



**Full&Default Power Mode for Head**

GSM850_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	30.11	29.98	30.48	31.50	21.11	20.98	21.48	22.50
GPRS 1 Tx slot	30.07	29.93	30.43	31.50	21.07	20.93	21.43	22.50
GPRS 2 Tx slots	29.03	29.37	29.58	30.50	23.03	23.37	23.58	24.50
GPRS 3 Tx slots	27.82	27.83	27.92	28.80	23.56	23.67	23.66	24.54
GPRS 4 Tx slots	26.23	26.41	26.43	27.50	23.23	23.41	23.43	24.50
EDGE 1 Tx slot	25.13	25.25	25.56	26.50	16.13	16.25	16.56	17.50
EDGE 2 Tx slots	24.25	24.33	24.55	25.50	18.25	18.33	18.55	19.50
EDGE 3 Tx slots	22.51	22.31	22.72	23.50	18.25	18.05	18.46	19.24
EDGE 4 Tx slots	20.51	20.45	20.69	21.50	17.51	17.45	17.69	18.50



**Full&Default Power Mode for Body**

GSM850_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.90	31.68	32.27	33.50	22.90	22.68	23.27	24.50
GPRS 1 Tx slot	31.88	31.65	32.24	33.50	22.88	22.65	23.24	24.50
GPRS 2 Tx slots	29.03	29.37	29.58	30.50	23.03	23.37	23.58	24.50
GPRS 3 Tx slots	27.82	27.93	27.92	28.80	23.56	23.67	23.66	24.54
GPRS 4 Tx slots	26.23	26.41	26.43	27.50	23.23	23.41	23.43	24.50
EDGE 1 Tx slot	25.13	25.25	25.56	26.50	16.13	16.25	16.56	17.50
EDGE 2 Tx slots	24.25	24.33	24.55	25.50	18.25	18.33	18.55	19.50
EDGE 3 Tx slots	22.51	22.31	22.72	23.50	18.25	18.33	18.46	19.24
EDGE 4 Tx slots	20.51	20.45	20.69	21.50	17.51	17.45	17.69	18.50

GSM1900_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1860	1909.8		1850.2	1860	1909.8	
GSM 1 Tx slot	28.65	28.83	28.85	30.50	19.65	19.83	19.85	21.50
GPRS 1 Tx slot	28.63	28.81	28.83	30.50	19.63	19.81	19.83	21.50
GPRS 2 Tx slots	26.61	26.48	26.50	27.50	20.61	20.48	20.50	21.50
GPRS 3 Tx slots	24.83	24.88	24.81	25.80	20.57	20.62	20.55	21.54
GPRS 4 Tx slots	23.40	23.41	23.27	24.50	20.40	20.41	20.27	21.50
EDGE 1 Tx slot	24.81	24.46	24.81	26.00	15.81	15.46	15.81	17.00
EDGE 2 Tx slots	23.51	23.61	23.31	25.00	17.51	17.61	17.31	19.00
EDGE 3 Tx slots	21.80	21.81	21.71	23.00	17.54	17.55	17.45	18.74
EDGE 4 Tx slots	19.81	19.77	19.71	21.50	16.81	16.77	16.71	18.50

Band TX Channel	WCDMA II_Ant 0			Tune-up Limit (dBm)	WCDMA II_Ant 1			Tune-up Limit (dBm)
	9262	9400	9538		9262	9400	9538	
Rx Channel	9552	9800	9938		9552	9800	9938	
Frequency (MHz)	1852.4	1890	1907.6		1852.4	1890	1907.6	
3GPP Rel 99 AMR 12.2Kbps	22.72	22.74	22.70	24.00	22.40	22.43	22.38	24.00
3GPP Rel 99 RMC 12.2Kbps	22.74	22.75	22.72	24.00	22.44	22.45	22.40	24.00
3GPP Rel 6 HSDPA Subtest-1	21.71	21.60	21.72	23.00	21.45	21.53	21.43	23.00
3GPP Rel 6 HSDPA Subtest-2	21.73	21.61	21.71	23.00	21.45	21.50	21.41	23.00
3GPP Rel 6 HSDPA Subtest-3	21.18	21.14	21.19	22.50	20.91	21.09	20.93	22.50
3GPP Rel 6 HSDPA Subtest-4	21.22	21.11	20.93	22.50	20.92	21.06	20.91	22.50
3GPP Rel 6 DC-HSDPA Subtest-1	21.70	21.49	21.64	23.00	21.31	21.41	21.40	23.00
3GPP Rel 6 DC-HSDPA Subtest-2	21.55	21.55	21.65	23.00	21.41	21.42	21.35	23.00
3GPP Rel 6 DC-HSDPA Subtest-3	21.07	20.97	21.15	22.50	20.86	20.89	20.92	22.50
3GPP Rel 6 DC-HSDPA Subtest-4	21.09	20.93	20.90	22.50	20.84	20.90	20.87	22.50
3GPP Rel 6 HSUPA Subtest-1	21.73	21.62	21.80	23.00	21.44	21.43	21.43	23.00
3GPP Rel 6 HSUPA Subtest-2	19.79	19.67	19.88	21.00	19.54	19.48	19.53	21.00
3GPP Rel 6 HSUPA Subtest-3	20.78	20.61	20.82	22.00	20.51	20.49	20.49	22.00
3GPP Rel 6 HSUPA Subtest-4	19.77	19.71	19.76	21.00	19.49	19.50	19.49	21.00
3GPP Rel 6 HSUPA Subtest-5	21.80	21.60	21.80	23.00	21.50	21.40	21.50	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	20.57	20.54	20.62	21.50	19.69	19.87	19.76	21.50

Band TX Channel	WCDMA IV_Ant 0			Tune-up Limit (dBm)	WCDMA IV_Ant 1			Tune-up Limit (dBm)
	1312	1413	1513		1312	1413	1513	
Rx Channel	1537	1633	1733		1537	1633	1733	
Frequency (MHz)	1712.4	1732.6	1752.6		1712.4	1732.6	1752.6	
3GPP Rel 99 AMR 12.2Kbps	22.52	22.80	22.68	24.00	22.40	22.81	22.52	24.00
3GPP Rel 99 RMC 12.2Kbps	22.54	22.82	22.70	24.00	22.41	22.83	22.54	24.00
3GPP Rel 6 HSDPA Subtest-1	21.57	21.82	21.72	23.00	21.41	21.69	21.57	23.00
3GPP Rel 6 HSDPA Subtest-2	21.56	21.81	21.66	23.00	21.41	21.70	21.58	23.00
3GPP Rel 6 HSDPA Subtest-3	21.09	21.30	21.21	22.50	20.92	21.17	21.12	22.50
3GPP Rel 6 HSDPA Subtest-4	21.03	21.38	21.15	22.50	20.94	21.16	21.07	22.50
3GPP Rel 6 DC-HSDPA Subtest-1	21.35	21.72	21.47	23.00	21.44	21.55	21.54	23.00
3GPP Rel 6 DC-HSDPA Subtest-2	21.38	21.75	21.59	23.00	21.49	21.48	21.33	23.00
3GPP Rel 6 DC-HSDPA Subtest-3	20.99	21.13	21.04	22.50	20.95	20.97	20.86	22.50
3GPP Rel 6 DC-HSDPA Subtest-4	20.79	21.21	20.99	22.50	20.83	20.98	20.88	22.50
3GPP Rel 6 HSUPA Subtest-1	21.80	21.83	21.89	23.00	21.65	21.68	21.57	23.00
3GPP Rel 6 HSUPA Subtest-2	19.80	19.66	19.76	21.00	19.65	19.67	19.58	21.00
3GPP Rel 6 HSUPA Subtest-3	20.78	20.85	20.73	22.00	20.62	20.68	20.59	22.00
3GPP Rel 6 HSUPA Subtest-4	19.75	19.81	19.74	21.00	19.60	19.66	19.61	21.00
3GPP Rel 6 HSUPA Subtest-5	21.76	21.90	21.70	23.00	21.65	21.70	21.60	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	20.59	20.55	20.52	21.50	19.94	20.12	20.11	21.50

Band TX Channel	WCDMA V_Ant 0			Tune-up Limit (dBm)	WCDMA V_Ant 1			Tune-up Limit (dBm)
	4132	4182	4233		4132	4182	4233	
Rx Channel	4357	4407	4458		4357	4407	4458	
Frequency (MHz)	826.4	836.4	846.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	22.13	22.25	22.22	24.00	22.46	22.62	22.60	24.00
3GPP Rel 99 RMC 12.2Kbps	22.19	22.27	22.25	24.00	22.50	22.65	22.62	24.00
3GPP Rel 6 HSDPA Subtest-1	21.19	21.26	21.30	23.00	21.54	21.67	21.77	23.00
3GPP Rel 6 HSDPA Subtest-2	21.14	21.27	21.33	23.00	21.54	21.68	21.74	23.00
3GPP Rel 6 HSDPA Subtest-3	20.65	20.74	20.65	22.50	20.99	21.11	21.26	22.50
3GPP Rel 6 HSDPA Subtest-4	20.65	20.74	20.77	22.50	21.00	21.16	21.25	22.50
3GPP Rel 6 DC-HSDPA Subtest-1	21.10	21.21	21.02	23.00	21.73	21.69	21.72	23.00
3GPP Rel 6 DC-HSDPA Subtest-2	21.06	21.13	21.09	23.00	21.63	21.68	21.67	23.00
3GPP Rel 6 DC-HSDPA Subtest-3	20.53	20.69	20.58	22.50	21.21	21.20	21.08	22.50
3GPP Rel 6 DC-HSDPA Subtest-4	20.70	20.71	20.59	22.50	21.11	21.17	21.03	22.50
3GPP Rel 6 HSUPA Subtest-1	21.12	21.22	21.28	23.00	21.70	21.68	21.75	23.00
3GPP Rel 6 HSUPA Subtest-2	19.14	19.26	19.29	21.00	19.66	19.64	19.74	21.00
3GPP Rel 6 HSUPA Subtest-3	20.14	20.23	20.30	22.00	20.65	20.64	20.70	22.00
3GPP Rel 6 HSUPA Subtest-4	19.14	19.23	19.28	21.00	19.56	19.66	19.74	21.00
3GPP Rel 6 HSUPA Subtest-5	21.10	21.20	21.30	23.00	21.50	21.60	21.70	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	19.54	19.66	19.60	21.50	20.08	20.15	20.03	21.50







Band 7_Ant 1										
EV MHz	Modulation	RB	RB Offset	Power Low	Power Middle	Power High	Power High Ch. Freq	Power High Ch. Freq	Turn-up time (secs)	MPR (dB)
Channel										
Frequency (MHz)				2060	2100	2150	2150			
20	OFDM	1	0	22.20	22.26	22.35			24	0
20	OFDM	1	49	22.20	22.27	22.35				
20	OFDM	1	99	22.20	22.41	22.48				
20	OFDM	50	0	21.57	21.72	21.81			23	1
20	OFDM	50	24	21.57	21.82	21.91				
20	OFDM	50	50	21.24	21.90	21.45				
20	OFDM	100	0	21.38	21.63	21.54				
20	OFDM	1	49	21.55	21.90	21.85			23	1
20	16QAM	1	99	21.59	21.97	21.85				
20	16QAM	50	0	20.27	20.65	20.53			22	2
20	16QAM	50	24	20.41	20.69	20.57				
20	16QAM	50	50	20.39	20.72	20.63				
20	16QAM	100	0	20.36	20.62	20.54				
20	64QAM	1	0	20.58	20.90	20.54			22	2
20	64QAM	1	49	20.69	20.78	20.72				
20	64QAM	1	99	20.47	20.78	20.72				
20	64QAM	50	0	19.27	19.61	19.52			21	3
20	64QAM	50	24	19.42	19.66	19.58				
20	64QAM	50	50	19.39	19.72	19.64				
20	64QAM	100	0	19.34	19.67	19.55				
20	256QAM	1	0	17.46	17.48	17.45			19	5
20	256QAM	1	49	17.33	17.41	17.33				
20	256QAM	1	99	17.35	17.43	17.34				
20	256QAM	50	0	17.21	17.23	17.19			19	5
20	256QAM	50	24	17.17	17.25	17.16				
20	256QAM	50	50	17.11	17.21	17.13				
20	256QAM	100	0	17.18	17.22	17.19			Turn-up time (secs)	MPR (dB)
Channel										
Frequency (MHz)				2507.5	2505	2502.5				
19	OFDM	1	0	22.11	22.47	22.31			24	0
19	OFDM	1	49	22.20	22.57	22.49				
19	OFDM	1	99	22.29	22.51	22.41				
19	OFDM	36	0	21.30	21.63	21.55			23	1
19	OFDM	36	18	21.16	21.59	21.49				
19	OFDM	36	36	21.20	21.51	21.41				
19	OFDM	75	0	21.31	21.58	21.44			23	1
19	16QAM	1	0	21.61	21.65	21.59				
19	16QAM	1	37	21.51	21.78	21.61			23	1
19	16QAM	1	74	21.47	21.85	21.80				
19	16QAM	50	0	20.36	20.58	20.49			22	2
19	16QAM	50	20	20.35	20.58	20.50				
19	16QAM	50	39	20.35	20.67	20.54				
19	16QAM	100	0	20.31	20.57	20.50				
19	64QAM	1	0	20.51	20.85	20.46			22	2
19	64QAM	1	37	20.66	20.72	20.64				
19	64QAM	1	74	20.43	21.60	21.60				
19	64QAM	36	0	19.23	19.52	19.40			21	0
19	64QAM	36	20	19.31	19.58	19.49			21	3
19	64QAM	36	39	19.24	19.53	19.45				
19	64QAM	75	0	19.27	19.59	19.48				
19	256QAM	1	0	17.42	17.41	17.37			19	5
19	256QAM	1	37	17.34	17.34	17.34				
19	256QAM	1	74	17.26	17.34	17.31				
19	256QAM	36	0	17.11	17.14	17.16			19	5
19	256QAM	36	20	17.08	17.22	17.15				
19	256QAM	36	39	17.05	17.13	17.13				
19	256QAM	75	0	17.14	17.11	17.09			Turn-up time (secs)	MPR (dB)
Channel										
Frequency (MHz)				2507.5	2505	2502.5				
19	OFDM	1	0	22.20	22.51	22.28			24	0
19	OFDM	1	49	22.19	22.57	22.49				
19	OFDM	1	99	22.16	22.53	22.43				
19	OFDM	25	0	21.36	21.66	21.59			23	1
19	OFDM	25	12	21.22	21.64	21.47				
19	OFDM	25	25	21.19	21.57	21.48				
19	OFDM	50	0	21.29	21.63	21.51			23	1
19	16QAM	1	0	21.66	21.70	21.64				
19	16QAM	1	25	21.54	21.97	21.81			23	1
19	16QAM	1	49	21.54	21.88	21.77				
19	16QAM	50	0	20.18	20.48	20.40			22	2
19	16QAM	50	12	20.35	20.68	20.57				
19	16QAM	50	25	20.34	20.65	20.56				
19	16QAM	100	0	20.31	20.57	20.50				
19	64QAM	1	0	20.57	20.85	20.46			22	2
19	64QAM	1	25	20.68	20.70	20.72				
19	64QAM	1	49	20.44	20.78	20.72				
19	64QAM	50	0	19.26	19.52	19.44			21	3
19	64QAM	50	12	19.33	19.63	19.53				
19	64QAM	50	25	19.31	19.68	19.61				
19	64QAM	100	0	19.32	19.59	19.48				
19	256QAM	1	0	17.44	17.47	17.45			19	5
19	256QAM	1	25	17.32	17.33	17.28				
19	256QAM	1	49	17.29	17.34	17.34				
19	256QAM	25	0	17.18	17.19	17.13			19	5
19	256QAM	25	12	17.17	17.23	17.08				
19	256QAM	25	25	17.03	17.17	17.08				
19	256QAM	50	0	17.09	17.19	17.12			Turn-up time (secs)	MPR (dB)
Channel										
Frequency (MHz)				2507.5	2505	2502.5				
3	OFDM	1	0	22.17	22.54	22.30			24	0
3	OFDM	1	12	22.20	22.57	22.49				
3	OFDM	1	24	22.13	22.58	22.47				
3	OFDM	12	0	21.32	21.67	21.61			23	1
3	OFDM	12	7	21.22	21.64	21.47				
3	OFDM	12	13	21.17	21.59	21.42				
3	OFDM	25	0	21.34	21.62	21.52			23	1
3	16QAM	1	0	21.65	21.84	21.68				
3	16QAM	1	12	21.48	21.90	21.84			23	1
3	16QAM	1	24	21.56	21.91	21.85				
3	16QAM	12	7	20.39	20.65	20.57			22	2
3	16QAM	12	13	20.34	20.67	20.54				
3	16QAM	25	0	20.29	20.57	20.48				
3	64QAM	1	0	20.49	20.87	20.52			22	2
3	64QAM	1	12	20.65	20.67	20.63				
3	64QAM	1	24	20.44	20.75	20.72				
3	64QAM	12	0	19.25	19.61	19.46			21	3
3	64QAM	12	7	19.34	19.63	19.49				
3	64QAM	12	14	19.38	19.72	19.58				
3	64QAM	25	0	19.30	19.67	19.53				
3	256QAM	1	0	17.40	17.47	17.39			19	5
3	256QAM	1	12	17.32	17.37	17.32				
3	256QAM	1	24	17.29	17.37	17.28				
3	256QAM	12	0	17.15	17.19	17.14			19	5
3	256QAM	12	7	17.13	17.18	17.08				
3	256QAM	12	13	17.07	17.13	17.13				
3	256QAM	25	0	17.14	17.15	17.16			Turn-up time (secs)	MPR (dB)

Band 12_Ant 0										
EV MHz	Modulation	RB	RB Offset	Power Low	Power Middle	Power High	Power High Ch. Freq	Power High Ch. Freq	Turn-up time (secs)	MPR (dB)
Channel										
Frequency (MHz)				2060	2100	2150	2150			
19	OFDM	1	0	22.78	22.85	22.85			24	0
19	OFDM	1	25	22.87	22.94	22.94				
19	OFDM	1	49	22.92	22.92	22.94				
19	OFDM	25	0	22.51	22.51	22.52			24	0
19	OFDM	25	12	22.47	22.47	22.48				
19	OFDM	25	25	22.84	22.97	22.85				
19	OFDM	50	0	22.93	22.97	22.91			24	0
19	16QAM	1	0	22.28	22.86	22.78				
19	16QAM	1	25	22.87	22.97	22.82			24	0
19	16QAM	1	49	22.80	22.80	22.71				
19	16QAM	25	0	22.14	22.14	22.15			23	1
19	16QAM	25	12	22.19	22.19	22.20				



Band 13_Ant 0									
BW (MHz)	Modulation	RB Spacing	RB Offset	Power Low Ch. / Freq.	Power Mids Ch. / Freq.	Power High Ch. / Freq.	Tune-up (int. dBm)	MFR (dB)	
Channel: 23300									
Frequency (MHz)									
10	QPSK	1	0	22.88			24	0	
10	QPSK	1	25	22.89					
10	QPSK	1	49	22.70					
10	QPSK	25	0	22.88			24	0	
10	QPSK	25	12	22.81					
10	QPSK	25	35	22.75					
10	QPSK	50	0	22.82			24	0	
10	HQAM	1	0	22.88					
10	HQAM	1	25	22.89			24	0	
10	HQAM	1	49	22.73					
10	HQAM	25	0	21.86			23	1	
10	HQAM	25	12	21.85					
10	HQAM	25	25	21.69					
10	HQAM	25	35	21.62					
10	HQAM	1	0	21.86			23	1	
10	HQAM	1	25	21.89					
10	HQAM	1	49	21.86					
10	HQAM	25	0	20.82					
10	HQAM	25	12	20.83			22	2	
10	HQAM	25	25	20.69					
10	HQAM	25	35	20.81					
10	ZSSBAM	1	0	19.09			20	4	
10	ZSSBAM	1	25	18.74					
10	ZSSBAM	1	49	18.81					
10	ZSSBAM	25	0	18.77			20	4	
10	ZSSBAM	25	12	18.85					
10	ZSSBAM	25	25	18.82					
10	ZSSBAM	25	35	18.70					
Channel: 23200									
Frequency (MHz)									
5	QPSK	1	0	22.83	22.82	22.77	24	0	
5	QPSK	1	12	22.77	22.78	22.79			
5	QPSK	1	24	22.60	22.62	22.64			
5	QPSK	12	0	22.88	22.84	22.79			
5	QPSK	12	7	22.77	22.77	22.74			
5	QPSK	12	13	22.72	22.67	22.69	24	0	
5	HQAM	1	0	22.78	22.81	22.78			
5	HQAM	1	12	22.62	22.77	22.78	24	0	
5	HQAM	1	24	22.64	22.61	22.64			
5	HQAM	12	0	21.75	21.81	21.82			
5	HQAM	12	7	21.87	21.75	21.81	23	1	
5	HQAM	12	13	21.82	21.61	21.87			
5	HQAM	25	0	21.74	21.78	21.78			
5	HQAM	1	0	21.82	21.80	21.88	23	1	
5	HQAM	1	12	21.64	21.65	21.84			
5	HQAM	1	24	21.88	21.81	21.86			
5	HQAM	12	0	20.83	20.85	20.86			
5	HQAM	12	7	20.78	20.72	20.80	22	2	
5	HQAM	12	13	20.87	20.89	20.81			
5	HQAM	25	0	20.75	20.78	20.76			
5	ZSSBAM	1	0	18.86	18.89	18.91	20	4	
5	ZSSBAM	1	12	18.70	18.66	18.70			
5	ZSSBAM	1	24	18.58	18.62	18.54			
5	ZSSBAM	12	0	18.71	18.71	18.71			
5	ZSSBAM	12	7	18.78	18.78	18.77			
5	ZSSBAM	12	13	18.48	18.48	18.48	20	4	
5	ZSSBAM	25	0	18.66	18.65	18.63			

Band 13_Ant 1									
BW (MHz)	Modulation	RB Spacing	RB Offset	Power Low Ch. / Freq.	Power Mids Ch. / Freq.	Power High Ch. / Freq.	Tune-up (int. dBm)	MFR (dB)	
Channel: 23300									
Frequency (MHz)									
10	QPSK	1	0	22.81			24	0	
10	QPSK	1	25	22.88					
10	QPSK	1	49	22.49					
10	QPSK	25	0	22.57			24	0	
10	QPSK	25	12	22.64					
10	QPSK	25	35	22.41					
10	QPSK	50	0	22.55			24	0	
10	HQAM	1	0	22.84					
10	HQAM	1	25	22.82			24	0	
10	HQAM	1	49	22.52					
10	HQAM	25	0	21.42			23	1	
10	HQAM	25	12	21.36					
10	HQAM	25	25	21.24					
10	HQAM	25	35	21.34					
10	HQAM	1	0	21.74			23	1	
10	HQAM	1	25	21.68					
10	HQAM	1	49	21.39					
10	HQAM	25	0	20.41					
10	HQAM	25	12	20.38			22	2	
10	HQAM	25	25	20.23					
10	HQAM	25	35	20.37					
10	ZSSBAM	1	0	18.55			20	4	
10	ZSSBAM	1	25	18.49					
10	ZSSBAM	1	49	18.28					
10	ZSSBAM	25	0	18.32			20	4	
10	ZSSBAM	25	12	18.24					
10	ZSSBAM	25	25	18.23					
10	ZSSBAM	25	35	18.22					
Channel: 23200									
Frequency (MHz)									
5	QPSK	1	0	22.57	22.59	22.54	24	0	
5	QPSK	1	12	22.68	22.61	22.61			
5	QPSK	1	24	22.37	22.39	22.40			
5	QPSK	12	0	22.47	22.51	22.47			
5	QPSK	12	7	22.43	22.47	22.47			
5	QPSK	12	13	22.38	22.35	22.38	24	0	
5	HQAM	1	0	22.52	22.48	22.49			
5	HQAM	1	12	22.62	22.65	22.65	24	0	
5	HQAM	1	24	22.48	22.41	22.40			
5	HQAM	12	0	21.37	21.38	21.38			
5	HQAM	12	7	21.25	21.25	21.24	23	1	
5	HQAM	12	13	21.20	21.21	21.20			
5	HQAM	25	0	21.28	21.28	21.25			
5	HQAM	1	0	21.58	21.69	21.68	23	1	
5	HQAM	1	12	21.58	21.63	21.62			
5	HQAM	1	24	21.28	21.33	21.36			
5	HQAM	12	0	20.37	20.36	20.32			
5	HQAM	12	7	20.26	20.27	20.33	22	2	
5	HQAM	12	13	20.16	20.13	20.11			
5	HQAM	25	0	20.25	20.27	20.33			
5	ZSSBAM	1	0	18.52	18.45	18.46	20	4	
5	ZSSBAM	1	12	18.33	18.33	18.37			
5	ZSSBAM	1	24	18.25	18.25	18.25			
5	ZSSBAM	12	0	18.27	18.25	18.25			
5	ZSSBAM	12	7	18.29	18.26	18.22			
5	ZSSBAM	12	13	18.20	18.13	18.13	20	4	
5	ZSSBAM	25	0	18.12	18.13	18.14			

Band 14_Ant 0									
BW (MHz)	Modulation	RB Spacing	RB Offset	Power Low Ch. / Freq.	Power Mids Ch. / Freq.	Power High Ch. / Freq.	Tune-up (int. dBm)	MFR (dB)	
Channel: 23300									
Frequency (MHz)									
10	QPSK	1	0	22.89			24	0	
10	QPSK	1	25	22.78					
10	QPSK	1	49	22.61					
10	QPSK	25	0	22.74			24	0	
10	QPSK	25	12	22.73					
10	QPSK	25	35	22.59					
10	QPSK	50	0	22.71			24	0	
10	HQAM	1	0	22.84					
10	HQAM	1	25	22.82			24	0	
10	HQAM	1	49	22.69					
10	HQAM	25	0	22.26			23	1	
10	HQAM	25	12	22.14					
10	HQAM	25	25	22.17					
10	HQAM	25	35	22.30					
10	HQAM	1	0	22.04			23	1	
10	HQAM	1	25	22.05					
10	HQAM	1	49	22.02					
10	HQAM	25	0	21.50					
10	HQAM	25	12	21.11			22	2	
10	HQAM	25	25	21.11					
10	HQAM	25	35	21.13					
10	ZSSBAM	1	0	19.38			20	4	
10	ZSSBAM	1	25	19.21					
10	ZSSBAM	1	49	19.36					
10	ZSSBAM	25	0	19.20			20	4	
10	ZSSBAM	25	12	19.23					
10	ZSSBAM	25	25	19.26					
10	ZSSBAM	25	35	19.17					
Channel: 23200									
Frequency (MHz)									
5	QPSK	1	0	22.81	22.81	22.84	24	0	
5	QPSK	1	12	22.69	22.69	22.68			
5	QPSK	1	24	22.42	22.52	22.50			
5	QPSK	12	0	22.68	22.63	22.65			
5	QPSK	12	7	22.63	22.62	22.68			



Band 17_Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low (W)	Power High (W)	Turnup (int/dem)	MPR (dB)			
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.72	22.71	22.75				
10	QPSK	1	24	22.72	22.71	22.75				
10	QPSK	1	48	22.83	22.89	22.85	24	0		
10	QPSK	25	0	22.85	22.84	22.82				
10	QPSK	25	24	22.85	22.84	22.82				
10	QPSK	25	48	22.85	22.85	22.86	24	0		
10	QPSK	50	0	22.85	22.81	22.86				
10	QPSK	50	24	22.72	22.66	22.83				
10	QPSK	50	48	22.72	22.79	22.83				
10	QPSK	50	72	22.72	22.79	22.83				
10	QPSK	50	96	22.81	22.89	22.84	24	0		
10	QPSK	50	120	22.81	22.89	22.84				
10	QPSK	50	144	22.81	22.89	22.84				
10	QPSK	50	168	22.81	22.89	22.84				
10	QPSK	50	192	22.81	22.89	22.84				
10	QPSK	50	216	22.81	22.89	22.84				
10	QPSK	50	240	22.81	22.89	22.84				
10	QPSK	50	264	22.81	22.89	22.84				
10	QPSK	50	288	22.81	22.89	22.84				
10	QPSK	50	312	22.81	22.89	22.84				
10	QPSK	50	336	22.81	22.89	22.84				
10	QPSK	50	360	22.81	22.89	22.84				
10	QPSK	50	384	22.81	22.89	22.84				
10	QPSK	50	408	22.81	22.89	22.84				
10	QPSK	50	432	22.81	22.89	22.84				
10	QPSK	50	456	22.81	22.89	22.84				
10	QPSK	50	480	22.81	22.89	22.84				
10	QPSK	50	504	22.81	22.89	22.84				
10	QPSK	50	528	22.81	22.89	22.84				
10	QPSK	50	552	22.81	22.89	22.84				
10	QPSK	50	576	22.81	22.89	22.84				
10	QPSK	50	600	22.81	22.89	22.84				
10	QPSK	50	624	22.81	22.89	22.84				
10	QPSK	50	648	22.81	22.89	22.84				
10	QPSK	50	672	22.81	22.89	22.84				
10	QPSK	50	696	22.81	22.89	22.84				
10	QPSK	50	720	22.81	22.89	22.84				
10	QPSK	50	744	22.81	22.89	22.84				
10	QPSK	50	768	22.81	22.89	22.84				
10	QPSK	50	792	22.81	22.89	22.84				
10	QPSK	50	816	22.81	22.89	22.84				
10	QPSK	50	840	22.81	22.89	22.84				
10	QPSK	50	864	22.81	22.89	22.84				
10	QPSK	50	888	22.81	22.89	22.84				
10	QPSK	50	912	22.81	22.89	22.84				
10	QPSK	50	936	22.81	22.89	22.84				
10	QPSK	50	960	22.81	22.89	22.84				
10	QPSK	50	984	22.81	22.89	22.84				
10	QPSK	50	1008	22.81	22.89	22.84				
10	QPSK	50	1032	22.81	22.89	22.84				
10	QPSK	50	1056	22.81	22.89	22.84				
10	QPSK	50	1080	22.81	22.89	22.84				
10	QPSK	50	1104	22.81	22.89	22.84				
10	QPSK	50	1128	22.81	22.89	22.84				
10	QPSK	50	1152	22.81	22.89	22.84				
10	QPSK	50	1176	22.81	22.89	22.84				
10	QPSK	50	1200	22.81	22.89	22.84				
10	QPSK	50	1224	22.81	22.89	22.84				
10	QPSK	50	1248	22.81	22.89	22.84				
10	QPSK	50	1272	22.81	22.89	22.84				
10	QPSK	50	1296	22.81	22.89	22.84				
10	QPSK	50	1320	22.81	22.89	22.84				
10	QPSK	50	1344	22.81	22.89	22.84				
10	QPSK	50	1368	22.81	22.89	22.84				
10	QPSK	50	1392	22.81	22.89	22.84				
10	QPSK	50	1416	22.81	22.89	22.84				
10	QPSK	50	1440	22.81	22.89	22.84				
10	QPSK	50	1464	22.81	22.89	22.84				
10	QPSK	50	1488	22.81	22.89	22.84				
10	QPSK	50	1512	22.81	22.89	22.84				
10	QPSK	50	1536	22.81	22.89	22.84				
10	QPSK	50	1560	22.81	22.89	22.84				
10	QPSK	50	1584	22.81	22.89	22.84				
10	QPSK	50	1608	22.81	22.89	22.84				
10	QPSK	50	1632	22.81	22.89	22.84				
10	QPSK	50	1656	22.81	22.89	22.84				
10	QPSK	50	1680	22.81	22.89	22.84				
10	QPSK	50	1704	22.81	22.89	22.84				
10	QPSK	50	1728	22.81	22.89	22.84				
10	QPSK	50	1752	22.81	22.89	22.84				
10	QPSK	50	1776	22.81	22.89	22.84				
10	QPSK	50	1800	22.81	22.89	22.84				
10	QPSK	50	1824	22.81	22.89	22.84				
10	QPSK	50	1848	22.81	22.89	22.84				
10	QPSK	50	1872	22.81	22.89	22.84				
10	QPSK	50	1896	22.81	22.89	22.84				
10	QPSK	50	1920	22.81	22.89	22.84				
10	QPSK	50	1944	22.81	22.89	22.84				
10	QPSK	50	1968	22.81	22.89	22.84				
10	QPSK	50	1992	22.81	22.89	22.84				
10	QPSK	50	2016	22.81	22.89	22.84				
10	QPSK	50	2040	22.81	22.89	22.84				
10	QPSK	50	2064	22.81	22.89	22.84				
10	QPSK	50	2088	22.81	22.89	22.84				
10	QPSK	50	2112	22.81	22.89	22.84				
10	QPSK	50	2136	22.81	22.89	22.84				
10	QPSK	50	2160	22.81	22.89	22.84				
10	QPSK	50	2184	22.81	22.89	22.84				
10	QPSK	50	2208	22.81	22.89	22.84				
10	QPSK	50	2232	22.81	22.89	22.84				
10	QPSK	50	2256	22.81	22.89	22.84				
10	QPSK	50	2280	22.81	22.89	22.84				
10	QPSK	50	2304	22.81	22.89	22.84				
10	QPSK	50	2328	22.81	22.89	22.84				
10	QPSK	50	2352	22.81	22.89	22.84				
10	QPSK	50	2376	22.81	22.89	22.84				
10	QPSK	50	2400	22.81	22.89	22.84				
10	QPSK	50	2424	22.81	22.89	22.84				
10	QPSK	50	2448	22.81	22.89	22.84				
10	QPSK	50	2472	22.81	22.89	22.84				
10	QPSK	50	2496	22.81	22.89	22.84				
10	QPSK	50	2520	22.81	22.89	22.84				
10	QPSK	50	2544	22.81	22.89	22.84				
10	QPSK	50	2568	22.81	22.89	22.84				
10	QPSK	50	2592	22.81	22.89	22.84				
10	QPSK	50	2616	22.81	22.89	22.84				
10	QPSK	50	2640	22.81	22.89	22.84				
10	QPSK	50	2664	22.81	22.89	22.84				
10	QPSK	50	2688	22.81	22.89	22.84				
10	QPSK	50	2712	22.81	22.89	22.84				
10	QPSK	50	2736	22.81	22.89	22.84				
10	QPSK	50	2760	22.81	22.89	22.84				
10	QPSK	50	2784	22.81	22.89	22.84				
10	QPSK	50	2808	22.81	22.89	22.84				
10	QPSK	50	2832	22.81	22.89	22.84				
10	QPSK	50	2856	22.81	22.89	22.84				
10	QPSK	50	2880	22.81	22.89	22.84				
10	QPSK	50	2904	22.81	22.89	22.84				
10	QPSK	50	2928	22.81	22.89	22.84				
10	QPSK	50	2952	22.81	22.89	22.84				
10	QPSK	50	2976	22.81	22.89	22.84				
10	QPSK	50	3000	22.81	22.89	22.84				
10	QPSK	50	3024	22.81	22.89	22.84				
10	QPSK	50	3048	22.81	22.89	22.84				
10	QPSK	50	3072	22.81	22.89	22.84				
10	QPSK	50	3096	22.81	22.89	22.84				
10	QPSK	50	3120	22.81	22.89	22.84				
10	QPSK	50	3144	22.81	22.89	22.84				
10	QPSK	50	3168	22.81	22.89	22.84				
10	QPSK	50	3192	22.81	22.89	22.84				
10	QPSK	50	3216	22.81	22.89	22.84				
10	QPSK	50	3240	22.81	22.89	22.84				
10	QPSK	50	3264	22.81	22.89	22.84				
10	QPSK	50	3288	22.81	22.89	22.84				
10	QPSK	50	3312	22.81	22.89	22.84				
10	QPSK	50	3336	22.81	22.89	22.84				
10	QPSK	50	3360	22.81	22.89	22.84				
10	QPSK	50	3384	22.81	22.89	22.84				
10	QPSK	50	3408	22.81	22.89	22.84				



### Band 26(FCC)\_Ant 0

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mids Ch / Freq	Power High Ch / Freq	Tune-up (int/dm)	MFR (dB)
Channel								
				821.5	831.5	841.5		
15	QPSK	1	0	22.32	22.42	22.57	24	0
15	QPSK	37	0	22.32	22.42	22.57		
15	QPSK	1	74	22.43	22.56	22.62		
15	QPSK	36	0	22.32	22.51	22.55		
15	QPSK	36	20	22.32	22.50	22.55		
15	QPSK	36	39	22.32	22.58	22.51		
15	QPSK	75	0	22.54	22.57	22.65	24	0
15	HQDM	1	0	22.32	22.41	22.44		
15	HQDM	1	37	22.32	22.47	22.42	24	0
15	HQDM	1	74	22.40	22.47	22.45		
15	HQDM	36	0	21.97	21.98	21.95		
15	HQDM	36	20	21.46	21.62	21.65		
15	HQDM	36	39	21.49	21.68	21.77	23	1
15	HQDM	75	0	21.46	21.61	21.61		
15	HQDM	1	0	21.50	21.57	21.53		
15	HQDM	1	37	21.59	21.67	21.86	23	1
15	HQDM	1	74	21.62	21.70	21.65		
15	HQDM	36	0	20.38	20.64	20.65		
15	HQDM	36	20	20.44	20.62	20.65		
15	HQDM	36	39	20.46	20.68	20.76	22	2
15	HQDM	75	0	20.43	20.69	20.67		
15	ZSSDM	1	0	18.14	18.21	18.20	20	4
15	ZSSDM	1	37	18.18	18.22	18.21		
15	ZSSDM	1	74	18.20	18.25	18.23		
15	ZSSDM	36	0	18.15	18.09	18.11		
15	ZSSDM	36	20	18.12	18.18	18.13	20	4
15	ZSSDM	36	39	18.18	18.20	18.18		
15	ZSSDM	75	0	18.14	18.15	18.11		
				819	831.5	844		
10	QPSK	1	0	22.28	22.31	22.50	24	0
10	QPSK	1	37	22.40	22.40	22.49		
10	QPSK	1	49	22.40	22.46	22.44		
10	QPSK	25	0	22.54	22.49	22.51		
10	QPSK	25	12	22.40	22.42	22.40		
10	QPSK	25	25	22.40	22.47	22.47	24	0
10	QPSK	50	0	22.48	22.52	22.46		
10	HQDM	1	0	22.48	22.48	22.45		
10	HQDM	1	25	22.52	22.43	22.36	24	0
10	HQDM	1	49	22.30	22.42	22.37		
10	HQDM	1	37	21.18	21.38	21.38		
10	HQDM	25	12	21.35	21.59	21.59		
10	HQDM	25	25	21.38	21.60	21.70	23	1
10	HQDM	50	0	21.43	21.53	21.53		
10	HQDM	1	0	21.41	21.52	21.47		
10	HQDM	1	25	21.61	21.68	21.77	23	1
10	HQDM	1	49	21.52	21.63	21.67		
10	HQDM	25	0	20.38	20.42	20.51		
10	HQDM	25	12	20.33	20.58	20.58		
10	HQDM	25	25	20.35	20.57	20.58	22	2
10	HQDM	50	0	20.38	20.63	20.58		
10	ZSSDM	1	0	18.02	18.16	18.16	20	4
10	ZSSDM	1	25	18.07	18.17	18.09		
10	ZSSDM	1	49	18.11	18.22	18.20		
10	ZSSDM	25	0	18.00	18.05	18.06		
10	ZSSDM	25	12	18.00	18.15	18.07	20	4
10	ZSSDM	25	25	18.00	18.16	18.11		
10	ZSSDM	50	0	18.02	18.12	18.02		
				816.5	831.5	846.5		
5	QPSK	1	0	22.22	22.35	22.49	24	0
5	QPSK	1	37	22.40	22.40	22.49		
5	QPSK	1	34	22.39	22.46	22.41		
5	QPSK	12	0	22.48	22.54	22.48		
5	QPSK	12	7	22.40	22.42	22.40		
5	QPSK	12	13	22.40	22.52	22.48	24	0
5	QPSK	25	0	22.48	22.50	22.46		
5	HQDM	1	0	22.48	22.48	22.45		
5	HQDM	1	12	22.52	22.30	22.36	24	0
5	HQDM	1	24	22.30	22.36	22.42		
5	HQDM	1	37	21.18	21.38	21.38		
5	HQDM	12	7	21.40	21.59	21.57		
5	HQDM	12	13	21.40	21.62	21.74	23	1
5	HQDM	25	0	21.32	21.54	21.55		
5	HQDM	1	0	21.42	21.51	21.44		
5	HQDM	1	12	21.63	21.60	21.79	23	1
5	HQDM	1	24	21.42	21.69	21.62		
5	HQDM	12	0	20.31	20.48	20.51		
5	HQDM	12	7	20.38	20.53	20.56	22	2
5	HQDM	12	13	20.43	20.64	20.65		
5	HQDM	25	0	20.34	20.48	20.58		
5	ZSSDM	1	0	18.04	18.16	18.11	20	4
5	ZSSDM	1	12	18.08	18.14	18.15		
5	ZSSDM	1	24	18.10	18.20	18.19		
5	ZSSDM	12	0	18.02	18.01	18.01		
5	ZSSDM	12	7	18.00	18.15	18.08	20	4
5	ZSSDM	12	13	18.00	18.13	18.06		
5	ZSSDM	25	0	18.02	18.06	18.00		
				815.5	831.5	847.5		
3	QPSK	1	0	22.20	22.32	22.51	24	0
3	QPSK	1	37	22.40	22.40	22.51		
3	QPSK	1	14	22.31	22.52	22.40		
3	QPSK	8	0	22.50	22.56	22.48		
3	QPSK	8	4	22.40	22.48	22.55		
3	QPSK	8	7	22.48	22.54	22.48	24	0
3	QPSK	16	0	22.43	22.49	22.43		
3	HQDM	1	0	22.48	22.48	22.45		
3	HQDM	1	8	22.31	22.41	22.36	24	0
3	HQDM	1	14	22.38	22.43	22.41		
3	HQDM	8	0	21.38	21.43	21.58		
3	HQDM	8	4	21.37	21.60	21.57		
3	HQDM	8	7	21.41	21.63	21.70	23	1
3	HQDM	16	0	21.46	21.69	21.61		
3	HQDM	1	0	21.39	21.47	21.44		
3	HQDM	1	8	21.48	21.60	21.75	23	1
3	HQDM	1	14	21.64	21.67	21.62		
3	HQDM	8	0	20.30	20.45	20.59		
3	HQDM	8	4	20.38	20.55	20.52	22	2
3	HQDM	8	7	20.35	20.60	20.65		
3	HQDM	16	0	20.38	20.56	20.62		
3	ZSSDM	1	0	18.02	18.09	18.17	20	4
3	ZSSDM	1	8	18.00	18.18	18.12		
3	ZSSDM	1	14	18.10	18.22	18.14		
3	ZSSDM	8	0	18.11	18.05	18.08		
3	ZSSDM	8	4	18.00	18.00	18.00	20	4
3	ZSSDM	8	7	18.11	18.12	18.05		
3	ZSSDM	16	0	18.00	18.11	18.02		
				814.7	831.5	848.3		
1.4	QPSK	1	0	22.24	22.36	22.49	24	0
1.4	QPSK	1	37	22.40	22.40	22.55		
1.4	QPSK	1	5	22.38	22.50	22.43		
1.4	QPSK	3	0	22.50	22.51	22.48		
1.4	QPSK	3	3	22.46	22.54	22.44		
1.4	QPSK	3	3	22.46	22.49	22.45	24	0
1.4	QPSK	6	0	22.50	22.48	22.52		
1.4	HQDM	1	0	22.32	22.36	22.37		
1.4	HQDM	1	3	22.22	22.30	22.37	24	0
1.4	HQDM	1	5	22.30	22.44	22.34		
1.4	HQDM	1	0	22.32	22.35	22.51		
1.4	HQDM	3	1	22.47	22.60	22.51		
1.4	HQDM	3	3	22.39	22.48	22.41	23	1
1.4	HQDM	1	0	21.47	21.61	21.45		
1.4	HQDM	1	3	21.56	21.61	21.78		
1.4	HQDM	1	5	21.62	21.66	21.67		
1.4	HQDM	3	0	21.44	21.68	21.72	23	1
1.4	HQDM	3	1	21.37	21.63	21.56		
1.4	HQDM	3	3	21.46	21.67	21.41		
1.4	ZSSDM	1	0	20.34	20.55	20.57	22	2
1.4	ZSSDM	1	3	18.10	18.12	18.16		
1.4	ZSSDM	1	5	18.12	18.22	18.12		
1.4	ZSSDM	3	0	18.10	18.04	18.00	20	4
1.4	ZSSDM	3	1	18.00	18.06	18.10		
1.4	ZSSDM	3	3	18.00	18.13	18.05		
1.4	ZSSDM	6	0	18.11	18.12	18.06	20	4

### Band 26(FCC)\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mids Ch / Freq	Power High Ch / Freq	Tune-up (int/dm)	MFR (dB)
Channel								
				821.5	831.5	841.5		
15	QPSK	1	0	22.27	22.37	22.60	24	0
15	QPSK	1	37	22.40	22.40	22.51		
15	QPSK	1	74	22.34	22.56	22.55		





Band 30_Ant 9									
BW (MHz)	Modulation	RB (MHz)	RB Offset	Power Low Ch. (Freq)	Power High Ch. (Freq)	Turnup (int/dBm)	MFR (dB)		
Channel									
27710									
Frequency (MHz)									
10	OPRK	1	0	22.28	22.28	24	0		
10	OPRK	1	25	22.28	22.28				
10	OPRK	1	49	23.31	23.31				
10	OPRK	25	0	23.31	23.31				
10	OPRK	25	12	23.32	23.32				
10	OPRK	25	35	23.31	23.31				
10	OPRK	50	0	23.32	23.32	24	0		
10	ISGM	1	25	23.43	23.43	24	0		
10	ISGM	1	49	23.42	23.42				
10	ISGM	25	0	23.39	23.39				
10	ISGM	25	12	23.39	23.39	23.5	0.5		
10	ISGM	25	25	23.39	23.39				
10	ISGM	50	0	23.33	23.33				
10	ISGM	1	49	23.31	23.31	23.5	0.5		
10	ISGM	1	25	23.28	23.28				
10	ISGM	25	0	22.99	22.99				
10	ISGM	25	12	22.99	22.99	22.5	1.5		
10	ISGM	25	25	22.99	22.99				
10	ISGM	50	0	22.80	22.80				
10	ZSSDM	1	0	19.85	19.85	20.5	3.5		
10	ZSSDM	1	25	19.84	19.84				
10	ZSSDM	1	49	20.01	20.01				
10	ZSSDM	25	0	19.80	19.80				
10	ZSSDM	25	12	19.73	19.73	20.5	3.5		
10	ZSSDM	25	25	19.84	19.84				
10	ZSSDM	50	0	19.70	19.70				
Channel									
27685, 27710, 27735									
2907.5, 2910, 2912.5									
Frequency (MHz)									
5	OPRK	1	0	22.70	22.70	24	0		
5	OPRK	12	0	22.67	22.64				
5	OPRK	1	24	23.17	23.28				
5	OPRK	12	0	23.37	23.30				
5	OPRK	12	13	23.32	23.33				
5	OPRK	25	0	23.32	23.33	24	0		
5	ISGM	1	0	23.29	23.29				
5	ISGM	1	24	23.31	23.32	24	0		
5	ISGM	1	24	23.32	23.31				
5	ISGM	12	7	23.50	23.59	23.5	0.5		
5	ISGM	12	13	23.49	23.49				
5	ISGM	25	0	23.48	23.43				
5	ISGM	1	0	23.38	23.37	23.5	0.5		
5	ISGM	1	24	23.31	23.32				
5	ISGM	12	0	21.87	21.87	21.7	1.5		
5	ISGM	12	7	22.07	21.94				
5	ISGM	12	13	21.85	21.83				
5	ISGM	25	0	21.88	21.84				
5	ZSSDM	1	0	19.56	19.49	20.5	3.5		
5	ZSSDM	1	24	19.70	19.62				
5	ZSSDM	1	24	19.84	19.88				
5	ZSSDM	12	0	19.78	19.77				
5	ZSSDM	12	7	19.59	19.68				
5	ZSSDM	12	13	19.81	19.86				
5	ZSSDM	25	0	19.58	19.61				

Band 30_Ant 1									
BW (MHz)	Modulation	RB (MHz)	RB Offset	Power Low Ch. (Freq)	Power High Ch. (Freq)	Turnup (int/dBm)	MFR (dB)		
Channel									
27710									
Frequency (MHz)									
10	OPRK	1	0	22.20	22.20	24	0		
10	OPRK	1	25	22.20	22.20				
10	OPRK	1	49	22.98	22.98				
10	OPRK	25	0	21.13	21.13	23	1		
10	OPRK	25	12	21.08	21.08				
10	OPRK	25	35	21.52	21.52				
10	OPRK	50	0	21.11	21.11	23	1		
10	ISGM	1	25	21.37	21.37	23	1		
10	ISGM	1	49	21.25	21.25				
10	ISGM	25	0	20.35	20.35				
10	ISGM	25	12	20.19	20.19	22	2		
10	ISGM	25	25	20.29	20.29				
10	ISGM	50	0	20.19	20.19				
10	ISGM	1	0	20.40	20.40				
10	ISGM	1	25	20.47	20.47	22	2		
10	ISGM	1	49	20.32	20.32				
10	ISGM	25	0	19.15	19.15				
10	ISGM	25	12	19.20	19.12	21	3		
10	ISGM	25	25	19.12	19.12				
10	ISGM	50	0	19.15	19.15				
10	ZSSDM	1	0	17.21	17.21	19	5		
10	ZSSDM	1	25	17.20	17.20				
10	ZSSDM	1	49	17.83	17.83				
10	ZSSDM	25	0	17.28	17.28				
10	ZSSDM	25	12	17.23	17.23	19	5		
10	ZSSDM	25	25	17.38	17.38				
10	ZSSDM	50	0	17.43	17.43				
Channel									
27685, 27710, 27735									
2907.5, 2910, 2912.5									
Frequency (MHz)									
5	OPRK	1	0	22.08	22.09	24	0		
5	OPRK	12	0	22.19	22.18				
5	OPRK	1	24	22.50	22.52				
5	OPRK	12	0	21.21	21.18				
5	OPRK	12	13	21.02	21.08				
5	OPRK	25	0	21.08	21.08	23	1		
5	ISGM	1	0	21.24	21.28				
5	ISGM	1	24	21.38	21.37	23	1		
5	ISGM	1	24	21.14	21.22				
5	ISGM	12	0	20.17	20.17	23	2		
5	ISGM	12	7	20.15	20.09				
5	ISGM	12	13	20.11	20.13				
5	ISGM	25	0	20.33	20.33	22	2		
5	ISGM	1	0	20.34	20.35				
5	ISGM	1	24	20.44	20.41				
5	ISGM	12	0	19.11	19.16	21	3		
5	ISGM	12	7	19.14	19.09				
5	ISGM	12	13	19.07	19.03				
5	ISGM	25	0	19.07	19.10				
5	ZSSDM	1	0	17.20	17.27	19	5		
5	ZSSDM	1	24	17.20	17.23				
5	ZSSDM	1	24	17.89	17.83				
5	ZSSDM	12	0	17.17	17.15				
5	ZSSDM	12	7	17.11	17.20				
5	ZSSDM	12	13	17.08	17.02				
5	ZSSDM	25	0	17.08	17.07				

Band 66_Ant 0									
BW (MHz)	Modulation	RB (MHz)	RB Offset	Power Low Ch. (Freq)	Power High Ch. (Freq)	Turnup (int/dBm)	MFR (dB)		
Channel									
130072, 130072, 130072									
Frequency (MHz)									
20	OPRK	1	0	22.80	22.79	24	0		
20	OPRK	1	25	22.80	22.80				
20	OPRK	1	49	22.71	22.73				
20	OPRK	25	0	22.77	22.80				
20	OPRK	25	12	22.78	22.78				
20	OPRK	50	0	22.74	22.80	24	0		
20	ISGM	1	49	22.87	22.87	24	0		
20	ISGM	1	25	22.85	22.85				
20	ISGM	1	99	22.73	22.73				
20	ISGM	25	0	21.80	21.80	23	1		
20	ISGM	25	12	21.82	21.81				
20	ISGM	50	0	21.81	21.81				
20	ISGM	1	49	21.99	21.94	23	1		
20	ISGM	1	99	21.87	22.01	23	1		
20	ISGM	50	0	20.77	20.83	22	2		
20	ISGM	50	24	20.88	20.87				
20	ISGM	100	0	20.88	20.80	20	4		
20	ZSSDM	1	0	18.52	18.53	20	4		
20	ZSSDM	1	25	18.53	18.53				
20	ZSSDM	1	49	18.57	18.64				
20	ZSSDM	25	0	18.51	18.52	20	4		
20	ZSSDM	25	12	18.49	18.49				
20	ZSSDM	25	25	18.50	18.51				
20	ZSSDM	50	0	18.48	18.42	20	4		
20	ZSSDM	100	0	18.48	18.42				
Channel									
1717.5, 1745, 1772.5									
Frequency (MHz)									
15	OPRK	1	0	22.72	22.70	24	0		
15	OPRK	1	25	22.72	22.72				
15	OPRK	1	49	22.63	22.61				
15	OPRK	12	0	22.68	22.77				
15	OPRK	12	13	22.62	22.65				
15	OPRK	25	0	22.66	22.72	24	0		
15	ISGM	1	0	22.75	22.75				
15	ISGM	1	24	22.62	22.53	24	0		
15	ISGM	1	24	22.62	22.61				
15	ISGM	12	0	21.87	21.83	23	1		
15	ISGM	12	7	21.73	21.75				
15	ISGM	12	13	21.71	21.78				
15	ISGM	25	0	21.85	21.82				



### Band 71\_Ant 0

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up (int. dBm)	MFR (dB)
Channel								
133322 133307 133372								
Frequency (MHz)								
20	QPSK	1	0	22.71	22.74	22.57	24	0
20	QPSK	49	0	22.71	22.74	22.57		
20	QPSK	1	99	22.58	22.64	22.61		
20	QPSK	50	0	22.58	22.73	22.72		
20	QPSK	24	0	22.58	22.64	22.61		
20	QPSK	50	50	22.57	22.57	22.56	24	0
20	QPSK	100	0	22.65	22.71	22.64		
20	HQAM	1	0	22.76	22.76	22.75		
20	HQAM	1	49	22.57	22.71	22.58	24	0
20	HQAM	1	99	22.60	22.65	22.58		
20	HQAM	50	24	22.12	22.15	22.08		
20	HQAM	50	50	22.16	22.17	22.11	23	1
20	HQAM	100	0	22.07	22.09	22.06		
20	BGAM	1	0	22.45	22.50	22.48		
20	BGAM	1	49	22.29	22.34	22.27	23	1
20	BGAM	50	0	21.33	21.35	21.29		
20	BGAM	50	24	21.16	21.22	21.19	22	2
20	BGAM	50	50	21.16	21.20	21.15		
20	BGAM	100	0	21.14	21.17	21.14		
20	ZSSDM	1	0	19.43	19.53	19.52	20	4
20	ZSSDM	1	49	19.44	19.45	19.41		
20	ZSSDM	1	99	19.34	19.36	19.31		
20	ZSSDM	50	0	19.23	19.29	19.27		
20	ZSSDM	50	24	19.15	19.23	19.19	20	4
20	ZSSDM	50	50	19.04	19.06	19.05		
20	ZSSDM	100	0	19.24	19.25	19.18		
Channel								
133147 133107 133147								
Frequency (MHz)								
15	QPSK	1	0	22.61	22.67	22.48	24	0
15	QPSK	37	0	22.61	22.67	22.48		
15	QPSK	1	74	22.47	22.54	22.54		
15	QPSK	36	0	22.58	22.63	22.61		
15	QPSK	36	20	21.96	22.06	21.94	24	0
15	QPSK	36	39	22.41	22.50	22.47		
15	QPSK	75	0	22.58	22.60	22.55		
15	HQAM	1	0	22.76	22.76	22.75		
15	HQAM	1	37	22.50	22.61	22.53	24	0
15	HQAM	1	74	22.52	22.56	22.49		
15	HQAM	1	21	22.12	22.13	22.03		
15	HQAM	36	20	22.05	22.12	22.03	23	1
15	HQAM	36	39	22.12	22.12	22.07		
15	HQAM	75	0	21.96	22.06	21.95		
15	BGAM	1	0	22.45	22.50	22.37		
15	BGAM	1	37	22.23	22.24	22.21	23	1
15	BGAM	1	74	22.26	22.31	22.31		
15	BGAM	36	0	21.29	21.27	21.26		
15	BGAM	36	20	21.12	21.10	21.15	22	2
15	BGAM	36	39	21.12	21.17	21.16		
15	BGAM	75	0	21.07	21.09	21.02		
15	ZSSDM	1	0	19.42	19.42	19.44	20	4
15	ZSSDM	1	37	19.38	19.39	19.35		
15	ZSSDM	1	74	19.26	19.24	19.26		
15	ZSSDM	36	0	19.15	19.25	19.21		
15	ZSSDM	36	20	19.10	19.17	19.10	20	4
15	ZSSDM	36	39	18.98	19.02	18.98		
15	ZSSDM	75	0	19.17	19.13	19.11		
Channel								
133152 133107 133152								
Frequency (MHz)								
10	QPSK	1	0	22.61	22.63	22.53	24	0
10	QPSK	1	25	22.68	22.74	22.52		
10	QPSK	1	49	22.55	22.55	22.51		
10	QPSK	25	0	22.58	22.64	22.60		
10	QPSK	25	12	22.46	22.48	22.54	24	0
10	QPSK	25	25	22.48	22.53	22.50		
10	QPSK	50	0	22.58	22.59	22.57		
10	HQAM	1	0	22.76	22.76	22.75		
10	HQAM	1	25	22.57	22.69	22.64	24	0
10	HQAM	1	49	22.56	22.60	22.47		
10	HQAM	25	0	22.11	22.17	22.04		
10	HQAM	25	12	22.04	22.11	21.96	23	1
10	HQAM	25	25	22.07	22.10	22.07		
10	HQAM	50	0	21.96	22.06	21.97		
10	BGAM	1	0	22.46	22.45	22.40		
10	BGAM	1	25	22.21	22.27	22.21	23	1
10	BGAM	1	49	22.26	22.32	22.33		
10	BGAM	25	0	21.24	21.23	21.19		
10	BGAM	25	12	21.05	21.11	21.16	22	2
10	BGAM	25	25	21.07	21.13	21.06		
10	BGAM	50	0	21.11	21.13	21.08		
10	ZSSDM	1	0	19.42	19.44	19.41	20	4
10	ZSSDM	1	25	19.38	19.41	19.38		
10	ZSSDM	1	49	19.26	19.30	19.26		
10	ZSSDM	25	0	19.20	19.21	19.18		
10	ZSSDM	25	12	19.09	19.14	19.11	20	4
10	ZSSDM	25	25	18.97	18.97	18.94		
10	ZSSDM	50	0	19.12	19.14	19.13		
Channel								
133147 133107 133147								
Frequency (MHz)								
5	QPSK	1	0	22.67	22.67	22.49	24	0
5	QPSK	1	12	22.69	22.74	22.52		
5	QPSK	1	24	22.51	22.61	22.55		
5	QPSK	12	0	22.60	22.63	22.66		
5	QPSK	12	7	22.46	22.48	22.54	24	0
5	QPSK	12	13	22.50	22.46	22.45		
5	QPSK	25	0	22.61	22.65	22.61		
5	HQAM	1	0	22.75	22.76	22.75		
5	HQAM	1	12	22.67	22.67	22.62	24	0
5	HQAM	1	24	22.48	22.61	22.61		
5	HQAM	12	0	22.11	22.18	22.04		
5	HQAM	12	7	22.02	22.09	22.04	23	1
5	HQAM	12	13	22.11	22.06	22.06		
5	HQAM	25	0	21.96	22.04	21.96		
5	BGAM	1	0	22.44	22.42	22.44		
5	BGAM	1	12	22.22	22.26	22.21	23	1
5	BGAM	1	24	22.33	22.34	22.37		
5	BGAM	12	0	21.26	21.29	21.23		
5	BGAM	12	7	21.11	21.16	21.12	22	2
5	BGAM	12	13	21.08	21.15	21.07		
5	BGAM	25	0	21.02	21.11	21.06		
5	ZSSDM	1	0	19.38	19.44	19.46	20	4
5	ZSSDM	1	12	19.33	19.42	19.38		
5	ZSSDM	1	24	19.30	19.29	19.21		
5	ZSSDM	12	0	19.12	19.25	19.18		
5	ZSSDM	12	7	19.10	19.16	19.13	20	4
5	ZSSDM	12	13	18.99	19.03	18.93		
5	ZSSDM	25	0	19.16	19.14	19.07		

### Band 71\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up (int. dBm)	MFR (dB)
Channel								
133322 133307 133372								
Frequency (MHz)								
20	QPSK	1	0	22.64	22.72	22.57	24	0
20	QPSK	49	0	22.64	22.72	22.57		
20	QPSK	1	99	22.41	22.48	22.40		
20	QPSK	50	0	22.41	22.70	22.70		
20	QPSK	24	0	22.41	22.48	22.45		
20	QPSK	50	50	22.45	22.52	22.52	24	0
20	QPSK	100	0	22.58	22.65	22.60		
20	HQAM	1	0	22.65	22.65	22.64		
20	HQAM	1	49	22.52	22.68	22.51	24	0
20	HQAM	1	99	22.60	22.71	22.66		
20	HQAM	50	24	21.85	21.89	21.88	23	1
20	HQAM	50	50	21.75	21.77	21.69		
20	HQAM	100	0	21.86	21.92	21.77		
20	BGAM	1	0	21.72	21.81	21.61		
20	BGAM	1	49	21.62	21.72	21.67	23	1
20	BGAM	50	0	20.74	20.76	20.69		
20	BGAM	50	24	20.86	20.92	20.75	22	2
20	BGAM	50	50	20.74	20.76	20.69		
20	BGAM	100	0	20.75	20.85	20.67		
20	ZSSDM	1	0	19.02	19.05	18.95	20	4
20	ZSSDM	1	49	18.83	18.85	18.70		
20	ZSSDM	1	99	18.77	18.84	18.70		
20	ZSSDM	50	0	18.70	18.83	18.64		
20	ZSSDM	50	24	18.62	18.67	18.72	20	4
20	ZSSDM	50	50	18.71	18.76	18.66		
20	ZSSDM	100	0	18.71	18.81	18.67		
Channel								
133147 133107 133147								
Frequency (MHz)								
15	QPSK	1	0	22.59	22.64	22.53	24	0
15	QPSK	37	0	22.59	22.64	22.48		
15	QPSK	1	74	22.25	22.45	22.33		
15	QPSK	36						



Band 38_Ant 9										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2560	2595	2610				
20	QPSK	1	0	23.04	23.14	23.01	24	0		
20	QPSK	49	49	23.08	23.02	23.03				
20	QPSK	1	99	23.18	23.21	22.97				
20	QPSK	50	0	23.30	23.35	23.18				
20	QPSK	50	24	23.08	23.06	23.07				
20	QPSK	50	50	23.20	23.28	23.16	24	0		
20	QPSK	100	0	23.30	23.32	23.23				
20	16QAM	1	0	23.05	23.13	22.71				
20	16QAM	1	49	22.75	22.76	22.65	24	0		
20	16QAM	1	99	23.19	23.09	23.02				
20	16QAM	50	0	22.75	22.96	22.86				
20	16QAM	50	24	23.11	22.96	23.02	23.5	0.5		
20	16QAM	50	50	23.09	23.06	22.95				
20	16QAM	100	0	22.95	22.90	22.89				
20	16QAM	100	1	22.48	22.81	22.75				
20	64QAM	1	99	22.69	22.85	22.61	23.5	0.5		
20	64QAM	50	0	21.78	21.92	21.89				
20	64QAM	50	24	22.09	22.36	21.83	22.5	1.5		
20	64QAM	50	50	22.08	22.09	21.99				
20	64QAM	100	0	21.95	22.03	21.93				
20	256QAM	1	0	19.60	19.63	19.58	20.5	3.5		
20	256QAM	1	49	19.61	19.62	19.59				
20	256QAM	1	99	19.41	19.46	19.39				
20	256QAM	50	0	19.68	19.74	19.68				
20	256QAM	50	24	19.62	19.67	19.63	20.5	3.5		
20	256QAM	50	50	19.62	19.63	19.60				
20	256QAM	100	0	19.68	19.74	19.72				
Channel										
Frequency (MHz)				2772	2793	2813	Turn-up limit (dBm)	MPR (dB)		
15	QPSK	1	0	22.88	23.10	22.85	24	0		
15	QPSK	1	37	23.29	23.35	22.89				
15	QPSK	1	74	23.02	23.17	22.78				
15	QPSK	36	0	23.25	23.34	23.10				
15	QPSK	36	20	23.03	23.19	22.96				
15	QPSK	36	39	23.02	23.17	23.15	24	0		
15	QPSK	75	0	23.13	23.18	23.07				
15	16QAM	1	0	22.89	23.02	22.86				
15	16QAM	1	37	22.89	23.03	23.16	24	0		
15	16QAM	1	74	23.10	22.93	22.91				
15	16QAM	36	0	22.62	22.76	22.62				
15	16QAM	36	20	23.03	22.79	22.95	23.5	0.5		
15	16QAM	36	39	22.96	22.97	22.91				
15	16QAM	75	0	22.93	22.71	22.74				
15	64QAM	1	37	22.63	22.73	22.51	23.5	0.5		
15	64QAM	1	74	22.51	22.75	22.55				
15	64QAM	36	0	21.70	21.79	21.84				
15	64QAM	36	20	21.86	21.86	21.82	22.5	1.5		
15	64QAM	36	39	21.92	21.91	21.95				
15	64QAM	75	0	21.79	21.87	21.81				
15	256QAM	1	0	19.62	19.64	19.61	20.5	3.5		
15	256QAM	1	37	19.38	19.43	19.39				
15	256QAM	1	74	19.35	19.42	19.32				
15	256QAM	36	0	19.65	19.62	19.58	20.5	3.5		
15	256QAM	36	20	19.59	19.56	19.54				
15	256QAM	36	39	19.59	19.69	19.67				
15	256QAM	75	0	19.59	19.69	19.67				
Channel										
Frequency (MHz)				3760	3800	3820	Turn-up limit (dBm)	MPR (dB)		
10	QPSK	1	0	23.00	23.09	22.93	24	0		
10	QPSK	1	25	23.19	23.31	23.05				
10	QPSK	1	49	23.03	23.09	22.91				
10	QPSK	25	0	23.29	23.26	23.07	24	0		
10	QPSK	25	12	23.26	23.27	23.03				
10	QPSK	25	25	23.04	23.09	23.10				
10	QPSK	50	0	23.19	23.22	23.17				
10	16QAM	1	0	22.95	23.02	22.63				
10	16QAM	1	25	22.95	23.10	23.01	24	0		
10	16QAM	1	49	23.06	22.91	22.95				
10	16QAM	25	0	22.72	22.97	22.95				
10	16QAM	25	12	23.09	22.79	22.91	23.5	0.5		
10	16QAM	25	25	22.95	22.94	22.79				
10	16QAM	50	0	22.75	22.71	22.67				
10	64QAM	1	25	22.47	22.33	22.25	23.5	0.5		
10	64QAM	1	49	22.51	22.79	22.46				
10	64QAM	25	0	21.65	21.86	21.84	22.5	1.5		
10	64QAM	25	12	22.06	21.84	21.75				
10	64QAM	25	25	21.92	22.03	21.93				
10	64QAM	50	0	21.84	22.01	21.82				
10	256QAM	1	0	19.55	19.56	19.46	20.5	3.5		
10	256QAM	1	25	19.38	19.46	19.41				
10	256QAM	25	0	19.62	19.64	19.61				
10	256QAM	25	12	19.55	19.62	19.56	20.5	3.5		
10	256QAM	25	25	19.56	19.60	19.56				
10	256QAM	50	0	19.56	19.66	19.69				
Channel										
Frequency (MHz)				2572	2595	2617.5	Turn-up limit (dBm)	MPR (dB)		
5	QPSK	1	0	22.88	23.07	22.95	24	0		
5	QPSK	1	12	23.34	23.37	22.99				
5	QPSK	1	24	23.10	23.09	22.82				
5	QPSK	12	0	23.13	23.24	23.17	24	0		
5	QPSK	12	7	23.12	23.17	23.11				
5	QPSK	12	13	23.19	23.25	23.06				
5	QPSK	25	0	22.88	23.14	23.04				
5	16QAM	1	0	22.97	23.06	22.53				
5	16QAM	1	12	22.86	23.13	23.03	24	0		
5	16QAM	1	24	22.99	22.89	22.96				
5	16QAM	12	0	22.68	22.82	22.71				
5	16QAM	12	7	23.05	22.77	22.91	23.5	0.5		
5	16QAM	12	13	23.01	23.05	22.76				
5	16QAM	25	0	22.77	23.62	23.50				
5	64QAM	1	0	22.33	22.48	22.44	23.5	0.5		
5	64QAM	1	12	22.56	22.70	22.39				
5	64QAM	1	24	22.57	22.72	22.50				
5	64QAM	12	0	21.63	21.79	21.75	22.5	1.5		
5	64QAM	12	7	21.89	21.88	21.86				
5	64QAM	12	13	22.02	22.09	21.87				
5	256QAM	1	0	21.84	21.86	21.86	20.5	3.5		
5	256QAM	1	12	19.49	19.56	19.54				
5	256QAM	1	24	19.40	19.44	19.41				
5	256QAM	12	0	19.31	19.37	19.35				
5	256QAM	12	7	19.53	19.63	19.59	20.5	3.5		
5	256QAM	12	13	19.55	19.58	19.56				
5	256QAM	25	0	19.56	19.66	19.62				

Band 38_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	22.85	22.93	22.84	24	0		
20	QPSK	1	49	22.85	23.03	22.86				
20	QPSK	1	99	22.87	22.95	22.84				
20	QPSK	50	0	22.37	22.47	22.37				
20	QPSK	50	24	22.45	22.43	22.37				
20	QPSK	50	50	22.34	22.43	22.27	23	1		
20	QPSK	100	0	22.40	22.43	22.33				
20	16QAM	1	0	22.32	22.18	22.26				
20	16QAM	1	49	22.32	21.66	21.53	23	1		
20	16QAM	1	99	22.30	22.34	22.21				
20	16QAM	50	0	21.32	21.36	21.32				
20	16QAM	50	24	21.40	21.43	21.37	22	2		
20	16QAM	50	50	21.45	21.41	21.27				
20	64QAM	1	0	21.39	21.40	21.35				
20	64QAM									



Band 41 (HPUE)_Ant 9													
BW (MHz)	Modulation	RB Size	RB Offset	For IC Power Low Ch / Freq	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Low High Ch / Freq	Power High Middle Ch / Freq	Power High High Ch / Freq	Time-up (dBm)	MPR (dB)		
Channel				39750	39750	40185	40620	41055	41490				
20	QPSK	1	0	2510	2506	25495	2593	26365	2680				
20	QPSK	1	49	2567	2567	2597	2616	2638	2643	27	0		
20	QPSK	1	99	2624	2620	2609	2620	2651	2648				
20	QPSK	50	0	2525	2524	2571	2620	2638	2634				
20	QPSK	50	24	2561	2561	2596	2616	2638	2632				
20	QPSK	50	50	2595	2593	2601	2611	2599	2645	27	0		
20	QPSK	100	0	2585	2600	2617	2626	2607	2651				
20	16QAM	1	0	2550	2594	2620	2647	2620	2647				
20	16QAM	1	49	2634	2614	2625	2600	2638	2632	27	0		
20	16QAM	1	99	2698	2637	2623	2641	2625	2651				
20	16QAM	50	0	2528	2623	2620	2628	2650	2637				
20	16QAM	50	24	2541	2638	2627	2629	2638	2666	26	1		
20	16QAM	50	50	2602	2630	2631	2636	2636	2656				
20	16QAM	100	0	2539	2633	2628	2638	2638	2651				
20	64QAM	1	0	2533	2629	2623	2626	2624	2658	26	1		
20	64QAM	1	49	2646	2618	2621	2621	2621	2654				
20	64QAM	1	99	2655	2647	2632	2633	2639	2638				
20	64QAM	50	0	2420	2417	2427	2437	2436	2434				
20	64QAM	50	24	2436	2434	2449	2441	2446	2441				
20	64QAM	50	50	2438	2432	2449	2443	2454	2434	24	2		
20	64QAM	100	0	2438	2432	2469	2479	2456	2479				
20	256QAM	1	0	2207	2218	2222	2227	2258	2256				
20	256QAM	1	49	2212	2214	2217	2226	2248	2248	23	4		
20	256QAM	1	99	2221	2211	2222	2228	2241	2264				
20	256QAM	50	0	2195	2209	2212	2225	2244	2254				
20	256QAM	50	24	2202	2216	2220	2221	2241	2241	23	4		
20	256QAM	50	50	2213	2204	2215	2226	2248	2248				
20	256QAM	100	0	2197	2202	2208	2213	2240	2244				
20	64QAM	1	0	2197	2202	2208	2213	2240	2244				
20	64QAM	1	49	2211	2211	2217	2222	2251	2249	22	2		
20	64QAM	100	0	2110	2106	2108	2105	2106	2108				
20	256QAM	1	0	1896	1902	1899	1906	1903	1886				
20	256QAM	1	49	1903	1892	1892	1900	1893	1891	20	4		
20	256QAM	1	99	1871	1870	1870	1878	1875	1869				
20	256QAM	50	0	1898	1894	1896	1903	1898	1884				
20	256QAM	50	24	1900	1898	1898	1905	1901	1896	20	4		
20	256QAM	50	50	1908	1898	1898	1905	1898	1889				
20	256QAM	100	0	1890	1890	1890	1898	1888	1889				
Channel				39755	39725	40173	40620	41068	41515	Time-up (dBm)	MPR (dB)		
15	QPSK	1	0	2007	2003	2043	2003	2037	2025				
15	QPSK	1	37	2058	2062	2043	2005	2016	2046	27	0		
15	QPSK	1	74	2147	2151	2031	2014	2037	2040				
15	QPSK	36	0	2062	2053	2051	2012	2037	2040				
15	QPSK	36	20	2064	2057	2057	2022	2047	2047	27	0		
15	QPSK	36	39	2046	2052	2050	2039	2051	2035				
15	QPSK	75	0	2091	2094	2089	2038	2054	2030	24	0		
15	QPSK	75	20	2102	2105	2092	2051	2076	2076				
15	16QAM	1	37	2093	2096	2091	2052	2067	2034	27	0		
15	16QAM	1	74	2122	2126	2102	2083	2105	2095				
15	16QAM	36	0	2107	2104	2106	2084	2102	2071				
15	16QAM	36	20	2109	2109	2102	2091	2111	2113	23	1		
15	16QAM	36	39	2108	2107	2104	2106	2103	2117				
15	16QAM	75	0	2108	2109	2109	2102	2118	2106				
15	16QAM	75	20	2112	2112	2112	2108	2116	2116				
15	16QAM	75	39	2112	2118	2118	2112	2118	2107				
15	64QAM	1	74	2103	2104	2107	2104	2101	2097				
15	64QAM	36	0	2088	2086	2102	2082	2081	2087				
15	64QAM	36	20	2101	2101	2101	2092	2092	2092				
15	64QAM	36	39	2117	2090	2107	2105	2051	2104	22	2		
15	64QAM	75	0	2100	2100	2104	2035	2070	2098				
15	256QAM	1	0	1873	1878	1878	1878	1885	1872				
15	256QAM	1	37	1884	1877	1884	1882	1889	1883	20	4		
15	256QAM	1	74	1854	1862	1850	1866	1864	1857				
15	256QAM	36	0	1892	1870	1883	1884	1885	1873				
15	256QAM	36	20	1892	1878	1884	1884	1885	1883	20	4		
15	256QAM	36	39	1876	1875	1874	1885	1887	1861				
15	256QAM	75	0	1873	1868	1871	1873	1878	1878				
Channel				39760	39760	40160	40620	41080	41540	Time-up (dBm)	MPR (dB)		
10	QPSK	1	0	2203	2203	2243	2203	2237	2225				
10	QPSK	1	25	2258	2262	2243	2205	2236	2237	24	0		
10	QPSK	1	49	2322	2324	2222	2208	2221	2215				
10	QPSK	1	99	2386	2382	2282	2267	2286	2282				
10	QPSK	50	0	2297	2300	2297	2301	2320	2288				
10	QPSK	50	24	2302	2302	2302	2297	2326	2301				
10	QPSK	50	50	2306	2304	2304	2312	2299	2307				
10	16QAM	1	25	2300	2302	2294	2282	2302	2284	24	0		
10	16QAM	1	49	2326	2326	2295	2289	2311	2302				
10	16QAM	1	99	2396	2392	2292	2277	2299	2299				
10	16QAM	50	0	2301	2302	2301	2296	2316	2299				
10	16QAM	50	24	2302	2302	2301	2296	2316	2299				
10	16QAM	50	50	2306	2306	2306	2312	2299	2307				
10	16QAM	100	0	2304	2304	2304	2312	2299	2307				
10	64QAM	1	25	2317	2318	2310	2306	2314	2310				
10	64QAM	1	49	2339	2338	2308	2301	2315	2318				
10	64QAM	1	99	2403	2403	2303	2288	2311	2309				
10	64QAM	50	0	2303	2303	2303	2312	2299	2309				
10	64QAM	50	24	2303	2303	2303	2312	2299	2311				
10	64QAM	50	50	2306	2306	2306	2312	2299	2309				
10	256QAM	1	25	1884	1882	1878	1878	1877	1879				
10	256QAM	1	49	1884	1884	1880	1888	1885	1857				
10	256QAM	1	99	1874	1885	1880	1888	1878	1876				
10	256QAM	50	0	1898	1898	1876	1882	1889	1887				
10	256QAM	50	24	1867	1858	1871	1868	1874	1871				
10	256QAM	50	50	1865	1861	1867	1875	1874	1879				
Channel				39765	39765	40165	40620	41080	41540	Time-up (dBm)	MPR (dB)		
5	QPSK	1	0	2505	2505	2545	2505	2539	2527				
5	QPSK	1	12	2563	2560	2539	2501	2532	2533	24	0		
5	QPSK	1	24	2621	2623	2521	2509	2532	2533				
5	QPSK	12	0	2648	2647	2630	2612	2636	2637				



Band 41_Ant 2											
BW [MHz]	Modulation	RB Size	RB Offset	Fair IC Power Low Ch / Freq	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel											
				39750	39750	40165	40620	41055	41490		
	Frequency (MHz)			2510	2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.02	23.06	23.22	23.35	23.03	23.13	24	0
20	QPSK	1	49	23.02	23.06	23.22	23.35	23.03	23.13	24	0
20	QPSK	1	99	23.08	23.05	23.27	23.47	22.97	23.33	24	0
20	QPSK	50	0	23.21	23.15	23.45	23.58	23.12	23.31	24	0
20	QPSK	50	24	23.21	23.15	23.45	23.58	23.12	23.31	24	0
20	QPSK	50	50	23.08	23.12	23.31	23.48	23.02	23.30	24	0
20	QPSK	100	0	23.18	23.20	23.40	23.47	23.10	23.32	24	0
20	16QAM	1	0	23.00	23.03	23.33	23.61	23.15	23.35	24	0
20	16QAM	1	49	23.00	23.03	23.33	23.61	23.15	23.35	24	0
20	16QAM	1	99	23.12	23.12	23.43	23.45	22.99	23.30	24	0
20	16QAM	50	0	22.11	22.07	22.31	22.47	22.17	22.25	23	1
20	16QAM	50	24	22.21	22.21	22.46	22.62	22.19	22.42	23	1
20	16QAM	50	50	22.25	22.23	22.46	22.62	22.07	22.48	23	1
20	16QAM	100	0	22.23	22.23	22.43	22.51	22.12	22.36	23	1
20	16QAM	100	1	21.97	21.98	22.12	22.31	22.02	22.15	23	1
20	16QAM	100	24	22.08	22.01	22.22	22.45	21.93	22.21	23	1
20	16QAM	100	50	22.07	22.04	22.29	22.43	21.98	22.42	23	1
20	16QAM	50	0	21.13	21.09	21.33	21.46	21.11	21.25	22	2
20	16QAM	50	24	21.24	21.24	21.45	21.64	21.41	21.41	22	2
20	16QAM	50	50	21.19	21.17	21.48	21.64	21.07	21.41	22	2
20	16QAM	100	0	21.20	21.20	21.43	21.63	21.14	21.42	22	2
20	256QAM	1	0	18.76	18.74	18.90	19.21	18.82	18.95	20	4
20	256QAM	1	49	18.78	18.88	18.84	19.15	18.78	18.92	20	4
20	256QAM	1	99	18.71	18.79	18.75	19.01	18.62	18.95	20	4
20	256QAM	50	0	18.67	18.66	18.64	18.99	18.65	18.87	20	4
20	256QAM	50	24	18.63	18.64	18.61	18.99	18.77	18.76	20	4
20	256QAM	50	50	18.66	18.68	18.66	18.99	18.61	18.96	20	4
20	256QAM	100	0	18.78	18.68	18.60	19.06	18.62	18.82	20	4
Channel											
				39765	39725	40173	40620	41058	41515		
	Frequency (MHz)			25075	25033	25433	2593	26373	26823		
15	QPSK	1	0	22.02	22.07	22.31	22.47	22.17	22.29	24	0
15	QPSK	1	37	22.96	22.94	23.25	23.34	22.99	23.33	24	0
15	QPSK	1	74	23.07	22.99	23.14	23.38	22.92	23.24	24	0
15	QPSK	36	0	23.06	23.12	23.41	23.40	23.18	23.18	24	0
15	QPSK	36	24	23.08	22.97	23.18	23.30	23.05	23.20	24	0
15	QPSK	36	50	23.05	23.00	23.14	23.30	22.94	23.24	24	0
15	QPSK	75	0	23.01	23.08	23.31	23.35	23.03	23.24	24	0
15	QPSK	75	24	23.08	22.97	23.18	23.30	23.05	23.20	24	0
15	16QAM	1	37	22.99	22.87	23.20	23.40	22.96	23.08	24	0
15	16QAM	1	74	23.00	23.01	23.38	23.31	22.86	23.17	24	0
15	16QAM	36	0	21.95	21.95	22.13	22.29	22.01	22.18	23	1
15	16QAM	36	24	22.02	22.18	22.22	22.33	22.03	22.31	23	1
15	16QAM	36	50	22.13	22.05	22.42	22.32	22.00	22.37	23	1
15	16QAM	75	0	22.19	22.13	22.26	22.34	21.97	22.24	23	1
15	16QAM	75	24	22.18	22.18	22.36	22.48	22.16	22.42	23	1
15	16QAM	75	50	22.26	22.06	22.26	22.27	21.83	22.17	23	1
15	16QAM	100	0	22.26	22.06	22.26	22.27	21.83	22.17	23	1
15	16QAM	100	1	21.91	22.11	22.19	22.33	21.99	22.32	23	1
15	16QAM	36	0	21.03	20.98	21.15	21.35	20.99	21.15	22	2
15	16QAM	36	24	21.08	21.14	21.22	21.38	21.01	21.28	22	2
15	16QAM	36	50	20.99	21.15	21.37	21.45	20.99	21.24	22	2
15	16QAM	75	0	21.17	21.19	21.33	21.35	21.03	21.31	22	2
15	256QAM	1	0	18.69	18.69	18.69	18.97	18.67	18.84	20	4
15	256QAM	1	49	18.50	18.41	18.44	18.97	18.65	18.69	20	4
15	256QAM	1	99	18.53	18.56	18.53	18.86	18.58	18.63	20	4
15	256QAM	50	0	18.65	18.49	18.44	19.04	18.54	18.72	20	4
15	256QAM	50	24	18.56	18.55	18.55	18.86	18.56	18.86	20	4
15	256QAM	50	50	18.55	18.55	18.53	19.01	18.70	18.66	20	4
15	256QAM	75	0	18.58	18.53	18.58	19.03	18.70	18.70	20	4
Channel											
				39740	39700	40160	40620	41080	41540		
	Frequency (MHz)			25095	25055	25455	2595	26395	26855		
10	QPSK	1	0	22.97	23.05	23.15	23.15	22.87	23.24	24	0
10	QPSK	1	25	23.08	23.01	23.30	23.33	22.93	23.30	24	0
10	QPSK	1	49	23.05	22.98	23.21	23.36	22.89	23.32	24	0
10	QPSK	1	74	23.08	23.17	23.42	23.38	22.95	23.33	24	0
10	QPSK	25	12	23.10	23.10	23.30	23.30	22.91	23.22	24	0
10	QPSK	25	25	22.98	23.07	23.28	23.38	22.98	23.25	24	0
10	QPSK	50	0	23.12	23.04	23.33	23.39	22.96	23.22	24	0
10	16QAM	1	0	22.93	22.98	23.28	23.41	22.91	23.18	24	0
10	16QAM	1	25	23.14	23.08	23.28	23.42	22.94	23.21	24	0
10	16QAM	1	49	22.95	23.07	23.31	23.31	22.81	23.12	24	0
10	16QAM	1	74	23.08	23.13	23.42	23.38	22.95	23.32	24	0
10	16QAM	25	12	23.13	22.97	23.27	23.40	22.93	23.26	23	1
10	16QAM	25	25	22.97	23.13	23.43	23.31	22.93	23.25	23	1
10	16QAM	50	0	22.15	22.04	22.26	22.31	21.94	22.19	23	1
10	16QAM	50	24	22.18	21.83	22.11	22.40	21.84	22.03	23	1
10	16QAM	50	50	22.07	21.99	22.19	22.30	21.84	22.05	23	1
10	16QAM	1	49	21.99	22.00	22.24	22.39	21.97	22.24	23	1
10	16QAM	25	12	21.21	21.21	21.41	21.50	20.98	21.30	22	2
10	16QAM	25	25	21.02	21.13	21.38	21.44	21.06	21.41	22	2
10	16QAM	50	0	21.04	21.04	21.41	21.62	20.96	21.30	22	2
10	256QAM	1	0	18.68	18.55	18.62	19.15	18.78	18.62	20	4
10	256QAM	1	25	18.52	18.55	18.60	19.03	18.69	18.79	20	4
10	256QAM	1	49	18.54	18.46	18.44	18.81	18.59	18.84	20	4
10	256QAM	25	0	18.62	18.50	18.60	18.94	18.63	18.82	20	4
10	256QAM	25	12	18.52	18.47	18.38	18.96	18.69	18.70	20	4
10	256QAM	25	25	18.53	18.38	18.39	19.05	18.68	18.78	20	4
10	256QAM	50	0	18.67	18.59	18.41	18.84	18.60	18.70	20	4
Channel											
				39715	39675	40135	40620	41035	41495		
	Frequency (MHz)			25025	24985	25445	2593	26375	26835		
5	QPSK	1	0	22.87	22.92	23.20	23.31	22.92	23.25	24	0
5	QPSK	1	12	23.02	23.05	23.31	23.49	22.93	23.28	24	0
5	QPSK	1	24	22.92	22.99	23.20	23.27	22.83	23.20	24	0
5	QPSK	1	49	23.13	23.05	23.26	23.41	22.97	23.38	24	0
5	QPSK	12	7	23.10	23.09	23.37	23.32	22.92	23.28	24	0
5	QPSK	12	13	22.97	22.98	23.23	23.30	22.86	23.18	24	0
5	QPSK	25	0	23.17	23.00	23.30	23.27	22.98	23.34	24	0
5	16QAM	1	0	22.81	23.01	23.18	23.45	22.99	23.31	24	0
5	16QAM	1	12	23.03	22.98	23.22	23.37	22.92	23.18		



Band 41 (HPUe_Ant 6)														
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Mid Ch / Freq	Power High Mid Ch / Freq	Power Low High Ch / Freq	Power High High Ch / Freq	Time-up limit (dBm)	MPR (dB)			
Channel														
Frequency (MHz)				39750	39750	40185	40185	40620	40620	41055	41055	2680		
20	QPSK	1	0	24.25	24.36	24.20	24.31	24.48	24.43	24	0			
20	QPSK	1	48	24.25	24.36	24.20	24.31	24.48	24.43	24	0			
20	QPSK	1	96	24.32	24.32	24.37	24.49	24.38	24.53	24	1			
20	QPSK	50	0	23.52	23.53	23.54	23.69	23.05	23.67	24	0			
20	QPSK	50	24	23.52	23.53	23.54	23.69	23.05	23.67	24	0			
20	QPSK	50	48	23.45	23.58	23.45	23.67	23.48	23.54	24	1			
20	QPSK	100	0	23.54	23.61	23.64	23.68	23.56	23.69	24	0			
20	16QAM	1	0	23.62	23.66	23.50	23.73	23.63	23.77	24	0			
20	16QAM	1	48	23.79	23.86	23.76	23.87	23.86	23.86	24	1			
20	16QAM	1	96	24.12	24.13	23.98	23.93	23.63	24.02	24	1			
20	16QAM	50	0	22.87	22.83	22.80	22.85	22.57	22.38	24	0			
20	16QAM	50	24	22.86	22.88	22.78	22.88	22.58	22.73	24	2			
20	16QAM	50	48	22.81	22.85	22.70	22.85	22.68	22.81	24	0			
20	16QAM	100	0	22.81	22.81	22.80	22.81	22.81	22.81	24	2			
20	16QAM	1	96	22.57	22.43	22.62	22.64	22.59	22.73	24	0			
20	64QAM	50	0	21.83	21.88	21.83	21.87	21.56	21.47	24	0			
20	64QAM	50	24	21.70	21.85	21.81	21.83	21.47	21.71	24	0			
20	64QAM	50	48	21.87	21.91	21.78	21.83	21.67	21.84	24	3			
20	64QAM	100	0	21.66	21.80	21.59	21.62	21.63	21.63	24	0			
20	256QAM	1	0	19.23	19.20	19.24	19.42	19.30	19.31	21	5			
20	256QAM	1	24	19.29	19.27	19.31	19.49	19.40	19.40	21	5			
20	256QAM	1	48	19.24	19.29	19.34	19.43	19.39	19.37	21	5			
20	256QAM	50	0	19.30	19.26	19.25	19.48	19.35	19.41	21	5			
20	256QAM	50	24	19.32	19.27	19.33	19.46	19.31	19.41	21	5			
20	256QAM	50	48	19.29	19.27	19.33	19.46	19.31	19.41	21	5			
20	256QAM	100	0	19.29	19.27	19.33	19.46	19.31	19.38	21	5			
Channel														
Frequency (MHz)				39755	39725	40173	40020	41068	41015					
15	QPSK	1	0	24.19	24.27	24.14	24.48	24.41	24.30	24	0			
15	QPSK	1	37	24.27	24.40	24.30	24.34	24.34	24.32	24	0			
15	QPSK	1	74	24.27	24.16	24.33	24.41	24.48	24.50	24	0			
15	QPSK	36	0	23.47	23.39	23.37	23.60	23.47	23.43	24	0			
15	QPSK	36	20	23.47	23.56	23.52	23.56	23.56	23.56	24	0			
15	QPSK	36	38	23.41	23.45	23.53	23.68	23.41	23.58	24	1			
15	QPSK	75	0	23.43	23.40	23.64	23.57	23.46	23.55	24	0			
15	QPSK	75	24	23.58	23.44	23.41	23.45	23.45	23.41	24	0			
15	16QAM	1	37	23.59	23.78	24.00	23.85	24.00	23.58	24	1			
15	16QAM	1	74	24.26	24.39	24.34	24.39	24.36	24.08	24	1			
15	16QAM	36	0	22.55	22.50	22.57	22.62	22.45	22.30	24	2			
15	16QAM	36	20	22.56	22.63	22.72	22.65	22.62	22.61	24	2			
15	16QAM	36	38	22.50	22.63	22.65	22.62	22.59	22.60	24	2			
15	16QAM	75	0	22.47	22.47	22.53	22.47	22.57	22.51	24	2			
15	16QAM	75	24	22.58	22.58	22.58	22.58	22.58	22.58	24	2			
15	16QAM	1	37	22.73	22.77	22.70	22.73	22.80	22.16	24	2			
15	16QAM	1	74	22.49	22.31	22.53	22.53	22.62	22.62	24	0			
15	64QAM	36	0	21.56	21.48	21.52	21.57	21.47	21.42	24	3			
15	64QAM	36	20	21.60	21.47	21.52	21.52	21.43	21.43	24	3			
15	64QAM	36	38	21.45	21.48	21.67	21.52	21.56	21.58	24	3			
15	64QAM	75	0	21.60	21.54	21.48	21.41	21.56	21.57	24	3			
15	256QAM	1	0	19.19	19.16	19.20	19.38	19.18	19.20	21	5			
15	256QAM	1	24	19.22	19.10	19.23	19.42	19.33	19.30	21	5			
15	256QAM	1	48	19.13	19.25	19.22	19.34	19.27	19.25	21	5			
15	256QAM	50	0	19.20	19.22	19.19	19.41	19.28	19.38	21	5			
15	256QAM	50	24	19.23	19.14	19.25	19.36	19.24	19.28	21	5			
15	256QAM	50	48	19.22	19.14	19.25	19.36	19.24	19.28	21	5			
15	256QAM	75	0	19.19	19.19	19.25	19.34	19.24	19.24	21	5			
Channel														
Frequency (MHz)				39760	39700	40160	40020	41080	41540					
10	QPSK	1	0	24.13	24.26	24.17	24.41	24.42	24.40	24	0			
10	QPSK	1	24	24.28	24.41	24.29	24.31	24.31	24.32	24	0			
10	QPSK	1	48	24.29	24.17	24.28	24.42	24.51	24.45	24	0			
10	QPSK	1	74	24.47	23.44	23.36	23.62	23.47	23.48	24	0			
10	QPSK	25	12	23.45	23.56	23.58	23.61	23.53	23.38	24	1			
10	QPSK	25	25	23.41	23.53	23.55	23.62	23.36	23.63	24	1			
10	QPSK	50	0	23.49	23.48	23.76	23.52	23.49	23.48	24	0			
10	16QAM	1	0	23.61	23.63	23.43	23.57	23.41	23.44	24	0			
10	16QAM	1	24	23.59	23.63	23.95	23.81	23.98	23.58	24	1			
10	16QAM	1	48	24.29	24.36	24.31	24.34	24.34	24.02	24	1			
10	16QAM	1	74	24.26	24.36	24.36	24.36	24.36	24.36	24	1			
10	16QAM	25	12	22.55	22.59	22.67	22.54	22.43	22.65	24	2			
10	16QAM	25	25	22.52	22.62	22.62	22.60	22.59	22.76	24	2			
10	16QAM	50	0	22.55	22.50	22.55	22.44	22.58	22.45	24	2			
10	16QAM	50	24	22.56	22.61	22.68	22.62	22.43	22.47	24	2			
10	16QAM	1	24	22.81	22.76	22.85	22.82	22.78	22.26	24	2			
10	64QAM	1	48	22.51	22.34	22.50	22.59	22.52	22.68	24	3			
10	64QAM	25	0	21.59	21.61	21.58	21.64	21.49	21.43	24	3			
10	64QAM	25	12	21.59	21.49	21.77	21.59	21.41	21.60	24	3			
10	64QAM	25	25	21.52	21.47	21.51	21.67	21.62	21.56	24	3			
10	64QAM	50	0	21.63	21.63	21.61	21.49	21.57	21.69	24	3			
10	256QAM	1	0	19.13	19.11	19.20	19.33	19.18	19.21	21	5			
10	256QAM	1	24	19.26	19.13	19.26	19.44	19.33	19.32	21	5			
10	256QAM	1	48	19.18	19.17	19.31	19.36	19.36	19.27	21	5			
10	256QAM	25	0	19.25	19.23	19.29	19.40	19.23	19.30	21	5			
10	256QAM	25	12	19.25	19.14	19.21	19.35	19.22	19.38	21	5			
10	256QAM	25	25	19.14	19.13	19.28	19.36	19.21	19.33	21	5			
10	256QAM	50	0	19.20	19.15	19.21	19.44	19.36	19.30	21	5			
Channel														
Frequency (MHz)				39765	39705	40165	40020	41093	41550					
5	QPSK	1	0	24.17	24.33	24.17	24.39	24.39	24.35	24	0			
5	QPSK	1	12	24.25	24.40	24.32	24.29	24.33	24.50	24	0			
5	QPSK	1	24	24.24	24.15	24.30	24.27	24.46	24.47	24	0			
5	QPSK	12	0	23.44	23.41	23.38	23.57	23.41	23.43	24	1			
5	QPSK	12	7	23.43	23.51	23.53	23.60	23.59	23.42	24	1			
5	QPSK	12	13	23.40	23.50	23.59	23.60	23.42	23.56	24	1			
5	QPSK	25	0	23.44	23.39	23.57	23.58</							



Band 48_Ant 10										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)										
20	QPSK	1	0	22.82	22.71	22.54	22.71	24	0	
20	QPSK	1	48	22.82	22.91	22.54	22.71			
20	QPSK	1	96	22.79	22.88	22.80	22.87			
20	QPSK	50	0	22.75	22.88	22.72	22.87			
20	QPSK	50	24	22.75	22.88	22.72	22.87			
20	QPSK	50	50	22.75	22.83	22.63	22.77	24	0	
20	QPSK	100	0	22.74	22.78	22.68	22.77			
20	16QAM	1	0	22.69	22.78	22.58	22.61			
20	16QAM	1	48	22.69	22.78	22.58	22.61			
20	16QAM	1	96	22.68	22.76	22.68	22.75			
20	16QAM	50	0	22.33	22.42	22.35	22.40			
20	16QAM	50	24	22.48	22.55	22.44	22.52	23.5	0.5	
20	16QAM	50	50	22.46	22.53	22.41	22.50			
20	16QAM	100	0	22.41	22.48	22.40	22.51			
20	64QAM	1	0	22.35	22.39	22.36	22.40			
20	64QAM	1	48	22.35	22.39	22.36	22.40			
20	64QAM	1	96	22.24	22.31	22.25	22.33			
20	64QAM	50	0	21.37	21.49	21.29	21.46			
20	64QAM	50	24	21.42	21.46	21.36	21.45			
20	64QAM	50	50	21.45	21.56	21.41	21.52	22.5	1.5	
20	64QAM	100	0	21.45	21.53	21.36	21.47			
20	256QAM	1	0	19.26	19.31	19.27	19.38			
20	256QAM	1	48	19.35	19.38	19.23	19.37			
20	256QAM	1	96	19.43	19.49	19.31	19.51	20.5	3.5	
20	256QAM	50	0	19.38	19.41	19.34	19.47			
20	256QAM	50	24	19.48	19.58	19.49	19.56	20.5	3.5	
20	256QAM	50	50	19.48	19.62	19.55	19.62			
20	256QAM	100	0	19.33	19.42	19.32	19.39			
Channel										
Frequency (MHz)										
15	QPSK	1	0	22.94	22.85	22.41	22.68	24	0	
15	QPSK	1	37	22.78	22.78	22.75	22.80			
15	QPSK	1	74	22.73	22.79	22.68	22.81			
15	QPSK	36	0	22.72	22.85	22.70	22.79			
15	QPSK	36	36	22.65	22.70	22.64	22.74	24	0	
15	QPSK	36	72	22.71	22.78	22.61	22.68			
15	QPSK	75	0	22.63	22.69	22.62	22.65			
15	16QAM	1	0	22.58	22.71	22.53	22.63			
15	16QAM	1	37	22.62	22.71	22.61	22.73	24	0	
15	16QAM	1	74	22.64	22.69	22.61	22.66			
15	16QAM	36	0	22.28	22.33	22.23	22.34			
15	16QAM	36	36	22.40	22.50	22.32	22.44	23.5	0.5	
15	16QAM	36	72	22.44	22.50	22.29	22.44			
15	16QAM	75	0	22.38	22.37	22.30	22.42			
15	64QAM	1	0	22.32	22.34	22.30	22.32			
15	64QAM	1	37	22.38	22.38	22.33	22.32	23.5	0.5	
15	64QAM	1	74	22.18	22.20	22.19	22.28			
15	64QAM	36	0	21.34	21.40	21.20	21.42			
15	64QAM	36	36	21.48	21.44	21.30	21.38	22.5	1.5	
15	64QAM	36	72	21.42	21.45	21.34	21.45			
15	64QAM	75	0	21.37	21.50	21.26	21.43			
15	256QAM	1	0	19.14	19.29	19.16	19.28			
15	256QAM	1	37	19.28	19.24	19.18	19.30	20.5	3.5	
15	256QAM	1	74	19.35	19.47	19.21	19.46			
15	256QAM	36	0	19.30	19.33	19.22	19.41			
15	256QAM	36	36	19.37	19.46	19.23	19.53	20.5	3.5	
15	256QAM	36	72	19.48	19.50	19.39	19.43			
15	256QAM	75	0	19.27	19.36	19.29	19.27			
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.54	22.66	22.42	22.59	24	0	
10	QPSK	1	25	22.73	22.83	22.79	22.87			
10	QPSK	1	49	22.78	22.78	22.69	22.75			
10	QPSK	25	0	22.73	22.81	22.60	22.81	24	0	
10	QPSK	25	12	22.65	22.78	22.58	22.74			
10	QPSK	25	25	22.63	22.72	22.59	22.75			
10	16QAM	1	0	22.68	22.73	22.62	22.68			
10	16QAM	1	25	22.59	22.65	22.53	22.73	24	0	
10	16QAM	1	49	22.60	22.74	22.61	22.71			
10	16QAM	25	0	22.32	22.40	22.24	22.33			
10	16QAM	25	12	22.44	22.43	22.38	22.44	23.5	0.5	
10	16QAM	25	25	22.43	22.47	22.29	22.52			
10	16QAM	50	0	22.35	22.46	22.37	22.39			
10	64QAM	1	0	22.30	22.34	22.31	22.31			
10	64QAM	1	25	22.31	22.44	22.28	22.38	23.5	0.5	
10	64QAM	1	49	22.12	22.21	22.13	22.28			
10	64QAM	25	0	21.38	21.41	21.17	21.41			
10	64QAM	25	12	21.37	21.41	21.32	21.42	22.5	1.5	
10	64QAM	25	25	21.36	21.48	21.36	21.45			
10	64QAM	50	0	21.38	21.50	21.28	21.44			
10	256QAM	1	0	19.18	19.21	19.17	19.32			
10	256QAM	1	25	19.31	19.28	19.20	19.25	20.5	3.5	
10	256QAM	1	49	19.40	19.44	19.29	19.41			
10	256QAM	25	0	19.33	19.29	19.23	19.48			
10	256QAM	25	12	19.38	19.47	19.40	19.48	20.5	3.5	
10	256QAM	25	25	19.47	19.51	19.32	19.47			
10	256QAM	50	0	19.24	19.32	19.29	19.29			
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.59	22.64	22.45	22.59	24	0	
5	QPSK	1	12	22.76	22.83	22.79	22.82			
5	QPSK	1	24	22.72	22.83	22.76	22.77			
5	QPSK	12	0	22.74	22.83	22.70	22.76	24	0	
5	QPSK	12	7	22.66	22.75	22.66	22.71			
5	QPSK	12	13	22.65	22.72	22.67	22.69			
5	QPSK	25	0	22.68	22.71	22.56	22.68			
5	16QAM	1	0	22.61	22.67	22.54	22.70	24	0	
5	16QAM	1	12	22.62	22.73	22.63	22.68			
5	16QAM	1	24	22.63	22.73	22.63	22.69			
5	16QAM	12	0	22.29	22.40	22.32	22.32			
5	16QAM	12	7	22.46	22.44	22.35	22.45	23.5	0.5	
5	16QAM	12	13	22.38	22.41	22.38	22.50			
5	16QAM	25	0	22.39	22.40	22.29	22.49			
5	64QAM	1	0	22.25	22.29	22.31	22.35			
5	64QAM	1	12	22.28	22.46	22.24	22.39	23.5	0.5	
5	64QAM	1	24	22.13	22.23	22.20	22.28			
5	64QAM	12	0	21.31	21.43	21.17	21.43	22.5	1.5	
5	64QAM	12	7	21.40	21.42	21.28	21.35			
5	64QAM	12	13	21.39	21.50	21.34	21.45			
5	64QAM	25	0	21.36	21.50	21.29	21.41			
5	256QAM	1	0	19.16	19.22	19.23	19.31			
5	256QAM	1	12	19.26	19.34	19.20	19.34	20.5	3.5	
5	256QAM	1	24	19.31	19.43	19.27	19.49			
5	256QAM	12	0	19.30	19.31	19.26	19.47			
5	256QAM	12	7	19.45	19.36	19.37	19.49	20.5	3.5	
5	256QAM	12	13	19.49	19.34	19.32	19.44			
5	256QAM	25	0	19.31	19.31	19.20	19.28			

Band 48_Ant 8										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)										
20	QPSK	1	0	23.38	22.90	22.91	22.90	24	0	
20	QPSK	1	48	23.52	23.02	23.03	23.03			
20	QPSK	1	96	23.41	23.01	23.00	23.03			
20	QPSK	50	0	23.62	22.18	22.20	22.15			
20	QPSK	50	24	22.68	22.18	22.19	22.18	23	1	
20	QPSK	50	50	22.59	22.15	22.19	22.19			



Reduced Power Mode for DS12

GSM850_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (Mhz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.90	31.68	32.27	33.50	22.90	22.68	23.27	24.50
GPRS 1 Tx slots	31.88	31.65	32.24	33.50	22.88	22.65	23.24	24.50
GPRS 2 Tx slots	29.03	29.37	29.58	30.50	23.03	23.37	23.58	24.50
GPRS 3 Tx slots	27.82	27.93	27.92	28.80	23.56	23.67	23.66	24.54
GPRS 4 Tx slots	26.23	26.41	26.43	27.50	23.23	23.41	23.43	24.50
EDGE 1 Tx slot	25.13	25.25	25.56	26.50	16.13	16.25	16.56	17.50
EDGE 2 Tx slots	24.25	24.33	24.55	25.50	18.25	18.33	18.55	19.50
EDGE 3 Tx slots	22.51	22.31	22.72	23.50	18.25	18.33	18.46	19.24
EDGE 4 Tx slots	20.51	20.45	20.69	21.50	17.51	17.45	17.69	18.50

GSM1900_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (Mhz)	1850.2	1860	1909.8		1850.2	1860	1909.8	
GSM 1 Tx slot	28.65	28.83	28.85	30.50	19.65	19.83	19.85	21.50
GPRS 1 Tx slot	28.63	28.81	28.83	30.50	19.63	19.81	19.83	21.50
GPRS 2 Tx slots	26.61	26.48	26.50	27.50	20.61	20.48	20.50	21.50
GPRS 3 Tx slots	24.83	24.88	24.81	25.80	20.57	20.62	20.55	21.54
GPRS 4 Tx slots	23.40	23.41	23.27	24.50	20.40	20.41	20.27	21.50
EDGE 1 Tx slot	24.81	24.46	24.81	26.00	15.81	15.46	15.81	17.00
EDGE 2 Tx slots	23.51	23.61	23.31	25.00	17.51	17.61	17.31	19.00
EDGE 3 Tx slots	21.80	21.81	21.71	23.00	17.54	17.55	17.45	18.74
EDGE 4 Tx slots	19.81	19.77	19.71	21.50	16.81	16.77	16.71	18.50

Band TX Channel	WCDMA_II_Ant 0			Tune-up Limit (dBm)	WCDMA_II_Ant 1			Tune-up Limit (dBm)
	9262	9400	9538		9262	9400	9538	
Rx Channel	9662	9800	9938		9662	9800	9938	
Frequency (Mhz)	1852.4	1900	1907.6		1852.4	1900	1907.6	
3GPP Rel 99 AMR 12.2Kbps	22.72	22.74	22.70	24.00	16.75	16.85	16.71	18.50
3GPP Rel 99 RMC 12.2Kbps	22.74	22.75	22.72	24.00	16.78	16.86	16.75	18.50
3GPP Rel 6 HSDPA Subtest-1	21.71	21.60	21.72	23.00	15.80	15.93	15.83	17.50
3GPP Rel 6 HSDPA Subtest-2	21.73	21.61	21.71	23.00	15.85	15.85	15.81	17.50
3GPP Rel 6 HSDPA Subtest-3	21.18	21.14	21.19	22.50	15.39	15.53	15.40	17.00
3GPP Rel 6 HSDPA Subtest-4	21.22	21.11	20.93	22.50	15.34	15.49	15.35	17.00
3GPP Rel 6 DC-HSDPA Subtest-1	21.70	21.49	21.64	23.00	15.75	15.79	15.81	17.50
3GPP Rel 6 DC-HSDPA Subtest-2	21.55	21.55	21.65	23.00	15.86	15.81	15.79	17.50
3GPP Rel 6 DC-HSDPA Subtest-3	21.07	20.97	21.15	22.50	15.31	15.28	15.33	17.00
3GPP Rel 6 DC-HSDPA Subtest-4	21.09	20.93	20.90	22.50	15.23	15.26	15.23	17.00
3GPP Rel 6 HSUPA Subtest-1	21.73	21.62	21.80	23.00	15.93	15.87	15.91	17.50
3GPP Rel 6 HSUPA Subtest-2	19.79	19.67	19.88	21.00	14.03	13.97	13.91	15.50
3GPP Rel 6 HSUPA Subtest-3	20.78	20.61	20.82	22.00	14.99	14.92	14.97	16.50
3GPP Rel 6 HSUPA Subtest-4	19.77	19.71	19.76	21.00	13.97	13.97	13.92	15.50
3GPP Rel 6 HSUPA Subtest-5	21.80	21.80	21.80	23.00	15.90	15.80	15.88	17.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	20.57	20.54	20.62	21.50	14.15	14.31	14.21	16.00

Band TX Channel	WCDMA_IV_Ant 0			Tune-up Limit (dBm)	WCDMA_IV_Ant 1			Tune-up Limit (dBm)
	1312	1413	1513		1312	1413	1513	
Rx Channel	1537	1638	1738		1537	1638	1738	
Frequency (Mhz)	1122.4	1122.3	1122.6		1122.4	1122.3	1122.6	
3GPP Rel 99 AMR 12.2Kbps	22.52	22.80	22.68	24.00	16.30	16.57	16.42	17.90
3GPP Rel 99 RMC 12.2Kbps	22.54	22.82	22.70	24.00	16.33	16.61	16.44	17.90
3GPP Rel 6 HSDPA Subtest-1	21.57	21.82	21.72	23.00	15.31	15.61	15.51	16.90
3GPP Rel 6 HSDPA Subtest-2	21.56	21.81	21.66	23.00	15.28	15.69	15.51	16.90
3GPP Rel 6 HSDPA Subtest-3	21.09	21.30	21.21	22.50	14.89	15.10	14.88	16.40
3GPP Rel 6 HSDPA Subtest-4	21.03	21.38	21.15	22.50	14.80	15.09	14.97	16.40
3GPP Rel 6 DC-HSDPA Subtest-1	21.35	21.72	21.47	23.00	15.30	15.54	15.49	16.90
3GPP Rel 6 DC-HSDPA Subtest-2	21.38	21.75	21.59	23.00	15.37	15.41	15.31	16.90
3GPP Rel 6 DC-HSDPA Subtest-3	20.99	21.13	21.04	22.50	14.94	14.86	14.72	16.40
3GPP Rel 6 DC-HSDPA Subtest-4	20.79	21.21	20.99	22.50	14.78	14.93	14.78	16.40
3GPP Rel 6 HSUPA Subtest-1	21.80	21.63	21.69	23.00	15.50	15.60	15.56	16.90
3GPP Rel 6 HSUPA Subtest-2	19.80	19.86	19.76	21.00	13.61	13.62	13.55	14.90
3GPP Rel 6 HSUPA Subtest-3	20.78	20.85	20.73	22.00	14.53	14.54	14.49	15.90
3GPP Rel 6 HSUPA Subtest-4	19.75	19.81	19.74	21.00	13.54	13.64	13.50	14.90
3GPP Rel 6 HSUPA Subtest-5	21.78	21.90	21.70	23.00	15.59	15.64	15.50	16.90
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	20.59	20.55	20.52	21.50	13.88	14.11	14.08	15.40

Band TX Channel	WCDMA_V_Ant 0			Tune-up Limit (dBm)	WCDMA_V_Ant 1			Tune-up Limit (dBm)
	4132	4182	4233		4132	4182	4233	
Rx Channel	4357	4407	4458		4357	4407	4458	
Frequency (Mhz)	826.4	836.4	846.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	22.13	22.25	22.22	24.00	20.51	20.68	20.61	21.90
3GPP Rel 99 RMC 12.2Kbps	22.15	22.27	22.25	24.00	20.56	20.72	20.66	21.90
3GPP Rel 6 HSDPA Subtest-1	21.19	21.26	21.30	23.00	19.54	19.69	19.73	20.90
3GPP Rel 6 HSDPA Subtest-2	21.14	21.27	21.33	23.00	19.62	19.71	19.83	20.90
3GPP Rel 6 HSDPA Subtest-3	20.65	20.74	20.65	22.50	19.04	19.06	19.29	20.40
3GPP Rel 6 HSDPA Subtest-4	20.65	20.74	20.77	22.50	19.07	19.23	19.32	20.40
3GPP Rel 6 DC-HSDPA Subtest-1	21.10	21.21	21.02	23.00	19.73	19.70	19.71	20.90
3GPP Rel 6 DC-HSDPA Subtest-2	21.06	21.13	21.09	23.00	19.61	19.70	19.66	20.90
3GPP Rel 6 DC-HSDPA Subtest-3	20.53	20.69	20.58	22.50	19.25	19.22	19.06	20.40
3GPP Rel 6 DC-HSDPA Subtest-4	20.70	20.71	20.59	22.50	19.13	19.15	19.10	20.40
3GPP Rel 6 HSUPA Subtest-1	21.12	21.22	21.28	23.00	19.71	19.67	19.81	20.90
3GPP Rel 6 HSUPA Subtest-2	19.14	19.26	19.29	21.00	17.68	17.67	17.81	18.90
3GPP Rel 6 HSUPA Subtest-3	20.14	20.23	20.30	22.00	18.65	18.59	18.69	19.90
3GPP Rel 6 HSUPA Subtest-4	19.14	19.23	19.28	21.00	17.55	17.70	17.70	18.90
3GPP Rel 6 HSUPA Subtest-5	21.10	21.20	21.30	23.00	19.54	19.64	19.79	20.90
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	19.54	19.66	19.60	21.50	18.08	18.13	18.07	19.40





Band 2_Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (sec)	MFR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	22.54	22.81	22.83				
20	QPSK	1	49	22.63	22.85	22.82	24	0		
20	QPSK	1	98	22.62	22.83	22.80				
20	QPSK	50	0	22.67	22.60	22.76				
20	QPSK	50	24	22.55	22.59	22.52	24	0		
20	QPSK	50	49	22.54	22.58	22.55				
20	QPSK	100	0	22.66	22.58	22.51				
20	16QAM	1	0	22.55	22.56	22.53	24	0		
20	16QAM	1	49	22.59	22.56	22.53				
20	16QAM	1	99	22.54	22.54	22.55				
20	16QAM	50	0	21.80	21.55	21.74				
20	16QAM	50	24	21.73	21.69	21.80				
20	16QAM	50	50	21.71	21.75	21.80	23	1		
20	16QAM	100	0	21.66	21.68	21.84				
20	16QAM	100	1	21.57	21.86	21.87				
20	16QAM	1	49	21.80	22.02	21.85	23	1		
20	16QAM	1	99	21.41	21.73	22.04				
20	16QAM	50	0	20.79	20.66	20.74				
20	16QAM	50	24	20.73	20.78	20.80	22	2		
20	16QAM	50	50	20.60	20.84	20.81				
20	16QAM	100	0	20.74	20.71	20.86				
20	256QAM	1	0	18.72	18.75	18.85				
20	256QAM	1	49	18.52	18.58	18.58	20	4		
20	256QAM	1	99	18.48	18.48	18.48				
20	256QAM	50	0	18.47	18.60	18.51				
20	256QAM	50	24	18.47	18.58	18.48	20	4		
20	256QAM	50	50	18.48	18.48	18.48				
20	256QAM	100	0	18.62	18.64	18.41				
Channel										
Frequency (MHz)										
15	QPSK	1	0	22.47	22.49	22.31				
15	QPSK	1	37	22.56	22.49	22.37	24	0		
15	QPSK	1	74	22.47	22.47	22.32				
15	QPSK	36	0	22.38	22.39	22.32				
15	QPSK	36	20	22.39	22.44	22.42	24	0		
15	QPSK	36	37	22.31	22.45	22.45				
15	QPSK	75	0	22.37	22.48	22.33				
15	16QAM	1	0	22.47	22.37	22.48	24	0		
15	16QAM	1	37	22.32	22.33	22.48				
15	16QAM	1	74	22.48	22.34	22.48				
15	16QAM	36	0	21.68	21.48	21.65	23	1		
15	16QAM	36	20	21.64	21.46	21.70				
15	16QAM	36	37	21.62	21.53	21.70				
15	16QAM	75	0	21.46	21.56	21.68				
15	16QAM	75	1	21.38	21.61	21.70				
15	16QAM	1	37	21.70	21.52	21.62	23	1		
15	16QAM	1	74	21.28	21.36	21.69				
15	16QAM	36	0	20.97	20.43	20.46				
15	16QAM	36	20	20.93	20.56	20.41	22	2		
15	16QAM	36	37	20.42	20.52	20.57				
15	16QAM	75	0	20.84	20.65	20.66				
15	256QAM	1	0	18.64	18.56	18.50				
15	256QAM	1	37	18.46	18.47	18.33	20	4		
15	256QAM	1	74	18.38	18.45	18.30				
15	256QAM	36	0	18.34	18.44	18.29				
15	256QAM	36	20	18.37	18.38	18.29				
15	256QAM	36	37	18.34	18.28	18.21	20	4		
15	256QAM	75	0	18.37	18.42	18.28				
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.45	22.48	22.44				
10	QPSK	1	25	22.57	22.40	22.45	24	0		
10	QPSK	1	49	22.45	22.45	22.45				
10	QPSK	35	0	22.50	22.35	22.46				
10	QPSK	35	12	22.34	22.39	22.34	24	0		
10	QPSK	35	24	22.32	22.34	22.46				
10	QPSK	50	0	22.36	22.34	22.30				
10	16QAM	1	0	22.40	22.43	22.44	24	0		
10	16QAM	1	25	22.27	22.11	22.46				
10	16QAM	1	49	22.42	22.42	22.41				
10	16QAM	25	0	21.73	21.43	21.65	23	1		
10	16QAM	25	12	21.61	21.61	21.72				
10	16QAM	25	25	21.64	21.53	21.64				
10	16QAM	50	0	21.53	21.54	21.67				
10	16QAM	50	1	21.38	21.67	21.70				
10	16QAM	1	25	21.72	21.68	21.68	23	1		
10	16QAM	1	49	21.31	21.60	21.69				
10	16QAM	25	0	20.99	20.49	20.53				
10	16QAM	25	12	20.90	20.58	20.43	22	2		
10	16QAM	25	25	20.87	20.65	20.60				
10	256QAM	1	0	18.61	18.58	18.41				
10	256QAM	1	25	18.38	18.48	18.44	20	4		
10	256QAM	1	49	18.46	18.56	18.30				
10	256QAM	25	0	18.34	18.36	18.45				
10	256QAM	25	12	18.36	18.36	18.36				
10	256QAM	25	25	18.29	18.45	18.25	20	4		
10	256QAM	50	0	18.17	18.20	18.17				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.40	22.47	22.46				
5	QPSK	1	12	22.56	22.51	22.53	24	0		
5	QPSK	1	24	22.40	22.50	22.46				
5	QPSK	12	0	22.42	22.45	22.44				
5	QPSK	12	7	22.47	22.44	22.43	24	0		
5	QPSK	12	14	22.42	22.46	22.46				
5	QPSK	25	0	22.60	22.52	22.27				
5	16QAM	1	0	22.40	22.41	22.41	24	0		
5	16QAM	1	12	22.27	22.11	22.46				
5	16QAM	1	24	22.43	22.38	22.42				
5	16QAM	12	0	21.65	21.30	21.54	23	1		
5	16QAM	12	7	21.67	21.63	21.68				
5	16QAM	12	14	21.66	21.67	21.74				
5	16QAM	25	0	21.56	21.44	21.75				
5	16QAM	25	1	21.39	21.75	21.78				
5	16QAM	1	12	21.56	21.66	21.74	23	1		
5	16QAM	1	24	21.26	21.64	21.94				
5	16QAM	12	0	20.83	20.43	20.66				
5	16QAM	12	7	20.49	20.66	20.50	22	2		
5	16QAM	12	14	20.59	20.51	20.71				
5	16QAM	25	0	20.61	20.61	20.68				
5	256QAM	1	0	18.49	18.53	18.53				
5	256QAM	1	12	18.30	18.30	18.30	20	4		
5	256QAM	1	24	18.47	18.53	18.34				
5	256QAM	12	0	18.38	18.52	18.27				
5	256QAM	12	7	18.36	18.36	18.36				
5	256QAM	12	14	18.27	18.33	18.38	20	4		
5	256QAM	25	0	18.40	18.40	18.24				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.34	22.38	22.31				
3	QPSK	1	8	22.39	22.45	22.53	24	0		
3	QPSK	1	14	22.34	22.40	22.42				
3	QPSK	8	0	22.60	22.54	22.50				
3	QPSK	8	4	22.30	22.36	22.42	24	0		
3	QPSK	8	7	22.47	22.49	22.42				
3	QPSK	15	0	22.43	22.42	22.45				
3	16QAM	1	0	22.45	22.33	22.48	24	0		
3	16QAM	1	8	22.31	22.18	22.49				
3	16QAM	1	14	22.31	22.47	22.31				
3	16QAM	8	0	21.71	21.46	21.56	23	1		
3	16QAM	8	4	21.61	21.49	21.73				
3	16QAM	8	7	21.67	21.53	21.71				
3	16QAM	15	0	21.41	21.64	21.73				
3	16QAM	1	0	21.68	21.66	21.67	23	1		
3	16QAM	1	8	21.63	21.83	21.73				
3	16QAM	8								



Band 4_Ant 1										
BW (MHz)	Modulation	RE	RB (MHz)	Power Low Ch / Freq.	Power Mide Ch / Freq.	Power High Ch / Freq.	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	16.84	16.86	16.91				
20	QPSK	1	48	16.85	17.03	16.95	18.1	0		
20	QPSK	1	96	16.86	16.91	16.95				
20	QPSK	50	0	16.85	17.01	16.93				
20	QPSK	50	24	16.87	16.87	16.88	18.1	0		
20	QPSK	50	48	16.88	16.88	16.88				
20	QPSK	100	0	16.86	16.86	16.93				
20	HQAM	1	0	16.84	16.85	16.85				
20	HQAM	1	48	16.85	16.84	16.84	18.1	0		
20	HQAM	1	96	16.89	17.00	16.99				
20	HQAM	50	0	16.84	16.86	16.86				
20	HQAM	50	24	16.87	16.88	16.91	18.1	0		
20	HQAM	50	48	16.89	16.88	16.96				
20	HQAM	100	0	16.85	16.85	16.94				
20	HQAM	100	24	16.86	16.86	16.88	18.1	0		
20	HQAM	100	48	16.89	16.85	16.85				
20	HQAM	1	48	16.88	16.87	16.83				
20	HQAM	1	96	16.86	16.89	16.84	18.1	0		
20	HQAM	50	24	16.88	16.93	16.88				
20	HQAM	50	48	16.85	16.86	16.87	18.1	0		
20	HQAM	100	0	16.85	16.88	16.88				
20	HQAM	100	24	16.87	16.84	16.88	18.1	0		
20	HQAM	100	48	16.89	16.83	16.93				
Channel										
Frequency (MHz)										
15	QPSK	1	0	16.88	16.87	16.89				
15	QPSK	1	37	16.82	16.87	16.93	18.1	0		
15	QPSK	1	74	16.83	16.88	16.91				
15	QPSK	36	0	16.89	16.94	16.92				
15	QPSK	36	20	16.86	16.77	16.85	18.1	0		
15	QPSK	36	40	16.83	16.83	16.88				
15	QPSK	75	0	16.91	16.87	16.90				
15	HQAM	1	0	16.87	16.89	16.84				
15	HQAM	1	37	16.83	16.83	16.88	18.1	0		
15	HQAM	1	74	16.84	16.91	16.91				
15	HQAM	36	0	16.90	16.91	16.88				
15	HQAM	36	20	16.85	16.85	16.90	18.1	0		
15	HQAM	36	40	16.88	16.88	16.87				
15	HQAM	75	0	16.86	16.88	16.92				
15	HQAM	75	20	16.85	16.89	16.86	18.1	0		
15	HQAM	1	37	16.87	16.83	16.85				
15	HQAM	1	74	16.83	16.82	16.89	18.1	0		
15	HQAM	36	20	16.84	16.79	16.77				
15	HQAM	36	40	16.85	16.84	16.85	18.1	0		
15	HQAM	75	0	16.90	16.86	16.90				
15	HQAM	75	20	16.87	16.87	16.90	18.1	0		
15	HQAM	1	37	16.85	16.86	16.93				
15	HQAM	1	74	16.86	16.87	16.85	18.1	0		
15	HQAM	36	20	16.86	16.82	16.89				
15	HQAM	36	40	16.89	16.89	16.85	18.1	0		
15	HQAM	75	0	16.87	16.90	16.91				
15	HQAM	75	20	16.85	16.84	16.81	18.1	0		
15	HQAM	1	37	16.89	16.89	16.89				
15	HQAM	1	74	16.89	16.89	16.89	18.1	0		
15	HQAM	36	20	16.86	16.86	16.86				
15	HQAM	36	40	16.89	16.89	16.89	18.1	0		
15	HQAM	75	0	16.89	16.89	16.89				
15	HQAM	75	20	16.89	16.84	16.81	18.1	0		
Channel										
Frequency (MHz)										
10	QPSK	1	0	16.91	16.88	16.94				
10	QPSK	1	25	16.92	16.88	16.94	18.1	0		
10	QPSK	1	50	16.93	16.88	16.94				
10	QPSK	25	0	16.93	16.87	16.91				
10	QPSK	25	12	16.92	16.79	16.83	18.1	0		
10	QPSK	25	25	16.91	16.87	16.91				
10	QPSK	50	0	16.93	16.88	16.91				
10	HQAM	1	0	16.92	16.88	16.90				
10	HQAM	1	25	16.87	16.87	16.92	18.1	0		
10	HQAM	1	50	16.91	16.91	16.96				
10	HQAM	25	0	16.84	16.91	16.84				
10	HQAM	25	12	16.85	16.85	16.88	18.1	0		
10	HQAM	25	25	16.89	16.88	16.88				
10	HQAM	50	0	16.93	16.85	16.89				
10	HQAM	50	12	16.83	16.84	16.78	18.1	0		
10	HQAM	50	25	16.84	16.79	16.77				
10	HQAM	1	48	16.90	16.92	16.96	18.1	0		
10	HQAM	1	96	16.87	16.89	16.84				
10	HQAM	25	12	16.86	16.84	16.87	18.1	0		
10	HQAM	25	25	16.89	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96	16.88	16.88	16.88				
10	HQAM	25	12	16.84	16.84	16.87	18.1	0		
10	HQAM	25	25	16.88	16.88	16.87				
10	HQAM	50	12	16.84	16.84	16.87	18.1	0		
10	HQAM	50	25	16.88	16.88	16.87				
10	HQAM	1	48	16.91	16.91	16.91	18.1	0		
10	HQAM	1	96</							



Band 7_Ant 1										
BW (MHz)	Modulation	RE Ch	RB Ch (MHz)	Power Low Ch (Freq)	Power Mid Ch (Freq)	Power High Ch (Freq)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
20	OPRSK	1	0	14.08	14.11	14.02				
20	OPRSK	1	48	14.08	14.13	14.03	15.6	0		
20	OPRSK	50	0	14.02	14.03	14.03				
20	OPRSK	50	24	14.02	14.01	14.01	15.6	0		
20	OPRSK	50	50	14.02	14.02	14.02				
20	OPRSK	100	0	14.10	14.11	14.09				
20	HQAM	1	0	14.01	14.01	14.01	15.6	0		
20	HQAM	1	48	14.01	14.02	14.02				
20	HQAM	50	0	14.00	13.98	13.98				
20	HQAM	50	24	14.00	14.05	13.99				
20	HQAM	50	50	14.00	14.01	14.02	15.6	0		
20	HQAM	100	0	14.08	14.02	14.03				
20	HQAM	100	48	14.02	14.07	14.05	15.6	0		
20	HQAM	100	50	14.02	14.04	14.04				
20	HQAM	50	0	14.01	14.02	14.02	15.6	0		
20	HQAM	50	24	14.00	14.11	14.12				
20	HQAM	50	50	14.00	13.98	14.03	15.6	0		
20	SSSSAM	1	0	14.11	14.05	14.05				
20	SSSSAM	1	48	14.05	14.12	14.10	15.6	0		
20	SSSSAM	50	0	14.11	14.11	14.04				
20	SSSSAM	50	24	13.99	14.12	14.03	15.6	0		
20	SSSSAM	50	50	14.00	14.03	14.03				
20	SSSSAM	100	0	14.11	14.09	14.03	15.6	0		
20	SSSSAM	100	48	14.03	14.08	13.98	15.6	0		
20	SSSSAM	100	50	14.03	14.09	14.03				
Channel										
Frequency (MHz)										
15	OPRSK	1	0	14.07	14.10	14.03				
15	OPRSK	1	37	14.00	14.01	14.04	15.6	0		
15	OPRSK	50	0	14.02	13.98	14.02				
15	OPRSK	50	24	14.00	14.09	13.98	15.6	0		
15	OPRSK	50	50	14.00	14.12	14.03				
15	OPRSK	100	0	14.07	14.11	13.99				
15	HQAM	1	0	14.02	14.07	14.10	15.6	0		
15	HQAM	1	37	13.98	14.03	14.03				
15	HQAM	50	0	14.11	14.12	14.00	15.6	0		
15	HQAM	50	24	14.00	14.08	14.05				
15	HQAM	50	50	14.02	13.98	14.02	15.6	0		
15	HQAM	100	0	14.02	14.07	14.03				
15	HQAM	100	37	13.98	14.04	14.03	15.6	0		
15	HQAM	100	50	14.00	14.08	14.03				
15	HQAM	50	0	14.00	14.10	14.03	15.6	0		
15	HQAM	50	24	14.00	14.06	14.09				
15	HQAM	50	50	14.00	14.02	14.02	15.6	0		
15	HQAM	100	0	14.08	14.12	14.10				
15	HQAM	100	37	13.98	14.03	14.03	15.6	0		
15	HQAM	100	50	14.00	14.08	14.03				
15	SSSSAM	1	0	14.00	14.10	14.12	15.6	0		
15	SSSSAM	1	37	14.02	14.07	14.09				
15	SSSSAM	50	0	14.00	14.04	14.05	15.6	0		
15	SSSSAM	50	24	14.01	14.04	14.03				
15	SSSSAM	50	50	14.00	14.01	14.03	15.6	0		
15	SSSSAM	100	0	14.08	14.07	14.03				
15	SSSSAM	100	37	14.00	14.02	14.03	15.6	0		
15	SSSSAM	100	50	14.00	14.04	14.03				
Channel										
Frequency (MHz)										
10	OPRSK	1	0	13.98	14.07	14.02				
10	OPRSK	1	25	14.00	14.06	13.98	15.6	0		
10	OPRSK	50	0	14.00	14.00	14.01				
10	OPRSK	50	12	14.00	14.09	13.98	15.6	0		
10	OPRSK	50	25	14.00	14.03	14.03				
10	HQAM	1	0	14.03	13.98	13.99	15.6	0		
10	HQAM	1	48	14.00	14.08	14.03				
10	HQAM	50	0	13.98	13.99	14.00	15.6	0		
10	HQAM	50	12	14.00	14.03	14.01				
10	HQAM	50	25	14.00	14.10	14.01	15.6	0		
10	HQAM	100	0	14.02	14.01	13.98				
10	HQAM	100	48	14.02	14.01	14.01	15.6	0		
10	HQAM	100	50	14.00	14.03	13.99				
10	HQAM	50	0	14.00	14.02	14.02	15.6	0		
10	HQAM	50	12	14.00	14.04	14.05				
10	HQAM	50	25	14.00	14.04	14.05	15.6	0		
10	HQAM	100	0	14.08	14.03	14.08				
10	HQAM	100	48	14.06	14.09	14.01	15.6	0		
10	HQAM	100	50	14.00	14.03	14.03				
10	HQAM	50	0	13.98	14.03	14.05	15.6	0		
10	HQAM	50	12	14.00	14.05	14.05				
10	HQAM	50	25	14.00	14.03	14.03	15.6	0		
10	SSSSAM	1	0	14.00	14.10	14.08				
10	SSSSAM	1	25	14.06	14.12	14.10	15.6	0		
10	SSSSAM	50	0	14.01	14.04	14.02				
10	SSSSAM	50	12	14.00	14.04	14.03	15.6	0		
10	SSSSAM	50	25	14.00	14.04	14.05				
10	SSSSAM	100	0	14.08	14.03	14.08				
10	SSSSAM	100	25	14.06	14.09	14.01	15.6	0		
10	SSSSAM	100	50	14.00	14.04	14.03				
Channel										
Frequency (MHz)										
5	OPRSK	1	0	14.05	14.11	14.00				
5	OPRSK	1	12	14.02	14.04	14.05	15.6	0		
5	OPRSK	50	0	14.01	14.04	14.11				
5	OPRSK	50	12	14.01	14.04	13.98	15.6	0		
5	OPRSK	50	25	14.00	13.98	14.03				
5	OPRSK	100	0	14.01	14.03	14.03				
5	HQAM	1	0	13.99	14.11	14.11	15.6	0		
5	HQAM	1	12	14.00	14.02	14.00				
5	HQAM	50	0	14.00	14.04	14.05	15.6	0		
5	HQAM	50	12	14.00	14.04	14.03				
5	HQAM	50	25	14.00	14.10	14.05	15.6	0		
5	HQAM	100	0	14.02	14.03	13.99				
5	HQAM	100	12	14.01	14.03	14.08	15.6	0		
5	HQAM	100	25	14.00	14.09	14.03				
5	HQAM	50	0	14.00	14.12	14.05	15.6	0		
5	HQAM	50	12	14.00	14.06	14.04				
5	HQAM	50	25	14.00	14.03	14.03	15.6	0		
5	HQAM	100	0	14.08	14.03	14.08				
5	HQAM	100	12	14.00	14.07	14.07	15.6	0		
5	HQAM	100	25	14.00	14.08	14.06				
5	HQAM	50	0	14.00	14.04	14.05	15.6	0		
5	HQAM	50	12	14.00	14.04	14.03				
5	HQAM	50	25	14.00	14.10	14.05	15.6	0		
5	SSSSAM	1	0	14.02	14.10	14.08				
5	SSSSAM	1	12	14.01	14.02	14.07	15.6	0		
5	SSSSAM	50	0	14.01	14.04	14.02				
5	SSSSAM	50	12	13.99	14.11	14.06	15.6	0		
5	SSSSAM	50	25	14.00	14.04	14.03				
5	SSSSAM	100	0	14.08	14.03	14.08				
5	SSSSAM	100	12	14.00	14.07	14.07	15.6	0		
5	SSSSAM	100	25	14.00	14.08	14.06				
5	SSSSAM	50	0	14.00	14.12	14.11	15.6	0		
5	SSSSAM	50	12	14.00	14.06	14.04				
5	SSSSAM	50	25	14.00	14.04	14.03	15.6	0		

Band 12_Ant 0										
BW (MHz)	Modulation	RE Ch	RB Ch (MHz)	Power Low Ch (Freq)	Power Mid Ch (Freq)	Power High Ch (Freq)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	OPRSK	1	0	22.78	22.85	22.85				
10	OPRSK	1	25	22.65	22.64	22.91	24	0		
10	OPRSK	50	0	22.81	22.87	22.87				
10	OPRSK	50	12	22.87	22.84	22.90	24	0		
10	OPRSK	50	25	22.81	22.87	22.87				
10	OPRSK	100	0	22.85	22.87	22.91				
10	HQAM	1	0	22.79	22.86	22.78	24	0		
10										



Band 13_Ant 1										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tuneup limit (dBm)	MFR (dB)		
Channel 7250										
Frequency (MHz)										
10	QPSK	1	0	19.77			21.2	0		
10	QPSK	1	25	19.98						
10	QPSK	1	49	19.77						
10	QPSK	25	0	19.85						
10	QPSK	25	12	19.77			21.2	0		
10	QPSK	25	25	19.78						
10	QPSK	50	0	19.85						
10	HQAM	1	0	19.81			21.2	0		
10	HQAM	1	25	19.81						
10	HQAM	1	49	19.75						
10	HQAM	25	0	19.79			21.2	0		
10	HQAM	25	12	19.80						
10	HQAM	25	25	19.72						
10	HQAM	50	0	19.78						
10	HQAM	1	0	19.78			21.2	0		
10	HQAM	1	25	19.78						
10	HQAM	1	49	19.72						
10	HQAM	25	0	19.78			21.2	0		
10	HQAM	25	12	19.78						
10	HQAM	25	25	19.78						
10	HQAM	50	0	19.78						
10	SSBAM	1	0	19.86			20	1.2		
10	SSBAM	1	25	19.86						
10	SSBAM	1	49	19.82						
10	SSBAM	25	0	19.86			20	1.2		
10	SSBAM	25	12	19.83						
10	SSBAM	25	25	19.81						
10	SSBAM	50	0	19.85						
Channel 7250										
Frequency (MHz)										
5	QPSK	1	0	19.66	19.70	19.65	21.2	0		
5	QPSK	1	12	19.62	19.60	19.30				
5	QPSK	1	24	19.60	19.61	19.63				
5	QPSK	12	0	19.64	19.63	19.65				
5	QPSK	12	7	19.63	19.59	19.62	21.2	0		
5	QPSK	12	13	19.65	19.64	19.62				
5	QPSK	25	0	19.68	19.71	19.70				
5	HQAM	1	0	19.72	19.74	19.72	21.2	0		
5	HQAM	1	12	19.72	19.69	19.78				
5	HQAM	1	24	19.65	19.68	19.84				
5	HQAM	12	0	19.67	19.61	19.68				
5	HQAM	12	7	19.69	19.70	19.75	21.2	0		
5	HQAM	12	13	19.65	19.68	19.80				
5	HQAM	25	0	19.64	19.63	19.68				
5	HQAM	1	12	19.65	19.73	19.71	21.2	0		
5	HQAM	1	24	19.52	19.55	19.58				
5	HQAM	12	0	19.65	19.69	19.65				
5	HQAM	12	7	19.73	19.68	19.66	21.2	0		
5	HQAM	12	13	19.71	19.60	19.74				
5	HQAM	25	0	19.72	19.70	19.71				
5	SSBAM	1	0	19.45	19.43	19.44	20	1.2		
5	SSBAM	1	12	19.44	19.41	19.41				
5	SSBAM	1	24	19.37	19.43	19.38				
5	SSBAM	12	0	19.48	19.41	19.45				
5	SSBAM	12	7	19.43	19.48	19.44	20	1.2		
5	SSBAM	12	13	19.52	19.59	19.58				
5	SSBAM	25	0	19.44	19.38	19.46				

Band 14_Ant 0										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tuneup limit (dBm)	MFR (dB)		
Channel 7300										
Frequency (MHz)										
10	QPSK	1	0	22.89			24	0		
10	QPSK	1	25	22.78						
10	QPSK	1	49	22.81						
10	QPSK	25	0	22.74						
10	QPSK	25	12	22.73			24	0		
10	QPSK	25	25	22.69						
10	QPSK	50	0	22.71						
10	HQAM	1	0	22.64			24	0		
10	HQAM	1	25	22.63						
10	HQAM	1	49	22.69						
10	HQAM	25	0	22.69						
10	HQAM	25	12	22.14			23	1		
10	HQAM	25	25	22.17						
10	HQAM	50	0	22.10						
10	HQAM	1	0	22.04						
10	HQAM	1	25	22.05			23	1		
10	HQAM	1	49	22.02						
10	HQAM	25	0	21.10						
10	HQAM	25	12	21.11			22	2		
10	HQAM	25	25	21.11						
10	HQAM	50	0	21.13						
10	SSBAM	1	0	19.38			20	4		
10	SSBAM	1	25	19.31						
10	SSBAM	1	49	19.35						
10	SSBAM	25	0	19.20			20	4		
10	SSBAM	25	12	19.23						
10	SSBAM	25	25	19.25						
10	SSBAM	50	0	19.17						
Channel 7300										
Frequency (MHz)										
5	QPSK	1	0	22.81	22.81	22.84	24	0		
5	QPSK	1	12	22.65	22.69	22.88				
5	QPSK	1	24	22.45	22.52	22.50				
5	QPSK	12	0	22.68	22.63	22.65				
5	QPSK	12	7	22.61	22.62	22.88	24	0		
5	QPSK	12	13	22.68	22.62	22.81				
5	QPSK	25	0	22.87	22.68	22.63				
5	HQAM	1	0	22.58	22.52	22.54	24	0		
5	HQAM	1	12	22.58	22.62	22.59				
5	HQAM	1	24	22.62	22.65	22.85				
5	HQAM	12	0	22.54	22.54	21.88				
5	HQAM	12	7	22.61	22.50	22.02	23	1		
5	HQAM	12	13	22.10	22.10	22.13				
5	HQAM	25	0	22.52	21.99	22.07				
5	HQAM	1	12	21.98	21.98	21.93	23	1		
5	HQAM	1	24	21.98	21.92	21.97				
5	HQAM	12	0	21.94	21.08	20.88	22	2		
5	HQAM	12	7	21.07	21.08	21.01				
5	HQAM	12	13	21.88	20.99	21.05				
5	SSBAM	1	0	19.20	19.20	19.35	20	4		
5	SSBAM	1	12	19.26	19.28	19.22				
5	SSBAM	1	24	19.21	19.26	19.24				
5	SSBAM	12	0	19.13	19.12	19.11	20	4		
5	SSBAM	12	7	19.17	19.13	19.16				
5	SSBAM	12	13	19.13	19.15	19.16				
5	SSBAM	25	0	19.10	19.09	19.06				

Band 14_Ant 1										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tuneup limit (dBm)	MFR (dB)		
Channel 7350										
Frequency (MHz)										
10	QPSK	1	0	20.80			22.5	0		
10	QPSK	1	25	21.03						
10	QPSK	1	49	20.85						
10	QPSK	25	0	20.88						
10	QPSK	25	12	20.96			22.5	0		
10	QPSK	25	25	20.91						
10	QPSK	50	0	20.88						
10	HQAM	1	0	20.91			22.5	0		
10	HQAM	1	25	20.85						
10	HQAM	1	49	20.90						
10	HQAM	25	0	20.91						
10	HQAM	25	12	20.88			22.5	0		
10	HQAM	25	25	21.02						
10	HQAM	50	0	20.90						
10	HQAM	1	0	20.90			22.5	0		
10	HQAM	1	25	20.94						
10	HQAM	1	49	21.02						
10	HQAM	25	0	20.73						
10	HQAM	25	12	20.78			22	0.5		
10	HQAM	25	25	20.82						
10	HQAM	50	0	20.72						
10	SSBAM	1	0	19.95			20	2.5		
10	SSBAM	1	25	19.95						
10	SSBAM	1	49	19.93						
10	SSBAM	25	0	19.97			20	2.5		
10	SSBAM	25	12	19.88						
10	SSBAM	25	25	19.83						
10	SSBAM	50	0	19.88						
Channel 7350										
Frequency (MHz)										
5	QPSK	1	0	20.79	20.83	20.84	22.5			



Band 17 Ant 1										
BW (MHz)	Modulation	RE Size	RB Offset	Power Lb Ch / Freq	Power Mb Ch / Freq	Power Hb Ch / Freq	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	19.79	19.89	19.79				
10	QPSK	1	25	19.91	20.01	19.91	21.2	0		
10	QPSK	1	50	19.93	19.98	19.93				
10	QPSK	25	0	19.94	19.99	19.94				
10	QPSK	25	12	19.95	19.99	19.95	21.2	0		
10	QPSK	25	25	19.95	19.98	19.95				
10	QPSK	50	0	19.96	19.93	19.96				
10	HQAM	1	0	19.79	19.87	19.86	21.2	0		
10	HQAM	1	25	19.91	19.92	19.91				
10	HQAM	1	50	19.93	19.91	19.89				
10	HQAM	25	0	19.92	19.93	19.84				
10	HQAM	25	12	19.92	19.93	19.84	21.2	0		
10	HQAM	25	25	19.92	19.95	19.90				
10	HQAM	50	0	19.95	19.87	19.89				
10	HQAM	50	0	19.93	19.98	19.87				
10	HQAM	1	49	19.94	19.94	19.93				
10	HQAM	1	49	19.87	19.96	19.89				
10	HQAM	25	0	19.93	19.96	19.92	21.2	0		
10	HQAM	25	12	19.94	19.95	19.86				
10	HQAM	25	0	19.93	19.97	19.92				
10	HQAM	50	0	19.94	19.87	19.77				
10	SSBAM	1	0	19.87	19.89	19.86				
10	SSBAM	1	25	19.86	19.75	19.73	20	1.2		
10	SSBAM	1	49	19.86	19.72	19.70				
10	SSBAM	25	0	19.89	19.89	19.84				
10	SSBAM	25	12	19.88	19.70	19.84	20	1.2		
10	SSBAM	25	25	19.83	19.88	19.82				
10	SSBAM	50	0	19.89	19.70	19.83				
Channel										
Frequency (MHz)										
5	QPSK	1	0	19.72	19.79	19.72				
5	QPSK	1	12	19.90	19.97	19.90	21.2	0		
5	QPSK	1	24	19.79	19.76	19.79				
5	QPSK	12	0	19.91	19.87	19.91				
5	QPSK	12	7	19.92	19.79	19.84	21.2	0		
5	QPSK	12	13	19.81	19.80	19.88				
5	QPSK	25	0	19.92	19.87	19.92				
5	HQAM	1	0	19.81	19.83	19.83	21.2	0		
5	HQAM	1	12	19.82	19.77	19.82				
5	HQAM	1	24	19.89	19.84	19.88				
5	HQAM	12	0	19.77	19.76	19.77				
5	HQAM	12	7	19.84	19.87	19.87	21.2	0		
5	HQAM	12	13	19.89	19.83	19.87				
5	HQAM	25	0	19.79	19.75	19.79				
5	HQAM	25	1	19.79	19.79	19.80				
5	HQAM	1	24	19.82	19.90	19.86	21.2	0		
5	HQAM	1	24	19.83	19.86	19.79				
5	HQAM	12	0	19.81	19.80	19.88				
5	HQAM	12	7	19.87	19.82	19.85	21.2	0		
5	HQAM	12	13	19.83	19.80	19.82				
5	SSBAM	1	0	19.82	19.83	19.81				
5	SSBAM	1	12	19.83	19.72	19.81	20	1.2		
5	SSBAM	1	24	19.81	19.86	19.84				
5	SSBAM	12	0	19.87	19.84	19.87				
5	SSBAM	12	7	19.87	19.83	19.86	20	1.2		
5	SSBAM	12	13	19.83	19.80	19.82				
5	SSBAM	25	0	19.88	19.88	19.84				

Band 25 Ant 0										
BW (MHz)	Modulation	RE Size	RB Offset	Power Lb Ch / Freq	Power Mb Ch / Freq	Power Hb Ch / Freq	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	22.48	22.57	22.50				
20	QPSK	1	49	22.43	22.67	22.61	24	0		
20	QPSK	1	99	22.43	22.67	22.61				
20	QPSK	50	0	22.31	22.45	22.44				
20	QPSK	50	24	22.21	22.22	22.29	24	0		
20	QPSK	50	49	22.32	22.32	22.39				
20	HQAM	1	0	22.29	22.43	22.36				
20	HQAM	1	0	22.55	22.43	22.32	24	0		
20	HQAM	1	25	22.52	22.52	22.59				
20	HQAM	1	99	22.37	22.84	22.51				
20	HQAM	50	0	21.25	21.26	21.25				
20	HQAM	50	24	21.28	21.27	21.33	23	1		
20	HQAM	50	49	21.31	21.28	21.43				
20	HQAM	100	0	21.46	21.36	21.44				
20	HQAM	100	0	21.66	21.78	21.50				
20	HQAM	1	49	21.85	21.58	21.86	23	1		
20	HQAM	1	49	21.85	21.52	21.41				
20	HQAM	50	0	20.21	20.21	20.24				
20	HQAM	50	24	20.20	20.35	20.28	22	2		
20	HQAM	50	49	20.24	20.32	20.31				
20	HQAM	100	0	20.34	20.27	20.36				
20	SSBAM	1	0	19.38	19.58	19.48				
20	SSBAM	1	49	19.76	19.60	19.40	20	4		
20	SSBAM	1	99	19.81	19.51	19.44				
20	SSBAM	50	0	19.20	19.53	19.35				
20	SSBAM	50	24	19.24	19.48	19.37	20	4		
20	SSBAM	50	49	19.26	19.47	19.38				
20	SSBAM	100	0	19.20	19.38	19.28				
Channel										
Frequency (MHz)										
15	QPSK	1	0	22.43	22.47	22.63				
15	QPSK	1	37	22.44	22.63	22.61	24	0		
15	QPSK	1	74	22.43	22.63	22.61				
15	QPSK	36	0	22.18	22.50	22.35				
15	QPSK	36	20	22.21	22.23	22.26	24	0		
15	QPSK	36	37	22.25	22.25	22.21				
15	QPSK	75	0	22.25	22.43	22.23				
15	HQAM	1	0	22.42	22.40	22.27				
15	HQAM	1	25	22.42	22.37	22.21	24	0		
15	HQAM	1	74	22.58	22.86	22.37				
15	HQAM	36	0	21.24	21.30	21.15				
15	HQAM	36	20	21.25	21.45	21.34	23	1		
15	HQAM	36	36	21.29	21.28	21.46				
15	HQAM	75	0	21.31	21.20	21.46				
15	HQAM	75	0	21.56	21.62	21.43				
15	HQAM	1	37	21.59	21.55	21.86	23	1		
15	HQAM	1	74	21.71	21.85	21.86				
15	HQAM	1	74	21.71	21.85	21.86				
15	HQAM	36	20	20.13	20.23	20.20	22	2		
15	HQAM	36	36	20.08	20.33	20.21				
15	SSBAM	1	0	19.31	19.47	19.44				
15	SSBAM	1	37	19.47	19.41	19.27	20	4		
15	SSBAM	1	74	19.31	19.43	19.48				
15	SSBAM	36	0	19.22	19.46	19.36				
15	SSBAM	36	20	19.24	19.44	19.37	20	4		
15	SSBAM	36	36	19.12	19.47	19.37				
15	SSBAM	75	0	19.24	19.34	19.23				
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.30	22.59	22.64				
10	QPSK	1	25	22.53	22.65	22.49	24	0		
10	QPSK	1	49	22.33	22.63	22.63				
10	QPSK	25	0	22.32	22.48	22.35				
10	QPSK	25	12	22.18	22.18	22.26	24	0		
10	QPSK	25	25	22.32	22.37	22.24				
10	HQAM	1	0	22.28	22.41	22.35				
10	HQAM	1	0	22.42	22.29	22.19	24	0		
10	HQAM	1	25	22.52	22.58	22.58				
10	HQAM	1	49	22.52	22.85	22.38				
10	HQAM	25	0	21.16	21.22	21.22				
10	HQAM	25	12	21.21	21.44	21.25	23	1		
10	HQAM	25	25	21.31	21.29	21.44				
10	HQAM	50	0	21.28	21.23	21.29				
10	HQAM	50	0	21.51	21.71	21.47				
10	HQAM	1	25	21.64	21.44	21.56	23	1		
10	HQAM	1	49	21.25	21.26	21.26		</		



Band 26(FCC)_Ant 1									
BW (MHz)	Modulation	RE Pcs	RB Offset	Power Low Ch / Freq	Power Mids Ch / Freq	Power High Ch / Freq	Time-up (min)	MFR (dB)	
Channel									
Frequency (MHz)									
811.5 811.5 811.5									
15	QPSK	1	0	19.54	19.60	19.57			
15	QPSK	1	37	19.74	19.78	19.70	20.0	0	
15	QPSK	1	74	19.45	19.58	19.55			
15	QPSK	36	0	19.65	19.71	19.68			
15	QPSK	36	20	19.54	19.58	19.54	20.0	0	
15	QPSK	36	39	19.45	19.54	19.51			
15	QPSK	75	0	19.53	19.59	19.51			
15	HQAM	1	0	19.51	19.57	19.55			
15	HQAM	1	37	19.55	19.58	19.49	20.0	0	
15	HQAM	1	74	19.52	19.60	19.58			
15	HQAM	36	0	19.54	19.55	19.45			
15	HQAM	36	20	19.55	19.61	19.50	20.0	0	
15	HQAM	36	39	19.59	19.61	19.52			
15	HQAM	75	0	19.55	19.60	19.54			
15	HQAM	1	0	19.52	19.61	19.53			
15	HQAM	1	37	19.55	19.61	19.55	20.0	0	
15	HQAM	1	74	19.52	19.58	19.50			
15	HQAM	36	0	19.52	19.55	19.47			
15	HQAM	36	20	19.52	19.57	19.50	20.0	0	
15	HQAM	36	39	19.49	19.59	19.54			
15	HQAM	75	0	19.52	19.57	19.49			
15	SSBQAM	1	0	18.40	18.42	18.39			
15	SSBQAM	1	37	18.42	18.65	18.52	20	0.9	
15	SSBQAM	1	74	18.75	18.82	18.74			
15	SSBQAM	36	0	18.37	18.45	18.42			
15	SSBQAM	36	20	18.38	18.54	18.52	20	0.0	
15	SSBQAM	36	39	18.53	18.55	18.46			
15	SSBQAM	75	0	18.51	18.58	18.52			
Channel									
Frequency (MHz)									
811.5 811.5 811.5									
10	QPSK	1	0	19.52	19.50	19.48			
10	QPSK	1	25	19.60	19.65	19.62	20.0	0	
10	QPSK	1	49	19.53	19.65	19.62			
10	QPSK	25	0	19.60	19.59	19.62			
10	QPSK	25	12	19.48	19.49	19.49	20.0	0	
10	QPSK	25	25	19.47	19.47	19.47			
10	QPSK	50	0	19.48	19.41	19.46			
10	HQAM	1	0	19.45	19.50	19.45	20.0	0	
10	HQAM	1	25	19.45	19.47	19.45			
10	HQAM	1	49	19.48	19.56	19.51			
10	HQAM	25	0	19.37	19.39	19.37	20.0	0	
10	HQAM	25	12	19.52	19.57	19.54			
10	HQAM	25	25	19.50	19.43	19.50			
10	HQAM	50	0	19.52	19.52	19.47			
10	HQAM	1	0	19.48	19.50	19.47	20.0	0	
10	HQAM	1	25	19.45	19.52	19.47			
10	HQAM	1	49	19.47	19.47	19.49			
10	HQAM	25	0	19.38	19.37	19.37	20.0	0	
10	HQAM	25	12	19.48	19.47	19.46			
10	HQAM	25	25	19.43	19.44	19.48			
10	HQAM	50	0	19.43	19.39	19.47	20.0	0	
10	SSBQAM	1	0	18.31	18.33	18.29			
10	SSBQAM	1	25	18.35	18.59	18.50	20	0.9	
10	SSBQAM	1	49	18.64	18.75	18.65			
10	SSBQAM	25	0	18.30	18.39	18.32			
10	SSBQAM	25	12	18.37	18.44	18.44	20	0.0	
10	SSBQAM	25	25	18.41	18.45	18.43			
10	SSBQAM	50	0	18.48	18.51	18.49			
Channel									
Frequency (MHz)									
811.5 811.5 811.5									
5	QPSK	1	0	19.55	19.54	19.47			
5	QPSK	1	12	19.62	19.68	19.68	20.0	0	
5	QPSK	1	24	19.47	19.53	19.48			
5	QPSK	12	0	19.60	19.60	19.65			
5	QPSK	12	7	19.51	19.45	19.52	20.0	0	
5	QPSK	12	13	19.49	19.49	19.49			
5	QPSK	25	0	19.49	19.41	19.45			
5	HQAM	1	0	19.52	19.52	19.49	20.0	0	
5	HQAM	1	12	19.43	19.43	19.45			
5	HQAM	1	24	19.48	19.55	19.55			
5	HQAM	12	0	19.35	19.43	19.38	20.0	0	
5	HQAM	12	7	19.51	19.56	19.50			
5	HQAM	12	13	19.42	19.43	19.45			
5	HQAM	25	0	19.45	19.52	19.50			
5	HQAM	1	0	19.50	19.45	19.45	20.0	0	
5	HQAM	1	12	19.51	19.48	19.48			
5	HQAM	1	24	19.48	19.41	19.49			
5	HQAM	12	0	19.42	19.42	19.41	20.0	0	
5	HQAM	12	7	19.42	19.45	19.42			
5	HQAM	12	13	19.47	19.51	19.48			
5	HQAM	25	0	19.43	19.45	19.40	20.0	0	
5	SSBQAM	1	0	18.30	18.38	18.35			
5	SSBQAM	1	12	18.35	18.54	18.54	20	0.9	
5	SSBQAM	1	24	18.63	18.72	18.64			
5	SSBQAM	12	0	18.29	18.41	18.34			
5	SSBQAM	12	7	18.49	18.44	18.44	20	0.0	
5	SSBQAM	12	13	18.45	18.45	18.38			
5	SSBQAM	25	0	18.43	18.49	18.49			
Channel									
Frequency (MHz)									
811.7 811.5 811.5									
1.4	QPSK	1	0	19.40	19.48	19.50			
1.4	QPSK	1	8	19.62	19.61	19.68	20.0	0	
1.4	QPSK	1	14	19.53	19.65	19.65			
1.4	QPSK	8	0	19.59	19.66	19.63			
1.4	QPSK	8	4	19.48	19.53	19.48	20.0	0	
1.4	QPSK	8	7	19.45	19.47	19.50			
1.4	QPSK	15	0	19.43	19.42	19.41			
1.4	HQAM	1	0	19.50	19.50	19.48	20.0	0	
1.4	HQAM	1	8	19.43	19.41	19.44			
1.4	HQAM	1	14	19.53	19.67	19.56			
1.4	HQAM	8	0	19.39	19.44	19.36	20.0	0	
1.4	HQAM	8	4	19.54	19.52	19.53			
1.4	HQAM	8	7	19.42	19.46	19.46			
1.4	HQAM	15	0	19.43	19.47	19.45			
1.4	HQAM	1	0	19.43	19.43	19.45	20.0	0	
1.4	HQAM	1	8	19.48	19.53	19.52			
1.4	HQAM	1	14	19.44	19.47	19.42			
1.4	HQAM	8	0	19.43	19.60	19.40	20.0	0	
1.4	HQAM	8	4	19.41	19.43	19.41			
1.4	HQAM	8	7	19.45	19.44	19.47			
1.4	HQAM	15	0	19.44	19.44	19.44	20.0	0	
1.4	SSBQAM	1	0	18.37	18.37	18.31			
1.4	SSBQAM	1	8	18.39	18.60	18.56	20	0.9	
1.4	SSBQAM	1	14	18.66	18.77	18.68			
1.4	SSBQAM	8	0	18.34	18.41	18.36			
1.4	SSBQAM	8	4	18.37	18.42	18.42	20	0.0	
1.4	SSBQAM	8	7	18.43	18.47	18.40			
1.4	SSBQAM	15	0	18.41	18.47	18.47			
Channel									
Frequency (MHz)									
811.7 811.5 811.5									
1.4	QPSK	1	0	19.51	19.51	19.54			
1.4	QPSK	1	3	19.67	19.67	19.67	20.0	0	
1.4	QPSK	1	5	19.45	19.48	19.51			
1.4	QPSK	3	0	19.64	19.61	19.65			
1.4	QPSK	3	1	19.52	19.46	19.45	20.0	0	
1.4	QPSK	3	3	19.40	19.43	19.45			
1.4	QPSK	6	0	19.50	19.48	19.48	20.0	0	
1.4	HQAM	1	0	19.45	19.52	19.47			
1.4	HQAM	1	3	19.48	19.43	19.48			
1.4	HQAM	1	5	19.53	19.67	19.52	20.0	0	
1.4	HQAM	3	0	19.43	19.43	19.40			
1.4	HQAM	3	1	19.51	19.59	19.50			
1.4	HQAM	3	3	19.42	19.44	19.42			
1.4	HQAM	6	0	19.53	19.48	19.48	20.0	0	
1.4	HQAM	1	0	19.50	19.48	19.47			
1.4	HQAM	1	3	19.47	19.48	19.45			
1.4	HQAM	1	5	19.48	19.40	19.45	20.0	0	
1.4	HQAM	3	0	19.42	19.46	19.37			
1.4	HQAM	3	1	19.48	19.42	19.48			
1.4	HQAM	3	3	19.45	19.45	19.43	20.0	0	
1.4	SSBQAM	1	0	18.48	18.55	18.54			



Band 30_Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Lch (Ch/Freq)	Power Hch (Ch/Freq)	Power High Ch (F/Freq)	Timeup (min)	MPR (dB)		
Channel 27710										
Frequency (MHz)										
10	QPSK	1	0	14.80			16.4	0		
10	QPSK	1	25	14.83						
10	QPSK	1	49	14.83						
10	QPSK	25	0	14.80						
10	QPSK	25	12	14.80			16.4	0		
10	QPSK	25	25	14.82						
10	QPSK	50	0	14.80						
10	QPSK	50	1	14.83			16.4	0		
10	QPSK	50	25	14.82						
10	HQAM	1	49	14.87	20.73	20.85				
10	HQAM	25	0	14.81	21.80	21.89				
10	HQAM	25	12	14.82	21.81	21.90				
10	HQAM	25	25	14.83	21.86	21.87				
10	HQAM	50	0	14.78	21.87	21.83				
10	HQAM	50	1	14.84	21.88	21.84				
10	HQAM	1	25	14.82	21.84	22.03				
10	HQAM	1	49	14.83	22.01	21.80				
10	HQAM	25	0	14.85	20.90	20.91				
10	HQAM	25	12	14.79	20.87	20.94				
10	HQAM	25	25	14.84	20.86	20.86				
10	HQAM	50	0	14.78	20.86	20.86				
10	HQAM	50	1	14.79	20.89	20.84				
10	SSQAM	1	0	14.86	18.53	18.46				
10	SSQAM	1	25	14.82	18.53	18.28				
10	SSQAM	1	49	14.81	18.54	18.50				
10	SSQAM	25	0	14.87	18.52	18.46				
10	SSQAM	25	12	14.87	18.52	18.46				
10	SSQAM	25	25	14.85	18.51	18.48				
10	SSQAM	50	0	14.85	18.51	18.48				
10	SSQAM	50	1	14.85	18.52	18.50				
Channel 27715										
Frequency (MHz)										
5	QPSK	1	0	14.78	14.70	14.78	16.4	0		
5	QPSK	1	12	14.87	14.81	14.90				
5	QPSK	1	24	14.80	14.77	14.78				
5	QPSK	12	0	14.88	14.86	14.81				
5	QPSK	12	7	14.71	14.70	14.72	16.4	0		
5	QPSK	12	13	14.78	14.78	14.78				
5	QPSK	25	0	14.81	14.78	14.80				
5	HQAM	1	0	14.74	14.78	14.78	16.4	0		
5	HQAM	1	12	14.81	14.78	14.81				
5	HQAM	1	24	14.84	14.80	14.83				
5	HQAM	12	0	14.80	14.78	14.79				
5	HQAM	12	7	14.71	14.71	14.74	16.4	0		
5	HQAM	12	13	14.80	14.78	14.79				
5	HQAM	25	0	14.74	14.78	14.78				
5	HQAM	25	1	14.79	14.83	14.81				
5	HQAM	1	12	14.81	14.74	14.75	16.4	0		
5	HQAM	1	24	14.74	14.77	14.77				
5	HQAM	12	0	14.78	14.77	14.78	16.4	0		
5	HQAM	12	7	14.70	14.70	14.73				
5	HQAM	12	13	14.78	14.78	14.78				
5	SSQAM	1	0	14.82	14.78	14.82	16.4	0		
5	SSQAM	1	12	14.78	14.77	14.80				
5	SSQAM	1	24	14.75	14.75	14.77				
5	SSQAM	12	0	14.78	14.88	14.78				
5	SSQAM	12	7	14.86	14.80	14.85				
5	SSQAM	12	13	14.82	14.76	14.77	16.4	0		
5	SSQAM	25	0	14.81	14.84	14.83				

Band 66_Ant 0										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Lch (Ch/Freq)	Power Hch (Ch/Freq)	Power High Ch (F/Freq)	Timeup (min)	MPR (dB)		
Channel 12202										
Frequency (MHz)										
20	QPSK	1	0	22.80	22.79	22.84				
20	QPSK	1	49	22.81	22.89	22.86	24	0		
20	QPSK	1	99	22.81	22.89	22.86				
20	QPSK	50	0	22.71	22.85	22.80				
20	QPSK	50	24	22.70	22.74	22.80	24	0		
20	QPSK	50	49	22.80	22.85	22.80				
20	QPSK	100	0	22.74	22.82	22.78				
20	QPSK	100	1	22.81	22.72	22.75				
20	QPSK	100	49	22.80	22.85	22.83	24	0		
20	HQAM	1	99	22.78	22.73	22.86				
20	HQAM	50	0	21.83	21.80	21.89				
20	HQAM	50	24	21.80	21.81	21.90				
20	HQAM	100	0	21.85	21.86	21.83	23	1		
20	HQAM	100	1	21.86	21.87	21.80				
20	HQAM	1	49	21.90	21.84	22.03				
20	HQAM	1	99	21.87	22.01	21.80				
20	HQAM	50	0	20.87	20.83	20.85				
20	HQAM	50	24	20.88	20.87	20.84				
20	HQAM	100	0	20.86	20.86	20.86				
20	HQAM	100	1	20.89	20.89	20.81				
20	SSQAM	1	0	18.52	18.53	18.46				
20	SSQAM	1	49	18.52	18.53	18.28				
20	SSQAM	1	99	18.51	18.54	18.50				
20	SSQAM	25	0	18.51	18.52	18.46				
20	SSQAM	25	12	18.52	18.52	18.46				
20	SSQAM	25	25	18.50	18.51	18.48				
20	SSQAM	50	0	18.52	18.52	18.48				
20	SSQAM	50	1	18.52	18.52	18.50				
Channel 12207										
Frequency (MHz)										
15	QPSK	1	0	22.72	22.70	22.73	24	0		
15	QPSK	1	37	22.71	22.78	22.78				
15	QPSK	1	74	22.81	22.81	22.81				
15	QPSK	36	0	22.68	22.77	22.71				
15	QPSK	36	20	22.69	22.70	22.68				
15	QPSK	36	37	22.80	22.77	22.77				
15	QPSK	75	0	22.68	22.72	22.74				
15	HQAM	1	0	22.76	22.63	22.71	24	0		
15	HQAM	1	37	22.82	22.81	22.82				
15	HQAM	1	74	22.62	22.81	22.55				
15	HQAM	36	0	21.77	21.72	21.82				
15	HQAM	36	20	21.81	21.82	21.79				
15	HQAM	36	37	21.71	21.75	21.79	23	1		
15	HQAM	75	0	21.77	21.78	21.82				
15	HQAM	75	1	21.86	21.86	21.87				
15	HQAM	1	37	21.82	21.83	21.89				
15	HQAM	1	74	21.87	21.86	21.82				
15	HQAM	36	0	20.79	20.84	20.85				
15	HQAM	36	20	20.74	20.73	20.83	22	2		
15	HQAM	36	37	20.78	20.84	20.83				
15	SSQAM	1	0	18.40	18.48	18.40				
15	SSQAM	1	37	18.48	18.53	18.46	20	4		
15	SSQAM	1	74	18.48	18.53	18.49				
15	SSQAM	36	0	18.40	18.49	18.43				
15	SSQAM	36	20	18.48	18.53	18.46				
15	SSQAM	36	37	18.48	18.51	18.54				
15	SSQAM	75	0	18.53	18.51	18.54				
Channel 12212										
Frequency (MHz)										
10	QPSK	1	0	22.73	22.70	22.73	24	0		
10	QPSK	1	25	22.73	22.81	22.80				
10	QPSK	25	0	22.63	22.63	22.63				
10	QPSK	25	12	22.68	22.79	22.72				
10	QPSK	25	25	22.68	22.71	22.72	24	0		
10	QPSK	50	0	22.62	22.72	22.66				
10	QPSK	50	1	22.70	22.70	22.68				
10	HQAM	1	0	22.73	22.61	22.66	24	0		
10	HQAM	1	25	22.69	22.69	22.69				
10	HQAM	1	49	22.68	22.81	22.84				
10	HQAM	25	0	21.78	21.74	21.77				
10	HQAM	25	12	21.78	21.78	21.85				
10	HQAM	25	25	21.78	21.78	21.82				
10	HQAM	50	0	21.71	21.76	21.81				
10	HQAM	50	1	21.84	21.89	21.90				
10	HQAM	1	25	21.80	21.87	21.96				
10	HQAM	1	49	21.84	21.91	21.75				
10	HQAM	25	0	20.74	20.80	20.83	22	2		
10	HQAM	25	12	20.78	20.77	20.90				



Band 71_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Nbrs Ch / Freq	Power High Ch / Freq	Tune-up Int (dB)	MPR (dB)	
Channel				13322	13327	13372	68		
Frequency (MHz)				613	615	617			
20	QPSK	1	0	19.17	19.23	19.17			
20	QPSK	1	49	19.34	19.38	19.25	20.6	0	
20	QPSK	1	99	19.18	19.23	19.18			
20	QPSK	50	0	19.21	19.30	19.25			
20	QPSK	50	24	19.16	19.17	19.16	20.6	0	
20	QPSK	50	59	19.15	19.22	19.14			
20	QPSK	100	0	19.12	19.20	19.19			
20	16QAM	1	0	19.07	19.16	19.11			
20	16QAM	1	49	19.19	19.24	19.20	20.6	0	
20	16QAM	1	99	19.15	19.17	19.11			
20	16QAM	50	0	19.15	19.21	19.14			
20	16QAM	50	24	19.12	19.21	19.13	20.6	0	
20	16QAM	50	50	19.14	19.18	19.14			
20	16QAM	100	0	19.11	19.20	19.15			
20	64QAM	1	0	19.11	19.19	19.15	20.6	0	
20	64QAM	1	49	19.11	19.21	19.15			
20	64QAM	1	99	19.14	19.21	19.13			
20	64QAM	50	0	19.12	19.19	19.14			
20	64QAM	50	24	19.14	19.24	19.19	20.6	0	
20	64QAM	50	50	19.13	19.19	19.19			
20	64QAM	100	0	19.13	19.19	19.14			
20	256QAM	1	0	19.14	19.23	19.16			
20	256QAM	1	49	19.16	19.17	19.15	20	0.6	
20	256QAM	1	99	19.14	19.22	19.19			
20	256QAM	50	0	19.15	19.22	19.12			
20	256QAM	50	24	19.14	19.23	19.18	20	0.6	
20	256QAM	50	50	19.15	19.20	19.18			
20	256QAM	100	0	19.12	19.18	19.11			
Channel				13377	13377	13377			
Frequency (MHz)				615.5	615.5	615.5			
15	QPSK	1	0	19.08	19.16	19.16			
15	QPSK	1	37	19.24	19.24	19.24	20.6	0	
15	QPSK	1	74	19.12	19.09	19.15			
15	QPSK	36	0	19.18	19.19	19.17			
15	QPSK	36	20	19.10	19.09	19.09	20.6	0	
15	QPSK	36	39	19.07	19.05	19.09			
15	QPSK	75	0	19.14	19.15	19.18			
15	16QAM	1	0	19.09	19.09	19.07			
15	16QAM	1	37	19.12	19.16	19.13	20.6	0	
15	16QAM	1	74	19.10	19.06	19.07			
15	16QAM	36	0	19.10	19.11	19.05			
15	16QAM	36	20	19.11	19.04	19.03	20.6	0	
15	16QAM	36	39	19.09	19.10	19.10			
15	16QAM	75	0	19.07	19.09	19.05			
15	64QAM	1	0	19.07	19.03	19.08	20.6	0	
15	64QAM	1	37	19.11	19.09	19.08			
15	64QAM	1	74	19.12	19.06	19.11			
15	64QAM	36	0	19.07	19.10	19.09	20.6	0	
15	64QAM	36	20	19.18	19.17	19.17			
15	64QAM	36	39	19.06	19.02	19.06	20.6	0	
15	64QAM	75	0	19.12	19.10	19.09			
15	256QAM	1	0	19.15	19.06	19.15	20	0.6	
15	256QAM	1	37	19.09	19.09	19.10			
15	256QAM	1	74	19.14	19.17	19.13			
15	256QAM	36	0	19.10	19.08	19.03	20	0.6	
15	256QAM	36	20	19.15	19.09	19.13			
15	256QAM	36	39	19.09	19.12	19.09			
15	256QAM	75	0	19.02	19.09	19.04			
Channel				13372	13377	13347			
Frequency (MHz)				615	615.5	615.5			
10	QPSK	1	0	19.13	19.07	19.11			
10	QPSK	1	25	19.26	19.25	19.26	20.6	0	
10	QPSK	1	49	19.17	19.17	19.08			
10	QPSK	25	0	19.22	19.25	19.18			
10	QPSK	25	12	19.10	19.14	19.07	20.6	0	
10	QPSK	25	24	19.10	19.10	19.13			
10	QPSK	50	0	19.11	19.16	19.10			
10	16QAM	1	0	19.01	19.05	19.05	20.6	0	
10	16QAM	1	25	19.13	19.16	19.13			
10	16QAM	1	49	19.06	19.08	19.09			
10	16QAM	25	0	19.05	19.08	19.10	20.6	0	
10	16QAM	25	12	19.05	19.11	19.08			
10	16QAM	25	24	19.12	19.09	19.07			
10	16QAM	50	0	19.06	19.03	19.05			
10	64QAM	1	0	19.05	19.09	19.09	20.6	0	
10	64QAM	1	25	19.09	19.11	19.17			
10	64QAM	1	49	19.04	19.09	19.12			
10	64QAM	25	0	19.10	19.10	19.05	20.6	0	
10	64QAM	25	12	19.13	19.12	19.10			
10	64QAM	25	24	19.08	19.04	19.05			
10	64QAM	50	0	19.04	19.04	19.12			
10	256QAM	1	0	19.14	19.13	19.15	20	0.6	
10	256QAM	1	25	19.05	19.12	19.10			
10	256QAM	1	49	19.10	19.14	19.10			
10	256QAM	25	0	19.06	19.04	19.11	20	0.6	
10	256QAM	25	12	19.13	19.15	19.14			
10	256QAM	25	24	19.13	19.10	19.07			
10	256QAM	50	0	19.05	19.06	19.02			
Channel				13377	13377	13347			
Frequency (MHz)				615.5	615.5	615.5			
5	QPSK	1	0	19.11	19.10	19.11			
5	QPSK	1	12	19.27	19.25	19.26	20.6	0	
5	QPSK	1	24	19.13	19.11	19.11			
5	QPSK	12	0	19.20	19.22	19.26			
5	QPSK	12	7	19.07	19.11	19.11	20.6	0	
5	QPSK	12	13	19.06	19.06	19.04			
5	QPSK	25	0	19.18	19.13	19.16			
5	16QAM	1	0	19.07	19.07	19.05	20.6	0	
5	16QAM	1	12	19.14	19.14	19.11			
5	16QAM	1	24	19.06	19.05	19.05			
5	16QAM	12	0	19.05	19.09	19.10	20.6	0	
5	16QAM	12	7	19.03	19.11	19.10			
5	16QAM	12	13	19.10	19.05	19.08			
5	16QAM	25	0	19.08	19.08	19.06			
5	64QAM	1	0	19.06	19.04	19.04	20.6	0	
5	64QAM	1	12	19.11	19.12	19.17			
5	64QAM	1	24	19.06	19.12	19.05			
5	64QAM	12	0	19.11	19.07	19.06	20.6	0	
5	64QAM	12	7	19.16	19.16	19.16			
5	64QAM	12	13	19.09	19.07	19.06			
5	64QAM	25	0	19.12	19.11	19.10	20.6	0	
5	256QAM	1	0	19.15	19.06	19.08	20	0.6	
5	256QAM	1	12	19.12	19.11	19.09			
5	256QAM	1	24	19.17	19.11	19.13			
5	256QAM	12	0	19.05	19.07	19.07	20	0.6	
5	256QAM	12	7	19.15	19.07	19.08			
5	256QAM	12	13	19.11	19.08	19.09			
5	256QAM	25	0	19.06	19.05	19.03			





Band 38_Ant 9										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2560	2595	2610				
20	QPSK	1	0	23.04	23.14	23.01	24	0		
20	QPSK	49	0	23.08	23.02	23.03				
20	QPSK	1	99	23.18	23.21	22.97				
20	QPSK	50	0	23.30	23.35	23.18				
20	QPSK	50	24	23.08	23.08	23.07				
20	QPSK	50	50	23.20	23.28	23.16				
20	QPSK	100	0	23.30	23.32	23.23				
20	16QAM	1	0	23.05	23.13	22.71				
20	16QAM	1	49	22.75	22.76	22.65				
20	16QAM	1	99	23.19	23.09	23.02				
20	16QAM	50	0	22.75	22.96	22.86				
20	16QAM	50	24	23.11	22.96	23.02				
20	16QAM	50	50	23.09	23.08	22.95				
20	16QAM	100	0	22.95	22.90	22.89				
20	64QAM	1	0	22.48	22.81	22.75				
20	64QAM	1	49	22.75	22.76	22.65				
20	64QAM	1	99	22.89	22.85	22.61				
20	64QAM	50	0	21.78	21.92	21.89				
20	64QAM	50	24	22.09	22.39	21.83				
20	64QAM	50	50	22.08	22.09	21.89				
20	64QAM	100	0	21.95	22.03	21.93				
20	256QAM	1	0	19.60	19.63	19.58				
20	256QAM	1	49	19.61	19.62	19.59				
20	256QAM	1	99	19.41	19.46	19.39				
20	256QAM	50	0	19.68	19.74	19.68				
20	256QAM	50	24	19.62	19.67	19.63				
20	256QAM	50	50	19.62	19.63	19.60				
20	256QAM	100	0	19.68	19.74	19.72				
Channel										
Frequency (MHz)				2772	2795	2812				
15	QPSK	1	0	22.88	23.10	22.95	24	0		
15	QPSK	1	37	23.29	23.35	22.89				
15	QPSK	1	74	23.02	23.17	22.78				
15	QPSK	36	0	23.25	23.34	23.10				
15	QPSK	36	39	23.09	23.19	22.86				
15	QPSK	36	39	23.02	23.17	23.15				
15	QPSK	75	0	23.13	23.18	23.07				
15	16QAM	1	0	22.88	23.09	22.95				
15	16QAM	1	37	22.89	23.03	23.16				
15	16QAM	1	74	23.10	22.93	22.91				
15	16QAM	36	0	22.62	22.76	22.82				
15	16QAM	36	39	23.03	22.79	22.95				
15	16QAM	36	39	22.96	22.97	22.91				
15	16QAM	75	0	22.93	22.71	22.74				
15	64QAM	1	0	21.98	21.98	21.86				
15	64QAM	1	37	22.63	22.73	22.51				
15	64QAM	1	74	22.81	22.75	22.55				
15	64QAM	36	0	21.70	21.79	21.84				
15	64QAM	36	39	22.86	22.86	22.82				
15	64QAM	36	39	21.92	21.91	21.95				
15	64QAM	75	0	21.79	21.87	21.81				
15	256QAM	1	0	19.62	19.64	19.61				
15	256QAM	1	37	19.38	19.43	19.39				
15	256QAM	1	74	19.35	19.42	19.32				
15	256QAM	36	0	19.65	19.62	19.58				
15	256QAM	36	39	19.56	19.54	19.53				
15	256QAM	75	0	19.59	19.69	19.67				
Channel										
Frequency (MHz)				3760	3800	3820				
10	QPSK	1	0	23.00	23.09	22.93	24	0		
10	QPSK	1	25	23.19	23.31	23.05				
10	QPSK	1	49	23.03	23.09	22.91				
10	QPSK	25	0	23.29	23.26	23.07				
10	QPSK	25	12	23.26	23.27	23.03				
10	QPSK	25	25	23.04	23.09	23.10				
10	QPSK	50	0	23.18	23.22	23.17				
10	16QAM	1	0	23.05	23.02	22.83				
10	16QAM	1	25	22.95	23.10	23.01				
10	16QAM	1	49	23.06	22.91	22.95				
10	16QAM	25	0	22.73	22.97	22.95				
10	16QAM	25	12	23.09	22.79	22.91				
10	16QAM	25	25	22.95	22.94	22.79				
10	16QAM	50	0	22.75	22.71	22.67				
10	64QAM	1	0	22.17	22.33	22.16				
10	64QAM	1	25	22.84	22.85	22.46				
10	64QAM	1	49	22.81	22.79	22.46				
10	64QAM	25	0	21.65	21.86	21.84				
10	64QAM	25	12	22.06	21.84	21.75				
10	64QAM	25	25	21.92	22.03	21.93				
10	64QAM	50	0	21.84	22.01	21.82				
10	256QAM	1	0	19.55	19.56	19.45				
10	256QAM	1	25	19.38	19.46	19.41				
10	256QAM	25	0	19.62	19.64	19.61				
10	256QAM	25	12	19.55	19.62	19.56				
10	256QAM	25	25	19.56	19.60	19.56				
10	256QAM	50	0	19.56	19.66	19.69				
Channel										
Frequency (MHz)				2572	2595	2612				
5	QPSK	1	0	22.88	23.07	22.95	24	0		
5	QPSK	1	12	23.34	23.37	22.99				
5	QPSK	1	24	23.10	23.09	22.82				
5	QPSK	12	0	23.13	23.24	23.17				
5	QPSK	12	7	23.12	23.17	23.11				
5	QPSK	12	13	23.19	23.25	23.06				
5	QPSK	25	0	23.18	23.14	23.04				
5	16QAM	1	0	22.97	23.06	22.83				
5	16QAM	1	12	22.86	23.13	23.03				
5	16QAM	1	24	22.99	22.89	22.96				
5	16QAM	12	0	22.88	22.82	22.71				
5	16QAM	12	7	23.05	22.77	22.91				
5	16QAM	12	13	23.01	23.05	22.76				
5	16QAM	25	0	22.77	23.62	23.50				
5	64QAM	1	0	22.33	22.48	22.24				
5	64QAM	1	12	22.56	22.70	22.39				
5	64QAM	1	24	22.57	22.72	22.50				
5	64QAM	12	0	21.63	21.79	21.75				
5	64QAM	12	7	21.89	21.88	21.86				
5	64QAM	12	13	22.02	22.09	21.87				
5	64QAM	25	0	21.84	21.86	21.86				
5	256QAM	1	0	19.49	19.56	19.54				
5	256QAM	1	12	19.40	19.44	19.41				
5	256QAM	1	24	19.31	19.37	19.35				
5	256QAM	12	0	19.63	19.63	19.59				
5	256QAM	12	7	19.50	19.61	19.59				
5	256QAM	12	13	19.55	19.58	19.56				
5	256QAM	25	0	19.56	19.66	19.62				

Band 38_Ant 1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	16.00	16.01	15.98	17.1	0		
20	QPSK	1	49	16.03	16.00	16.01				
20	QPSK	1	99	15.91	16.07	15.93				
20	QPSK	50	0	15.01	15.06	15.06				
20	QPSK	50	24	15.92	15.97	15.96				
20	QPSK	50	50	15.96	15.97	15.95				
20	QPSK	100	0	15.99	16.02	15.99				
20	16QAM	1	0	15.94	16.01	15.99				
20	16QAM	1	49	16.02	16.01	15.95				
20	16QAM	1	99	15.91	16.05	15.94				
20	16QAM	50	0	15.94	16.07	15.98				
20	16QAM	50	24	15.89	16.07	15.99				
20	16QAM	50	50	15.98	16.07	15.98				
20	16QAM	100	0	15.93	16.04	15.96				
20										



Band 41 (HPUE)_Ant 9												
BW (MHz)	Modulation	RB Size	RB Offset	For IC Power Low Ch / Freq	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Low High Ch / Freq	Power High Middle Ch / Freq	Power High High Ch / Freq	Time-up limit (dms)	MPR (dB)	
Channel				39750	39750	40165	40165	40580	41000			
20	QPSK	1	0	2510	2506	25475	2593	26355	2680			
20	QPSK	1	49	2637	2637	26787	2726	27688	2816			
20	QPSK	1	99	2634	2630	26709	2720	27621	2811			
20	QPSK	50	0	2525	2524	25651	2611	26520	2700			
20	QPSK	50	24	2526	2525	25663	2612	26532	2701			
20	QPSK	50	50	2525	2523	25671	2611	26589	2705			
20	QPSK	100	0	2535	2530	25717	2621	26627	2711			
20	16QAM	1	0	2530	2524	25620	2617	26527	2707			
20	16QAM	1	49	2634	2634	26751	2728	27638	2818			
20	16QAM	1	99	2635	2637	26723	2721	27625	2811			
20	16QAM	50	0	2528	2528	25675	2628	26685	2717			
20	16QAM	50	24	2521	2528	25722	2629	26698	2719			
20	16QAM	50	50	2522	2530	25731	2628	26698	2719			
20	16QAM	100	0	2538	2533	25789	2638	26798	2728			
20	64QAM	1	0	2533	2529	25725	2628	26698	2719			
20	64QAM	1	49	2634	2634	26751	2728	27638	2818			
20	64QAM	1	99	2635	2637	26723	2721	27625	2811			
20	64QAM	50	0	2420	2417	24577	2517	25584	2614			
20	64QAM	50	24	2426	2434	24789	2540	25811	2640			
20	64QAM	50	50	2438	2432	24789	2543	25854	2644			
20	64QAM	100	0	2438	2432	24699	2479	24959	2509			
20	256QAM	1	0	2207	2218	22327	2277	22958	23258			
20	256QAM	1	49	2302	2314	2317	23276	23488	23548			
20	256QAM	1	99	2221	2221	2221	2228	2241	2264			
20	256QAM	50	0	2195	2209	2218	2225	2244	2254			
20	256QAM	50	24	2208	2216	2220	2221	2241	2251			
20	256QAM	50	50	2193	2208	2215	2221	2248	2254			
20	256QAM	100	0	2197	2202	2208	2223	2240	2244			
Channel				39755	39725	40173	40620	41068	41515	Time-up limit (dms)	MPR (dB)	
15	QPSK	1	0	2507	2503	25443	2593	26374	26825			
15	QPSK	1	49	2632	2632	26734	2723	27675	2818			
15	QPSK	1	99	2632	2632	26645	2714	27586	2807			
15	QPSK	36	0	2528	2528	25695	2620	26607	2710			
15	QPSK	36	24	2529	2536	25706	2621	26622	2711			
15	QPSK	36	50	2528	2526	25614	2617	26585	2707			
15	QPSK	75	0	2526	2522	2559	2599	2639	2679			
15	QPSK	75	24	2527	2534	25638	2614	26554	2705			
15	16QAM	1	0	2522	2516	25572	2610	26516	2702			
15	16QAM	1	49	2626	2630	26707	2721	27627	2813			
15	16QAM	1	99	2627	2629	26675	2720	27601	2812			
15	16QAM	36	0	2521	2520	25545	2611	26495	2698			
15	16QAM	36	24	2525	2532	25626	2612	26542	2701			
15	16QAM	36	50	2525	2525	25515	2613	26524	2702			
15	16QAM	75	0	2525	2524	25666	2619	26599	2711			
15	16QAM	75	24	2528	2536	25680	2621	26628	2712			
15	16QAM	75	50	2524	2528	25628	2617	26587	2707			
15	16QAM	100	0	2400	2398	24377	2476	24924	2505			
15	64QAM	1	0	2424	2424	24651	2524	25662	2615			
15	64QAM	1	49	2424	2424	24651	2524	25662	2615			
15	64QAM	1	99	2424	2420	24657	2476	24917	2507			
15	64QAM	50	0	2429	2424	24677	2476	24917	2507			
15	256QAM	1	0	2207	2204	2224	2227	2239	2251			
15	256QAM	1	49	2302	2314	2317	23276	23488	23548			
15	256QAM	1	99	2213	2216	2221	2228	2241	2264			
15	256QAM	36	0	2178	2207	2216	2221	2236	2250			
15	256QAM	36	24	2204	2214	2218	2221	2241	2251			
15	256QAM	36	50	2183	2194	2202	2216	2232	2247			
15	256QAM	75	0	2177	2189	2197	2213	2233	2244			
Channel				39760	39730	40178	40623	41070	41517	Time-up limit (dms)	MPR (dB)	
10	QPSK	1	0	2508	2504	25453	2594	26385	26836			
10	QPSK	1	49	2633	2633	26745	2724	27686	2819			
10	QPSK	1	99	2633	2633	26656	2714	27598	2809			
10	QPSK	25	0	2529	2529	25696	2621	26608	2711			
10	QPSK	25	24	2529	2536	25706	2622	26622	2712			
10	QPSK	25	50	2529	2527	25614	2618	26585	2707			
10	QPSK	50	0	2526	2522	2559	2599	2639	2679			
10	QPSK	50	24	2527	2534	25638	2614	26554	2705			
10	16QAM	1	0	2522	2516	25572	2610	26516	2702			
10	16QAM	1	49	2626	2630	26707	2721	27627	2813			
10	16QAM	1	99	2627	2629	26675	2720	27601	2812			
10	16QAM	25	0	2521	2520	25545	2611	26495	2698			
10	16QAM	25	24	2525	2532	25626	2612	26542	2701			
10	16QAM	25	50	2525	2525	25515	2613	26524	2702			
10	16QAM	50	0	2525	2524	25666	2619	26599	2711			
10	16QAM	50	24	2528	2536	25680	2621	26628	2712			
10	16QAM	50	50	2524	2528	25628	2617	26587	2707			
10	16QAM	100	0	2400	2398	24377	2476	24924	2505			
10	64QAM	1	0	2424	2424	24651	2524	25662	2615			
10	64QAM	1	49	2424	2424	24651	2524	25662	2615			
10	64QAM	1	99	2424	2420	24657	2476	24917	2507			
10	64QAM	50	0	2429	2424	24677	2476	24917	2507			
10	256QAM	1	0	2207	2204	2224	2227	2239	2251			
10	256QAM	1	49	2302	2314	2317	23276	23488	23548			
10	256QAM	1	99	2213	2216	2221	2228	2241	2264			
10	256QAM	36	0	2178	2207	2216	2221	2236	2250			
10	256QAM	36	24	2204	2214	2218	2221	2241	2251			
10	256QAM	36	50	2183	2194	2202	2216	2232	2247			
10	256QAM	75	0	2177	2189	2197	2213	2233	2244			
Channel				39765	39735	40183	40628	41073	41520	Time-up limit (dms)	MPR (dB)	
5	QPSK	1	0	2510	2506	25475	2593	26355	2680			
5	QPSK	1	49	2637	2637	26787	2726	27688	2816			
5	QPSK	1	99	2634	2630	26709	2720	27621	2811			
5	QPSK	50	0	2525	2524	25651	2611	26520	2700			
5	QPSK	50	24	2526	2525	25663	2612	26532	2701			
5	QPSK	50	50	2525	2523	25671	2611	26589	2705			
5	QPSK	100	0	2535	2530	25717	2621	26627	2711			
5	16QAM	1	0	2530	2524	25620	2617	26527	2707			
5	16QAM	1	49	2634	2634	26751	2728	27638	2818			
5	16QAM	1	99	2635	2637	26723	2721	27625	2811			
5	16QAM	50	0	2528	2528	25675	2628	26685	2717			
5	16QAM	50	24	2521	2528	25722	2629	26698	2719			
5	16QAM	50	50	2522	2530	25731	2628	26698	2719			
5	16QAM	100	0	2538	2533	25789	2638	26798	2728			



Band 41_Ant 2													
BW [MHz]	Modulation	RB Size	RB Offset	Fat IC Power Lw Ch / Freq	Power Lw Ch / Freq	Power Low Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)			
Channel													
				39750	39750	40165	40620	41055	41490				
	Frequency (MHz)			2510	2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	23.02	23.06	23.22	23.35	23.03	23.13				
20	QPSK	1	49	23.02	23.06	23.22	23.35	23.03	23.13			24	0
20	QPSK	1	99	23.08	23.05	23.27	23.47	22.97	23.33				
20	QPSK	50	0	23.21	23.15	23.45	23.49	23.12	23.31				
20	QPSK	50	24	23.21	23.15	23.45	23.49	23.12	23.31				
20	QPSK	50	50	23.21	23.22	23.45	23.48	23.44	23.32			26	1
20	QPSK	100	0	24.30	24.24	24.54	24.51	24.42	24.30				
20	16QAM	1	0	24.30	24.24	24.10	24.56	24.54	24.66				
20	16QAM	1	49	24.30	24.24	24.64	24.63	24.33	24.91				
20	16QAM	1	99	24.35	24.58	24.73	24.77	24.49	24.33			26	1
20	16QAM	50	0	24.34	24.39	24.26	24.41	23.97	24.27				
20	16QAM	50	24	24.44	24.47	24.41	24.86	24.94	24.46				
20	16QAM	50	50	24.38	24.39	24.49	24.83	24.81	24.93				
20	16QAM	100	0	24.31	24.39	24.31	24.48	24.33	24.34				
20	16QAM	100	0	24.45	24.46	24.32	24.61	24.65	24.48				
20	16QAM	100	49	24.70	24.69	24.64	24.83	24.33	24.91				
20	16QAM	100	99	24.53	24.72	24.45	24.84	24.85	24.38				
20	16QAM	50	9	22.35	22.27	22.23	22.48	22.38	22.40				
20	16QAM	50	24	22.49	22.24	22.40	22.97	22.95	22.41				
20	16QAM	50	50	22.48	22.44	22.46	22.60	22.62	22.47				
20	16QAM	100	0	22.46	22.41	22.39	22.43	22.48	22.34				
20	256QAM	1	0	20.05	20.08	20.02	20.16	20.13	20.06				
20	256QAM	1	24	20.09	20.16	20.06	20.21	20.22	20.12				
20	256QAM	1	50	20.12	20.12	20.05	20.17	20.20	20.10				
20	256QAM	50	0	20.08	20.14	20.03	20.25	20.22	20.10				
20	256QAM	50	24	20.15	20.14	20.07	20.21	20.16	20.07				
20	256QAM	50	49	20.14	20.14	20.07	20.46	20.38	20.29				
20	256QAM	100	0	20.07	20.09	20.08	20.23	20.22	20.15				
Channel													
				39765	39725	40173	40620	41058	41515				
	Frequency (MHz)			2507.5	2503.5	2548.3	2593	2637.8	2682.5				
15	QPSK	1	0	20.05	20.07	20.04	20.19	20.16	20.09				
15	QPSK	1	37	20.18	20.15	20.42	20.47	20.31	20.38				
15	QPSK	1	74	20.13	20.05	20.12	20.42	20.05	20.02				
15	QPSK	36	0	24.35	24.36	24.31	24.50	24.44	24.29				
15	QPSK	36	24	24.08	24.07	24.07	24.48	24.38	24.29				
15	QPSK	36	50	24.02	24.18	24.33	24.32	24.41	24.24				
15	QPSK	75	0	24.25	24.31	24.63	24.42	24.28	24.29				
15	QPSK	75	24	24.28	24.28	24.06	24.51	24.48	24.42				
15	QPSK	75	50	24.28	24.35	24.70	24.51	24.39	24.44				
15	16QAM	1	74	24.28	24.35	24.70	24.51	24.39	24.44				
15	16QAM	1	74	24.28	24.35	24.70	24.51	24.39	24.44				
15	16QAM	36	0	23.22	23.28	23.17	23.40	23.49	23.11				
15	16QAM	36	24	23.30	23.30	23.16	23.41	23.38	23.29				
15	16QAM	36	50	23.20	23.21	23.42	23.42	23.41	23.44				
15	16QAM	75	0	23.14	23.37	23.12	23.46	23.49	23.33				
15	16QAM	75	24	23.12	23.38	23.56	23.52	23.19	23.90				
15	16QAM	75	50	23.14	23.39	23.56	23.52	23.19	23.90				
15	16QAM	100	0	23.29	23.28	23.35	23.79	23.79	23.32				
15	16QAM	100	0	22.29	22.26	22.15	22.41	22.36	22.24				
15	16QAM	100	24	22.43	22.43	22.43	22.43	22.43	22.43				
15	16QAM	100	50	22.27	22.34	22.45	22.45	22.45	22.45				
15	16QAM	36	39	22.27	22.24	22.22	22.22	22.22	22.22				
15	16QAM	75	0	22.19	22.13	22.26	22.49	22.31	22.17				
15	16QAM	75	24	22.18	22.18	22.18	22.18	22.18	22.18				
15	16QAM	75	50	22.18	22.18	22.18	22.18	22.18	22.18				
15	16QAM	100	0	22.16	22.11	22.19	22.33	22.19	22.15				
15	16QAM	100	0	21.03	20.98	21.15	21.35	20.98	21.32				
15	16QAM	100	24	21.08	21.14	21.08	21.08	21.08	21.08				
15	16QAM	100	50	20.99	21.15	21.37	21.45	20.99	21.34				
15	16QAM	36	39	20.99	21.15	21.37	21.45	20.99	21.34				
15	16QAM	75	0	21.17	21.19	21.33	21.35	21.03	21.28				
15	256QAM	1	0	18.82	18.86	18.86	18.86	18.86	18.86				
15	256QAM	1	24	18.82	18.84	18.84	18.87	18.86	18.86				
15	256QAM	1	49	18.83	18.84	18.84	18.86	18.86	18.86				
15	256QAM	36	0	18.85	18.49	18.44	19.04	18.54	18.72				
15	256QAM	36	24	18.86	18.56	18.56	18.86	18.86	18.86				
15	256QAM	36	50	18.85	18.55	18.55	19.01	18.70	18.66				
15	256QAM	75	0	18.89	18.83	18.88	19.04	18.80	18.70				
Channel													
				39740	39700	40160	40620	41080	41540				
	Frequency (MHz)			2507.5	2503.5	2548.3	2593	2637.8	2682.5				
10	QPSK	1	0	22.97	23.05	23.15	23.15	22.87	23.24				
10	QPSK	1	25	23.08	23.01	23.30	23.33	23.03	23.30				
10	QPSK	1	49	23.05	22.98	23.21	23.36	22.89	23.32				
10	QPSK	1	74	23.08	23.17	23.42	23.38	23.06	23.33				
10	QPSK	25	12	23.10	23.10	23.30	23.30	22.91	23.22				
10	QPSK	25	25	23.08	23.07	23.28	23.38	22.98	23.25				
10	QPSK	50	0	23.12	23.04	23.33	23.39	22.96	23.22				
10	16QAM	1	0	22.97	22.98	23.06	23.06	22.78	23.15				
10	16QAM	1	25	23.14	23.08	23.28	23.42	22.92	23.21				
10	16QAM	1	49	22.95	23.07	23.31	23.31	22.81	23.12				
10	16QAM	1	74	23.08	23.17	23.42	23.38	23.06	23.33				
10	16QAM	25	12	23.13	23.07	23.27	23.40	22.93	23.26				
10	16QAM	25	25	22.97	23.13	23.37	23.37	22.87	23.18				
10	16QAM	50	0	23.15	23.04	23.26	23.31	22.94	23.21				
10	16QAM	50	24	23.07	22.99	23.19	23.30	22.84	23.09				
10	16QAM	50	49	23.35	23.52	23.31	23.66	23.82	23.24				
10	16QAM	50	74	23.32	23.19	23.58	23.43	23.42	23.22				
10	16QAM	50	99	23.21	23.24	23.44	23.44	23.25	23.27				
10	16QAM	100	0	22.32	22.36	22.30	22.41	22.33	22.14				
10	16QAM	100	0	20.12	20.07	20.13	20.03	20.15	20.04				
10	16QAM	100	24	20.17	20.16	20.16	20.17	20.17	20.19				
10	256QAM	1	0	20.08	20.07	20.02	20.07	20.06	20.04				
10	256QAM	25	0	20.01	20.12	20.16	20.31	20.14	20.16				
10	256QAM	25	24	20.13	20.00	20.04	20.20	20.15	20.18				



Band 41 (HPUe_Ant 6)														
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power Low High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)			
Channel														
Frequency (MHz)				39750	39750	40185	40620	41055	41490					
20	QPSK	1	0	24.15	24.07	24.01	24.22	24.11	24.18	25.1	0			
20	QPSK	1	49	24.15	24.11	24.11	24.25	24.11	24.18					
20	QPSK	1	99	24.14	24.02	24.09	24.32	24.02	24.14					
20	QPSK	50	0	23.11	23.13	23.49	23.60	23.52	23.55					
20	QPSK	15	24	23.28	23.28	23.34	23.46	23.46	23.46					
20	QPSK	50	50	23.40	23.46	23.42	23.57	23.44	23.49		0.1			
20	QPSK	100	0	23.43	23.42	23.54	23.59	23.50	23.51					
20	16QAM	1	0	23.56	23.48	23.47	23.67	23.46	23.61					
20	16QAM	1	49	23.79	23.86	23.76	23.57	23.86	23.26					
20	16QAM	1	99	23.54	23.43	23.52	23.79	23.42	23.56		0.1			
20	16QAM	50	0	22.87	22.83	22.80	22.85	22.57	22.38					
20	16QAM	50	24	22.85	22.88	22.78	22.58	22.55	22.73		1.1			
20	16QAM	50	50	22.81	22.85	22.70	22.68	22.68	22.81					
20	16QAM	100	0	22.88	22.86	22.85	22.88	22.81	22.88					
20	16QAM	1	0	22.81	22.81	22.80	22.87	22.81	22.81					
20	16QAM	1	49	22.79	22.86	22.76	22.57	22.86	22.26					
20	16QAM	1	99	22.87	22.83	22.82	23.04	22.59	22.73					
20	16QAM	50	0	21.83	21.88	21.83	21.87	21.56	21.47					
20	16QAM	50	24	21.70	21.85	21.81	21.83	21.47	21.71					
20	16QAM	50	49	21.87	21.78	21.63	21.63	21.64	21.64					
20	16QAM	100	0	21.66	21.80	21.59	21.82	21.63	21.63					
20	256QAM	1	0	19.23	19.20	19.24	19.42	19.30	19.31					
20	256QAM	1	24	19.29	19.23	19.31	19.49	19.40	19.40					
20	256QAM	1	99	19.24	19.29	19.34	19.43	19.30	19.37		4.1			
20	256QAM	50	0	19.30	19.26	19.25	19.48	19.35	19.41					
20	256QAM	50	24	19.32	19.23	19.33	19.46	19.31	19.41					
20	256QAM	50	49	19.29	19.27	19.34	19.43	19.30	19.37					
20	256QAM	100	0	19.29	19.27	19.33	19.40	19.38	19.38					
Channel														
Frequency (MHz)				39755	39725	40173	40620	41068	41515					
15	QPSK	1	0	24.04	24.03	24.03	24.23	24.07	24.02	25.1	0			
15	QPSK	1	37	24.12	24.06	24.09	24.21	24.01	24.18					
15	QPSK	1	74	24.06	23.90	24.05	24.30	23.98	24.05					
15	QPSK	36	0	23.26	23.35	23.47	23.56	23.51	23.51					
15	QPSK	36	20	23.23	23.27	23.34	23.36	23.40	23.40					
15	QPSK	36	39	23.27	23.38	23.32	23.50	23.31	23.38		0.1			
15	QPSK	75	0	23.34	23.36	23.45	23.44	23.37	23.45					
15	QPSK	75	24	23.36	23.48	23.41	23.49	23.40	23.41					
15	16QAM	1	37	23.51	23.56	23.55	23.75	23.57	23.65					
15	16QAM	1	74	23.52	23.38	23.50	23.77	23.46	23.49		0.1			
15	16QAM	36	0	22.85	22.80	22.87	22.82	22.45	22.30					
15	16QAM	36	20	22.86	22.83	22.72	22.55	22.82	22.67					
15	16QAM	36	39	22.80	22.83	22.85	22.85	22.59	22.60		1.1			
15	16QAM	75	0	22.47	22.47	22.53	22.47	22.57	22.51					
15	16QAM	75	24	22.48	22.48	22.51	22.51	22.45	22.45					
15	16QAM	1	37	22.73	22.77	22.70	22.83	22.80	22.16					
15	16QAM	1	74	22.49	22.31	22.53	22.83	22.62	22.62					
15	16QAM	36	0	21.86	21.48	21.52	21.97	21.47	21.42					
15	16QAM	36	20	21.60	21.48	21.52	21.43	21.43	21.43					
15	16QAM	36	39	21.45	21.48	21.67	21.52	21.56	21.58		2.1			
15	16QAM	75	0	21.80	21.54	21.48	21.41	21.56	21.57					
15	256QAM	1	0	19.19	19.16	19.19	19.38	19.18	19.26					
15	256QAM	1	37	19.22	19.10	19.23	19.42	19.33	19.30					
15	256QAM	1	74	19.13	19.25	19.22	19.34	19.27	19.25					
15	256QAM	36	0	19.20	19.22	19.19	19.41	19.28	19.38					
15	256QAM	36	20	19.23	19.14	19.25	19.36	19.24	19.28					
15	256QAM	36	39	19.24	19.19	19.25	19.41	19.28	19.24					
15	256QAM	75	0	19.19	19.19	19.25	19.41	19.33	19.24					
Channel														
Frequency (MHz)				39740	39700	40160	40620	41080	41540					
10	QPSK	1	0	24.00	23.95	23.95	24.12	24.02	24.00	25.1	0			
10	QPSK	1	25	24.10	24.11	23.98	24.26	24.10	24.23					
10	QPSK	1	49	24.02	24.01	24.04	24.23	23.89	24.04					
10	QPSK	25	0	23.28	23.48	23.34	23.45	23.45	23.45					
10	QPSK	25	12	23.33	23.27	23.37	23.47	23.49	23.20					
10	QPSK	25	25	23.33	23.38	23.38	23.44	23.38	23.42		0.1			
10	QPSK	50	0	23.37	23.36	23.36	23.55	23.47	23.39					
10	16QAM	1	0	23.44	23.45	23.41	23.66	23.44	23.58					
10	16QAM	1	25	23.64	23.63	23.63	23.77	23.52	23.68					
10	16QAM	1	49	23.50	23.38	23.51	23.78	23.46	23.63		0.1			
10	16QAM	25	0	22.86	22.86	22.86	22.86	22.47	22.47					
10	16QAM	25	12	22.85	22.89	22.87	22.84	22.43	22.85					
10	16QAM	25	25	22.82	22.82	22.82	22.80	22.59	22.76					
10	16QAM	50	0	22.85	22.80	22.85	22.84	22.88	22.45					
10	16QAM	50	24	22.86	22.76	22.85	22.86	22.48	22.78					
10	16QAM	1	25	22.88	22.76	22.85	22.82	22.78	22.20					
10	16QAM	1	49	22.81	22.34	22.50	22.59	22.82	22.88					
10	16QAM	25	0	21.89	21.61	21.58	21.64	21.49	21.43					
10	16QAM	25	12	21.85	21.49	21.77	21.59	21.41	21.60					
10	16QAM	25	25	21.82	21.47	21.75	21.57	21.62	21.56					
10	16QAM	50	0	21.83	21.63	21.51	21.49	21.67	21.69					
10	256QAM	1	0	19.13	19.11	19.20	19.33	19.18	19.21					
10	256QAM	1	25	19.26	19.13	19.26	19.44	19.33	19.32					
10	256QAM	1	49	19.18	19.17	19.31	19.36	19.36	19.27					
10	256QAM	25	0	19.26	19.23	19.20	19.40	19.23	19.30					
10	256QAM	25	12	19.25	19.14	19.21	19.30	19.22	19.38					
10	256QAM	25	25	19.14	19.13	19.28	19.31	19.21	19.33					
10	256QAM	50	0	19.20	19.15	19.21	19.44	19.36	19.30					
Channel														
Frequency (MHz)				39745	39705	40165	40620	41093	41550					
5	QPSK	1	0	24.10	24.05	24.00	24.10	23.97	24.09	25.1	0			
5	QPSK	1	12	24.07	24.03	24.10	24.34	23.98	24.21					
5	QPSK	1	24	24.09	23.91	24.06	24.21	24.01	24.10					
5	QPSK	12	0	23.29	23.34	23.39	23.46	23.44	23.50					
5	QPSK	12	7	23.32	23.18	23.46	23.43	23.48	23.19					
5	QPSK	12	13	23.25	23.43	23.38	23.51	23.34	23.35					
5	16QAM	1	0	23.50	23.43	23.43	23.59	23.56	23.55					
5	16QAM	1	12	23.57	23.57	23.47	23.76	23.59	23					



Band 48_Ant 10										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)				3550	3559	3541	3550			
20	QPSK	1	0	22.82	22.71	22.54	22.71	24	0	
20	QPSK	1	48	22.82	22.01	22.82	22.01			
20	QPSK	1	96	22.79	22.88	22.80	22.87			
20	QPSK	50	0	22.75	22.88	22.72	22.87			
20	QPSK	15	24	22.75	22.80	22.78	22.78			
20	QPSK	50	50	22.75	22.83	22.63	22.77			
20	QPSK	100	0	22.74	22.78	22.68	22.77			
20	16QAM	1	0	22.69	22.78	22.58	22.61			
20	16QAM	1	48	22.69	22.50	22.69	22.50			
20	16QAM	1	96	22.68	22.75	22.65	22.75			
20	16QAM	50	0	22.33	22.42	22.35	22.40			
20	16QAM	50	24	22.48	22.55	22.44	22.52			0.5
20	16QAM	50	50	22.46	22.53	22.43	22.50			
20	16QAM	100	0	22.41	22.48	22.40	22.51			
20	64QAM	1	0	22.35	22.39	22.36	22.40			0.5
20	64QAM	1	48	22.40	22.30	22.40	22.30			
20	64QAM	1	96	22.24	22.31	22.25	22.33			
20	64QAM	50	0	21.37	21.49	21.29	21.46			1.5
20	64QAM	50	24	21.42	21.46	21.36	21.45			
20	64QAM	50	48	21.45	21.56	21.41	21.52			
20	64QAM	100	0	21.45	21.53	21.36	21.47			
20	256QAM	1	0	19.26	19.31	19.27	19.38			3.5
20	256QAM	1	48	19.35	19.38	19.23	19.37			
20	256QAM	1	96	19.43	19.49	19.31	19.51			
20	256QAM	50	0	19.38	19.41	19.34	19.47			
20	256QAM	50	24	19.48	19.58	19.49	19.56			3.5
20	256QAM	50	48	19.48	19.62	19.54	19.61			
20	256QAM	100	0	19.33	19.42	19.32	19.39			
Channel										
Frequency (MHz)				3572	3573	3542	3572.5			
15	QPSK	1	0	22.34	22.65	22.41	22.68			
15	QPSK	1	37	22.78	22.78	22.75	22.80			24
15	QPSK	1	74	22.73	22.79	22.68	22.81			
15	QPSK	36	0	22.72	22.85	22.70	22.79			0
15	QPSK	36	36	22.65	22.70	22.64	22.74			
15	QPSK	36	72	22.71	22.78	22.61	22.68			24
15	QPSK	75	0	22.63	22.69	22.62	22.65			
15	16QAM	1	0	22.33	22.71	22.53	22.33			
15	16QAM	1	37	22.62	22.71	22.61	22.73			24
15	16QAM	1	74	22.64	22.69	22.61	22.66			
15	16QAM	36	0	22.28	22.33	22.23	22.34			0.5
15	16QAM	36	36	22.40	22.50	22.32	22.44			
15	16QAM	36	72	22.44	22.50	22.29	22.44			
15	16QAM	75	0	22.38	22.37	22.30	22.42			
15	64QAM	1	0	22.22	22.34	22.26	22.32			0.5
15	64QAM	1	37	22.38	22.38	22.33	22.32			
15	64QAM	1	74	22.18	22.20	22.19	22.28			
15	64QAM	36	0	21.34	21.40	21.20	21.42			1.5
15	64QAM	36	36	21.40	21.44	21.30	21.38			
15	64QAM	36	72	21.42	21.45	21.34	21.45			
15	64QAM	75	0	21.37	21.50	21.26	21.43			
15	256QAM	1	0	19.14	19.29	19.16	19.28			3.5
15	256QAM	1	37	19.28	19.24	19.18	19.30			
15	256QAM	1	74	19.35	19.47	19.21	19.46			
15	256QAM	36	0	19.30	19.33	19.22	19.41			
15	256QAM	36	36	19.37	19.46	19.33	19.43			3.5
15	256QAM	36	72	19.48	19.50	19.39	19.43			
15	256QAM	75	0	19.27	19.36	19.29	19.27			
Channel										
Frequency (MHz)				3572	3573	3542	3572.5			
10	QPSK	1	0	22.54	22.66	22.42	22.59			
10	QPSK	1	25	22.73	22.83	22.79	22.87			24
10	QPSK	1	49	22.78	22.78	22.69	22.75			
10	QPSK	25	0	22.73	22.81	22.60	22.81			24
10	QPSK	25	12	22.65	22.78	22.58	22.74			
10	QPSK	25	25	22.63	22.72	22.59	22.75			0
10	16QAM	1	0	22.68	22.73	22.62	22.68			
10	16QAM	1	25	22.59	22.65	22.62	22.70			24
10	16QAM	1	49	22.60	22.74	22.61	22.71			
10	16QAM	25	0	22.32	22.40	22.24	22.33			0.5
10	16QAM	25	12	22.44	22.43	22.38	22.44			
10	16QAM	25	25	22.43	22.47	22.29	22.52			
10	16QAM	50	0	22.35	22.46	22.37	22.39			
10	64QAM	1	0	22.21	22.34	22.23	22.31			0.5
10	64QAM	1	25	22.31	22.44	22.28	22.38			
10	64QAM	1	49	22.12	22.21	22.13	22.28			
10	64QAM	25	0	21.38	21.41	21.17	21.41			1.5
10	64QAM	25	12	21.37	21.41	21.32	21.42			
10	64QAM	25	25	21.36	21.48	21.36	21.45			
10	64QAM	50	0	21.38	21.50	21.28	21.44			
10	256QAM	1	0	19.18	19.21	19.17	19.32			3.5
10	256QAM	1	25	19.31	19.28	19.20	19.25			
10	256QAM	1	49	19.40	19.44	19.29	19.41			
10	256QAM	25	0	19.33	19.28	19.23	19.48			3.5
10	256QAM	25	12	19.38	19.47	19.40	19.48			
10	256QAM	25	25	19.47	19.51	19.32	19.47			
10	256QAM	50	0	19.24	19.32	19.29	19.23			
Channel										
Frequency (MHz)				3572.5	3567	3543	3572.5			
5	QPSK	1	0	22.59	22.64	22.45	22.59			
5	QPSK	1	12	22.76	22.83	22.79	22.82			24
5	QPSK	1	24	22.72	22.83	22.75	22.77			
5	QPSK	12	0	22.74	22.83	22.70	22.76			24
5	QPSK	12	7	22.66	22.75	22.66	22.71			
5	QPSK	12	13	22.65	22.72	22.67	22.69			
5	QPSK	25	0	22.68	22.71	22.56	22.68			
5	16QAM	1	0	22.61	22.67	22.54	22.70			
5	16QAM	1	12	22.62	22.73	22.63	22.68			24
5	16QAM	1	24	22.63	22.73	22.63	22.69			
5	16QAM	12	0	22.23	22.40	22.32	22.32			0.5
5	16QAM	12	7	22.46	22.44	22.35	22.45			
5	16QAM	12	13	22.38	22.41	22.38	22.50			
5	16QAM	25	0	22.39	22.40	22.29	22.49			
5	64QAM	1	0	22.25	22.29	22.31	22.35			0.5
5	64QAM	1	12	22.28	22.45	22.24	22.39			
5	64QAM	1	24	22.13	22.23	22.20	22.28			
5	64QAM	12	0	21.31	21.43	21.17	21.43			1.5
5	64QAM	12	7	21.40	21.42	21.28	21.35			
5	64QAM	12	13	21.39	21.50	21.34	21.45			
5	64QAM	25	0	21.36	21.40	21.28	21.41			
5	256QAM	1	0	19.16	19.22	19.23	19.31			3.5
5	256QAM	1	12	19.26	19.34	19.20	19.34			
5	256QAM	1	24	19.31	19.43	19.27	19.49			
5	256QAM	12	0	19.30	19.31	19.26	19.47			3.5
5	256QAM	12	7	19.45	19.56	19.37	19.49			
5	256QAM	12	13	19.49	19.54	19.32	19.44			
5	256QAM	25	0	19.31	19.31	19.20	19.28			

Band 48_Ant 8										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)				3560	3559	3541	3550			
20	QPSK	1	0	15.47	15.48	15.50	15.31	16.2	0	
20	QPSK	1	48	15.36	15.31	15.30	15.31			
20	QPSK	1	96	15.42	15.30	15.26	15.30			
20	QPSK	50	0	15.47	15.45	15.30	15.33			
20										



Reduced Power Mode for DSI3

GSM850_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (Mhz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.90	31.68	32.27	33.50	22.90	22.68	23.27	24.50
GPRS 1 Tx slot	31.88	31.65	32.24	33.50	22.88	22.65	23.24	24.50
GPRS 2 Tx slots	29.03	29.37	29.58	30.50	23.03	23.37	23.58	24.50
GPRS 3 Tx slots	27.82	27.93	27.92	28.80	23.56	23.67	23.66	24.54
GPRS 4 Tx slots	26.23	26.41	26.43	27.50	23.23	23.41	23.43	24.50
EDGE 1 Tx slot	25.13	25.25	25.56	26.50	16.13	16.25	16.56	17.50
EDGE 2 Tx slots	24.25	24.33	24.55	25.50	16.25	16.33	16.55	19.50
EDGE 3 Tx slots	22.51	22.31	22.72	23.50	16.25	18.35	18.46	19.24
EDGE 4 Tx slots	20.51	20.45	20.69	21.50	17.51	17.45	17.69	18.50

GSM1900_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (Mhz)	1850.2	1680	1909.8		1850.2	1680	1909.8	
GSM 1 Tx slot	27.64	27.76	27.75	28.10	18.64	18.76	18.75	19.10
GPRS 1 Tx slot	27.59	27.73	27.68	28.10	18.59	18.73	18.68	19.10
GPRS 2 Tx slots	24.29	24.33	24.28	25.10	18.29	18.33	18.28	19.10
GPRS 3 Tx slots	22.43	22.51	22.46	23.40	18.17	18.25	18.20	19.14
GPRS 4 Tx slots	21.12	21.18	21.10	22.10	18.12	18.18	18.10	19.10
EDGE 1 Tx slot	24.81	24.46	24.81	26.00	15.81	15.46	15.81	17.00
EDGE 2 Tx slots	23.51	23.61	23.31	25.00	17.51	17.61	17.31	19.00
EDGE 3 Tx slots	21.80	21.81	21.71	23.00	17.54	17.55	17.45	18.74
EDGE 4 Tx slots	19.81	19.77	19.71	21.50	16.81	16.77	16.71	18.50

Band TX Channel	WCDMA_II_Ant 0			Tune-up Limit (dBm)	WCDMA_II_Ant 1			Tune-up Limit (dBm)
	9262	9400	9538		9262	9400	9538	
Rx Channel	9662	9800	9938		9662	9800	9938	
Frequency (Mhz)	1852.4	1930	1907.6		1852.4	1930	1907.6	
3GPP Rel 99 AMR 12.2Kbps	15.97	15.88	15.93	17.20	17.83	17.89	17.85	19.50
3GPP Rel 99 RMC 12.2Kbps	15.99	16.02	15.96	17.20	17.86	17.92	17.87	19.50
3GPP Rel 6 HSDPA Subtest-1	15.00	14.75	14.96	16.20	16.92	17.00	16.98	18.50
3GPP Rel 6 HSDPA Subtest-2	14.89	14.85	14.95	16.20	16.93	17.07	16.92	18.50
3GPP Rel 6 HSDPA Subtest-3	14.40	14.29	14.34	15.70	16.48	16.56	16.40	18.00
3GPP Rel 6 HSDPA Subtest-4	14.51	14.39	14.10	15.70	16.51	16.53	16.44	18.00
3GPP Rel 6 DC-HSDPA Subtest-1	14.86	14.73	14.84	16.20	16.89	16.93	16.89	18.50
3GPP Rel 6 DC-HSDPA Subtest-2	14.81	14.71	14.88	16.20	16.89	16.88	16.84	18.50
3GPP Rel 6 DC-HSDPA Subtest-3	14.29	14.19	14.35	15.70	16.32	16.35	16.37	18.00
3GPP Rel 6 DC-HSDPA Subtest-4	14.26	14.09	14.09	15.70	16.37	16.41	16.40	18.00
3GPP Rel 6 HSUPA Subtest-1	14.96	14.79	15.05	16.20	16.99	16.93	16.98	18.50
3GPP Rel 6 HSUPA Subtest-2	13.93	12.88	13.03	14.20	15.12	15.01	14.98	16.50
3GPP Rel 6 HSUPA Subtest-3	14.03	13.76	13.99	15.20	15.99	16.01	16.07	17.50
3GPP Rel 6 HSUPA Subtest-4	13.06	12.93	13.05	14.20	15.07	15.07	15.07	16.50
3GPP Rel 6 HSUPA Subtest-5	15.09	14.81	15.05	16.20	16.95	16.85	17.07	18.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	13.74	13.73	13.77	14.70	15.16	15.40	15.31	17.00

Band TX Channel	WCDMA_IV_Ant 0			Tune-up Limit (dBm)	WCDMA_IV_Ant 1			Tune-up Limit (dBm)
	1312	1413	1513		1312	1413	1513	
Rx Channel	1537	1638	1738		1537	1638	1738	
Frequency (Mhz)	1712.4	1792.3	1752.6		1712.4	1792.3	1752.6	
3GPP Rel 99 AMR 12.2Kbps	16.83	17.17	17.02	18.20	16.94	17.04	17.02	18.40
3GPP Rel 99 RMC 12.2Kbps	16.88	17.19	17.07	18.20	16.97	17.10	17.04	18.40
3GPP Rel 6 HSDPA Subtest-1	15.90	16.15	16.07	17.20	15.85	16.22	16.11	17.40
3GPP Rel 6 HSDPA Subtest-2	15.94	16.08	16.04	17.20	15.87	16.11	16.05	17.40
3GPP Rel 6 HSDPA Subtest-3	15.45	15.59	15.55	16.70	15.38	15.62	15.59	16.90
3GPP Rel 6 HSDPA Subtest-4	15.37	15.73	15.46	16.70	15.45	15.62	15.51	16.90
3GPP Rel 6 DC-HSDPA Subtest-1	15.68	16.01	15.73	17.20	15.94	16.06	15.97	17.40
3GPP Rel 6 DC-HSDPA Subtest-2	15.66	16.11	15.85	17.20	15.89	16.02	15.85	17.40
3GPP Rel 6 DC-HSDPA Subtest-3	15.37	15.43	15.29	16.70	15.47	15.51	15.36	16.90
3GPP Rel 6 DC-HSDPA Subtest-4	15.17	15.58	15.36	16.70	15.31	15.48	15.38	16.90
3GPP Rel 6 HSUPA Subtest-1	16.05	16.14	15.98	17.20	16.12	16.15	16.02	17.40
3GPP Rel 6 HSUPA Subtest-2	14.07	14.12	14.08	15.20	14.08	14.14	14.10	15.40
3GPP Rel 6 HSUPA Subtest-3	15.08	15.10	15.09	16.20	15.07	15.11	15.01	16.40
3GPP Rel 6 HSUPA Subtest-4	14.11	14.15	14.00	15.20	14.05	14.14	14.11	15.40
3GPP Rel 6 HSUPA Subtest-5	16.14	16.16	16.03	17.20	16.08	16.11	16.02	17.40
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	14.98	14.82	14.81	15.70	14.38	14.61	14.65	15.90

Band TX Channel	WCDMA_V_Ant 0			Tune-up Limit (dBm)	WCDMA_V_Ant 1			Tune-up Limit (dBm)
	4132	4182	4233		4132	4182	4233	
Rx Channel	4357	4407	4458		4357	4407	4458	
Frequency (Mhz)	826.4	836.4	846.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	22.13	22.25	22.22	24.00	22.48	22.62	22.60	24.00
3GPP Rel 99 RMC 12.2Kbps	22.15	22.27	22.25	24.00	22.50	22.65	22.62	24.00
3GPP Rel 6 HSDPA Subtest-1	21.19	21.26	21.30	23.00	21.54	21.67	21.77	23.00
3GPP Rel 6 HSDPA Subtest-2	21.14	21.27	21.33	23.00	21.54	21.68	21.74	23.00
3GPP Rel 6 HSDPA Subtest-3	20.65	20.74	20.65	22.50	20.99	21.11	21.26	22.50
3GPP Rel 6 HSDPA Subtest-4	20.65	20.74	20.77	22.50	21.00	21.16	21.25	22.50
3GPP Rel 6 DC-HSDPA Subtest-1	21.10	21.21	21.02	23.00	21.73	21.69	21.72	23.00
3GPP Rel 6 DC-HSDPA Subtest-2	21.06	21.13	21.09	23.00	21.63	21.68	21.67	23.00
3GPP Rel 6 DC-HSDPA Subtest-3	20.53	20.69	20.58	22.50	21.21	21.20	21.08	22.50
3GPP Rel 6 DC-HSDPA Subtest-4	20.70	20.71	20.59	22.50	21.11	21.17	21.03	22.50
3GPP Rel 6 HSUPA Subtest-1	21.12	21.22	21.28	23.00	21.70	21.68	21.75	23.00
3GPP Rel 6 HSUPA Subtest-2	19.14	19.26	19.29	21.00	19.66	19.64	19.74	21.00
3GPP Rel 6 HSUPA Subtest-3	20.14	20.23	20.30	22.00	20.65	20.64	20.70	22.00
3GPP Rel 6 HSUPA Subtest-4	19.14	19.23	19.28	21.00	19.56	19.66	19.74	21.00
3GPP Rel 6 HSUPA Subtest-5	21.10	21.20	21.30	23.00	21.50	21.60	21.70	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	19.54	19.66	19.60	21.50	20.08	20.15	20.03	21.50



Band 2_Ant 0										
RF (MHz)	Modulation	RB (MHz)	RB Offset	Power Low Ch / Freq	Power Med Ch / Freq	Power High Ch / Freq	Turn-up (min)	MFR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	15.97	15.99	15.94	17.4	0		
20	QPSK	1	49	16.02	16.01	16.01				
20	QPSK	1	98	16.06	16.05	16.05				
20	QPSK	50	0	15.97	15.98	15.95				
20	QPSK	50	24	16.03	16.01	16.07	17.4	0		
20	QPSK	50	49	16.07	16.06	16.04				
20	QPSK	100	0	15.97	16.00	15.98				
20	HQDM	1	0	15.98	16.01	15.99				
20	HQDM	1	49	16.00	16.07	15.99				
20	HQDM	50	0	15.98	16.04	15.97				
20	HQDM	50	24	15.99	16.02	15.99	17.4	0		
20	HQDM	50	49	15.96	16.01	15.90				
20	HQDM	100	0	15.98	15.97	15.95				
20	HQDM	100	0	15.99	16.02	15.96				
20	HQDM	1	49	16.02	16.01	15.90	17.4	0		
20	HQDM	1	99	15.98	16.04	15.97				
20	HQDM	50	50	15.99	16.02	15.99				
20	HQDM	50	24	15.99	15.97	15.90	17.4	0		
20	HQDM	50	49	15.99	16.04	15.97				
20	HQDM	100	0	15.99	15.99	15.99				
20	HQDM	100	0	15.99	15.99	15.99				
Channel										
Frequency (MHz)										
15	QPSK	1	0	15.87	15.97	15.79	17.4	0		
15	QPSK	1	47	16.02	16.06	16.03				
15	QPSK	1	95	15.95	15.95	15.95				
15	QPSK	36	0	15.96	16.01	15.90				
15	QPSK	36	20	15.94	15.96	15.76	17.4	0		
15	QPSK	36	40	15.93	15.96	15.96				
15	QPSK	75	0	15.89	15.98	15.81				
15	HQDM	1	0	15.93	15.97	15.75	17.4	0		
15	HQDM	1	47	15.99	16.02	15.97				
15	HQDM	36	0	15.92	16.02	15.94				
15	HQDM	36	24	15.92	16.00	15.90	17.4	0		
15	HQDM	36	40	15.90	15.98	15.82				
15	HQDM	75	0	15.87	16.03	15.82				
15	HQDM	36	39	15.91	15.98	15.87	17.4	0		
15	HQDM	36	39	15.93	15.93	15.89				
15	HQDM	75	0	15.94	15.99	15.89				
15	HQDM	75	0	15.96	15.98	15.81				
15	HQDM	1	47	15.98	15.99	15.85	17.4	0		
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				
15	HQDM	36	20	15.94	15.92	15.84				
15	HQDM	36	20	15.95	15.96	15.85	17.4	0		
15	HQDM	36	39	15.93	15.90	15.89				
15	HQDM	36	39	15.96	15.94	15.89				
15	HQDM	75	0	15.91	15.92	15.82	17.4	0		
15	HQDM	75	0	15.93	15.93	15.82				
15	HQDM	75	0	15.94	15.93	15.82				
15	HQDM	1	47	15.98	15.97	15.78				
15	HQDM	1	74	15.99	15.92	15.84				



Band 5_Ant 0										
BW (MHz)	Modulation	RE (Hz)	RB (kHz)	Power Low Ch / Freq.	Power Mide Ch / Freq.	Power High Ch / Freq.	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.42	22.50	22.57				
10	QPSK	1	25	22.52	22.63	22.69	24	0		
10	QPSK	1	49	22.62	22.74	22.81				
10	QPSK	25	0	22.52	22.61	22.58				
10	QPSK	25	12	22.43	22.50	22.56	24	0		
10	QPSK	25	25	22.43	22.54	22.62				
10	QPSK	50	0	22.52	22.58	22.57				
10	HQAM	1	0	22.35	22.38	22.51	24	0		
10	HQAM	1	25	22.44	22.53	22.51				
10	HQAM	1	49	22.41	22.46	22.45				
10	HQAM	25	0	21.33	21.44	21.53				
10	HQAM	25	12	21.47	21.52	21.51	23	1		
10	HQAM	25	25	21.47	21.44	21.51				
10	HQAM	50	0	21.42	21.48	21.48				
10	HQAM	50	1	21.41	21.00	21.43				
10	HQAM	1	25	21.45	21.43	21.51	23	1		
10	HQAM	1	49	21.37	21.51	21.55				
10	HQAM	25	0	20.36	20.00	20.52				
10	HQAM	25	12	20.47	20.52	20.48	22	2		
10	HQAM	25	25	20.45	20.44	20.51				
10	HQAM	50	0	18.74	18.74	18.74				
10	HQAM	50	1	18.71	18.62	18.78				
10	SSBAM	1	0	18.81	18.85	18.82	20	4		
10	SSBAM	1	25	18.87	18.85	18.82				
10	SSBAM	1	49	18.84	18.84	18.83				
10	SSBAM	25	0	18.80	18.84	18.83				
10	SSBAM	25	12	18.88	18.88	18.88	20	4		
10	SSBAM	25	25	18.84	18.87	18.83				
10	SSBAM	50	0	18.80	18.88	18.81				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.42	22.42	22.52				
5	QPSK	1	12	22.48	22.60	22.58	24	0		
5	QPSK	1	24	22.54	22.54	22.48				
5	QPSK	12	0	22.44	22.67	22.56				
5	QPSK	12	7	22.38	22.44	22.50	24	0		
5	QPSK	12	14	22.42	22.54	22.42				
5	QPSK	25	0	22.42	22.47	22.54				
5	HQAM	1	0	22.27	22.33	22.44	24	0		
5	HQAM	1	24	22.37	22.34	22.36				
5	HQAM	12	0	21.27	21.38	21.44				
5	HQAM	12	7	21.36	21.54	21.48	23	1		
5	HQAM	12	13	21.43	21.34	21.42				
5	HQAM	25	0	21.36	21.37	21.40				
5	HQAM	25	7	21.32	21.33	21.31	23	1		
5	HQAM	1	12	21.32	21.33	21.42	23	1		
5	HQAM	1	24	21.29	21.43	21.47				
5	HQAM	12	0	20.31	20.33	20.42				
5	HQAM	12	7	20.40	20.41	20.37	22	2		
5	HQAM	12	13	20.41	20.35	20.38				
5	HQAM	25	0	18.74	18.74	18.74				
5	SSBAM	1	0	18.81	18.85	18.87	20	4		
5	SSBAM	1	12	18.87	18.85	18.82				
5	SSBAM	1	24	18.84	18.83	18.88				
5	SSBAM	12	0	18.74	18.72	18.76				
5	SSBAM	12	7	18.82	18.88	18.88	20	4		
5	SSBAM	12	13	18.71	18.76	18.70				
5	SSBAM	25	0	18.78	18.85	18.87				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.33	22.39	22.53				
3	QPSK	1	8	22.48	22.58	22.48	24	0		
3	QPSK	1	16	22.54	22.54	22.48				
3	QPSK	8	0	22.38	22.59	22.52				
3	QPSK	8	4	22.39	22.39	22.50	24	0		
3	QPSK	8	8	22.44	22.44	22.42				
3	QPSK	16	0	22.43	22.56	22.46				
3	HQAM	1	0	22.30	22.31	22.39	24	0		
3	HQAM	1	16	22.42	22.42	22.44				
3	HQAM	1	14	22.31	22.29	22.33				
3	HQAM	8	0	21.31	21.38	21.43				
3	HQAM	8	4	21.38	21.46	21.42	23	1		
3	HQAM	8	7	21.38	21.37	21.46				
3	HQAM	15	0	21.37	21.36	21.44				
3	HQAM	1	0	21.38	21.38	21.32				
3	HQAM	1	8	21.31	21.31	21.45	23	1		
3	HQAM	1	16	21.28	21.40	21.52				
3	HQAM	8	0	20.34	20.38	20.47				
3	HQAM	8	4	20.40	20.44	20.37	22	2		
3	HQAM	8	7	20.42	20.37	20.41				
3	HQAM	15	0	20.35	20.41	20.38				
3	SSBAM	1	0	18.80	18.78	18.71				
3	SSBAM	1	8	18.86	18.81	18.84	20	4		
3	SSBAM	1	14	18.74	18.80	18.84				
3	SSBAM	8	0	18.80	18.77	18.76				
3	SSBAM	8	4	18.74	18.84	18.80	20	4		
3	SSBAM	8	7	18.75	18.79	18.78				
3	SSBAM	15	0	18.78	18.78	18.73				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.33	22.38	22.49				
1.4	QPSK	1	3	22.48	22.56	22.51	24	0		
1.4	QPSK	1	6	22.54	22.54	22.48				
1.4	QPSK	3	0	22.51	22.49	22.51				
1.4	QPSK	3	3	22.40	22.42	22.46				
1.4	QPSK	3	6	22.40	22.62	22.48	24	0		
1.4	HQAM	1	0	22.25	22.28	22.40				
1.4	HQAM	1	6	22.34	22.42	22.40				
1.4	HQAM	1	4	22.28	22.34	22.35	24	0		
1.4	HQAM	3	0	22.40	22.49	22.52				
1.4	HQAM	3	22.44	22.44	22.49					
1.4	HQAM	3	3	22.43	22.48	22.49				
1.4	HQAM	6	0	21.32	21.39	21.43	23	1		
1.4	HQAM	6	3	21.37	21.39	21.34				
1.4	HQAM	1	3	21.40	21.40	21.44				
1.4	HQAM	1	6	21.28	21.43	21.50	23	1		
1.4	HQAM	3	0	21.38	21.43	21.43				
1.4	HQAM	3	1	21.33	21.33	21.34				
1.4	HQAM	3	3	21.42	21.38	21.43	22	2		
1.4	HQAM	6	0	20.38	20.38	20.37				
1.4	SSBAM	1	0	18.73	18.74	18.74				
1.4	SSBAM	1	3	18.74	18.80	18.84	20	4		
1.4	SSBAM	1	6	18.74	18.80	18.84				
1.4	SSBAM	3	0	18.70	18.78	18.74				
1.4	SSBAM	3	3	18.76	18.82	18.78	20	4		
1.4	SSBAM	3	6	18.70	18.84	18.73				
1.4	SSBAM	6	0	18.78	18.79	18.73				

Band 5_Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (kHz)	Power Low Ch / Freq.	Power Mide Ch / Freq.	Power High Ch / Freq.	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.42	22.55	22.56				
10	QPSK	1	25	22.53	22.64	22.62	24	0		
10	QPSK	1	49	22.62	22.74	22.82				
10	QPSK	25	0	22.52	22.62	22.51				
10	QPSK	25	12	22.44	22.54	22.58	24	0		
10	QPSK	25	25	22.42	22.53	22.58				
10	QPSK	50	0	22.52	22.58	22.56				
10	HQAM	1	0	22.45	22.49	22.42	24	0		
10	HQAM	1	25	22.45	22.53	22.53				
10	HQAM	1	49	22.41	22.37	22.45				
10	HQAM	25	0	21.35	21.33	21.24				
10	HQAM	25	12	21.20	21.27	21.22	23	1		
10	HQAM	25	25	21.18	21.22	21.21				
10	HQAM	50	0	21.11	21.23	21.15				
10	HQAM	50	1	21.42	21.53	21.64				
10	HQAM	1	25	21.37	21.83	21.77	23	1		
10	HQAM	1	49	21.48	21.83	2				





Band 12 Ant 0										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch. (Freq.)	Power Mid Ch. (Freq.)	Power High Ch. (Freq.)	Tuneup (int. dB)	MRR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.78	22.85	22.85				
10	QPSK	1	25	22.65	22.64	22.93	24	0		
10	QPSK	8	0	22.81	22.81	22.81				
10	QPSK	25	0	22.81	22.81	22.82				
10	QPSK	25	12	22.87	22.84	22.90	24	0		
10	QPSK	25	25	22.84	22.87	22.88				
10	QPSK	50	0	22.80	22.87	22.91				
10	HQAM	1	0	22.79	22.86	22.78	24	0		
10	HQAM	1	25	22.82	22.82	22.82				
10	HQAM	1	48	22.80	22.86	22.71				
10	HQAM	25	0	22.64	22.14	22.15				
10	HQAM	25	12	22.10	22.18	22.00				
10	HQAM	25	25	22.18	22.23	22.25	23	1		
10	HQAM	50	0	22.11	22.15	22.14				
10	HQAM	1	25	22.82	22.87	22.82	23	1		
10	HQAM	1	48	22.28	22.38	22.48				
10	HQAM	25	0	21.90	21.10	21.14				
10	HQAM	25	12	21.13	21.18	21.16				
10	HQAM	25	25	21.11	21.18	21.22	22	2		
10	HQAM	50	0	21.10	21.11	21.18				
10	SSQAM	1	0	19.21	19.23	19.19				
10	SSQAM	1	25	19.16	19.22	19.31	20	4		
10	SSQAM	1	48	19.15	19.19	19.18				
10	SSQAM	25	0	19.30	19.36	19.30				
10	SSQAM	25	12	19.24	19.24	19.24	20	4		
10	SSQAM	25	25	19.38	19.34	19.30				
10	SSQAM	50	0	19.27	19.30	19.26				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.73	22.77	22.82				
5	QPSK	1	12	22.69	22.83	22.96	24	0		
5	QPSK	8	0	22.84	22.84	22.84				
5	QPSK	12	0	22.88	22.83	22.85				
5	QPSK	12	7	22.80	22.84	22.85	24	0		
5	QPSK	25	0	22.89	22.87	22.84				
5	HQAM	1	0	22.70	22.74	22.74	24	0		
5	HQAM	1	24	22.82	22.82	22.82				
5	HQAM	1	24	22.78	22.88	22.59				
5	HQAM	12	0	21.94	22.05	22.08				
5	HQAM	12	7	22.07	22.09	22.07	23	1		
5	HQAM	12	13	22.09	22.15	22.14				
5	HQAM	25	0	22.60	22.07	22.04				
5	HQAM	25	12	22.02	22.09	22.09				
5	HQAM	1	12	22.10	22.42	22.29	23	1		
5	HQAM	1	24	22.20	22.36	22.43				
5	HQAM	12	0	21.90	21.98	21.10				
5	HQAM	12	7	21.10	21.08	21.09	22	2		
5	HQAM	12	13	21.06	21.10	21.15				
5	SSQAM	1	0	19.12	19.17	19.14				
5	SSQAM	1	12	19.21	19.22	19.22	20	4		
5	SSQAM	1	24	19.17	19.13	19.07				
5	SSQAM	12	0	19.25	19.24	19.23				
5	SSQAM	12	7	19.27	19.23	19.19	20	4		
5	SSQAM	12	13	19.18	19.22	19.19				
5	SSQAM	25	0	19.22	19.25	19.21				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.87	22.79	22.75				
3	QPSK	1	8	22.88	22.69	22.87	24	0		
3	QPSK	8	0	22.81	22.81	22.81				
3	QPSK	8	0	22.84	22.83	22.83				
3	QPSK	8	4	22.81	22.82	22.78	24	0		
3	QPSK	16	0	22.82	22.88	22.86				
3	QPSK	16	0	22.84	22.84	22.86				
3	HQAM	1	0	22.71	22.79	22.73	24	0		
3	HQAM	1	14	22.72	22.77	22.68				
3	HQAM	8	0	22.61	22.09	22.10				
3	HQAM	8	4	22.09	22.10	22.17				
3	HQAM	8	7	22.14	22.14	22.20	23	1		
3	HQAM	15	0	22.04	22.04	22.08				
3	HQAM	1	0	22.98	22.21	22.13				
3	HQAM	1	8	22.18	22.41	22.27	23	1		
3	HQAM	1	18	22.16	22.29	22.43				
3	HQAM	8	0	22.07	21.07	21.08	22	2		
3	HQAM	8	4	21.09	21.08	21.10				
3	SSQAM	1	0	19.13	19.13	19.08				
3	SSQAM	1	8	19.26	19.25	19.22	20	4		
3	SSQAM	1	14	19.18	19.10	19.12				
3	SSQAM	8	0	19.24	19.22	19.28				
3	SSQAM	8	4	19.10	19.13	19.19	20	4		
3	SSQAM	8	7	19.22	19.22	19.18				
3	SSQAM	15	0	19.23	19.18	19.18				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.73	22.76	22.76				
1.4	QPSK	1	3	22.83	22.83	22.83	24	0		
1.4	QPSK	3	0	22.83	22.84	22.87				
1.4	QPSK	3	0	22.82	22.87	22.87				
1.4	QPSK	3	1	22.83	22.84	22.84	24	0		
1.4	QPSK	3	3	22.81	22.86	22.83				
1.4	QPSK	6	0	22.88	22.81	22.79	24	0		
1.4	HQAM	1	0	22.72	22.83	22.71				
1.4	HQAM	1	3	22.77	22.82	22.78				
1.4	HQAM	1	6	22.78	22.74	22.81	24	0		
1.4	HQAM	3	0	22.77	22.86	22.82				
1.4	HQAM	3	1	22.86	22.83	22.84	1	0		
1.4	HQAM	3	3	22.72	22.81	22.86				
1.4	HQAM	6	0	22.85	22.59	22.59	23	1		
1.4	HQAM	1	0	22.67	22.30	22.22				
1.4	HQAM	1	3	22.12	22.41	22.24				
1.4	HQAM	1	6	22.24	22.33	22.37	23	1		
1.4	HQAM	3	0	22.91	22.32	22.84				
1.4	HQAM	3	1	22.13	22.28	22.16				
1.4	HQAM	6	0	21.18	22.41	22.29	22	2		
1.4	SSQAM	1	0	19.13	19.15	19.08				
1.4	SSQAM	1	3	19.26	19.21	19.22	20	4		
1.4	SSQAM	1	6	19.14	19.18	19.07				
1.4	SSQAM	3	0	19.20	19.22	19.22				
1.4	SSQAM	3	1	19.24	19.13	19.07	20	4		
1.4	SSQAM	3	3	19.20	19.22	19.22				
1.4	SSQAM	6	0	19.25	19.25	19.19	20	4		

Band 12 Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch. (Freq.)	Power Mid Ch. (Freq.)	Power High Ch. (Freq.)	Tuneup (int. dB)	MRR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.71	22.71	22.78				
10	QPSK	1	25	22.68	22.61	22.98	24	0		
10	QPSK	8	0	22.77	22.83	22.77				
10	QPSK	25	0	22.85	22.89	22.85				
10	QPSK	25	12	22.80	22.86	22.80	24	0		
10	QPSK	25	25	22.77	22.83	22.77				
10	QPSK	50	0	22.88	22.88	22.84				
10	HQAM	1	0	22.77	22.80	22.77	24	0		
10	HQAM	1	25	22.77	22.82	22.81				
10	HQAM	1	48	22.81	22.77	22.82				
10	HQAM	25	0	21.68	21.70	21.76				
10	HQAM	25	12	21.60	21.78	21.83				
10	HQAM	25	25	21.78	21.82	21.88	23	1		
10	HQAM	50	0	21.78	21.72	21.81				
10	HQAM	1	25	21.88	21.91	21.96				
10	HQAM	1	25	21.89	22.04	22.15	23	1		
10	HQAM	1	48	21.96	22.02	22.17				
10	HQAM	25	0	20.98	20.71	20.72				
10	HQAM	25	12	20.84	20.77	20.79				
10	HQAM	25	25	20.94	20.82	20.89	22	2		
10	HQAM	50	0	20.78	20.78	20.77				
10	SSQAM	1	0	18.89	18.99	18.97				
10	SSQAM	1	25</							



Band 14_Ant 0										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tuneup (int. (dB))	MFR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.69						
10	QPSK	1	25	22.78			24	0		
10	QPSK	1	49	22.81						
10	QPSK	25	0	22.74						
10	QPSK	25	12	22.73			24	0		
10	QPSK	25	25	22.68						
10	QPSK	50	0	22.71						
10	HQAM	1	0	22.64			24	0		
10	HQAM	1	25	22.63						
10	HQAM	1	49	22.69						
10	HQAM	25	0	22.69						
10	HQAM	25	12	22.14			23	1		
10	HQAM	25	25	22.17						
10	HQAM	50	0	22.10						
10	HQAM	1	0	22.04						
10	HQAM	1	25	22.05			23	1		
10	HQAM	1	49	22.02						
10	HQAM	25	0	21.90						
10	HQAM	25	12	21.11			22	2		
10	HQAM	25	25	21.11						
10	HQAM	50	0	21.13						
10	SSBQAM	1	0	19.38						
10	SSBQAM	1	25	19.31			20	4		
10	SSBQAM	1	49	19.35						
10	SSBQAM	25	0	19.20						
10	SSBQAM	25	12	19.21			20	4		
10	SSBQAM	25	25	19.25						
10	SSBQAM	50	0	19.17						
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.61	22.61	22.64				
5	QPSK	1	12	22.60	22.60	22.68	24	0		
5	QPSK	1	24	22.40	22.52	22.60				
5	QPSK	12	0	22.66	22.63	22.66				
5	QPSK	12	7	22.61	22.62	22.68	24	0		
5	QPSK	12	13	22.68	22.62	22.61				
5	QPSK	25	0	22.67	22.68	22.63				
5	HQAM	1	0	22.58	22.52	22.54	24	0		
5	HQAM	1	12	22.50	22.62	22.59				
5	HQAM	1	24	22.62	22.65	22.65				
5	HQAM	12	0	22.64	22.64	21.98				
5	HQAM	12	7	22.60	22.10	22.02	23	1		
5	HQAM	12	13	22.10	22.10	22.13				
5	HQAM	25	0	22.62	21.99	22.07				
5	HQAM	1	0	21.94	21.98	21.93				
5	HQAM	1	12	21.90	21.98	22.01	23	1		
5	HQAM	1	24	21.95	21.92	21.97				
5	HQAM	12	0	21.94	21.06	20.95				
5	HQAM	12	7	21.91	21.98	21.91	22	2		
5	HQAM	12	13	21.06	21.06	21.06				
5	HQAM	25	0	19.20	19.20	19.35				
5	SSBQAM	1	0	19.20	19.20	19.35	20	4		
5	SSBQAM	1	12	19.26	19.26	19.22				
5	SSBQAM	1	24	19.21	19.26	19.24				
5	SSBQAM	12	0	19.13	19.12	19.11				
5	SSBQAM	12	7	19.17	19.13	19.16	20	4		
5	SSBQAM	12	13	19.13	19.15	19.16				
5	SSBQAM	25	0	19.10	19.06	19.06				

Band 14_Ant 1										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tuneup (int. (dB))	MFR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.45						
10	QPSK	1	25	22.58			24	0		
10	QPSK	1	49	22.53						
10	QPSK	25	0	22.67						
10	QPSK	25	12	22.64			24	0		
10	QPSK	25	25	22.61						
10	QPSK	50	0	22.64						
10	HQAM	1	0	22.49			24	0		
10	HQAM	1	25	22.48						
10	HQAM	1	49	22.45						
10	HQAM	25	0	21.77						
10	HQAM	25	12	21.78			23	1		
10	HQAM	25	25	21.85						
10	HQAM	50	0	21.72						
10	HQAM	1	0	22.04						
10	HQAM	1	25	22.17			23	1		
10	HQAM	1	49	21.99						
10	HQAM	25	0	20.73						
10	HQAM	25	12	20.78			22	2		
10	HQAM	25	25	20.82						
10	HQAM	50	0	20.72						
10	SSBQAM	1	0	19.95						
10	SSBQAM	1	25	19.95			20	4		
10	SSBQAM	1	49	19.93						
10	SSBQAM	25	0	19.97						
10	SSBQAM	25	12	19.88			20	4		
10	SSBQAM	25	25	19.83						
10	SSBQAM	50	0	19.88						
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.42	22.36	22.39				
5	QPSK	1	12	22.50	22.51	22.50	24	0		
5	QPSK	1	24	22.43	22.42	22.41				
5	QPSK	12	0	22.50	22.54	22.53				
5	QPSK	12	7	22.40	22.48	22.51	24	0		
5	QPSK	12	13	22.42	22.42	22.42				
5	QPSK	25	0	22.40	22.42	22.43				
5	HQAM	1	0	22.37	22.37	22.46	24	0		
5	HQAM	1	12	22.40	22.38	22.45				
5	HQAM	1	24	22.38	22.34	22.38				
5	HQAM	12	0	21.71	21.67	21.65				
5	HQAM	12	7	21.71	21.66	21.68	23	1		
5	HQAM	12	13	21.77	21.74	21.77				
5	HQAM	25	0	21.66	21.67	21.64				
5	HQAM	1	0	21.92	21.94	21.98				
5	HQAM	1	12	22.10	22.08	22.10	23	1		
5	HQAM	1	24	21.91	21.93	21.91				
5	HQAM	12	0	20.90	20.88	20.92				
5	HQAM	12	7	20.70	20.65	20.64	22	2		
5	HQAM	12	13	20.76	20.70	20.72				
5	SSBQAM	1	0	19.80	19.80	19.86				
5	SSBQAM	1	12	19.87	19.81	19.80	20	4		
5	SSBQAM	1	24	19.83	19.82	19.86				
5	SSBQAM	12	0	19.80	19.80	19.85				
5	SSBQAM	12	7	19.80	19.83	19.83	20	4		
5	SSBQAM	12	13	19.83	19.85	19.88				
5	SSBQAM	25	0	19.78	19.85	19.80				

Band 17_Ant 0										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tuneup (int. (dB))	MFR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.72	22.71	22.75				
10	QPSK	1	25	22.61	22.66	22.92	24	0		
10	QPSK	1	49	22.63	22.69	22.85				
10	QPSK	25	0	22.65	22.64	22.62				
10	QPSK	25	12	22.63	22.61	22.80	24	0		
10	QPSK	25	25	22.68	22.68	22.75				
10	QPSK	50	0	22.65	22.61	22.88				
10	HQAM	1	0	22.71	22.66	22.83	24	0		
10	HQAM	1	25	22.62	22.64	22.65				
10	HQAM	1	49	22.69	22.64	22.85				
10	HQAM	25	0	22.61	22.63	22.66				
10	HQAM	25	12	22.17	22.14	22.12	23	1		
10	HQAM	25	25	22.13	22.18	22.15				
10	HQAM	50	0	22.07	22.08	22.07				
10	HQAM	1	0	22.21	22.23	22.13				
10	HQAM	1	25	22.32	22.35	22.37	23	1		
10	HQAM	1	49	22.38	22.40	22.27				
10	HQAM	25	0	21.98	21.94	21.92				
10	HQAM	25	12	21.10	21.11	21.10	22	2		
10	HQAM	25	25	21.14	21.13	21.13				
10	HQAM	50	0	21.98	21.98	21.97				
10	SSBQAM	1								



Band 25_Ant 0														
BW (MHz)	Modulation	RB Freq	RB Offset	Power Low Ch / Freq	Power Nch Ch / Freq	Power High Ch / Freq	Turn-up time (sec)	MPR (dB)						
Channel									28160	28300	28500	Turn-up time (sec)	MPR (dB)	
Frequency (MHz)									1800	1820	1840			
20	QPSK	1	0	15.86	15.95	15.83								
20	QPSK	1	49	15.99	16.07	15.95	17.4	0						
20	QPSK	50	0	15.86	15.95	15.83								
20	QPSK	50	24	15.92	15.98	15.89	17.4	0						
20	QPSK	50	49	15.94	15.99	15.92								
20	QPSK	100	0	15.86	15.91	15.81								
20	16QAM	1	0	15.98	15.96	15.84	17.4	0						
20	16QAM	1	49	15.84	15.93	15.83								
20	16QAM	50	0	15.86	15.90	15.88								
20	16QAM	50	24	15.96	15.92	15.93	17.4	0						
20	16QAM	50	49	15.94	15.99	15.92								
20	16QAM	100	0	15.83	15.92	15.83								
20	16QAM	100	24	15.87	15.92	15.91								
20	16QAM	100	49	15.94	15.99	15.92								
20	64QAM	1	49	15.84	15.92	15.83	17.4	0						
20	64QAM	1	99	15.87	15.92	15.83								
20	64QAM	50	0	15.84	15.94	15.82	17.4	0						
20	64QAM	50	24	15.97	15.92	15.87								
20	64QAM	50	49	15.96	15.97	15.95								
20	256QAM	1	0	15.91	15.90	15.91	17.4	0						
20	256QAM	1	49	15.97	15.96	15.92								
20	256QAM	50	0	15.87	15.97	15.92								
20	256QAM	50	24	15.94	15.93	15.83	17.4	0						
20	256QAM	50	49	15.97	15.93	15.82								
20	256QAM	100	0	15.86	15.92	15.83								
20	256QAM	100	24	15.83	15.93	15.81								
20	256QAM	100	49	15.94	15.93	15.82								
15	QPSK	1	0	15.74	15.82	15.77	17.4	0						
15	QPSK	1	37	15.91	15.94	15.90								
15	QPSK	74	0	15.73	15.84	15.82								
15	QPSK	36	0	15.90	15.96	15.88	17.4	0						
15	QPSK	36	20	15.85	15.89	15.74								
15	QPSK	36	40	15.81	15.85	15.72								
15	16QAM	1	0	15.79	15.96	15.72	17.4	0						
15	16QAM	1	0	15.83	15.83	15.80								
15	16QAM	1	37	15.74	15.84	15.82								
15	16QAM	74	0	15.81	15.85	15.71								
15	16QAM	36	0	15.78	15.93	15.78	17.4	0						
15	16QAM	36	39	15.89	15.90	15.78								
15	16QAM	75	0	15.75	15.91	15.84								
15	64QAM	1	49	15.79	15.89	15.88	17.4	0						
15	64QAM	1	37	15.72	15.85	15.83								
15	64QAM	74	0	15.77	15.88	15.84								
15	64QAM	36	0	15.88	15.98	15.73	17.4	0						
15	64QAM	36	20	15.86	15.89	15.76								
15	64QAM	36	39	15.79	15.94	15.86								
15	64QAM	75	0	15.71	15.84	15.77								
15	256QAM	1	0	15.77	15.88	15.87	17.4	0						
15	256QAM	1	37	15.90	15.92	15.87								
15	256QAM	74	0	15.84	15.95	15.90								
15	256QAM	36	0	15.73	15.84	15.82	17.4	0						
15	256QAM	36	39	15.84	15.95	15.74								
15	256QAM	75	0	15.80	15.78	15.89								
15	256QAM	75	0	15.80	15.78	15.89								
5	QPSK	1	0	15.71	15.93	15.79	17.4	0						
5	QPSK	1	25	15.85	15.94	15.91								
5	QPSK	25	0	15.93	15.95	15.82	17.4	0						
5	QPSK	25	12	15.90	15.97	15.81								
5	QPSK	25	24	15.71	15.84	15.77								
5	QPSK	50	0	15.80	15.91	15.73	17.4	0						
5	16QAM	1	0	15.93	15.81	15.72	17.4	0						
5	16QAM	1	25	15.74	15.92	15.71								
5	16QAM	1	49	15.82	15.91	15.81								
5	16QAM	25	0	15.80	15.98	15.77	17.4	0						
5	16QAM	25	12	15.83	15.91	15.79								
5	16QAM	25	24	15.86	15.91	15.88								
5	16QAM	50	0	15.84	15.91	15.84								
5	64QAM	1	0	15.87	15.98	15.83	17.4	0						
5	64QAM	1	25	15.81	15.85	15.83								
5	64QAM	1	49	15.86	15.96	15.81								
5	64QAM	25	0	15.81	15.89	15.74	17.4	0						
5	64QAM	25	12	15.84	15.98	15.84								
5	64QAM	25	24	15.74	15.98	15.80								
5	64QAM	50	0	15.79	15.84	15.81	17.4	0						
5	256QAM	1	0	15.77	15.95	15.87	17.4	0						
5	256QAM	1	25	15.95	15.92	15.87								
5	256QAM	49	0	15.83	15.95	15.79								
5	256QAM	25	0	15.76	15.88	15.79	17.4	0						
5	256QAM	25	12	15.85	15.92	15.75								
5	256QAM	25	24	15.86	15.90	15.75								
5	256QAM	50	0	15.80	15.88	15.67								
3	QPSK	1	0	15.74	15.93	15.78	17.4	0						
3	QPSK	1	12	15.88	15.93	15.85								
3	QPSK	12	0	15.82	15.98	15.82	17.4	0						
3	QPSK	12	6	15.86	15.97	15.78								
3	QPSK	12	7	15.80	15.86	15.85	17.4	0						
3	QPSK	12	14	15.80	15.92	15.72								
3	QPSK	25	0	15.80	15.86	15.67								
3	16QAM	1	0	15.92	15.90	15.72	17.4	0						
3	16QAM	1	12	15.74	15.92	15.71								
3	16QAM	1	24	15.80	15.87	15.82								
3	16QAM	12	0	15.82	15.88	15.70	17.4	0						
3	16QAM	12	7	15.79	15.95	15.71								
3	16QAM	12	14	15.84	15.86	15.79								
3	16QAM	25	0	15.84	15.91	15.84								
3	64QAM	1	0	15.83	15.98	15.83	17.4	0						
3	64QAM	1	12	15.81	15.85	15.80								
3	64QAM	1	24	15.86	15.90	15.85								
3	64QAM	12	0	15.80	15.91	15.84	17.4	0						
3	64QAM	12	7	15.93	15.88	15.80								
3	64QAM	12	14	15.92	15.89	15.80								
3	64QAM	25	0	15.78	15.97	15.86	17.4	0						
3	64QAM	25	7	15.82	15.99	15.84								
3	256QAM	1	0	15.85	15.94	15.89	17.4	0						
3	256QAM	1	12	15.87	15.92	15.86								
3	256QAM	1	24	15.81	15.87	15.80								
3	256QAM	12	0	15.73	15.84	15.89	17.4	0						
3	256QAM	12	7	15.85	15.97	15.79								
3	256QAM	12	14	15.77	15.93	15.69								
3	256QAM	25	0	15.80	15.80	15.78								
3	256QAM	25	0	15.80	15.80	15.78								
1.4	QPSK	1	0	15.73	15.80	15.78	17.4	0						
1.4	QPSK	1	3	15.90	15.90	15.89								
1.4	QPSK	3	0	15.84	15.78	15.84	17.4	0						
1.4	QPSK	3	0	15.91	15.88	15.77								
1.4	QPSK	3	1	15.77	15.95	15.83								
1.4	QPSK	3	1	15.82	15.91	15.82								
1.4	QPSK	6	0	15.77	15.91	15.70	17.4	0						
1.4	QPSK	6	0	15.94	15.83	15.77								
1.4	16QAM	1	0	15.80	15.90	15.79	17.4	0						
1.4	16QAM	1	0	15.79	15.87	15.85								
1.4	16QAM	3	0	15.87	15.92	15.74	17.4	0						
1.4	16QAM	3	1	15.75	15.91	15.75								



Band 26(FCC)_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Nbr Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPR (dB)		
Channel 2095										
Frequency (MHz) 811.5 811.5										
15	QPSK	1	0	22.27	22.37	22.58				
15	QPSK	1	37	22.44	22.66	22.85	24	0		
15	QPSK	1	74	22.54	22.84	23.12				
15	QPSK	36	0	22.54	22.84	23.12				
15	QPSK	36	20	22.48	22.80	22.49	24	0		
15	QPSK	36	39	22.38	22.80	22.65				
15	QPSK	75	0	22.49	22.57	22.51				
15	16QAM	1	0	22.26	22.20	22.47	24	0		
15	16QAM	1	37	22.36	22.49	22.43				
15	16QAM	1	74	22.38	22.31	22.41				
15	16QAM	36	0	21.00	21.19	21.34				
15	16QAM	36	20	21.09	21.29	21.41				
15	16QAM	36	39	21.11	21.33	21.37	23	1		
15	16QAM	75	0	21.11	21.26	21.21				
15	64QAM	1	0	21.16	21.35	21.49				
15	64QAM	1	37	21.24	21.41	21.64	23	1		
15	64QAM	1	74	21.21	21.46	21.30				
15	64QAM	36	0	20.00	20.17	20.36				
15	64QAM	36	20	20.08	20.25	20.39				
15	64QAM	36	39	20.04	20.30	20.34	22	2		
15	64QAM	75	0	20.10	20.29	20.32				
15	256QAM	1	0	18.30	18.32	18.29				
15	256QAM	1	37	18.52	18.56	18.52	20	4		
15	256QAM	1	74	18.56	18.72	18.61				
15	256QAM	36	0	18.27	18.35	18.32				
15	256QAM	36	20	18.28	18.44	18.42	20	4		
15	256QAM	36	39	18.43	18.45	18.38				
15	256QAM	75	0	18.41	18.48	18.40				
Channel 2096										
Frequency (MHz) 811.5 811.5										
10	QPSK	1	0	22.18	22.27	22.51				
10	QPSK	1	25	22.41	22.63	22.54	24	0		
10	QPSK	1	49	22.44	22.47	22.54				
10	QPSK	25	0	22.43	22.61	22.48				
10	QPSK	25	12	22.39	22.52	22.38	24	0		
10	QPSK	25	25	22.36	22.47	22.54				
10	QPSK	50	0	22.43	22.54	22.43				
10	16QAM	1	0	22.14	22.16	22.25	24	0		
10	16QAM	1	29	22.29	22.28	22.41				
10	16QAM	1	49	22.30	22.28	22.38				
10	16QAM	25	0	21.06	21.10	21.28				
10	16QAM	25	12	21.00	21.20	21.44				
10	16QAM	25	25	21.03	21.22	21.31	23	1		
10	16QAM	50	0	21.07	21.14	21.10				
10	64QAM	1	0	21.13	21.29	21.31				
10	64QAM	1	28	21.14	21.31	21.53	23	1		
10	64QAM	1	49	21.16	21.38	21.22				
10	64QAM	25	0	20.00	20.32	20.32				
10	64QAM	25	12	20.00	20.15	20.34	22	2		
10	64QAM	25	25	20.02	20.21	20.26				
10	64QAM	50	0	20.07	20.23	20.23				
10	256QAM	1	0	18.21	18.23	18.19				
10	256QAM	1	20	18.43	18.49	18.40	20	4		
10	256QAM	1	49	18.54	18.65	18.64				
10	256QAM	25	0	18.20	18.29	18.22				
10	256QAM	25	12	18.22	18.32	18.21	20	4		
10	256QAM	25	25	18.31	18.38	18.33				
10	256QAM	50	0	18.38	18.41	18.39				
Channel 2097										
Frequency (MHz) 811.5 811.5										
5	QPSK	1	0	22.23	22.30	22.51				
5	QPSK	1	12	22.32	22.56	22.52	24	0		
5	QPSK	1	24	22.30	22.45	22.42				
5	QPSK	12	0	22.43	22.61	22.51				
5	QPSK	12	7	22.37	22.49	22.45	24	0		
5	QPSK	12	14	22.29	22.47	22.43				
5	QPSK	25	0	22.38	22.45	22.48				
5	16QAM	1	0	22.23	22.15	22.44	24	0		
5	16QAM	1	12	22.32	22.43	22.32				
5	16QAM	1	24	22.35	22.19	22.37				
5	16QAM	12	0	21.00	21.11	21.30				
5	16QAM	12	7	21.00	21.18	21.34				
5	16QAM	12	14	21.01	21.21	21.34	23	1		
5	16QAM	25	0	21.00	21.23	21.21				
5	64QAM	1	0	21.12	21.32	21.31				
5	64QAM	1	12	21.21	21.30	21.57	23	1		
5	64QAM	1	24	21.15	21.36	21.25				
5	64QAM	12	0	20.04	20.26	20.27				
5	64QAM	12	7	20.01	20.16	20.30	22	2		
5	64QAM	12	14	20.09	20.24	20.20				
5	64QAM	25	0	20.01	20.23	20.23				
5	256QAM	1	0	18.20	18.28	18.25				
5	256QAM	1	12	18.46	18.44	18.44	20	4		
5	256QAM	1	24	18.53	18.62	18.54				
5	256QAM	12	0	18.18	18.31	18.24				
5	256QAM	12	7	18.22	18.32	18.21	20	4		
5	256QAM	12	14	18.36	18.38	18.20				
5	256QAM	25	0	18.36	18.39	18.39				
Channel 2098										
Frequency (MHz) 811.5 811.5										
3	QPSK	1	0	22.21	22.34	22.57				
3	QPSK	1	8	22.35	22.63	22.52	24	0		
3	QPSK	1	14	22.32	22.45	22.42				
3	QPSK	8	0	22.46	22.61	22.48				
3	QPSK	8	4	22.42	22.61	22.38	24	0		
3	QPSK	15	0	22.38	22.48	22.43				
3	QPSK	15	0	22.43	22.52	22.43				
3	16QAM	1	0	22.16	22.12	22.40	24	0		
3	16QAM	1	8	22.28	22.37	22.34				
3	16QAM	1	14	22.31	22.27	22.34				
3	16QAM	8	0	21.02	21.14	21.25				
3	16QAM	8	4	21.03	21.16	21.31				
3	16QAM	8	7	21.04	21.23	21.29	23	1		
3	16QAM	15	0	21.08	21.18	21.26				
3	64QAM	1	0	21.10	21.26	21.33				
3	64QAM	1	8	21.18	21.52	21.53	23	1		
3	64QAM	1	14	21.14	21.37	21.26				
3	64QAM	8	0	20.03	20.14	20.29				
3	64QAM	8	4	20.05	20.22	20.30	22	2		
3	64QAM	8	7	20.03	20.26	20.26				
3	64QAM	15	0	20.01	20.25	20.23				
3	256QAM	1	0	18.27	18.27	18.21				
3	256QAM	1	8	18.45	18.59	18.48	20	4		
3	256QAM	1	14	18.56	18.67	18.58				
3	256QAM	8	0	18.24	18.31	18.28				
3	256QAM	8	4	18.27	18.32	18.21	20	4		
3	256QAM	8	7	18.35	18.37	18.30				
3	256QAM	15	0	18.31	18.37	18.37				
Channel 2099										
Frequency (MHz) 814.7 811.5										
14	QPSK	1	0	22.17	22.31	22.55				
14	QPSK	1	3	22.39	22.54	22.51	24	0		
14	QPSK	3	0	22.44	22.59	22.47				
14	QPSK	3	1	22.45	22.50	22.44				
14	QPSK	3	2	22.29	22.53	22.49				
14	QPSK	6	0	22.37	22.53	22.39	24	0		
14	16QAM	1	0	22.23	22.17	22.26				
14	16QAM	1	3	22.38	22.45	22.31				
14	16QAM	1	6	22.28	22.23	22.33				
14	16QAM	3	0	22.22	22.31	22.49	24	0		
14	16QAM	3	1	22.37	22.60	22.41				
14	16QAM	3	3	22.22	22.61	22.62				
14	16QAM	6	0	21.03	21.21	21.27	23	1		
14	64QAM	1	0	21.04	21.30	21.36				
14	64QAM	1	3	21.21	21.34	21.43				



Band 66_Ant 0									
BW (MHz)	Modulation	RE	RB (MHz)	Power Lb Ch / Freq	Power Mb Ch / Freq	Power Hb Ch / Freq	Tx Power (dBm)	MPR (dB)	
Channel 13202 13202 13202									
Frequency (MHz)									
20	QPSK	1	0	17.20	17.31	17.23	18.4	0	
20	QPSK	1	48	17.28	17.34	17.24	18.4	0	
20	QPSK	1	95	17.36	17.42	17.32	18.4	0	
20	QPSK	56	0	17.34	17.32	17.32	18.4	0	
20	QPSK	50	24	17.17	17.26	17.22	18.4	0	
20	QPSK	50	48	17.25	17.30	17.25	18.4	0	
20	QPSK	100	0	17.26	17.28	17.15	18.4	0	
20	HQAM	1	0	17.19	17.26	17.19	18.4	0	
20	HQAM	1	48	17.27	17.31	17.21	18.4	0	
20	HQAM	1	96	17.34	17.32	17.18	18.4	0	
20	HQAM	50	0	17.22	17.26	17.10	18.4	0	
20	HQAM	50	24	17.27	17.28	17.22	18.4	0	
20	HQAM	50	48	17.33	17.32	17.23	18.4	0	
20	HQAM	100	0	17.18	17.32	17.23	18.4	0	
20	HQAM	100	0	17.18	17.25	17.19	18.4	0	
20	HQAM	100	0	17.19	17.29	17.19	18.4	0	
20	HQAM	1	48	17.18	17.21	17.23	18.4	0	
20	HQAM	1	96	17.18	17.25	17.15	18.4	0	
20	HQAM	50	0	17.28	17.26	17.11	18.4	0	
20	HQAM	50	24	17.18	17.20	17.11	18.4	0	
20	HQAM	50	48	17.18	17.19	17.09	18.4	0	
20	HQAM	100	0	17.21	17.28	17.09	18.4	0	
20	HQAM	1	48	17.13	17.16	17.11	18.4	0	
20	HQAM	1	96	17.13	17.24	17.21	18.4	0	
20	HQAM	50	0	17.18	17.23	17.12	18.4	0	
20	HQAM	50	24	17.23	17.22	17.12	18.4	0	
20	HQAM	50	48	17.19	17.19	17.09	18.4	0	
20	HQAM	100	0	17.17	17.31	17.11	18.4	0	
Channel 13202 13202 13202									
Frequency (MHz)									
15	QPSK	1	0	17.17	17.22	17.22	18.4	0	
15	QPSK	1	37	17.26	17.29	17.13	18.4	0	
15	QPSK	1	74	17.33	17.33	17.23	18.4	0	
15	QPSK	36	0	17.14	17.30	17.10	18.4	0	
15	QPSK	36	20	17.16	17.17	17.20	18.4	0	
15	QPSK	36	40	17.18	17.18	17.18	18.4	0	
15	QPSK	72	0	17.14	17.19	17.03	18.4	0	
15	HQAM	1	0	17.12	17.22	17.07	18.4	0	
15	HQAM	1	37	17.21	17.21	17.11	18.4	0	
15	HQAM	1	74	17.11	17.15	17.06	18.4	0	
15	HQAM	36	0	17.16	17.21	17.06	18.4	0	
15	HQAM	36	20	17.21	17.22	17.22	18.4	0	
15	HQAM	36	36	17.09	17.20	17.14	18.4	0	
15	HQAM	72	0	17.16	17.16	17.14	18.4	0	
15	HQAM	72	0	17.15	17.15	17.08	18.4	0	
15	HQAM	1	37	17.20	17.22	17.09	18.4	0	
15	HQAM	1	74	17.13	17.17	17.06	18.4	0	
15	HQAM	36	20	17.27	17.27	17.24	18.4	0	
15	HQAM	36	36	17.12	17.18	17.11	18.4	0	
15	HQAM	72	0	17.17	17.08	17.06	18.4	0	
15	HQAM	1	37	17.21	17.21	17.11	18.4	0	
15	HQAM	1	74	17.18	17.16	17.11	18.4	0	
15	HQAM	36	0	17.20	17.26	17.09	18.4	0	
15	HQAM	36	20	17.18	17.06	17.05	18.4	0	
15	HQAM	72	0	17.28	17.29	17.09	18.4	0	
Channel 13202 13202 13202									
Frequency (MHz)									
10	QPSK	1	0	17.08	17.17	17.14	18.4	0	
10	QPSK	1	25	17.26	17.33	17.19	18.4	0	
10	QPSK	1	50	17.44	17.44	17.34	18.4	0	
10	QPSK	26	0	17.18	17.27	17.20	18.4	0	
10	QPSK	26	12	17.14	17.24	17.21	18.4	0	
10	QPSK	26	24	17.22	17.28	17.28	18.4	0	
10	QPSK	50	0	17.13	17.24	17.03	18.4	0	
10	HQAM	1	0	17.14	17.18	17.12	18.4	0	
10	HQAM	1	25	17.22	17.22	17.06	18.4	0	
10	HQAM	1	49	17.01	17.11	17.06	18.4	0	
10	HQAM	26	0	17.16	17.18	17.07	18.4	0	
10	HQAM	26	12	17.15	17.24	17.09	18.4	0	
10	HQAM	26	24	17.17	17.17	17.12	18.4	0	
10	HQAM	50	0	17.16	17.23	17.13	18.4	0	
10	HQAM	50	0	17.18	17.28	17.07	18.4	0	
10	HQAM	1	49	17.04	17.13	17.12	18.4	0	
10	HQAM	1	24	17.21	17.24	17.05	18.4	0	
10	HQAM	26	12	17.09	17.06	17.01	18.4	0	
10	HQAM	26	24	17.13	17.13	17.04	18.4	0	
10	HQAM	50	0	17.13	17.21	17.06	18.4	0	
10	HQAM	1	25	17.16	17.13	17.14	18.4	0	
10	HQAM	1	49	17.08	17.12	17.07	18.4	0	
10	HQAM	26	0	17.15	17.23	17.05	18.4	0	
10	HQAM	26	12	17.14	17.21	17.05	18.4	0	
10	HQAM	26	24	17.15	17.05	17.02	18.4	0	
10	HQAM	50	0	17.02	17.26	17.08	18.4	0	
Channel 13202 13202 13202									
Frequency (MHz)									
5	QPSK	1	0	17.10	17.18	17.08	18.4	0	
5	QPSK	1	12	17.14	17.26	17.16	18.4	0	
5	QPSK	1	24	17.18	17.30	17.18	18.4	0	
5	QPSK	12	0	17.14	17.21	17.11	18.4	0	
5	QPSK	12	6	17.11	17.18	17.08	18.4	0	
5	QPSK	25	0	17.14	17.16	17.04	18.4	0	
5	HQAM	1	0	17.16	17.18	17.08	18.4	0	
5	HQAM	1	12	17.21	17.18	17.08	18.4	0	
5	HQAM	1	24	17.01	17.17	17.04	18.4	0	
5	HQAM	12	0	17.16	17.14	17.04	18.4	0	
5	HQAM	12	6	17.13	17.17	17.10	18.4	0	
5	HQAM	25	0	17.16	17.20	17.22	18.4	0	
5	HQAM	25	0	17.16	17.20	17.05	18.4	0	
5	HQAM	1	12	17.08	17.18	17.10	18.4	0	
5	HQAM	1	24	17.10	17.21	17.08	18.4	0	
5	HQAM	12	0	17.16	17.22	17.05	18.4	0	
5	HQAM	12	6	17.14	17.16	17.07	18.4	0	
5	HQAM	25	0	17.15	17.25	17.08	18.4	0	
5	HQAM	1	12	17.13	17.13	17.00	18.4	0	
5	HQAM	1	24	17.05	17.10	17.20	18.4	0	
5	HQAM	12	0	17.05	17.28	17.01	18.4	0	
5	HQAM	12	6	17.13	17.13	17.04	18.4	0	
5	HQAM	25	0	17.14	17.21	17.09	18.4	0	
5	HQAM	25	0	17.14	17.21	17.09	18.4	0	
Channel 13202 13202 13202									
Frequency (MHz)									
3	QPSK	1	0	17.07	17.19	17.18	18.4	0	
3	QPSK	1	8	17.25	17.21	17.22	18.4	0	
3	QPSK	1	16	17.33	17.33	17.23	18.4	0	
3	QPSK	8	0	17.10	17.23	17.10	18.4	0	
3	QPSK	8	4	17.07	17.22	17.21	18.4	0	
3	QPSK	16	0	17.16	17.16	17.06	18.4	0	
3	QPSK	16	0	17.19	17.23	17.04	18.4	0	
3	HQAM	1	0	17.10	17.11	17.09	18.4	0	
3	HQAM	1	8	17.21	17.21	17.12	18.4	0	
3	HQAM	1	14	17.13	17.16	17.06	18.4	0	
3	HQAM	8	0	17.17	17.22	17.00	18.4	0	
3	HQAM	8	4	17.13	17.21	17.16	18.4	0	
3	HQAM	16	0	17.10	17.20	17.08	18.4	0	
3	HQAM	1	8	17.11	17.17	17.05	18.4	0	
3	HQAM	1	16	17.06	17.07	17.07	18.4	0	
3	HQAM	8	0	17.10	17.19	17.08	18.4	0	
3	HQAM	8	4	17.05	17.19	17.10	18.4	0	
3	HQAM	16	0	17.05	17.17	17.04	18.4	0	
3	HQAM	1	8	17.07	17.17	17.05	18.4	0	
3	HQAM	1	16	17.08	17.14	17.06	18.4	0	
3	HQAM	8	0	17.16	17.21	17.02	18.4	0	
3	HQAM	8	4	17.18	17.17	17.09	18.4	0	
3	HQAM	16	0	17.11	17.24	17.08	18.4	0	
Channel 13202 13202 13202									
Frequency (MHz)									
1.4	QPSK	1	0	17.10	17.20	17.22	18.4	0	
1.4	QPSK	1	3						



Band 38_Ant 9										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up [dBm]	MPR [dB]		
Channel										
				37650	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	19.41	19.41	19.28	20.5	0		
20	QPSK	50	49	19.39	19.47	19.24				
20	QPSK	100	0	19.41	19.41	19.28				
20	QPSK	50	50	19.39	19.45	19.30				
20	QPSK	100	0	19.40	19.44	19.39				
20	16QAM	1	0	19.51	19.39	19.32				
20	16QAM	1	49	19.38	19.32	19.24				
20	16QAM	1	99	19.38	19.45	19.27				
20	16QAM	50	0	19.38	19.42	19.33				
20	16QAM	50	24	19.47	19.30	19.24				
20	16QAM	50	20	19.48	19.49	19.35				
20	16QAM	100	0	19.38	19.39	19.37				
20	64QAM	1	0	19.41	19.50	19.32				
20	64QAM	1	49	19.42	19.52	19.24				
20	64QAM	1	99	19.43	19.44	19.25				
20	64QAM	50	0	19.42	19.47	19.34				
20	64QAM	50	24	19.42	19.41	19.28				
20	64QAM	50	20	19.44	19.4	19.28				
20	64QAM	100	0	19.47	19.46	19.28				
20	256QAM	1	0	19.30	19.33	19.28				
20	256QAM	1	49	19.33	19.32	19.25				
20	256QAM	1	99	19.11	19.16	19.09				
20	256QAM	50	0	19.38	19.44	19.30				
20	256QAM	50	24	19.32	19.37	19.28				
20	256QAM	50	20	19.32	19.33	19.29				
20	256QAM	100	0	19.38	19.44	19.42				
Channel										
				37625	38000	38175				
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	19.33	19.32	19.25				
15	QPSK	1	37	19.51	19.52	19.32				
15	QPSK	1	74	19.36	19.33	19.09				
15	QPSK	36	0	19.37	19.44	19.21				
15	QPSK	36	20	19.33	19.42	19.17				
15	QPSK	36	39	19.35	19.36	19.25				
15	QPSK	75	0	19.38	19.31	19.23				
15	16QAM	1	0	19.33	19.20	19.15				
15	16QAM	1	37	19.32	19.37	19.18				
15	16QAM	1	74	19.31	19.42	19.21				
15	16QAM	36	0	19.23	19.30	19.28				
15	16QAM	36	20	19.40	19.36	19.19				
15	16QAM	36	39	19.39	19.34	19.24				
15	16QAM	75	0	19.24	19.37	19.35				
15	64QAM	1	0	19.38	19.38	19.28				
15	64QAM	1	37	19.31	19.48	19.13				
15	64QAM	1	74	19.30	19.35	19.22				
15	64QAM	36	0	19.27	19.43	19.25				
15	64QAM	36	20	19.27	19.38	19.19				
15	64QAM	36	39	19.40	19.34	19.14				
15	64QAM	75	0	19.45	19.33	19.24				
15	256QAM	1	0	19.52	19.27	19.25				
15	256QAM	1	37	19.08	19.13	19.09				
15	256QAM	1	74	19.05	19.12	19.02				
15	256QAM	36	0	19.35	19.32	19.28				
15	256QAM	36	20	19.29	19.24	19.23				
15	256QAM	36	39	19.29	19.24	19.23				
15	256QAM	75	0	19.29	19.39	19.37				
Channel										
				37600	38000	38200				
Frequency (MHz)				2572.5	2595	2617.5				
10	QPSK	1	0	19.27	19.37	19.26				
10	QPSK	1	25	19.51	19.39	19.35				
10	QPSK	1	49	19.36	19.35	19.18				
10	QPSK	25	0	19.40	19.38	19.28				
10	QPSK	25	12	19.25	19.30	19.15				
10	QPSK	25	25	19.24	19.36	19.22				
10	QPSK	50	0	19.38	19.37	19.21				
10	16QAM	1	0	19.25	19.25	19.20				
10	16QAM	1	25	19.33	19.46	19.15				
10	16QAM	1	49	19.25	19.40	19.18				
10	16QAM	25	0	19.29	19.36	19.23				
10	16QAM	25	12	19.39	19.39	19.21				
10	16QAM	25	25	19.34	19.45	19.26				
10	16QAM	50	0	19.23	19.32	19.35				
10	64QAM	1	0	19.31	19.43	19.17				
10	64QAM	1	25	19.31	19.43	19.22				
10	64QAM	1	49	19.36	19.29	19.24				
10	64QAM	25	0	19.40	19.42	19.30				
10	64QAM	25	12	19.35	19.39	19.14				
10	64QAM	25	25	19.43	19.34	19.19				
10	64QAM	50	0	19.32	19.39	19.21				
10	256QAM	1	0	19.25	19.26	19.18				
10	256QAM	1	25	19.08	19.16	19.11				
10	256QAM	1	49	19.04	19.04	18.98				
10	256QAM	25	0	19.32	19.34	19.31				
10	256QAM	25	12	19.25	19.32	19.26				
10	256QAM	25	25	19.26	19.30	19.26				
10	256QAM	50	0	19.26	19.36	19.39				
Channel										
				2572.5	2595	2617.5				
Frequency (MHz)				19.27	19.30	19.33				
5	QPSK	1	0	19.38	19.32	19.21				
5	QPSK	1	12	19.41	19.41	19.24				
5	QPSK	1	24	19.31	19.46	19.11				
5	QPSK	12	0	19.42	19.31	19.26				
5	QPSK	12	7	19.23	19.28	19.17				
5	QPSK	12	13	19.35	19.32	19.27				
5	QPSK	25	0	19.30	19.41	19.33				
5	16QAM	1	0	19.45	19.32	19.21				
5	16QAM	1	12	19.25	19.39	19.12				
5	16QAM	1	24	19.34	19.36	19.13				
5	16QAM	12	0	19.37	19.38	19.31				
5	16QAM	12	7	19.41	19.36	19.13				
5	16QAM	12	13	19.36	19.42	19.29				
5	16QAM	25	0	19.27	19.42	19.19				
5	64QAM	1	0	19.27	19.44	19.27				
5	64QAM	1	12	19.38	19.47	19.20				
5	64QAM	1	24	19.32	19.30	19.13				
5	64QAM	12	0	19.32	19.42	19.19				
5	64QAM	12	7	19.40	19.32	19.12				
5	64QAM	12	13	19.34	19.27	19.17				
5	64QAM	25	0	19.46	19.38	19.22				
5	256QAM	1	0	19.19	19.26	19.24				
5	256QAM	1	12	19.10	19.14	19.11				
5	256QAM	1	24	19.01	19.07	19.05				
5	256QAM	12	0	19.33	19.33	19.29				
5	256QAM	12	7	19.20	19.31	19.29				
5	256QAM	12	13	19.25	19.28	19.26				
5	256QAM	25	0	19.26	19.38	19.32				

Band 38_Ant 1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up [dBm]	MPR [dB]		
Channel										
				37650	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	17.56	17.74	17.65	18.6	0		
20	QPSK	1	49	17.62	17.62	17.58				
20	QPSK	1	99	17.57	17.68	17.65				
20	QPSK	50	0	17.63	17.79	17.65				
20	QPSK	50	24	17.62	17.74	17.64				
20	QPSK	50	20	17.57	17.76	17.55				
20	QPSK	100	0	17.65	17.75	17.54				
20	16QAM	1	0	17.61	17.72	17.50				
20	16QAM	1	49	17.62	17.71	17.58				
20	16QAM	1	99	17.56	17.73	17.58				
20	16QAM	50	0	17.68	17.73	17.55				
20	16QAM	50	24	17.69	17.74	17.64				
20	16QAM	50	20	17.63	17.73	17.66				
20	16QAM	100								



Band 41 (HPUE)_Ant 9												
BW (MHz)	Modulation	RB Size	RB Offset	For LC Power Low Ch / Freq	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Mid Ch / Freq	Power High Ch / Freq	Time-up (min)	MPR (dB)		
Channel				39790	39750	40185	40620	41055	41490			
20	QPSK	1	0	2510	2506	25495	2593	26365	2680			
20	QPSK	1	49	2048	2104	2143	2183	2226	2136	22.1	0	
20	QPSK	1	99	2104	2104	2143	2183	2226	2136			
20	QPSK	50	0	2036	2115	2125	2137	2038	2143			
20	QPSK	50	24	2036	2115	2125	2137	2038	2143	22.1	0	
20	QPSK	50	50	2036	2115	2125	2137	2038	2143			
20	QPSK	100	0	2104	2106	2118	2135	2083	2137			
20	16QAM	1	0	2036	2103	2116	2137	2084	2143			
20	16QAM	1	49	2032	2105	2120	2138	2088	2143	22.1	0	
20	16QAM	1	99	2104	2106	2120	2137	2085	2142			
20	16QAM	50	0	2034	2113	2120	2130	2039	2135			
20	16QAM	50	24	2034	2113	2120	2130	2039	2135	22.1	0	
20	16QAM	50	50	2037	2114	2118	2129	2083	2133			
20	16QAM	100	0	2081	2115	2116	2127	2030	2146			
20	64QAM	1	0	2033	2114	2121	2128	2088	2139	22.1	0	
20	64QAM	1	49	2032	2105	2110	2120	2088	2143			
20	64QAM	1	99	2105	2111	2115	2130	2084	2140			
20	64QAM	50	0	2037	2109	2114	2126	2039	2144			
20	64QAM	50	24	2036	2108	2112	2123	2084	2144	22.1	0	
20	64QAM	50	50	2104	2104	2111	2128	2084	2134			
20	64QAM	100	0	2083	2115	2108	2134	2081	2136			
20	256QAM	1	0	2033	2115	2121	2132	2083	2132	22.1	0	
20	256QAM	1	49	2033	2115	2121	2132	2083	2132			
20	256QAM	1	99	2035	2104	2121	2128	2083	2132			
20	256QAM	50	0	2033	2116	2109	2135	2086	2144			
20	256QAM	50	24	2037	2110	2115	2132	2083	2138	22.1	0	
20	256QAM	50	50	2103	2109	2116	2129	2088	2141			
20	256QAM	100	0	2085	2109	2113	2125	2089	2137			
Channel				39765	39725	40173	40620	41068	41515	Time-up (min)	MPR (dB)	
15	QPSK	1	0	2207.5	2203.5	2248.5	2293	2337.5	2382.5			
15	QPSK	1	37	2121	2109	2118	2135	2087	2136	22.1	0	
15	QPSK	1	74	2091	2098	2110	2118	2082	2130			
15	QPSK	36	0	2085	2107	2105	2130	2083	2132			
15	QPSK	36	20	2079	2104	2110	2129	2083	2132	22.1	0	
15	QPSK	36	39	2079	2106	2112	2121	2071	2138			
15	QPSK	75	0	2102	2092	2107	2120	2088	2135			
15	QPSK	75	20	2083	2105	2108	2128	2084	2144	22.1	0	
15	16QAM	1	37	2084	2096	2102	2120	2083	2142			
15	16QAM	1	74	2092	2091	2117	2119	2082	2142	22.1	0	
15	16QAM	36	0	2082	2104	2117	2117	2082	2134			
15	16QAM	36	20	2081	2106	2110	2127	2077	2139	22.1	0	
15	16QAM	36	39	2085	2104	2110	2127	2076	2120			
15	16QAM	75	0	2085	2102	2100	2128	2083	2134			
15	16QAM	75	20	2083	2106	2112	2123	2084	2144	22.1	0	
15	64QAM	1	37	2079	2093	2108	2113	2085	2118			
15	64QAM	1	74	2089	2107	2110	2115	2087	2141	22.1	0	
15	64QAM	36	0	2086	2098	2110	2120	2089	2129			
15	64QAM	36	20	2081	2102	2103	2126	2081	2138	22.1	0	
15	64QAM	36	39	2089	2099	2109	2119	2079	2122			
15	64QAM	75	0	2082	2108	2106	2122	2088	2123			
15	256QAM	1	0	2082	2108	2107	2123	2088	2148	22.1	0	
15	256QAM	1	37	2086	2106	2107	2124	2077	2138			
15	256QAM	1	74	2084	2094	2112	2120	2074	2122			
15	256QAM	36	0	2083	2110	2099	2125	2075	2134	22.1	0	
15	256QAM	36	20	2084	2102	2103	2126	2081	2138			
15	256QAM	36	39	2086	2113	2109	2125	2084	2137			
15	256QAM	75	0	2089	2102	2111	2128	2088	2125			
Channel				39740	39700	40160	40620	41080	41540	Time-up (min)	MPR (dB)	
10	QPSK	1	0	2295	2291	2336	2381	2426	2471			
10	QPSK	1	25	2085	2113	2121	2131	2086	2144	22.1	0	
10	QPSK	1	49	2102	2089	2110	2124	2088	2128			
10	QPSK	1	99	2102	2102	2110	2120	2088	2137			
10	QPSK	25	0	2081	2101	2103	2123	2084	2144	22.1	0	
10	QPSK	25	12	2081	2101	2102	2123	2084	2144			
10	QPSK	25	25	2087	2105	2111	2123	2083	2128			
10	QPSK	50	0	2082	2101	2113	2130	2084	2134	22.1	0	
10	16QAM	1	25	2078	2103	2103	2123	2083	2138			
10	16QAM	1	49	2083	2097	2108	2117	2081	2138	22.1	0	
10	16QAM	1	99	2083	2102	2103	2123	2083	2138			
10	16QAM	25	0	2085	2098	2113	2122	2079	2130	22.1	0	
10	16QAM	25	12	2085	2098	2113	2122	2079	2130			
10	16QAM	50	0	2087	2110	2107	2134	2087	2144			
10	16QAM	50	24	2081	2107	2107	2127	2081	2144	22.1	0	
10	16QAM	50	49	2082	2098	2112	2122	2073	2124			
10	16QAM	100	0	2100	2089	2110	2128	2079	2131			
10	64QAM	1	25	2081	2103	2110	2121	2074	2126	22.1	0	
10	64QAM	1	49	2100	2089	2110	2128	2079	2131			
10	64QAM	25	0	2082	2103	2110	2123	2083	2138			
10	64QAM	25	12	2081	2103	2110	2121	2074	2126			
10	64QAM	25	25	2081	2103	2110	2125	2080	2131			
10	64QAM	50	0	2088	2110	2100	2125	2077	2123	22.1	0	
10	256QAM	1	0	2087	2103	2103	2123	2087	2138			
10	256QAM	1	25	2080	2103	2097	2121	2077	2133	22.1	0	
10	256QAM	1	49	2081	2098	2117	2124	2071	2120			
10	256QAM	25	0	2088	2110	2104	2128	2079	2138			
10	256QAM	25	12	2083	2099	2114	2119	2088	2131	22.1	0	
10	256QAM	25	25	2083	2101	2108	2125	2086	2130			
10	256QAM	50	0	2080	2099	2098	2118	2086	2129			
Channel				2297.5	2293.5	2338.5	2383	2427.5	2472.5	Time-up (min)	MPR (dB)	
5	QPSK	1	0	2101	2095	2112	2122	2083	2129			
5	QPSK	1	12	2102	2103	2109	2125	2085	2137	22.1	0	
5	QPSK	1	24	2100	2093	2108	2117	2084	2117			
5	QPSK	12	0	2087	2106	2111	2130	2086	2136			
5	QPSK	12	7	2089	2108	2110	2122	2089	2131	22.1	0	
5	QPSK	12	13	2081	2103	2103	2126	2081	2137			
5	QPSK	25	0	2101	2102	2105	2126	2086	2128			
5	16QAM	1	0	2083	2104	2103	2136	2070	2142	22.1	0	
5	16QAM	1	12	2091	2095	2109	2123	2087	2131			
5	16QAM	1	24	2101	2097	2110	2123	2083	2141	22.1	0	
5	16QAM	12	0	2080	2105	2107	2127	2083	2132			
5	16QAM	12	7	2081	2108	2107	2126	2083	2133			
5	16QAM	12	13	2085	2108	2110	2126	2079	2127	22.1	0	
5	64QAM	1	0	2089								



Band 41_Ant 2													
BW (MHz)	Modulation	RB Size	RB Offset	Freq Ch / Freq	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel													
				39790	39790	40185	40620	41055	41490				
	Frequency (MHz)			2510	2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	23.02	23.06	23.22	23.35	23.03	23.13				
20	QPSK	1	49	23.02	23.06	23.22	23.35	23.03	23.13	24	0		
20	QPSK	1	99	23.08	23.05	23.27	23.47	23.07	23.33				
20	QPSK	50	0	23.21	23.15	23.45	23.59	23.12	23.31				
20	QPSK	50	24	23.21	23.15	23.45	23.59	23.12	23.31	24	0		
20	QPSK	50	50	23.28	23.12	23.31	23.58	23.02	23.30				
20	QPSK	100	0	23.18	23.20	23.40	23.47	23.10	23.32				
20	16QAM	1	0	23.00	23.03	23.33	23.61	23.15	23.35				
20	16QAM	1	49	23.00	23.03	23.33	23.61	23.15	23.35	24	0		
20	16QAM	1	99	23.12	23.12	23.43	23.45	23.09	23.30				
20	16QAM	50	0	22.11	22.07	22.31	22.47	22.17	22.25				
20	16QAM	50	24	22.21	22.21	22.46	22.62	22.19	22.42	23	1		
20	16QAM	50	50	22.28	22.23	22.46	22.62	22.07	22.48				
20	16QAM	100	0	22.23	22.23	22.43	22.51	22.12	22.36				
20	16QAM	100	0	21.97	21.98	22.12	22.31	22.02	22.15				
20	16QAM	100	24	22.08	22.01	22.22	22.45	21.93	22.21	23	1		
20	16QAM	100	50	22.07	22.04	22.29	22.43	21.98	22.42				
20	16QAM	50	0	21.13	21.09	21.33	21.46	21.11	21.25				
20	16QAM	50	24	21.24	21.24	21.45	21.64	21.14	21.41	22	2		
20	16QAM	50	50	21.19	21.17	21.48	21.64	21.07	21.41				
20	16QAM	100	0	21.20	21.20	21.43	21.63	21.14	21.42				
20	256QAM	1	0	18.76	18.74	18.90	19.21	18.82	18.95				
20	256QAM	1	49	18.78	18.88	18.84	19.15	18.78	18.20	20	4		
20	256QAM	1	99	18.71	18.79	18.75	19.01	18.62	18.95				
20	256QAM	50	0	18.67	18.66	18.64	18.99	18.65	18.87				
20	256QAM	50	24	18.63	18.64	18.61	18.99	18.77	18.76	20	5		
20	256QAM	50	50	18.66	18.68	18.63	18.99	18.61	18.96				
20	256QAM	100	0	18.78	18.68	18.60	19.06	18.62	18.82				
Channel													
	Frequency (MHz)			39765	39725	40173	40620	41068	41515				
15	QPSK	1	0	22.07	22.03	22.43	22.93	23.37	23.83				
15	QPSK	1	49	22.07	22.03	22.43	22.93	23.37	23.83	24	0		
15	QPSK	1	99	22.06	22.05	22.34	22.99	23.33	23.60				
15	QPSK	36	0	22.02	22.12	22.41	23.00	23.18	23.18				
15	QPSK	36	24	22.02	22.07	22.35	23.03	23.21	23.20	24	0		
15	QPSK	36	50	22.07	22.00	22.34	23.00	23.24	23.24				
15	QPSK	75	0	22.01	23.08	23.31	23.33	23.03	23.24				
15	QPSK	75	24	22.07	22.07	22.32	23.00	23.23	23.23	24	0		
15	16QAM	1	0	22.09	22.07	23.30	23.40	22.96	23.08				
15	16QAM	1	49	22.09	22.07	23.30	23.40	22.96	23.08	24	0		
15	16QAM	1	99	22.00	22.01	23.38	23.31	22.86	23.17				
15	16QAM	36	0	21.95	21.95	22.13	22.29	22.01	22.18				
15	16QAM	36	24	22.02	22.18	22.27	22.33	22.03	22.31	23	1		
15	16QAM	36	50	22.13	22.05	22.42	22.52	22.00	22.37				
15	16QAM	75	0	22.19	22.13	22.26	22.34	21.97	22.24				
15	16QAM	75	24	22.18	22.18	22.44	22.56	22.16	22.42	23	1		
15	16QAM	75	50	22.26	21.95	22.06	22.27	21.83	22.17				
15	16QAM	100	0	21.91	22.11	22.19	22.33	21.99	22.32				
15	16QAM	100	0	21.63	20.98	21.15	21.35	20.98	21.35				
15	16QAM	100	24	21.68	21.14	21.28	21.50	21.14	21.38	22	2		
15	16QAM	100	50	20.99	21.15	21.37	21.45	20.95	21.24				
15	256QAM	1	0	18.82	18.82	18.83	18.86	18.86	18.83				
15	256QAM	1	49	18.50	18.44	18.44	18.94	18.54	18.72	20	4		
15	256QAM	1	99	18.56	18.56	18.56	18.86	18.56	18.86				
15	256QAM	36	0	18.55	18.49	18.44	19.04	18.54	18.72				
15	256QAM	36	24	18.56	18.56	18.56	18.86	18.56	18.86	20	5		
15	256QAM	36	50	18.55	18.55	18.55	19.01	18.70	18.66				
15	256QAM	75	0	18.58	18.53	18.58	19.03	18.70	18.70				
Channel													
	Frequency (MHz)			39740	39700	40160	40620	41080	41540				
10	QPSK	1	0	22.07	23.05	23.15	23.15	22.87	22.94				
10	QPSK	1	49	23.08	23.01	23.30	23.33	22.93	23.24	24	0		
10	QPSK	1	99	23.05	23.06	23.29	23.30	22.91	23.22				
10	QPSK	25	0	23.10	23.10	23.30	23.30	22.91	23.22				
10	QPSK	25	24	23.08	23.07	23.28	23.38	22.98	23.25	24	0		
10	QPSK	25	50	23.12	23.04	23.33	23.39	22.96	23.22				
10	16QAM	1	0	23.02	23.08	23.32	23.42	23.02	23.26				
10	16QAM	1	49	23.02	23.08	23.32	23.42	23.02	23.26	24	0		
10	16QAM	1	99	23.14	23.14	23.34	23.34	22.94	23.21				
10	16QAM	25	0	22.95	22.97	23.31	23.31	22.91	23.21				
10	16QAM	25	24	23.00	23.07	23.31	23.31	22.91	23.21	24	0		
10	16QAM	25	50	23.07	23.07	23.27	23.40	22.91	23.21				
10	16QAM	50	0	22.18	22.04	22.26	22.31	21.94	22.19				
10	16QAM	50	24	22.18	21.83	22.03	22.40	21.93	22.32	23	1		
10	16QAM	50	50	22.07	21.99	21.19	22.30	21.84	22.03				
10	16QAM	100	0	21.99	22.00	22.24	22.39	21.97	22.24				
10	16QAM	100	24	22.01	21.91	21.41	21.60	21.38	21.54	22	2		
10	16QAM	100	50	21.92	21.10	21.41	21.50	21.38	21.50				
10	16QAM	25	0	21.02	21.03	21.38	21.44	21.06	21.40				
10	16QAM	25	24	21.04	21.04	21.41	21.62	21.06	21.43	24	0		
10	256QAM	1	0	18.68	18.55	18.62	19.15	18.78	18.62				
10	256QAM	1	49	18.54	18.46	18.44	18.81	18.39	18.74	20	4		
10	256QAM	1	99	18.60	18.56	18.56	18.86	18.56	18.86				
10	256QAM	36	0	18.52	18.47	18.38	18.96	18.69	18.70				
10	256QAM	36	24	18.53	18.38	18.39	19.05	18.68	18.79	20	5		
10	256QAM	36	50	18.67	18.59	18.41	18.84	18.60	18.70				
Channel													
	Frequency (MHz)			39715	39675	40135	40620	41095	41555				
5	QPSK	1	0	22.87	22.82	23.20	23.31	22.92	23.23				
5	QPSK	1	12	23.02	23.05	23.31	23.49	22.93	23.28	24	0		
5	QPSK	1	24	22.92	22.99	23.20	23.27	22.83	23.20				
5	QPSK	12	0	23.13	23.05	23.26	23.41	22.97	23.38				
5	QPSK	12	7	23.10	23.09	23.37	23.32	22.92	23.28	24	0		
5	QPSK	12	13	22.97	22.98	23.23	23.30	22.86	23.18				
5	QPSK	12	24	23.03	23.03	23.33	23.33	22.93	23.24	24	0		
5	16QAM	1	0	22.81	23.01	23.18	23.45	22.99	23.31				





Band 41 (HPUe_Ant 6)														
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power Low High Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Turn-up limit (dBm)	MPR (dB)			
Channel														
Frequency (MHz)				39750	39750	40185	40620	41055	41490					
20	QPSK	1	0	24.15	24.07	24.01	24.22	24.11	24.18	25.1	0			
20	QPSK	1	48	24.15	24.11	24.11	24.26	24.11	24.18					
20	QPSK	1	96	24.14	24.02	24.09	24.32	24.02	24.14					
20	QPSK	50	0	23.11	23.13	23.49	23.60	23.52	23.55	25	0.1			
20	QPSK	15	24	23.29	23.28	23.31	23.49	23.40	23.43					
20	QPSK	50	50	23.40	23.46	23.42	23.57	23.44	23.49					
20	QPSK	100	0	23.43	23.42	23.54	23.59	23.50	23.51					
20	16QAM	1	0	23.56	23.48	23.47	23.67	23.46	23.61	25	0.1			
20	16QAM	1	48	23.79	23.86	23.76	23.57	23.86	23.76					
20	16QAM	1	96	23.54	23.43	23.52	23.79	23.42	23.56					
20	16QAM	50	0	22.87	22.83	22.80	22.85	22.87	22.88	24	1.1			
20	16QAM	50	24	22.85	22.88	22.78	22.58	22.59	22.73					
20	16QAM	50	50	22.81	22.86	22.70	22.68	22.68	22.81					
20	16QAM	100	0	22.58	22.56	22.65	22.58	22.61	22.58					
20	64QAM	1	0	22.81	22.81	22.80	22.87	22.81	22.81	24	1.1			
20	64QAM	1	48	22.79	22.86	22.76	22.57	22.86	22.76					
20	64QAM	1	96	22.57	22.43	22.62	23.04	22.59	22.73					
20	64QAM	50	0	21.83	21.88	21.83	21.67	21.86	21.47	23	2.1			
20	64QAM	50	24	21.70	21.85	21.81	21.63	21.46	21.71					
20	64QAM	50	48	21.87	21.78	21.78	21.63	21.67	21.84					
20	64QAM	100	0	21.66	21.80	21.59	21.82	21.63	21.63					
20	256QAM	1	0	19.23	19.20	19.24	19.42	19.30	19.31	21	4.1			
20	256QAM	1	48	19.29	19.23	19.31	19.49	19.40	19.43					
20	256QAM	1	96	19.24	19.29	19.34	19.42	19.30	19.37					
20	256QAM	50	0	19.30	19.26	19.25	19.48	19.35	19.41					
20	256QAM	50	24	19.32	19.23	19.33	19.46	19.31	19.41	21	4.1			
20	256QAM	50	48	19.29	19.28	19.38	19.46	19.34	19.48					
20	256QAM	100	0	19.29	19.27	19.33	19.40	19.38	19.38					
Channel														
Frequency (MHz)				39755	39725	40173	40620	41068	41515					
15	QPSK	1	0	24.04	24.04	24.09	24.23	24.01	24.18	25.1	0			
15	QPSK	1	37	24.12	24.06	24.09	24.23	24.01	24.18					
15	QPSK	1	74	24.06	23.90	24.05	24.30	23.98	24.05					
15	QPSK	36	0	23.26	23.35	23.47	23.26	23.51	23.51	25	0.1			
15	QPSK	36	20	23.23	23.27	23.34	23.36	23.40	23.40					
15	QPSK	36	38	23.27	23.38	23.32	23.50	23.31	23.38					
15	QPSK	75	0	23.34	23.38	23.45	23.44	23.37	23.45					
15	QPSK	75	24	23.36	23.32	23.31	23.49	23.40	23.43					
15	16QAM	1	37	23.51	23.56	23.55	23.75	23.57	23.65	25	0.1			
15	16QAM	1	74	23.52	23.38	23.50	23.77	23.46	23.49					
15	16QAM	36	0	22.55	22.50	22.57	22.62	22.45	22.30	24	1.1			
15	16QAM	36	20	22.56	22.63	22.72	22.55	22.52	22.67					
15	16QAM	36	38	22.50	22.63	22.65	22.65	22.59	22.60					
15	16QAM	75	0	22.47	22.47	22.53	22.47	22.57	22.51					
15	16QAM	75	24	22.58	22.58	22.61	22.63	22.46	22.71					
15	64QAM	1	37	22.73	22.77	22.70	22.73	22.80	22.16	24	1.1			
15	64QAM	1	74	22.49	22.31	22.53	22.83	22.62	22.62					
15	64QAM	36	0	21.56	21.48	21.52	21.97	21.47	21.42	23	2.1			
15	64QAM	36	20	21.60	21.44	21.55	21.73	21.43	21.53					
15	64QAM	36	38	21.45	21.48	21.67	21.52	21.56	21.58					
15	64QAM	75	0	21.60	21.54	21.48	21.41	21.56	21.57					
15	256QAM	1	0	19.19	19.16	19.23	19.42	19.33	19.30	21	4.1			
15	256QAM	1	48	19.25	19.10	19.23	19.42	19.33	19.30					
15	256QAM	1	96	19.13	19.25	19.22	19.34	19.27	19.25					
15	256QAM	36	0	19.20	19.22	19.19	19.41	19.28	19.38					
15	256QAM	36	20	19.23	19.14	19.25	19.36	19.24	19.31	21	4.1			
15	256QAM	36	38	19.22	19.14	19.25	19.28	19.28	19.28					
15	256QAM	75	0	19.19	19.19	19.25	19.34	19.24	19.24					
Channel														
Frequency (MHz)				39740	39700	40160	40620	41080	41540					
10	QPSK	1	0	24.00	23.95	23.95	24.12	24.02	24.00	25.1	0			
10	QPSK	1	25	24.10	24.11	23.98	24.26	24.10	24.23					
10	QPSK	1	49	24.02	24.01	24.04	24.23	23.89	24.04					
10	QPSK	24	0	23.28	23.48	23.34	23.45	23.45	23.48	25	0.1			
10	QPSK	25	12	23.33	23.27	23.37	23.47	23.49	23.20					
10	QPSK	25	25	23.33	23.38	23.38	23.44	23.38	23.42					
10	QPSK	50	0	22.57	22.86	22.76	22.55	22.47	22.39	24	1.1			
10	16QAM	1	0	23.44	23.45	23.41	23.64	23.44	23.58					
10	16QAM	1	25	23.64	23.63	23.53	23.77	23.52	23.68	25	0.1			
10	16QAM	1	49	23.50	23.38	23.51	23.78	23.46	23.63					
10	16QAM	25	0	22.56	22.56	22.56	22.56	22.56	22.56	24	1.1			
10	16QAM	25	12	22.56	22.59	22.67	22.54	22.43	22.65					
10	16QAM	25	25	22.52	22.62	22.62	22.60	22.59	22.76					
10	16QAM	50	0	22.55	22.50	22.55	22.44	22.58	22.45					
10	16QAM	50	12	22.56	22.43	22.59	22.43	22.43	22.43	24	1.1			
10	64QAM	1	25	22.85	22.76	22.85	22.32	22.78	22.20	25	0.1			
10	64QAM	1	49	22.81	22.34	22.50	22.59	22.52	22.68					
10	64QAM	25	0	21.59	21.61	21.58	21.64	21.49	21.43	23	2.1			
10	64QAM	25	12	21.59	21.49	21.77	21.59	21.41	21.60					
10	64QAM	25	25	21.52	21.47	21.75	21.57	21.62	21.56					
10	64QAM	50	0	21.83	21.83	21.81	21.49	21.57	21.69					
10	256QAM	1	25	19.13	19.11	19.20	19.33	19.18	19.21	21	4.1			
10	256QAM	1	49	19.18	19.17	19.31	19.36	19.36	19.27					
10	256QAM	25	0	19.26	19.23	19.29	19.40	19.23	19.30					
10	256QAM	25	12	19.26	19.14	19.21	19.30	19.22	19.38					
10	256QAM	25	25	19.14	19.13	19.28	19.38	19.21	19.33					
10	256QAM	50	0	19.20	19.15	19.21	19.44	19.36	19.30					
Channel														
Frequency (MHz)				39745	39705	40165	40620	41093	41550					
5	QPSK	1	0	24.10	24.05	24.00	24.10	23.97	24.09	25.1	0			
5	QPSK	1	12	24.07	24.03	24.10	24.34	23.98	24.21					
5	QPSK	1	24	24.09	23.91	24.06	24.21	24.01	24.10					
5	QPSK	12	0	23.29	23.34	23.38	23.46	23.44	23.50	25	0.1			
5	QPSK	12	13	23.25	23.18	23.46	23.43	23.48	23.19					
5	QPSK	12	13	23.25	23.43	23.38	23.51	23.34	23.35					
5	QPSK	25	0	23.29	23.38	23.43	23.51	23.36	23.45					
5	16QAM	1	0	23.50	23.43	23.43	23.59	2						



Band 48_Ant 10									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Mid Ch. / Freq	Power High Ch. / Freq	Power High Ch. / Freq	Time-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				3550	3559	3541	3550		
20	QPSK	1	0	18.24	18.31	18.34	18.38	19.2	0
20	QPSK	1	49	18.27	18.35	18.37	18.41		
20	QPSK	1	99	18.27	18.32	18.40	18.37		
20	QPSK	50	0	18.27	18.41	18.43	18.35		
20	QPSK	15	24	18.28	18.38	18.38	18.30		
20	QPSK	50	50	18.22	18.35	18.38	18.30	19.2	0
20	QPSK	100	0	18.17	18.40	18.33	18.36		
20	16QAM	1	0	18.30	18.31	18.31	18.31		
20	16QAM	1	49	18.27	18.37	18.37	18.41		
20	16QAM	1	99	18.31	18.44	18.43	18.30	19.2	0
20	16QAM	50	0	18.18	18.34	18.39	18.27		
20	16QAM	50	24	18.25	18.31	18.44	18.35	19.2	0
20	16QAM	50	50	18.20	18.30	18.32	18.35		
20	16QAM	100	0	18.21	18.44	18.34	18.28		
20	64QAM	1	0	18.24	18.33	18.44	18.31	19.2	0
20	64QAM	1	49	18.27	18.38	18.39	18.32		
20	64QAM	1	99	18.22	18.37	18.38	18.33		
20	64QAM	50	0	18.21	18.35	18.40	18.28		
20	64QAM	50	24	18.28	18.30	18.36	18.38	19.2	0
20	64QAM	50	50	18.20	18.34	18.42	18.33		
20	64QAM	100	0	18.23	18.38	18.41	18.29		
20	256QAM	1	0	18.24	18.43	18.30	18.30	19.2	0
20	256QAM	1	49	18.24	18.31	18.44	18.30		
20	256QAM	1	99	18.21	18.38	18.37	18.33		
20	256QAM	50	0	18.22	18.40	18.36	18.33		
20	256QAM	50	24	18.20	18.36	18.36	18.38	19.2	0
20	256QAM	50	50	18.20	18.37	18.33	18.38		
20	256QAM	100	0	18.27	18.33	18.30	18.32		
Channel									
Frequency (MHz)				3572	3573	3542	3572.5		
15	QPSK	1	0	18.18	18.16	18.28	18.30	19.2	0
15	QPSK	1	37	18.20	18.32	18.34	18.38		
15	QPSK	1	74	18.22	18.19	18.28	18.30		
15	QPSK	36	0	18.14	18.28	18.31	18.34	19.2	0
15	QPSK	36	20	18.09	18.37	18.39	18.37		
15	QPSK	36	39	18.09	18.32	18.28	18.23		
15	QPSK	75	0	18.05	18.34	18.25	18.22		
15	16QAM	1	0	18.27	18.28	18.27	18.23	19.2	0
15	16QAM	1	37	18.18	18.26	18.20	18.31		
15	16QAM	1	74	18.27	18.36	18.38	18.29		
15	16QAM	36	0	18.06	18.19	18.27	18.13	19.2	0
15	16QAM	36	20	18.12	18.28	18.39	18.37		
15	16QAM	36	39	18.17	18.15	18.23	18.27		
15	16QAM	75	0	18.07	18.30	18.23	18.16		
15	64QAM	1	0	18.18	18.30	18.27	18.28	19.2	0
15	64QAM	1	37	18.16	18.24	18.27	18.25		
15	64QAM	1	74	18.18	18.29	18.34	18.29		
15	64QAM	36	0	18.17	18.23	18.34	18.15	19.2	0
15	64QAM	36	20	18.24	18.18	18.27	18.28		
15	64QAM	36	39	18.09	18.33	18.39	18.22		
15	64QAM	75	0	18.13	18.28	18.33	18.16		
15	256QAM	1	0	18.18	18.41	18.24	18.27	19.2	0
15	256QAM	1	37	18.14	18.24	18.32	18.29		
15	256QAM	1	74	18.07	18.32	18.24	18.31		
15	256QAM	36	0	18.16	18.38	18.24	18.24	19.2	0
15	256QAM	36	20	18.28	18.28	18.23	18.28		
15	256QAM	36	39	18.25	18.28	18.25	18.26		
15	256QAM	75	0	18.20	18.24	18.23	18.19		
Channel									
Frequency (MHz)				3572	3573	3542	3572.5		
10	QPSK	1	0	18.15	18.16	18.30	18.23	19.2	0
10	QPSK	1	25	18.29	18.39	18.38	18.37		
10	QPSK	1	49	18.19	18.19	18.37	18.24		
10	QPSK	25	0	18.18	18.27	18.26	18.28	19.2	0
10	QPSK	25	12	18.18	18.29	18.16	18.18		
10	QPSK	25	25	18.10	18.32	18.35	18.18		
10	QPSK	50	0	18.05	18.30	18.22	18.24		
10	16QAM	1	0	18.20	18.30	18.18	18.22	19.2	0
10	16QAM	1	25	18.20	18.26	18.27	18.24		
10	16QAM	1	49	18.19	18.28	18.34	18.31		
10	16QAM	25	0	18.17	18.26	18.35	18.15	19.2	0
10	16QAM	25	12	18.23	18.21	18.35	18.24		
10	16QAM	25	25	18.10	18.24	18.35	18.21		
10	16QAM	50	0	18.10	18.36	18.28	18.16		
10	64QAM	1	0	18.21	18.27	18.44	18.18	19.2	0
10	64QAM	1	25	18.18	18.25	18.37	18.21		
10	64QAM	1	49	18.20	18.28	18.34	18.24		
10	64QAM	25	0	18.18	18.33	18.34	18.16	19.2	0
10	64QAM	25	12	18.18	18.26	18.32	18.39		
10	64QAM	25	25	18.19	18.22	18.31	18.18		
10	64QAM	50	0	18.08	18.30	18.33	18.27		
10	256QAM	1	0	18.11	18.28	18.21	18.25	19.2	0
10	256QAM	1	25	18.09	18.28	18.34	18.37		
10	256QAM	1	49	18.07	18.30	18.27	18.18		
10	256QAM	25	0	18.11	18.29	18.33	18.25		
10	256QAM	25	12	18.23	18.23	18.31	18.23	19.2	0
10	256QAM	25	25	18.21	18.36	18.29	18.21		
10	256QAM	50	0	18.15	18.20	18.25	18.19		
Channel									
Frequency (MHz)				3572.5	3573	3543	3572.5		
5	QPSK	1	0	18.12	18.27	18.31	18.37	19.2	0
5	QPSK	1	12	18.26	18.41	18.31	18.39		
5	QPSK	1	24	18.17	18.22	18.30	18.36		
5	QPSK	12	0	18.14	18.31	18.38	18.29	19.2	0
5	QPSK	12	7	18.06	18.38	18.20	18.16		
5	QPSK	12	13	18.13	18.28	18.30	18.21		
5	QPSK	25	0	18.15	18.32	18.28	18.23	19.2	0
5	16QAM	1	0	18.22	18.22	18.26	18.18		
5	16QAM	1	12	18.14	18.36	18.31	18.28	19.2	0
5	16QAM	1	24	18.26	18.35	18.32	18.27		
5	16QAM	12	0	18.09	18.28	18.35	18.15	19.2	0
5	16QAM	12	7	18.19	18.21	18.42	18.32		
5	16QAM	12	13	18.06	18.24	18.24	18.30		
5	16QAM	25	0	18.09	18.31	18.23	18.15	19.2	0
5	64QAM	1	0	18.18	18.30	18.29	18.17	19.2	0
5	64QAM	1	12	18.24	18.36	18.30	18.19		
5	64QAM	1	24	18.10	18.29	18.34	18.28		
5	64QAM	12	0	18.09	18.28	18.35	18.15	19.2	0
5	64QAM	12	7	18.17	18.17	18.30	18.36		
5	64QAM	12	13	18.05	18.19	18.41	18.30		
5	64QAM	25	0	18.11	18.33	18.29	18.17	19.2	0
5	256QAM	1	0	18.22	18.31	18.23	18.17		
5	256QAM	1	12	18.17	18.29	18.43	18.27	19.2	0
5	256QAM	1	24	18.11	18.31	18.29	18.24		
5	256QAM	12	0	18.16	18.37	18.13	18.22	19.2	0
5	256QAM	12	7	18.21	18.22	18.24	18.27		
5	256QAM	12	13	18.19	18.31	18.23	18.14		
5	256QAM	25	0	18.22	18.32	18.18	18.18		

Band 48_Ant 8									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Mid Ch. / Freq	Power High Ch. / Freq	Power High Ch. / Freq	Time-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				3530	3530	3541	3530		
20	QPSK	1	0	17.28	17.27	17.28	17.21	17.7	0
20	QPSK	1	49	17.25	17.32	17.26	17.24		
20	QPSK	1	99	17.30	17.27	17.25	17.09		
20	QPSK	50	0	17.33	17.25	17.25	17.15		
20	QPSK	15	24	17.28	17.18	17.21	17.06	17.7	0
20	QPSK	50	50	17.25	17.23	17.18	17.09		
20	QPSK	100	0	17.30	17.29	17.21	17.09		
20	16QAM	1	0	17.34	17.18	17.23	17.17	17.7	0



Reduced Power Mode for DSiE

GSM850_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (Mhz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.90	31.68	32.27	33.50	22.90	22.68	23.27	24.50
GPRS 1 Tx slots	31.88	31.65	32.24	33.50	22.88	22.65	23.24	24.50
GPRS 2 Tx slots	29.03	29.37	29.58	30.50	23.03	23.37	23.58	24.50
GPRS 3 Tx slots	27.82	27.93	27.92	28.80	23.56	23.67	23.66	24.54
GPRS 4 Tx slots	26.23	26.41	26.43	27.50	23.23	23.41	23.43	24.50
EDGE 1 Tx slot	25.13	25.25	25.56	26.50	16.13	16.25	16.56	17.50
EDGE 2 Tx slots	24.25	24.33	24.55	25.50	18.25	18.33	18.55	19.50
EDGE 3 Tx slots	22.51	22.31	22.72	23.50	18.25	18.33	18.46	19.24
EDGE 4 Tx slots	20.51	20.45	20.69	21.50	17.51	17.45	17.69	18.50

GSM1900_Ant 0 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (Mhz)	1850.2	1860	1909.8		1850.2	1860	1909.8	
GSM 1 Tx slot	28.65	28.83	28.85	30.50	19.65	19.83	19.85	21.50
GPRS 1 Tx slot	28.63	28.81	28.83	30.50	19.63	19.81	19.83	21.50
GPRS 2 Tx slots	26.61	26.48	26.50	27.50	20.61	20.48	20.50	21.50
GPRS 3 Tx slots	24.83	24.88	24.81	25.80	20.57	20.62	20.55	21.54
GPRS 4 Tx slots	23.40	23.41	23.27	24.50	20.40	20.41	20.27	21.50
EDGE 1 Tx slot	24.81	24.46	24.81	26.00	15.81	15.46	15.81	17.00
EDGE 2 Tx slots	23.51	23.61	23.31	25.00	17.51	17.61	17.31	19.00
EDGE 3 Tx slots	21.80	21.81	21.71	23.00	17.54	17.55	17.45	18.74
EDGE 4 Tx slots	19.81	19.77	19.71	21.50	16.81	16.77	16.71	18.50

Band TX Channel	WCDMA_II_Ant 0			Tune-up Limit (dBm)	WCDMA_II_Ant 1			Tune-up Limit (dBm)
	9262	9400	9538		9262	9400	9538	
Rx Channel	9662	9800	9938		9662	9800	9938	
Frequency (Mhz)	1852.4	1930	1907.6		1852.4	1930	1907.6	
3GPP Rel 99 AMR 12.2Kbps	19.40	19.43	19.42	20.70	22.40	22.43	22.39	24.00
3GPP Rel 99 RMC 12.2Kbps	19.43	19.48	19.38	20.70	22.44	22.45	22.40	24.00
3GPP Rel 6 HSDPA Subtest-1	18.39	18.19	18.38	19.70	21.45	21.53	21.43	23.00
3GPP Rel 6 HSDPA Subtest-2	18.26	18.34	18.40	19.70	21.45	21.50	21.41	23.00
3GPP Rel 6 HSDPA Subtest-3	17.78	17.68	17.73	19.20	20.91	20.99	20.93	22.50
3GPP Rel 6 HSDPA Subtest-4	17.91	17.78	17.46	19.20	20.92	21.06	20.91	22.50
3GPP Rel 6 DC-HSDPA Subtest-1	18.33	18.14	18.25	19.70	21.31	21.41	21.40	23.00
3GPP Rel 6 DC-HSDPA Subtest-2	18.20	18.19	18.34	19.70	21.41	21.42	21.35	23.00
3GPP Rel 6 DC-HSDPA Subtest-3	17.76	17.59	17.72	19.20	20.86	20.89	20.92	22.50
3GPP Rel 6 DC-HSDPA Subtest-4	17.67	17.48	17.44	19.20	20.84	20.90	20.87	22.50
3GPP Rel 6 HSUPA Subtest-1	18.45	18.27	18.51	19.70	21.44	21.43	21.43	23.00
3GPP Rel 6 HSUPA Subtest-2	16.44	16.32	16.45	17.70	19.54	19.48	19.53	21.00
3GPP Rel 6 HSUPA Subtest-3	17.39	17.11	17.42	18.70	20.51	20.49	20.49	22.00
3GPP Rel 6 HSUPA Subtest-4	16.46	16.30	16.44	17.70	19.49	19.50	19.49	21.00
3GPP Rel 6 HSUPA Subtest-5	18.45	18.25	18.44	19.70	21.50	21.40	21.50	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	17.20	17.14	17.18	18.20	19.69	19.87	19.76	21.50

Band TX Channel	WCDMA_IV_Ant 0			Tune-up Limit (dBm)	WCDMA_IV_Ant 1			Tune-up Limit (dBm)
	1312	1413	1513		1312	1413	1513	
Rx Channel	1537	1638	1738		1537	1638	1738	
Frequency (Mhz)	1122.4	1223.3	1323.6		1122.4	1223.3	1323.6	
3GPP Rel 99 AMR 12.2Kbps	20.06	20.31	20.22	21.20	20.50	20.69	20.64	21.90
3GPP Rel 99 RMC 12.2Kbps	20.14	20.32	20.26	21.20	20.58	20.71	20.66	21.90
3GPP Rel 6 HSDPA Subtest-1	19.12	19.39	19.27	20.20	19.55	19.74	19.67	20.90
3GPP Rel 6 HSDPA Subtest-2	19.11	19.39	19.17	20.20	19.57	19.86	19.67	20.90
3GPP Rel 6 HSDPA Subtest-3	18.65	18.89	18.75	19.70	19.11	19.35	19.27	20.40
3GPP Rel 6 HSDPA Subtest-4	18.58	18.87	18.62	19.70	19.13	19.35	19.14	20.40
3GPP Rel 6 DC-HSDPA Subtest-1	18.81	19.27	19.04	20.20	19.60	19.70	19.70	20.90
3GPP Rel 6 DC-HSDPA Subtest-2	18.87	19.25	19.18	20.20	19.65	19.58	19.39	20.90
3GPP Rel 6 DC-HSDPA Subtest-3	18.48	18.65	18.51	19.70	19.07	19.08	18.97	20.40
3GPP Rel 6 DC-HSDPA Subtest-4	18.32	18.68	18.45	19.70	18.93	19.12	18.98	20.40
3GPP Rel 6 HSUPA Subtest-1	19.35	19.42	19.25	20.20	19.71	19.79	19.66	20.90
3GPP Rel 6 HSUPA Subtest-2	17.37	17.36	17.24	18.20	17.73	17.81	17.75	18.90
3GPP Rel 6 HSUPA Subtest-3	18.25	18.34	18.32	19.20	18.81	18.73	18.68	19.90
3GPP Rel 6 HSUPA Subtest-4	17.20	17.34	17.24	18.20	17.76	17.85	17.78	18.90
3GPP Rel 6 HSUPA Subtest-5	19.27	19.35	19.23	20.20	19.79	19.78	19.72	20.90
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	18.12	18.14	18.03	18.70	18.02	18.25	18.29	19.40

Band TX Channel	WCDMA_V_Ant 0			Tune-up Limit (dBm)	WCDMA_V_Ant 1			Tune-up Limit (dBm)
	4132	4182	4233		4132	4182	4233	
Rx Channel	4357	4407	4458		4357	4407	4458	
Frequency (Mhz)	826.4	836.4	846.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	22.13	22.25	22.22	24.00	22.48	22.62	22.60	24.00
3GPP Rel 99 RMC 12.2Kbps	22.15	22.27	22.25	24.00	22.50	22.65	22.62	24.00
3GPP Rel 6 HSDPA Subtest-1	21.19	21.26	21.30	23.00	21.54	21.67	21.77	23.00
3GPP Rel 6 HSDPA Subtest-2	21.14	21.27	21.33	23.00	21.54	21.68	21.74	23.00
3GPP Rel 6 HSDPA Subtest-3	20.65	20.74	20.65	22.50	20.90	21.11	21.26	22.50
3GPP Rel 6 HSDPA Subtest-4	20.65	20.74	20.77	22.50	21.00	21.16	21.25	22.50
3GPP Rel 6 DC-HSDPA Subtest-1	21.10	21.21	21.02	23.00	21.73	21.69	21.72	23.00
3GPP Rel 6 DC-HSDPA Subtest-2	21.06	21.13	21.09	23.00	21.63	21.68	21.67	23.00
3GPP Rel 6 DC-HSDPA Subtest-3	20.53	20.69	20.58	22.50	21.21	21.20	21.08	22.50
3GPP Rel 6 DC-HSDPA Subtest-4	20.70	20.71	20.59	22.50	21.11	21.17	21.03	22.50
3GPP Rel 6 HSUPA Subtest-1	21.12	21.22	21.28	23.00	21.70	21.68	21.75	23.00
3GPP Rel 6 HSUPA Subtest-2	19.14	19.26	19.29	21.00	19.66	19.64	19.74	21.00
3GPP Rel 6 HSUPA Subtest-3	20.14	20.23	20.30	22.00	20.65	20.64	20.70	22.00
3GPP Rel 6 HSUPA Subtest-4	19.14	19.23	19.28	21.00	19.56	19.66	19.74	21.00
3GPP Rel 6 HSUPA Subtest-5	21.10	21.20	21.30	23.00	21.50	21.60	21.70	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	19.54	19.66	19.60	21.50	20.06	20.15	20.03	21.50



Band 2_Ant 0									
BW (MHz)	Modulation	RB (MHz)	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up (min)	MFR (dB)	MFR (dB)
Channel									
20	QPSK	1	0	19.42	19.46	19.41	20.0	0	
20	QPSK	1	49	19.52	19.55	19.50	20.0	0	
20	QPSK	1	97	19.57	19.57	19.57	20.0	0	
20	QPSK	50	0	19.41	19.52	19.47	20.0	0	
20	QPSK	50	24	19.38	19.39	19.39	20.0	0	
20	QPSK	50	49	19.47	19.43	19.44	20.0	0	
20	QPSK	100	0	19.40	19.50	19.45	20.0	0	
20	HQAM	1	0	19.42	19.46	19.44	20.0	0	
20	HQAM	1	49	19.49	19.40	19.42	20.0	0	
20	HQAM	50	0	19.38	19.44	19.43	20.0	0	
20	HQAM	50	24	19.43	19.40	19.43	20.0	0	
20	HQAM	50	49	19.42	19.39	19.42	20.0	0	
20	HQAM	100	0	19.47	19.40	19.39	20.0	0	
20	HQAM	100	0	19.53	19.40	19.37	20.0	0	
20	HQAM	1	49	19.39	19.48	19.40	20.0	0	
20	HQAM	1	99	19.42	19.47	19.38	20.0	0	
20	HQAM	50	24	19.38	19.45	19.40	20.0	0	
20	HQAM	50	49	19.39	19.43	19.38	20.0	0	
20	HQAM	100	0	19.47	19.40	19.37	20.0	0	
20	HQAM	100	0	19.53	19.40	19.37	20.0	0	
Channel									
20	QPSK	1	0	18.72	18.75	18.65	20.0	0.9	
20	QPSK	1	49	18.52	18.58	18.58	20.0	0.9	
20	QPSK	1	97	18.58	18.58	18.58	20.0	0.9	
20	QPSK	50	0	18.47	18.50	18.51	20.0	0.9	
20	QPSK	50	24	18.47	18.58	18.58	20.0	0.9	
20	QPSK	50	49	18.48	18.48	18.46	20.0	0.9	
20	QPSK	100	0	18.42	18.64	18.41	20.0	0.9	
20	QPSK	100	0	18.79	18.60	18.55	20.0	0.9	
Channel									
15	QPSK	1	0	19.36	19.33	19.38	20.0	0	
15	QPSK	1	47	19.45	19.50	19.39	20.0	0	
15	QPSK	1	93	19.36	19.33	19.33	20.0	0	
15	QPSK	36	0	19.29	19.38	19.46	20.0	0	
15	QPSK	36	20	19.32	19.21	19.36	20.0	0	
15	QPSK	36	40	19.37	19.21	19.36	20.0	0	
15	QPSK	78	0	19.37	19.48	19.45	20.0	0	
15	HQAM	1	0	19.42	19.43	19.41	20.0	0	
15	HQAM	1	47	19.47	19.43	19.43	20.0	0	
15	HQAM	1	93	19.36	19.39	19.31	20.0	0	
15	HQAM	36	0	19.29	19.38	19.29	20.0	0	
15	HQAM	36	20	19.31	19.28	19.32	20.0	0	
15	HQAM	36	40	19.36	19.32	19.38	20.0	0	
15	HQAM	78	0	19.33	19.39	19.32	20.0	0	
15	HQAM	78	0	19.41	19.39	19.33	20.0	0	
15	HQAM	1	47	19.29	19.41	19.29	20.0	0	
15	HQAM	1	74	19.34	19.36	19.34	20.0	0	
15	HQAM	36	20	19.31	19.28	19.32	20.0	0	
15	HQAM	36	40	19.32	19.30	19.35	20.0	0	
15	HQAM	78	0	19.27	19.37	19.32	20.0	0	
15	HQAM	78	0	19.38	19.37	19.32	20.0	0	
15	HQAM	1	47	18.48	18.56	18.47	20.0	0.9	
15	HQAM	1	93	18.48	18.45	18.47	20.0	0.9	
15	HQAM	36	0	18.34	18.44	18.29	20.0	0.9	
15	HQAM	36	20	18.37	18.29	18.31	20.0	0.9	
15	HQAM	36	40	18.38	18.29	18.31	20.0	0.9	
15	HQAM	78	0	18.37	18.42	18.28	20.0	0.9	
Channel									
10	QPSK	1	0	19.33	19.32	19.30	20.0	0	
10	QPSK	1	25	19.45	19.46	19.38	20.0	0	
10	QPSK	1	50	19.33	19.33	19.33	20.0	0	
10	QPSK	26	0	19.41	19.37	19.44	20.0	0	
10	QPSK	26	12	19.31	19.32	19.25	20.0	0	
10	QPSK	26	25	19.37	19.32	19.32	20.0	0	
10	QPSK	50	0	19.48	19.37	19.44	20.0	0	
10	HQAM	1	0	19.38	19.34	19.43	20.0	0	
10	HQAM	1	49	19.42	19.38	19.38	20.0	0	
10	HQAM	26	0	19.28	19.29	19.39	20.0	0	
10	HQAM	26	12	19.29	19.42	19.32	20.0	0	
10	HQAM	26	25	19.37	19.28	19.31	20.0	0	
10	HQAM	50	0	19.45	19.30	19.26	20.0	0	
10	HQAM	50	0	19.44	19.39	19.27	20.0	0	
10	HQAM	1	49	19.30	19.34	19.27	20.0	0	
10	HQAM	1	25	19.33	19.41	19.26	20.0	0	
10	HQAM	1	50	19.34	19.33	19.39	20.0	0	
10	HQAM	26	12	19.23	19.44	19.39	20.0	0	
10	HQAM	26	25	19.34	19.33	19.39	20.0	0	
10	HQAM	50	0	18.51	18.59	18.41	20.0	0.9	
10	HQAM	1	25	18.38	18.46	18.44	20.0	0.9	
10	HQAM	1	50	18.48	18.52	18.52	20.0	0.9	
10	HQAM	26	0	18.34	18.36	18.45	20.0	0.9	
10	HQAM	26	12	18.37	18.45	18.29	20.0	0.9	
10	HQAM	26	25	18.29	18.45	18.29	20.0	0.9	
10	HQAM	50	0	18.51	18.59	18.41	20.0	0.9	
Channel									
5	QPSK	1	0	19.37	19.45	19.36	20.0	0	
5	QPSK	1	12	19.44	19.47	19.40	20.0	0	
5	QPSK	1	24	19.37	19.37	19.37	20.0	0	
5	QPSK	12	0	19.33	19.45	19.44	20.0	0	
5	QPSK	12	7	19.36	19.30	19.30	20.0	0	
5	QPSK	12	14	19.39	19.39	19.39	20.0	0	
5	QPSK	26	0	19.34	19.38	19.35	20.0	0	
5	HQAM	1	0	19.42	19.41	19.35	20.0	0	
5	HQAM	1	12	19.39	19.34	19.33	20.0	0	
5	HQAM	1	24	19.41	19.29	19.29	20.0	0	
5	HQAM	12	0	19.31	19.25	19.36	20.0	0	
5	HQAM	12	7	19.38	19.41	19.28	20.0	0	
5	HQAM	12	14	19.31	19.38	19.27	20.0	0	
5	HQAM	26	0	19.34	19.32	19.29	20.0	0	
5	HQAM	26	7	19.37	19.42	19.27	20.0	0	
5	HQAM	1	24	19.36	19.42	19.31	20.0	0	
5	HQAM	1	12	19.41	19.39	19.33	20.0	0	
5	HQAM	12	7	19.27	19.35	19.48	20.0	0	
5	HQAM	12	14	19.26	19.36	19.31	20.0	0	
5	HQAM	26	0	19.40	19.39	19.25	20.0	0	
5	HQAM	26	7	19.42	18.51	18.53	20.0	0.9	
5	HQAM	26	14	19.38	18.52	18.51	20.0	0.9	
5	HQAM	12	0	18.38	18.52	18.27	20.0	0.9	
5	HQAM	12	7	18.47	18.53	18.34	20.0	0.9	
5	HQAM	12	14	18.29	18.45	18.29	20.0	0.9	
5	HQAM	26	0	18.40	18.40	18.24	20.0	0.9	
Channel									
3	QPSK	1	0	19.35	19.36	19.35	20.0	0	
3	QPSK	1	8	19.38	19.51	19.46	20.0	0	
3	QPSK	1	16	19.35	19.35	19.35	20.0	0	
3	QPSK	8	0	19.30	19.48	19.38	20.0	0	
3	QPSK	8	4	19.30	19.22	19.30	20.0	0	
3	QPSK	8	8	19.34	19.33	19.33	20.0	0	
3	QPSK	16	0	19.40	19.38	19.34	20.0	0	
3	HQAM	1	0	19.42	19.42	19.35	20.0	0	
3	HQAM	1	8	19.40	19.39	19.38	20.0	0	
3	HQAM	1	16	19.45	19.29	19.35	20.0	0	
3	HQAM	8	0	19.30	19.42	19.37	20.0	0	
3	HQAM	8	4	19.30	19.34	19.28	20.0	0	
3	HQAM	8	8	19.40	19.38	19.35	20.0	0	
3	HQAM	16	0	19.42	19.38	19.34	20.0	0	
3	HQAM	16	0	19.48	19.39	19.38	20.0	0	
3	HQAM	8	4	19.30	19.34	19.28	20.0	0	
3	HQAM	8	8	19.37	19.37	19.37	20.0	0	
3	HQAM	16	0	19.40	19.38	19.35	20.0	0	
3	HQAM	16	0	19.46	19.39	19.38	20.0	0	
3	HQAM	1	16	19.45	19.29	19.35	20.0	0	
3	HQAM	8	7	19.40	19.38	19.35	20.0	0	
3	HQAM	8	16	19.33	19.27	19.26	20.0	0	
3									



Band 5_Ant 0										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch. (F/Hz)	Power Mide Ch. (F/Hz)	Power High Ch. (F/Hz)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.42	22.50	22.57				
10	QPSK	1	25	22.52	22.63	22.82	24	0		
10	QPSK	1	49	22.62	22.74	22.93				
10	QPSK	25	0	22.52	22.61	22.58				
10	QPSK	25	12	22.43	22.50	22.58	24	0		
10	QPSK	25	25	22.42	22.54	22.64				
10	QPSK	50	0	22.52	22.58	22.57				
10	HQAM	1	0	22.35	22.38	22.51	24	0		
10	HQAM	1	49	22.44	22.44	22.44				
10	HQAM	25	0	21.31	21.44	21.53	23	1		
10	HQAM	25	12	21.47	21.52	21.51				
10	HQAM	25	25	21.47	21.44	21.51				
10	HQAM	50	0	21.42	21.48	21.48				
10	HQAM	1	0	21.41	21.00	21.43	23	1		
10	HQAM	1	25	21.45	21.43	21.51				
10	HQAM	1	49	21.37	21.51	21.55	23	1		
10	HQAM	25	0	20.36	20.00	20.52	22	2		
10	HQAM	25	12	20.47	20.52	20.48				
10	HQAM	25	25	20.45	20.44	20.51				
10	HQAM	50	0	20.45	20.08	20.47				
10	SSBAM	1	0	18.71	18.62	18.78	20	4		
10	SSBAM	1	25	18.67	18.65	18.62				
10	SSBAM	1	49	18.63	18.61	18.60				
10	SSBAM	25	0	18.60	18.64	18.63				
10	SSBAM	25	12	18.68	18.68	18.68				
10	SSBAM	25	25	18.84	18.87	18.88	20	4		
10	SSBAM	50	0	18.80	18.88	18.81				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.42	22.42	22.52				
5	QPSK	1	12	22.48	22.60	22.58	24	0		
5	QPSK	1	24	22.43	22.54	22.48				
5	QPSK	12	0	22.44	22.67	22.58				
5	QPSK	12	7	22.38	22.44	22.50	24	0		
5	QPSK	12	14	22.42	22.54	22.44				
5	QPSK	25	0	22.40	22.47	22.54				
5	HQAM	1	0	22.27	22.33	22.44	24	0		
5	HQAM	1	24	22.37	22.34	22.36				
5	HQAM	12	0	21.27	21.38	21.44	23	1		
5	HQAM	12	7	21.36	21.53	21.48				
5	HQAM	12	13	21.43	21.34	21.42				
5	HQAM	25	0	21.38	21.37	21.40				
5	HQAM	25	7	21.32	21.33	21.31				
5	HQAM	1	12	21.32	21.33	21.42	23	1		
5	HQAM	1	24	21.29	21.43	21.47				
5	HQAM	12	7	20.47	20.33	20.42				
5	HQAM	12	13	20.40	20.41	20.37	22	2		
5	HQAM	12	13	20.41	20.35	20.48				
5	HQAM	25	0	18.74	18.74	18.75	20	4		
5	SSBAM	1	0	18.74	18.74	18.75				
5	SSBAM	1	12	18.69	18.65	18.67				
5	SSBAM	1	24	18.60	18.63	18.68				
5	SSBAM	12	0	18.74	18.72	18.76				
5	SSBAM	12	7	18.67	18.68	18.68				
5	SSBAM	12	13	18.71	18.76	18.70	20	4		
5	SSBAM	25	0	18.78	18.85	18.87				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.33	22.39	22.53				
3	QPSK	1	8	22.48	22.58	22.48	24	0		
3	QPSK	1	16	22.42	22.54	22.48				
3	QPSK	8	0	22.38	22.39	22.52	24	0		
3	QPSK	8	8	22.44	22.46	22.44				
3	QPSK	16	0	22.43	22.56	22.46				
3	HQAM	1	0	22.30	22.31	22.39	24	0		
3	HQAM	1	14	22.31	22.29	22.33				
3	HQAM	8	0	21.31	21.38	21.43	23	1		
3	HQAM	8	4	21.38	21.46	21.42				
3	HQAM	8	7	21.38	21.37	21.46				
3	HQAM	15	0	21.37	21.38	21.44				
3	HQAM	1	0	21.38	21.38	21.32	23	1		
3	HQAM	1	8	21.33	21.31	21.42	23	1		
3	HQAM	1	16	21.28	21.40	21.52				
3	HQAM	8	0	20.34	20.38	20.47	22	2		
3	HQAM	8	4	20.40	20.44	20.37				
3	HQAM	8	7	20.42	20.37	20.41				
3	HQAM	15	0	20.35	20.41	20.38				
3	SSBAM	1	0	18.69	18.76	18.71	20	4		
3	SSBAM	1	8	18.65	18.61	18.64				
3	SSBAM	1	16	18.56	18.60	18.64				
3	SSBAM	8	0	18.69	18.77	18.76				
3	SSBAM	8	4	18.74	18.84	18.80				
3	SSBAM	8	7	18.75	18.79	18.78	20	4		
3	SSBAM	15	0	18.78	18.76	18.73				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.33	22.38	22.49				
1.4	QPSK	1	3	22.48	22.56	22.51	24	0		
1.4	QPSK	1	6	22.42	22.54	22.48				
1.4	QPSK	3	0	22.51	22.49	22.51				
1.4	QPSK	3	3	22.40	22.42	22.46	24	0		
1.4	QPSK	3	6	22.40	22.62	22.48	24	0		
1.4	HQAM	1	0	22.25	22.28	22.40	24	0		
1.4	HQAM	1	14	22.34	22.42	22.40				
1.4	HQAM	1	28	22.38	22.34	22.35				
1.4	HQAM	3	0	22.40	22.49	22.52	24	0		
1.4	HQAM	3	14	22.44	22.44	22.49				
1.4	HQAM	3	28	22.48	22.49	22.49				
1.4	HQAM	6	0	21.32	21.39	21.43	23	1		
1.4	HQAM	6	7	21.37	21.39	21.34				
1.4	HQAM	6	14	21.40	21.40	21.44				
1.4	HQAM	1	0	21.28	21.43	21.50	23	1		
1.4	HQAM	1	14	21.33	21.43	21.43				
1.4	HQAM	3	1	21.33	21.33	21.34				
1.4	HQAM	3	7	21.42	21.38	21.43	22	2		
1.4	HQAM	3	14	20.38	20.38	20.37				
1.4	SSBAM	1	0	18.73	18.74	18.74	20	4		
1.4	SSBAM	1	7	18.74	18.68	18.64				
1.4	SSBAM	1	14	18.67	18.60	18.52				
1.4	SSBAM	3	0	18.70	18.78	18.74	20	4		
1.4	SSBAM	3	7	18.76	18.82	18.78				
1.4	SSBAM	3	14	18.80	18.84	18.73				
1.4	SSBAM	6	0	18.78	18.79	18.73	20	4		

Band 5_Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch. (F/Hz)	Power Mide Ch. (F/Hz)	Power High Ch. (F/Hz)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.42	22.55	22.58				
10	QPSK	1	25	22.53	22.64	22.82	24	0		
10	QPSK	1	49	22.62	22.74	22.93				
10	QPSK	25	0	22.52	22.62	22.51				
10	QPSK	25	12	22.44	22.54	22.58	24	0		
10	QPSK	25	25	22.42	22.54	22.64				
10	QPSK	50	0	22.52	22.58	22.56				
10	HQAM	1	0	22.45	22.49	22.42	24	0		
10	HQAM	1	49	22.45	22.33	22.53				
10	HQAM	25	0	22.41	22.37	22.45				
10	HQAM	25	12	21.65	21.13	21.24	23	1		
10	HQAM	25	25	21.20	21.07	21.22				
10	HQAM	50	0	21.18	21.22	21.21				
10	HQAM	50	25	21.18	21.22	21.15				
10	HQAM	1	0	21.45	21.53	21.64	23	1		
10	HQAM	1	25	21.57	21.83	21.77				
10	HQAM	1	49	21.48	21.83	21.83	23	1		
10	HQAM	25	0	20.33	20.34	20.44	22	2		
10	HQAM	25	12	20.37	20.43	20.41				
10	HQAM	25	25	20.37	20.38	20.41				



Band 12 Ant 0										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch. (Freq.)	Power Mid Ch. (Freq.)	Power High Ch. (Freq.)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.78	22.85	22.85				
10	QPSK	1	25	22.65	22.64	22.91	24	0		
10	QPSK	1	49	22.62	22.62	22.88				
10	QPSK	25	0	22.81	22.81	22.52				
10	QPSK	25	12	22.87	22.84	22.80	24	0		
10	QPSK	25	25	22.84	22.87	22.88				
10	QPSK	50	0	22.80	22.87	22.91				
10	HQAM	1	0	22.79	22.86	22.78	24	0		
10	HQAM	1	25	22.82	22.82	22.82				
10	HQAM	1	49	22.80	22.86	22.71				
10	HQAM	25	0	22.64	22.14	22.15				
10	HQAM	25	12	22.10	22.18	22.00				
10	HQAM	25	25	22.18	22.23	22.25	23	1		
10	HQAM	50	0	22.11	22.15	22.14				
10	HQAM	1	25	22.82	22.87	22.82	23	1		
10	HQAM	1	49	22.28	22.38	22.48				
10	HQAM	25	0	21.90	21.10	21.14				
10	HQAM	25	12	21.13	21.18	21.16				
10	HQAM	25	25	21.11	21.18	21.22	22	2		
10	HQAM	50	0	21.13	21.11	21.18				
10	SSQAM	1	0	19.21	19.23	19.19				
10	SSQAM	1	25	19.16	19.22	19.31	20	4		
10	SSQAM	1	49	19.15	19.19	19.18				
10	SSQAM	25	0	19.30	19.36	19.30				
10	SSQAM	25	12	19.28	19.24	19.24	20	4		
10	SSQAM	25	25	19.38	19.34	19.30				
10	SSQAM	50	0	19.27	19.30	19.26				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.73	22.77	22.82				
5	QPSK	1	12	22.69	22.83	22.86	24	0		
5	QPSK	1	24	22.84	22.84	22.84				
5	QPSK	12	0	22.88	22.83	22.85				
5	QPSK	12	7	22.80	22.84	22.85	24	0		
5	QPSK	12	12	22.82	22.82	22.82				
5	QPSK	25	0	22.80	22.87	22.84				
5	HQAM	1	0	22.70	22.74	22.74	24	0		
5	HQAM	1	24	22.82	22.82	22.82				
5	HQAM	1	24	22.73	22.88	22.59				
5	HQAM	12	0	21.94	22.05	22.08				
5	HQAM	12	7	21.97	21.89	21.86				
5	HQAM	12	13	22.00	22.15	22.14	23	1		
5	HQAM	25	0	22.60	22.07	22.04				
5	HQAM	25	12	22.02	22.09	22.14				
5	HQAM	1	12	22.10	22.42	22.29	23	1		
5	HQAM	1	24	22.20	22.36	22.43				
5	HQAM	12	0	21.90	21.98	21.10				
5	HQAM	12	7	21.10	21.08	21.09	22	2		
5	HQAM	12	13	21.06	21.10	21.15				
5	SSQAM	1	0	19.12	19.17	19.14				
5	SSQAM	1	12	19.21	19.22	19.22	20	4		
5	SSQAM	1	24	19.27	19.13	19.07				
5	SSQAM	12	0	19.25	19.24	19.23				
5	SSQAM	12	7	19.27	19.23	19.20	20	4		
5	SSQAM	12	13	19.18	19.22	19.19				
5	SSQAM	25	0	19.22	19.25	19.21				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.87	22.79	22.75				
3	QPSK	1	8	22.88	22.69	22.87	24	0		
3	QPSK	1	16	22.81	22.81	22.81				
3	QPSK	8	0	22.84	22.83	22.83				
3	QPSK	8	4	22.81	22.82	22.78	24	0		
3	QPSK	16	0	22.82	22.88	22.86				
3	QPSK	16	8	22.84	22.84	22.86				
3	HQAM	1	0	22.71	22.79	22.73	24	0		
3	HQAM	1	14	22.72	22.82	22.77				
3	HQAM	1	14	22.72	22.77	22.88				
3	HQAM	8	0	22.61	22.09	22.10				
3	HQAM	8	4	22.09	22.10	22.17				
3	HQAM	8	7	22.14	22.14	22.20	23	1		
3	HQAM	15	0	22.04	22.04	22.08				
3	HQAM	1	0	22.98	22.21	22.13				
3	HQAM	1	8	22.18	22.41	22.27	23	1		
3	HQAM	1	16	22.16	22.29	22.43				
3	HQAM	8	0	22.07	21.07	21.08	22	2		
3	HQAM	8	4	21.09	21.08	21.10				
3	SSQAM	1	0	19.13	19.13	19.08				
3	SSQAM	1	8	19.26	19.25	19.22	20	4		
3	SSQAM	1	16	19.16	19.13	19.12				
3	SSQAM	8	0	19.24	19.22	19.28				
3	SSQAM	8	4	19.10	19.13	19.19	20	4		
3	SSQAM	8	7	19.22	19.22	19.18				
3	SSQAM	15	0	19.23	19.18	19.18				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.73	22.76	22.76				
1.4	QPSK	1	3	22.83	22.83	22.83	24	0		
1.4	QPSK	1	6	22.83	22.84	22.87				
1.4	QPSK	3	0	22.82	22.87	22.87				
1.4	QPSK	3	1	22.83	22.84	22.84	24	0		
1.4	QPSK	3	3	22.81	22.86	22.83				
1.4	QPSK	6	0	22.88	22.81	22.79	24	0		
1.4	HQAM	1	0	22.72	22.83	22.71				
1.4	HQAM	1	3	22.77	22.82	22.78				
1.4	HQAM	1	6	22.78	22.74	22.81	24	0		
1.4	HQAM	3	0	22.77	22.86	22.82				
1.4	HQAM	3	1	22.86	22.83	22.84	1	0		
1.4	HQAM	3	3	22.72	22.81	22.86				
1.4	HQAM	6	0	22.85	22.59	22.59	23	1		
1.4	HQAM	1	0	22.67	22.30	22.22				
1.4	HQAM	1	3	22.12	22.41	22.24				
1.4	HQAM	1	6	22.24	22.33	22.37	23	1		
1.4	HQAM	3	0	22.91	22.32	22.84				
1.4	HQAM	3	1	22.13	22.28	22.16				
1.4	HQAM	6	0	21.16	22.41	22.29	22	2		
1.4	HQAM	6	0	21.16	21.01	21.10				
1.4	SSQAM	1	0	19.13	19.15	19.08				
1.4	SSQAM	1	3	19.26	19.21	19.22	20	4		
1.4	SSQAM	1	6	19.14	19.13	19.07				
1.4	SSQAM	3	0	19.20	19.22	19.22				
1.4	SSQAM	3	1	19.16	19.21	19.23	20	4		
1.4	SSQAM	3	3	19.22	19.25	19.23				
1.4	SSQAM	6	0	19.20	19.25	19.19	20	4		

Band 12 Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch. (Freq.)	Power Mid Ch. (Freq.)	Power High Ch. (Freq.)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.71	22.71	22.78				
10	QPSK	1	25	22.68	22.61	22.86	24	0		
10	QPSK	1	49	22.62	22.62	22.88				
10	QPSK	25	0	22.85	22.85	22.52				
10	QPSK	25	12	22.80	22.86	22.80	24	0		
10	QPSK	25	25	22.77	22.83	22.77				
10	QPSK	50	0	22.88	22.88	22.84				
10	HQAM	1	0	22.77	22.80	22.77	24	0		
10	HQAM	1	25	22.77	22.82	22.81				
10	HQAM	1	49	22.81	22.77	22.82				
10	HQAM	25	0	21.68	21.70	21.76				
10	HQAM	25	12	21.69	21.78	21.83				
10	HQAM	25	25	21.78	21.82	21.88	23	1		
10	HQAM	50	0	21.78	21.72	21.81				
10	HQAM	1	25	21.88	21.91	21.96				
10	HQAM	1	25	21.89	22.04	22.15	23	1		
10	HQAM	1	49	21.96	22.02	22.17				
10	HQAM	25	0	20.98	20.71	20.72				
10	HQAM	25	12	20.84	20.77	20.79				
10	HQAM	25	25							



Band 14_Ant 0									
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. (Freq)	Power Mid Ch. (Freq)	Power High Ch. (Freq)	Tuneup (int. (dB))	MFR (dB)	
Channel									
2350									
Frequency (MHz)									
10	QPSK	1	0	22.69					
10	QPSK	1	25	22.78			24	0	
10	QPSK	1	49	22.81					
10	QPSK	25	0	22.74					
10	QPSK	25	12	22.73			24	0	
10	QPSK	25	25	22.88					
10	QPSK	50	0	22.71					
10	HQAM	1	0	22.64			24	0	
10	HQAM	1	25	22.83					
10	HQAM	1	49	22.89					
10	HQAM	25	0	22.69					
10	HQAM	25	12	22.14			23	1	
10	HQAM	25	25	22.17					
10	HQAM	50	0	22.10					
10	HQAM	1	0	22.04					
10	HQAM	1	25	22.25			23	1	
10	HQAM	1	49	22.02					
10	HQAM	25	0	21.10					
10	HQAM	25	12	21.11			22	2	
10	HQAM	25	25	21.11					
10	HQAM	50	0	21.13					
10	SSBQAM	1	0	19.38					
10	SSBQAM	1	25	19.31			20	4	
10	SSBQAM	1	49	19.35					
10	SSBQAM	25	0	19.20					
10	SSBQAM	25	12	19.21			20	4	
10	SSBQAM	25	25	19.25					
10	SSBQAM	50	0	19.17					
Channel									
2355									
Frequency (MHz)									
5	QPSK	1	0	22.61	22.61	22.64			
5	QPSK	1	12	22.60	22.69	22.68	24	0	
5	QPSK	1	24	22.40	22.52	22.50			
5	QPSK	12	0	22.66	22.63	22.65			
5	QPSK	12	7	22.61	22.62	22.68	24	0	
5	QPSK	12	13	22.68	22.62	22.61			
5	QPSK	25	0	22.67	22.68	22.63			
5	HQAM	1	0	22.58	22.52	22.54	24	0	
5	HQAM	1	12	22.50	22.62	22.59			
5	HQAM	1	24	22.62	22.65	22.65			
5	HQAM	12	0	22.64	22.64	21.98			
5	HQAM	12	7	22.60	22.10	22.02	23	1	
5	HQAM	12	13	22.10	22.10	22.13			
5	HQAM	25	0	22.62	21.99	22.07			
5	HQAM	1	0	21.94	21.98	21.93			
5	HQAM	1	12	21.92	21.98	22.01	23	1	
5	HQAM	1	24	21.95	21.92	21.97			
5	HQAM	12	0	21.94	21.06	20.95			
5	HQAM	12	7	21.91	21.98	21.91	22	2	
5	HQAM	12	13	21.91	21.98	21.91			
5	HQAM	25	0	21.95	20.99	21.05			
5	SSBQAM	1	0	19.20	19.20	19.25			
5	SSBQAM	1	12	19.26	19.26	19.22	20	4	
5	SSBQAM	1	24	19.21	19.26	19.24			
5	SSBQAM	12	0	19.13	19.12	19.11			
5	SSBQAM	12	7	19.17	19.13	19.16	20	4	
5	SSBQAM	12	13	19.13	19.15	19.16			
5	SSBQAM	25	0	19.10	19.06	19.06			

Band 14_Ant 1									
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. (Freq)	Power Mid Ch. (Freq)	Power High Ch. (Freq)	Tuneup (int. (dB))	MFR (dB)	
Channel									
2350									
Frequency (MHz)									
10	QPSK	1	0	22.45					
10	QPSK	1	25	22.58			24	0	
10	QPSK	1	49	22.53					
10	QPSK	25	0	22.67					
10	QPSK	25	12	22.64			24	0	
10	QPSK	25	25	22.81					
10	QPSK	50	0	22.64					
10	HQAM	1	0	22.49			24	0	
10	HQAM	1	25	22.48					
10	HQAM	1	49	22.45					
10	HQAM	25	0	21.77					
10	HQAM	25	12	21.78			23	1	
10	HQAM	25	25	21.85					
10	HQAM	50	0	21.72					
10	HQAM	1	0	22.04					
10	HQAM	1	25	22.17			23	1	
10	HQAM	1	49	21.99					
10	HQAM	25	0	20.73					
10	HQAM	25	12	20.78			22	2	
10	HQAM	25	25	20.82					
10	HQAM	50	0	20.72					
10	SSBQAM	1	0	19.95					
10	SSBQAM	1	25	19.95			20	4	
10	SSBQAM	1	49	19.93					
10	SSBQAM	25	0	19.97					
10	SSBQAM	25	12	19.88			20	4	
10	SSBQAM	25	25	19.83					
10	SSBQAM	50	0	19.88					
Channel									
2355									
Frequency (MHz)									
5	QPSK	1	0	22.42	22.36	22.39			
5	QPSK	1	12	22.50	22.51	22.50	24	0	
5	QPSK	1	24	22.43	22.42	22.41			
5	QPSK	12	0	22.50	22.54	22.53			
5	QPSK	12	7	22.40	22.48	22.51	24	0	
5	QPSK	12	13	22.42	22.42	22.42			
5	QPSK	25	0	22.40	22.42	22.43			
5	HQAM	1	0	22.37	22.37	22.46	24	0	
5	HQAM	1	12	22.40	22.38	22.45			
5	HQAM	1	24	22.38	22.34	22.38			
5	HQAM	12	0	21.71	21.67	21.65			
5	HQAM	12	7	21.71	21.66	21.68	23	1	
5	HQAM	12	13	21.77	21.74	21.77			
5	HQAM	25	0	21.66	21.67	21.64			
5	HQAM	1	0	21.92	21.94	21.98			
5	HQAM	1	12	22.10	22.08	22.10	23	1	
5	HQAM	1	24	21.91	21.93	21.91			
5	HQAM	12	0	20.99	20.98	20.92			
5	HQAM	12	7	20.70	20.65	20.64	22	2	
5	HQAM	12	13	20.76	20.70	20.72			
5	SSBQAM	1	0	19.80	19.90	19.96			
5	SSBQAM	1	12	19.87	19.91	19.90	20	4	
5	SSBQAM	1	24	19.83	19.82	19.90			
5	SSBQAM	12	0	19.80	19.80	19.85			
5	SSBQAM	12	7	19.80	19.83	19.83	20	4	
5	SSBQAM	12	13	19.83	19.85	19.88			
5	SSBQAM	25	0	19.78	19.85	19.80			

Band 17_Ant 0									
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. (Freq)	Power Mid Ch. (Freq)	Power High Ch. (Freq)	Tuneup (int. (dB))	MFR (dB)	
Channel									
2370									
Frequency (MHz)									
10	QPSK	1	0	22.72	22.71	22.75			
10	QPSK	1	25	22.61	22.66	22.92	24	0	
10	QPSK	1	49	22.63	22.89	22.85			
10	QPSK	25	0	22.85	22.84	22.82			
10	QPSK	25	12	22.83	22.81	22.80	24	0	
10	QPSK	25	25	22.82	22.85	22.75			
10	QPSK	50	0	22.85	22.81	22.88			
10	HQAM	1	0	22.71	22.66	22.83	24	0	
10	HQAM	1	25	22.82	22.84	22.85			
10	HQAM	1	49	22.89	22.84	22.85			
10	HQAM	25	0	22.61	22.63	22.65			
10	HQAM	25	12	22.17	22.14	22.12	23	1	
10	HQAM	25	25	22.13	22.18	22.15			
10	HQAM	50	0	22.07	22.08	22.07			
10	HQAM	1	0	22.21	22.23	22.13			
10	HQAM	1	25	22.32	22.35	22.37	23	1	
10	HQAM	1	49	22.38	22.40	22.27			
10	HQAM	25	0	21.98	21.94	21.92			
10	HQAM	25	12	21.10	21.11	21.10	22	2	
10	HQAM	25	25	21.14	21.13	21.13			
10	HQAM	50	0	21.98	21.98	21.97			
10	SSBQAM	1	0	19.11	19.13	19.11			
10	SSBQAM	1	25	19.36	19.46	19.42	20	4	
10	SSBQAM	1	49	19.36	19.30	19.23			
10	SSBQAM	25	0	19.13	19.15	19.10			
10	SSBQAM	25	12	19.18	19.27	19.19	20	4	
10	SSBQAM	25	25	19.20	19.23	19.21			
10	SSBQAM	50	0	19.09	19.14				



Band 25_Ant 0													
BW (MHz)	Modulation	RB Freq	RB Offset	Power Low Ch / Freq	Power Nch Ch / Freq	Power Hch / Freq	Turn-up time (sec)	MPR (dB)					
		Channel	2160	2340	2520								
		Frequency (MHz)	1860	1980	2100								
20	QPSK	1	0	19.59	19.73	19.88							
20	QPSK	1	49	19.72	19.87	19.75	20.9	0					
20	QPSK	1	99	19.59	19.73	19.88							
20	QPSK	50	0	19.66	19.82	19.66							
20	QPSK	50	24	19.62	19.78	19.87	20.9	0					
20	QPSK	50	50	19.66	19.82	19.66							
20	QPSK	100	0	19.58	19.80	19.68							
20	16QAM	1	0	19.59	19.81	19.83	20.9	0					
20	16QAM	1	49	19.62	19.78	19.81							
20	16QAM	1	99	19.66	19.85	19.69							
20	16QAM	50	0	19.67	19.84	19.73							
20	16QAM	50	24	19.66	19.82	19.72							
20	16QAM	50	50	19.65	19.79	19.82	20.9	0					
20	16QAM	100	0	19.58	19.75	19.85							
20	16QAM	100	24	19.60	19.74	19.81							
20	16QAM	1	49	19.60	19.85	19.59	20.9	0					
20	64QAM	1	99	19.71	19.74	19.69							
20	64QAM	50	0	19.64	19.82	19.69							
20	64QAM	50	24	19.69	19.82	19.69							
20	64QAM	50	50	19.64	19.82	19.69	20.9	0					
20	256QAM	1	0	19.38	19.58	18.48							
20	256QAM	1	49	18.19	18.39	18.46	20	0.9					
20	256QAM	1	99	18.27	18.52	18.22							
20	256QAM	50	0	19.25	18.53	18.36							
20	256QAM	50	24	18.23	18.47	18.33							
20	256QAM	50	50	18.20	18.47	18.33	20	0.9					
20	256QAM	100	0	18.26	18.38	18.28							
		Channel	2160	2340	2520								
		Frequency (MHz)	1860	1980	2100								
15	QPSK	1	0	19.55	19.58	19.57							
15	QPSK	1	37	19.57	19.77	19.82	20.9	0					
15	QPSK	1	74	19.56	19.62	19.62							
15	QPSK	36	0	19.59	19.70	19.57							
15	QPSK	36	20	19.58	19.65	19.61	20.9	0					
15	QPSK	36	40	19.56	19.68	19.61							
15	QPSK	75	0	19.48	19.73	19.54							
15	16QAM	1	0	19.44	19.74	19.58	20.9	0					
15	16QAM	1	37	19.52	19.72	19.67							
15	16QAM	1	74	19.53	19.71	19.68							
15	16QAM	36	0	19.55	19.72	19.65							
15	16QAM	36	20	19.52	19.68	19.67	20.9	0					
15	16QAM	36	39	19.52	19.75	19.53							
15	16QAM	75	0	19.47	19.62	19.60							
15	64QAM	1	49	19.49	19.62	19.55							
15	64QAM	1	37	19.48	19.74	19.55	20	0					
15	64QAM	1	74	19.44	19.67	19.59							
15	64QAM	36	0	19.55	19.67	19.54							
15	64QAM	36	20	19.56	19.65	19.54	20	0					
15	64QAM	36	39	19.51	19.67	19.44							
15	64QAM	75	0	19.55	19.63	19.59							
15	256QAM	1	0	18.31	18.47	18.44							
15	256QAM	1	37	18.20	18.31	18.27	20	0.9					
15	256QAM	1	74	18.31	18.34	18.33							
15	256QAM	36	0	18.22	18.46	18.36							
15	256QAM	36	20	18.24	18.37	18.32	20	0.9					
15	256QAM	36	39	18.12	18.47	18.37							
15	256QAM	75	0	18.24	18.34	18.23							
		Channel	2160	2340	2520								
		Frequency (MHz)	1860	1980	2100								

Band 25_Ant 1													
BW (MHz)	Modulation	RB Freq	RB Offset	Power Low Ch / Freq	Power Nch Ch / Freq	Power Hch / Freq	Turn-up time (sec)	MPR (dB)					
		Channel	2160	2340	2520								
		Frequency (MHz)	1860	1980	2100								
20	QPSK	1	0	20.89	20.97	20.78							
20	QPSK	1	49	20.81	21.08	20.95	22.5	0					
20	QPSK	1	99	20.86	21.08	20.78							
20	QPSK	50	0	20.70	21.04	20.78							
20	QPSK	50	24	20.77	21.01	20.81	22.5	0					
20	QPSK	50	50	20.77	21.02	20.81							
20	QPSK	100	0	20.90	20.95	20.84							
20	16QAM	1	0	20.83	20.92	20.84	22.5	0					
20	16QAM	1	49	20.85	21.02	20.92							
20	16QAM	1	99	20.81	20.92	20.88							
20	16QAM	50	0	20.34	20.44	20.60							
20	16QAM	50	24	20.43	20.53	20.58							
20	16QAM	50	50	20.39	20.41	20.63	22	0.5					
20	16QAM	100	0	20.42	20.48	20.70							
20	16QAM	100	24	20.53	20.59	20.68							
20	64QAM	1	49	20.81	20.73	20.50	22	0.5					
20	64QAM	1	99	20.54	20.50	20.75							
20	64QAM	50	0	19.37	19.41	19.59							
20	64QAM	50	24	19.43	19.48	19.68	21	1.5					
20	64QAM	50	50	19.39	19.49	19.69							
20	256QAM	1	0	17.24	17.38	17.19							
20	256QAM	1	49	17.17	17.26	17.16	19	3.5					
20	256QAM	1	99	17.20	17.35	17.24							
20	256QAM	50	0	17.05	17.15	17.09							
20	256QAM	50	24	17.16	17.25	17.13	19	3.5					
20	256QAM	50	50	17.11	17.25	17.16							
20	256QAM	100	0	17.11	17.18	17.18							
		Channel	2160	2340	2520								
		Frequency (MHz)	1860	1980	2100								

Band 26(FCC)_Ant 0													
BW (MHz)	Modulation	RB Freq	RB Offset	Power Low Ch / Freq	Power Nch Ch / Freq	Power Hch / Freq	Turn-up time (sec)	MPR (dB)					
		Channel	2160	2340	2520								
		Frequency (MHz)	1860	1980	2100								
15	QPSK	1	0	22.30	22.42	22.57							
15	QPSK	1	37	22.47	22.66	22.67	24	0					
15	QPSK	1	74	22.43	22.56	22.52							
15	QPSK	36	0	22.50	22.81	22.52							
15	QPSK	36	20	22.44	22.59	22.62	24	0					
15	QPSK	36	40	22.53	22.58	22.61							
15	QPSK	75	0	22.54	22.57	22.58							
15	16QAM	1	0	22.35	22.41	22.64	24	0					
15	16QAM	1	37	22.34	22.47	22.42							
15	16QAM	1	74	22.40	22.47	22.48							
15	16QAM	36	0	21.37	21.48	21.68							
15	16QAM	36	20	21.46	21.52	21.65	23	1					
15	16QAM	36	39	21.49	21.68	21.77							
15	16QAM	75	0	21.48	21.61	21.85							
15	16QAM	75	24	21.50	21.57	21.53							
15	64QAM	1	37	21.59	21.67	21.88	23	1					
15	64QAM	1	74	21.62	21.70	21.85							
15	64QAM	36	0	20.44	20.62	20.58							
15	64QAM	36	20	20.48	20.68	20.78	22	2					
15	64QAM	36	39	20.46	20.68	20.78							
15	64QAM	75	0	20.34	20.58	20.67							
15	256QAM	1	0	18.14	18.21	18.20							
15	256QAM	1	37	18.16	18.22	18.21	20	4					
15	256QAM	1	74	18.22	18.28	18.22							
15	256QAM	36	0	18.15	18.09	18.11							
15	256QAM	36	20	18.12	18.18	18.18	20	4					
15	256QAM	36	39	18.18	18.18	18.18							
15	256QAM	75	0	18.14	18.15	18.18							
		Channel	2160	2340	2520								
		Frequency (MHz)	1860	1980	2100								





Band 26(FCC)_Ant 1									
BW (MHz)	Modulation	RE Freq.	RB Offset	Power Low Ch. / Freq.	Power Mids Ch. / Freq.	Power High Ch. / Freq.	Time-up limit (mins)	MPR (dB)	
Channel									
Frequency (MHz)									
21765 21770 21775									
811.5 811.5 811.5									
15	QPSK	1	0	22.27	22.37	22.50			
15	QPSK	1	37	22.44	22.66	22.80	24	0	
15	QPSK	1	74	22.44	22.66	22.80			
15	QPSK	36	0	22.54	22.64	22.72			
15	QPSK	36	20	22.48	22.60	22.49	24	0	
15	QPSK	36	39	22.32	22.58	22.55			
15	QPSK	75	0	22.48	22.67	22.51			
15	HQAM	1	0	22.26	22.20	22.47	24	0	
15	HQAM	1	37	22.26	22.49	22.43			
15	HQAM	1	74	22.38	22.31	22.41			
15	HQAM	36	0	21.60	21.59	21.34			
15	HQAM	36	20	21.60	21.28	21.41			
15	HQAM	36	39	21.11	21.33	21.37	23	1	
15	HQAM	75	0	21.11	21.26	21.31			
15	HQAM	1	0	21.36	21.25	21.40			
15	HQAM	1	37	21.26	21.41	21.54	23	1	
15	HQAM	1	74	21.21	21.46	21.30			
15	HQAM	36	0	20.90	20.17	20.36			
15	HQAM	36	20	20.58	20.25	20.39	22	2	
15	HQAM	36	39	20.18	20.20	20.38			
15	HQAM	75	0	20.10	20.29	20.32			
15	SSQAM	1	0	18.20	18.32	18.29			
15	SSQAM	1	37	18.32	18.56	18.52	20	4	
15	SSQAM	1	74	18.85	18.72	18.84			
15	SSQAM	36	0	18.27	18.35	18.32			
15	SSQAM	36	20	18.38	18.44	18.42	20	4	
15	SSQAM	36	39	18.43	18.45	18.36			
15	SSQAM	75	0	18.41	18.48	18.42			
Channel									
Frequency (MHz)									
21780 21785 21790									
811.5 811.5 811.5									
10	QPSK	1	0	22.18	22.27	22.51			
10	QPSK	1	25	22.41	22.63	22.54	24	0	
10	QPSK	49	0	22.24	22.47	22.40			
10	QPSK	25	0	22.43	22.61	22.46			
10	QPSK	25	12	22.39	22.52	22.38	24	0	
10	QPSK	25	25	22.33	22.47	22.43			
10	QPSK	50	0	22.43	22.64	22.43			
10	HQAM	1	0	22.14	22.16	22.35	24	0	
10	HQAM	1	25	22.22	22.39	22.35			
10	HQAM	1	49	22.30	22.28	22.36			
10	HQAM	25	0	21.66	21.50	21.28			
10	HQAM	25	12	21.60	21.20	21.34			
10	HQAM	25	25	21.63	21.22	21.31	23	1	
10	HQAM	50	0	21.67	21.44	21.19			
10	HQAM	1	0	21.13	21.29	21.31			
10	HQAM	1	25	21.14	21.31	21.33	23	1	
10	HQAM	1	49	21.16	21.38	21.22			
10	HQAM	25	0	20.90	20.98	20.32			
10	HQAM	25	12	20.90	20.15	20.34	22	2	
10	HQAM	25	25	20.92	20.21	20.39			
10	HQAM	50	0	20.93	20.23	20.25			
10	SSQAM	1	0	18.21	18.23	18.19			
10	SSQAM	1	49	18.43	18.69	18.40	20	4	
10	SSQAM	1	25	18.44	18.65	18.55			
10	SSQAM	25	0	18.20	18.29	18.22			
10	SSQAM	25	12	18.27	18.34	18.36	20	4	
10	SSQAM	25	25	18.31	18.28	18.33			
10	SSQAM	50	0	18.38	18.41	18.39			
Channel									
Frequency (MHz)									
21795 21800 21805									
811.5 811.5 811.5									
5	QPSK	1	0	22.23	22.30	22.51			
5	QPSK	1	12	22.52	22.66	22.52	24	0	
5	QPSK	1	24	22.20	22.45	22.43			
5	QPSK	12	0	22.43	22.61	22.51			
5	QPSK	12	7	22.37	22.49	22.46	24	0	
5	QPSK	12	13	22.32	22.47	22.43			
5	QPSK	25	0	22.38	22.45	22.46			
5	HQAM	1	0	22.23	22.15	22.44	24	0	
5	HQAM	1	12	22.22	22.43	22.32			
5	HQAM	1	24	22.35	22.19	22.37			
5	HQAM	12	0	21.66	21.11	21.30			
5	HQAM	12	7	21.60	21.18	21.38			
5	HQAM	12	13	21.61	21.21	21.34	23	1	
5	HQAM	25	0	21.63	21.23	21.21			
5	HQAM	1	0	21.12	21.32	21.31			
5	HQAM	1	12	21.21	21.30	21.37	23	1	
5	HQAM	1	24	21.15	21.38	21.29			
5	HQAM	12	0	20.94	20.95	20.27			
5	HQAM	12	7	20.91	20.16	20.33	22	2	
5	HQAM	12	13	20.94	20.23	20.32			
5	SSQAM	1	0	18.20	18.28	18.25			
5	SSQAM	1	12	18.46	18.44	18.44	20	4	
5	SSQAM	1	24	18.53	18.62	18.54			
5	SSQAM	12	0	18.18	18.31	18.24			
5	SSQAM	12	7	18.26	18.34	18.36	20	4	
5	SSQAM	12	13	18.35	18.28	18.28			
5	SSQAM	25	0	18.35	18.39	18.39			
Channel									
Frequency (MHz)									
21810 21815 21820									
811.5 811.5 811.5									
1.4	QPSK	1	0	22.17	22.31	22.55			
1.4	QPSK	1	3	22.35	22.64	22.51	24	0	
1.4	QPSK	1	5	22.27	22.45	22.51			
1.4	QPSK	3	0	22.44	22.65	22.47			
1.4	QPSK	3	1	22.45	22.50	22.44			
1.4	QPSK	3	3	22.20	22.53	22.49			
1.4	QPSK	6	0	22.37	22.63	22.38	24	0	
1.4	HQAM	1	0	22.23	22.17	22.36			
1.4	HQAM	3	0	22.23	22.46	22.33			
1.4	HQAM	1	5	22.28	22.23	22.33	24	0	
1.4	HQAM	1	0	22.22	22.31	22.49			
1.4	HQAM	3	1	22.37	22.69	22.51			
1.4	HQAM	3	3	22.22	22.51	22.52			
1.4	HQAM	6	0	21.63	21.21	21.27	23	1	
1.4	HQAM	1	0	21.66	21.09	21.36			
1.4	HQAM	1	3	21.21	21.34	21.43			
1.4	HQAM	1	5	21.16	21.42	21.18	23	1	
1.4	HQAM	3	0	21.69	21.27	21.33			
1.4	HQAM	3	1	21.60	21.23	21.19			
1.4	HQAM	3	3	21.12	21.45	21.36			
1.4	HQAM	6	0	20.94	20.18	20.22	22	2	
1.4	SSQAM	1	0	18.25	18.21	18.18			
1.4	SSQAM	1	3	18.46	18.47	18.48	20	4	
1.4	SSQAM	1	5	18.58	18.63	18.52			
1.4	SSQAM	3	0	18.19	18.25	18.27			
1.4	SSQAM	3	1	18.26	18.29	18.29	20	4	
1.4	SSQAM	3	3	18.40	18.34	18.31			
1.4	SSQAM	6	0	18.34	18.38	18.32	20	4	

Band 30_Ant 9									
BW (MHz)	Modulation	RE Freq.	RB Offset	Power Low Ch. / Freq.	Power Mids Ch. / Freq.	Power High Ch. / Freq.	Time-up limit (mins)	MPR (dB)	
Channel									
Frequency (MHz)									
21710 21715 21720									
211.5 211.5 211.5									
10	QPSK	1	0	20.85	20.87	20.95			
10	QPSK	1	25	21.03	20.88	20.99	22	0	
10	QPSK	1	49	20.86	20.83	20.94			
10	QPSK	25	0	21.01	20.87	20.93			
10	QPSK	25	12	20.92	20.84	20.92	22	0	
10	QPSK	25	25	20.86	20.85	20.92			
10	HQAM	1	0	20.85	20.81	20.92			
10	HQAM	1	25	21.02	20.81	20.91	22	0	
10	HQAM	1	49	20.83	20.83	20.95			
10	HQAM	25	0	21.00	20.88	20.99			
10	HQAM	25	12	20.95	20.91	20.91	22	0	
10	HQAM	25	25	20.91	20.91	20.91			
10	HQAM	50	0	20.86	20.86	20.91			
10	HQAM	1	0	20.97	20.81	20.92	22	0	
10	HQAM	1	25	20.93	20.85	20.95			
10	HQAM	1	49	20.83	20.83	20.96			
10	HQAM	25	0	20.95	20.81	20.92	22	0	
10	HQAM	25	12	20.95	20.85	20.94			
10	HQAM	25	25	20.91	20.94	20.94			
10									



Band 30_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Lch / Freq.	Power Mch / Freq.	Power Hch / Freq.	Turn-up Int. (sec)	MFR (dB)		
Channel										
Frequency (MHz)										
2102										
10	QPSK	1	0	17.49						
10	QPSK	1	25	17.37					18.9	0
10	QPSK	1	49	17.30						
10	QPSK	25	0	17.55						
10	QPSK	25	12	17.31					18.9	0
10	QPSK	25	36	17.41						
10	QPSK	50	0	17.48						
10	16QAM	1	0	17.34					18.9	0
10	16QAM	1	49	17.37						
10	16QAM	1	99	17.32						
10	16QAM	25	0	17.42						
10	16QAM	25	12	17.34					18.9	0
10	16QAM	25	36	17.28						
10	16QAM	50	0	17.38						
10	64QAM	1	0	17.31					18.9	0
10	64QAM	1	25	17.29						
10	64QAM	1	49	17.37						
10	64QAM	25	12	17.36					18.9	0
10	64QAM	25	36	17.38						
10	64QAM	50	0	17.35						
10	256QAM	1	0	17.48					18.9	0
10	256QAM	1	25	17.30						
10	256QAM	1	49	17.28						
10	256QAM	25	0	17.21					18.9	0
10	256QAM	25	12	17.35						
10	256QAM	25	36	17.34						
Channel										
Frequency (MHz)										
2105										
5	QPSK	1	0	17.48	17.48	17.44				
5	QPSK	1	12	17.51	17.50	17.54			18.9	0
5	QPSK	1	24	17.29	17.18	17.23				
5	QPSK	12	0	17.43	17.45	17.50				
5	QPSK	12	7	17.29	17.16	17.23			18.9	0
5	QPSK	12	13	17.28	17.27	17.38				
5	QPSK	25	0	17.48	17.36	17.38				
5	16QAM	1	0	17.28	17.19	17.23			18.9	0
5	16QAM	1	12	17.27	17.29	17.35				
5	16QAM	1	24	17.30	17.24	17.27				
5	16QAM	12	0	17.37	17.37	17.27			18.9	0
5	16QAM	12	7	17.28	17.29	17.29				
5	16QAM	12	13	17.20	17.20	17.28				
5	16QAM	25	0	17.23	17.17	17.21				
5	64QAM	1	0	17.18	17.27	17.17			18.9	0
5	64QAM	1	12	17.20	17.23	17.14				
5	64QAM	1	24	17.35	17.36	17.35				
5	64QAM	12	0	17.25	17.24	17.25			18.9	0
5	64QAM	12	7	17.34	17.26	17.35				
5	64QAM	12	13	17.29	17.28	17.17				
5	64QAM	25	0	17.24	17.20	17.24				
5	256QAM	1	0	17.31	17.34	17.34			18.9	0
5	256QAM	1	12	17.27	17.26	17.34				
5	256QAM	1	24	17.26	17.21	17.15				
5	256QAM	12	0	17.22	17.18	17.23			18.9	0
5	256QAM	12	7	17.14	17.23	17.28				
5	256QAM	12	13	17.21	17.21	17.28				
5	256QAM	25	0	17.24	17.19	17.25				

Band 66_Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Lch / Freq.	Power Mch / Freq.	Power Hch / Freq.	Turn-up Int. (sec)	MFR (dB)		
Channel										
Frequency (MHz)										
1765										
20	QPSK	1	0	21.05	21.25	21.08				
20	QPSK	1	49	21.19	21.28	21.19			21.9	0
20	QPSK	1	99	21.15	21.16	21.19				
20	QPSK	50	0	21.15	21.25	21.11				
20	QPSK	50	24	21.14	21.21	21.08			21.9	0
20	QPSK	50	49	21.07	21.17	21.09				
20	QPSK	100	0	21.16	21.23	21.11				
20	16QAM	1	0	21.08	21.15	21.13			21.9	0
20	16QAM	1	49	21.11	21.26	21.17				
20	16QAM	1	99	21.18	21.26	21.17				
20	16QAM	50	0	21.12	21.26	21.07				
20	16QAM	50	24	21.15	21.24	21.13			21.9	0
20	16QAM	50	49	21.13	21.13	21.15				
20	16QAM	100	0	21.13	21.17	21.18				
20	64QAM	1	0	21.07	21.25	21.09			21.9	0
20	64QAM	1	49	21.08	21.25	21.17				
20	64QAM	1	99	21.12	21.24	21.12				
20	64QAM	50	0	21.12	21.14	21.15				
20	64QAM	50	24	21.13	21.23	21.14			21.9	0
20	64QAM	50	49	21.09	21.21	21.11				
20	64QAM	100	0	21.09	21.21	21.11				
20	256QAM	1	0	18.52	18.53	18.46			20	1.9
20	256QAM	1	49	18.59	18.53	18.28				
20	256QAM	1	99	18.57	18.54	18.58				
20	256QAM	50	0	18.51	18.52	18.46			20	1.9
20	256QAM	50	24	18.58	18.50	18.48				
20	256QAM	50	49	18.59	18.51	18.51				
20	256QAM	100	0	18.58	18.52	18.59				
Channel										
Frequency (MHz)										
1772										
15	QPSK	1	0	20.98	21.24	20.98				
15	QPSK	1	37	21.11	21.20	21.17			21.9	0
15	QPSK	1	74	21.15	21.14	21.14				
15	QPSK	36	0	21.07	21.21	20.99				
15	QPSK	36	18	21.00	21.07	20.94			21.9	0
15	QPSK	36	36	20.99	21.11	21.00				
15	QPSK	75	0	21.11	21.18	21.04				
15	16QAM	1	0	20.91	21.00	21.11			21.9	0
15	16QAM	1	37	21.08	21.22	21.11				
15	16QAM	1	74	21.09	21.11	21.14				
15	16QAM	36	0	20.98	21.13	21.05			21.9	0
15	16QAM	36	18	21.02	21.19	21.08				
15	16QAM	36	36	20.99	21.01	21.10				
15	16QAM	75	0	21.05	21.15	21.03				
15	64QAM	1	0	21.10	21.25	21.03			21.9	0
15	64QAM	1	37	20.94	21.15	21.04				
15	64QAM	1	74	21.01	21.16	21.09				
15	64QAM	36	0	21.07	21.11	21.10				
15	64QAM	36	18	21.10	21.11	20.92			21.9	0
15	64QAM	36	36	21.03	21.19	21.10				
15	64QAM	75	0	21.02	21.11	21.10				
15	256QAM	1	0	18.40	18.48	18.40			20	1.9
15	256QAM	1	37	18.19	18.22	18.20				
15	256QAM	1	74	18.48	18.49	18.49				
15	256QAM	36	0	18.40	18.49	18.43			20	1.9
15	256QAM	36	18	18.45	18.45	18.45				
15	256QAM	36	36	18.49	18.51	18.54				
15	256QAM	75	0	18.53	18.51	18.54				
Channel										
Frequency (MHz)										
1779										
10	QPSK	1	0	20.90	21.17	21.03				
10	QPSK	1	25	21.05	21.16	21.15			21.9	0
10	QPSK	1	49	21.15	21.08	21.09				
10	QPSK	25	0	21.13	21.18	21.06				
10	QPSK	25	12	21.09	21.18	20.92			21.9	0
10	QPSK	25	36	21.04	21.11	21.00				
10	QPSK	50	0	21.04	21.22	21.10				
10	16QAM	1	0	21.01	21.06	21.00			21.9	0
10	16QAM	1	25	21.03	21.24	21.11				
10	16QAM	1	49	21.08	21.24	21.03				
10	16QAM	25	0	21.06	21.12	21.03			21.9	0
10	16QAM	25	12	21.05	21.19	20.98				
10	16QAM	25	36	21.12	20.99	21.05				
10	16QAM	50	0	21.08	21.10	21.10				
10	64QAM	1	0	21.02	21.25	20.98			21.9	0
10	64QAM	1	25	21.05	21.18	21.09				
10	64QAM	1	49	21.09						



Band 71_Ant 0									
RFW [MHz]	Modulation	RB Spans	RB Offset	Power Low Ch / Freq	Power Mode Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.71	22.74	22.87			
20	QPSK	1	48	22.75	22.83	22.83	24	0	
20	QPSK	1	48	22.75	22.83	22.83			
20	QPSK	50	0	22.85	22.73	22.72			
20	QPSK	50	24	22.87	22.83	22.81	24	0	
20	QPSK	50	50	22.83	22.87	22.86			
20	QPSK	100	0	22.85	22.71	22.84			
20	HQDM	1	0	22.78	22.79	22.75	24	0	
20	HQDM	1	48	22.69	22.71	22.68			
20	HQDM	1	96	22.60	22.65	22.58			
20	HQDM	50	0	22.15	22.22	22.15			
20	HQDM	50	24	22.12	22.15	22.08			
20	HQDM	50	50	22.18	22.17	22.11			
20	HQDM	100	0	22.07	22.00	22.08	23	1	
20	HQDM	1	0	22.49	22.50	22.48			
20	HQDM	1	48	22.29	22.34	22.27	23	1	
20	HQDM	1	96	22.38	22.41	22.40			
20	HQDM	50	0	21.93	21.98	21.99			
20	HQDM	50	24	21.18	21.22	21.19	22	2	
20	HQDM	50	50	21.19	21.20	21.16			
20	HQDM	100	0	21.14	21.17	21.14			
20	256QAM	1	0	19.49	19.53	19.52			
20	256QAM	1	48	19.44	19.45	19.41	20	4	
20	256QAM	1	96	19.28	19.38	19.31			
20	256QAM	50	0	19.23	19.29	19.27			
20	256QAM	50	24	19.19	19.23	19.19	20	4	
20	256QAM	50	50	19.04	19.06	19.05			
20	256QAM	100	0	19.24	19.25	19.18			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.61	22.67	22.48			
15	QPSK	1	37	22.65	22.79	22.51	24	0	
15	QPSK	1	74	22.47	22.64	22.54			
15	QPSK	38	0	22.58	22.63	22.61			
15	QPSK	38	20	22.48	22.59	22.54	24	0	
15	QPSK	38	50	22.41	22.50	22.47			
15	QPSK	75	0	22.59	22.60	22.55			
15	HQDM	1	0	22.74	22.76	22.67	24	0	
15	HQDM	1	37	22.60	22.61	22.63			
15	HQDM	1	74	22.52	22.58	22.49			
15	HQDM	38	0	22.12	22.19	22.03			
15	HQDM	38	20	22.09	22.12	22.08			
15	HQDM	38	38	22.12	22.12	22.07	23	1	
15	HQDM	75	0	21.99	22.06	22.04			
15	HQDM	1	0	22.49	22.50	22.37			
15	HQDM	1	37	22.23	22.24	22.21	23	1	
15	HQDM	1	74	22.30	22.31	22.34			
15	HQDM	38	0	21.99	21.97	21.98			
15	HQDM	38	20	21.12	21.10	21.15	22	2	
15	HQDM	38	38	21.10	21.10	21.08			
15	256QAM	1	0	19.42	19.42	19.44			
15	256QAM	1	37	19.38	19.39	19.33	20	4	
15	256QAM	1	74	19.24	19.24	19.26			
15	256QAM	38	0	19.15	19.20	19.21			
15	256QAM	38	20	19.10	19.11	19.11	20	4	
15	256QAM	38	38	19.08	19.02	19.08			
15	256QAM	75	0	19.17	19.13	19.11			
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.61	22.63	22.53			
10	QPSK	1	25	22.68	22.75	22.52	24	0	
10	QPSK	1	48	22.65	22.65	22.51			
10	QPSK	25	0	22.59	22.64	22.69			
10	QPSK	25	12	22.47	22.57	22.57	24	0	
10	QPSK	25	25	22.44	22.53	22.50			
10	QPSK	50	0	22.59	22.59	22.57			
10	HQDM	1	0	22.87	22.76	22.68	24	0	
10	HQDM	1	25	22.67	22.66	22.64			
10	HQDM	1	48	22.55	22.60	22.47			
10	HQDM	25	0	22.11	22.17	22.07			
10	HQDM	25	12	22.04	22.11	21.96			
10	HQDM	25	25	22.07	22.10	22.07	23	1	
10	HQDM	50	0	21.98	22.06	21.97			
10	HQDM	1	0	22.46	22.45	22.40			
10	HQDM	1	25	22.21	22.27	22.21	23	1	
10	HQDM	1	48	22.26	22.32	22.33			
10	HQDM	25	0	21.94	21.93	21.99			
10	HQDM	25	12	21.65	21.11	21.15	22	2	
10	HQDM	25	25	21.07	21.13	21.08			
10	HQDM	50	0	21.11	21.13	21.08			
10	256QAM	1	0	19.40	19.44	19.41			
10	256QAM	1	25	19.36	19.41	19.38	20	4	
10	256QAM	1	48	19.25	19.30	19.26			
10	256QAM	25	0	19.20	19.21	19.19			
10	256QAM	25	12	19.09	19.14	19.11	20	4	
10	256QAM	25	25	19.07	19.07	19.04			
10	256QAM	50	0	19.16	19.14	19.13			
Channel									
Frequency (MHz)									
5	QPSK	1	0	22.67	22.67	22.49			
5	QPSK	1	12	22.67	22.74	22.52	24	0	
5	QPSK	1	24	22.53	22.61	22.55			
5	QPSK	12	0	22.60	22.63	22.66			
5	QPSK	12	7	22.45	22.56	22.54	24	0	
5	QPSK	12	13	22.50	22.46	22.45			
5	QPSK	25	0	22.61	22.65	22.61			
5	HQDM	1	0	22.72	22.75	22.72	24	0	
5	HQDM	1	12	22.61	22.67	22.62			
5	HQDM	1	24	22.48	22.61	22.61			
5	HQDM	12	0	22.11	22.18	22.04			
5	HQDM	12	7	22.02	22.09	22.04			
5	HQDM	12	13	22.11	22.08	22.06	23	1	
5	HQDM	25	0	21.99	22.04	21.98			
5	HQDM	1	0	22.44	22.42	22.44			
5	HQDM	1	12	22.22	22.26	22.21	23	1	
5	HQDM	1	24	22.33	22.34	22.37			
5	HQDM	12	0	21.96	21.99	21.93			
5	HQDM	12	7	21.11	21.10	21.12	22	2	
5	HQDM	12	13	21.08	21.15	21.07			
5	HQDM	25	0	21.02	21.11	21.06			
5	256QAM	1	0	19.38	19.44	19.46			
5	256QAM	1	12	19.39	19.45	19.38	20	4	
5	256QAM	1	24	19.30	19.32	19.21			
5	256QAM	12	0	19.12	19.20	19.18			
5	256QAM	12	7	19.09	19.16	19.13	20	4	
5	256QAM	12	13	19.09	19.03	19.03			
5	256QAM	25	0	19.19	19.14	19.07			

Band 71_Ant 1									
RFW [MHz]	Modulation	RB Spans	RB Offset	Power Low Ch / Freq	Power Mode Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.84	22.79	22.57			
20	QPSK	1	48	22.71	22.73	22.60	24	0	
20	QPSK	1	48	22.71	22.73	22.60			
20	QPSK	50	0	22.87	22.70	22.55			
20	QPSK	50	24	22.81	22.85	22.51	24	0	
20	QPSK	50	50	22.85	22.82	22.82			
20	QPSK	100	0	22.86	22.65	22.80			
20	HQDM	1	0	22.87	22.70	22.54	24	0	
20	HQDM	1	48	22.62	22.68	22.51			
20	HQDM	1	96	22.66	22.71	22.56			
20	HQDM	50	0	21.89	21.96	21.94			
20	HQDM	50	24	21.93	21.93	21.88			
20	HQDM	50	50	21.75	21.77	21.69	23	1	
20	HQDM	100	0	21.88	21.82	21.77			
20	HQDM	1	0	21.72	21.81	21.61			
20	HQDM	1	48	21.62	21.72	21.57	23	1	
20	HQDM	1	96	21.48	21.55	21.39			
20	HQDM	50	0	20.98	20.92	20.73			
20	HQDM	50	24	20.95	20.92	20.75	22	2	
20	HQDM	50	50	20.74	20.76	20.69			
20	HQDM	100	0	20.75	20.85	20.67			
20	256QAM	1	0	19.02	19.05	18.85			
20	256QAM	1	48	18.93	18.85				



Band 38_Ant 9										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	23.04	23.14	23.01	24	0		
20	QPSK	1	49	23.08	23.22	23.03				
20	QPSK	1	99	23.16	23.21	22.97				
20	QPSK	50	0	23.30	23.35	23.18				
20	QPSK	50	24	23.28	23.38	23.13				
20	QPSK	50	50	23.20	23.28	23.16	24	0		
20	QPSK	100	0	23.30	23.32	23.23				
20	16QAM	1	0	23.05	23.13	22.71				
20	16QAM	1	49	22.99	23.26	22.95	24	0		
20	16QAM	1	99	23.19	23.09	23.02				
20	16QAM	50	0	22.75	22.96	22.89				
20	16QAM	50	24	23.11	22.96	23.02	23.5	0.5		
20	16QAM	50	50	23.09	23.06	22.95				
20	16QAM	100	0	22.95	22.90	22.89				
20	64QAM	1	0	22.48	22.81	22.75	23.5	0.5		
20	64QAM	1	49	22.75	22.76	22.65				
20	64QAM	1	99	22.69	22.85	22.61				
20	64QAM	50	0	21.78	21.92	21.89				
20	64QAM	50	24	22.09	22.39	21.83	22.5	1.5		
20	64QAM	50	50	22.08	22.09	21.99				
20	64QAM	100	0	21.95	22.03	21.93				
20	256QAM	1	0	19.60	19.63	19.58	20.5	3.5		
20	256QAM	1	49	19.61	19.62	19.59				
20	256QAM	1	99	19.41	19.46	19.39				
20	256QAM	50	0	19.68	19.74	19.68				
20	256QAM	50	24	19.62	19.67	19.63	20.5	3.5		
20	256QAM	50	50	19.62	19.63	19.60				
20	256QAM	100	0	19.68	19.74	19.72				
Channel										
Frequency (MHz)				277.5	2795	2812.5				
15	QPSK	1	0	22.88	23.10	22.86	24	0		
15	QPSK	1	37	23.29	23.35	22.89				
15	QPSK	1	74	23.02	23.17	22.78				
15	QPSK	36	0	23.25	23.34	23.10				
15	QPSK	36	30	23.09	23.19	22.86				
15	QPSK	36	39	23.02	23.17	23.15				
15	QPSK	75	0	23.13	23.18	23.07				
15	QPSK	75	30	23.05	23.09	22.87				
15	16QAM	1	37	22.89	23.03	23.16	24	0		
15	16QAM	1	74	23.10	22.93	22.91				
15	16QAM	36	0	22.62	22.76	22.82				
15	16QAM	36	30	23.03	22.79	22.95	23.5	0.5		
15	16QAM	36	39	22.96	22.97	22.91				
15	16QAM	75	0	22.93	22.71	22.74				
15	64QAM	1	0	21.84	21.98	21.98	22.5	0.5		
15	64QAM	1	37	22.63	22.73	22.51				
15	64QAM	1	74	22.51	22.75	22.55				
15	64QAM	36	0	21.70	21.79	21.84				
15	64QAM	36	30	22.81	22.86	22.82	22.5	1.5		
15	64QAM	36	39	21.92	21.91	21.95				
15	64QAM	75	0	21.79	21.87	21.81				
15	256QAM	1	0	19.62	19.64	19.65	20.5	3.5		
15	256QAM	1	37	19.38	19.43	19.39				
15	256QAM	1	74	19.35	19.42	19.32				
15	256QAM	36	0	19.65	19.62	19.58	20.5	3.5		
15	256QAM	36	30	19.56	19.54	19.53				
15	256QAM	75	0	19.59	19.69	19.67				
Channel										
Frequency (MHz)				3760	3800	3820				
10	QPSK	1	0	23.00	23.09	22.93	24	0		
10	QPSK	1	25	23.19	23.31	23.05				
10	QPSK	1	49	23.03	23.09	22.91				
10	QPSK	25	0	23.29	23.26	23.07	24	0		
10	QPSK	25	12	23.26	23.27	23.03				
10	QPSK	25	25	23.04	23.09	23.10				
10	QPSK	50	0	23.18	23.22	23.17				
10	16QAM	1	0	23.03	23.02	22.83	24	0		
10	16QAM	1	25	22.95	23.10	23.01				
10	16QAM	1	49	23.06	22.91	22.95	24	0		
10	16QAM	1	74	23.13	22.97	22.91				
10	16QAM	25	0	22.97	22.92	22.81	23.5	0.5		
10	16QAM	25	12	23.09	22.79	22.91				
10	16QAM	25	25	22.95	22.94	22.79				
10	16QAM	50	0	22.75	22.71	22.67				
10	64QAM	1	0	22.17	22.33	22.25	23.5	0.5		
10	64QAM	1	25	22.84	22.85	22.46				
10	64QAM	1	49	22.51	22.79	22.46				
10	64QAM	25	0	21.65	21.86	21.84	22.5	1.5		
10	64QAM	25	12	22.06	21.84	21.75				
10	64QAM	25	25	21.92	22.03	21.93				
10	64QAM	50	0	21.84	22.01	21.82				
10	256QAM	1	0	19.55	19.56	19.46	20.5	3.5		
10	256QAM	1	25	19.38	19.46	19.41				
10	256QAM	25	0	19.62	19.64	19.61				
10	256QAM	25	12	19.55	19.62	19.56	20.5	3.5		
10	256QAM	25	25	19.56	19.60	19.56				
10	256QAM	50	0	19.56	19.66	19.69				
Channel										
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	22.88	23.07	22.95	24	0		
5	QPSK	1	12	23.34	23.37	22.99				
5	QPSK	1	24	23.10	23.09	22.82				
5	QPSK	12	0	23.13	23.24	23.17	24	0		
5	QPSK	12	7	23.12	23.17	23.11				
5	QPSK	12	13	23.19	23.25	23.06				
5	QPSK	25	0	23.18	23.14	23.04				
5	16QAM	1	0	22.97	23.06	22.53				
5	16QAM	1	12	22.86	23.13	23.03	24	0		
5	16QAM	1	24	22.99	22.89	22.96				
5	16QAM	12	0	22.68	22.82	22.71	23.5	0.5		
5	16QAM	12	7	23.05	22.77	22.91				
5	16QAM	12	13	23.01	23.05	22.76				
5	16QAM	25	0	22.77	23.62	22.80				
5	64QAM	1	0	22.33	22.48	22.24	23.5	0.5		
5	64QAM	1	12	22.66	22.70	22.39				
5	64QAM	1	24	22.57	22.72	22.50				
5	64QAM	12	0	21.63	21.79	21.75	22.5	1.5		
5	64QAM	12	7	21.89	21.88	21.86				
5	64QAM	12	13	22.02	22.08	21.87				
5	64QAM	25	0	21.84	21.86	21.86				
5	256QAM	1	0	19.49	19.56	19.54	20.5	3.5		
5	256QAM	1	12	19.40	19.44	19.41				
5	256QAM	1	24	19.31	19.37	19.35				
5	256QAM	12	0	19.63	19.63	19.59	20.5	3.5		
5	256QAM	12	7	19.50	19.61	19.59				
5	256QAM	12	13	19.55	19.58	19.56				
5	256QAM	25	0	19.66	19.66	19.62				

Band 38_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	19.88	19.91	19.86	21.1	0		
20	QPSK	1	49	19.92	20.02	19.90				
20	QPSK	1	99	19.90	20.00	19.89				
20	QPSK	50	0	19.90	20.02	19.95				
20	QPSK	50	24	19.91	19.91	19.86	21.1	0		
20	QPSK	50	50	19.85	19.93	19.88				
20	QPSK	100	0	19.83	19.90	19.95				
20	16QAM	1	0	19.84	20.02	19.90				
20	16QAM	1	49	19.83	19.92	19.90	21.1	0		
20	16QAM	1	99	19.86	19.95	19.94				
20	16QAM	50	0	19.79	20.00					





Band 41_Ant 2													
BW [MHz]	Modulation	RB Size	RB Offset	Fair IC Power Low Ch / Freq	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel													
				39750	39750	40165	40620	41055	41490				
				2510	2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	23.02	23.06	23.22	23.35	23.53	23.63	23.10			
20	QPSK	1	89	23.02	23.06	23.22	23.35	23.53	23.63	23.10			
20	QPSK	1	99	23.08	23.05	23.27	23.47	23.97	23.33				
20	QPSK	50	0	23.21	23.15	23.49	23.12	23.31					
20	QPSK	50	24	23.21	23.15	23.49	23.12	23.31					
20	QPSK	50	30	23.08	23.12	23.31	23.58	23.02	23.30				
20	QPSK	100	0	23.18	23.20	23.40	23.47	23.10	23.32				
20	16QAM	1	0	23.00	23.03	23.33	23.61	23.15	23.35				
20	16QAM	1	89	23.00	23.03	23.34	23.65	23.60	23.35				
20	16QAM	1	99	23.12	23.12	23.43	23.45	23.99	23.30				
20	16QAM	50	0	22.11	22.07	22.31	22.47	22.17	22.25				
20	16QAM	50	24	22.21	22.21	22.49	22.62	22.19	22.42				
20	16QAM	50	30	22.26	22.23	22.46	22.62	22.07	22.48				
20	16QAM	100	0	22.23	22.23	22.43	22.41	22.12	22.36				
20	16QAM	100	1	21.97	21.98	22.12	22.31	22.02	22.15				
20	16QAM	100	24	22.00	22.01	22.22	22.45	21.93	22.21				
20	16QAM	100	30	22.07	22.04	22.29	22.43	21.98	22.24				
20	16QAM	50	0	21.13	21.09	21.33	21.46	21.11	21.25				
20	16QAM	50	24	21.24	21.24	21.45	21.54	21.14	21.41				
20	16QAM	50	30	21.19	21.17	21.48	21.84	21.07	21.41				
20	16QAM	100	0	21.20	21.20	21.43	21.83	21.14	21.42				
20	256QAM	1	0	18.76	18.74	18.90	19.21	18.82	18.95				
20	256QAM	1	89	18.78	18.88	18.84	19.15	18.78	18.20				
20	256QAM	1	99	18.71	18.79	18.75	19.01	18.62	18.95				
20	256QAM	50	0	18.67	18.66	18.64	18.99	18.65	18.87				
20	256QAM	50	24	18.63	18.64	18.61	18.99	18.77	18.76				
20	256QAM	50	30	18.66	18.68	18.63	19.00	18.65	18.96				
20	256QAM	100	0	18.78	18.86	18.60	19.06	18.62	18.82				
Channel													
				39765	39725	40173	40620	41068	41515				
				25075	25023	25433	2593	26373	26823				
15	QPSK	1	0	22.02	22.07	22.32	22.52	22.93	23.03				
15	QPSK	1	37	22.96	22.94	23.25	23.34	22.99	23.33				
15	QPSK	1	74	23.07	22.99	23.14	23.38	22.92	23.24				
15	QPSK	36	0	23.06	23.12	23.41	23.40	23.04	23.18				
15	QPSK	36	29	23.08	22.97	23.22	23.33	22.93	23.20				
15	QPSK	36	39	23.05	23.00	23.14	23.30	22.94	23.12				
15	QPSK	75	0	23.01	23.08	23.31	23.35	23.03	23.24				
15	QPSK	75	24	23.08	22.97	23.22	23.33	22.93	23.20				
15	16QAM	1	37	22.99	22.87	23.20	23.40	22.96	23.08				
15	16QAM	1	74	23.00	23.01	23.38	23.31	22.86	23.17				
15	16QAM	36	0	21.95	21.95	22.13	22.29	22.01	22.18				
15	16QAM	36	29	22.02	22.18	22.44	22.51	22.03	22.31				
15	16QAM	36	39	22.13	22.05	22.42	22.32	22.00	22.27				
15	16QAM	75	0	22.19	22.13	22.26	22.34	21.97	22.24				
15	16QAM	75	24	22.18	22.18	22.44	22.51	22.03	22.32				
15	16QAM	75	37	22.06	22.06	22.26	22.27	21.83	22.17				
15	16QAM	100	0	21.91	21.11	22.19	22.33	21.79	22.32				
15	16QAM	100	1	21.03	20.98	21.15	21.35	20.98	21.15				
15	16QAM	100	24	21.08	21.14	21.33	21.33	20.93	21.08				
15	16QAM	100	39	20.99	21.15	21.37	21.45	20.99	21.24				
15	16QAM	75	0	21.17	21.19	21.33	21.35	21.03	21.24				
15	256QAM	1	0	18.69	18.69	18.69	18.97	18.67	18.84				
15	256QAM	1	74	18.50	18.41	18.44	18.97	18.65	18.69				
15	256QAM	1	89	18.53	18.56	18.53	18.86	18.58	18.63				
15	256QAM	36	0	18.65	18.49	18.44	19.04	18.54	18.72				
15	256QAM	36	29	18.56	18.55	18.55	18.86	18.58	18.66				
15	256QAM	36	39	18.55	18.55	18.51	19.01	18.70	18.66				
15	256QAM	75	0	18.58	18.53	18.58	19.03	18.70	18.70				
Channel													
				39740	39700	40160	40620	41080	41540				
				25090	25050	25460	25920	26380	26840				
10	QPSK	1	0	22.97	23.05	23.15	23.15	22.87	23.24				
10	QPSK	1	25	23.08	23.01	23.30	23.33	22.93	23.30				
10	QPSK	1	49	23.05	22.98	23.21	23.36	22.89	23.32				
10	QPSK	1	74	23.08	23.17	23.42	23.38	22.95	23.33				
10	QPSK	25	12	23.10	23.10	23.30	23.36	22.91	23.22				
10	QPSK	25	25	22.98	23.07	23.28	23.38	22.98	23.25				
10	QPSK	50	0	23.12	23.04	23.33	23.39	22.96	23.22				
10	16QAM	1	0	22.93	22.98	23.28	23.31	22.93	23.20				
10	16QAM	1	25	23.14	23.08	23.28	23.42	22.94	23.21				
10	16QAM	1	49	22.95	23.07	23.31	23.31	22.81	23.12				
10	16QAM	1	74	23.08	23.17	23.42	23.38	22.95	23.33				
10	16QAM	25	12	23.13	22.97	23.27	23.40	22.93	23.26				
10	16QAM	25	25	22.97	23.13	23.37	23.37	22.93	23.20				
10	16QAM	50	0	22.15	22.04	22.26	22.31	21.94	22.19				
10	16QAM	50	24	22.18	21.83	22.11	22.40	21.93	22.02				
10	16QAM	50	37	22.07	21.99	22.19	22.30	21.84	22.03				
10	16QAM	100	0	21.99	22.00	22.24	22.39	21.97	22.24				
10	16QAM	100	24	22.11	22.10	21.41	21.60	21.88	21.30				
10	16QAM	100	37	21.06	21.13	21.38	21.44	21.06	21.40				
10	16QAM	50	0	21.04	21.04	21.41	21.62	21.06	21.30				
10	256QAM	1	0	18.68	18.55	18.62	19.15	18.78	18.62				
10	256QAM	1	25	18.52	18.55	18.60	19.03	18.69	18.79				
10	256QAM	1	49	18.54	18.46	18.44	18.81	18.59	18.84				
10	256QAM	25	0	18.60	18.50	18.60	18.94	18.63	18.82				
10	256QAM	25	12	18.52	18.47	18.38	18.96	18.69	18.70				
10	256QAM	25	25	18.53	18.38	18.39	19.05	18.68	18.79				
10	256QAM	50	0	18.67	18.59	18.41	18.84	18.60	18.70				
Channel													
				39715	39675	40135	40620	41095	41555				
				25075	25035	25445	25905	26365	26825				
5	QPSK	1	0	22.87	22.92	23.20	23.31	22.92	23.25				
5	QPSK	1	12	23.02	23.05	23.31	23.49	22.93	23.28				
5	QPSK	1	24	22.92	22.99	23.20	23.27	22.83	23.20				
5	QPSK	12	0	23.13	23.05	23.36	23.41	23.07	23.38				
5	QPSK	12	7	23.10	23.09	23.37	23.32	22.92	23.28				
5	QPSK	12	13	22.97									



Band 41 (HPUe_Ant 6)													
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power Low High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)		
Channel													
				39750	39750	40185	40620	41055	41490				
				2510	2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	22.78	22.79	22.79	23.09	22.83	22.87	23.9	0		
20	QPSK	1	48	22.82	22.81	22.81	23.11	22.85	22.89				
20	QPSK	1	96	22.79	22.85	22.83	23.00	22.79	22.88				
20	QPSK	50	0	22.89	22.84	22.84	23.10	22.75	22.85				
20	QPSK	50	24	22.89	22.84	22.84	23.10	22.75	22.85				
20	QPSK	50	50	22.82	22.75	22.82	23.05	22.71	22.84	23.9	0		
20	QPSK	100	0	22.88	22.81	22.87	23.06	22.79	22.88				
20	HQAM	1	0	22.80	22.85	22.83	23.09	22.76	22.86				
20	HQAM	1	48	22.87	22.82	22.80	23.03	22.70	22.81				
20	HQAM	1	96	22.77	22.83	22.76	23.11	22.75	22.83	23.9	0		
20	HQAM	50	0	22.78	22.71	22.79	23.11	22.73	22.80				
20	HQAM	50	24	22.80	22.81	22.82	23.04	22.87	22.89	23.9	0		
20	HQAM	50	50	22.82	22.75	22.81	23.03	22.80	22.88				
20	HQAM	100	0	22.85	22.85	22.83	23.13	22.83	22.84				
20	HQAM	100	1	22.88	22.80	22.81	23.09	22.76	22.88				
20	HQAM	100	1	22.78	22.82	22.76	23.09	22.75	22.81	23.9	0		
20	HQAM	50	0	21.83	21.58	21.63	21.67	21.56	21.47				
20	HQAM	50	24	21.70	21.65	21.66	21.63	21.47	21.71				
20	HQAM	50	50	21.87	21.30	21.78	21.63	21.67	21.64	23	0.9		
20	HQAM	100	0	21.66	21.60	21.59	21.62	21.63	21.63				
20	256QAM	1	0	19.23	19.20	19.24	19.42	19.30	19.31				
20	256QAM	1	24	19.29	19.23	19.31	19.49	19.40	19.40				
20	256QAM	1	50	19.24	19.29	19.34	19.43	19.30	19.37	21	2.9		
20	256QAM	50	0	19.30	19.26	19.25	19.48	19.35	19.41				
20	256QAM	50	24	19.32	19.23	19.33	19.46	19.31	19.41				
20	256QAM	50	50	19.29	19.27	19.28	19.49	19.34	19.41	21	2.9		
20	256QAM	100	0	19.29	19.27	19.33	19.46	19.40	19.38				
Channel													
				39755	39725	40173	40620	41058	41515				
				20273	20253	20283	2023	20273	20225				
15	QPSK	1	0	22.74	22.84	22.74	23.03	22.74	22.85	23.9	0		
15	QPSK	1	37	22.85	22.81	22.79	23.03	22.76	22.85				
15	QPSK	1	74	22.69	22.82	22.78	22.98	22.73	22.86				
15	QPSK	36	0	22.73	22.71	22.70	22.86	22.70	22.87				
15	QPSK	36	20	22.78	22.74	22.72	22.89	22.41	22.81				
15	QPSK	36	38	22.78	22.69	22.76	22.89	22.61	22.78	23.9	0		
15	QPSK	75	0	22.81	22.68	22.84	23.02	22.69	22.72				
15	QPSK	75	21	22.78	22.65	22.74	22.98	22.61	22.75				
15	HQAM	1	37	22.69	22.70	22.76	22.83	22.60	22.76	23.9	0		
15	HQAM	1	74	22.66	22.82	22.73	23.01	22.70	22.80				
15	HQAM	36	0	22.75	22.69	22.76	22.88	22.63	22.85				
15	HQAM	36	20	22.68	22.74	22.72	22.89	22.59	22.73	23.9	0		
15	HQAM	36	38	22.67	22.73	22.68	23.01	22.72	22.73				
15	HQAM	75	0	22.78	22.81	22.79	23.10	22.74	22.72				
15	HQAM	75	21	22.74	22.65	22.76	23.03	22.67	22.74				
15	HQAM	1	37	22.75	22.76	22.86	23.02	22.67	22.77	23.9	0		
15	HQAM	1	74	22.76	22.68	22.73	23.01	22.68	22.83				
15	HQAM	36	0	21.56	21.48	21.52	21.67	21.47	21.42				
15	HQAM	36	20	21.60	21.41	21.52	21.63	21.43	21.43	23	0.9		
15	HQAM	36	38	21.45	21.48	21.67	21.52	21.56	21.58				
15	HQAM	75	0	21.60	21.54	21.48	21.41	21.56	21.57				
15	HQAM	75	21	21.19	21.16	21.19	21.34	21.16	21.16	21	2.9		
15	256QAM	1	0	19.22	19.10	19.23	19.42	19.33	19.30				
15	256QAM	1	24	19.13	19.25	19.22	19.34	19.27	19.25				
15	256QAM	1	50	19.20	19.22	19.19	19.41	19.28	19.38				
15	256QAM	50	0	19.23	19.14	19.25	19.36	19.24	19.28	21	2.9		
15	256QAM	50	24	19.19	19.19	19.25	19.44	19.33	19.24				
Channel													
				39740	39700	40160	40620	41080	41540				
				20273	20253	20283	2023	20273	20225				
10	QPSK	1	0	22.63	22.72	22.74	23.00	22.70	22.82	23.9	0		
10	QPSK	1	25	22.90	22.72	22.84	23.00	22.73	22.84				
10	QPSK	1	49	22.74	22.72	22.71	22.87	22.69	22.87				
10	QPSK	1	73	22.86	22.74	22.74	23.03	22.80	22.86				
10	QPSK	25	12	22.77	22.66	22.71	22.91	22.59	22.81	23.9	0		
10	QPSK	25	25	22.80	22.66	22.70	23.04	22.62	22.74				
10	QPSK	50	0	22.87	22.69	22.74	23.03	22.84	22.86				
10	QPSK	50	25	22.78	22.73	22.78	23.06	22.67	22.84				
10	HQAM	1	25	22.80	22.66	22.68	22.98	22.66	22.78	23.9	0		
10	HQAM	1	49	22.64	22.70	22.64	23.07	22.66	22.80				
10	HQAM	25	0	22.76	22.65	22.65	22.94	22.66	22.86				
10	HQAM	25	12	22.70	22.79	22.71	23.05	22.72	22.80	23.9	0		
10	HQAM	25	25	22.77	22.65	22.74	22.92	22.74	22.80				
10	HQAM	50	0	22.71	22.70	22.71	23.08	22.79	22.79				
10	HQAM	50	25	22.85	22.75	22.81	23.09	22.76	22.88	23.9	0		
10	HQAM	100	0	22.84	22.68	22.67	23.06	22.63	22.85				
10	HQAM	100	1	21.59	21.49	21.57	21.59	21.41	21.60				
10	HQAM	25	0	21.52	21.47	21.57	21.47	21.62	21.56	23	0.9		
10	HQAM	50	0	21.83	21.63	21.61	21.69	21.57	21.68				
10	256QAM	1	0	19.13	19.11	19.20	19.33	19.16	19.21				
10	256QAM	1	25	19.26	19.13	19.26	19.44	19.33	19.32	21	2.9		
10	256QAM	1	49	19.18	19.17	19.31	19.36	19.36	19.27				
10	256QAM	25	0	19.26	19.23	19.29	19.40	19.23	19.30				
10	256QAM	25	12	19.26	19.14	19.21	19.30	19.22	19.38	21	2.9		
10	256QAM	25	25	19.14	19.13	19.28	19.31	19.21	19.33				
10	256QAM	50	0	19.20	19.15	19.21	19.44	19.30	19.30				
Channel													
				39745	39705	40160	40620	41080	41540				
				20273	20253	20283	2023	20273	20225				
5	QPSK	1	0	22.77	22.75	22.71	23.07	22.73	22.90	23.9	0		
5	QPSK	1	12	22.81	22.85	22.87	23.05	22.73	22.92				
5	QPSK	1	24	22.78	22.71	22.68	23.02	22.75	22.94				
5	QPSK	12	0	22.76	22.78	22.78	23.06	22.67	22.89				
5	QPSK	12	7	22.69	22.69	22.67	22.81	22.61	22.89	23.9	0		
5	QPSK	12	13	22.69	22.68	22.74	23.00	22.56	22.80				
5	QPSK	25	0	22.75	22.75	22.77	23.05	22.71	22.93				
5	HQAM	1	0	22.65	22.71	22.79	23.03	22.					



Band 48_Ant 10										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-to-Sett (dBm)	MPR (dB)	
Channel										
Frequency (MHz)				3550	3509	3541	3590			
20	QPSK	1	0	17.81	18.02	17.89	18.02	19	0	
20	QPSK	1	49	17.81	18.03	17.92	18.03			
20	QPSK	1	99	17.75	18.00	17.90	17.90			
20	QPSK	50	0	17.75	18.12	17.78	18.02			
20	QPSK	15	24	17.78	18.04	17.78	17.88			
20	QPSK	50	50	17.95	18.08	17.88	17.98	19	0	
20	QPSK	100	0	17.78	18.01	17.98	17.91			
20	16QAM	1	0	17.83	17.91	17.80	17.99			
20	16QAM	1	49	17.83	18.06	17.92	17.97			
20	16QAM	1	99	17.82	17.97	17.85	17.84	19	0	
20	16QAM	50	0	17.74	18.07	17.85	17.92			
20	16QAM	50	24	17.77	17.97	17.80	17.82			
20	16QAM	50	50	17.74	17.99	17.80	17.85	19	0	
20	16QAM	100	0	17.78	17.96	17.83	17.77			
20	64QAM	1	0	17.78	17.88	17.74	17.87			
20	64QAM	1	49	17.85	18.06	17.92	17.97			
20	64QAM	1	99	17.83	17.85	17.82	17.75	19	0	
20	64QAM	50	0	17.80	18.02	17.86	17.90			
20	64QAM	50	24	17.76	18.03	17.83	17.84			
20	64QAM	50	50	17.85	18.06	17.85	17.89	19	0	
20	64QAM	100	0	17.77	17.91	17.82	17.84			
20	256QAM	1	0	17.80	17.89	17.81	17.89			
20	256QAM	1	49	17.88	18.06	17.92	17.99			
20	256QAM	1	99	17.82	17.93	17.79	17.80	19	0	
20	256QAM	50	0	17.80	18.02	17.88	17.90			
20	256QAM	50	24	17.76	17.95	17.77	17.85			
20	256QAM	50	50	17.82	18.04	17.82	17.88	19	0	
20	256QAM	100	0	17.69	17.87	17.87	17.79			
Channel										
Frequency (MHz)				3572	3623	3642	3692.5	Time-to-Sett (dBm)	MPR (dB)	
15	QPSK	1	0	17.73	18.01	17.84	17.84			
15	QPSK	1	37	17.98	18.05	17.99	18.04			
15	QPSK	1	74	17.66	17.87	17.85	17.82			
15	QPSK	36	0	17.80	18.06	17.92	17.96			
15	QPSK	36	20	17.82	17.96	17.86	17.88			
15	QPSK	36	39	17.77	17.96	17.77	17.91	19	0	
15	QPSK	75	0	17.68	17.96	17.84	17.77			
15	16QAM	1	0	17.88	18.00	17.86	17.89			
15	16QAM	1	37	17.87	18.04	17.99	17.91	19	0	
15	16QAM	1	74	17.71	17.87	17.89	17.86			
15	16QAM	36	0	17.83	17.98	17.83	17.84			
15	16QAM	36	20	17.74	17.94	17.82	17.83			
15	16QAM	36	39	17.82	17.95	17.78	17.84	19	0	
15	16QAM	75	0	17.69	17.86	17.85	17.80			
15	64QAM	1	0	17.77	17.89	17.82	17.80			
15	64QAM	1	37	17.83	18.03	17.98	17.97	19	0	
15	64QAM	1	74	17.64	17.85	17.80	17.85			
15	64QAM	36	0	17.81	17.97	17.86	17.89			
15	64QAM	36	20	17.81	18.03	17.82	17.88			
15	64QAM	36	39	17.76	17.98	17.73	17.89	19	0	
15	64QAM	75	0	17.67	17.91	17.92	17.76			
15	256QAM	1	0	17.78	17.88	17.74	17.89			
15	256QAM	1	37	17.79	17.93	17.85	18.01	19	0	
15	256QAM	1	74	17.70	17.93	17.75	17.82			
15	256QAM	36	0	17.86	18.01	17.90	17.94			
15	256QAM	36	20	17.68	17.94	17.84	17.84			
15	256QAM	36	39	17.82	18.07	17.79	17.92	19	0	
15	256QAM	75	0	17.77	17.95	17.95	17.77			
Channel										
Frequency (MHz)				3572	3581.5	3616	3690	Time-to-Sett (dBm)	MPR (dB)	
10	QPSK	1	0	17.67	17.94	17.82	17.96			
10	QPSK	1	25	17.77	18.07	17.97	17.94	19	0	
10	QPSK	1	49	17.73	17.88	17.79	17.86			
10	QPSK	1	74	17.68	18.11	17.96	17.89			
10	QPSK	25	12	17.71	18.00	17.88	17.92			
10	QPSK	25	25	17.73	18.03	17.79	17.88			
10	QPSK	50	0	17.63	17.90	17.86	17.80			
10	QPSK	50	12	17.81	18.01	17.80	17.83			
10	16QAM	1	0	17.79	18.00	17.91	18.01	19	0	
10	16QAM	1	25	17.82	17.99	17.83	17.88			
10	16QAM	1	49	17.62	17.99	17.83	17.88			
10	16QAM	25	0	17.78	18.03	17.86	17.94			
10	16QAM	25	12	17.81	18.03	17.91	17.93	19	0	
10	16QAM	25	25	17.78	18.00	17.77	17.97			
10	16QAM	50	0	17.69	18.00	17.95	17.89			
10	64QAM	1	0	17.61	17.87	17.81	18.01			
10	64QAM	1	25	17.80	18.11	17.92	18.02	19	0	
10	64QAM	1	49	17.69	17.97	17.78	17.85			
10	64QAM	25	0	17.78	18.05	17.96	17.87			
10	64QAM	25	12	17.82	17.95	17.88	17.91	19	0	
10	64QAM	25	25	17.79	17.98	17.78	17.85			
10	64QAM	50	0	17.75	17.94	17.91	17.82			
10	256QAM	1	0	17.71	18.00	17.86	17.84			
10	256QAM	1	25	17.80	18.05	17.90	18.04	19	0	
10	256QAM	1	49	17.72	17.90	17.80	17.83			
10	256QAM	25	0	17.67	18.03	17.89	17.80			
10	256QAM	25	12	17.71	18.01	17.89	17.81	19	0	
10	256QAM	25	25	17.73	18.06	17.82	17.88			
10	256QAM	50	0	17.67	17.95	17.84	17.83			
Channel										
Frequency (MHz)				3622.5	3667	3643	3697.5	Time-to-Sett (dBm)	MPR (dB)	
5	QPSK	1	0	17.76	17.91	17.77	17.95			
5	QPSK	1	12	17.80	18.00	17.94	18.01	19	0	
5	QPSK	1	24	17.66	17.96	17.76	17.86			
5	QPSK	12	0	17.97	17.99	17.83	17.82			
5	QPSK	12	7	17.78	17.84	17.88	17.82	19	0	
5	QPSK	12	13	17.78	17.95	17.78	17.91			
5	QPSK	25	0	17.68	17.90	17.90	17.78			
5	16QAM	1	0	17.77	17.99	17.87	17.95			
5	16QAM	1	12	17.78	18.12	17.95	18.01	19	0	
5	16QAM	1	24	17.69	17.96	17.86	17.86			
5	16QAM	12	0	17.68	17.96	17.84	17.87			
5	16QAM	12	7	17.76	17.90	17.84	17.95	19	0	
5	16QAM	12	13	17.81	18.06	17.77	17.87			
5	64QAM	1	0	17.78	17.96	17.84	17.87			
5	64QAM	1	12	17.71	17.95	17.84	18.00	19	0	
5	64QAM	1	24	17.61	17.95	17.82	17.83			
5	64QAM	12	0	17.78	18.00	17.84	17.87			
5	64QAM	12	7	17.74	17.99	17.85	17.85	19	0	
5	64QAM	12	13	17.74	18.03	17.82	17.84			
5	64QAM	25	0	17.78	17.96	17.89	17.84			
5	256QAM	1	0	17.67	17.90	17.84	17.99			
5	256QAM	1	12	17.84	17.99	17.97	18.01	19	0	
5	256QAM	1	24	17.67	17.97	17.76	17.77			
5	256QAM	12	0	17.75	18.00	17.86	17.90			
5	256QAM	12	7	17.72	17.94	17.85	17.86	19	0	
5	256QAM	12	13	17.73	17.93	17.86	17.95			
5	256QAM	25	0	17.70	17.90	17.84	17.83			

Band 48_Ant 8										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-to-Sett (dBm)	MPR (dB)	
Channel										
Frequency (MHz)				3550	3509	3541	3590			
20	QPSK	1	0	21.41	21.25	21.29	21.19	21.7	0	
20	QPSK	1	49	21.68	21.30	21.33	21.24			
20	QPSK	1								





Reduced Power Mode for DS17

GSM850_Ant 0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	TX Channel	128	189		251	128	189	
Frequency (Mhz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.90	31.88	32.27	33.50	22.90	22.88	23.27	24.50
GPRS 1 Tx slots	31.88	31.85	32.24	33.50	22.88	22.85	23.24	24.50
GPRS 2 Tx slots	29.03	29.37	29.58	30.50	23.03	23.37	23.58	24.50
GPRS 3 Tx slots	27.82	27.93	27.92	28.80	23.56	23.67	23.66	24.54
GPRS 4 Tx slots	26.23	26.41	26.43	27.50	23.23	23.41	23.43	24.50
EDGE 1 Tx slot	25.13	25.25	25.56	26.50	16.13	16.25	16.56	17.50
EDGE 2 Tx slots	24.25	24.33	24.55	25.50	18.25	18.33	18.55	19.50
EDGE 3 Tx slots	22.51	22.31	22.72	23.50	18.25	18.33	18.46	19.24
EDGE 4 Tx slots	20.51	20.45	20.69	21.50	17.51	17.45	17.69	18.50

GSM1900_Ant 0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	TX Channel	512	661		810	512	661	
Frequency (Mhz)	1850.2	1860	1909.8		1850.2	1860	1909.8	
GSM 1 Tx slot	25.87	25.98	26.03	26.60	16.87	16.98	17.03	17.60
GPRS 1 Tx slot	25.83	26.01	25.86	26.60	16.83	17.01	16.86	17.60
GPRS 2 Tx slots	22.56	22.50	22.49	23.60	16.56	16.50	16.49	17.60
GPRS 3 Tx slots	20.60	20.80	20.66	21.90	16.34	16.54	16.39	17.64
GPRS 4 Tx slots	19.29	19.38	19.39	20.60	16.29	16.38	16.39	17.60
EDGE 1 Tx slot	24.81	24.46	24.81	26.00	15.81	15.46	15.81	17.00
EDGE 2 Tx slots	22.25	22.16	22.17	23.60	16.25	16.16	16.17	17.60
EDGE 3 Tx slots	20.25	20.48	20.22	21.90	15.99	16.22	15.96	17.64
EDGE 4 Tx slots	18.85	19.06	19.05	20.60	15.85	16.06	16.05	17.60

Band	WCDMA_II_Ant 0			Tune-up Limit (dBm)	WCDMA_II_Ant 1			Tune-up Limit (dBm)
	TX Channel	9262	9400		9538	9262	9400	
Rx Channel	9662	9800	9938		9662	9800	9938	
Frequency (Mhz)	1852.4	1900	1907.6		1852.4	1900	1907.6	
3GPP Rel 99 AMR 12.2Kbps	14.45	14.52	14.44	15.70	16.30	16.45	16.39	18.00
3GPP Rel 99 RMC 12.2Kbps	14.49	14.55	14.48	15.70	16.34	16.48	16.41	18.00
3GPP Rel 6 HSDPA Subtest-1	13.36	13.16	13.43	14.70	15.43	15.54	15.48	17.00
3GPP Rel 6 HSDPA Subtest-2	13.29	13.31	13.47	14.70	15.47	15.53	15.44	17.00
3GPP Rel 6 HSDPA Subtest-3	12.83	12.68	12.73	14.20	14.97	15.01	14.88	16.50
3GPP Rel 6 HSDPA Subtest-4	12.92	12.75	12.45	14.20	15.04	15.12	14.94	16.50
3GPP Rel 6 DC-HSDPA Subtest-1	13.31	13.15	13.31	14.70	15.41	15.43	15.42	17.00
3GPP Rel 6 DC-HSDPA Subtest-2	13.24	13.26	13.43	14.70	15.36	15.44	15.31	17.00
3GPP Rel 6 DC-HSDPA Subtest-3	12.72	12.62	12.77	14.20	14.90	14.92	14.89	16.50
3GPP Rel 6 DC-HSDPA Subtest-4	12.63	12.57	12.42	14.20	14.96	14.91	14.91	16.50
3GPP Rel 6 HSUPA Subtest-1	13.47	13.22	13.60	14.70	15.46	15.44	15.45	17.00
3GPP Rel 6 HSUPA Subtest-2	11.39	11.28	11.53	12.70	13.59	13.60	13.52	15.00
3GPP Rel 6 HSUPA Subtest-3	12.35	12.19	12.51	13.70	14.53	14.49	14.65	16.00
3GPP Rel 6 HSUPA Subtest-4	11.52	11.36	11.49	12.70	13.52	13.54	13.60	15.00
3GPP Rel 6 HSUPA Subtest-5	13.49	13.26	13.48	14.70	15.47	15.32	15.57	17.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	12.17	12.21	12.24	13.20	13.69	13.98	13.82	15.50

Band	WCDMA_IV_Ant 0			Tune-up Limit (dBm)	WCDMA_IV_Ant 1			Tune-up Limit (dBm)
	TX Channel	1312	1413		1513	1312	1413	
Rx Channel	1537	1638	1738		1537	1638	1738	
Frequency (Mhz)	1712.4	1722.3	1722.6		1712.4	1722.3	1722.6	
3GPP Rel 99 AMR 12.2Kbps	15.31	15.52	15.51	16.70	15.89	16.00	15.93	17.40
3GPP Rel 99 RMC 12.2Kbps	15.34	15.56	15.54	16.70	16.02	16.03	15.97	17.40
3GPP Rel 6 HSDPA Subtest-1	14.38	14.60	14.45	15.70	14.78	15.14	14.89	16.40
3GPP Rel 6 HSDPA Subtest-2	14.29	14.53	14.51	15.70	14.78	14.96	14.96	16.40
3GPP Rel 6 HSDPA Subtest-3	13.91	14.04	13.90	15.20	14.23	14.57	14.55	15.90
3GPP Rel 6 HSDPA Subtest-4	13.77	14.20	13.95	15.20	14.44	14.57	14.40	15.90
3GPP Rel 6 DC-HSDPA Subtest-1	14.08	14.38	14.10	15.70	14.83	14.94	14.84	16.40
3GPP Rel 6 DC-HSDPA Subtest-2	14.04	14.55	14.32	15.70	14.87	14.94	14.82	16.40
3GPP Rel 6 DC-HSDPA Subtest-3	13.78	13.87	13.77	15.20	14.34	14.48	14.26	15.90
3GPP Rel 6 DC-HSDPA Subtest-4	13.66	14.07	13.80	15.20	14.24	14.47	14.24	15.90
3GPP Rel 6 HSUPA Subtest-1	14.53	14.62	14.40	15.70	14.98	15.09	14.87	16.40
3GPP Rel 6 HSUPA Subtest-2	12.50	12.60	12.54	13.70	12.99	13.03	12.99	14.40
3GPP Rel 6 HSUPA Subtest-3	13.48	13.45	13.49	14.70	14.03	14.03	13.98	15.40
3GPP Rel 6 HSUPA Subtest-4	12.59	12.62	12.39	13.70	13.04	13.08	13.02	14.40
3GPP Rel 6 HSUPA Subtest-5	14.58	14.56	14.49	15.70	15.07	15.07	14.91	16.40
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	13.39	13.28	13.22	14.20	13.31	13.58	13.52	14.90

Band	WCDMA_V_Ant 0			Tune-up Limit (dBm)	WCDMA_V_Ant 1			Tune-up Limit (dBm)
	TX Channel	4132	4182		4233	4132	4182	
Rx Channel	4357	4407	4458		4357	4407	4458	
Frequency (Mhz)	826.4	836.4	846.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	22.13	22.25	22.22	24.00	20.51	20.68	20.61	21.90
3GPP Rel 99 RMC 12.2Kbps	22.15	22.27	22.25	24.00	20.56	20.72	20.66	21.90
3GPP Rel 6 HSDPA Subtest-1	21.19	21.26	21.30	23.00	19.54	19.69	19.73	20.90
3GPP Rel 6 HSDPA Subtest-2	21.14	21.27	21.33	23.00	19.62	19.71	19.83	20.90
3GPP Rel 6 HSDPA Subtest-3	20.65	20.74	20.65	22.50	19.04	19.06	19.29	20.40
3GPP Rel 6 HSDPA Subtest-4	20.65	20.74	20.77	22.50	19.97	19.23	19.32	20.40
3GPP Rel 6 DC-HSDPA Subtest-1	21.10	21.21	21.02	23.00	19.73	19.70	19.71	20.90
3GPP Rel 6 DC-HSDPA Subtest-2	21.06	21.13	21.09	23.00	19.61	19.70	19.66	20.90
3GPP Rel 6 DC-HSDPA Subtest-3	20.53	20.69	20.58	22.50	19.25	19.22	19.06	20.40
3GPP Rel 6 DC-HSDPA Subtest-4	20.70	20.71	20.59	22.50	19.13	19.15	19.10	20.40
3GPP Rel 6 HSUPA Subtest-1	21.12	21.22	21.28	23.00	19.71	19.67	19.81	20.90
3GPP Rel 6 HSUPA Subtest-2	19.14	19.26	19.29	21.00	17.68	17.67	17.81	18.90
3GPP Rel 6 HSUPA Subtest-3	20.14	20.23	20.30	22.00	18.65	18.59	18.69	19.90
3GPP Rel 6 HSUPA Subtest-4	19.14	19.23	19.28	21.00	17.55	17.70	17.70	18.90
3GPP Rel 6 HSUPA Subtest-5	21.10	21.20	21.30	23.00	19.54	19.64	19.79	20.90
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	19.54	19.66	19.60	21.50	18.08	18.13	18.07	19.40

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Band 5_Ant 0										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch (F/Hz)	Power Med Ch (F/Hz)	Power High Ch (F/Hz)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.45	22.50	22.57				
10	QPSK	1	25	22.52	22.63	22.80	24	0		
10	QPSK	1	49	22.62	22.84	23.14				
10	QPSK	25	0	22.52	22.61	22.58				
10	QPSK	25	12	22.43	22.50	22.56	24	0		
10	QPSK	25	25	22.41	21.90	21.43				
10	QPSK	50	0	22.52	22.58	22.57				
10	HQAM	1	0	23.25	22.28	22.51	24	0		
10	HQAM	1	25	23.44	22.24	22.51				
10	HQAM	1	49	22.41	22.46	22.45				
10	HQAM	25	0	21.26	21.44	21.53				
10	HQAM	25	12	21.47	21.52	21.51	23	1		
10	HQAM	25	25	21.47	21.44	21.51				
10	HQAM	50	0	21.42	21.48	21.48				
10	HQAM	50	1	21.41	21.00	21.43				
10	HQAM	1	25	21.45	21.43	21.51	23	1		
10	HQAM	1	49	21.37	21.51	21.53				
10	HQAM	25	0	20.36	20.00	20.52				
10	HQAM	25	12	20.47	20.32	20.48	22	2		
10	HQAM	25	25	20.45	20.44	20.51				
10	HQAM	50	0	20.45	20.28	20.47				
10	SSBAM	1	0	18.71	18.62	18.78				
10	SSBAM	1	25	18.67	18.65	18.62	20	4		
10	SSBAM	1	49	18.63	18.63	18.63				
10	SSBAM	25	0	18.60	18.64	18.63				
10	SSBAM	25	12	18.58	18.68	18.62	20	4		
10	SSBAM	25	25	18.58	18.67	18.61				
10	SSBAM	50	0	18.60	18.68	18.61				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.42	22.42	22.52				
5	QPSK	1	12	22.48	22.60	22.56	24	0		
5	QPSK	1	24	22.43	22.54	22.48				
5	QPSK	12	0	22.44	22.67	22.58				
5	QPSK	12	7	22.38	22.44	22.50	24	0		
5	QPSK	12	14	22.42	21.93	21.42				
5	QPSK	25	0	22.45	22.47	22.54				
5	HQAM	1	0	22.27	22.33	22.44	24	0		
5	HQAM	1	24	22.37	22.54	22.44				
5	HQAM	1	24	22.37	22.34	22.36				
5	HQAM	12	0	21.27	21.38	21.44				
5	HQAM	12	7	21.36	21.63	21.48	23	1		
5	HQAM	12	13	21.43	21.34	21.42				
5	HQAM	25	0	21.36	21.37	21.40				
5	HQAM	25	7	21.32	21.33	21.31				
5	HQAM	1	12	21.32	21.33	21.42	23	1		
5	HQAM	1	24	21.29	21.43	21.47				
5	HQAM	12	0	20.31	20.33	20.42				
5	HQAM	12	7	20.40	20.41	20.37	22	2		
5	HQAM	12	13	20.41	20.35	20.48				
5	SSBAM	1	0	18.74	18.74	18.75				
5	SSBAM	1	12	18.69	18.65	18.67	20	4		
5	SSBAM	1	24	18.65	18.63	18.68				
5	SSBAM	12	0	18.74	18.72	18.76				
5	SSBAM	12	7	18.69	18.68	18.67	20	4		
5	SSBAM	12	13	18.71	18.76	18.70				
5	SSBAM	25	0	18.78	18.85	18.87				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.33	22.39	22.53				
3	QPSK	1	8	22.48	22.56	22.48	24	0		
3	QPSK	1	16	22.43	22.54	22.48				
3	QPSK	8	0	22.48	22.54	22.51				
3	QPSK	8	4	22.39	22.39	22.52	24	0		
3	QPSK	8	8	22.44	22.44	22.44				
3	QPSK	16	0	22.43	22.56	22.46				
3	HQAM	1	0	22.30	22.31	22.39	24	0		
3	HQAM	1	24	22.42	22.42	22.42				
3	HQAM	1	14	22.31	22.29	22.33				
3	HQAM	8	0	21.31	21.38	21.43				
3	HQAM	8	4	21.38	21.46	21.42	23	1		
3	HQAM	8	7	21.39	21.37	21.46				
3	HQAM	15	0	21.37	21.36	21.44				
3	HQAM	1	12	21.38	21.38	21.32				
3	HQAM	1	8	21.31	21.31	21.45	23	1		
3	HQAM	1	16	21.28	21.40	21.52				
3	HQAM	8	0	20.34	20.38	20.47				
3	HQAM	8	4	20.42	20.44	20.37	22	2		
3	HQAM	8	7	20.42	20.37	20.41				
3	HQAM	15	0	20.35	20.41	20.38				
3	SSBAM	1	0	18.69	18.76	18.71				
3	SSBAM	1	8	18.65	18.61	18.64	20	4		
3	SSBAM	1	14	18.74	18.66	18.64				
3	SSBAM	8	0	18.69	18.77	18.76				
3	SSBAM	8	4	18.74	18.64	18.66	20	4		
3	SSBAM	8	7	18.75	18.79	18.78				
3	SSBAM	15	0	18.78	18.76	18.73				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.33	22.38	22.49				
1.4	QPSK	1	3	22.48	22.56	22.51	24	0		
1.4	QPSK	1	6	22.43	22.54	22.48				
1.4	QPSK	3	0	22.51	22.49	22.51				
1.4	QPSK	3	1	22.40	22.42	22.46	24	0		
1.4	QPSK	3	3	22.40	22.46	22.41				
1.4	QPSK	6	0	22.40	22.62	22.48	24	0		
1.4	HQAM	1	0	22.25	22.28	22.40	24	0		
1.4	HQAM	1	24	22.34	22.46	22.40				
1.4	HQAM	1	14	22.28	22.34	22.35				
1.4	HQAM	3	0	22.40	22.49	22.52	24	0		
1.4	HQAM	3	1	22.38	21.46	21.42				
1.4	HQAM	3	3	22.43	22.48	22.49				
1.4	HQAM	6	0	21.32	21.39	21.43	23	1		
1.4	HQAM	1	12	21.37	21.39	21.34				
1.4	HQAM	1	8	21.40	21.40	21.44				
1.4	HQAM	1	16	21.28	21.43	21.50	23	1		
1.4	HQAM	3	0	21.36	21.43	21.43				
1.4	HQAM	3	1	21.33	21.33	21.34				
1.4	HQAM	3	1	21.42	21.38	21.43				
1.4	HQAM	6	0	20.36	20.39	20.37	22	2		
1.4	SSBAM	1	0	18.73	18.74	18.74				
1.4	SSBAM	1	8	18.68	18.68	18.64	20	4		
1.4	SSBAM	1	14	18.76	18.66	18.66				
1.4	SSBAM	3	0	18.70	18.78	18.74				
1.4	SSBAM	3	1	18.76	18.69	18.76	20	4		
1.4	SSBAM	3	3	18.80	18.84	18.73				
1.4	SSBAM	6	0	18.78	18.79	18.73				

Band 5_Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (MHz)	Power Low Ch (F/Hz)	Power Med Ch (F/Hz)	Power High Ch (F/Hz)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.14	21.14	21.06				
10	QPSK	1	25	21.17	21.25	21.21	22.4	0		
10	QPSK	1	49	21.12	21.15	21.14				
10	QPSK	25	0	21.14	21.22	21.20				
10	QPSK	25	12	21.08	21.20	21.19	22.4	0		
10	QPSK	25	25	21.02	21.15	21.20				
10	QPSK	50	0	21.05	21.21	21.20				
10	HQAM	1	0	21.09	21.18	21.26	22.4	0		
10	HQAM	1	25	21.15	21.20	21.16				
10	HQAM	1	49	21.05	21.14	21.15				
10	HQAM	25	0	21.06	21.12	21.06				
10	HQAM	25	12	21.01	21.22	21.18	22.4	0		
10	HQAM	25	25	21.03	21.21	21.10				
10	HQAM	50	0	21.13	21.14	21.10				
10	HQAM	50	1	21.08	21.15	21.17				
10	HQAM	1	25	21.18	21.13	21.20	22.4	0		
10	HQAM	1								



Band 12_Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (Hz)	Power Low Ch. (Freq.)	Power Mid Ch. (Freq.)	Power High Ch. (Freq.)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.78	22.85	22.85				
10	QPSK	1	25	22.65	22.64	22.93	24	0		
10	QPSK	1	49	22.52	22.52	22.93				
10	QPSK	25	0	22.81	22.81	22.52				
10	QPSK	25	12	22.67	22.64	22.90	24	0		
10	QPSK	25	25	22.54	22.57	22.93				
10	QPSK	50	0	22.69	22.67	22.91				
10	HQAM	1	0	22.79	22.86	22.78	24	0		
10	HQAM	1	49	22.80	22.86	22.71				
10	HQAM	25	0	22.64	22.14	22.15				
10	HQAM	25	12	22.50	22.39	22.00				
10	HQAM	25	25	22.18	22.23	22.25	23	1		
10	HQAM	50	0	22.11	22.15	22.14				
10	HQAM	1	25	22.22	22.27	22.32	23	1		
10	HQAM	1	49	22.28	22.28	22.48				
10	HQAM	25	0	21.92	21.10	21.14				
10	HQAM	25	12	21.13	21.18	21.16				
10	HQAM	25	25	21.11	21.18	21.22	22	2		
10	HQAM	50	0	21.13	21.11	21.18				
10	SSBAM	1	0	19.21	19.23	19.19				
10	SSBAM	1	25	19.16	19.24	19.31	20	4		
10	SSBAM	1	49	19.15	19.19	19.18				
10	SSBAM	25	0	19.30	19.36	19.30				
10	SSBAM	25	12	19.24	19.24	19.24	20	4		
10	SSBAM	25	25	19.34	19.34	19.30				
10	SSBAM	50	0	19.27	19.30	19.26				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.73	22.77	22.82				
5	QPSK	1	12	22.69	22.63	22.96	24	0		
5	QPSK	1	24	22.64	22.64	22.84				
5	QPSK	12	0	22.88	22.83	22.85				
5	QPSK	12	7	22.60	22.64	22.85	24	0		
5	QPSK	12	14	22.57	22.62	22.78				
5	QPSK	25	0	22.89	22.87	22.84				
5	HQAM	1	0	22.70	22.74	22.74	24	0		
5	HQAM	1	24	22.72	22.82	22.77				
5	HQAM	12	0	21.94	22.05	22.08				
5	HQAM	12	7	21.97	21.93	21.86				
5	HQAM	12	13	22.09	22.15	22.14	23	1		
5	HQAM	25	0	22.60	22.07	22.04				
5	HQAM	25	12	22.02	22.09	22.14				
5	HQAM	25	13	22.09	22.15	22.14				
5	HQAM	25	0	21.87	21.62	21.71				
5	HQAM	25	12	21.82	21.88	21.89				
5	HQAM	25	13	21.82	21.81	21.79	23	0.5		
5	HQAM	1	12	21.92	21.99	22.01	23	0.5		
5	HQAM	1	24	21.92	21.95	22.15				
5	HQAM	12	0	21.96	21.96	22.05				
5	HQAM	12	7	21.96	21.96	22.05				
5	HQAM	12	13	22.02	22.02	22.12	23	1		
5	HQAM	12	0	21.84	21.84	21.84				
5	HQAM	12	7	21.84	21.81	21.81				
5	HQAM	12	13	21.82	21.81	21.81	23	0.5		
5	HQAM	25	0	21.74	21.78	21.78				
5	HQAM	25	12	21.90	21.90	21.88				
5	HQAM	1	12	21.94	21.95	21.84	23	0.5		
5	HQAM	1	24	21.98	21.91	21.86				
5	HQAM	12	0	21.83	21.85	21.85				
5	HQAM	12	7	21.78	21.72	21.85	22	1.5		
5	HQAM	12	13	21.78	21.72	21.85				
5	HQAM	12	0	21.80	21.80	21.80				
5	HQAM	1	12	18.74	18.74	18.74	20	4		
5	SSBAM	1	0	18.80	18.80	18.80				
5	SSBAM	1	24	18.82	18.82	18.54				
5	SSBAM	12	0	18.71	18.71	18.71				
5	SSBAM	12	7	18.76	18.79	18.77	20	4		
5	SSBAM	12	13	18.48	18.48	18.48				
5	SSBAM	25	0	18.86	18.85	18.83				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.67	22.79	22.75				
3	QPSK	1	8	22.68	22.69	22.87	24	0		
3	QPSK	1	16	22.61	22.61	22.87				
3	QPSK	8	0	22.84	22.83	22.83				
3	QPSK	8	4	22.61	22.62	22.78	24	0		
3	QPSK	8	8	22.52	22.68	22.78				
3	QPSK	16	0	22.84	22.84	22.85				
3	HQAM	1	0	22.71	22.79	22.73	24	0		
3	HQAM	1	14	22.72	22.77	22.68				
3	HQAM	8	0	22.61	22.69	22.10				
3	HQAM	8	4	22.69	22.10	22.17				
3	HQAM	8	7	22.14	22.14	22.20	23	1		
3	HQAM	15	0	22.64	22.64	22.68				
3	HQAM	1	0	22.98	22.91	22.13				
3	HQAM	1	8	22.16	22.41	22.27	23	1		
3	HQAM	1	14	22.16	22.29	22.43				
3	HQAM	8	0	21.97	21.07	21.08				
3	HQAM	8	7	21.08	21.07	21.10	22	2		
3	HQAM	8	4	21.09	21.08	21.10				
3	HQAM	16	0	21.03	21.07	21.06				
3	SSBAM	1	0	19.13	19.13	19.08				
3	SSBAM	1	8	19.26	19.25	19.22	20	4		
3	SSBAM	1	14	19.26	19.13	19.12				
3	SSBAM	8	0	19.24	19.22	19.28				
3	SSBAM	8	4	19.10	19.13	19.19	20	4		
3	SSBAM	8	7	19.22	19.22	19.18				
3	SSBAM	15	0	19.23	19.18	19.18				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.73	22.76	22.76				
1.4	QPSK	1	3	22.63	22.63	22.93	24	0		
1.4	QPSK	1	6	22.63	22.64	22.87				
1.4	QPSK	3	0	22.82	22.87	22.87				
1.4	QPSK	3	1	22.63	22.64	22.84	24	0		
1.4	QPSK	3	3	22.61	22.66	22.83				
1.4	QPSK	6	0	22.88	22.81	22.79	24	0		
1.4	HQAM	1	0	22.72	22.83	22.71				
1.4	HQAM	1	3	22.77	22.82	22.78				
1.4	HQAM	1	6	22.78	22.74	22.81	24	0		
1.4	HQAM	3	0	22.77	22.86	22.82				
1.4	HQAM	3	1	22.68	22.93	22.84				
1.4	HQAM	3	3	22.72	22.81	22.86				
1.4	HQAM	6	0	22.66	22.59	22.89	23	1		
1.4	HQAM	6	0	22.67	22.59	22.92				
1.4	HQAM	1	3	22.12	22.41	22.24				
1.4	HQAM	1	6	22.24	22.33	22.37	23	1		
1.4	HQAM	3	0	22.91	22.92	22.94				
1.4	HQAM	3	1	22.12	22.28	22.16				
1.4	HQAM	3	3	22.16	22.41	22.29	22	2		
1.4	SSBAM	1	0	19.13	19.15	19.08				
1.4	SSBAM	1	3	19.26	19.21	19.22	20	4		
1.4	SSBAM	1	6	19.24	19.13	19.07				
1.4	SSBAM	3	0	19.20	19.22	19.22				
1.4	SSBAM	3	1	19.16	19.24	19.22	20	4		
1.4	SSBAM	3	3	19.22	19.25	19.23				
1.4	SSBAM	6	0	19.20	19.25	19.19	20	4		

Band 12_Ant 1										
BW (MHz)	Modulation	RE (Hz)	RB (Hz)	Power Low Ch. (Freq.)	Power Mid Ch. (Freq.)	Power High Ch. (Freq.)	Timeup (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.23	22.29	22.22				
10	QPSK	1	25	22.11	22.43	22.30	23.5	0		
10	QPSK	1	49	22.02	22.30	22.24				
10	QPSK	25	0	22.25	22.40	22.28				
10	QPSK	25	12	22.21	22.25	22.18	23.5	0		
10	QPSK	25	25	22.12	22.28	22.21				
10	QPSK	50	0							



Band 14_Ant 0										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Timeup (min)	MFR (dB)		
Channel										
7350										
Frequency (MHz)										
10	QPSK	1	0	22.69	22.70	22.71				
10	QPSK	1	25	22.78	22.79	22.80	24	0		
10	QPSK	1	49	22.81	22.82	22.83				
10	QPSK	25	0	22.74	22.75	22.76				
10	QPSK	25	12	22.73	22.74	22.75	24	0		
10	QPSK	25	25	22.68	22.69	22.70				
10	QPSK	50	0	22.71	22.72	22.73				
10	HQAM	1	0	22.64	22.65	22.66	24	0		
10	HQAM	1	25	22.63	22.64	22.65				
10	HQAM	1	49	22.69	22.70	22.71				
10	HQAM	25	0	22.69	22.70	22.71				
10	HQAM	25	12	22.14	22.15	22.16	23	1		
10	HQAM	25	25	22.17	22.18	22.19				
10	HQAM	50	0	22.10	22.11	22.12				
10	HQAM	1	0	22.04	22.05	22.06				
10	HQAM	1	25	22.05	22.06	22.07	23	1		
10	HQAM	1	49	22.02	22.03	22.04				
10	HQAM	25	0	21.10	21.11	21.12				
10	HQAM	25	12	21.11	21.12	21.13	22	2		
10	HQAM	25	25	21.13	21.14	21.15				
10	SSBQAM	1	0	19.38	19.39	19.40				
10	SSBQAM	1	25	19.31	19.32	19.33	20	4		
10	SSBQAM	1	49	19.35	19.36	19.37				
10	SSBQAM	25	0	19.20	19.21	19.22				
10	SSBQAM	25	12	19.21	19.22	19.23	20	4		
10	SSBQAM	25	25	19.25	19.26	19.27				
10	SSBQAM	50	0	19.17	19.18	19.19				
Channel										
2385										
Frequency (MHz)										
5	QPSK	1	0	22.61	22.61	22.64				
5	QPSK	1	12	22.60	22.60	22.68	24	0		
5	QPSK	1	24	22.40	22.52	22.60				
5	QPSK	12	0	22.66	22.63	22.66				
5	QPSK	12	7	22.61	22.62	22.68	24	0		
5	QPSK	12	13	22.68	22.62	22.61				
5	QPSK	25	0	22.67	22.68	22.63				
5	HQAM	1	0	22.58	22.52	22.54	24	0		
5	HQAM	1	12	22.50	22.62	22.59				
5	HQAM	1	24	22.62	22.65	22.65				
5	HQAM	12	0	22.64	22.64	21.98				
5	HQAM	12	7	22.60	22.10	22.02	23	1		
5	HQAM	12	13	22.10	22.10	22.13				
5	HQAM	25	0	22.62	21.99	22.07				
5	HQAM	1	12	21.94	21.98	21.93	23	1		
5	HQAM	1	24	21.95	21.92	21.97				
5	HQAM	12	0	21.94	21.08	20.98				
5	HQAM	12	7	21.91	21.98	21.91	22	2		
5	HQAM	12	13	21.98	20.99	21.00				
5	SSBQAM	1	0	19.20	19.20	19.35				
5	SSBQAM	1	12	19.26	19.26	19.22	20	4		
5	SSBQAM	1	24	19.21	19.26	19.24				
5	SSBQAM	12	0	19.13	19.12	19.11				
5	SSBQAM	12	7	19.17	19.13	19.16	20	4		
5	SSBQAM	12	13	19.19	19.15	19.16				
5	SSBQAM	25	0	19.10	19.06	19.06				

Band 14_Ant 1										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Timeup (min)	MFR (dB)		
Channel										
7350										
Frequency (MHz)										
10	QPSK	1	0	20.80	20.80	20.80				
10	QPSK	1	25	21.03	21.03	21.03	22.5	0		
10	QPSK	1	49	20.85	20.85	20.85				
10	QPSK	25	0	20.88	20.88	20.88				
10	QPSK	25	12	20.96	20.96	20.96	22.5	0		
10	QPSK	25	25	20.91	20.91	20.91				
10	QPSK	50	0	20.88	20.88	20.88				
10	HQAM	1	0	20.91	20.91	20.91	22.5	0		
10	HQAM	1	25	20.73	20.73	20.73				
10	HQAM	1	49	20.90	20.90	20.90				
10	HQAM	25	0	20.91	20.91	20.91				
10	HQAM	25	12	20.88	20.88	20.88	22.5	0		
10	HQAM	25	25	21.02	21.02	21.02				
10	HQAM	50	0	20.90	20.90	20.90				
10	HQAM	1	0	20.90	20.90	20.90				
10	HQAM	1	25	20.94	20.94	20.94	22.5	0		
10	HQAM	1	49	21.02	21.02	21.02				
10	HQAM	25	0	20.73	20.73	20.73				
10	HQAM	25	12	20.78	20.78	20.78	22	0.5		
10	HQAM	25	25	20.82	20.82	20.82				
10	HQAM	50	0	20.72	20.72	20.72				
10	SSBQAM	1	0	19.05	19.05	19.05				
10	SSBQAM	1	25	19.05	19.05	19.05	20	2.5		
10	SSBQAM	1	49	19.03	19.03	19.03				
10	SSBQAM	25	0	19.97	19.97	19.97				
10	SSBQAM	25	12	19.88	19.88	19.88	20	2.5		
10	SSBQAM	25	25	19.83	19.83	19.83				
10	SSBQAM	50	0	19.88	19.88	19.88				
Channel										
2385										
Frequency (MHz)										
5	QPSK	1	0	20.79	20.83	20.84				
5	QPSK	1	12	20.97	20.91	20.94	22.5	0		
5	QPSK	1	24	20.80	20.89	20.87				
5	QPSK	12	0	20.90	20.76	20.81				
5	QPSK	12	7	20.94	20.83	20.83	22.5	0		
5	QPSK	12	13	20.78	20.80	20.83				
5	QPSK	25	0	20.78	20.76	20.88				
5	HQAM	1	0	20.88	20.80	20.88	22.5	0		
5	HQAM	1	12	20.82	20.91	20.92				
5	HQAM	1	24	20.83	20.77	20.80				
5	HQAM	12	0	20.85	20.78	20.76				
5	HQAM	12	7	20.89	20.76	20.84	22.5	0		
5	HQAM	12	13	20.99	20.98	20.90				
5	HQAM	25	0	20.84	20.88	20.75				
5	HQAM	1	12	20.80	20.75	20.85	22.5	0		
5	HQAM	1	24	20.86	20.95	20.97				
5	HQAM	12	0	20.89	20.88	20.82				
5	HQAM	12	7	20.70	20.85	20.84	22	0.5		
5	HQAM	12	13	20.76	20.10	20.12				
5	SSBQAM	1	0	18.95	19.01	19.06				
5	SSBQAM	1	12	18.97	19.01	18.90	20	2.5		
5	SSBQAM	1	24	18.93	18.92	18.96				
5	SSBQAM	12	0	18.80	18.90	18.85				
5	SSBQAM	12	7	18.89	18.83	18.83	20	2.5		
5	SSBQAM	12	13	18.83	18.85	18.88				
5	SSBQAM	25	0	18.78	18.85	18.80				

Band 17_Ant 0										
BW (MHz)	Modulation	RE Res.	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Timeup (min)	MFR (dB)		
Channel										
2390										
Frequency (MHz)										
10	QPSK	1	0	22.72	22.71	22.75				
10	QPSK	1	25	22.61	22.66	22.92	24	0		
10	QPSK	1	49	22.63	22.69	22.85				
10	QPSK	25	0	22.65	22.64	22.62				
10	QPSK	25	12	22.63	22.61	22.80	24	0		
10	QPSK	25	25	22.68	22.68	22.73				
10	QPSK	50	0	22.65	22.61	22.88				
10	HQAM	1	0	22.71	22.66	22.83	24	0		
10	HQAM	1	25	22.62	22.64	22.65				
10	HQAM	1	49	22.69	22.84	22.85				
10	HQAM	25	0	22.61	22.63	22.66				
10	HQAM	25	12	22.17	22.14	22.12	23	1		
10	HQAM	25	25	22.18	22.18	22.15				
10	HQAM	50	0	22.67	22.68	22.67				
10	HQAM	1	0	22.21	22.23	22.13				
10	HQAM	1	25	22.32	22.35	22.37	23	1		
10	HQAM	1	49	22.38	22					



Band 25_Ant 0										
BW (MHz)	Modulation	RB Freq	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Turn-up time (sec)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	14.93	15.02	15.02				
20	QPSK	1	49	15.11	15.17	15.25	16.4	0		
20	QPSK	50	0	15.11	15.15	15.25				
20	QPSK	50	24	14.99	15.02	14.93	16.4	0		
20	QPSK	50	49	15.13	15.13	15.25				
20	QPSK	100	0	15.00	15.15	14.89				
20	16QAM	1	0	15.12	15.14	14.89	16.4	0		
20	16QAM	50	24	14.97	15.05	14.90				
20	16QAM	50	49	15.14	15.15	15.05				
20	16QAM	100	0	14.99	15.07	15.08	16.4	0		
20	16QAM	100	0	15.02	15.11	15.02				
20	16QAM	100	0	15.13	15.13	15.25				
20	64QAM	1	49	15.00	15.10	15.01	16.4	0		
20	64QAM	1	99	15.03	15.11	15.08				
20	64QAM	50	0	15.08	15.07	14.90	16.4	0		
20	64QAM	50	24	15.15	15.15	14.97				
20	64QAM	50	49	14.96	14.96	14.89				
20	256QAM	1	0	15.01	15.10	15.00	16.4	0		
20	256QAM	1	49	15.10	15.10	14.99				
20	256QAM	50	0	14.98	15.13	14.99	16.4	0		
20	256QAM	50	24	15.08	15.11	14.93				
20	256QAM	50	49	15.14	15.15	14.88				
20	256QAM	100	0	14.98	15.05	14.91				
Channel										
Frequency (MHz)										
15	QPSK	1	0	14.74	14.88	14.83				
15	QPSK	1	37	14.99	14.97	14.83	16.4	0		
15	QPSK	74	0	14.87	14.88	14.89				
15	QPSK	36	0	14.87	14.88	14.89				
15	QPSK	36	20	14.92	14.85	14.82	16.4	0		
15	QPSK	36	48	14.74	14.88	14.83				
15	QPSK	75	0	14.89	14.95	14.65				
15	16QAM	1	0	14.97	14.95	14.64	16.4	0		
15	16QAM	1	37	14.88	14.93	14.79				
15	16QAM	1	74	14.80	14.91	14.75				
15	16QAM	36	0	14.86	14.95	14.74	16.4	0		
15	16QAM	36	20	14.80	14.94	14.75				
15	16QAM	36	39	14.82	14.89	14.89				
15	16QAM	75	0	14.88	14.96	14.86				
15	16QAM	75	0	14.94	14.98	14.82				
15	64QAM	1	37	14.85	14.88	14.79	16.4	0		
15	64QAM	1	74	14.81	14.90	14.86				
15	64QAM	36	0	14.85	14.95	14.78				
15	64QAM	36	20	15.04	14.92	14.85	16.4	0		
15	64QAM	36	39	14.87	14.94	14.81				
15	64QAM	75	0	14.75	14.88	14.73				
15	256QAM	1	0	14.89	14.87	14.87	16.4	0		
15	256QAM	1	37	14.96	14.99	14.74				
15	256QAM	1	74	14.87	14.97	14.79				
15	256QAM	36	0	14.74	15.00	14.87	16.4	0		
15	256QAM	36	20	14.88	14.95	14.81				
15	256QAM	36	39	14.73	14.91	14.79				
15	256QAM	75	0	14.82	14.94	14.89				
Channel										
Frequency (MHz)										
10	QPSK	1	0	14.72	14.90	14.79				
10	QPSK	1	25	14.98	14.93	14.83	16.4	0		
10	QPSK	12	0	14.78	14.78	14.88				
10	QPSK	25	0	14.91	14.95	14.88				
10	QPSK	25	12	14.86	14.97	14.75	16.4	0		
10	QPSK	25	12	14.79	14.95	14.75				
10	QPSK	50	0	14.86	14.94	14.68				
10	16QAM	1	0	14.91	15.02	14.72	16.4	0		
10	16QAM	1	25	14.88	14.93	14.68				
10	16QAM	1	49	14.87	14.89	14.80				
10	16QAM	25	0	14.93	14.94	14.70	16.4	0		
10	16QAM	25	12	14.86	15.04	14.89				
10	16QAM	25	25	14.77	14.84	14.81				
10	16QAM	50	0	14.88	14.95	14.81				
10	64QAM	1	0	14.98	14.97	14.83	16.4	0		
10	64QAM	1	25	14.82	14.98	14.78				
10	64QAM	1	49	14.81	14.91	14.84				
10	64QAM	25	0	14.92	14.98	14.73	16.4	0		
10	64QAM	25	12	15.04	14.97	14.74				
10	64QAM	25	25	14.77	14.82	14.84				
10	64QAM	50	0	14.76	14.89	14.73				
10	256QAM	1	0	14.81	14.89	14.84	16.4	0		
10	256QAM	1	25	14.91	14.94	14.74				
10	256QAM	1	49	14.95	15.01	14.75				
10	256QAM	25	0	14.76	14.96	14.81	16.4	0		
10	256QAM	25	12	14.79	14.97	14.80				
10	256QAM	25	25	14.79	14.85	14.75				
10	256QAM	50	0	14.77	14.88	14.78				
Channel										
Frequency (MHz)										
5	QPSK	1	0	14.77	14.90	14.85				
5	QPSK	1	12	14.97	14.99	14.94	16.4	0		
5	QPSK	1	24	14.71	14.88	14.81				
5	QPSK	12	0	14.94	14.94	14.94				
5	QPSK	12	7	14.81	14.89	14.76	16.4	0		
5	QPSK	12	14	14.77	14.95	14.81				
5	QPSK	25	0	14.76	14.95	14.77				
5	16QAM	1	0	14.97	15.01	14.71	16.4	0		
5	16QAM	1	12	14.78	14.95	14.67				
5	16QAM	1	24	14.82	14.92	14.80				
5	16QAM	12	0	14.95	14.98	14.82	16.4	0		
5	16QAM	12	7	14.87	15.02	14.69				
5	16QAM	12	14	14.84	14.84	14.82				
5	16QAM	25	0	14.79	14.97	14.80				
5	64QAM	1	0	14.91	14.97	14.80	16.4	0		
5	64QAM	1	12	14.79	14.85	14.81				
5	64QAM	1	24	14.74	14.91	14.81				
5	64QAM	12	0	14.84	14.90	14.75	16.4	0		
5	64QAM	12	7	14.99	14.91	14.87				
5	64QAM	12	14	14.87	14.98	14.87				
5	64QAM	25	0	14.92	14.94	14.80	16.4	0		
5	256QAM	1	0	14.77	14.98	14.80				
5	256QAM	1	12	14.97	14.99	14.80				
5	256QAM	1	24	14.92	15.01	14.75	16.4	0		
5	256QAM	12	0	14.82	14.96	14.87				
5	256QAM	12	7	14.74	14.94	14.79				
5	256QAM	12	14	14.82	14.93	14.81	16.4	0		
5	256QAM	25	0	14.82	14.87	14.80				
Channel										
Frequency (MHz)										
3	QPSK	1	0	14.70	14.83	14.79				
3	QPSK	1	8	14.94	15.06	14.85	16.4	0		
3	QPSK	1	16	14.74	14.87	14.81				
3	QPSK	8	0	14.92	14.98	14.91				
3	QPSK	8	4	14.75	14.87	14.81	16.4	0		
3	QPSK	8	16	14.87	14.87	14.87				
3	QPSK	15	0	14.76	14.90	14.65				
3	16QAM	1	0	14.88	15.01	14.67	16.4	0		
3	16QAM	1	8	14.87	14.93	14.77				
3	16QAM	1	16	14.83	14.83	14.81				
3	16QAM	8	0	14.95	14.90	14.78	16.4	0		
3	16QAM	8	4	14.89	14.91	14.74				
3	16QAM	8	7	14.84	14.86	14.95				
3	64QAM	1	0	14.87	14.86	14.84	16.4	0		
3	64QAM	1	8	14.89	14.96	14.89				
3	64QAM	1	16	14.86	14.94	14.79				
3	64QAM	8	0	14.88	15.00	14.86	16.4	0		
3	64QAM	8	4	14.92	14.86	14.79				
3	64QAM	8	7	14.76	14.96	14.82				
3	64QAM	15	0	14.						



Band 26(FCC)_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Nbrs Ch./Freq	Power High Ch./Freq	Turn-up time (sec)	MPR (dB)		
Channel: 20965 20965 20965										
Frequency (MHz) 811.5 811.5 811.5										
15	QPSK	1	0	20.95	21.04	20.97				
15	QPSK	1	37	21.09	21.18	21.07	22.4	0		
15	QPSK	1	74	21.05	21.14	21.04				
15	QPSK	36	0	21.01	21.10	20.99				
15	QPSK	36	20	20.95	21.15	20.93	22.4	0		
15	QPSK	36	39	21.03	21.14	21.05				
15	QPSK	75	0	21.04	21.11	21.02				
15	16QAM	1	0	21.01	21.17	21.05				
15	16QAM	1	37	21.01	21.06	20.97	22.4	0		
15	16QAM	1	74	21.05	21.15	21.06				
15	16QAM	36	0	21.01	21.16	20.96				
15	16QAM	36	20	21.00	21.17	20.94	22.4	0		
15	16QAM	36	39	21.03	21.14	21.05				
15	16QAM	75	0	20.95	21.16	20.95				
15	64QAM	1	37	21.05	21.11	20.99	22.4	0		
15	64QAM	1	74	21.03	21.13	21.04				
15	64QAM	36	0	20.90	20.97	20.96				
15	64QAM	36	20	20.98	20.95	20.99	22	0.4		
15	64QAM	36	39	20.94	20.94	20.94				
15	64QAM	75	0	20.90	20.99	20.92				
15	256QAM	1	0	18.30	18.32	18.29				
15	256QAM	1	37	18.52	18.56	18.52	20	2.4		
15	256QAM	1	74	18.45	18.53	18.44				
15	256QAM	36	0	18.27	18.35	18.32				
15	256QAM	36	20	18.31	18.44	18.42	20	2.4		
15	256QAM	36	39	18.43	18.45	18.38				
15	256QAM	75	0	18.41	18.48	18.40				
Channel: 20940 20940 20940										
Frequency (MHz) 811.5 811.5 811.5										
10	QPSK	1	0	20.84	21.00	20.86				
10	QPSK	1	25	21.04	21.00	21.05	22.4	0		
10	QPSK	1	49	20.90	20.93	20.93				
10	QPSK	25	0	20.90	21.15	20.96				
10	QPSK	25	12	20.83	21.13	20.85	22.4	0		
10	QPSK	25	25	20.95	21.00	20.92				
10	QPSK	50	0	20.91	21.00	20.89				
10	16QAM	1	0	20.89	21.06	20.97				
10	16QAM	1	25	20.85	20.99	20.94	22.4	0		
10	16QAM	1	49	20.92	21.11	20.95				
10	16QAM	25	0	20.99	21.04	20.83				
10	16QAM	25	12	20.85	21.03	20.84	22.4	0		
10	16QAM	25	25	20.91	21.03	20.94				
10	16QAM	50	0	20.82	21.07	20.83				
10	64QAM	1	0	20.84	21.01	20.92				
10	64QAM	1	25	20.93	21.03	20.85	22.4	0		
10	64QAM	1	49	21.01	21.08	20.95				
10	64QAM	25	0	20.90	20.96	20.92				
10	64QAM	25	12	20.90	20.15	20.34	22	0.4		
10	64QAM	25	25	20.92	20.21	20.35				
10	64QAM	50	0	20.87	20.23	20.25				
10	256QAM	1	0	18.21	18.23	18.19				
10	256QAM	1	25	18.43	18.49	18.40	20	2.4		
10	256QAM	1	49	18.34	18.65	18.54				
10	256QAM	25	0	18.20	18.25	18.22				
10	256QAM	25	12	18.31	18.32	18.24	20	2.4		
10	256QAM	25	25	18.31	18.38	18.33				
10	256QAM	50	0	18.38	18.41	18.39				
Channel: 20975 20975 20975										
Frequency (MHz) 811.5 811.5 811.5										
5	QPSK	1	0	20.87	20.90	20.86				
5	QPSK	1	12	21.01	21.09	21.06	22.4	0		
5	QPSK	1	24	20.90	21.01	21.02				
5	QPSK	12	0	20.97	21.13	20.94				
5	QPSK	12	7	20.86	21.03	20.81	22.4	0		
5	QPSK	12	14	20.89	21.07	20.92				
5	QPSK	25	0	20.94	20.99	20.90				
5	16QAM	1	0	20.97	21.14	21.02				
5	16QAM	1	12	21.04	21.05	20.91	22.4	0		
5	16QAM	12	0	20.95	21.15	20.82				
5	16QAM	12	7	20.89	21.11	20.88	22.4	0		
5	16QAM	12	14	21.01	21.12	20.93				
5	16QAM	25	0	20.84	21.12	20.81				
5	64QAM	1	0	20.84	20.92	20.84				
5	64QAM	1	12	21.02	21.05	20.91	22.4	0		
5	64QAM	1	24	20.91	21.09	20.97				
5	64QAM	12	0	20.94	20.97	20.97				
5	64QAM	12	7	20.91	20.16	20.33	22	0.4		
5	64QAM	12	14	20.99	20.24	20.30				
5	64QAM	25	0	20.91	20.23	20.22				
5	256QAM	1	0	18.20	18.28	18.25				
5	256QAM	1	12	18.46	18.44	18.44	20	2.4		
5	256QAM	1	24	18.51	18.62	18.54				
5	256QAM	12	0	18.18	18.31	18.24				
5	256QAM	12	7	18.27	18.32	18.26	20	2.4		
5	256QAM	12	14	18.36	18.38	18.30				
5	256QAM	25	0	18.36	18.39	18.39				
Channel: 20967 20967 20967										
Frequency (MHz) 811.5 811.5 811.5										
3	QPSK	1	0	20.91	20.90	20.86				
3	QPSK	1	8	20.93	21.06	21.02	22.4	0		
3	QPSK	1	14	21.02	20.96	20.92				
3	QPSK	8	0	20.88	21.05	20.88				
3	QPSK	8	4	20.86	21.07	20.91	22.4	0		
3	QPSK	8	7	20.97	21.12	20.95				
3	QPSK	15	0	20.92	21.09	20.87				
3	16QAM	1	0	20.88	21.03	20.89				
3	16QAM	1	8	20.96	21.02	20.91	22.4	0		
3	16QAM	1	14	20.92	21.09	20.89				
3	16QAM	8	0	20.97	21.15	20.95				
3	16QAM	8	4	20.96	21.10	20.91	22.4	0		
3	16QAM	8	7	20.88	21.09	20.81				
3	16QAM	15	0	20.92	21.02	20.84				
3	64QAM	1	0	20.83	21.02	20.89				
3	64QAM	1	8	21.03	21.01	20.95	22.4	0		
3	64QAM	1	14	20.97	21.00	20.90				
3	64QAM	8	0	20.93	20.14	20.29				
3	64QAM	8	4	20.95	20.22	20.30	22	0.4		
3	64QAM	8	7	20.93	20.26	20.26				
3	64QAM	15	0	20.91	20.25	20.23				
3	256QAM	1	0	18.27	18.27	18.21				
3	256QAM	1	8	18.45	18.59	18.48	20	2.4		
3	256QAM	1	14	18.56	18.67	18.58				
3	256QAM	8	0	18.24	18.31	18.28				
3	256QAM	8	4	18.27	18.32	18.26	20	2.4		
3	256QAM	8	7	18.35	18.37	18.30				
3	256QAM	15	0	18.31	18.37	18.37				
Channel: 20967 20967 20967										
Frequency (MHz) 814.7 811.5 814.5										
1.4	QPSK	1	0	20.88	20.95	20.86				
1.4	QPSK	1	3	20.94	21.09	20.93	22.4	0		
1.4	QPSK	1	6	21.00	20.93	20.95				
1.4	QPSK	3	0	20.90	20.91	20.90				
1.4	QPSK	3	1	21.06	21.15	21.01				
1.4	QPSK	3	3	20.93	20.91	20.94				
1.4	QPSK	6	0	20.90	21.10	20.85	22.4	0		
1.4	16QAM	1	0	20.83	21.02	20.89				
1.4	16QAM	1	3	20.99	20.99	20.91				
1.4	16QAM	1	6	20.87	21.09	20.88	22.4	0		
1.4	16QAM	3	0	20.96	21.09	20.96				
1.4	16QAM	3	1	20.95	20.98	20.95				
1.4	16QAM	3	3	20.97	21.11	21.03				
1.4	16QAM	6	0	20.89	21.09	20.84	22.4	0		
1.4	64QAM	1	0	20.93	21.12	20.84			</	



Band 66_Ant 0										
BW (MHz)	Modulation	RE	RB (MHz)	Power Lb Ch (Frac)	Power Mb Ch (Frac)	Power Hb Ch (Frac)	Tx Power (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	15.67	15.83	15.83	19.5	0		
20	QPSK	1	48	15.74	15.90	15.91	19.5	0		
20	QPSK	1	96	15.81	15.97	15.98	19.5	0		
20	QPSK	50	0	15.71	15.86	15.76	19.5	0		
20	QPSK	50	24	15.71	15.80	15.73	19.5	0		
20	QPSK	50	48	15.78	15.85	15.80	19.5	0		
20	QPSK	100	0	15.62	15.84	15.69	19.5	0		
20	HQAM	1	0	15.64	15.74	15.64	19.5	0		
20	HQAM	1	48	15.71	15.82	15.77	19.5	0		
20	HQAM	1	96	15.81	15.76	15.86	19.5	0		
20	HQAM	50	0	15.68	15.73	15.59	19.5	0		
20	HQAM	50	24	15.61	15.81	15.72	19.5	0		
20	HQAM	50	48	15.67	15.80	15.72	19.5	0		
20	HQAM	100	0	15.59	15.85	15.69	19.5	0		
20	HQAM	1	48	15.68	15.73	15.81	19.5	0		
20	HQAM	1	96	15.77	15.75	15.74	19.5	0		
20	HQAM	50	0	15.72	15.80	15.69	19.5	0		
20	HQAM	50	24	15.67	15.72	15.70	19.5	0		
20	HQAM	50	48	15.71	15.82	15.84	19.5	0		
20	HQAM	100	0	15.60	15.81	15.56	19.5	0		
Channel										
Frequency (MHz)										
15	QPSK	1	0	15.63	15.79	15.67	19.5	0		
15	QPSK	1	37	15.60	15.76	15.73	19.5	0		
15	QPSK	1	74	15.67	15.71	15.71	19.5	0		
15	QPSK	36	0	15.62	15.78	15.76	19.5	0		
15	QPSK	36	20	15.66	15.78	15.84	19.5	0		
15	QPSK	36	40	15.70	15.83	15.80	19.5	0		
15	QPSK	75	0	15.71	15.79	15.62	19.5	0		
15	HQAM	1	0	15.58	15.61	15.40	19.5	0		
15	HQAM	1	37	15.59	15.89	15.70	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	0	15.67	15.63	15.26	19.5	0		
15	HQAM	36	20	15.69	15.78	15.59	19.5	0		
15	HQAM	36	40	15.75	15.71	15.28	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	37	15.59	15.84	15.71	19.5	0		
15	HQAM	1	74	15.69	15.72	15.71	19.5	0		
15	HQAM	36	20	15.62	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26	19.5	0		
15	HQAM	36	40	15.69	15.78	15.59	19.5	0		
15	HQAM	75	0	15.62	15.71	15.28	19.5	0		
15	HQAM	75	37	15.75	15.78	15.83	19.5	0		
15	HQAM	1	74	15.61	15.83	15.33	19.5	0		
15	HQAM	36	20	15.67	15.63	15.26				





Band 38_Ant 9										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2360	2365	2410				
20	QPSK	1	0	17.00	16.91	16.73	18	0		
20	QPSK	49	0	17.02	17.07	16.95				
20	QPSK	1	99	16.87	16.92	16.74				
20	QPSK	50	0	16.99	17.05	16.93				
20	QPSK	50	50	16.84	17.00	16.76	18	0		
20	QPSK	100	0	16.94	17.00	16.87				
20	16QAM	1	0	16.87	16.87	16.66				
20	16QAM	1	49	16.98	17.06	16.93	18	0		
20	16QAM	1	99	16.77	16.78	16.70				
20	16QAM	50	0	16.98	16.97	16.84				
20	16QAM	50	24	16.97	16.99	16.83	18	0		
20	16QAM	50	50	16.71	16.82	16.75				
20	16QAM	100	0	16.92	16.86	16.74				
20	64QAM	1	0	16.87	16.81	16.61	18	0		
20	64QAM	1	49	16.98	17.06	16.93				
20	64QAM	1	99	16.72	16.82	16.73				
20	64QAM	50	0	16.88	16.95	16.82				
20	64QAM	50	24	16.83	16.87	16.72	18	0		
20	64QAM	50	50	16.8	16.83	16.66				
20	64QAM	100	0	16.91	16.95	16.72				
20	256QAM	1	0	16.86	16.90	16.59	18	0		
20	256QAM	1	49	16.98	16.96	16.78				
20	256QAM	1	99	16.78	16.88	16.68				
20	256QAM	50	0	16.88	16.96	16.77				
20	256QAM	50	24	16.85	16.94	16.70	18	0		
20	256QAM	50	50	16.8	16.82	16.62				
20	256QAM	100	0	16.82	16.91	16.84				
Channel										
Frequency (MHz)				2372.5	2395	2417.5				
15	QPSK	1	0	16.82	16.81	16.63	18	0		
15	QPSK	1	37	16.88	16.97	16.86				
15	QPSK	1	74	16.85	16.81	16.64				
15	QPSK	36	0	16.84	16.99	16.87				
15	QPSK	36	39	16.87	16.96	16.70	18	0		
15	QPSK	36	39	16.78	16.87	16.75				
15	QPSK	75	0	16.80	16.91	16.82				
15	16QAM	1	0	16.83	16.84	16.69	18	0		
15	16QAM	1	37	16.85	16.88	16.74				
15	16QAM	1	74	16.74	16.73	16.65				
15	16QAM	36	0	16.83	16.90	16.73				
15	16QAM	36	39	16.77	16.86	16.69	18	0		
15	16QAM	36	39	16.68	16.84	16.73				
15	16QAM	75	0	16.82	16.83	16.71				
15	64QAM	1	0	16.87	16.86	16.62	18	0		
15	64QAM	1	37	16.89	17.00	16.84				
15	64QAM	1	74	16.69	16.76	16.65				
15	64QAM	36	0	16.80	16.94	16.69				
15	64QAM	36	39	16.83	16.92	16.66	18	0		
15	64QAM	36	39	16.76	16.86	16.60				
15	64QAM	75	0	16.87	16.94	16.83				
15	256QAM	1	0	16.77	16.87	16.66	18	0		
15	256QAM	1	37	16.75	16.97	16.79				
15	256QAM	1	74	16.71	16.78	16.64				
15	256QAM	36	0	16.76	16.92	16.69				
15	256QAM	36	39	16.83	16.92	16.66	18	0		
15	256QAM	36	39	16.65	16.87	16.59				
15	256QAM	75	0	16.78	16.87	16.71				
Channel										
Frequency (MHz)				2377.5	2399	2421.5				
10	QPSK	1	0	16.99	16.80	16.72	18	0		
10	QPSK	1	25	16.94	17.06	16.85				
10	QPSK	1	49	16.74	16.85	16.72				
10	QPSK	25	0	16.91	16.99	16.74	18	0		
10	QPSK	25	12	16.93	16.94	16.70				
10	QPSK	25	25	16.78	16.85	16.63				
10	QPSK	50	0	16.88	16.96	16.82				
10	16QAM	1	0	16.80	16.79	16.61	18	0		
10	16QAM	1	25	16.87	16.88	16.83				
10	16QAM	1	49	16.73	16.76	16.59				
10	16QAM	25	0	16.82	16.94	16.75	18	0		
10	16QAM	25	12	16.73	16.96	16.51				
10	16QAM	25	25	16.56	16.77	16.70				
10	16QAM	50	0	16.87	16.76	16.68				
10	64QAM	1	25	16.95	17.03	16.92	18	0		
10	64QAM	1	49	16.59	16.75	16.67				
10	64QAM	25	0	16.81	16.92	16.79				
10	64QAM	25	12	16.78	16.83	16.71				
10	64QAM	25	25	16.74	16.87	16.63	18	0		
10	64QAM	50	0	16.84	16.86	16.64				
10	256QAM	1	25	16.74	17.01	16.82	18	0		
10	256QAM	1	49	16.69	16.77	16.53				
10	256QAM	25	0	16.77	16.94	16.70				
10	256QAM	25	12	16.75	16.94	16.62	18	0		
10	256QAM	25	25	16.74	16.82	16.58				
10	256QAM	50	0	16.80	16.84	16.75				
Channel										
Frequency (MHz)				2377.5	2399	2421.5				
5	QPSK	1	0	16.85	16.87	16.62	18	0		
5	QPSK	1	12	16.97	16.99	16.93				
5	QPSK	1	24	16.86	16.82	16.63				
5	QPSK	12	0	16.90	16.96	16.86	18	0		
5	QPSK	12	7	16.82	16.95	16.70				
5	QPSK	12	13	16.83	16.93	16.70				
5	QPSK	24	0	16.80	16.89	16.77				
5	16QAM	1	0	16.86	16.74	16.56	18	0		
5	16QAM	1	12	16.88	16.90	16.78				
5	16QAM	1	24	16.88	16.77	16.62	18	0		
5	16QAM	12	0	16.86	16.89	16.72				
5	16QAM	12	7	16.72	16.94	16.62				
5	16QAM	12	13	16.70	16.79	16.71				
5	64QAM	1	0	16.82	16.70	16.46	18	0		
5	64QAM	1	12	16.90	16.98	16.78				
5	64QAM	1	24	16.85	16.70	16.68				
5	64QAM	12	0	16.84	16.90	16.74	18	0		
5	64QAM	12	7	16.72	16.82	16.65				
5	64QAM	12	13	16.85	16.79	16.56				
5	64QAM	24	0	16.82	16.80	16.67				
5	256QAM	1	0	16.71	16.81	16.45	18	0		
5	256QAM	1	12	16.83	17.01	16.74				
5	256QAM	1	24	16.76	16.83	16.64				
5	256QAM	12	0	16.80	16.94	16.67	18	0		
5	256QAM	12	7	16.75	16.90	16.67				
5	256QAM	12	13	16.69	16.87	16.48				
5	256QAM	24	0	16.81	16.89	16.81				

Band 38_Ant 1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2380	2385	2430				
20	QPSK	1	0	16.58	16.73	16.70	17.8	0		
20	QPSK	1	49	16.52	16.63	16.76				
20	QPSK	1	99	16.65	16.74	16.74				
20	QPSK	50	0	16.53	16.80	16.73	17.6	0		
20	QPSK	50	24	16.57	16.72	16.67				
20	QPSK	50	50	16.53	16.79	16.60				
20	QPSK	100	0	16.65	16.76	16.63				
20	16QAM	1	0	16.60	16.80	16.58	17.6	0		
20	16QAM	1	49	16.72	16.74	16.63				
20	16QAM	1	99	16.53	16.81	16.64				
20	16QAM	50	0	16.70	16.78	16.64				
20	16QAM	50	24	16.67	16.72	16.67	17.6	0		
20	16QAM	50	50	16.68	16.71	16.69				
20	16QAM	100	0	16.67	16.72	16.54				
20	64QAM	1</								



Band 41 (HPUE)_Ant 9													
BW (MHz)	Modulation	RB Size	RB Offset	For IC Power Low Ch / Freq	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Low High Ch / Freq	Power High Middle Ch / Freq	Power High High Ch / Freq	Time-up limit (dpm)	MPR (dB)		
Channel				39750	39750	40185	40620	41055	41490				
20	QPSK	1	0	18.49	18.61	18.60	18.62	18.34	18.90	19.6	0		
20	QPSK	1	49	18.41	18.52	18.71	18.82	18.34	18.93				
20	QPSK	1	99	18.57	18.60	18.69	18.63	18.40	18.78				
20	QPSK	50	0	18.42	18.50	18.65	18.55	18.52	18.90				
20	QPSK	50	24	18.40	18.51	18.61	18.59	18.34	18.94				
20	QPSK	50	50	18.38	18.59	18.59	18.52	18.32	18.97				
20	QPSK	100	0	18.56	18.56	18.76	18.76	18.28	18.94				
20	16QAM	1	0	18.54	18.55	18.70	18.52	18.43	19.01				
20	16QAM	1	49	18.21	18.50	18.74	18.75	18.32	18.90				
20	16QAM	1	99	18.63	18.91	18.72	18.62	18.44	18.92				
20	16QAM	50	0	18.43	18.66	18.68	18.83	18.51	18.83				
20	16QAM	50	24	18.51	18.68	18.64	18.53	18.46	18.93				
20	16QAM	50	50	18.52	18.62	18.69	18.85	18.29	18.90				
20	16QAM	100	0	18.39	18.68	18.68	18.83	18.42	19.01				
20	64QAM	1	0	18.39	18.67	18.73	18.80	18.37	18.85				
20	64QAM	1	49	18.21	18.50	18.74	18.75	18.32	18.90				
20	64QAM	1	99	18.59	18.60	18.71	18.86	18.41	18.99				
20	64QAM	50	0	18.47	18.63	18.62	18.85	18.41	18.98				
20	64QAM	50	24	18.52	18.58	18.61	18.69	18.41	18.93				
20	64QAM	50	50	18.51	18.50	18.73	18.83	18.42	18.86				
20	64QAM	100	0	18.47	18.69	18.65	18.85	18.32	18.93				
20	256QAM	1	0	18.41	18.71	18.66	18.77	18.44	18.81				
20	256QAM	1	49	18.41	18.61	18.65	18.82	18.33	18.86				
20	256QAM	1	99	18.47	18.51	18.71	18.74	18.41	18.79				
20	256QAM	50	0	18.42	18.63	18.58	18.87	18.38	18.99				
20	256QAM	50	24	18.42	18.66	18.73	18.91	18.48	18.86				
20	256QAM	50	50	18.48	18.65	18.61	18.85	18.38	18.94				
20	256QAM	100	0	18.42	18.64	18.62	18.73	18.42	18.91				
Channel				39755	39725	40173	40620	41068	41515	Time-up limit (dpm)	MPR (dB)		
15	QPSK	1	0	18.40	18.58	18.60	18.62	18.34	18.90	19.6	0		
15	QPSK	1	37	18.53	18.62	18.27	18.87	18.42	19.00				
15	QPSK	1	74	18.43	18.50	18.62	18.80	18.30	19.73				
15	QPSK	36	0	18.38	18.61	18.62	18.90	18.30	18.95				
15	QPSK	36	20	18.38	18.45	18.51	18.64	18.38	18.90				
15	QPSK	36	39	18.31	18.49	18.42	18.81	18.17	18.80				
15	QPSK	75	0	18.44	18.53	18.63	18.79	18.27	18.99				
15	QPSK	75	24	18.43	18.53	18.63	18.82	18.37	18.89				
15	16QAM	1	37	18.30	18.39	18.52	18.76	18.30	18.88				
15	16QAM	1	74	18.52	18.50	18.64	18.79	18.41	18.88				
15	16QAM	36	0	18.39	18.58	18.59	18.74	18.40	18.81				
15	16QAM	36	20	18.45	18.58	18.56	18.68	18.41	18.89				
15	16QAM	36	39	18.40	18.59	18.62	18.82	18.23	18.78				
15	16QAM	75	0	18.24	18.62	18.66	18.70	18.33	18.89				
15	64QAM	1	37	18.47	18.59	18.62	18.63	18.18	18.76				
15	64QAM	1	74	18.50	18.56	18.60	18.79	18.38	18.94				
15	64QAM	36	0	18.32	18.57	18.67	18.74	18.37	18.89				
15	64QAM	36	20	18.48	18.50	18.61	18.64	18.38	18.70				
15	64QAM	36	39	18.54	18.51	18.60	18.77	18.34	18.83				
15	64QAM	75	0	18.33	18.54	18.42	18.79	18.20	18.85				
15	256QAM	1	0	18.39	18.59	18.54	18.93	18.30	18.74				
15	256QAM	1	37	18.30	18.48	18.61	18.70	18.16	18.74				
15	256QAM	1	74	18.30	18.41	18.69	18.72	18.32	18.75				
15	256QAM	36	0	18.27	18.53	18.46	18.78	18.20	18.93				
15	256QAM	36	20	18.28	18.53	18.58	18.64	18.38	18.85				
15	256QAM	36	39	18.33	18.53	18.56	18.72	18.26	18.94				
15	256QAM	75	0	18.33	18.56	18.48	18.71	18.34	18.88				
Channel				39740	39700	40160	40620	41080	41540	Time-up limit (dpm)	MPR (dB)		
10	QPSK	1	0	18.42	18.52	18.49	18.72	18.26	18.78	19.6	0		
10	QPSK	1	25	18.48	18.61	18.49	18.66	18.49	19.01				
10	QPSK	1	49	18.47	18.45	18.66	18.81	18.42	18.88				
10	QPSK	25	0	18.53	18.53	18.63	18.80	18.27	18.87				
10	QPSK	25	12	18.32	18.51	18.23	18.77	18.17	18.84				
10	QPSK	25	25	18.36	18.51	18.46	18.80	18.20	18.75				
10	QPSK	50	0	18.45	18.50	18.74	18.91	18.20	18.70				
10	16QAM	1	25	18.47	18.50	18.67	18.77	18.31	18.91				
10	16QAM	1	25	18.39	18.51	18.56	18.81	18.30	18.85				
10	16QAM	1	49	18.61	18.58	18.62	18.75	18.20	18.81				
10	16QAM	25	0	18.40	18.50	18.63	18.80	18.27	18.87				
10	16QAM	25	12	18.45	18.60	18.61	18.70	18.40	18.91				
10	16QAM	25	25	18.51	18.58	18.56	18.74	18.27	18.71				
10	16QAM	50	0	18.38	18.58	18.65	18.76	18.31	18.95				
10	16QAM	50	12	18.27	18.56	18.64	18.74	18.33	18.78				
10	64QAM	1	25	18.39	18.46	18.60	18.69	18.17	18.83				
10	64QAM	1	49	18.44	18.49	18.61	18.83	18.31	18.97				
10	64QAM	25	0	18.46	18.60	18.58	18.76	18.30	18.97				
10	64QAM	25	12	18.40	18.49	18.49	18.70	18.22	18.89				
10	64QAM	25	25	18.60	18.56	18.67	18.72	18.38	18.84				
10	64QAM	50	0	18.43	18.62	18.51	18.84	18.18	18.92				
10	256QAM	1	0	18.37	18.61	18.64	18.94	18.33	18.78				
10	256QAM	1	25	18.38	18.57	18.60	18.70	18.16	18.84				
10	256QAM	1	49	18.28	18.45	18.70	18.62	18.33	18.78				
10	256QAM	25	0	18.40	18.59	18.61	18.80	18.24	18.74				
10	256QAM	25	12	18.27	18.50	18.66	18.81	18.38	18.72				
10	256QAM	25	25	18.40	18.48	18.62	18.76	18.32	18.94				
10	256QAM	50	0	18.32	18.56	18.55	18.72	18.38	18.89				
Channel				39715	39715	40160	40620	41080	41540	Time-up limit (dpm)	MPR (dB)		
5	QPSK	1	0	18.35	18.54	18.59	18.71	18.26	18.88	19.6	0		
5	QPSK	1	12	18.50	18.54	18.60	18.94	18.30	18.90				
5	QPSK	1	24	18.42	18.54	18.56	18.69	18.31	18.87				
5	QPSK	12	0	18.32	18.62	18.56	18.87	18.46	18.89				
5	QPSK	12	7	18.39	18.44	18.47	18.77	18.18	18.76				
5	QPSK	12	13	18.36	18.58	18.55	18.87	18.21	18.72				
5	QPSK	25	0	18.48	18.50	18.63	18.76	18.27	18.88				
5	16QAM	1	0	18.49	18.44	18.60	18.90	18.41	19.00				
5	16QAM	1	12	18.34	18.43	18.54	18.80	18.44	18.92				
5													



Band 41_Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Fair IC Power Low Ch / Freq	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Turn-up limit (dBm)	MPR (dB)
Channel											
				39750	39750	40165	40620	41055	41490		
	Frequency (MHz)			2510	2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.20	22.36	22.62	22.71	22.34	22.85	23.5	0
20	QPSK	1	49	22.20	22.33	22.66	22.73	22.43	22.95	23.5	0
20	QPSK	1	99	22.21	22.37	22.67	22.68	22.37	22.88	23.5	0
20	QPSK	50	0	22.21	22.37	22.69	22.79	22.40	22.87	23.5	0
20	QPSK	50	24	22.21	22.34	22.66	22.76	22.46	22.97	23.5	0
20	QPSK	50	50	22.20	22.35	22.62	22.76	22.31	22.83	23.5	0
20	QPSK	100	0	22.21	22.41	22.67	22.72	22.31	22.83	23.5	0
20	16QAM	1	0	22.27	22.34	22.62	22.62	22.43	22.86	23.5	0
20	16QAM	1	49	22.28	22.01	22.22	22.45	21.93	22.21	23.5	0
20	16QAM	1	99	22.24	22.41	22.20	22.81	22.32	22.62	23.5	0
20	16QAM	50	0	22.11	22.07	22.31	22.47	22.17	22.25	23.5	0
20	16QAM	50	24	22.21	22.21	22.49	22.62	22.19	22.42	23.5	0.5
20	16QAM	50	50	22.26	22.23	22.46	22.62	22.07	22.48	23.5	0
20	16QAM	100	0	22.23	22.23	22.43	22.43	22.12	22.36	23.5	0
20	64QAM	1	0	21.97	21.98	22.12	22.31	22.02	22.15	23.5	0.5
20	64QAM	1	49	22.08	22.01	22.22	22.45	21.93	22.21	23.5	0.5
20	64QAM	1	99	22.07	22.14	22.29	22.43	21.98	22.22	23.5	0.5
20	64QAM	50	0	21.13	21.09	21.33	21.46	21.11	21.26	23.5	0.5
20	64QAM	50	24	21.24	21.24	21.45	21.54	21.14	21.41	23.5	0.5
20	64QAM	50	50	21.19	21.20	21.48	21.64	21.07	21.41	23.5	1.5
20	64QAM	100	0	21.20	21.20	21.43	21.53	21.14	21.42	23.5	1.5
20	256QAM	1	0	18.76	18.74	18.90	19.21	18.82	18.96	20	3.5
20	256QAM	1	49	18.78	18.88	18.84	19.15	18.78	18.20	20	3.5
20	256QAM	1	99	18.71	18.79	18.75	19.01	18.62	18.95	20	3.5
20	256QAM	50	0	18.67	18.66	18.64	18.99	18.67	18.77	20	3.5
20	256QAM	50	24	18.63	18.64	18.81	18.99	18.77	18.76	20	3.5
20	256QAM	50	50	18.66	18.68	18.66	19.01	18.65	18.66	20	3.5
20	256QAM	100	0	18.78	18.68	18.60	18.96	18.62	18.82	20	3.5
Channel											
				39765	39725	40173	40620	41068	41515		
	Frequency (MHz)			25075	25033	25483	2593	26378	26823		
15	QPSK	1	0	22.21	22.22	22.40	22.40	22.20	22.41	23.5	0
15	QPSK	1	37	22.20	22.32	22.60	22.70	22.40	22.81	23.5	0
15	QPSK	1	74	22.20	22.31	22.47	22.61	22.22	22.25	23.5	0
15	QPSK	36	0	22.27	22.30	22.60	22.69	22.39	22.63	23.5	0
15	QPSK	36	24	22.11	22.14	22.37	22.53	22.03	22.23	23.5	0
15	QPSK	36	39	22.21	22.30	22.60	22.69	22.36	22.58	23.5	0
15	QPSK	75	0	22.08	22.26	22.61	22.70	22.20	22.44	23.5	0
15	QPSK	75	24	22.08	22.32	22.60	22.69	22.39	22.63	23.5	0
15	16QAM	1	37	22.18	22.29	22.65	22.74	22.26	22.27	23.5	0
15	16QAM	1	74	22.18	22.40	22.59	22.68	22.23	22.59	23.5	0
15	16QAM	36	0	21.95	21.95	22.13	22.29	22.01	22.18	23.5	0
15	16QAM	36	24	22.18	22.18	22.37	22.53	22.03	22.31	23.5	0
15	16QAM	36	39	22.13	22.05	22.42	22.52	22.00	22.23	23.5	0
15	16QAM	75	0	22.19	22.13	22.26	22.34	21.97	22.24	23.5	0
15	16QAM	75	24	22.16	22.16	22.35	22.51	22.01	22.26	23.5	0
15	64QAM	1	37	22.06	22.06	22.06	22.27	21.83	22.17	23.5	0
15	64QAM	1	74	22.11	22.11	22.19	22.33	21.79	22.32	23.5	0
15	64QAM	36	0	21.63	20.98	21.15	21.35	20.98	21.21	23.5	1.5
15	64QAM	36	24	21.68	21.14	21.28	21.51	21.14	21.38	23.5	1.5
15	64QAM	36	39	20.99	21.15	21.37	21.45	20.99	21.24	23.5	1.5
15	64QAM	75	0	21.17	21.19	21.33	21.35	21.01	21.38	23.5	1.5
15	256QAM	1	0	18.69	18.69	18.69	18.67	18.67	18.64	20	3.5
15	256QAM	1	49	18.50	18.41	18.44	18.97	18.66	18.69	20	3.5
15	256QAM	1	99	18.53	18.56	18.53	18.86	18.58	18.63	20	3.5
15	256QAM	50	0	18.65	18.49	18.44	19.04	18.54	18.72	20	3.5
15	256QAM	50	24	18.66	18.56	18.56	18.86	18.56	18.66	20	3.5
15	256QAM	50	39	18.55	18.55	18.53	19.01	18.70	18.66	20	3.5
15	256QAM	75	0	18.58	18.43	18.38	18.96	18.45	18.74	20	3.5
Channel											
				39740	39700	40160	40620	41080	41540		
	Frequency (MHz)			25095	25055	25495	25940	26385	26840		
10	QPSK	1	0	22.19	22.31	22.60	22.58	22.22	22.43	23.5	0
10	QPSK	1	25	22.23	22.29	22.57	22.77	22.39	22.59	23.5	0
10	QPSK	1	49	22.26	22.34	22.49	22.67	22.31	22.62	23.5	0
10	QPSK	1	74	22.28	22.33	22.59	22.64	22.32	22.63	23.5	0
10	QPSK	25	12	22.11	22.26	22.47	22.57	22.31	22.61	23.5	0
10	QPSK	25	28	22.20	22.29	22.54	22.63	22.24	22.60	23.5	0
10	QPSK	50	0	22.11	22.31	22.59	22.64	22.24	22.49	23.5	0
10	16QAM	1	0	22.20	22.21	22.40	22.40	22.20	22.41	23.5	0
10	16QAM	1	25	22.26	22.16	22.64	22.63	22.30	22.50	23.5	0
10	16QAM	1	49	22.17	22.32	22.53	22.71	22.19	22.60	23.5	0
10	16QAM	1	74	22.18	22.18	22.37	22.53	22.03	22.31	23.5	0
10	16QAM	25	12	22.13	22.07	22.27	22.40	22.03	22.36	23.5	0.5
10	16QAM	25	28	22.07	22.13	22.43	22.51	21.93	22.26	23.5	0.5
10	16QAM	50	0	22.18	22.04	22.26	22.31	21.94	22.19	23.5	0.5
10	64QAM	1	0	21.91	21.83	21.91	22.11	21.83	22.12	23.5	0.5
10	64QAM	1	25	22.07	21.99	22.19	22.30	21.84	22.03	23.5	0.5
10	64QAM	1	49	21.99	22.00	22.24	22.39	21.97	22.24	23.5	0.5
10	64QAM	25	0	20.97	20.91	21.22	21.39	20.91	21.18	23.5	1.5
10	64QAM	25	12	21.21	21.10	21.41	21.50	20.98	21.30	23.5	1.5
10	64QAM	25	28	21.02	21.13	21.38	21.44	21.06	21.40	23.5	1.5
10	64QAM	50	0	21.04	21.04	21.41	21.62	20.96	21.33	23.5	1.5
10	256QAM	1	0	18.68	18.55	18.62	19.15	18.78	18.62	20	3.5
10	256QAM	1	25	18.52	18.55	18.60	19.03	18.60	18.79	20	3.5
10	256QAM	1	49	18.54	18.46	18.44	18.81	18.59	18.84	20	3.5
10	256QAM	25	0	18.62	18.50	18.44	18.94	18.63	18.82	20	3.5
10	256QAM	25	12	18.52	18.47	18.50	18.96	18.69	18.70	20	3.5
10	256QAM	25	28	18.53	18.38	18.39	19.05	18.68	18.79	20	3.5
10	256QAM	50	0	18.67	18.59	18.41	18.84	18.60	18.70	20	3.5
Channel											
				39715	39675	40165	40620	41093	41550		
	Frequency (MHz)			25075	25033	25483	2593	26378	26823		
5	QPSK	1	0	22.13	22.23	22.60	22.70	22.25	22.41	23.5	0
5	QPSK	1	12	22.33	22.27	22.62	22.88	22.36	22.62	23.5	0
5	QPSK	1	24	22.20	22.24	22.56	22.63	22.23	22.60	23.5	0
5	QPSK	12	0	22.30	22.27	22.63	22.70	22.36	22.64	23.5	0
5	QPSK	12	7	22.17	22.20	22.53	22.71	22.30	22.50	23.5	0
5	QPSK	12	13	22.21	22.34	22.56	22.65	22.29	22.58	23.5	0
5	QPSK	25	0	22.12	22.26	22.51	22.67	22.28	22.63	23.5	



Band 41 (HPUe) Ant 6													
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Mid Ch / Freq	Power High Mid Ch / Freq	Power Low H Ch / Freq	Power High H Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel													
Frequency (MHz)				39750	39750	40185	40620	41055	41490				
20	QPSK	1	0	18.72	18.78	18.72	19.05	18.72	18.82	19.9	0		
20	QPSK	1	49	18.72	18.82	18.78	19.05	18.72	18.82				
20	QPSK	1	99	18.75	18.79	18.69	18.99	18.75	18.83				
20	QPSK	50	0	18.80	18.73	18.83	19.07	18.85	18.85				
20	QPSK	15	24	18.78	18.83	18.76	18.99	18.80	18.80				
20	QPSK	50	50	18.77	18.69	18.78	19.03	18.56	18.80	19.9	0		
20	QPSK	100	0	18.63	18.67	18.76	19.00	18.77	18.78				
20	16QAM	1	0	18.69	18.67	18.88	19.04	18.66	18.73				
20	16QAM	1	49	18.79	18.72	18.79	18.96	18.70	18.85				
20	16QAM	1	99	18.70	18.74	18.55	18.93	18.55	18.78				
20	16QAM	50	0	18.67	18.62	18.78	18.95	18.55	18.78				
20	16QAM	50	24	18.68	18.63	18.70	18.86	18.53	18.77	19.9	0		
20	16QAM	50	50	18.74	18.67	18.76	18.99	18.41	18.75				
20	16QAM	100	0	18.69	18.63	18.73	18.97	18.71	18.72				
20	64QAM	1	0	18.66	18.68	18.63	18.94	18.66	18.78				
20	64QAM	1	49	18.79	18.72	18.79	18.96	18.70	18.85	19.9	0		
20	64QAM	1	99	18.67	18.66	18.61	18.91	18.61	18.77				
20	64QAM	50	0	18.68	18.72	18.78	18.98	18.05	18.85				
20	64QAM	50	24	18.67	18.63	18.76	18.88	18.50	18.75	19.9	0		
20	64QAM	50	50	18.76	18.65	18.67	18.99	18.50	18.74				
20	64QAM	100	0	18.78	18.64	18.61	18.92	18.65	18.77				
20	256QAM	1	0	18.70	18.73	18.70	19.00	18.67	18.69				
20	256QAM	1	49	18.79	18.76	18.80	18.99	18.74	18.93	19.9	0		
20	256QAM	1	99	18.66	18.73	18.65	18.85	18.60	18.78				
20	256QAM	50	0	18.75	18.69	18.69	18.94	18.63	18.73				
20	256QAM	50	24	18.65	18.59	18.69	18.87	18.58	18.80	19.9	0		
20	256QAM	50	50	18.79	18.67	18.70	18.98	18.50	18.80				
20	256QAM	100	0	18.78	18.66	18.74	19.03	18.70	18.74				
Channel													
Frequency (MHz)				39755	39725	40173	40620	41068	41515				
15	QPSK	1	0	18.66	18.74	18.70	18.99	18.77	18.82	19.9	0		
15	QPSK	1	37	18.74	18.72	18.81	19.03	18.82	18.85				
15	QPSK	1	74	18.72	18.73	18.80	18.95	18.71	18.71				
15	QPSK	36	0	18.70	18.70	18.74	19.05	18.63	18.85				
15	QPSK	36	20	18.62	18.57	18.65	18.86	18.46	18.71	19.9	0		
15	QPSK	36	39	18.70	18.65	18.65	18.97	18.42	18.77				
15	QPSK	75	0	18.78	18.62	18.62	19.02	18.63	18.65				
15	QPSK	75	1	18.54	18.54	18.60	18.89	18.74	18.93	19.9	0		
15	16QAM	1	37	18.77	18.82	18.75	18.93	18.60	18.78				
15	16QAM	1	74	18.65	18.73	18.43	18.78	18.62	18.66				
15	16QAM	36	0	18.60	18.62	18.78	18.84	18.44	18.63				
15	16QAM	36	20	18.53	18.50	18.66	18.79	18.49	18.63	19.9	0		
15	16QAM	36	39	18.66	18.51	18.66	18.89	18.29	18.61				
15	16QAM	75	0	18.58	18.44	18.65	18.86	18.63	18.64				
15	16QAM	75	1	18.54	18.54	18.60	18.89	18.74	18.93	19.9	0		
15	64QAM	1	37	18.73	18.66	18.73	18.97	18.67	18.73	19.9	0		
15	64QAM	1	74	18.62	18.51	18.52	18.89	18.57	18.63				
15	64QAM	36	0	18.58	18.69	18.67	18.84	18.60	18.71				
15	64QAM	36	20	18.58	18.61	18.65	18.86	18.46	18.67	19.9	0		
15	64QAM	36	39	18.66	18.51	18.64	18.88	18.37	18.60				
15	64QAM	75	0	18.77	18.49	18.56	18.80	18.56	18.78				
15	256QAM	1	0	18.69	18.69	18.76	18.97	18.67	18.72				
15	256QAM	1	37	18.70	18.67	18.70	18.87	18.67	18.83	19.9	0		
15	256QAM	1	74	18.63	18.67	18.69	18.88	18.51	18.74				
15	256QAM	36	0	18.69	18.66	18.65	18.92	18.55	18.71				
15	256QAM	36	20	18.61	18.57	18.61	18.86	18.46	18.67	19.9	0		
15	256QAM	36	39	18.73	18.57	18.61	18.78	18.47	18.68				
15	256QAM	75	0	18.75	18.58	18.70	18.92	18.66	18.68				
Channel													
Frequency (MHz)				39760	39700	40160	40620	41080	41540				
10	QPSK	1	0	18.66	18.71	18.67	18.97	18.59	18.74				
10	QPSK	1	25	18.80	18.82	18.74	19.04	18.72	18.85	19.9	0		
10	QPSK	1	49	18.74	18.76	18.80	18.89	18.68	18.73				
10	QPSK	24	0	18.78	18.65	18.73	18.97	18.62	18.83				
10	QPSK	25	12	18.64	18.67	18.69	18.86	18.46	18.71	19.9	0		
10	QPSK	25	25	18.74	18.64	18.69	18.98	18.41	18.73				
10	QPSK	50	0	18.76	18.60	18.66	18.95	18.70	18.85				
10	16QAM	1	0	18.67	18.62	18.64	18.92	18.60	18.65				
10	16QAM	1	25	18.79	18.76	18.71	18.84	18.58	18.77	19.9	0		
10	16QAM	1	49	18.67	18.64	18.47	18.78	18.64	18.62				
10	16QAM	25	0	18.59	18.54	18.61	18.85	18.42	18.60	19.9	0		
10	16QAM	25	12	18.65	18.50	18.62	18.87	18.51	18.70				
10	16QAM	25	25	18.62	18.63	18.73	18.92	18.33	18.70				
10	16QAM	50	0	18.66	18.38	18.72	18.85	18.69	18.67				
10	16QAM	50	1	18.54	18.54	18.60	18.89	18.74	18.93	19.9	0		
10	64QAM	1	25	18.74	18.65	18.74	18.88	18.69	18.78				
10	64QAM	1	49	18.69	18.64	18.60	18.90	18.60	18.67				
10	64QAM	25	0	18.66	18.66	18.67	18.86	18.56	18.83				
10	64QAM	25	12	18.64	18.54	18.74	18.73	18.42	18.70	19.9	0		
10	64QAM	25	25	18.63	18.60	18.55	18.91	18.47	18.73				
10	64QAM	50	0	18.76	18.46	18.60	18.79	18.50	18.66				
10	256QAM	1	0	18.69	18.63	18.61	18.88	18.65	18.65				
10	256QAM	1	25	18.64	18.71	18.73	18.83	18.71	18.80	19.9	0		
10	256QAM	1	49	18.53	18.63	18.56	18.87	18.50	18.64				
10	256QAM	25	0	18.68	18.61	18.61	18.88	18.62	18.70				
10	256QAM	25	12	18.61	18.52	18.62	18.78	18.51	18.79				
10	256QAM	25	25	18.61	18.66	18.67	18.88	18.44	18.77	19.9	0		
10	256QAM	50	0	18.71	18.56	18.69	18.89	18.56	18.67				
Channel													
Frequency (MHz)				39765	39705	40165	40620	41085	41550				
5	QPSK	1	0	18.67	18.70	18.70	19.02	18.71	18.75				
5	QPSK	1	12	18.88	18.70	18.72	18.94	18.72	18.90	19.9	0		
5	QPSK	1	24	18.80	18.73	18.80	18.86	18.62	18.74				
5	QPSK	12	0	18.77	18.62	18.72	18.99	18.58	18.81				
5	QPSK	12	7	18.70	18.57	18.67	18.81	18.48	18.72	19.9	0		
5	QPSK	12	13	18.75	18.63	18.67	18.97	18.51	18.79				
5	QPSK	25	0	18.78	18.65	18.67	19.00	18.60	18.63				



Band 48_Ant 10									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Mid Ch. / Freq	Power High Ch. / Freq	Power High Ch. / Freq	Time-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				3550	3509	3541	3590		
20	QPSK	1	0	16.67	16.67	16.77	16.79	17.7	0
20	QPSK	1	48	16.67	16.67	16.77	16.79		
20	QPSK	1	96	16.71	16.79	16.78	16.72		
20	QPSK	50	0	16.69	16.67	16.72	16.75		
20	QPSK	50	24	16.68	16.64	16.76	16.77		
20	QPSK	50	50	16.62	16.71	16.73	16.70	17.7	0
20	QPSK	100	0	16.64	16.65	16.72	16.77		
20	16QAM	1	0	16.65	16.77	16.74	16.70		
20	16QAM	1	48	16.64	16.75	16.82	16.78		
20	16QAM	1	96	16.80	16.88	16.78	16.81	17.7	0
20	16QAM	50	0	16.56	16.83	16.84	16.67		
20	16QAM	50	24	16.65	16.67	16.79	16.81		
20	16QAM	50	50	16.65	16.79	16.85	16.83	17.7	0
20	16QAM	100	0	16.68	16.82	16.78	16.76		
20	64QAM	1	0	16.61	16.73	16.81	16.80		
20	64QAM	1	48	16.64	16.75	16.82	16.78		
20	64QAM	1	96	16.66	16.83	16.73	16.68	17.7	0
20	64QAM	50	0	16.56	16.78	16.79	16.64		
20	64QAM	50	24	16.61	16.67	16.73	16.82		
20	64QAM	50	50	16.65	16.71	16.80	16.79	17.7	0
20	64QAM	100	0	16.66	16.76	16.85	16.74		
20	256QAM	1	0	16.59	16.83	16.66	16.77		
20	256QAM	1	48	16.73	16.76	16.80	16.82		
20	256QAM	1	96	16.58	16.76	16.76	16.82	17.7	0
20	256QAM	50	0	16.59	16.84	16.81	16.75		
20	256QAM	50	24	16.71	16.80	16.79	16.82		
20	256QAM	50	50	16.61	16.80	16.83	16.83	17.7	0
20	256QAM	100	0	16.63	16.73	16.65	16.75		
Channel									
Frequency (MHz)				3572	3523	3542	3592.5		
15	QPSK	1	0	16.62	16.61	16.74	16.68		
15	QPSK	1	37	16.65	16.88	16.80	16.79	17.7	0
15	QPSK	1	74	16.69	16.64	16.72	16.59		
15	QPSK	36	0	16.63	16.66	16.76	16.69		
15	QPSK	36	20	16.63	16.72	16.77	16.62		
15	QPSK	36	39	16.54	16.68	16.70	16.69	17.7	0
15	QPSK	75	0	16.54	16.74	16.65	16.72		
15	16QAM	1	0	16.63	16.68	16.73	16.68		
15	16QAM	1	37	16.57	16.67	16.68	16.70	17.7	0
15	16QAM	1	74	16.70	16.79	16.70	16.70		
15	16QAM	36	0	16.45	16.81	16.76	16.53		
15	16QAM	36	20	16.52	16.65	16.74	16.77		
15	16QAM	36	39	16.54	16.71	16.75	16.72	17.7	0
15	16QAM	75	0	16.60	16.77	16.75	16.63		
15	64QAM	1	0	16.68	16.68	16.78	16.71		
15	64QAM	1	37	16.48	16.69	16.70	16.71	17.7	0
15	64QAM	1	74	16.64	16.73	16.63	16.56		
15	64QAM	36	0	16.55	16.76	16.76	16.60		
15	64QAM	36	20	16.56	16.63	16.62	16.72		
15	64QAM	36	39	16.53	16.69	16.66	16.76	17.7	0
15	64QAM	75	0	16.56	16.63	16.75	16.73		
15	256QAM	1	0	16.61	16.69	16.62	16.68		
15	256QAM	1	37	16.62	16.66	16.79	16.79	17.7	0
15	256QAM	1	74	16.63	16.67	16.68	16.69		
15	256QAM	36	0	16.54	16.69	16.69	16.71		
15	256QAM	36	20	16.56	16.71	16.72	16.76		
15	256QAM	36	39	16.71	16.68	16.83	16.57	17.7	0
15	256QAM	75	0	16.50	16.72	16.54	16.63		
Channel									
Frequency (MHz)				3572	35815	35165	35690		
10	QPSK	1	0	16.65	16.59	16.64	16.73		
10	QPSK	1	25	16.68	16.90	16.69	16.80	17.7	0
10	QPSK	1	49	16.60	16.66	16.63	16.60		
10	QPSK	25	0	16.57	16.76	16.74	16.68		
10	QPSK	25	12	16.50	16.69	16.73	16.68		
10	QPSK	25	25	16.60	16.69	16.58	16.59	17.7	0
10	16QAM	50	0	16.59	16.71	16.67	16.70		
10	16QAM	1	0	16.57	16.71	16.70	16.58		
10	16QAM	1	25	16.57	16.60	16.76	16.70	17.7	0
10	16QAM	1	49	16.69	16.67	16.68	16.76		
10	16QAM	25	0	16.58	16.62	16.68	16.58		
10	16QAM	25	12	16.59	16.62	16.74	16.74	17.7	0
10	16QAM	25	25	16.62	16.76	16.61	16.74		
10	16QAM	50	0	16.56	16.67	16.65	16.73		
10	64QAM	1	0	16.50	16.63	16.63	16.76		
10	64QAM	1	25	16.59	16.70	16.68	16.69	17.7	0
10	64QAM	1	49	16.54	16.71	16.68	16.59		
10	64QAM	25	0	16.54	16.73	16.64	16.63		
10	64QAM	25	12	16.52	16.65	16.67	16.77		
10	64QAM	25	25	16.51	16.66	16.75	16.75	17.7	0
10	64QAM	50	0	16.53	16.67	16.83	16.66		
10	256QAM	1	0	16.48	16.78	16.51	16.66		
10	256QAM	1	25	16.64	16.67	16.68	16.80	17.7	0
10	256QAM	1	49	16.45	16.73	16.72	16.67		
10	256QAM	25	0	16.53	16.60	16.73	16.70		
10	256QAM	25	12	16.70	16.77	16.73	16.76	17.7	0
10	256QAM	25	25	16.68	16.68	16.77	16.55		
10	256QAM	50	0	16.57	16.70	16.61	16.66		
Channel									
Frequency (MHz)				3572.5	3597	3643	3697.5		
5	QPSK	1	0	16.63	16.58	16.72	16.65		
5	QPSK	1	12	16.79	16.83	16.76	16.73	17.7	0
5	QPSK	1	24	16.61	16.73	16.74	16.60		
5	QPSK	12	0	16.51	16.74	16.72	16.63		
5	QPSK	12	7	16.54	16.73	16.65	16.63	17.7	0
5	QPSK	12	13	16.57	16.56	16.62	16.58		
5	QPSK	25	0	16.59	16.70	16.57	16.67		
5	16QAM	1	0	16.60	16.72	16.63	16.64		
5	16QAM	1	12	16.56	16.70	16.71	16.84	17.7	0
5	16QAM	1	24	16.65	16.63	16.67	16.75		
5	16QAM	12	0	16.58	16.79	16.67	16.73		
5	16QAM	12	7	16.56	16.83	16.74	16.80	17.7	0
5	16QAM	12	13	16.60	16.72	16.84	16.69		
5	16QAM	25	0	16.58	16.76	16.62	16.69		
5	64QAM	1	0	16.58	16.59	16.69	16.68		
5	64QAM	1	12	16.52	16.65	16.76	16.66	17.7	0
5	64QAM	1	24	16.54	16.73	16.69	16.54		
5	64QAM	12	0	16.41	16.74	16.76	16.54		
5	64QAM	12	7	16.58	16.73	16.59	16.76	17.7	0
5	64QAM	12	13	16.58	16.60	16.67	16.72		
5	64QAM	25	0	16.58	16.76	16.62	16.69		
5	256QAM	1	0	16.55	16.71	16.60	16.76		
5	256QAM	1	12	16.60	16.62	16.70	16.70	17.7	0
5	256QAM	1	24	16.50	16.73	16.68	16.76		
5	256QAM	12	0	16.54	16.81	16.70	16.64		
5	256QAM	12	7	16.61	16.75	16.76	16.72	17.7	0
5	256QAM	12	13	16.65	16.65	16.80	16.58		
5	256QAM	25	0	16.59	16.64	16.61	16.65		

Band 48_Ant 8									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Mid Ch. / Freq	Power High Ch. / Freq	Power High Ch. / Freq	Time-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				3560	3509	3541	3590		
20	QPSK	1	0	16.31	16.25	16.36	16.23	16.7	0
20	QPSK	1	48	16.63	16.31	16.37	16.23		
20	QPSK	1	96	16.40	16.33	16.31	16.10		
20	QPSK	50	0	16.42	16.31	16.31	16.23		
20	QPSK	50	24	16.24	16.10	16.22	16.16	16.7	0
20	QPSK	50	50	16.32	16.18	16.19	16.14		
20	QPSK	100	0	16.39	16.29	16.30	16.16		
20	16QAM	1	0	16.37	16.21	16.28	16.14		
20	16QAM	1</							



Full&Default Power Mode

n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 372000	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	23.18	23.27	23.17			
20	PI2 BPSK	1	53	23.18	23.28	23.18	24.0	0.0	
20	PI2 BPSK	1	104	23.24	23.28	23.16			
20	PI2 BPSK	50	0	23.11	23.15	23.09	24.0	0.0	
20	PI2 BPSK	50	28	23.06	23.16	23.14	24.0	0.0	
20	PI2 BPSK	50	56	23.09	23.19	23.16	24.0	0.0	
20	PI2 BPSK	100	0	23.16	23.20	23.12	24.0	0.0	
20	QPSK	1	1	23.25	23.30	23.22			
20	QPSK	1	53	23.24	23.28	23.18	24.0	0.0	
20	QPSK	1	104	23.17	23.24	23.20			
20	QPSK	50	0	22.73	22.83	22.77	24.0	0.0	
20	QPSK	50	28	23.16	23.19	23.11	24.0	0.0	
20	QPSK	50	56	22.77	22.82	22.76	24.0	0.0	
20	QPSK	100	0	23.03	23.11	23.03	24.0	0.0	
20	16QAM	1	1	23.05	23.07	23.05	24.0	0.0	
20	64QAM	1	1	21.86	21.82	21.82	22.5	1.5	
20	256QAM	1	1	19.48	19.53	19.47	20.5	3.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	37.150	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	371000	376000	381000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	1852.5	1890	1907.5	Tune-up limit (dBm)	MPR (dB)	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 372000	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.94	22.96	22.89			
20	PI2 BPSK	1	53	22.94	23.04	22.95	24.0	0.0	
20	PI2 BPSK	1	104	22.89	22.98	22.89			
20	PI2 BPSK	50	0	22.44	22.49	22.46	23.5	0.5	
20	PI2 BPSK	50	28	22.93	22.95	22.87	24.0	0.0	
20	PI2 BPSK	50	56	22.39	22.45	22.44	24.0	0.0	
20	PI2 BPSK	100	0	22.49	22.52	22.45	23.5	0.5	
20	QPSK	1	1	23.02	23.10	23.01			
20	QPSK	1	53	22.93	22.99	22.96	24.0	0.0	
20	QPSK	1	104	22.94	23.03	23.00			
20	QPSK	50	0	21.85	21.89	21.81	23.0	1.0	
20	QPSK	50	28	22.94	22.98	22.91	24.0	0.0	
20	QPSK	50	56	21.85	21.83	21.83	23.0	1.0	
20	QPSK	100	0	21.91	21.85	21.85	23.0	1.0	
20	16QAM	1	1	22.09	22.10	22.02	23.0	1.0	
20	64QAM	1	1	20.46	20.54	20.47	21.5	2.5	
20	256QAM	1	1	18.43	18.51	18.43	19.5	4.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	37.150	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	371000	376000	381000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.90	22.93	22.86	24.0	0.0	

n5_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 167800	Power Middle Ch. Freq. 167900	Power High Ch. Freq. 167900	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.78	22.82	22.80			
20	PI2 BPSK	1	53	22.89	22.95	22.87	24.0	0.0	
20	PI2 BPSK	1	104	22.76	22.86	22.78			
20	PI2 BPSK	50	0	22.78	22.88	22.86	24.0	0.0	
20	PI2 BPSK	50	28	22.90	22.95	22.90	24.0	0.0	
20	PI2 BPSK	50	56	22.77	22.82	22.79	24.0	0.0	
20	PI2 BPSK	100	0	22.78	22.98	22.83	24.0	0.0	
20	QPSK	1	1	22.95	23.00	22.91			
20	QPSK	1	53	22.79	22.82	22.79	24.0	0.0	
20	QPSK	1	104	22.82	22.85	22.76			
20	QPSK	50	0	22.76	22.85	22.76	24.0	0.0	
20	QPSK	50	28	22.91	22.96	22.92	24.0	0.0	
20	QPSK	50	56	22.77	22.86	22.84	24.0	0.0	
20	QPSK	100	0	22.87	22.90	22.84	24.0	0.0	
20	16QAM	1	1	22.87	22.92	22.87	24.0	0.0	
20	64QAM	1	1	21.61	21.65	21.55	22.5	1.5	
20	256QAM	1	1	19.69	19.71	19.67	20.5	3.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	167800	167900	168000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	167300	167900	168500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	826.5	826.5	826.5	Tune-up limit (dBm)	MPR (dB)	



n5_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 167300	Power Middle Ch. / Freq. 167300	Power High Ch. / Freq. 167300	Tune-up limit (dBm)	MPR (dB)	
Channel				834	836.5	839			
Frequency (MHz)				22.74	22.77	22.70			
20	PI2 BPSK	1	1	22.91	22.86	22.86	24.0	0.0	
20	PI2 BPSK	1	104	22.85	22.88	22.82			
20	PI2 BPSK	50	0	22.81	22.85	22.79	24.0	0.0	
20	PI2 BPSK	50	28	22.79	22.89	22.79	24.0	0.0	
20	PI2 BPSK	50	56	22.78	22.88	22.84	24.0	0.0	
20	PI2 BPSK	100	0	22.68	22.78	22.75	24.0	0.0	
20	QPSK	1	1	22.95	22.98	22.80			
20	QPSK	1	53	22.72	22.78	22.73	24.0	0.0	
20	QPSK	1	104	22.86	22.88	22.81			
20	QPSK	50	0	22.73	22.82	22.74	24.0	0.0	
20	QPSK	50	28	22.80	22.90	22.82	24.0	0.0	
20	QPSK	50	56	22.74	22.80	22.74	24.0	0.0	
20	QPSK	100	0	22.65	22.69	22.63	24.0	0.0	
20	16QAM	1	1	22.81	22.85	22.78	24.0	0.0	
20	64QAM	1	1	21.51	21.61	21.56	22.5	1.5	
20	256QAM	1	1	19.62	19.64	19.62	20.5	3.5	
Channel				165300	167300	168300	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	22.87	22.93	22.87	24.0	0.0	
Channel				165800	167300	168800	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	1	22.90	22.90	22.87	24.0	0.0	
Channel				165300	167300	169300	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	1	22.93	22.96	22.83	24.0	0.0	

n7_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 504500	Power Middle Ch. / Freq. 507000	Power High Ch. / Freq. 510000	Tune-up limit (dBm)	MPR (dB)	
Channel				2520	2535	2550			
Frequency (MHz)				22.88	23.08	23.05			
40	PI2 BPSK	1	1	23.10	23.24	23.15	24.0	0.0	
40	PI2 BPSK	1	214	23.07	23.23	23.21			
40	PI2 BPSK	108	0	22.90	23.05	23.01	24.0	0.0	
40	PI2 BPSK	108	54	22.99	23.15	23.10	24.0	0.0	
40	PI2 BPSK	108	108	22.99	23.12	23.04	24.0	0.0	
40	PI2 BPSK	216	0	22.99	23.11	23.07	24.0	0.0	
40	QPSK	1	1	23.11	23.28	23.22			
40	QPSK	1	108	22.86	23.11	23.03	24.0	0.0	
40	QPSK	1	214	23.07	23.23	23.20			
40	QPSK	108	0	22.85	23.05	22.98	24.0	0.0	
40	QPSK	108	54	23.05	23.20	23.17	24.0	0.0	
40	QPSK	108	108	22.89	23.09	23.05	24.0	0.0	
40	QPSK	216	0	22.95	23.18	23.08	24.0	0.0	
40	16QAM	1	1	23.13	23.25	23.23	24.0	0.0	
40	64QAM	1	1	22.31	22.51	22.44	23.0	1.0	
40	256QAM	1	1	20.29	20.47	20.37	21.0	3.0	
Channel				505000	507000	511000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	23.04	23.16	23.14	24.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	23.05	23.17	23.19	24.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2510	2535	2550			
20	QPSK	1	1	23.05	23.17	23.19	24.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	23.04	23.22	23.13	24.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	23.01	23.20	23.16	24.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	23.07	23.23	23.19	24.0	0.0	

n7_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 504500	Power Middle Ch. / Freq. 507000	Power High Ch. / Freq. 510000	Tune-up limit (dBm)	MPR (dB)	
Channel				2520	2535	2550			
Frequency (MHz)				22.88	23.07	22.88			
40	PI2 BPSK	1	1	23.12	23.17	23.11	24.0	0.0	
40	PI2 BPSK	1	108	23.11	23.21	23.17			
40	PI2 BPSK	108	0	22.90	22.95	22.83	23.5	0.5	
40	PI2 BPSK	108	54	23.04	23.06	22.87	24.0	0.0	
40	PI2 BPSK	108	108	22.84	22.71	22.70	24.0	0.0	
40	PI2 BPSK	216	0	22.70	22.72	22.68	23.5	0.5	
40	QPSK	1	1	23.11	23.23	23.19			
40	QPSK	1	108	23.10	23.14	23.09	24.0	0.0	
40	QPSK	1	214	23.13	23.17	23.17			
40	QPSK	108	0	22.93	22.11	22.96	23.0	1.0	
40	QPSK	108	54	23.05	23.08	23.04	24.0	0.0	
40	QPSK	108	108	22.19	22.22	22.16	23.0	1.0	
40	QPSK	216	0	22.12	22.18	22.15	23.0	1.0	
40	16QAM	1	1	22.34	22.36	22.32	23.0	1.0	
40	64QAM	1	1	20.78	20.86	20.84	21.5	2.5	
40	256QAM	1	1	18.80	18.82	18.77	19.5	4.5	
Channel				505000	507000	511000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	22.93	23.03	22.96	24.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	22.95	23.06	22.92	24.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2510	2535	2550			
20	QPSK	1	1	22.93	22.99	22.97	24.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	22.98	23.06	22.97	24.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	22.97	23.00	22.91	24.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	22.93	23.03	22.94	24.0	0.0	



n12_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 141300	Power Middle Ch. / Freq. 141500	Power High Ch. / Freq. 141700	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	22.87	22.90	22.84	24.0	0.0	
15	PI2 BPSK	1	40	22.91	22.96	22.91			
15	PI2 BPSK	1	77	22.83	22.93	22.83			
15	PI2 BPSK	36	0	22.84	22.88	22.86	24.0	0.0	
15	PI2 BPSK	36	22	22.74	22.79	22.77	24.0	0.0	
15	PI2 BPSK	36	43	22.69	22.76	22.70			
15	PI2 BPSK	75	0	22.84	22.88	22.86	24.0	0.0	
15	QPSK	1	1	22.96	23.01	22.92			
15	QPSK	1	40	22.85	22.92	22.83	24.0	0.0	
15	QPSK	1	77	22.83	22.93	22.91			
15	QPSK	36	0	22.79	22.86	22.79	24.0	0.0	
15	QPSK	36	22	22.91	22.96	22.92	24.0	0.0	
15	QPSK	36	43	22.70	22.78	22.70			
15	QPSK	75	0	22.84	22.86	22.87	24.0	0.0	
15	16QAM	1	1	22.95	22.91	22.86	24.0	0.0	
15	16QAM	1	1	21.43	21.51	21.49	22.5	1.5	
15	256QAM	1	1	19.51	19.55	19.49	20.5	3.5	
Channel				140300	141500	142700	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				704	707.5	711			
10	QPSK	1	1	22.88	22.99	22.86	24.0	0.0	
Channel				140300	141500	142700	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	1	22.99	22.94	22.97	24.0	0.0	

n12_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 141300	Power Middle Ch. / Freq. 141500	Power High Ch. / Freq. 141700	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	23.34	23.35	23.31	24.0	0.0	
15	PI2 BPSK	1	40	23.33	23.36	23.31			
15	PI2 BPSK	1	77	23.31	23.32	23.31			
15	PI2 BPSK	36	0	22.89	22.91	22.84	23.5	0.5	
15	PI2 BPSK	36	22	23.15	23.17	23.15	24.0	0.0	
15	PI2 BPSK	36	43	22.82	22.91	22.87			
15	PI2 BPSK	75	0	22.95	22.98	22.93	23.5	0.5	
15	QPSK	1	1	23.35	23.37	23.32			
15	QPSK	1	40	23.19	23.28	23.24	24.0	0.0	
15	QPSK	1	77	23.34	23.36	23.34			
15	QPSK	36	0	22.40	22.46	22.44	23.0	1.0	
15	QPSK	36	22	23.19	23.23	23.16	24.0	0.0	
15	QPSK	36	43	22.26	22.35	22.30			
15	QPSK	75	0	22.49	22.52	22.45	23.0	1.0	
15	16QAM	1	1	22.97	22.81	22.51	23.0	1.0	
15	16QAM	1	1	21.05	21.11	21.09	21.5	2.5	
15	256QAM	1	1	19.08	19.18	19.17	19.5	4.5	
Channel				140300	141500	142700	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				704	707.5	711			
10	QPSK	1	1	23.32	23.29	23.26	24.0	0.0	
Channel				140300	141500	142700	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	1	23.30	23.33	23.27	24.0	0.0	

n14_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 156100	Power Middle Ch. / Freq. 156600	Power High Ch. / Freq. 156900	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
10	PI2 BPSK	1	1		22.78				
10	PI2 BPSK	1	26		22.90		24.0	0.0	
10	PI2 BPSK	1	50		22.76				
10	PI2 BPSK	26	0		22.84		24.0	0.0	
10	PI2 BPSK	26	14		22.89		24.0	0.0	
10	PI2 BPSK	26	27		22.83				
10	PI2 BPSK	50	0		22.94		24.0	0.0	
10	QPSK	1	1		22.82				
10	QPSK	1	26		22.80		24.0	0.0	
10	QPSK	1	50		22.72				
10	QPSK	26	0		22.85		24.0	0.0	
10	QPSK	26	14		22.71		24.0	0.0	
10	QPSK	26	27		22.88				
10	QPSK	50	0		22.86		24.0	0.0	
10	16QAM	1	1		22.90		24.0	0.0	
10	16QAM	1	1		21.57		22.5	1.5	
10	256QAM	1	1		19.45		20.5	3.5	
Channel				156100	156600	156900	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				750.5	753	755.5			
5	QPSK	1	1	22.74	22.75	22.75	24.0	0.0	





n14_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	PI2 BPSK	1	1	23.15	23.15	23.15			
10	PI2 BPSK	1	26	23.16	23.16	23.16	24.0	0.0	
10	PI2 BPSK	1	50	23.16	23.16	23.16			
10	PI2 BPSK	25	0	23.04	23.04	23.04	24.0	0.0	
10	PI2 BPSK	25	14	23.05	23.05	23.05	24.0	0.0	
10	PI2 BPSK	25	27	22.98	22.98	22.98	24.0	0.0	
10	PI2 BPSK	50	0	23.00	23.00	23.00	24.0	0.0	
10	QPSK	1	1	23.21	23.21	23.21			
10	QPSK	1	26	23.18	23.18	23.18	24.0	0.0	
10	QPSK	1	50	23.18	23.18	23.18			
10	QPSK	25	0	22.55	22.55	22.55	23.5	0.5	
10	QPSK	25	14	23.11	23.11	23.11	24.0	0.0	
10	QPSK	25	27	22.53	22.53	22.53	23.5	0.5	
10	QPSK	50	0	22.51	22.51	22.51	23.5	0.5	
10	16QAM	1	1	22.61	22.61	22.61	23.5	0.5	
10	64QAM	1	1	21.33	21.33	21.33	22.0	2.0	
10	256QAM	1	1	19.15	19.15	19.15	20.0	4.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.12	23.14	23.08	24.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	23.16	23.23	23.18			
40	PI2 BPSK	1	108	23.26	23.33	23.23	24.0	0.0	
40	PI2 BPSK	1	214	23.22	23.28	23.24			
40	PI2 BPSK	108	0	22.81	22.89	22.85	23.5	0.5	
40	PI2 BPSK	108	54	23.11	23.18	23.08	24.0	0.0	
40	PI2 BPSK	108	108	22.90	22.99	22.94	23.5	0.5	
40	PI2 BPSK	216	0	22.99	23.01	22.93	23.5	0.5	
40	QPSK	1	1	23.26	23.36	23.34			
40	QPSK	1	108	23.18	23.25	23.18	24.0	0.0	
40	QPSK	1	214	23.26	23.32	23.22			
40	QPSK	108	0	22.29	22.38	22.32	23.0	1.0	
40	QPSK	108	54	23.15	23.25	23.16	24.0	0.0	
40	QPSK	108	108	22.39	22.43	22.38	23.0	1.0	
40	QPSK	216	0	22.41	22.43	22.39	23.0	1.0	
40	16QAM	1	1	22.38	22.45	22.35	23.0	1.0	
40	64QAM	1	1	20.89	20.96	20.90	21.5	2.5	
40	256QAM	1	1	19.11	19.14	19.09	19.5	4.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	23.24	23.34	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.22	23.33	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.25	23.32	23.30	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.26	23.29	23.30	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.26	23.34	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.23	23.28	23.25	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.23	23.34	23.28	24.0	0.0	

n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	22.64	22.72	22.64			
40	PI2 BPSK	1	108	22.66	22.75	22.74	24.0	0.0	
40	PI2 BPSK	1	214	22.46	22.47	22.39			
40	PI2 BPSK	108	0	22.12	22.19	22.18	23.5	0.5	
40	PI2 BPSK	108	54	22.47	22.53	22.45	24.0	0.0	
40	PI2 BPSK	108	108	22.15	22.18	22.12	23.5	0.5	
40	PI2 BPSK	216	0	22.10	22.14	22.12	23.5	0.5	
40	QPSK	1	1	22.72	22.78	22.72			
40	QPSK	1	108	22.68	22.73	22.68	24.0	0.0	
40	QPSK	1	214	22.42	22.49	22.39			
40	QPSK	108	0	21.63	21.64	21.61	23.0	1.0	
40	QPSK	108	54	22.47	22.53	22.44	24.0	0.0	
40	QPSK	108	108	21.54	21.62	21.60	23.0	1.0	
40	QPSK	216	0	21.63	21.64	21.63	23.0	1.0	
40	16QAM	1	1	21.91	21.94	21.92	23.0	1.0	
40	64QAM	1	1	20.46	20.48	20.43	21.5	2.5	
40	256QAM	1	1	18.36	18.43	18.36	19.5	4.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	22.63	22.71	22.61	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.62	22.63	22.59	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.63	22.70	22.60	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.62	22.69	22.63	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.56	22.68	22.62	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.59	22.71	22.61	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.63	22.69	22.55	24.0	0.0	



n26(FCC)_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	22.84	22.90	22.87			
20	PI2 BPSK	1	53	22.99	23.02	22.97	24.0	0.0	
20	PI2 BPSK	1	104	22.92	23.00	22.98			
20	PI2 BPSK	50	0	22.84	22.90	22.88	24.0	0.0	
20	PI2 BPSK	50	28	22.89	22.95	22.89	24.0	0.0	
20	PI2 BPSK	50	56	22.88	22.90	22.89	24.0	0.0	
20	PI2 BPSK	100	0	22.82	22.92	22.95			
20	QPSK	1	1	23.05	23.09	23.05			
20	QPSK	1	53	22.88	22.95	22.93	24.0	0.0	
20	QPSK	1	104	22.92	23.02	23.00			
20	QPSK	50	0	22.47	22.53	22.45	23.5	0.5	
20	QPSK	50	28	22.88	22.96	22.87	24.0	0.0	
20	QPSK	50	56	22.85	22.71	22.85			
20	QPSK	100	0	22.80	22.86	22.98	23.5	0.5	
20	16QAM	1	1	22.57	22.65	22.59	23.5	0.5	
20	84QAM	1	1	21.08	21.15	21.07	22.0	2.0	
20	256QAM	1	1	19.13	19.17	19.14	20.0	4.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	22.95	23.03	23.03	24.0	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	22.97	23.05	22.96	24.0	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.94	23.07	23.01	24.0	0.0	

n26(FCC)_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	23.07	23.10	23.08			
20	PI2 BPSK	1	53	23.04	23.12	23.03	24.0	0.0	
20	PI2 BPSK	1	104	23.23	23.26	23.20			
20	PI2 BPSK	50	0	22.80	22.82	22.74	23.5	0.5	
20	PI2 BPSK	50	28	23.16	23.22	23.13	24.0	0.0	
20	PI2 BPSK	50	56	22.81	22.90	22.96	23.5	0.5	
20	PI2 BPSK	100	0	22.87	22.90	22.92			
20	QPSK	1	1	23.25	23.30	23.26			
20	QPSK	1	53	23.07	23.13	23.06	24.0	0.0	
20	QPSK	1	104	23.23	23.26	23.22			
20	QPSK	50	0	22.23	22.33	22.26	23.0	1.0	
20	QPSK	50	28	23.18	23.25	23.21	24.0	0.0	
20	QPSK	50	56	22.42	22.47	22.44			
20	QPSK	100	0	22.38	22.43	22.39	23.0	1.0	
20	16QAM	1	1	22.45	22.46	22.45	23.0	1.0	
20	84QAM	1	1	20.89	20.95	20.94	21.5	2.5	
20	256QAM	1	1	18.78	18.88	18.86	19.5	4.5	
Channel				164300	166300	168300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	23.15	23.25	23.16	24.0	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	23.22	23.21	23.21	24.0	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	23.17	23.20	23.23	24.0	0.0	

n30_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 460000	Power Middle Ch. / Freq. 462000	Power High Ch. / Freq. 464000	Tune-up limit (dBm)	MPR (dB)	
Channel				2310					
Frequency (MHz)									
10	PI2 BPSK	1	1	22.85					
10	PI2 BPSK	1	26	22.86			24.0	0.0	
10	PI2 BPSK	1	50	22.78					
10	PI2 BPSK	26	0	22.86			24.0	0.0	
10	PI2 BPSK	26	14	22.73			24.0	0.0	
10	PI2 BPSK	26	27	22.87			24.0	0.0	
10	PI2 BPSK	50	0	22.72					
10	QPSK	1	1	22.90					
10	QPSK	1	26	22.88			24.0	0.0	
10	QPSK	1	50	22.86					
10	QPSK	26	0	22.81			24.0	0.0	
10	QPSK	26	14	22.75			24.0	0.0	
10	QPSK	26	27	22.71			24.0	0.0	
10	QPSK	50	0	22.73			24.0	0.0	
10	16QAM	1	1	22.78			22.5	1.5	
10	84QAM	1	1	22.05			22.5	3.5	
10	256QAM	1	1	19.86			20.5	4.5	
Channel				461500	462000	462500	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.77	22.80	22.78	24.0	0.0	



n30\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Free	Power Middle Ch. / Free 462000	Power High Ch. / Free	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)					2310			
10	P12 BPSK	1	1		22.08			
10	P12 BPSK	1	26		22.12		24.0	0.0
10	P12 BPSK	1	50		22.08			
10	P12 BPSK	25	0		21.59		23.5	0.5
10	P12 BPSK	25	14		22.10		24.0	0.0
10	P12 BPSK	25	27		21.54		23.5	0.5
10	P12 BPSK	50	0		21.63			
10	QPSK	1	1		22.18			
10	QPSK	1	26		22.14		24.0	0.0
10	QPSK	1	50		22.03			
10	QPSK	25	0		21.15		23.0	1.0
10	QPSK	25	14		22.10		24.0	0.0
10	QPSK	25	27		21.05		23.0	1.0
10	QPSK	50	0		21.09		23.0	1.0
10	16QAM	1	1		21.17		23.0	1.0
10	64QAM	1	1		19.85		21.5	2.5
10	256QAM	1	1		17.63		19.5	4.5
Channel				481500	462000	462500		
Frequency (MHz)				2307.5	2310	2312.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	22.06	22.11	22.09	24.0	0.0



n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	23.10	23.15	23.08			
40	PI2 BPSK	1	168	23.20	23.26	23.20	24.0	0.0	
40	PI2 BPSK	1	214	23.24	23.26	23.16			
40	PI2 BPSK	108	0	23.15	23.21	23.17	24.0	0.0	
40	PI2 BPSK	108	54	23.21	23.25	23.17	24.0	0.0	
40	PI2 BPSK	108	108	23.18	23.23	23.21	24.0	0.0	
40	PI2 BPSK	216	0	23.11	23.20	23.18			
40	QPSK	1	1	23.25	23.31	23.30			
40	QPSK	1	168	23.14	23.18	23.12	24.0	0.0	
40	QPSK	1	214	23.21	23.26	23.24			
40	QPSK	108	0	22.75	22.85	22.83	24.0	0.0	
40	QPSK	108	54	23.21	23.26	23.25	24.0	0.0	
40	QPSK	108	108	22.95	22.97	22.87	24.0	0.0	
40	QPSK	216	0	23.05	23.11	23.06			
40	16QAM	1	1	23.03	23.05	23.03	24.0	0.0	
40	64QAM	1	1	21.48	21.51	21.48	22.5	1.5	
40	256QAM	1	1	19.39	19.46	19.41	20.5	3.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	23.21	23.26	23.27	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.23	23.27	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.22	23.25	23.24	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.18	23.23	23.22	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.18	23.22	23.26	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.18	23.26	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.22	23.23	23.22	24.0	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	22.90	22.96	22.91			
40	PI2 BPSK	1	168	22.86	22.95	22.89	24.0	0.0	
40	PI2 BPSK	1	214	22.91	22.92	22.84			
40	PI2 BPSK	108	0	22.91	22.97	22.95	24.0	0.0	
40	PI2 BPSK	108	54	22.96	23.05	22.95	24.0	0.0	
40	PI2 BPSK	108	108	22.95	23.04	22.99	24.0	0.0	
40	PI2 BPSK	216	0	22.99	23.01	22.91			
40	QPSK	1	1	23.00	23.08	23.04			
40	QPSK	1	168	22.96	23.05	22.88	24.0	0.0	
40	QPSK	1	214	22.89	22.95	22.86			
40	QPSK	108	0	22.37	22.45	22.35	23.5	0.5	
40	QPSK	108	54	22.87	22.75	22.81	24.0	0.0	
40	QPSK	108	108	22.38	22.44	22.36	23.5	0.5	
40	QPSK	216	0	22.41	22.45	22.37			
40	16QAM	1	1	22.81	22.71	22.84	23.5	0.5	
40	64QAM	1	1	21.10	21.16	21.13	22.0	2.0	
40	256QAM	1	1	19.07	19.13	19.05	20.0	4.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	22.95	23.04	22.97	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.94	23.03	22.94	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.94	23.03	22.96	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.92	22.99	22.96	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.91	23.00	22.94	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.98	23.02	22.91	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.90	23.04	22.85	24.0	0.0	

n70_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	PI2 BPSK	1	1		1702.5				
15	PI2 BPSK	1	40				24.0	0.0	
15	PI2 BPSK	1	77						
15	PI2 BPSK	36	0				24.0	0.0	
15	PI2 BPSK	36	22				24.0	0.0	
15	PI2 BPSK	36	43				24.0	0.0	
15	PI2 BPSK	75	0				24.0	0.0	
15	QPSK	1	1		22.97				
15	QPSK	1	40				24.0	0.0	
15	QPSK	1	77						
15	QPSK	36	0				24.0	0.0	
15	QPSK	36	22				24.0	0.0	
15	QPSK	36	43				24.0	0.0	
15	QPSK	75	0				24.0	0.0	
15	16QAM	1	1		22.85		22.5	1.5	
15	64QAM	1	1		21.75		22.5	3.5	
15	256QAM	1	1		19.65		20.5	4.5	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.84	22.95	22.86	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.98	22.99	22.99	24.0	0.0	



n70_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				1702.5			
Frequency (MHz)							
15	PI2 BPSK	1	1	23.28	23.28	23.28	
15	PI2 BPSK	1	40	23.30	23.30	23.30	24.0
15	PI2 BPSK	1	77	23.25	23.25	23.25	
15	PI2 BPSK	36	0	22.83	22.83	22.83	23.5
15	PI2 BPSK	36	22	23.15	23.15	23.15	24.0
15	PI2 BPSK	36	43	22.72	22.72	22.72	23.5
15	PI2 BPSK	75	0	22.75	22.75	22.75	24.0
15	QPSK	1	1	23.36	23.36	23.36	
15	QPSK	1	40	23.30	23.30	23.30	24.0
15	QPSK	1	77	23.25	23.25	23.25	
15	QPSK	36	0	22.36	22.36	22.36	23.0
15	QPSK	36	22	23.21	23.21	23.21	24.0
15	QPSK	36	43	22.23	22.23	22.23	23.0
15	QPSK	75	0	22.22	22.22	22.22	23.0
15	16QAM	1	1	22.64	22.64	22.64	23.0
15	64QAM	1	1	21.28	21.28	21.28	21.5
15	256QAM	1	1	19.03	19.03	19.03	19.5
Channel				34050	34050	341000	
Frequency (MHz)							
10	QPSK	1	1	23.28	23.28	23.22	24.0
Channel				33650	34050	341500	
Frequency (MHz)							
5	QPSK	1	1	23.23	23.33	23.27	24.0

n71_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				13600	13600	13600	
Frequency (MHz)							
30	PI2 BPSK	1	1	23.05	23.07	22.86	
30	PI2 BPSK	1	80	22.59	22.80	22.59	24.0
30	PI2 BPSK	1	158	22.63	22.68	22.65	
30	PI2 BPSK	80	0	22.65	22.72	22.69	24.0
30	PI2 BPSK	80	40	22.65	22.74	22.66	24.0
30	PI2 BPSK	80	80	22.46	22.51	22.49	24.0
30	PI2 BPSK	160	0	22.66	22.68	22.62	24.0
30	QPSK	1	1	23.06	23.12	23.05	
30	QPSK	1	80	22.64	22.65	22.64	24.0
30	QPSK	1	158	22.66	22.72	22.67	
30	QPSK	80	0	22.66	22.73	22.71	24.0
30	QPSK	80	40	22.68	22.75	22.72	24.0
30	QPSK	80	80	22.38	22.48	22.39	24.0
30	QPSK	160	0	22.66	22.71	22.67	24.0
30	16QAM	1	1	22.99	23.02	22.95	24.0
30	64QAM	1	1	22.01	22.07	22.04	22.5
30	256QAM	1	1	20.07	20.14	20.09	20.5
Channel				136100	136100	137100	
Frequency (MHz)							
25	QPSK	1	1	23.06	23.02	22.98	24.0
Channel				136600	136100	137600	
Frequency (MHz)							
20	QPSK	1	1	23.02	23.04	23.02	24.0
Channel				134100	136100	138100	
Frequency (MHz)							
15	QPSK	1	1	22.98	23.05	22.95	24.0
Channel				132000	134100	135000	
Frequency (MHz)							
10	QPSK	1	1	23.02	23.02	23.00	24.0
Channel				133100	136100	139100	
Frequency (MHz)							
5	QPSK	1	1	22.98	23.08	22.95	24.0

n71_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				678	680.5	683	
Frequency (MHz)							
30	PI2 BPSK	1	1	23.22	23.27	23.15	
30	PI2 BPSK	1	80	23.02	23.08	23.00	24.0
30	PI2 BPSK	1	158	22.85	22.89	22.83	
30	PI2 BPSK	80	0	22.83	22.91	22.75	24.0
30	PI2 BPSK	80	40	22.92	22.95	22.79	24.0
30	PI2 BPSK	80	80	22.86	22.88	22.88	24.0
30	PI2 BPSK	160	0	22.94	23.01	22.83	24.0
30	QPSK	1	1	23.25	23.30	23.15	
30	QPSK	1	80	22.93	23.02	22.86	24.0
30	QPSK	1	158	22.93	22.95	22.83	
30	QPSK	80	0	22.99	22.88	22.94	24.0
30	QPSK	80	40	22.90	22.96	22.80	24.0
30	QPSK	80	80	22.52	22.55	22.35	24.0
30	QPSK	160	0	22.54	22.56	22.57	24.0
30	16QAM	1	1	22.90	22.98	22.84	24.0
30	64QAM	1	1	21.38	21.43	21.26	22.5
30	256QAM	1	1	19.39	19.42	19.30	20.5
Channel				136100	136100	137100	
Frequency (MHz)							
25	QPSK	1	1	23.18	23.27	23.09	24.0
Channel				136600	136100	137600	
Frequency (MHz)							
20	QPSK	1	1	23.01	23.04	23.06	24.0
Channel				134100	136100	138100	
Frequency (MHz)							
15	QPSK	1	1	23.26	23.27	23.09	24.0
Channel				132000	134100	135000	
Frequency (MHz)							
10	QPSK	1	1	23.18	23.24	23.05	24.0
Channel				133100	136100	139100	
Frequency (MHz)							
5	QPSK	1	1	23.23	23.23	23.05	24.0



Full&Default Power Mode for Head

FCC_n41_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.84	21.89	21.83			
100	PI2 BPSK	1	137	21.81	21.88	21.82	23.0	0.0	
100	PI2 BPSK	1	271	21.80	21.88	21.84	23.0	0.0	
100	PI2 BPSK	135	0	21.81	21.87	21.84	23.0	0.0	
100	PI2 BPSK	135	69	21.89	21.82	21.84	23.0	0.0	
100	PI2 BPSK	135	138	21.78	21.88	21.82	23.0	0.0	
100	PI2 BPSK	270	0	21.83	21.84	21.86			
100	QPSK	1	1	21.53	21.57	21.77			
100	QPSK	1	137	21.89	21.85	21.76	23.0	0.0	
100	QPSK	1	271	21.84	21.90	21.88			
100	QPSK	135	0	21.78	21.88	21.71			
100	QPSK	135	69	21.95	21.95	21.76	23.0	0.0	
100	QPSK	135	138	21.75	21.88	21.72			
100	QPSK	270	0	21.78	21.83	21.71	23.0	0.0	
100	MSAM	1	1	21.82	21.82	21.76	23.0	0.0	
100	64QAM	1	1	21.80	21.82	21.88	23.0	0.0	
100	256QAM	1	1	20.81	20.86	20.83	22.5	0.5	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.68	21.95	21.76	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.73	21.93	21.69	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.73	21.96	21.73	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.79	21.85	21.76	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.70	21.95	21.63	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.70	21.88	21.64	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.76	21.81	21.76	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.74	21.82	21.71	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.83	21.90	21.71	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.81	21.89	21.84	23.0	0.0	

FCC_n41 HPUE_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.36	24.34	24.38			
100	PI2 BPSK	1	137	24.38	24.37	24.36	26.0	0.0	
100	PI2 BPSK	1	271	24.34	24.35	24.42			
100	PI2 BPSK	135	0	24.31	24.38	24.31	26.0	0.0	
100	PI2 BPSK	135	69	24.26	24.32	24.36	26.0	0.0	
100	PI2 BPSK	135	138	24.37	24.27	24.33			
100	PI2 BPSK	270	0	24.35	24.43	24.30	26.0	0.0	
100	QPSK	1	1	24.40	24.45	24.43			
100	QPSK	1	137	24.26	24.33	24.37	26.0	0.0	
100	QPSK	1	271	24.31	24.33	24.40			
100	QPSK	135	0	24.29	24.28	24.21			
100	QPSK	135	69	24.25	24.42	24.30	26.0	0.0	
100	QPSK	135	138	24.04	24.14	24.12			
100	QPSK	270	0	24.33	24.38	24.32	26.0	0.0	
100	16QAM	1	1	24.32	24.41	24.40	26.0	0.0	
100	64QAM	1	1	22.84	22.89	22.86	24.5	1.5	
100	256QAM	1	1	20.81	20.86	20.83	22.5	0.5	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.31	24.35	24.31	26.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.30	24.30	24.31	26.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.33	24.34	24.28	26.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.35	24.30	24.36	26.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.29	24.42	24.32	26.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.33	24.30	24.38	26.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.30	24.31	24.36	26.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.30	24.39	24.35	26.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.30	24.41	24.30	26.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.35	24.33	24.28	26.0	0.0	



### FCC\_n41\_Ant 6

Channel	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				50620	51858	53096		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI2 BPSK	1	1	21.22	21.23	21.12		
100	PI2 BPSK	1	137	21.20	21.19	21.03	22.5	0.0
100	PI2 BPSK	1	271	21.11	21.07	21.06		
100	PI2 BPSK	135	0	21.09	21.23	21.15	22.5	0.0
100	PI2 BPSK	135	69	21.09	21.21	21.13	22.5	0.0
100	PI2 BPSK	135	138	21.16	21.29	21.16	22.5	0.0
100	PI2 BPSK	270	0	21.21	21.32	21.04		
100	QPSK	1	1	21.23	21.33	21.18		
100	QPSK	1	137	21.19	21.28	21.03	22.5	0.0
100	QPSK	1	271	21.12	21.22	21.15		
100	QPSK	135	0	21.09	21.25	21.08		
100	QPSK	135	69	21.18	21.32	21.17	22.5	0.0
100	QPSK	135	138	21.10	21.25	21.07		
100	QPSK	270	0	21.20	21.28	21.15	22.5	0.0
100	16QAM	1	1	21.14	21.26	21.06	22.5	0.0
100	64QAM	1	1	21.08	21.18	21.07	22.5	0.0
100	256QAM	1	1	19.80	19.82	19.75	21.0	1.5
Channel				50620	51858	53096		MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98	Tune-up limit (dBm)	
80	QPSK	1	1	21.13	21.22	21.16	22.5	0.0
Channel				507204	518598	530998		MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99	Tune-up limit (dBm)	
80	QPSK	1	1	21.19	21.25	21.17	22.5	0.0
Channel				508200	518598	531000		MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655	Tune-up limit (dBm)	
70	QPSK	1	1	21.17	21.20	21.12	22.5	0.0
Channel				508200	518598	531000		MPR (dB)
Frequency (MHz)				2530	2592.99	2650.98	Tune-up limit (dBm)	
60	QPSK	1	1	21.18	21.27	21.05	22.5	0.0
Channel				504204	518598	530998		MPR (dB)
Frequency (MHz)				2521.02	2592.99	2644.99	Tune-up limit (dBm)	
50	QPSK	1	1	21.14	21.23	21.12	22.5	0.0
Channel				503202	518598	534000		MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670	Tune-up limit (dBm)	
40	QPSK	1	1	21.19	21.24	21.10	22.5	0.0
Channel				502200	518598	530998		MPR (dB)
Frequency (MHz)				2511	2592.99	2674.98	Tune-up limit (dBm)	
30	QPSK	1	1	21.14	21.19	21.15	22.5	0.0
Channel				501204	518598	530998		MPR (dB)
Frequency (MHz)				2506.02	2592.99	2670.99	Tune-up limit (dBm)	
20	QPSK	1	1	21.21	21.32	21.13	22.5	0.0
Channel				500700	518598	530998		MPR (dB)
Frequency (MHz)				2503.0	2592.99	2662.48	Tune-up limit (dBm)	
15	QPSK	1	1	21.17	21.18	21.15	22.5	0.0
Channel				500200	518598	531000		MPR (dB)
Frequency (MHz)				2501.01	2592.99	2655	Tune-up limit (dBm)	
10	QPSK	1	1	21.22	21.31	21.14	22.5	0.0



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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
	Channel			2662.02	2692.99	2640		
	Frequency (MHz)			2662.02	2692.99	2640		
100	PI2 BPSK	1	1	23.21	23.26	23.19		
100	PI2 BPSK	1	137	23.21	23.26	23.17	24.5	0.0
100	PI2 BPSK	1	271	23.33	23.31	23.19		
100	PI2 BPSK	135	0	23.33	23.26	23.24	24.5	0.0
100	PI2 BPSK	135	69	23.32	23.21	23.21	24.5	0.0
100	PI2 BPSK	135	138	23.30	23.25	23.14	24.5	0.0
100	PI2 BPSK	270	0	23.32	23.28	23.25		
100	QPSK	1	1	23.32	23.28	23.25		
100	QPSK	1	137	23.27	23.28	23.19	24.5	0.0
100	QPSK	1	271	23.22	23.21	23.14		
100	QPSK	135	0	23.16	23.24	23.08		
100	QPSK	135	69	23.25	23.32	23.17	24.5	0.0
100	QPSK	135	138	23.22	23.23	22.98		
100	QPSK	270	0	23.13	23.15	22.90	24.5	0.0
100	16QAM	1	1	21.90	21.85	21.85	24.5	0.0
100	16QAM	1	1	21.90	21.92	21.85	23.0	1.5
100	256QAM	1	1	19.80	19.82	19.75	21.0	3.5
	Channel			5020.00	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5020.00	5189.98	5299.96		
50	QPSK	1	1	23.22	23.22	23.15	24.5	0.0
	Channel			5072.04	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5072.04	5189.98	5299.96		
80	QPSK	1	1	23.20	23.21	23.20	24.5	0.0
	Channel			5020.02	5189.98	5310.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5020.02	5189.98	5310.00		
70	QPSK	1	1	23.22	23.24	23.27	24.5	0.0
	Channel			5020.00	5189.98	5319.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5020.00	5189.98	5319.96		
60	QPSK	1	1	23.32	23.21	23.19	24.5	0.0
	Channel			5042.04	5189.98	5329.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5042.04	5189.98	5329.96		
50	QPSK	1	1	23.21	23.32	23.13	24.5	0.0
	Channel			5032.02	5189.98	5340.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5032.02	5189.98	5340.00		
40	QPSK	1	1	23.34	23.23	23.19	24.5	0.0
	Channel			5020.00	5189.98	5359.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5020.00	5189.98	5359.96		
30	QPSK	1	1	23.20	23.22	23.20	24.5	0.0
	Channel			5012.04	5189.98	5359.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5012.04	5189.98	5359.96		
20	QPSK	1	1	23.24	23.24	23.17	24.5	0.0
	Channel			5070.00	5189.98	5368.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5070.00	5189.98	5368.96		
15	QPSK	1	1	23.29	23.26	23.25	24.5	0.0
	Channel			5032.02	5189.98	5370.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			5032.02	5189.98	5370.00		
10	QPSK	1	1	23.32	23.26	23.16	24.5	0.0

### Part27Q\_n77\_Ant 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
	Channel			3300.00	3333.32	3336.69	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3300.00	3333.32	3336.69		
100	PI2 BPSK	1	1	20.02	20.02	20.02		
100	PI2 BPSK	1	137	19.98	19.98	19.98	21.0	0.0
100	PI2 BPSK	1	271	20.05	20.05	20.05	21.0	0.0
100	PI2 BPSK	135	0	20.05	20.05	20.05	21.0	0.0
100	PI2 BPSK	135	69	20.02	20.02	20.02	21.0	0.0
100	PI2 BPSK	135	138	20.00	20.00	20.00	21.0	0.0
100	PI2 BPSK	270	0	19.93	19.93	19.93	21.0	0.0
100	QPSK	1	1	20.08	20.08	20.08		
100	QPSK	1	137	19.87	19.87	19.87	21.0	0.0
100	QPSK	1	271	19.99	19.99	19.99		
100	QPSK	135	0	20.01	20.01	20.01		
100	QPSK	135	69	20.08	20.08	20.08	21.0	0.0
100	QPSK	135	138	19.99	19.99	19.99		
100	QPSK	270	0	19.94	19.94	19.94	21.0	0.0
100	16QAM	1	1	19.98	19.98	19.98	21.0	0.0
100	16QAM	1	1	20.05	20.05	20.05	21.0	0.0
100	256QAM	1	1	18.42	18.42	18.42	19.5	1.5
	Channel			6330.00	6333.32	6336.69	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6330.00	6333.32	6336.69		
80	QPSK	1	1	19.96	20.07	20.05	21.0	0.0
	Channel			6368.00	6333.32	6340.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6368.00	6333.32	6340.00		
80	QPSK	1	1	19.81	19.84	20.00	21.0	0.0
	Channel			6326.04	6333.32	6332.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6326.04	6333.32	6332.00		
70	QPSK	1	1	19.82	19.92	20.01	21.0	0.0
	Channel			6320.00	6333.32	6348.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6320.00	6333.32	6348.00		
60	QPSK	1	1	19.95	19.92	19.97	21.0	0.0
	Channel			6316.68	6333.32	6350.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6316.68	6333.32	6350.00		
50	QPSK	1	1	19.93	20.05	19.97	21.0	0.0
	Channel			6313.34	6333.32	6353.32	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6313.34	6333.32	6353.32		
40	QPSK	1	1	19.81	19.97	19.98	21.0	0.0
	Channel			6310.00	6333.32	6359.99	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6310.00	6333.32	6359.99		
30	QPSK	1	1	19.82	20.06	19.90	21.0	0.0
	Channel			6306.68	6333.32	6350.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6306.68	6333.32	6350.00		
20	QPSK	1	1	19.89	19.93	20.04	21.0	0.0
	Channel			6303.34	6333.32	6369.96	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6303.34	6333.32	6369.96		
15	QPSK	1	1	19.89	19.98	19.92	21.0	0.0
	Channel			6303.34	6333.32	6363.32	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6303.34	6333.32	6363.32		
10	QPSK	1	1	19.87	19.97	20.04	21.0	0.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
	Channel			6500.00	6500.00	6500.00	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6500.00	6500.00	6500.00		
100	PI2 BPSK	1	1	19.93	19.94	19.92		
100	PI2 BPSK	1	137	19.86	19.85	19.95	21.0	0.0
100	PI2 BPSK	1	271	19.96	19.91	19.96		
100	PI2 BPSK	135	0	19.81	19.95	19.95	21.0	0.0
100	PI2 BPSK	135	69	19.86	19.85	19.87	21.0	0.0
100	PI2 BPSK	135	138	19.95	19.88	19.87	21.0	0.0
100	PI2 BPSK	270	0	19.85	19.85	19.87		
100	QPSK	1	1	19.96	19.98	19.96		
100	QPSK	1	137	19.89	19.92	19.91	21.0	0.0
100	QPSK	1	271	19.82	19.89	19.87		
100	QPSK	135	0	19.86	19.84	19.85		
100	QPSK	135	69	19.94	19.97	19.91	21.0	0.0
100	QPSK	135	138	19.85	19.88	19.88		
100	QPSK	270	0	19.83	19.95	19.81	21.0	0.0
100	16QAM	1	1	19.85	19.92	19.83	21.0	0.0
100	16QAM	1	1	19.91	19.91	19.86	21.0	0.0
100	256QAM	1	1	18.35	18.44	18.33	19.5	1.5
	Channel			6496.68	6500.00	6503.32	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6496.68	6500.00	6503.32		
80	QPSK	1	1	19.92	19.85	19.89	21.0	0.0
	Channel			6483.34	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6483.34	6500.00	6506.66		
80	QPSK	1	1	19.89	19.92	19.90	21.0	0.0
	Channel			6480.00	6500.00	6503.32	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6480.00	6500.00	6503.32		
70	QPSK	1	1	19.85	19.98	19.90	21.0	0.0
	Channel			6476.68	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6476.68	6500.00	6506.66		
60	QPSK	1	1	19.89	19.92	19.97	21.0	0.0
	Channel			6483.34	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6483.34	6500.00	6506.66		
50	QPSK	1	1	19.84	19.95	19.92	21.0	0.0
	Channel			6479.99	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6479.99	6500.00	6506.66		
40	QPSK	1	1	19.88	19.86	19.89	21.0	0.0
	Channel			6476.68	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6476.68	6500.00	6506.66		
30	QPSK	1	1	19.87	19.85	19.92	21.0	0.0
	Channel			6473.34	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6473.34	6500.00	6506.66		
20	QPSK	1	1	19.88	19.91	19.90	21.0	0.0
	Channel			6470.00	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6470.00	6500.00	6506.66		
15	QPSK	1	1	19.82	19.85	19.84	21.0	0.0
	Channel			6466.68	6500.00	6506.66	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			6466.68	6500.00	6506.66		
10	QPSK	1	1	19.81	19.94	19.92	21.0	0.0





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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	3499.98				
100	PI2 BPSK	1	137	21.85	21.85	21.85		
100	PI2 BPSK	1	271	21.81	21.91	21.91	23.0	0.0
100	PI2 BPSK	135	0	21.83	21.83	21.83	23.0	0.0
100	PI2 BPSK	135	69	21.81	21.81	21.81	23.0	0.0
100	PI2 BPSK	135	138	21.91	21.91	21.91	23.0	0.0
100	PI2 BPSK	270	0	21.86	21.86	21.86	23.0	0.0
100	QPSK	1	1	21.94	21.94	21.94	23.0	0.0
100	QPSK	1	137	21.79	21.79	21.79	23.0	0.0
100	QPSK	1	271	21.92	21.92	21.92	23.0	0.0
100	QPSK	135	0	21.78	21.78	21.78	23.0	0.0
100	QPSK	135	69	21.85	21.85	21.85	23.0	0.0
100	QPSK	135	138	21.94	21.94	21.94	23.0	0.0
100	QPSK	270	0	21.92	21.92	21.92	23.0	0.0
100	16QAM	1	1	21.81	21.81	21.81	23.0	0.0
100	64QAM	1	1	20.51	20.51	20.51	21.5	1.5
100	256QAM	1	1	18.42	18.42	18.42	19.5	3.5
Channel								
Frequency (MHz)								
50	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	3490.02	3499.98	3510	23.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.78	21.74	21.74	23.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	21.80	21.70	21.70	23.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	QPSK	1	1	3476.02	3499.98	3525	23.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.74	21.83	21.83	23.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	630998	633332	636000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
15	QPSK	1	1	3460.02	3499.98	3540	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.77	21.73	21.76	23.0	0.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	3765	3840	3930		
100	PI2 BPSK	1	137	21.82	22.12	22.04		
100	PI2 BPSK	1	271	21.89	22.08	22.06	23.0	0.0
100	PI2 BPSK	135	0	21.92	22.11	22.03	23.0	0.0
100	PI2 BPSK	135	69	21.82	22.10	21.95	23.0	0.0
100	PI2 BPSK	135	138	21.93	22.03	21.97	23.0	0.0
100	PI2 BPSK	270	0	21.87	22.08	21.98	23.0	0.0
100	QPSK	1	1	21.86	22.01	22.05	23.0	0.0
100	QPSK	1	137	21.88	22.05	21.94	23.0	0.0
100	QPSK	1	271	21.81	22.07	22.05	23.0	0.0
100	QPSK	135	0	21.90	22.09	21.96	23.0	0.0
100	QPSK	135	69	21.93	22.13	22.04	23.0	0.0
100	QPSK	135	138	21.83	22.11	21.98	23.0	0.0
100	QPSK	270	0	21.83	22.05	21.99	23.0	0.0
100	16QAM	1	1	21.83	22.11	22.01	23.0	0.0
100	64QAM	1	1	20.44	20.56	20.49	21.5	1.5
100	256QAM	1	1	18.35	18.44	18.33	19.5	3.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	649698	650000	652332	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	3740.01	3840	3939.99	23.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.80	22.12	21.93	23.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	648334	650000	653666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
50	QPSK	1	1	3720.01	3840	3943.99	23.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	21.82	22.01	22.01	23.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	648334	650000	653666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	3720.01	3840	3960	23.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	21.88	22.00	22.01	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	647334	650000	654666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
10	QPSK	1	1	3710.01	3840	3969.99	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.94	22.00	22.04	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	647168	650000	654832	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
15	QPSK	1	1	3707.52	3840	3972.48	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.89	22.05	22.03	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	647000	650000	655000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
10	QPSK	1	1	3705	3840	3975	23.0	0.0

### Part27Q\_n77\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	3499.98				
100	PI2 BPSK	1	137	19.84	19.84	19.84		
100	PI2 BPSK	1	271	19.89	19.89	19.89	21.0	0.0
100	PI2 BPSK	135	0	19.92	19.92	19.92	21.0	0.0
100	PI2 BPSK	135	69	19.82	19.82	19.82	21.0	0.0
100	PI2 BPSK	135	138	19.91	19.91	19.91	21.0	0.0
100	PI2 BPSK	270	0	19.81	19.81	19.81	21.0	0.0
100	QPSK	1	1	19.93	19.93	19.93	21.0	0.0
100	QPSK	1	137	19.92	19.92	19.92	21.0	0.0
100	QPSK	1	271	19.85	19.85	19.85	21.0	0.0
100	QPSK	135	0	19.94	19.94	19.94	21.0	0.0
100	QPSK	135	69	19.85	19.85	19.85	21.0	0.0
100	QPSK	135	138	19.92	19.92	19.92	21.0	0.0
100	QPSK	270	0	19.91	19.91	19.91	21.0	0.0
100	16QAM	1	1	19.83	19.83	19.83	21.0	0.0
100	64QAM	1	1	19.92	19.92	19.92	21.0	0.0
100	256QAM	1	1	18.47	18.47	18.47	19.5	1.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	3490.02	3499.98	3510	21.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	19.78	19.73	19.80	21.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
50	QPSK	1	1	3476.02	3499.98	3530	21.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	19.77	19.76	19.80	21.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	630998	633332	636000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
15	QPSK	1	1	3460.02	3499.98	3540	21.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	19.70	19.73	19.77	21.0	0.0



### Part270\_n77\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3750	3860	3950		
100	PI2 BPSK	1	1	19.30	19.37	19.33		
100	PI2 BPSK	1	137	19.25	19.44	19.19	21.0	0.0
100	PI2 BPSK	1	271	19.29	19.41	19.30		
100	PI2 BPSK	135	0	19.25	19.40	19.28	21.0	0.0
100	PI2 BPSK	135	69	19.29	19.42	19.22	21.0	0.0
100	PI2 BPSK	135	138	19.28	19.38	19.22		
100	PI2 BPSK	270	0	19.21	19.44	19.28	21.0	0.0
100	QPSK	1	1	19.35	19.47	19.34		
100	QPSK	1	137	19.25	19.41	19.29	21.0	0.0
100	QPSK	1	271	19.28	19.43	19.28		
100	QPSK	135	0	19.29	19.34	19.21		
100	QPSK	135	69	19.35	19.43	19.25	21.0	0.0
100	QPSK	135	138	19.25	19.38	19.23		
100	QPSK	270	0	19.21	19.37	19.21	21.0	0.0
100	16QAM	1	1	19.34	19.32	19.22	21.0	0.0
100	64QAM	1	1	19.27	19.45	19.25	21.0	0.0
100	256QAM	1	1	17.90	17.86	17.83	19.5	1.5
Channel								
Frequency (MHz)				64968	65000	65232	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	19.31	19.45	19.24	21.0	0.0
Channel								
Frequency (MHz)				64934	65000	65096	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	19.22	19.32	19.23	21.0	0.0
Channel								
Frequency (MHz)				3750	3860	3950	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	19.28	19.34	19.26	21.0	0.0
Channel								
Frequency (MHz)				64968	65000	65332	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	19.29	19.40	19.31	21.0	0.0
Channel								
Frequency (MHz)				64934	65000	65096	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	19.29	19.43	19.29	21.0	0.0
Channel								
Frequency (MHz)				64900	65000	65400	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	19.24	19.37	19.21	21.0	0.0
Channel								
Frequency (MHz)				3750	3860	3950	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	19.27	19.43	19.28	21.0	0.0
Channel								
Frequency (MHz)				64734	65000	65496	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	19.23	19.44	19.20	21.0	0.0
Channel								
Frequency (MHz)				64768	65000	65464	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	19.24	19.40	19.27	21.0	0.0
Channel								
Frequency (MHz)				64700	65000	65000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	19.24	19.32	19.25	21.0	0.0

### Part27Q\_n77 HPUE\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63332				
100	PI2 BPSK	1	1		21.80			
100	PI2 BPSK	1	137		21.81		23.0	0.0
100	PI2 BPSK	1	271		21.92			
100	PI2 BPSK	135	0		21.84		23.0	0.0
100	PI2 BPSK	135	69		21.83		23.0	0.0
100	PI2 BPSK	135	138		21.80			
100	PI2 BPSK	270	0		21.85		23.0	0.0
100	QPSK	1	1		21.93			
100	QPSK	1	137		21.81		23.0	0.0
100	QPSK	1	271		21.91			
100	QPSK	135	0		21.81			
100	QPSK	135	69		21.91		23.0	0.0
100	QPSK	135	138		21.85			
100	QPSK	270	0		21.90		23.0	0.0
100	16QAM	1	1		21.91		23.0	0.0
100	64QAM	1	1		20.38		21.5	1.5
100	256QAM	1	1		18.47		19.5	3.5
Channel								
Frequency (MHz)				63300	63332	63369	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	21.83	21.82	21.82	23.0	0.0
Channel								
Frequency (MHz)				63268	63332	63400	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	21.76	21.88	21.81	23.0	0.0
Channel								
Frequency (MHz)				63255	63332	63332	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	21.75	21.81	21.79	23.0	0.0
Channel								
Frequency (MHz)				63200	63332	63496	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	21.81	21.76	21.77	23.0	0.0
Channel								
Frequency (MHz)				63168	63332	63500	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	21.78	21.74	21.74	23.0	0.0
Channel								
Frequency (MHz)				63134	63332	63532	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	21.72	21.75	21.69	23.0	0.0
Channel								
Frequency (MHz)				63098	63332	63599	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	21.72	21.69	21.72	23.0	0.0
Channel								
Frequency (MHz)				63068	63332	63600	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	21.81	21.67	21.70	23.0	0.0
Channel								
Frequency (MHz)				63050	63332	63668	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	21.79	21.81	21.79	23.0	0.0
Channel								
Frequency (MHz)				63034	63332	63632	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	21.77	21.74	21.76	23.0	0.0

### Part270\_n77 HPUE\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3750	3860	3950		
100	PI2 BPSK	1	1	21.31	21.39	21.40		
100	PI2 BPSK	1	137	21.25	21.38	21.39	23.0	0.0
100	PI2 BPSK	1	271	21.30	21.35	21.35		
100	PI2 BPSK	135	0	21.28	21.37	21.29	23.0	0.0
100	PI2 BPSK	135	69	21.29	21.32	21.38	23.0	0.0
100	PI2 BPSK	135	138	21.25	21.38	21.37		
100	PI2 BPSK	270	0	21.32	21.28	21.32	23.0	0.0
100	QPSK	1	1	21.34	21.41	21.34		
100	QPSK	1	137	21.30	21.31	21.29	23.0	0.0
100	QPSK	1	271	21.30	21.28	21.33		
100	QPSK	135	0	21.22	21.31	21.17		
100	QPSK	135	69	21.27	21.38	21.25	23.0	0.0
100	QPSK	135	138	21.19	21.22	21.08		
100	QPSK	270	0	21.09	21.16	21.10	23.0	0.0
100	16QAM	1	1	21.21	21.32	21.33	23.0	0.0
100	64QAM	1	1	19.84	19.91	19.89	21.5	1.5
100	256QAM	1	1	17.80	17.86	17.83	19.5	3.5
Channel								
Frequency (MHz)				64968	65000	65232	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	21.29	21.31	21.30	23.0	0.0
Channel								
Frequency (MHz)				64934	65000	65096	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	21.25	21.28	21.27	23.0	0.0
Channel								
Frequency (MHz)				3750	3860	3950	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	21.20	21.33	21.40	23.0	0.0
Channel								
Frequency (MHz)				64968	65000	65332	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	21.21	21.26	21.38	23.0	0.0
Channel								
Frequency (MHz)				64934	65000	65096	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	21.24	21.36	21.29	23.0	0.0
Channel								
Frequency (MHz)				3750	3860	3950	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	21.19	21.39	21.38	23.0	0.0
Channel								
Frequency (MHz)				64734	65000	65496	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	21.31	21.38	21.33	23.0	0.0
Channel								
Frequency (MHz)				64768	65000	65464	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	21.28	21.30	21.28	23.0	0.0
Channel								
Frequency (MHz)				64700	65000	65000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	21.28	21.35	21.40	23.0	0.0



Full&Default Power Mode for Body

n38_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				516004	519000	519996			
Frequency (MHz)				2560.02	2595	2599.98			
40	PI2 BPSK	1	1	22.83	22.92	22.88			
40	PI2 BPSK	1	53	22.81	22.93	22.86	24.0	0.0	
40	PI2 BPSK	1	104	22.78	22.98	22.93			
40	PI2 BPSK	50	0	22.78	22.73	22.83	24.0	0.0	
40	PI2 BPSK	50	28	22.77	22.79	22.77			
40	PI2 BPSK	50	56	22.64	22.65	22.63			
40	PI2 BPSK	100	0	22.74	22.76	22.86	24.0	0.0	
40	QPSK	1	1	22.90	22.95	22.91			
40	QPSK	1	53	22.88	22.93	22.90	24.0	0.0	
40	QPSK	1	104	22.80	22.73	22.89			
40	QPSK	50	0	22.74	22.76	22.71			
40	QPSK	50	28	22.78	22.80	22.75	24.0	0.0	
40	QPSK	50	56	22.68	22.70	22.63			
40	QPSK	100	0	22.74	22.75	22.70	24.0	0.0	
40	16QAM	1	1	22.81	22.85	22.82	24.0	0.0	
40	16QAM	1	1	22.67	22.77	22.75	24.0	0.0	
40	256QAM	1	1	20.58	20.64	20.58	22.0	2.0	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2658.01	2695	2694.99	(dB)		
30	QPSK	1	1	22.91	22.85	22.89	24.0	0.0	
Channel				516000	519000	520000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2580	2595	2610	(dB)		
20	QPSK	1	1	22.53	22.57	22.54	24.0	0.0	
Channel				515002	519000	520600	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2577.51	2595	2612.49	(dB)		
15	QPSK	1	1	22.84	22.85	22.87	24.0	0.0	
Channel				515004	519000	520900	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2575.02	2595	2614.98	(dB)		
10	QPSK	1	1	22.85	22.90	22.84	24.0	0.0	

n38_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				516004	519000	519996			
Frequency (MHz)				2560.02	2595	2599.98			
40	PI2 BPSK	1	1	22.79	22.88	22.79			
40	PI2 BPSK	1	53	22.94	22.92	22.90	24.0	0.0	
40	PI2 BPSK	1	104	22.83	22.91	22.86			
40	PI2 BPSK	50	0	22.84	22.94	22.93	23.5	0.5	
40	PI2 BPSK	50	28	22.92	22.95	22.91			
40	PI2 BPSK	50	56	22.64	22.68	22.62			
40	PI2 BPSK	100	0	22.44	22.54	22.52	23.5	0.5	
40	QPSK	1	1	22.93	22.96	22.95			
40	QPSK	1	53	22.82	22.94	22.80	24.0	0.0	
40	QPSK	1	104	22.81	22.89	22.84			
40	QPSK	50	0	22.38	22.39	22.33			
40	QPSK	50	28	22.92	22.93	22.85	24.0	0.0	
40	QPSK	50	56	22.29	22.30	22.26			
40	QPSK	100	0	22.28	22.33	22.31	23.0	1.0	
40	16QAM	1	1	22.40	22.48	22.42	23.0	1.0	
40	16QAM	1	1	21.04	21.05	20.96	21.5	2.5	
40	256QAM	1	1	18.91	18.98	18.95	18.5	4.5	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2658.01	2695	2694.99	(dB)		
30	QPSK	1	1	22.73	22.80	22.78	24.0	0.0	
Channel				516000	519000	520000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2580	2595	2610	(dB)		
20	QPSK	1	1	22.80	22.88	22.86	24.0	0.0	
Channel				515002	519000	520600	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2577.51	2595	2612.49	(dB)		
15	QPSK	1	1	22.76	22.86	22.84	24.0	0.0	
Channel				515004	519000	520900	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2575.02	2595	2614.98	(dB)		
10	QPSK	1	1	22.80	22.82	22.85	24.0	0.0	

FCC_n41_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				505002	518500	520000			
Frequency (MHz)				2546.01	2592.99	2600			
100	PI2 BPSK	1	1	22.71	22.81	22.80			
100	PI2 BPSK	1	137	22.74	22.85	22.75	24.0	0.0	
100	PI2 BPSK	1	271	22.58	22.73	22.55			
100	PI2 BPSK	135	0	22.60	22.74	22.71	24.0	0.0	
100	PI2 BPSK	135	69	22.67	22.80	22.61			
100	PI2 BPSK	135	138	22.61	22.66	22.65			
100	PI2 BPSK	270	0	22.62	22.65	22.46	24.0	0.0	
100	QPSK	1	1	22.71	22.97	22.85			
100	QPSK	1	137	22.66	22.88	22.85	24.0	0.0	
100	QPSK	1	271	22.64	22.73	22.53			
100	QPSK	135	0	22.67	22.72	22.58			
100	QPSK	135	69	22.59	22.83	22.72	24.0	0.0	
100	QPSK	135	138	22.54	22.61	22.58			
100	QPSK	270	0	22.53	22.57	22.43	23.5	0.5	
100	16QAM	1	1	22.76	22.86	22.78	24.0	0.0	
100	16QAM	1	1	22.69	22.84	22.79	24.0	0.0	
100	256QAM	1	1	22.81	22.88	22.80	24.0	0.0	
Channel				508000	518500	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2641	2692.99	2641.99	(dB)		
90	QPSK	1	1	22.58	22.89	22.72	24.0	0.0	
Channel				507204	518500	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2636.02	2692.99	2636.99	(dB)		
80	QPSK	1	1	22.70	22.92	22.87	24.0	0.0	
Channel				505002	518500	520000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2531.01	2592.99	2605	(dB)		
70	QPSK	1	1	22.67	22.92	22.71	24.0	0.0	
Channel				505000	518500	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2530	2592.99	2605.98	(dB)		
60	QPSK	1	1	22.65	22.95	22.82	24.0	0.0	
Channel				504204	518500	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2521.02	2592.99	2604.99	(dB)		
50	QPSK	1	1	22.53	22.79	22.81	24.0	0.0	
Channel				503002	518500	520000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2516.01	2592.99	2610	(dB)		
40	QPSK	1	1	22.62	22.86	22.86	24.0	0.0	
Channel				502000	518500	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2511	2592.99	2614.98	(dB)		
30	QPSK	1	1	22.55	22.86	22.70	24.0	0.0	
Channel				501204	518500	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2502.04	2592.99	2602.98	(dB)		
20	QPSK	1	1	22.58	22.85	22.71	24.0	0.0	
Channel				500700	518500	520998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2503.5	2592.99	2602.48	(dB)		
15	QPSK	1	1	22.55	22.91	22.44	24.0	0.0	
Channel				500202	518500	520000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2501.01	2592.99	2605	(dB)		
10	QPSK	1	1	22.67	22.89	22.69	24.0	0.0	



FCC_n41 HPUE_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518988	529900			
Frequency (MHz)				2546.01	2592.99	2540			
100	PI2 BPSK	1	1	25.68	25.82	25.72			
100	PI2 BPSK	1	137	25.96	25.90	25.80	27.0	0.0	
100	PI2 BPSK	1	271	25.93	25.77	25.73			
100	PI2 BPSK	135	0	25.71	25.69	25.63	26.5	0.5	
100	PI2 BPSK	135	69	25.73	25.70	25.71	27.0	0.0	
100	PI2 BPSK	135	138	25.70	25.68	25.60	26.5	0.5	
100	PI2 BPSK	270	0	25.70	25.55	25.52			
100	QPSK	1	1	25.00	25.01	25.53			
100	QPSK	1	137	25.75	25.92	25.87	27.0	0.0	
100	QPSK	1	271	25.86	25.81	25.73			
100	QPSK	135	0	25.62	25.66	25.60			
100	QPSK	135	69	25.75	25.78	25.73	27.0	0.0	
100	QPSK	135	138	25.73	25.60	25.55			
100	QPSK	270	0	25.66	25.70	25.63	26.5	0.5	
100	16QAM	1	1	25.78	25.66	25.63	27.0	0.0	
100	64QAM	1	1	24.85	24.92	24.82	25.0	1.0	
100	256QAM	1	1	22.71	22.84	22.81	24.0	3.0	
Channel				509200	518988	529996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2544	2592.99	2544.86			
50	QPSK	1	1	25.90	25.95	25.89	27.0	0.0	
Channel				507204	518988	529988	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2538.02	2592.99	2548.99			
80	QPSK	1	1	25.43	25.43	25.45	27.0	0.0	
Channel				509202	518988	531000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2631.01	2692.99	2656			
70	QPSK	1	1	25.97	25.92	25.90	27.0	0.0	
Channel				509200	518988	531996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2595	2692.99	2699.98			
60	QPSK	1	1	25.91	25.97	25.85	27.0	0.0	
Channel				504204	518988	532988	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2541.02	2692.99	2644.99			
50	QPSK	1	1	25.93	25.92	25.84	27.0	0.0	
Channel				503202	518988	534000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2516.01	2692.99	2670			
40	QPSK	1	1	25.90	25.96	25.87	27.0	0.0	
Channel				502200	518988	535000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2511	2692.99	2674.98			
30	QPSK	1	1	25.95	25.90	25.83	27.0	0.0	
Channel				501204	518988	535988	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2496.02	2692.99	2679.99			
20	QPSK	1	1	25.92	25.95	25.88	27.0	0.0	
Channel				500700	518988	536486	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2493.5	2692.99	2692.48			
15	QPSK	1	1	25.93	25.91	25.84	27.0	0.0	
Channel				509202	518988	537000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2501.01	2692.99	2685			
10	QPSK	1	1	25.97	25.95	25.86	27.0	0.0	



### FCC\_n41\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				50502	51898	53900		
Frequency (MHz)				2646.01	2692.99	2640		
100	PI2 BPSK	1	1	22.78	22.88	22.79		
100	PI2 BPSK	1	137	22.84	22.91	22.82	24.0	0.0
100	PI2 BPSK	1	271	22.78	22.82	22.63		
100	PI2 BPSK	135	0	22.67	22.79	22.84	24.0	0.0
100	PI2 BPSK	135	69	22.83	22.86	22.84	24.0	0.0
100	PI2 BPSK	135	138	22.47	22.66	22.58		
100	PI2 BPSK	270	0	22.51	22.70	22.60	24.0	0.0
100	QPSK	1	1	22.52	22.59	22.55		
100	QPSK	1	137	22.78	22.93	22.82	24.0	0.0
100	QPSK	1	271	22.77	22.82	22.73		
100	QPSK	135	0	22.96	22.77	22.67		
100	QPSK	135	69	22.75	22.86	22.78	24.0	0.0
100	QPSK	135	138	22.60	22.77	22.66		
100	QPSK	270	0	22.81	22.83	22.81	24.0	0.0
100	16QAM	1	1	22.98	22.94	22.87	24.0	0.0
100	64QAM	1	1	22.81	22.98	22.76	24.0	0.0
100	256QAM	1	1	20.81	20.88	20.83	22.5	1.5
Channel				508200	518988	529996	Tune-up limit (dB)	MPR
Frequency (MHz)				2541	2592.99	2644.98	(dBm)	(dB)
50	QPSK	1	1	22.74	22.84	22.76	24.0	0.0
Channel				507204	518998	529988	Tune-up limit (dB)	MPR
Frequency (MHz)				2538.02	2592.99	2648.99	(dBm)	(dB)
80	QPSK	1	1	22.84	22.80	22.60	24.0	0.0
Channel				505200	518998	531998	Tune-up limit (dB)	MPR
Frequency (MHz)				2656	2692.99	2658	(dBm)	(dB)
70	QPSK	1	1	22.80	22.82	22.66	24.0	0.0
Channel				505200	518998	531998	Tune-up limit (dB)	MPR
Frequency (MHz)				2656	2692.99	2658.98	(dBm)	(dB)
60	QPSK	1	1	22.66	22.85	22.69	24.0	0.0
Channel				504204	518998	532998	Tune-up limit (dB)	MPR
Frequency (MHz)				2531.02	2592.99	2648.99	(dBm)	(dB)
50	QPSK	1	1	22.72	22.85	22.82	24.0	0.0
Channel				503202	518998	534000	Tune-up limit (dB)	MPR
Frequency (MHz)				2616.01	2692.99	2670	(dBm)	(dB)
40	QPSK	1	1	22.74	22.81	22.76	24.0	0.0
Channel				502200	518998	535000	Tune-up limit (dB)	MPR
Frequency (MHz)				2511	2692.99	2674.98	(dBm)	(dB)
30	QPSK	1	1	22.62	22.97	22.76	24.0	0.0
Channel				501204	518998	535998	Tune-up limit (dB)	MPR
Frequency (MHz)				2638.02	2692.99	2678.99	(dBm)	(dB)
20	QPSK	1	1	22.64	22.86	22.68	24.0	0.0
Channel				500700	518998	536496	Tune-up limit (dB)	MPR
Frequency (MHz)				2503.5	2692.99	2682.48	(dBm)	(dB)
15	QPSK	1	1	22.76	22.87	22.78	24.0	0.0
Channel				500202	518998	537000	Tune-up limit (dB)	MPR
Frequency (MHz)				2501.01	2692.99	2685	(dBm)	(dB)
10	QPSK	1	1	22.76	22.86	22.69	24.0	0.0

### FCC\_n41 HPUE Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				2646.01	2692.99	2640		
Frequency (MHz)				2646.01	2692.99	2640		
100	PI2 BPSK	1	1	25.38	25.40	25.32		
100	PI2 BPSK	1	137	25.27	25.36	25.28	27.0	0.0
100	PI2 BPSK	1	271	25.25	25.33	25.11		
100	PI2 BPSK	135	0	24.72	24.76	24.68	26.5	0.5
100	PI2 BPSK	135	69	25.28	25.33	25.29	27.0	0.0
100	PI2 BPSK	135	138	24.60	24.69	24.67		
100	PI2 BPSK	270	0	24.57	24.64	24.55	26.5	0.5
100	QPSK	1	1	25.43	25.48	25.45		
100	QPSK	1	137	25.27	25.32	25.28	27.0	0.0
100	QPSK	1	271	25.14	25.23	25.20		
100	QPSK	135	0	25.26	25.28	25.21		
100	QPSK	135	69	25.35	25.35	25.25	27.0	0.0
100	QPSK	135	138	24.04	24.14	24.12		
100	QPSK	270	0	24.33	24.38	24.32	26.0	1.0
100	16QAM	1	1	24.49	24.55	24.48	26.0	1.0
100	64QAM	1	1	22.84	22.89	22.88	24.5	2.5
100	256QAM	1	1	20.81	20.88	20.83	22.5	4.5
Channel				508200	518998	529996	Tune-up limit (dB)	MPR
Frequency (MHz)				2541	2592.99	2644.98	(dBm)	(dB)
50	QPSK	1	1	25.41	25.45	25.38	27.0	0.0
Channel				507204	518998	529988	Tune-up limit (dB)	MPR
Frequency (MHz)				2538.02	2592.99	2648.99	(dBm)	(dB)
80	QPSK	1	1	25.35	25.40	25.40	27.0	0.0
Channel				505200	518998	531998	Tune-up limit (dB)	MPR
Frequency (MHz)				2651.01	2692.99	2656	(dBm)	(dB)
70	QPSK	1	1	25.40	25.43	25.38	27.0	0.0
Channel				505200	518998	531998	Tune-up limit (dB)	MPR
Frequency (MHz)				2656	2692.99	2658.98	(dBm)	(dB)
60	QPSK	1	1	25.38	25.43	25.35	27.0	0.0
Channel				504204	518998	532998	Tune-up limit (dB)	MPR
Frequency (MHz)				2531.02	2592.99	2648.99	(dBm)	(dB)
50	QPSK	1	1	25.37	25.53	25.42	27.0	0.0
Channel				503202	518998	534000	Tune-up limit (dB)	MPR
Frequency (MHz)				2616.01	2692.99	2670	(dBm)	(dB)
40	QPSK	1	1	25.34	25.45	25.35	27.0	0.0
Channel				502200	518998	535000	Tune-up limit (dB)	MPR
Frequency (MHz)				2511	2692.99	2674.98	(dBm)	(dB)
30	QPSK	1	1	25.39	25.45	25.37	27.0	0.0
Channel				501204	518998	535998	Tune-up limit (dB)	MPR
Frequency (MHz)				2638.02	2692.99	2678.99	(dBm)	(dB)
20	QPSK	1	1	25.38	25.39	25.36	27.0	0.0
Channel				500700	518998	536496	Tune-up limit (dB)	MPR
Frequency (MHz)				2503.5	2692.99	2682.48	(dBm)	(dB)
15	QPSK	1	1	25.35	25.41	25.38	27.0	0.0
Channel				500202	518998	537000	Tune-up limit (dB)	MPR
Frequency (MHz)				2501.01	2692.99	2685	(dBm)	(dB)
10	QPSK	1	1	25.36	25.39	25.35	27.0	0.0

### FCC\_n41\_Ant 2

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				2646.01	2692.99	2640		
Frequency (MHz)				2646.01	2692.99	2640		
100	PI2 BPSK	1	1	22.41	22.60	22.75		
100	PI2 BPSK	1	137	22.47	22.57	22.71	24.0	0.0
100	PI2 BPSK	1	271	22.43	22.58	22.72		
100	PI2 BPSK	135	0	22.43	22.55	22.74	24.0	0.0
100	PI2 BPSK	135	69	22.47	22.58	22.71	24.0	0.0
100	PI2 BPSK	135	138	22.49	22.58	22.76		
100	PI2 BPSK	270	0	22.47	22.58	22.75	24.0	0.0
100	QPSK	1	1	22.51	22.53	22.79		
100	QPSK	1	137	22.49	22.61	22.71	24.0	0.0
100	QPSK	1	271	22.42	22.59	22.78		
100	QPSK	135	0	22.48	22.61	22.71		
100	QPSK	135	69	22.55	22.55	22.77	24.0	0.0
100	QPSK	135	138	22.42	22.54	22.75		
100	QPSK	270	0	22.48	22.58	22.72	24.0	0.0
100	16QAM	1	1	22.44	22.60	22.70	24.0	0.0
100	64QAM	1	1	22.68	22.71	22.72	23.5	0.5
100	256QAM	1	1	20.69	20.76	20.84	21.5	2.5
Channel				508200	518998	529996	Tune-up limit (dB)	MPR
Frequency (MHz)				2541	2592.99	2644.98	(dBm)	(dB)
50	QPSK	1	1	22.42	22.57	22.73	24.0	0.0
Channel				507204	518998	529988	Tune-up limit (dB)	MPR
Frequency (MHz)				2538.02	2592.99	2648.99	(dBm)	(dB)
80	QPSK	1	1	22.45	22.60	22.77	24.0	0.0
Channel				505200	518998	531998	Tune-up limit (dB)	MPR
Frequency (MHz)				2651.01	2692.99	2656	(dBm)	(dB)
70	QPSK	1	1	22.49	22.60	22.76	24.0	0.0
Channel				505200	518998	531998	Tune-up limit (dB)	MPR
Frequency (MHz)				2656	2692.99	2658.98	(dBm)	(dB)
60	QPSK	1	1	22.44	22.55	22.71	24.0	0.0
Channel				504204	518998	532998	Tune-up limit (dB)	MPR
Frequency (MHz)				2531.02	2592.99	2648.99	(dBm)	(dB)
50	QPSK	1	1	22.43	22.53	22.77	24.0	0.0
Channel				503202	518998	534000	Tune-up limit (dB)	MPR
Frequency (MHz)				2616.01	2692.99	2670	(dBm)	(dB)
40	QPSK	1	1	22.41	22.54	22.69	24.0	0.0
Channel				502200	518998	535000	Tune-up limit (dB)	MPR
Frequency (MHz)				2511	2692.99	2674.98	(dBm)	(dB)
30	QPSK	1	1	22.44	22.57	22.74	24.0	0.0
Channel				501204	518998	535998	Tune-up limit (dB)	MPR
Frequency (MHz)				2638.02	2692.99	2678.99	(dBm)	(dB)
20	QPSK	1	1	22.42	22.54	22.74	24.0	0.0
Channel				500700	518998	536496	Tune-up limit (dB)	MPR
Frequency (MHz)				2503.5	2692.99	2682.48	(dBm)	(dB)
15	QPSK	1	1	22.42	22.53	22.77	24.0	0.0
Channel				500202				



FCC_n41 HPU_E_Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	2546.01	2562.99	2640			
100	Pi2 BPSK	1	137	24.46	24.54	24.57			
100	Pi2 BPSK	1	137	24.47	24.65	24.71			0.0
100	Pi2 BPSK	1	211	24.38	24.56	24.76			1.0
100	Pi2 BPSK	135	0	24.32	24.52	24.53			25.5 0.5
100	Pi2 BPSK	135	69	24.45	24.61	24.72			26.0 0.0
100	Pi2 BPSK	135	138	24.43	24.55	24.58			25.5 0.5
100	Pi2 BPSK	210	0	24.36	24.48	24.82			
100	QPSK	1	1	24.51	24.68	24.74			
100	QPSK	1	137	24.47	24.55	24.66			26.0 0.0
100	QPSK	1	211	24.40	24.58	24.58			
100	QPSK	135	0	23.86	23.82	23.79			
100	QPSK	135	69	24.46	24.61	24.67			26.0 0.0
100	QPSK	135	138	23.84	24.12	24.15			
100	QPSK	210	0	23.85	23.91	23.97			25.0 1.0
100	8QAM	1	1	22.73	23.83	23.82			25.0 1.0
100	8QAM	1	1	22.68	22.71	22.72			23.5 2.5
100	256QAM	1	1	20.69	20.76	20.84			21.5 4.5
Channel									
Frequency (MHz)									
80	QPSK	1	1	508200	518598	529998	Tune-up limit (dBm)	MPR	
				2541	2562.99	2644.98	(dBm)		
90	QPSK	1	1	24.39	24.52	24.73	26.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	507204	518598	529998	Tune-up limit (dBm)	MPR	
				2536.02	2562.99	2649.98	(dBm)		
80	QPSK	1	1	24.45	24.52	24.68	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	505202	518598	531996	Tune-up limit (dBm)	MPR	
				2531.01	2562.99	2655	(dBm)		
70	QPSK	1	1	24.42	24.53	24.59	26.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	503200	518598	531996	Tune-up limit (dBm)	MPR	
				2506	2562.99	2668.98	(dBm)		
60	QPSK	1	1	24.37	24.46	24.55	26.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	504204	518598	532998	Tune-up limit (dBm)	MPR	
				2521.02	2562.99	2674.97	(dBm)		
50	QPSK	1	1	24.53	24.49	24.69	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	503202	518598	534000	Tune-up limit (dBm)	MPR	
				2516.01	2562.99	2670	(dBm)		
40	QPSK	1	1	24.45	24.62	24.60	26.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	502200	518598	535998	Tune-up limit (dBm)	MPR	
				2511	2562.99	2674.98	(dBm)		
30	QPSK	1	1	24.53	24.56	24.69	26.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	501204	518598	537996	Tune-up limit (dBm)	MPR	
				2507.04	2562.99	2682.48	(dBm)		
20	QPSK	1	1	24.44	24.49	24.68	26.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	500700	518598	536496	Tune-up limit (dBm)	MPR	
				2503.5	2562.99	2682.48	(dBm)		
15	QPSK	1	1	24.49	24.59	24.59	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	502202	518598	537000	Tune-up limit (dBm)	MPR	
				2501.01	2562.99	2685	(dBm)		
10	QPSK	1	1	24.35	24.62	24.62	26.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	2217	2224	2215			
100	Pi2 BPSK	1	137	22.17	22.25	22.17			23.5 0.0
100	Pi2 BPSK	1	211	22.16	22.29	22.16			
100	Pi2 BPSK	135	0	22.21	22.25	22.15			23.5 0.0
100	Pi2 BPSK	135	69	22.20	22.28	22.10			23.5 0.0
100	Pi2 BPSK	135	138	22.16	22.28	22.11			23.5 0.0
100	Pi2 BPSK	210	0	22.16	22.29	22.11			
100	QPSK	1	1	22.26	22.33	22.20			
100	QPSK	1	137	22.22	22.30	22.10			23.5 0.0
100	QPSK	1	211	22.18	22.30	22.13			
100	QPSK	135	0	22.20	22.24	22.13			
100	QPSK	135	69	22.22	22.28	22.15			23.5 0.0
100	QPSK	135	138	22.17	22.24	22.14			
100	QPSK	210	0	22.18	22.23	22.12			23.5 0.0
100	8QAM	1	1	22.16	22.31	22.10			23.5 0.0
100	8QAM	1	1	21.90	21.92	21.85			23.0 0.5
100	256QAM	1	1	19.80	19.82	19.75			21.0 2.5
Channel									
Frequency (MHz)									
80	QPSK	1	1	508200	518598	529998	Tune-up limit (dBm)	MPR	
				2541	2562.99	2644.98	(dBm)		
90	QPSK	1	1	22.22	22.28	22.15	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	507204	518598	529998	Tune-up limit (dBm)	MPR	
				2536.02	2562.99	2649.98	(dBm)		
80	QPSK	1	1	22.21	22.24	22.16	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	505202	518598	531996	Tune-up limit (dBm)	MPR	
				2531.01	2562.99	2655	(dBm)		
70	QPSK	1	1	22.24	22.30	22.17	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	503200	518598	531996	Tune-up limit (dBm)	MPR	
				2506	2562.99	2668.98	(dBm)		
60	QPSK	1	1	22.24	22.27	22.10	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	504204	518598	532998	Tune-up limit (dBm)	MPR	
				2521.02	2562.99	2674.97	(dBm)		
50	QPSK	1	1	22.20	22.28	22.10	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	503202	518598	534000	Tune-up limit (dBm)	MPR	
				2516.01	2562.99	2670	(dBm)		
40	QPSK	1	1	22.24	22.23	22.18	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	502200	518598	535998	Tune-up limit (dBm)	MPR	
				2511	2562.99	2674.98	(dBm)		
30	QPSK	1	1	22.22	22.28	22.12	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	501204	518598	537996	Tune-up limit (dBm)	MPR	
				2507.04	2562.99	2682.48	(dBm)		
20	QPSK	1	1	22.23	22.25	22.10	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	500700	518598	536496	Tune-up limit (dBm)	MPR	
				2503.5	2562.99	2682.48	(dBm)		
15	QPSK	1	1	22.21	22.30	22.15	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	502202	518598	537000	Tune-up limit (dBm)	MPR	
				2501.01	2562.99	2685	(dBm)		
10	QPSK	1	1	22.22	22.24	22.12	23.5	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	2425	2430	2418			
100	Pi2 BPSK	1	137	24.30	24.33	24.18			25.5 0.0
100	Pi2 BPSK	1	211	24.25	24.29	24.58			
100	Pi2 BPSK	135	0	23.81	23.78	23.55			25.0 0.5
100	Pi2 BPSK	135	69	24.31	24.25	24.21			25.5 0.0
100	Pi2 BPSK	135	138	23.78	23.80	23.76			25.0 0.5
100	Pi2 BPSK	210	0	23.72	23.75	23.68			
100	QPSK	1	1	24.51	24.36	24.25			
100	QPSK	1	137	24.25	24.31	24.20			25.5 0.0
100	QPSK	1	211	24.30	23.88	23.05			
100	QPSK	135	0	23.16	23.24	23.08			
100	QPSK	135	69	24.50	24.26	24.18			25.5 0.0
100	QPSK	135	138	23.22	23.23	22.88			
100	QPSK	210	0	23.13	23.15	22.80			24.5 1.0
100	8QAM	1	1	23.33	23.36	23.22			24.5 1.0
100	8QAM	1	1	21.90	21.92	21.85			23.0 2.5
100	256QAM	1	1	19.80	19.82	19.75			21.0 4.5
Channel									
Frequency (MHz)									
80	QPSK	1	1	508200	518598	529998	Tune-up limit (dBm)	MPR	
				2541	2562.99	2644.98	(dBm)		
90	QPSK	1	1	24.25	24.23	24.18	25.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	507204	518598	529998	Tune-up limit (dBm)	MPR	
				2536.02	2562.99	2649.98	(dBm)		
80	QPSK	1	1	24.28	24.34	24.17	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	505202	518598	531996	Tune-up limit (dBm)	MPR	
				2531.01	2562.99	2655	(dBm)		
70	QPSK	1	1	24.22	24.25	24.14	25.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	503200	518598	531996	Tune-up limit (dBm)	MPR	
				2506	2562.99	2668.98	(dBm)		
60	QPSK	1	1	24.29	24.22	24.20	25.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	504204	518598	532998	Tune-up limit (dBm)	MPR	
				2521.02	2562.99	2674.97	(dBm)		
50	QPSK	1	1	24.30	24.23	24.22	25.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	503202	518598	534000	Tune-up limit (dBm)	MPR	
				2516.01	2562.99	2670	(dBm)		
40	QPSK	1	1	24.26	24.34	24.19	25.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	502200	518598	535998	Tune-up limit (dBm)	MPR	
				2511	2562.99	2674.98	(dBm)		
30	QPSK	1	1	24.21	24.25	24.14	25.5	0.0	
Channel									
Frequency (MHz)									
20									



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				50020	51898	53900			
Frequency (MHz)				2646.01	2692.99	2640			
100	PI2 BPSK	1	1	21.69	22.00	21.71			
100	PI2 BPSK	1	137	21.66	22.00	21.60	23.0	0.0	
100	PI2 BPSK	1	211	21.71	21.98	21.59			
100	PI2 BPSK	135	0	21.68	22.04	21.67	23.0	0.0	
100	PI2 BPSK	135	69	21.77	22.03	21.59	23.0	0.0	
100	PI2 BPSK	135	138	21.67	21.98	21.62	23.0	0.0	
100	PI2 BPSK	210	0	21.73	22.01	21.66			
100	QPSK	1	1	21.75	22.07	21.74			
100	QPSK	1	137	21.74	22.02	21.62	23.0	0.0	
100	QPSK	1	271	21.76	22.02	21.71			
100	QPSK	135	0	21.68	21.98	21.68			
100	QPSK	135	69	21.72	22.02	21.68	23.0	0.0	
100	QPSK	135	138	21.68	21.98	21.62			
100	QPSK	270	0	21.76	21.98	21.68	23.0	0.0	
100	16QAM	1	1	21.64	21.97	21.73	23.0	0.0	
100	64QAM	1	1	21.30	21.43	21.21	22.5	0.5	
100	256QAM	1	1	20.33	20.41	20.15	21.5	1.5	
Channel				50020	51898	53996	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2641	2692.99	2641.88			
50	QPSK	1	1	21.72	22.05	21.64	23.0	0.0	
Channel				50704	51898	53998	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2638.02	2692.99	2648.99			
80	QPSK	1	1	21.72	21.43	21.70	23.0	0.0	
Channel				50020	51898	53100	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2631.01	2692.99	2655			
70	QPSK	1	1	21.78	21.96	21.59	23.0	0.0	
Channel				50020	51898	53196	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2629	2692.99	2629.98			
60	QPSK	1	1	21.78	21.98	21.62	23.0	0.0	
Channel				504204	51898	53998	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2621.02	2692.99	2644.99			
50	QPSK	1	1	21.71	22.00	21.73	23.0	0.0	
Channel				500202	51898	53400	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2616.01	2692.99	2670			
40	QPSK	1	1	21.64	22.01	21.72	23.0	0.0	
Channel				500200	51898	53996	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2611	2692.99	2674.98			
30	QPSK	1	1	21.69	21.96	21.62	23.0	0.0	
Channel				501204	51898	53998	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2608.03	2692.99	2678.99			
20	QPSK	1	1	21.74	21.99	21.61	23.0	0.0	
Channel				500700	51898	53646	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2603.5	2692.99	2682.48			
15	QPSK	1	1	21.74	22.04	21.63	23.0	0.0	
Channel				500202	51898	53700	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2601.01	2692.99	2685			
10	QPSK	1	1	21.68	22.03	21.72	23.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				50020	51898	53900			
Frequency (MHz)				2646.01	2692.99	2640			
100	PI2 BPSK	1	1	23.78	23.90	23.60			
100	PI2 BPSK	1	137	23.64	23.85	23.65	25.0	0.0	
100	PI2 BPSK	1	271	23.73	23.89	23.62			
100	PI2 BPSK	135	0	23.47	23.58	23.31	24.5	0.5	
100	PI2 BPSK	135	69	23.69	23.87	23.65	25.0	0.0	
100	PI2 BPSK	135	138	23.35	23.60	23.27	24.5	0.5	
100	PI2 BPSK	210	0	23.45	23.60	23.22			
100	QPSK	1	1	23.70	23.99	23.65			
100	QPSK	1	137	23.65	23.89	23.51	25.0	0.0	
100	QPSK	1	271	23.70	23.88	23.59			
100	QPSK	135	0	23.68	23.88	23.48			
100	QPSK	135	69	23.65	23.95	23.51	25.0	0.0	
100	QPSK	135	138	22.73	22.88	22.37			
100	QPSK	270	0	22.66	22.94	22.62	24.0	1.0	
100	16QAM	1	1	22.69	22.97	22.64	24.0	1.0	
100	64QAM	1	1	21.30	21.43	21.21	22.5	2.5	
100	256QAM	1	1	20.33	20.41	20.15	21.5	3.5	
Channel				50020	51898	53996	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2641	2692.99	2641.88			
50	QPSK	1	1	23.65	23.85	23.52	25.0	0.0	
Channel				50704	51898	53998	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2638.02	2692.99	2648.99			
80	QPSK	1	1	23.67	23.63	23.40	26.0	0.0	
Channel				500202	51898	53100	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2631.01	2692.99	2655			
70	QPSK	1	1	23.62	23.87	23.59	25.0	0.0	
Channel				500200	51898	53196	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2629	2692.99	2629.98			
60	QPSK	1	1	23.65	23.90	23.54	25.0	0.0	
Channel				504204	51898	53998	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2621.02	2692.99	2644.99			
50	QPSK	1	1	23.63	23.81	23.47	25.0	0.0	
Channel				500202	51898	53400	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2616.01	2692.99	2670			
40	QPSK	1	1	23.65	23.88	23.58	25.0	0.0	
Channel				500700	51898	53996	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2611	2692.99	2674.98			
30	QPSK	1	1	23.71	23.91	23.58	25.0	0.0	
Channel				501204	51898	53998	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2608.03	2692.99	2678.99			
20	QPSK	1	1	23.59	23.93	23.58	25.0	0.0	
Channel				500700	51898	53646	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2603.5	2692.99	2682.48			
15	QPSK	1	1	23.63	23.84	23.40	23.0	0.0	
Channel				500202	51898	53700	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				2601.01	2692.99	2685			
10	QPSK	1	1	23.63	23.79	23.56	25.0	0.0	



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				636000	641666	646332			
Frequency (MHz)				3570	3624.99	3679.98			
40	PI2 BPSK	1	1	23.09	23.11	23.10			
40	PI2 BPSK	1	53	23.20	23.21	23.15	24.0	0.0	
40	PI2 BPSK	1	104	23.05	23.20	23.06	24.0	0.0	
40	PI2 BPSK	50	0	22.96	22.99	22.94	24.0	0.0	
40	PI2 BPSK	50	28	22.85	23.01	22.86	24.0	0.0	
40	PI2 BPSK	50	56	22.93	22.95	22.91	24.0	0.0	
40	PI2 BPSK	100	0	22.88	22.90	22.87	24.0	0.0	
40	QPSK	1	1	23.19	23.25	23.17			
40	QPSK	1	53	23.12	23.15	23.12	24.0	0.0	
40	QPSK	1	104	23.03	23.24	23.10			
40	QPSK	50	0	23.15	23.18	23.13			
40	QPSK	50	28	23.16	23.20	23.14	24.0	0.0	
40	QPSK	50	56	23.10	23.11	23.08			
40	QPSK	100	0	23.14	23.18	23.12	24.0	0.0	
40	16QAM	1	1	23.15	23.18	23.15	24.0	0.0	
40	16QAM	1	1	22.66	22.68	22.62	23.5	0.5	
40	256QAM	1	1	21.10	21.11	21.18	21.5	2.5	
Channel				637668	641666	645666	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3563.02	3624.99	3684.98			
30	QPSK	1	1	23.04	23.09	23.01	24.0	0.0	
Channel				637334	641666	646000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3560.01	3624.99	3690			
20	QPSK	1	1	23.08	23.13	23.04	24.0	0.0	
Channel				637000	641666	645332	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3565	3624.99	3684.98			
10	QPSK	1	1	23.05	23.12	22.97	24.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				636000	641666	646332			
Frequency (MHz)				3570	3624.99	3679.98			
40	PI2 BPSK	1	1	22.71	22.53	22.30			
40	PI2 BPSK	1	53	22.54	22.51	22.30	24.0	0.0	
40	PI2 BPSK	1	104	22.27	22.26	22.29			
40	PI2 BPSK	50	0	22.07	22.12	22.09	23.5	0.5	
40	PI2 BPSK	50	28	22.50	22.51	22.28	24.0	0.0	
40	PI2 BPSK	50	56	21.98	22.07	21.99			
40	PI2 BPSK	100	0	21.71	21.83	21.72	23.5	0.5	
40	QPSK	1	1	22.73	22.55	22.34			
40	QPSK	1	53	22.44	22.34	22.28	24.0	0.0	
40	QPSK	1	104	22.31	22.17	22.16			
40	QPSK	50	0	21.16	21.23	21.20			
40	QPSK	50	28	22.64	22.32	22.21	24.0	0.0	
40	QPSK	50	56	20.81	20.88	20.82			
40	QPSK	100	0	21.45	21.40	21.35	23.0	1.0	
40	16QAM	1	1	20.36	20.25	20.53	23.0	1.0	
40	16QAM	1	1	18.71	18.82	18.92	21.5	2.5	
40	256QAM	1	1	16.87	16.83	17.12	19.5	4.5	
Channel				637668	641666	645666	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3563.02	3624.99	3684.98			
30	QPSK	1	1	22.68	22.47	22.32	24.0	0.0	
Channel				637334	641666	646000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3560.01	3624.99	3690			
20	QPSK	1	1	22.67	22.46	22.26	24.0	0.0	
Channel				637000	641666	645332	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3565	3624.99	3684.98			
10	QPSK	1	1	22.68	22.49	22.26	24.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				636000	641666	646332			
Frequency (MHz)				3570	3624.99	3679.98			
40	PI2 BPSK	1	1	23.00	23.00	22.99			
40	PI2 BPSK	1	53	23.03	23.05	23.04	24.0	0.0	
40	PI2 BPSK	1	104	23.00	23.02	23.02			
40	PI2 BPSK	50	0	22.83	22.91	22.80	23.5	0.5	
40	PI2 BPSK	50	28	22.83	22.86	22.80	24.0	0.0	
40	PI2 BPSK	50	56	22.83	22.90	22.82			
40	PI2 BPSK	100	0	22.81	22.87	22.84	23.5	0.5	
40	QPSK	1	1	23.08	23.10	23.05			
40	QPSK	1	53	22.98	23.02	22.83	24.0	0.0	
40	QPSK	1	104	23.01	23.09	23.03			
40	QPSK	50	0	22.84	22.90	22.82			
40	QPSK	50	28	22.95	22.93	22.86	24.0	0.0	
40	QPSK	50	56	22.74	22.83	22.78			
40	QPSK	100	0	22.86	22.80	22.86	24.0	0.0	
40	16QAM	1	1	20.93	21.03	20.94	23.0	1.0	
40	16QAM	1	1	19.44	19.52	19.50	21.5	2.5	
40	256QAM	1	1	17.48	17.55	17.52	19.5	4.5	
Channel				637668	641666	645666	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3563.02	3624.99	3684.98			
30	QPSK	1	1	22.99	23.04	23.01	24.0	0.0	
Channel				637334	641666	646000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3560.01	3624.99	3690			
20	QPSK	1	1	23.03	23.08	22.99	24.0	0.0	
Channel				637000	641666	645332	Tune-up limit (dBm)	MPR	
Frequency (MHz)				3565	3624.99	3684.98			
10	QPSK	1	1	23.00	23.07	23.01	24.0	0.0	





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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				630000	641666	646332		
Frequency (MHz)				3570	3624.99	3679.98		
40	PI2 BPSK	1	1	22.59	22.67	22.57		
40	PI2 BPSK	1	53	22.46	22.61	22.47	24.0	0.0
40	PI2 BPSK	1	104	22.30	22.62	22.49	23.5	0.5
40	PI2 BPSK	50	0	21.77	21.82	21.73	24.0	0.0
40	PI2 BPSK	50	26	22.58	22.65	22.58	24.0	0.0
40	PI2 BPSK	50	56	21.68	21.70	21.61	23.5	0.5
40	PI2 BPSK	100	0	21.38	21.43	21.33		
40	QPSK	1	1	22.65	22.72	22.35		
40	QPSK	1	53	22.98	22.68	22.31	24.0	0.0
40	QPSK	1	104	22.33	22.47	22.34		
40	QPSK	50	0	20.76	20.82	20.76		
40	QPSK	50	26	22.59	22.61	22.57	24.0	0.0
40	QPSK	50	56	20.76	20.88	20.81		
40	QPSK	100	0	21.62	21.66	21.62	23.0	1.0
40	16QAM	1	1	18.72	18.77	18.75	23.0	1.0
40	64QAM	1	1	18.23	18.25	18.16	21.5	2.5
40	256QAM	1	1	16.16	16.29	16.17	19.5	4.5
Channel				637098	641666	645666	Tune-up limit (dB)	MPR
Frequency (MHz)				3665.02	3624.99	3624.99		
30	QPSK	1	1	22.59	22.63	22.31	24.0	0.0
Channel				637334	641666	646000	Tune-up limit (dB)	MPR
Frequency (MHz)				3660.01	3624.99	3690		
20	QPSK	1	1	22.85	22.86	22.31	24.0	0.0
Channel				637000	641666	646332	Tune-up limit (dB)	MPR
Frequency (MHz)				3655	3624.99	3694.98		
10	QPSK	1	1	22.62	22.63	22.33	24.0	0.0

Part27Q_n77_Ant 4								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				633000	633332	633666		
Frequency (MHz)				3499.98				
100	PI2 BPSK	1	1	22.98				
100	PI2 BPSK	1	137	23.15			24.0	0.0
100	PI2 BPSK	1	271	23.13			24.0	0.0
100	PI2 BPSK	135	0	22.98			24.0	0.0
100	PI2 BPSK	135	69	23.11			24.0	0.0
100	PI2 BPSK	135	138	23.08			24.0	0.0
100	PI2 BPSK	270	0	23.09				
100	QPSK	1	1	23.16				
100	QPSK	1	137	23.11			24.0	0.0
100	QPSK	1	271	23.10				
100	QPSK	135	0	22.92				
100	QPSK	135	69	23.06			24.0	0.0
100	QPSK	135	138	23.02				
100	QPSK	270	0	22.98			24.0	0.0
100	16QAM	1	1	22.30			24.0	0.0
100	64QAM	1	1	23.08			24.0	0.0
100	256QAM	1	1	22.11			23.5	0.5
Channel				633000	633332	633666	Tune-up limit (dB)	MPR
Frequency (MHz)				3495	3499.98	3524.99		
50	QPSK	1	1	23.10	23.13	23.09	24.0	0.0
Channel				632668	633332	634000	Tune-up limit (dB)	MPR
Frequency (MHz)				3490.02	3499.98	3510		
80	QPSK	1	1	23.00	23.07	23.00	24.0	0.0
Channel				632534	633332	635332	Tune-up limit (dB)	MPR
Frequency (MHz)				3485.01	3499.98	3514.98		
70	QPSK	1	1	23.06	23.14	23.14	24.0	0.0
Channel				632000	633332	634666	Tune-up limit (dB)	MPR
Frequency (MHz)				3480	3499.98	3519.99		
60	QPSK	1	1	23.12	23.07	23.15	24.0	0.0
Channel				631668	633332	635000	Tune-up limit (dB)	MPR
Frequency (MHz)				3475.02	3499.98	3525		
50	QPSK	1	1	23.09	23.12	23.15	24.0	0.0
Channel				631334	633332	635332	Tune-up limit (dB)	MPR
Frequency (MHz)				3470.01	3499.98	3529.98		
40	QPSK	1	1	23.06	23.15	23.15	24.0	0.0
Channel				631000	633332	635666	Tune-up limit (dB)	MPR
Frequency (MHz)				3465	3499.98	3534.99		
30	QPSK	1	1	23.13	23.06	23.13	24.0	0.0
Channel				630668	633332	636000	Tune-up limit (dB)	MPR
Frequency (MHz)				3460.02	3499.98	3540		
20	QPSK	1	1	23.12	23.06	23.11	24.0	0.0
Channel				630500	633332	636166	Tune-up limit (dB)	MPR
Frequency (MHz)				3457.05	3499.98	3542.49		
15	QPSK	1	1	23.00	23.07	23.08	24.0	0.0
Channel				630334	633332	636332	Tune-up limit (dB)	MPR
Frequency (MHz)				3455.01	3499.98	3544.98		
10	QPSK	1	1	23.07	23.13	23.15	24.0	0.0



### Part27Q\_n77 Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3760	3840	3920		
100	Pi2 BPSK	1	1	23.15	23.23	23.17		
100	Pi2 BPSK	1	137	23.20	23.25	23.15	24.0	0.0
100	Pi2 BPSK	1	271	23.18	23.21	23.22		
100	Pi2 BPSK	135	0	23.13	23.12	23.17	24.0	0.0
100	Pi2 BPSK	135	69	23.10	23.13	23.10	24.0	0.0
100	Pi2 BPSK	135	138	23.12	23.04	23.10		
100	Pi2 BPSK	270	0	23.05	23.00	23.06	24.0	0.0
100	QPSK	1	1	23.25	23.28	23.25		
100	QPSK	1	137	23.18	23.25	23.19	24.0	0.0
100	QPSK	1	271	23.20	23.21	23.19		
100	QPSK	135	0	23.05	23.09	23.08		
100	QPSK	135	69	23.12	23.15	23.11	24.0	0.0
100	QPSK	135	138	23.08	23.11	23.04		
100	QPSK	270	0	23.03	23.05	23.00	24.0	0.0
100	16QAM	1	1	23.12	23.12	23.12	24.0	0.0
100	16QAM	1	1	23.10	23.10	23.10	24.0	0.0
100	256QAM	1	1	22.27	22.21	22.24	23.5	3.5
Channel				649668	656000	662332	Tune-up limit	MPR
Frequency (MHz)				3762.02	3840	3924.98	(dBm)	(dB)
90	QPSK	1	1	23.22	23.19	23.23	24.0	0.0
Channel								
Frequency (MHz)				649334	656000	662666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3840	3929.99	(dBm)	(dB)
80	QPSK	1	1	23.17	23.19	23.17	24.0	0.0
Channel								
Frequency (MHz)				649330	656000	662670	Tune-up limit	MPR
Frequency (MHz)				3785	3840	3945	(dBm)	(dB)
70	QPSK	1	1	23.21	23.23	23.18	24.0	0.0
Channel								
Frequency (MHz)				649668	656000	662332	Tune-up limit	MPR
Frequency (MHz)				3770.02	3840	3960.98	(dBm)	(dB)
60	QPSK	1	1	23.20	23.21	23.16	24.0	0.0
Channel								
Frequency (MHz)				648334	656000	663666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3840	3954.99	(dBm)	(dB)
50	QPSK	1	1	23.23	23.23	23.17	24.0	0.0
Channel								
Frequency (MHz)				648000	656000	664000	Tune-up limit	MPR
Frequency (MHz)				3720	3840	3960	(dBm)	(dB)
40	QPSK	1	1	23.18	23.19	23.15	24.0	0.0
Channel								
Frequency (MHz)				647668	656000	664332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3840	3964.98	(dBm)	(dB)
30	QPSK	1	1	23.19	23.18	23.21	24.0	0.0
Channel								
Frequency (MHz)				647334	656000	664666	Tune-up limit	MPR
Frequency (MHz)				3710.01	3840	3969.99	(dBm)	(dB)
20	QPSK	1	1	23.21	23.22	23.17	24.0	0.0
Channel								
Frequency (MHz)				647168	656000	664832	Tune-up limit	MPR
Frequency (MHz)				3707.52	3840	3972.48	(dBm)	(dB)
15	QPSK	1	1	23.22	23.22	23.22	24.0	0.0
Channel								
Frequency (MHz)				647000	656000	665000	Tune-up limit	MPR
Frequency (MHz)				3705	3840	3975	(dBm)	(dB)
10	QPSK	1	1	23.15	23.25	23.18	24.0	0.0

### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				6349.98		6333.32		
100	Pi2 BPSK	1	1		26.07			
100	Pi2 BPSK	1	137		26.16		27.0	0.0
100	Pi2 BPSK	1	271		26.14			
100	Pi2 BPSK	135	0		26.02		27.0	0.0
100	Pi2 BPSK	135	69		26.07		27.0	0.0
100	Pi2 BPSK	135	138		25.79			
100	Pi2 BPSK	270	0		26.07		27.0	0.0
100	QPSK	1	1		26.20			
100	QPSK	1	137		26.11		27.0	0.0
100	QPSK	1	271		26.08			
100	QPSK	135	0		26.01			
100	QPSK	135	69		26.08		27.0	0.0
100	QPSK	135	138		26.00			
100	QPSK	270	0		26.08		27.0	0.0
100	16QAM	1	1		26.11		27.0	0.0
100	16QAM	1	1		24.33		25.5	1.5
100	256QAM	1	1		22.91		23.5	3.5
Channel				633000	633332	633668	Tune-up limit	MPR
Frequency (MHz)				3466	3469.98	3564.98	(dBm)	(dB)
90	QPSK	1	1	26.13	26.18	26.07	27.0	0.0
Channel								
Frequency (MHz)				632668	633332	634000	Tune-up limit	MPR
Frequency (MHz)				3400.02	3469.98	3510	(dBm)	(dB)
80	QPSK	1	1	26.13	26.16	26.04	27.0	0.0
Channel								
Frequency (MHz)				632334	633332	634332	Tune-up limit	MPR
Frequency (MHz)				3486.01	3469.98	3514.98	(dBm)	(dB)
70	QPSK	1	1	26.06	26.18	26.01	27.0	0.0
Channel								
Frequency (MHz)				632000	633332	635668	Tune-up limit	MPR
Frequency (MHz)				3460	3469.98	3519.98	(dBm)	(dB)
60	QPSK	1	1	26.09	26.10	26.04	27.0	0.0
Channel								
Frequency (MHz)				631668	633332	636000	Tune-up limit	MPR
Frequency (MHz)				3474.02	3469.98	3525	(dBm)	(dB)
50	QPSK	1	1	26.08	26.13	26.06	27.0	0.0
Channel								
Frequency (MHz)				631334	633332	636332	Tune-up limit	MPR
Frequency (MHz)				3470.01	3469.98	3529.98	(dBm)	(dB)
40	QPSK	1	1	26.06	26.11	26.02	27.0	0.0
Channel								
Frequency (MHz)				631000	633332	636668	Tune-up limit	MPR
Frequency (MHz)				3465	3469.98	3534.98	(dBm)	(dB)
30	QPSK	1	1	26.09	26.10	26.01	27.0	0.0
Channel								
Frequency (MHz)				630668	633332	637000	Tune-up limit	MPR
Frequency (MHz)				3460.02	3469.98	3540	(dBm)	(dB)
20	QPSK	1	1	26.07	26.13	26.04	27.0	0.0
Channel								
Frequency (MHz)				630300	633332	637332	Tune-up limit	MPR
Frequency (MHz)				3455.01	3469.98	3544.98	(dBm)	(dB)
15	QPSK	1	1	26.06	26.18	26.01	27.0	0.0
Channel								
Frequency (MHz)				630000	633332	637668	Tune-up limit	MPR
Frequency (MHz)				3450.02	3469.98	3549	(dBm)	(dB)
10	QPSK	1	1	26.10	26.13	26.08	27.0	0.0

### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3760	3840	3920		
100	Pi2 BPSK	1	1	26.11	26.20	26.14		
100	Pi2 BPSK	1	137	26.19	26.29	26.26	27.0	0.0
100	Pi2 BPSK	1	271	26.21	26.25	26.15		
100	Pi2 BPSK	135	0	26.08	26.11	26.04	27.0	0.0
100	Pi2 BPSK	135	69	26.15	26.21	26.19	27.0	0.0
100	Pi2 BPSK	135	138	26.09	26.15	26.05		
100	Pi2 BPSK	270	0	26.06	26.04	26.02	27.0	0.0
100	QPSK	1	1	26.30	26.34	26.27		
100	QPSK	1	137	26.15	26.21	26.14	27.0	0.0
100	QPSK	1	271	26.20	26.30	26.23		
100	QPSK	135	0	26.09	26.07	26.08		
100	QPSK	135	69	26.12	26.25	26.18	27.0	0.0
100	QPSK	135	138	26.00	26.05	26.02		
100	QPSK	270	0	25.91	25.95	25.86	27.0	0.0
100	16QAM	1	1	25.75	25.81	25.77	27.0	0.0
100	16QAM	1	1	24.26	24.35	24.30	25.5	1.5
100	256QAM	1	1	22.88	22.92	22.87	23.5	3.5
Channel				649668	656000	662332	Tune-up limit	MPR
Frequency (MHz)				3762.02	3840	3924.98	(dBm)	(dB)
90	QPSK	1	1	26.22	26.25	26.17	27.0	0.0
Channel								
Frequency (MHz)				649334	656000	662666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3840	3929.99	(dBm)	(dB)
80	QPSK	1	1	26.22	26.27	26.22	27.0	0.0
Channel								
Frequency (MHz)				649330	656000	662670	Tune-up limit	MPR
Frequency (MHz)				3785	3840	3945	(dBm)	(dB)
70	QPSK	1	1	26.20	26.28	26.23	27.0	0.0
Channel								
Frequency (MHz)				648998	656000	663332	Tune-up limit	MPR
Frequency (MHz)				3770.02	3840	3960.98	(dBm)	(dB)
60	QPSK	1	1	26.26	26.31	26.22	27.0	0.0
Channel								
Frequency (MHz)				648334	656000	663666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3840	3954.99	(dBm)	(dB)
50	QPSK	1	1	26.21	26.23	26.20	27.0	0.0
Channel								
Frequency (MHz)				648000	656000	664000	Tune-up limit	MPR
Frequency (MHz)				3720	3840	3960	(dBm)	(dB)
40	QPSK	1	1	26.25	26.29	26.24	27.0	0.0
Channel								
Frequency (MHz)				647668	656000	664332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3840	3964.98	(dBm)	(dB)
30	QPSK	1	1	26.24	26.29	26.23	27.0	0.0
Channel								
Frequency (MHz)				647334	656000	664666	Tune-up limit	MPR
Frequency (MHz)				3710.01	3840	3969.99	(dBm)	(dB)
20	QPSK	1	1	26.24	26.25	26.18	27.0	0.0
Channel								
Frequency (MHz)				647168	656000	664832	Tune-up limit	MPR
Frequency (MHz)				3707.52	3840	3972.48	(dBm)	(dB)
15	QPSK	1	1	26.20	26.24	26.21	2	



### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3499.98				
100	Plz BPSK	1	1	20.94				
100	Plz BPSK	1	137	20.93			22.0	0.0
100	Plz BPSK	1	271	20.98				
100	Plz BPSK	135	0	20.97	21.03	20.95	22.0	0.0
100	Plz BPSK	135	69	20.94	21.03	20.99	22.0	0.0
100	Plz BPSK	135	138	20.92	21.00	20.95	22.0	0.0
100	Plz BPSK	270	0	20.96	21.02	21.00	22.0	0.0
100	QPSK	1	1	21.04				
100	QPSK	1	137	20.94	21.02	21.00	22.0	0.0
100	QPSK	1	271	20.88				
100	QPSK	135	0	20.92	20.96	21.00	22.0	0.0
100	QPSK	135	69	20.96	21.05	21.02	22.0	0.0
100	QPSK	135	138	20.94	20.96	20.98	22.0	0.0
100	QPSK	270	0	20.94	20.97	20.95	22.0	0.0
100	16QAM	1	1	20.94	20.96	20.94	22.0	0.0
100	16QAM	1	1	20.46	20.52	20.49	21.5	0.5
100	256QAM	1	1	18.42	18.44	18.33	18.5	2.5
Channel								
Frequency (MHz)				633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3495	3499.98	3504.99	22.0	0.0
Channel								
Frequency (MHz)				632668	633332	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3490.02	3499.98	3510	22.0	0.0
Channel								
Frequency (MHz)				632334	633332	634332	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	3485.01	3499.98	3514.98	22.0	0.0
Channel								
Frequency (MHz)				632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3480	3499.98	3519.98	22.0	0.0
Channel								
Frequency (MHz)				631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3475.02	3499.98	3525	22.0	0.0
Channel								
Frequency (MHz)				631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3470.01	3499.98	3529.98	22.0	0.0
Channel								
Frequency (MHz)				631000	633332	635666	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3465	3499.98	3534.98	22.0	0.0
Channel								
Frequency (MHz)				630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3460.02	3499.98	3540	22.0	0.0
Channel								
Frequency (MHz)				630334	633332	636332	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3455.01	3499.98	3544.98	22.0	0.0
Channel								
Frequency (MHz)				630000	633332	636666	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.94			22.0	0.0

### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				630000	630000	630000		
100	Plz BPSK	1	1	20.97	21.00	21.01		
100	Plz BPSK	1	137	20.98	21.01	20.96	22.0	0.0
100	Plz BPSK	1	271	20.90	21.00	20.96		
100	Plz BPSK	135	0	20.93	21.03	20.95	22.0	0.0
100	Plz BPSK	135	69	20.95	21.03	20.99	22.0	0.0
100	Plz BPSK	135	138	20.95	21.00	20.95	22.0	0.0
100	Plz BPSK	270	0	20.92	21.02	21.00	22.0	0.0
100	QPSK	1	1	21.00	21.06	21.03		
100	QPSK	1	137	20.94	21.02	21.00	22.0	0.0
100	QPSK	1	271	20.94	20.97	20.99		
100	QPSK	135	0	20.94	20.96	21.00	22.0	0.0
100	QPSK	135	69	20.95	21.05	21.02	22.0	0.0
100	QPSK	135	138	20.90	20.96	20.98	22.0	0.0
100	QPSK	270	0	20.90	20.97	20.95	22.0	0.0
100	16QAM	1	1	20.98	20.96	20.94	22.0	0.0
100	16QAM	1	1	20.44	20.56	20.49	21.5	0.5
100	256QAM	1	1	18.35	18.44	18.33	18.5	2.5
Channel								
Frequency (MHz)				649668	650000	650332	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3745.02	3840	3934.98	22.0	0.0
Channel								
Frequency (MHz)				649334	650000	650666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3939.98	22.0	0.0
Channel								
Frequency (MHz)				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	20.98	21.03	21.04	22.0	0.0
Channel								
Frequency (MHz)				648668	650000	651332	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3735	3840	3945	22.0	0.0
Channel								
Frequency (MHz)				648334	650000	651666	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3730.01	3840	3949.98	22.0	0.0
Channel								
Frequency (MHz)				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	20.95	21.02	21.00	22.0	0.0
Channel								
Frequency (MHz)				647668	650000	652332	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3725	3840	3954.98	22.0	0.0
Channel								
Frequency (MHz)				647334	650000	652666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	20.92	21.02	20.93	22.0	0.0
Channel								
Frequency (MHz)				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.93	20.99	21.00	22.0	0.0
Channel								
Frequency (MHz)				646700	650000	653300	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.93	20.97	20.96	22.0	0.0

### Part27Q\_n77 HPUE\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3499.98				
100	Plz BPSK	1	1	22.98				
100	Plz BPSK	1	137	22.84			24.0	0.0
100	Plz BPSK	1	271	22.82				
100	Plz BPSK	135	0	22.94	23.00	22.95	23.5	0.5
100	Plz BPSK	135	69	22.93	23.00	22.96	24.0	0.0
100	Plz BPSK	135	138	22.84	23.00	22.95	23.5	0.5
100	Plz BPSK	270	0	22.81	23.00	22.95	24.0	0.0
100	QPSK	1	1	23.01				
100	QPSK	1	137	22.94	23.00	22.95	24.0	0.0
100	QPSK	1	271	22.08				
100	QPSK	135	0	22.96	23.00	22.95	24.0	0.0
100	QPSK	135	69	22.98	23.00	22.95	24.0	0.0
100	QPSK	135	138	22.94	23.00	22.95	24.0	0.0
100	QPSK	270	0	22.83	23.00	22.95	24.0	1.0
100	16QAM	1	1	22.04	22.04	22.04	21.5	1.5
100	16QAM	1	1	20.51	20.51	20.51	21.5	2.5
100	256QAM	1	1	18.42	18.42	18.33	18.5	4.5
Channel								
Frequency (MHz)				633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3495	3499.98	3504.99	24.0	0.0
Channel								
Frequency (MHz)				632668	633332	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3490.02	3499.98	3510	24.0	0.0
Channel								
Frequency (MHz)				632334	633332	634332	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	3485.01	3499.98	3514.98	24.0	0.0
Channel								
Frequency (MHz)				632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3480	3499.98	3519.98	24.0	0.0
Channel								
Frequency (MHz)				631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3475.02	3499.98	3525	24.0	0.0
Channel								
Frequency (MHz)				631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3470.01	3499.98	3529.98	24.0	0.0
Channel								
Frequency (MHz)				631000	633332	635666	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3465	3499.98	3534.98	24.0	0.0
Channel								
Frequency (MHz)				630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3460.02	3499.98	3540	24.0	0.0
Channel								
Frequency (MHz)				630334	633332	636332	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3455.01	3499.98	3544.98	24.0	0.0
Channel								
Frequency (MHz)				630000	633332	636666	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	22.94	22.99	22.92	24.0	0.0



### Part270\_n77\_HPUe\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3760	3840	3900		
100	Pi2 BPSK	1	1	22.97	23.03	22.91		
100	Pi2 BPSK	1	137	23.04	23.07	23.04	24.0	0.0
100	Pi2 BPSK	1	211	22.95	22.96	22.91		
100	Pi2 BPSK	135	0	22.34	22.38	22.36	24.0	0.0
100	Pi2 BPSK	135	69	22.92	23.02	22.87	24.0	0.0
100	Pi2 BPSK	135	138	22.40	22.43	22.34		
100	Pi2 BPSK	270	0	22.26	22.41	22.38	24.0	0.0
100	QPSK	1	1	23.01	23.08	23.04		
100	QPSK	1	137	22.99	23.07	23.01	24.0	0.0
100	QPSK	1	271	22.98	23.02	22.87		
100	QPSK	135	0	21.94	21.94	21.86		
100	QPSK	135	69	22.85	22.97	22.94	24.0	0.0
100	QPSK	135	138	21.90	21.95	21.86		
100	QPSK	270	0	21.73	21.87	21.76	23.0	1.0
100	ISGAM	1	1	21.96	22.11	22.06	23.0	1.0
100	ISGAM	1	1	20.44	20.56	20.49	21.5	2.5
100	256QAM	1	1	18.35	18.44	18.33	19.5	4.5
Channel								
Frequency (MHz)				649668	650000	652332	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3765.02	3840	3904.98	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	650666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	22.33	22.01	22.01	24.0	0.0
Channel								
Frequency (MHz)				649000	650000	650000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	3785	3840	3945	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	652332	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	22.98	23.05	22.87	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	650666	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3725.01	3840	3924.97	24.0	0.0
Channel								
Frequency (MHz)				648000	650000	650000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3720	3840	3960	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	652332	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	22.92	23.07	22.93	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	650666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	22.89	23.02	22.88	24.0	0.0
Channel								
Frequency (MHz)				647000	650000	650000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3705	3840	3975	24.0	0.0
Channel								
Frequency (MHz)				646668	650000	650666	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	22.84	23.08	22.89	24.0	0.0

### Part270\_n77\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				639000	633332	634998		
100	Pi2 BPSK	1	1	22.80				
100	Pi2 BPSK	1	137	22.77			24.0	0.0
100	Pi2 BPSK	1	271	22.72				
100	Pi2 BPSK	135	0	22.75			24.0	0.0
100	Pi2 BPSK	135	69	22.89			24.0	0.0
100	Pi2 BPSK	135	138	22.72				
100	Pi2 BPSK	270	0	22.76			24.0	0.0
100	QPSK	1	1	22.81				
100	QPSK	1	137	22.75			24.0	0.0
100	QPSK	1	271	22.71				
100	QPSK	135	0	22.70			24.0	0.0
100	QPSK	135	69	22.73			24.0	0.0
100	QPSK	135	138	22.48				
100	QPSK	270	0	22.84			24.0	0.0
100	ISGAM	1	1	22.89			24.0	0.0
100	ISGAM	1	1	22.43			24.0	0.0
100	256QAM	1	1	21.08			22.5	1.5
Channel								
Frequency (MHz)				633000	633332	633668	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3465	3499.98	3524.99	24.0	0.0
Channel								
Frequency (MHz)				632668	633332	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3400.02	3499.98	3510	24.0	0.0
Channel								
Frequency (MHz)				632334	633332	634332	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	3485.01	3499.98	3514.98	24.0	0.0
Channel								
Frequency (MHz)				632000	633332	633668	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3460	3499.98	3519.98	24.0	0.0
Channel								
Frequency (MHz)				631668	633332	633668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3475.02	3499.98	3525	24.0	0.0
Channel								
Frequency (MHz)				631334	633332	633668	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3470.01	3499.98	3529.98	24.0	0.0
Channel								
Frequency (MHz)				631000	633332	633668	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3465	3499.98	3534.98	24.0	0.0
Channel								
Frequency (MHz)				630668	633332	633668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3460.02	3499.98	3540	24.0	0.0
Channel								
Frequency (MHz)				630334	633332	633668	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3455.01	3499.98	3544.98	24.0	0.0
Channel								
Frequency (MHz)				630000	633332	633668	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	3450	3499.98	3549.98	24.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				649000	650000	652000		
100	Pi2 BPSK	1	1	22.87	22.82	22.76		
100	Pi2 BPSK	1	137	22.90	22.87	22.81	24.0	0.0
100	Pi2 BPSK	1	271	22.87	22.87	22.76		
100	Pi2 BPSK	135	0	22.88	22.88	22.79	24.0	0.0
100	Pi2 BPSK	135	69	22.93	22.90	22.79	24.0	0.0
100	Pi2 BPSK	135	138	22.87	22.86	22.81		
100	Pi2 BPSK	270	0	22.80	22.87	22.75	24.0	0.0
100	QPSK	1	1	22.98	22.93	22.84		
100	QPSK	1	137	22.98	22.82	22.80	24.0	0.0
100	QPSK	1	271	22.91	22.85	22.78		
100	QPSK	135	0	22.89	22.83	22.73		
100	QPSK	135	69	22.90	22.86	22.75	24.0	0.0
100	QPSK	135	138	22.82	22.85	22.77		
100	QPSK	270	0	22.88	22.85	22.77	24.0	0.0
100	ISGAM	1	1	22.86	22.87	22.74	24.0	0.0
100	ISGAM	1	1	22.90	22.85	22.79	24.0	0.0
100	256QAM	1	1	21.88	22.00	21.96	23.0	1.0
Channel								
Frequency (MHz)				648668	650000	652332	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3765.02	3840	3924.98	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	650666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3939.98	24.0	0.0
Channel								
Frequency (MHz)				648000	650000	650000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	3735	3840	3945	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	652332	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	22.85	22.78	22.77	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	652332	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3725.01	3840	3924.97	24.0	0.0
Channel								
Frequency (MHz)				647000	650000	650000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3720	3840	3960	24.0	0.0
Channel								
Frequency (MHz)				646668	650000	652332	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	22.97	22.80	22.77	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	650666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	22.88	22.86	22.89	24.0	0.0
Channel								
Frequency (MHz)				647000	650000	650000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3715.02	3840	3964.98	24.0	0.0
Channel								
Frequency (MHz)				646668	650000	650666	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	22.95	22.80	22.72	24.0	0.0



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	26.12	26.12	26.12	27.0	0.0		
100	Pl2 BPSK	1	137	26.03	26.03	26.03				
100	Pl2 BPSK	1	271	26.08	26.08	26.08				
100	Pl2 BPSK	135	0	26.02	26.02	26.02	26.5	0.5		
100	Pl2 BPSK	135	69	26.01	26.01	26.01	27.0	0.0		
100	Pl2 BPSK	135	138	25.97	25.97	25.97	26.5	0.5		
100	Pl2 BPSK	270	0	25.91	25.91	25.91				
100	QPSK	1	1	25.15	25.15	25.15	27.0	0.0		
100	QPSK	1	137	26.03	26.03	26.03				
100	QPSK	1	271	26.11	26.11	26.11				
100	QPSK	135	0	26.06	26.06	26.06				
100	QPSK	135	69	25.92	25.92	25.92	27.0	0.0		
100	QPSK	135	138	25.42	25.42	25.42				
100	QPSK	270	0	25.21	25.21	25.21	26.0	1.0		
100	16QAM	1	1	25.91	25.91	25.91	26.0	1.0		
100	16QAM	1	1	24.42	24.42	24.42	24.5	2.5		
100	256QAM	1	1	22.31	22.31	22.31	22.5	4.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	25.97	25.97	25.97	27.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	25.11	25.11	25.11	27.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	25.91	25.84	25.82	27.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	25.80	25.89	25.83	27.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	25.78	25.54	25.88	27.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	25.81	25.91	25.87	27.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	25.81	25.91	25.87	27.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	25.88	25.89	25.79	27.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	25.85	25.87	25.95	27.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	25.88	25.82	25.97	27.0	0.0		

Part27Q_n77 HPUE_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	25.82	25.89	25.76	27.0	0.0		
100	Pl2 BPSK	1	137	25.84	25.89	25.74				
100	Pl2 BPSK	1	271	25.90	25.86	25.83				
100	Pl2 BPSK	135	0	25.73	25.62	25.68	26.5	0.5		
100	Pl2 BPSK	135	69	25.78	25.69	25.72	27.0	0.0		
100	Pl2 BPSK	135	138	25.77	25.71	25.86	26.5	0.5		
100	Pl2 BPSK	270	0	25.66	25.61	25.63				
100	QPSK	1	1	25.91	25.88	25.77	27.0	0.0		
100	QPSK	1	137	25.85	25.86	25.70				
100	QPSK	1	271	25.90	25.73	25.65				
100	QPSK	135	0	25.25	25.02	25.06				
100	QPSK	135	69	25.72	25.62	25.50	27.0	0.0		
100	QPSK	135	138	25.33	25.13	25.08				
100	QPSK	270	0	25.24	24.88	24.82	26.0	1.0		
100	16QAM	1	1	25.39	24.77	24.73	26.0	1.0		
100	16QAM	1	1	23.94	23.45	23.39	24.5	2.5		
100	256QAM	1	1	21.88	22.00	21.96	22.5	4.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	25.93	25.70	25.76	27.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	25.78	25.74	25.88	27.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	25.73	25.72	25.69	27.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	25.74	25.86	25.85	27.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	25.78	25.82	25.63	27.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	25.77	25.77	25.65	27.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	25.85	25.87	25.58	27.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	25.75	25.70	25.72	27.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	25.78	25.71	25.67	27.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	25.71	25.87	25.65	27.0	0.0		

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	20.86	20.86	20.86	22.0	0.0		
100	Pl2 BPSK	1	137	20.89	20.89	20.89				
100	Pl2 BPSK	1	271	20.81	20.81	20.81				
100	Pl2 BPSK	135	0	20.89	20.89	20.89	22.0	0.0		
100	Pl2 BPSK	135	69	20.85	20.85	20.85	22.0	0.0		
100	Pl2 BPSK	135	138	20.88	20.88	20.88	22.0	0.0		
100	Pl2 BPSK	270	0	20.84	20.84	20.84				
100	QPSK	1	1	20.91	20.91	20.91	22.0	0.0		
100	QPSK	1	137	20.89	20.89	20.89				
100	QPSK	1	271	20.86	20.86	20.86				
100	QPSK	135	0	20.87	20.87	20.87				
100	QPSK	135	69	20.88	20.88	20.88	22.0	0.0		
100	QPSK	135	138	20.85	20.85	20.85				
100	QPSK	270	0	20.85	20.85	20.85	22.0	0.0		
100	16QAM	1	1	20.84	20.84	20.84	22.0	0.0		
100	16QAM	1	1	20.38	20.38	20.38	21.5	0.5		
100	256QAM	1	1	18.47	18.47	18.47	18.5	2.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	20.80	20.87	20.76	22.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.77	20.88	20.77	22.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.79	20.83	20.71	22.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.78	20.84	20.74	22.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.75	20.82	20.74	22.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	20.78	20.81	20.71	22.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.76	20.87	20.74	22.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	20.82	20.89	20.71	22.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	20.82	20.89	20.78	22.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	20.82	20.89	20.78	22.0	0.0		



Part270_n77_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
	Channel			65000	65000	65000			
	Frequency (MHz)			3760	3840	3920			
100	PI2 BPSK	1	1	20.29	20.41	20.34			
100	PI2 BPSK	1	137	20.27	20.39	20.34	22.0	0.0	
100	PI2 BPSK	1	271	20.24	20.37	20.37	22.0	0.0	
100	PI2 BPSK	135	0	20.25	20.44	20.36	22.0	0.0	
100	PI2 BPSK	135	69	20.30	20.40	20.34	22.0	0.0	
100	PI2 BPSK	135	138	20.27	20.44	20.30	22.0	0.0	
100	PI2 BPSK	270	0	20.26	20.39	20.37	22.0	0.0	
100	QPSK	1	1	20.33	20.46	20.40			
100	QPSK	1	137	20.29	20.36	20.31	22.0	0.0	
100	QPSK	1	271	20.24	20.41	20.34	22.0	0.0	
100	QPSK	135	0	20.26	20.41	20.36			
100	QPSK	135	69	20.30	20.45	20.35	22.0	0.0	
100	QPSK	135	138	20.27	20.36	20.33	22.0	0.0	
100	QPSK	270	0	20.31	20.43	20.31	22.0	0.0	
100	8QAM	1	1	20.23	20.44	20.33	22.0	0.0	
100	8QAM	1	1	19.84	19.91	19.89	21.5	0.5	
100	256QAM	1	1	17.90	17.96	17.93	19.5	2.5	
	Channel			649668	650000	652332	Tune-up limit	MPR	
	Frequency (MHz)			3743.02	3840	3934.98	(dBm)	(dB)	
90	QPSK	1	1	22.23	22.37	22.30	24.0	0.0	
	Channel			648334	650000	662666	Tune-up limit	MPR	
	Frequency (MHz)			3740.01	3840	3939.99	(dBm)	(dB)	
80	QPSK	1	1	22.30	22.38	22.34	22.0	0.0	
	Channel			649000	650000	651000	Tune-up limit	MPR	
	Frequency (MHz)			3785	3840	3945	(dBm)	(dB)	
70	QPSK	1	1	22.23	22.40	22.30	22.0	0.0	
	Channel			648668	650000	652332	Tune-up limit	MPR	
	Frequency (MHz)			3782.02	3840	3943.98	(dBm)	(dB)	
60	QPSK	1	1	22.24	22.41	22.33	22.0	0.0	
	Channel			648334	650000	663666	Tune-up limit	MPR	
	Frequency (MHz)			3725.01	3840	3924.99	(dBm)	(dB)	
50	QPSK	1	1	22.25	22.39	22.32	22.0	0.0	
	Channel			648000	650000	654000	Tune-up limit	MPR	
	Frequency (MHz)			3720	3840	3960	(dBm)	(dB)	
40	QPSK	1	1	20.28	20.41	20.33	22.0	0.0	
	Channel			647168	650000	664832	Tune-up limit	MPR	
	Frequency (MHz)			3715.02	3840	3944.98	(dBm)	(dB)	
30	QPSK	1	1	20.31	20.37	20.34	22.0	0.0	
	Channel			647334	650000	656666	Tune-up limit	MPR	
	Frequency (MHz)			3710.01	3840	3953.99	(dBm)	(dB)	
20	QPSK	1	1	20.31	20.44	20.36	22.0	0.0	
	Channel			647168	650000	664832	Tune-up limit	MPR	
	Frequency (MHz)			3707.52	3840	3924.48	(dBm)	(dB)	
15	QPSK	1	1	20.28	20.38	20.30	22.0	0.0	
	Channel			647000	650000	655000	Tune-up limit	MPR	
	Frequency (MHz)			3705	3840	3975	(dBm)	(dB)	
10	QPSK	1	1	20.28	20.38	20.38	22.0	0.0	

Part27Q_n77 HPUe_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
	Channel			633000	633332	633666			
	Frequency (MHz)			3499.98					
100	PI2 BPSK	1	1	22.86	22.86	22.86			
100	PI2 BPSK	1	137	22.91	22.92	22.92	24.0	0.0	
100	PI2 BPSK	1	271	22.82	22.82	22.82	24.0	0.0	
100	PI2 BPSK	135	0	22.84	22.84	22.84	23.5	0.5	
100	PI2 BPSK	135	69	22.89	22.89	22.89	24.0	0.0	
100	PI2 BPSK	135	138	22.86	22.86	22.86	23.5	0.5	
100	PI2 BPSK	270	0	22.82	22.82	22.82	24.0	0.0	
100	QPSK	1	1	22.93	22.93	22.93			
100	QPSK	1	137	22.87	22.87	22.87	24.0	0.0	
100	QPSK	1	271	22.84	22.84	22.84	24.0	0.0	
100	QPSK	135	0	22.86	22.86	22.86			
100	QPSK	135	69	22.92	22.92	22.92	24.0	0.0	
100	QPSK	135	138	22.89	22.89	22.89	24.0	0.0	
100	QPSK	270	0	22.82	22.82	22.82	23.0	1.0	
100	8QAM	1	1	21.95	21.95	21.95	23.0	1.0	
100	8QAM	1	1	20.38	20.38	20.38	21.5	2.5	
100	256QAM	1	1	19.47	19.47	19.47	19.5	4.5	
	Channel			633000	633332	633666	Tune-up limit	MPR	
	Frequency (MHz)			3498	3499.98	3501.98	(dBm)	(dB)	
90	QPSK	1	1	22.80	22.75	22.78	24.0	0.0	
	Channel			632668	633332	634000	Tune-up limit	MPR	
	Frequency (MHz)			3490.02	3499.98	3500	(dBm)	(dB)	
80	QPSK	1	1	22.82	22.85	22.84	24.0	0.0	
	Channel			632334	633332	634332	Tune-up limit	MPR	
	Frequency (MHz)			3486.01	3499.98	3514.98	(dBm)	(dB)	
70	QPSK	1	1	22.74	22.87	22.81	24.0	0.0	
	Channel			632000	633332	633666	Tune-up limit	MPR	
	Frequency (MHz)			3480	3499.98	3519.98	(dBm)	(dB)	
60	QPSK	1	1	22.85	22.75	22.79	24.0	0.0	
	Channel			631668	633332	635000	Tune-up limit	MPR	
	Frequency (MHz)			3472.02	3499.98	3525	(dBm)	(dB)	
50	QPSK	1	1	22.77	22.78	22.80	24.0	0.0	
	Channel			631334	633332	635332	Tune-up limit	MPR	
	Frequency (MHz)			3470.01	3499.98	3529.98	(dBm)	(dB)	
40	QPSK	1	1	22.73	22.74	22.87	24.0	0.0	
	Channel			631000	633332	635966	Tune-up limit	MPR	
	Frequency (MHz)			3465	3499.98	3534.98	(dBm)	(dB)	
30	QPSK	1	1	22.85	22.82	22.75	24.0	0.0	
	Channel			630668	633332	636000	Tune-up limit	MPR	
	Frequency (MHz)			3460.02	3499.98	3540	(dBm)	(dB)	
20	QPSK	1	1	22.85	22.74	22.86	24.0	0.0	
	Channel			630300	633332	636168	Tune-up limit	MPR	
	Frequency (MHz)			3457.52	3499.98	3524.48	(dBm)	(dB)	
15	QPSK	1	1	22.83	22.82	22.82	24.0	0.0	
	Channel			630334	633332	636332	Tune-up limit	MPR	
	Frequency (MHz)			3456.01	3499.98	3544.98	(dBm)	(dB)	
10	QPSK	1	1	22.84	22.86	22.78	24.0	0.0	

Part270_n77 HPUe_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
	Channel			649000	650000	652000			
	Frequency (MHz)			3790	3840	3900			
100	PI2 BPSK	1	1	22.28	22.43	22.29			
100	PI2 BPSK	1	137	22.21	22.36	22.28	24.0	0.0	
100	PI2 BPSK	1	271	22.32	22.42	22.39	24.0	0.0	
100	PI2 BPSK	135	0	21.85	21.88	21.79	23.5	0.5	
100	PI2 BPSK	135	69	22.32	22.33	22.32	24.0	0.0	
100	PI2 BPSK	135	138	21.73	21.83	21.81	23.5	0.5	
100	PI2 BPSK	270	0	21.86	21.79	21.68	23.5	0.5	
100	QPSK	1	1	22.33	22.45	22.43			
100	QPSK	1	137	22.31	22.43	22.35	24.0	0.0	
100	QPSK	1	271	22.24	22.37	22.22	24.0	0.0	
100	QPSK	135	0	21.82	21.81	21.87			
100	QPSK	135	69	22.30	22.27	22.15	24.0	0.0	
100	QPSK	135	138	21.19	21.22	21.08	23.0	1.0	
100	QPSK	270	0	21.09	21.16	21.10	23.0	1.0	
100	8QAM	1	1	21.50	21.57	21.52	23.0	1.0	
100	8QAM	1	1	19.84	19.91	19.89	21.5	2.5	
100	256QAM	1	1	17.90	17.96	17.93	19.5	4.5	
	Channel			649668	650000	652332	Tune-up limit	MPR	
	Frequency (MHz)			3743.02	3840	3934.98	(dBm)	(dB)	
90	QPSK	1	1	22.15	22.35	22.34	24.0	0.0	
	Channel			648334	650000	663666	Tune-up limit	MPR	
	Frequency (MHz)			3740.01	3840	3939.98	(dBm)	(dB)	
80	QPSK	1	1	22.21	22.41	22.31	24.0	0.0	
	Channel			648000	650000	662000	Tune-up limit	MPR	
	Frequency (MHz)			3735	3840	3945	(dBm)	(dB)	
70	QPSK	1	1	22.20	22.36	22.35	24.0	0.0	
	Channel			648000	650000	663332	Tune-up limit	MPR	
	Frequency (MHz)			3730.02	3840	3945.98	(dBm)	(dB)	
60	QPSK	1	1	22.21	22.38	22.39	24.0	0.0	
	Channel			648334	650000	663666	Tune-up limit	MPR	
	Frequency (MHz)			3725.01	3840	3924.98	(dBm)	(dB)	
50	QPSK	1	1	22.25	22.38	22.37	24.0	0.0	
	Channel			648000	650000	664000	Tune-up limit	MPR	
	Frequency (MHz)			3720	3840	3960	(dBm)	(dB)	
40	QPSK	1	1	22.12	22.44	22.41	24.0	0.0	
	Channel			647168	650000	664832	Tune-up limit	MPR	
	Frequency (MHz)			3715.02	3840	3944.98	(dBm)	(dB)	
30	QPSK	1	1	22.26	22.37	22.41	24.0	0.0	
	Channel			647334	650000	656666	Tune-up limit	MPR	
	Frequency (MHz)			3710.01	3840	3953.98	(dBm)	(dB)	
20	QPSK	1	1	22.22	22.38	22.39	24.0	0.0	
	Channel			647168	650000	664832	Tune-up limit	MPR	
	Frequency (MHz)			3707.52	3840	3924.48	(dBm)	(dB)	
15	QPSK	1	1	22.21	22.42	22.41	24.0	0.0	
	Channel			647000	650000	655000	Tune-up limit	MPR	
	Frequency (MHz)			3705	3840	3975	(dBm)	(dB)	
10	QPSK	1	1	22.22	22.43	22.42	24.0	0.0	



Part27Q_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1		22.69				
100	PI2 BPSK	1	137		22.66		24.0	0.0	
100	PI2 BPSK	1	271		22.74				
100	PI2 BPSK	135	0		22.67		24.0	0.0	
100	PI2 BPSK	135	69		22.67		24.0	0.0	
100	PI2 BPSK	135	138		22.71				
100	PI2 BPSK	270	0		22.75		24.0	0.0	
100	QPSK	1	1		22.78				
100	QPSK	1	137		22.73		24.0	0.0	
100	QPSK	1	271		22.73				
100	QPSK	135	0		22.69				
100	QPSK	135	69		22.75		24.0	0.0	
100	QPSK	135	138		22.69				
100	QPSK	270	0		22.74		24.0	0.0	
100	16QAM	1	1		22.68		24.0	0.0	
100	64QAM	1	1		22.85		24.0	0.0	
100	256QAM	1	1		22.82		24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	63300	63332	63366			
Channel									
Frequency (MHz)									
80	QPSK	1	1	3460	3498	3510			
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.69	22.84	22.62	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.69	22.64	22.66	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	63168	63332	63500			
Channel									
Frequency (MHz)									
40	QPSK	1	1	3470	3498	3525			
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.70	22.84	22.70	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.75	22.68	22.64	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	63050	63332	63616			
Channel									
Frequency (MHz)									
10	QPSK	1	1	3455.01	3498.98	3544.98			

Part27O_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1		22.74				
100	PI2 BPSK	1	137		22.72		24.0	0.0	
100	PI2 BPSK	1	271		22.78				
100	PI2 BPSK	135	0		22.72		24.0	0.0	
100	PI2 BPSK	135	69		22.73		24.0	0.0	
100	PI2 BPSK	135	138		22.72				
100	PI2 BPSK	270	0		22.82		24.0	0.0	
100	QPSK	1	1		22.84				
100	QPSK	1	137		22.74		24.0	0.0	
100	QPSK	1	271		22.75				
100	QPSK	135	0		22.73				
100	QPSK	135	69		22.83		24.0	0.0	
100	QPSK	135	138		22.78				
100	QPSK	270	0		22.78		24.0	0.0	
100	16QAM	1	1		22.79		24.0	0.0	
100	64QAM	1	1		22.82		24.0	0.0	
100	256QAM	1	1		22.75		24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	64968	65000	65032			
Channel									
Frequency (MHz)									
80	QPSK	1	1	3740.02	3750	3759.99			
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.85	22.73	22.70	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.82	22.78	22.78	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	64834	65000	65166			
Channel									
Frequency (MHz)									
40	QPSK	1	1	3720	3750	3760			
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.69	22.74	22.74	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.68	22.74	22.76	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	64768	65000	65232			
Channel									
Frequency (MHz)									
10	QPSK	1	1	3705	3750	3765			



Part27Q_n78 HPUE_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Plz BPSK	1	1	25.85	25.85	25.85	27.0	0.0		
100	Plz BPSK	1	137	25.79	25.79	25.79	27.0	0.0		
100	Plz BPSK	1	271	25.85	25.85	25.85	27.0	0.0		
100	Plz BPSK	135	0	25.70	25.70	25.70	27.0	0.0		
100	Plz BPSK	135	69	25.83	25.83	25.83	27.0	0.0		
100	Plz BPSK	135	138	25.78	25.78	25.78	27.0	0.0		
100	Plz BPSK	270	0	25.73	25.73	25.73	27.0	0.0		
100	QPSK	1	1	25.90	25.90	25.90	27.0	0.0		
100	QPSK	1	137	25.81	25.81	25.81	27.0	0.0		
100	QPSK	1	271	25.86	25.86	25.86	27.0	0.0		
100	QPSK	135	0	25.74	25.74	25.74	27.0	0.0		
100	QPSK	135	69	25.83	25.83	25.83	27.0	0.0		
100	QPSK	135	138	25.33	25.33	25.33	27.0	0.0		
100	QPSK	270	0	25.80	25.80	25.80	27.0	0.0		
100	16QAM	1	1	25.83	25.83	25.83	27.0	0.0		
100	16QAM	1	1	25.56	25.56	25.56	26.5	0.5		
100	256QAM	1	1	23.46	23.46	23.46	24.5	2.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	25.31	25.37	25.30	27.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	25.31	25.33	25.37	27.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	25.38	25.32	25.32	27.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	25.29	25.33	25.28	27.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	25.34	25.37	25.33	27.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	25.29	25.32	25.30	27.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	25.38	25.28	25.28	27.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	25.38	25.30	25.28	27.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	25.28	25.37	25.29	27.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	25.30	25.37	25.30	27.0	0.0		

Part27Q_n78 HPUE_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Plz BPSK	1	1	25.80	25.80	25.80	27.0	0.0		
100	Plz BPSK	1	137	25.72	25.72	25.72	27.0	0.0		
100	Plz BPSK	1	271	25.77	25.77	25.77	27.0	0.0		
100	Plz BPSK	135	0	25.66	25.66	25.66	27.0	0.0		
100	Plz BPSK	135	69	25.75	25.75	25.75	27.0	0.0		
100	Plz BPSK	135	138	25.72	25.72	25.72	27.0	0.0		
100	Plz BPSK	270	0	25.69	25.69	25.69	27.0	0.0		
100	QPSK	1	1	25.81	25.81	25.81	27.0	0.0		
100	QPSK	1	137	25.79	25.79	25.79	27.0	0.0		
100	QPSK	1	271	25.76	25.76	25.76	27.0	0.0		
100	QPSK	135	0	25.70	25.70	25.70	27.0	0.0		
100	QPSK	135	69	25.75	25.75	25.75	27.0	0.0		
100	QPSK	135	138	25.69	25.69	25.69	27.0	0.0		
100	QPSK	270	0	25.70	25.70	25.70	27.0	0.0		
100	16QAM	1	1	25.71	25.71	25.71	27.0	0.0		
100	16QAM	1	1	25.30	25.30	25.30	26.5	0.5		
100	256QAM	1	1	23.37	23.37	23.37	24.5	2.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	25.73	25.74	25.76	27.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	25.72	25.72	25.76	27.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	25.73	25.74	25.71	27.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	25.72	25.76	25.76	27.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	25.71	25.72	25.72	27.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	25.78	25.74	25.71	27.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	25.74	25.75	25.71	27.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	25.71	25.72	25.76	27.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	25.73	25.72	25.72	27.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	25.78	25.71	25.75	27.0	0.0		

Part27Q_n78 Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Plz BPSK	1	1	20.72	20.72	20.72	22.0	0.0		
100	Plz BPSK	1	137	20.83	20.83	20.83	22.0	0.0		
100	Plz BPSK	1	271	20.80	20.80	20.80	22.0	0.0		
100	Plz BPSK	135	0	20.82	20.82	20.82	22.0	0.0		
100	Plz BPSK	135	69	20.87	20.87	20.87	22.0	0.0		
100	Plz BPSK	135	138	20.79	20.79	20.79	22.0	0.0		
100	Plz BPSK	270	0	20.77	20.77	20.77	22.0	0.0		
100	QPSK	1	1	20.86	20.86	20.86	22.0	0.0		
100	QPSK	1	137	20.79	20.79	20.79	22.0	0.0		
100	QPSK	1	271	20.73	20.73	20.73	22.0	0.0		
100	QPSK	135	0	20.80	20.80	20.80	22.0	0.0		
100	QPSK	135	69	20.85	20.85	20.85	22.0	0.0		
100	QPSK	135	138	20.70	20.70	20.70	22.0	0.0		
100	QPSK	270	0	20.83	20.83	20.83	22.0	0.0		
100	16QAM	1	1	20.81	20.81	20.81	22.0	0.0		
100	16QAM	1	1	20.85	20.85	20.85	22.0	0.0		
100	256QAM	1	1	19.25	19.25	19.25	20.5	1.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	20.82	20.80	20.79	22.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.77	20.80	20.87	22.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.80	20.78	20.83	22.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.81	20.84	20.82	22.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.81	20.82	20.82	22.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	20.75	20.83	20.76	22.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.85	20.85	20.86	22.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	20.79	20.88	20.85	22.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	20.76	20.84	20.87	22.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	20.80	20.86	20.85	22.0	0.0		





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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				65000				
Frequency (MHz)				3795				
100	PI2 BPSK	1	1	21.12				
100	PI2 BPSK	1	137	21.06			22.0	0.0
100	PI2 BPSK	1	271	21.14				
100	PI2 BPSK	135	0	21.16			22.0	0.0
100	PI2 BPSK	135	69	21.14			22.0	0.0
100	PI2 BPSK	135	138	21.11			22.0	0.0
100	PI2 BPSK	270	0	21.15				
100	QPSK	1	1	21.20				
100	QPSK	1	137	21.19			22.0	0.0
100	QPSK	1	271	21.17				
100	QPSK	135	0	21.06				
100	QPSK	135	69	21.13			22.0	0.0
100	QPSK	135	138	21.10				
100	QPSK	270	0	21.07			22.0	0.0
100	16QAM	1	1	21.06			22.0	0.0
100	64QAM	1	1	20.93			22.0	0.0
100	256QAM	1	1	19.46			20.5	1.5
Channel				64968	65000	65032	Tune-up limit	MPR
Frequency (MHz)				3748.02	3750	3752.02	(dBm)	(dB)
90	QPSK	1	1	21.08	21.09	21.09	22.0	0.0
Channel				64934	65000	65066	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	21.11	21.12	21.12	22.0	0.0
Channel				64900	65000	65100	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	21.14	21.19	21.15	22.0	0.0
Channel				64868	65000	65132	Tune-up limit	MPR
Frequency (MHz)				3729.02	3750	3759.98	(dBm)	(dB)
60	QPSK	1	1	21.08	21.15	21.13	22.0	0.0
Channel				64834	65000	65166	Tune-up limit	MPR
Frequency (MHz)				3723.01	3750	3771.97	(dBm)	(dB)
50	QPSK	1	1	21.16	21.10	21.12	22.0	0.0
Channel				64800	65000	65200	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	21.07	21.08	21.16	22.0	0.0
Channel				64766	65000	65332	Tune-up limit	MPR
Frequency (MHz)				3716.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	21.16	21.16	21.15	22.0	0.0
Channel				64734	65000	65396	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	21.15	21.19	21.13	22.0	0.0
Channel				64700	65000	65452	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	21.08	21.14	21.15	22.0	0.0
Channel				64700	65000	65300	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	21.14	21.08	21.09	22.0	0.0



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	22.71	22.71	22.71	24.0	0.0		
100	Pl2 BPSK	1	137	22.72	22.72	22.72				
100	Pl2 BPSK	1	271	22.67	22.67	22.67	24.0	0.0		
100	Pl2 BPSK	135	0	22.68	22.68	22.68	24.0	0.0		
100	Pl2 BPSK	135	69	22.74	22.74	22.74	24.0	0.0		
100	Pl2 BPSK	135	138	22.18	22.18	22.18	24.0	0.0		
100	Pl2 BPSK	270	0	22.06	22.06	22.06				
100	QPSK	1	1	22.80	22.80	22.80	24.0	0.0		
100	QPSK	1	137	22.77	22.77	22.77				
100	QPSK	1	271	22.22	22.22	22.22				
100	QPSK	135	0	22.72	22.72	22.72				
100	QPSK	135	69	22.77	22.77	22.77	24.0	0.0		
100	QPSK	135	138	21.40	21.40	21.40				
100	QPSK	270	0	22.21	22.21	22.21	23.5	0.5		
100	16QAM	1	1	22.76	22.76	22.76	24.0	0.0		
100	16QAM	1	1	21.26	21.26	21.26	22.5	1.5		
100	256QAM	1	1	19.25	19.25	19.25	20.5	3.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	22.77	22.74	22.76	24.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	22.08	22.08	22.70	24.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	22.75	22.76	22.67	24.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	22.71	22.65	22.75	24.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	22.77	22.68	22.70	24.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	22.69	22.68	22.73	24.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	22.76	22.65	22.72	24.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	22.75	22.66	22.72	24.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	22.65	22.70	22.73	24.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	22.73	22.73	22.75	24.0	0.0		

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	22.94	22.94	22.94	24.0	0.0		
100	Pl2 BPSK	1	137	23.04	23.04	23.04				
100	Pl2 BPSK	1	271	22.90	22.90	22.90	24.0	0.0		
100	Pl2 BPSK	135	0	22.96	22.96	22.96	24.0	0.0		
100	Pl2 BPSK	135	69	23.00	23.00	23.00	24.0	0.0		
100	Pl2 BPSK	135	138	23.04	23.04	23.04	24.0	0.0		
100	Pl2 BPSK	270	0	22.84	22.84	22.84				
100	QPSK	1	1	23.05	23.05	23.05	24.0	0.0		
100	QPSK	1	137	22.96	22.96	22.96				
100	QPSK	1	271	22.92	22.92	22.92				
100	QPSK	135	0	22.95	22.95	22.95				
100	QPSK	135	69	22.97	22.97	22.97	24.0	0.0		
100	QPSK	135	138	22.44	22.44	22.44				
100	QPSK	270	0	22.54	22.54	22.54	23.5	0.5		
100	16QAM	1	1	22.85	22.85	22.85	24.0	0.0		
100	16QAM	1	1	21.23	21.23	21.23	22.5	1.5		
100	256QAM	1	1	19.26	19.26	19.26	20.5	3.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	22.91	23.00	22.95	24.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	22.01	22.08	22.33	24.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	22.85	22.96	22.96	24.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	23.04	22.97	22.97	24.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	22.99	23.00	22.93	24.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	22.96	22.95	22.99	24.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	22.90	22.90	22.90	24.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	23.00	22.99	22.91	24.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	22.99	23.01	22.95	24.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	23.04	22.99	22.95	24.0	0.0		

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	23.11	23.11	23.11	24.0	0.0		
100	Pl2 BPSK	1	137	22.98	22.98	22.98				
100	Pl2 BPSK	1	271	22.98	22.98	22.98	24.0	0.0		
100	Pl2 BPSK	135	0	23.03	23.03	23.03	24.0	0.0		
100	Pl2 BPSK	135	69	22.94	22.94	22.94	24.0	0.0		
100	Pl2 BPSK	135	138	23.02	23.02	23.02	24.0	0.0		
100	Pl2 BPSK	270	0	23.93	23.93	23.93				
100	QPSK	1	1	23.11	23.11	23.11	24.0	0.0		
100	QPSK	1	137	23.01	23.01	23.01				
100	QPSK	1	271	23.05	23.05	23.05				
100	QPSK	135	0	22.98	22.98	22.98				
100	QPSK	135	69	23.01	23.01	23.01	24.0	0.0		
100	QPSK	135	138	22.99	22.99	22.99				
100	QPSK	270	0	22.89	22.89	22.89	24.0	0.0		
100	16QAM	1	1	23.09	23.09	23.09	24.0	0.0		
100	16QAM	1	1	22.96	22.96	22.96	24.0	0.0		
100	256QAM	1	1	22.60	22.60	22.60	23.5	0.5		
Channel										
Frequency (MHz)										
90	QPSK	1	1	23.07	23.10	23.01	24.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	23.08	23.04	23.06	24.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	23.02	23.01	22.98	24.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	23.08	23.04	23.05	24.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	23.08	23.01	22.98	24.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	23.07	23.10	23.02	24.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	22.98	23.05	22.96	24.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	22.99	23.07	23.03	24.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	23.02	23.03	23.02	24.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	23.04	22.98	23.07	24.0	0.0		



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000				
100	PI2 BPSK	1	1	22.93				
100	PI2 BPSK	1	137	23.00			24.0	0.0
100	PI2 BPSK	1	211	22.98				
100	PI2 BPSK	135	0	22.91			24.0	0.0
100	PI2 BPSK	135	69	23.00			24.0	0.0
100	PI2 BPSK	135	138	22.95			24.0	0.0
100	PI2 BPSK	210	0	22.95				
100	QPSK	1	1	23.01				
100	QPSK	1	137	22.97			24.0	0.0
100	QPSK	1	211	22.93				
100	QPSK	135	0	22.91				
100	QPSK	135	69	22.97			24.0	0.0
100	QPSK	135	138	22.95				
100	QPSK	270	0	22.94			24.0	0.0
100	16QAM	1	1	22.96			24.0	0.0
100	64QAM	1	1	22.88			24.0	0.0
100	256QAM	1	1	22.54			23.5	0.5
Channel								
Frequency (MHz)				64968	65000	65032	Tune-up limit	MPR
Frequency (MHz)				3743.02	3750	3743.98	(dBm)	(dB)
90	QPSK	1	1	22.80	22.76	22.81	24.0	0.0
Channel								
Frequency (MHz)				64934	65000	65066	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3739.99	(dBm)	(dB)
80	QPSK	1	1	22.82	22.76	22.79	24.0	0.0
Channel								
Frequency (MHz)				64900	65000	65100	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	22.80	22.76	22.87	24.0	0.0
Channel								
Frequency (MHz)				64868	65000	65132	Tune-up limit	MPR
Frequency (MHz)				3729.02	3750	3730.98	(dBm)	(dB)
60	QPSK	1	1	22.80	22.79	22.86	24.0	0.0
Channel								
Frequency (MHz)				64834	65000	65166	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3724.99	(dBm)	(dB)
50	QPSK	1	1	22.82	22.82	22.84	24.0	0.0
Channel								
Frequency (MHz)				64800	65000	65200	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	22.83	22.80	22.84	24.0	0.0
Channel								
Frequency (MHz)				64766	65000	65232	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3714.98	(dBm)	(dB)
30	QPSK	1	1	22.84	22.80	22.82	24.0	0.0
Channel								
Frequency (MHz)				64734	65000	65266	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3709.99	(dBm)	(dB)
20	QPSK	1	1	22.76	22.79	22.85	24.0	0.0
Channel								
Frequency (MHz)				64700	65000	65300	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	22.80	22.79	22.82	24.0	0.0



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Plz BPSK	1	1	25.97	25.97	25.97	27.0	0.0
100	Plz BPSK	1	137	25.79	25.79	25.79	27.0	0.0
100	Plz BPSK	1	271	25.88	25.88	25.88	27.0	0.0
100	Plz BPSK	135	0	25.94	25.94	25.94	27.0	0.0
100	Plz BPSK	135	69	25.78	25.78	25.78	27.0	0.0
100	Plz BPSK	135	138	25.88	25.88	25.88	27.0	0.0
100	Plz BPSK	270	0	25.76	25.76	25.76	27.0	0.0
100	QPSK	1	1	25.03	25.03	25.03	27.0	0.0
100	QPSK	1	137	25.97	25.97	25.97	27.0	0.0
100	QPSK	1	271	25.94	25.94	25.94	27.0	0.0
100	QPSK	135	0	25.97	25.97	25.97	27.0	0.0
100	QPSK	135	69	25.98	25.98	25.98	27.0	0.0
100	QPSK	135	138	25.79	25.79	25.79	28.5	0.5
100	QPSK	270	0	25.83	25.83	25.83	27.0	0.0
100	6QAM	1	1	24.70	24.70	24.70	25.5	1.5
100	256QAM	1	1	22.60	22.60	22.60	23.5	3.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	25.98	25.97	20.00	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.17	25.19	20.00	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.88	25.89	20.02	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	26.00	25.89	25.92	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.14	25.12	20.02	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	26.00	26.00	20.00	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.97	25.91	20.02	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.97	25.90	25.92	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.53	25.58	25.88	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.95	25.92	25.98	27.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Plz BPSK	1	1	25.78	25.78	25.78	27.0	0.0
100	Plz BPSK	1	137	25.58	25.58	25.58	27.0	0.0
100	Plz BPSK	1	271	25.37	25.37	25.37	27.0	0.0
100	Plz BPSK	135	0	25.66	25.66	25.66	27.0	0.0
100	Plz BPSK	135	69	25.54	25.54	25.54	27.0	0.0
100	Plz BPSK	135	138	25.88	25.88	25.88	27.0	0.0
100	Plz BPSK	270	0	25.52	25.52	25.52	27.0	0.0
100	QPSK	1	1	25.88	25.88	25.88	27.0	0.0
100	QPSK	1	137	25.79	25.79	25.79	27.0	0.0
100	QPSK	1	271	26.81	26.81	26.81	27.0	0.0
100	QPSK	135	0	25.71	25.71	25.71	27.0	0.0
100	QPSK	135	69	25.74	25.74	25.74	27.0	0.0
100	QPSK	135	138	25.70	25.70	25.70	28.5	0.5
100	QPSK	270	0	25.57	25.57	25.57	27.0	0.0
100	6QAM	1	1	24.40	24.40	24.40	25.5	1.5
100	256QAM	1	1	22.37	22.37	22.37	23.5	3.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	25.77	25.88	25.84	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.10	25.86	25.37	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.77	25.87	25.85	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.81	25.80	25.88	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.17	25.79	25.85	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.74	25.85	25.84	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.81	25.85	25.74	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.77	25.87	25.78	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.87	25.81	25.79	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.77	25.87	25.79	27.0	0.0

### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Plz BPSK	1	1	20.83	20.83	20.83	22.0	0.0
100	Plz BPSK	1	137	20.59	20.59	20.59	22.0	0.0
100	Plz BPSK	1	271	20.54	20.54	20.54	22.0	0.0
100	Plz BPSK	135	0	20.82	20.82	20.82	22.0	0.0
100	Plz BPSK	135	69	20.81	20.81	20.81	22.0	0.0
100	Plz BPSK	135	138	20.55	20.55	20.55	22.0	0.0
100	Plz BPSK	270	0	20.58	20.58	20.58	22.0	0.0
100	QPSK	1	1	20.89	20.89	20.89	22.0	0.0
100	QPSK	1	137	20.83	20.83	20.83	22.0	0.0
100	QPSK	1	271	20.86	20.86	20.86	22.0	0.0
100	QPSK	135	0	20.85	20.85	20.85	22.0	0.0
100	QPSK	135	69	20.87	20.87	20.87	22.0	0.0
100	QPSK	135	138	20.58	20.58	20.58	22.0	0.0
100	QPSK	270	0	20.80	20.80	20.80	22.0	0.0
100	6QAM	1	1	20.54	20.54	20.54	21.0	0.0
100	6QAM	1	1	20.00	20.00	20.00	21.5	0.5
100	256QAM	1	1	19.17	19.17	19.17	19.5	2.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	20.66	20.54	20.55	22.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.86	20.83	20.84	22.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	20.83	20.55	20.57	22.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	20.55	20.56	20.66	22.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	20.57	20.55	20.68	22.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	20.66	20.86	20.86	22.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	20.55	20.54	20.58	22.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	20.62	20.57	20.65	22.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	20.54	20.87	20.83	22.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	20.86	20.83	20.88	22.0	0.0



Part270\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				65000				
Frequency (MHz)				3795				
100	PI2 BPSK	1	1		21.10			
100	PI2 BPSK	1	137		21.06		22.0	0.0
100	PI2 BPSK	1	211		21.12			
100	PI2 BPSK	135	0		21.06		22.0	0.0
100	PI2 BPSK	135	69		21.06		22.0	0.0
100	PI2 BPSK	135	138		21.15		22.0	0.0
100	PI2 BPSK	210	0		21.15			
100	QPSK	1	1		21.16			
100	QPSK	1	137		21.09		22.0	0.0
100	QPSK	1	211		21.11			
100	QPSK	135	0		21.06			
100	QPSK	135	69		21.10		22.0	0.0
100	QPSK	135	138		21.07			
100	QPSK	270	0		21.04		22.0	0.0
100	16QAM	1	1		21.02		22.0	0.0
100	64QAM	1	1		20.58		21.5	0.5
100	256QAM	1	1		18.58		18.5	2.5
Channel				64868	65000	65032	Tune-up limit	MPR
Frequency (MHz)				3745.02	3750	3762.48	(dBm)	(dB)
90	QPSK	1	1	21.11	21.13	21.01	22.0	0.0
Channel				64834	65000	65066	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	21.05	21.14	21.12	22.0	0.0
Channel				64800	65000	65100	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	21.07	21.07	21.01	22.0	0.0
Channel				64868	65000	65132	Tune-up limit	MPR
Frequency (MHz)				3729.02	3750	3769.98	(dBm)	(dB)
60	QPSK	1	1	21.15	21.07	21.11	22.0	0.0
Channel				64834	65000	65166	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	21.14	21.14	21.09	22.0	0.0
Channel				64800	65000	65200	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	21.10	21.09	21.12	22.0	0.0
Channel				64768	65000	65332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	21.09	21.11	21.12	22.0	0.0
Channel				64734	65000	65266	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	21.14	21.13	21.04	22.0	0.0
Channel				64768	65000	65282	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	21.15	21.10	21.01	22.0	0.0
Channel				64700	65000	65300	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	21.03	21.13	21.09	22.0	0.0



Part27Q_n78 HPUe_Ant 8									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1		3499.98				
					22.64				
100	Pl2 BPSK	1	137		22.54		24.0	0.0	
100	Pl2 BPSK	1	271		22.60				
100	Pl2 BPSK	135	0		22.55		23.5	0.5	
100	Pl2 BPSK	135	69		22.51		24.0	0.0	
100	Pl2 BPSK	135	138		22.43				
100	Pl2 BPSK	270	0		22.50		23.5	0.5	
100	QPSK	1	1		22.73				
100	QPSK	1	137		22.64		24.0	0.0	
100	QPSK	1	271		22.65				
100	QPSK	135	0		22.47				
100	QPSK	135	69		22.68		24.0	0.0	
100	QPSK	135	138		21.95				
100	QPSK	270	0		22.20		23.0	1.0	
100	8QAM	1	1		22.36		23.0	1.0	
100	8QAM	1	1		21.29		21.5	2.5	
100	256QAM	1	1		19.17		19.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1		633000	633332	633668	Tune-up limit (dBm)	MPR (dB)
					3496	3499.98	3503.98		
					22.70	22.66	22.66	24.0	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1		630968	633332	634000	Tune-up limit (dBm)	MPR (dB)
					3490.02	3499.98	3510		
					22.71	22.59	22.84	24.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1		632334	633332	634332	Tune-up limit (dBm)	MPR (dB)
					3486.01	3499.98	3514.98		
					22.62	22.60	22.58	24.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1		632000	633332	633668	Tune-up limit (dBm)	MPR (dB)
					3480	3499.98	3519.98		
					22.59	22.71	22.68	24.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1		631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
					3472.02	3499.98	3520		
					22.54	22.53	22.71	24.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1		631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
					3470.01	3499.98	3529.98		
					22.59	22.61	22.67	24.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1		631000	633332	635668	Tune-up limit (dBm)	MPR (dB)
					3465	3499.98	3534.98		
					22.68	22.62	22.71	24.0	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1		630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
					3460.02	3499.98	3540		
					22.63	22.60	22.70	24.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1		630300	633332	636368	Tune-up limit (dBm)	MPR (dB)
					3450	3499.98	3542.48		
					22.59	22.68	22.72	24.0	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1		630000	633332	636668	Tune-up limit (dBm)	MPR (dB)
					3445.01	3499.98	3544.98		
					22.65	22.66	22.63	24.0	0.0

Part27O_n78 HPUe_Ant 8									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1		3765				
					23.05				
100	Pl2 BPSK	1	137		22.98		24.0	0.0	
100	Pl2 BPSK	1	271		22.92				
100	Pl2 BPSK	135	0		22.48		23.5	0.5	
100	Pl2 BPSK	135	69		23.03		24.0	0.0	
100	Pl2 BPSK	135	138		22.44				
100	Pl2 BPSK	270	0		22.51		23.5	0.5	
100	QPSK	1	1		23.12				
100	QPSK	1	137		23.06		24.0	0.0	
100	QPSK	1	271		23.02				
100	QPSK	135	0		22.06				
100	QPSK	135	69		23.06		24.0	0.0	
100	QPSK	135	138		22.02				
100	QPSK	270	0		22.89		23.0	1.0	
100	8QAM	1	1		22.13		23.0	1.0	
100	8QAM	1	1		20.38		21.5	2.5	
100	256QAM	1	1		18.58		19.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1		649668	650000	650332	Tune-up limit (dBm)	MPR (dB)
					3745.02	3760	3764.98		
					23.05	22.98	23.02	24.0	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1		649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
					3740.01	3760	3769.98		
					23.05	23.00	23.02	24.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1		648000	650000	651000	Tune-up limit (dBm)	MPR (dB)
					3735	3760	3765		
					22.98	23.03	22.97	24.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1		646668	650000	651332	Tune-up limit (dBm)	MPR (dB)
					3720.02	3760	3769.98		
					23.03	23.00	23.06	24.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1		645334	650000	651668	Tune-up limit (dBm)	MPR (dB)
					3715.01	3760	3774.98		
					23.03	23.10	23.02	24.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1		644000	650000	652000	Tune-up limit (dBm)	MPR (dB)
					3710	3760	3760		
					23.08	23.11	23.09	24.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1		642668	650000	652332	Tune-up limit (dBm)	MPR (dB)
					3705.02	3760	3764.98		
					23.10	23.08	23.10	24.0	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1		641334	650000	652668	Tune-up limit (dBm)	MPR (dB)
					3700.01	3760	3769.98		
					23.10	23.00	23.04	24.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1		640000	650000	653000	Tune-up limit (dBm)	MPR (dB)
					3695	3760	3765		
					23.07	22.98	23.04	24.0	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1		638668	650000	653332	Tune-up limit (dBm)	MPR (dB)
					3690.02	3760	3769.98		
					23.03	23.07	23.06	24.0	0.0



Reduced Power Mode for DS12

n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 376000	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	23.18	23.27	23.17			
20	PI2 BPSK	1	53	23.18	23.28	23.18	24.0	0.0	
20	PI2 BPSK	1	104	23.24	23.28	23.16			
20	PI2 BPSK	50	0	23.11	23.15	23.09	24.0	0.0	
20	PI2 BPSK	50	28	23.08	23.18	23.14	24.0	0.0	
20	PI2 BPSK	50	56	23.09	23.19	23.16	24.0	0.0	
20	PI2 BPSK	100	0	23.16	23.20	23.12	24.0	0.0	
20	QPSK	1	1	23.25	23.30	23.22			
20	QPSK	1	53	23.24	23.28	23.18	24.0	0.0	
20	QPSK	1	104	23.17	23.24	23.20			
20	QPSK	50	0	22.73	22.83	22.77	24.0	0.0	
20	QPSK	50	28	23.18	23.19	23.11	24.0	0.0	
20	QPSK	50	56	22.77	22.82	22.76	24.0	0.0	
20	QPSK	100	0	23.03	23.11	23.03	24.0	0.0	
20	16QAM	1	1	23.05	23.07	23.05	24.0	0.0	
20	64QAM	1	1	21.86	21.82	21.82	22.5	1.5	
20	256QAM	1	1	19.48	19.53	19.47	20.5	3.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	371500	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	1852.5	1860	1907.5	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	370500	376000	381500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	1852.5	1860	1907.5	Tune-up limit (dBm)	MPR (dB)	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 372900	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	15.78	15.81	15.86			
20	PI2 BPSK	1	53	15.81	15.83	15.78	17.0	0.0	
20	PI2 BPSK	1	104	15.81	15.85	15.78			
20	PI2 BPSK	50	0	15.79	15.77	15.73	17.0	0.0	
20	PI2 BPSK	50	28	15.76	15.76	15.78	17.0	0.0	
20	PI2 BPSK	50	56	15.73	15.77	15.84	17.0	0.0	
20	PI2 BPSK	100	0	15.74	15.81	15.75	17.0	0.0	
20	QPSK	1	1	15.85	15.81	15.87			
20	QPSK	1	53	15.78	15.77	15.83	17.0	0.0	
20	QPSK	1	104	15.72	15.79	15.76			
20	QPSK	50	0	15.75	15.83	15.73	17.0	0.0	
20	QPSK	50	28	15.81	15.85	15.77	17.0	0.0	
20	QPSK	50	56	15.73	15.80	15.68	17.0	0.0	
20	QPSK	100	0	15.74	15.83	15.75	17.0	0.0	
20	16QAM	1	1	15.77	15.78	15.80	17.0	0.0	
20	64QAM	1	1	15.82	15.90	15.80	17.0	0.0	
20	256QAM	1	1	15.79	15.80	15.75	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	371500	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	1855	1860	1905	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	370500	376000	381500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.75	15.88	15.74	17.0	0.0	

n5_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 166800	Power Middle Ch. Freq. 167500	Power High Ch. Freq. 168000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.78	22.82	22.80			
20	PI2 BPSK	1	53	22.80	22.95	22.87	24.0	0.0	
20	PI2 BPSK	1	104	22.76	22.86	22.78			
20	PI2 BPSK	50	0	22.78	22.88	22.86	24.0	0.0	
20	PI2 BPSK	50	28	22.90	22.85	22.90	24.0	0.0	
20	PI2 BPSK	50	56	22.77	22.82	22.79	24.0	0.0	
20	PI2 BPSK	100	0	22.78	22.98	22.83	24.0	0.0	
20	QPSK	1	1	22.85	23.00	22.91			
20	QPSK	1	53	22.79	22.82	22.79	24.0	0.0	
20	QPSK	1	104	22.82	22.85	22.76			
20	QPSK	50	0	22.76	22.85	22.76	24.0	0.0	
20	QPSK	50	28	22.81	22.86	22.82	24.0	0.0	
20	QPSK	50	56	22.77	22.86	22.84	24.0	0.0	
20	QPSK	100	0	22.87	22.90	22.84	24.0	0.0	
20	16QAM	1	1	22.87	22.92	22.87	24.0	0.0	
20	64QAM	1	1	21.61	21.65	21.55	22.5	1.5	
20	256QAM	1	1	19.69	19.71	19.67	20.5	3.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	166300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	826.5	826.5	841	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	165300	167300	169300	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.83	22.83	22.83	24.0	0.0	



n5_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 16600	Power Middle Ch. Freq. 16700	Power High Ch. Freq. 16780	Tune-up limit (dBm)	MPR (dB)	
Channel				834	836.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	19.49	19.56	19.39			
20	PI2 BPSK	1	53	19.38	19.47	19.33	20.5	0.0	
20	PI2 BPSK	1	104	19.47	19.47	19.41			
20	PI2 BPSK	50	0	19.45	19.44	19.38	20.5	0.0	
20	PI2 BPSK	50	28	19.44	19.47	19.32	20.5	0.0	
20	PI2 BPSK	50	56	19.39	19.47	19.31	20.5	0.0	
20	PI2 BPSK	100	0	19.44	19.50	19.33	20.5	0.0	
20	QPSK	1	1	19.53	19.57	19.43			
20	QPSK	1	53	19.38	19.47	19.34	20.5	0.0	
20	QPSK	1	104	19.46	19.46	19.29			
20	QPSK	50	0	19.42	19.47	19.31	20.5	0.0	
20	QPSK	50	28	19.43	19.55	19.41	20.5	0.0	
20	QPSK	50	56	19.41	19.45	19.32	20.5	0.0	
20	QPSK	100	0	19.47	19.50	19.41	20.5	0.0	
20	16QAM	1	1	19.45	19.50	19.28	20.5	0.0	
20	64QAM	1	1	19.46	19.53	19.34	20.5	0.0	
20	256QAM	1	1	19.38	19.49	19.38	20.5	0.0	
Channel				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
15	QPSK	1	1	19.42	19.51	19.42	20.5	0.0	
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
10	QPSK	1	1	19.40	19.43	19.33	20.5	0.0	
Channel				166300	167300	169300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
5	QPSK	1	1	19.39	19.55	19.33	20.5	0.0	

n7_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 50400	Power Middle Ch. Freq. 50700	Power High Ch. Freq. 51000	Tune-up limit (dBm)	MPR (dB)	
Channel				2520	2535	2550			
Frequency (MHz)									
40	PI2 BPSK	1	1	22.88	23.08	23.05			
40	PI2 BPSK	1	108	23.10	23.24	23.15	24.0	0.0	
40	PI2 BPSK	1	214	23.07	23.23	23.21			
40	PI2 BPSK	108	0	22.90	23.05	23.01	24.0	0.0	
40	PI2 BPSK	108	54	22.99	23.15	23.10	24.0	0.0	
40	PI2 BPSK	108	108	22.99	23.12	23.04	24.0	0.0	
40	PI2 BPSK	216	0	22.99	23.11	23.07	24.0	0.0	
40	QPSK	1	1	23.11	23.28	23.22			
40	QPSK	1	108	22.86	23.11	23.03	24.0	0.0	
40	QPSK	1	214	23.07	23.23	23.20			
40	QPSK	108	0	22.85	23.05	22.98	24.0	0.0	
40	QPSK	108	54	23.08	23.20	23.17	24.0	0.0	
40	QPSK	108	108	22.89	23.09	23.05	24.0	0.0	
40	QPSK	216	0	22.99	23.18	23.08	24.0	0.0	
40	16QAM	1	1	23.13	23.25	23.23	24.0	0.0	
40	64QAM	1	1	22.31	22.51	22.44	23.0	1.0	
40	256QAM	1	1	20.29	20.47	20.37	21.0	3.0	
Channel				505000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
30	QPSK	1	1	23.04	23.16	23.14	24.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
25	QPSK	1	1	23.05	23.25	23.23	24.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
20	QPSK	1	1	23.05	23.17	23.19	24.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
15	QPSK	1	1	23.04	23.22	23.13	24.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
10	QPSK	1	1	23.01	23.20	23.16	24.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
5	QPSK	1	1	23.07	23.23	23.19	24.0	0.0	

n7_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 50400	Power Middle Ch. Freq. 50700	Power High Ch. Freq. 51000	Tune-up limit (dBm)	MPR (dB)	
Channel				2520	2535	2550			
Frequency (MHz)									
40	PI2 BPSK	1	1	14.45	14.49	14.38			
40	PI2 BPSK	1	108	14.59	14.50	14.58	15.5	0.0	
40	PI2 BPSK	1	214	14.49	14.61	14.65			
40	PI2 BPSK	108	0	14.36	14.49	14.35	15.5	0.0	
40	PI2 BPSK	108	54	14.34	14.58	14.38	15.5	0.0	
40	PI2 BPSK	108	108	14.50	14.59	14.49	15.5	0.0	
40	PI2 BPSK	216	0	14.52	14.57	14.63	15.5	0.0	
40	QPSK	1	1	14.53	14.67	14.65			
40	QPSK	1	108	14.45	14.55	14.62	15.5	0.0	
40	QPSK	1	214	14.49	14.65	14.65			
40	QPSK	108	0	14.54	14.58	14.58	15.5	0.0	
40	QPSK	108	54	14.55	14.65	14.60	15.5	0.0	
40	QPSK	108	108	14.48	14.54	14.58	15.5	0.0	
40	QPSK	216	0	14.56	14.62	14.60	15.5	0.0	
40	16QAM	1	1	14.56	14.63	14.65	15.5	0.0	
40	64QAM	1	1	14.41	14.60	14.54	15.5	0.0	
40	256QAM	1	1	14.52	14.57	14.63	15.5	0.0	
Channel				505000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
30	QPSK	1	1	14.42	14.58	14.58	15.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
25	QPSK	1	1	14.42	14.61	14.54	15.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
20	QPSK	1	1	14.50	14.60	14.60	15.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
15	QPSK	1	1	14.43	14.58	14.62	15.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
10	QPSK	1	1	14.49	14.60	14.61	15.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
5	QPSK	1	1	14.45	14.57	14.58	15.5	0.0	





n12_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 141900	Power Middle Ch. / Freq. 141500	Power High Ch. / Freq. 141700	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	22.87	22.90	22.84	24.0	0.0	
15	PI2 BPSK	1	40	22.91	22.96	22.91			
15	PI2 BPSK	1	77	22.83	22.93	22.83			
15	PI2 BPSK	36	0	22.84	22.88	22.86	24.0	0.0	
15	PI2 BPSK	36	22	22.74	22.79	22.77	24.0	0.0	
15	PI2 BPSK	36	43	22.69	22.76	22.70	24.0	0.0	
15	PI2 BPSK	75	0	22.84	22.88	22.86	24.0	0.0	
15	QPSK	1	1	22.96	23.01	22.92			
15	QPSK	1	40	22.85	22.92	22.83	24.0	0.0	
15	QPSK	1	77	22.83	22.93	22.91			
15	QPSK	36	0	22.79	22.86	22.79	24.0	0.0	
15	QPSK	36	22	22.91	22.96	22.93	24.0	0.0	
15	QPSK	36	43	22.70	22.78	22.70	24.0	0.0	
15	QPSK	75	0	22.84	22.86	22.87	24.0	0.0	
15	16QAM	1	1	22.95	22.91	22.86	24.0	0.0	
15	64QAM	1	1	21.43	21.51	21.49	22.5	1.5	
15	256QAM	1	1	19.51	19.55	19.49	20.5	3.5	
Channel				14000	141500	142000	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	22.88	22.99	22.86	24.0	0.0	
Channel				14000	141500	142000	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	22.99	22.94	22.87	24.0	0.0	

n12_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 141900	Power Middle Ch. / Freq. 141500	Power High Ch. / Freq. 141700	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	20.19	20.27	20.26	21.0	0.0	
15	PI2 BPSK	1	40	20.16	20.29	20.35			
15	PI2 BPSK	1	77	20.19	20.28	20.39			
15	PI2 BPSK	36	0	20.21	20.32	20.31	21.0	0.0	
15	PI2 BPSK	36	22	20.22	20.28	20.33	21.0	0.0	
15	PI2 BPSK	36	43	20.14	20.30	20.35	21.0	0.0	
15	PI2 BPSK	75	0	20.20	20.33	20.39	21.0	0.0	
15	QPSK	1	1	20.26	20.41	20.40			
15	QPSK	1	40	20.23	20.37	20.32	21.0	0.0	
15	QPSK	1	77	20.16	20.30	20.33			
15	QPSK	36	0	20.16	20.32	20.30	21.0	0.0	
15	QPSK	36	22	20.18	20.38	20.31	21.0	0.0	
15	QPSK	36	43	20.14	20.31	20.28	21.0	0.0	
15	QPSK	75	0	20.25	20.36	20.28	21.0	0.0	
15	16QAM	1	1	20.19	20.26	20.20	21.0	0.0	
15	64QAM	1	1	20.22	20.29	20.31	21.0	0.0	
15	256QAM	1	1	19.08	19.18	19.17	19.5	1.5	
Channel				14000	141500	142000	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	20.11	20.27	20.35	21.0	0.0	
Channel				14000	141500	142000	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	20.24	20.30	20.25	21.0	0.0	

n14_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 158100	Power Middle Ch. / Freq. 158600	Power High Ch. / Freq. 159100	Tune-up limit (dBm)	MPR (dB)	
Channel				790					
Frequency (MHz)									
10	PI2 BPSK	1	1		22.78				
10	PI2 BPSK	1	26		22.80		24.0	0.0	
10	PI2 BPSK	1	50		22.76				
10	PI2 BPSK	25	0		22.84		24.0	0.0	
10	PI2 BPSK	25	14		22.89		24.0	0.0	
10	PI2 BPSK	25	27		22.83		24.0	0.0	
10	PI2 BPSK	50	0		22.84		24.0	0.0	
10	QPSK	1	1		22.82				
10	QPSK	1	26		22.80		24.0	0.0	
10	QPSK	1	50		22.72				
10	QPSK	25	0		22.85		24.0	0.0	
10	QPSK	25	14		22.71		24.0	0.0	
10	QPSK	25	27		22.88		24.0	0.0	
10	QPSK	50	0		22.86		24.0	0.0	
10	16QAM	1	1		22.80		24.0	0.0	
10	64QAM	1	1		21.57		22.5	1.5	
10	256QAM	1	1		19.45		20.5	3.5	
Channel				158100	158600	159100	Tune-up limit	MPR	
Frequency (MHz)				790.5	793	795.5	(dBm)	(dB)	
5	QPSK	1	1	22.74	22.75	22.75	24.0	0.0	



n14_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	PI2 BPSK	1	1	21.07	793				
10	PI2 BPSK	1	26	21.13			22.0	0.0	
10	PI2 BPSK	1	50	21.11					
10	PI2 BPSK	25	0	21.12			22.0	0.0	
10	PI2 BPSK	25	14	21.18					
10	PI2 BPSK	25	27	21.10			22.0	0.0	
10	PI2 BPSK	50	0	21.15					
10	QPSK	1	1	21.21					
10	QPSK	1	26	21.10			22.0	0.0	
10	QPSK	1	50	21.12					
10	QPSK	25	0	21.11			22.0	0.0	
10	QPSK	25	14	21.17					
10	QPSK	25	27	21.05			22.0	0.0	
10	QPSK	50	0	21.15					
10	16QAM	1	1	21.05			22.0	0.0	
10	64QAM	1	1	21.16			22.0	0.0	
10	256QAM	1	1	19.15			20.0	2.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	158.100	158.600	159.100	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	21.17	21.16	21.16	22.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	23.16	23.23	23.18			
40	PI2 BPSK	1	108	23.26	23.33	23.23	24.0	0.0	
40	PI2 BPSK	1	214	23.22	23.28	23.24			
40	PI2 BPSK	108	0	22.81	22.89	22.85	23.5	0.5	
40	PI2 BPSK	108	54	23.11	23.18	23.08	24.0	0.0	
40	PI2 BPSK	108	108	22.90	22.99	22.94			
40	PI2 BPSK	216	0	22.99	23.01	22.93	23.5	0.5	
40	QPSK	1	1	23.26	23.36	23.34			
40	QPSK	1	108	23.18	23.25	23.18	24.0	0.0	
40	QPSK	1	214	23.26	23.32	23.22			
40	QPSK	108	0	22.29	22.38	22.32	23.0	1.0	
40	QPSK	108	54	23.15	23.25	23.16	24.0	0.0	
40	QPSK	108	108	22.39	22.43	22.38			
40	QPSK	216	0	22.41	22.43	22.39	23.0	1.0	
40	16QAM	1	1	22.38	22.45	22.35	23.0	1.0	
40	64QAM	1	1	20.88	20.96	20.90	21.5	2.5	
40	256QAM	1	1	19.11	19.14	19.09	19.5	4.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	23.24	23.34	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	186.5	187.5	187.0	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	182.5	182.5	182.5	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.26	23.29	23.30	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.26	23.34	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	182.5	182.5	182.5	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.23	23.34	23.28	24.0	0.0	

n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	15.75	15.91	15.84			
40	PI2 BPSK	1	108	15.75	15.77	15.82	17.0	0.0	
40	PI2 BPSK	1	214	15.66	15.83	15.75			
40	PI2 BPSK	108	0	15.72	15.78	15.81	17.0	0.0	
40	PI2 BPSK	108	54	15.67	15.89	15.82	17.0	0.0	
40	PI2 BPSK	108	108	15.72	15.89	15.77			
40	PI2 BPSK	216	0	15.63	15.88	15.83	17.0	0.0	
40	QPSK	1	1	15.76	15.92	15.85			
40	QPSK	1	108	15.66	15.90	15.84	17.0	0.0	
40	QPSK	1	214	15.73	15.90	15.84			
40	QPSK	108	0	15.63	15.80	15.76	17.0	0.0	
40	QPSK	108	54	15.69	15.88	15.81	17.0	0.0	
40	QPSK	108	108	15.63	15.82	15.78			
40	QPSK	216	0	15.71	15.84	15.71	17.0	0.0	
40	16QAM	1	1	15.68	15.81	15.84	17.0	0.0	
40	64QAM	1	1	15.67	15.81	15.78	17.0	0.0	
40	256QAM	1	1	15.71	15.80	15.78	17.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	15.60	15.75	15.70	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.80	15.78	15.82	17.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.58	15.82	15.82	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.59	15.82	15.85	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.67	15.78	15.75	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.63	15.76	15.71	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.60	15.77	15.71	17.0	0.0	



n26(FCC)_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 164800	Power Middle Ch. F.Freq. 166300	Power High Ch. F.Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	22.84	22.90	22.87			
20	PI2 BPSK	1	53	22.99	23.02	22.97	24.0	0.0	
20	PI2 BPSK	1	104	22.92	23.00	22.98			
20	PI2 BPSK	50	0	22.84	22.90	22.88	24.0	0.0	
20	PI2 BPSK	50	28	22.89	22.95	22.89	24.0	0.0	
20	PI2 BPSK	50	56	22.88	22.90	22.89			
20	PI2 BPSK	100	0	22.82	22.92	22.95	24.0	0.0	
20	QPSK	1	1	22.95	23.09	23.05			
20	QPSK	1	53	22.88	22.95	22.93	24.0	0.0	
20	QPSK	1	104	22.92	23.02	23.00			
20	QPSK	50	0	22.47	22.53	22.45	23.5	0.5	
20	QPSK	50	28	22.88	22.96	22.87	24.0	0.0	
20	QPSK	50	56	22.85	22.71	22.85			
20	QPSK	100	0	22.80	22.86	22.86	23.5	0.5	
20	16QAM	1	1	22.57	22.65	22.59	23.5	0.5	
20	16QAM	1	1	21.08	21.15	21.07	22.0	2.0	
20	256QAM	1	1	19.13	19.17	19.14	20.0	4.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	22.95	23.03	22.95	24.0	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	22.97	23.05	22.96	24.0	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.94	23.07	23.01	24.0	0.0	

n26(FCC)_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 164800	Power Middle Ch. F.Freq. 166300	Power High Ch. F.Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	19.63	19.77	19.75			
20	PI2 BPSK	1	53	19.63	19.82	19.73	20.5	0.0	
20	PI2 BPSK	1	104	19.63	19.68	19.68			
20	PI2 BPSK	50	0	19.64	19.82	19.72	20.5	0.0	
20	PI2 BPSK	50	28	19.70	19.71	19.71	20.5	0.0	
20	PI2 BPSK	50	56	19.67	19.79	19.76			
20	PI2 BPSK	100	0	19.72	19.68	19.65	20.5	0.0	
20	QPSK	1	1	19.76	19.83	19.77			
20	QPSK	1	53	19.65	19.82	19.72	20.5	0.0	
20	QPSK	1	104	19.70	19.82	19.82			
20	QPSK	50	0	19.65	19.73	19.70	20.5	0.0	
20	QPSK	50	28	19.67	19.79	19.73			
20	QPSK	50	56	19.64	19.72	19.63			
20	QPSK	100	0	19.64	19.76	19.66	20.5	0.0	
20	16QAM	1	1	19.72	19.74	19.65	20.5	0.0	
20	16QAM	1	1	19.71	19.78	19.65	20.5	0.0	
20	256QAM	1	1	18.78	18.88	18.86	19.0	1.5	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	19.74	19.82	19.69	20.5	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	19.70	19.72	19.71	20.5	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	19.63	19.82	19.73	20.5	0.0	

n30_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 460000	Power Middle Ch. F.Freq. 462500	Power High Ch. F.Freq. 465000	Tune-up limit (dBm)	MPR (dB)	
Channel				2310					
Frequency (MHz)									
10	PI2 BPSK	1	1	22.85					
10	PI2 BPSK	1	26	22.85			24.0	0.0	
10	PI2 BPSK	1	50	22.78					
10	PI2 BPSK	26	0	22.86			24.0	0.0	
10	PI2 BPSK	26	14	22.73			24.0	0.0	
10	PI2 BPSK	26	27	22.87					
10	PI2 BPSK	50	0	22.72			24.0	0.0	
10	QPSK	1	1	22.90					
10	QPSK	1	26	22.88			24.0	0.0	
10	QPSK	1	50	22.86					
10	QPSK	26	0	22.81			24.0	0.0	
10	QPSK	26	14	22.75			24.0	0.0	
10	QPSK	26	27	22.71					
10	QPSK	50	0	22.73			24.0	0.0	
10	16QAM	1	1	22.78			22.5	1.5	
10	16QAM	1	1	22.05			22.5	3.5	
10	256QAM	1	1	19.86			20.5	1.5	
Channel				461500	462500	463500	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.77	22.80	22.78	24.0	0.0	



**n30\_Ant 1**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Free	Power Middle Ch. / Free	Power High Ch. / Free	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)					2310			
10	P12 BPSK	1	1		15.18			
10	P12 BPSK	1	26		15.22		17.0	0.0
10	P12 BPSK	1	50		15.11			
10	P12 BPSK	25	0		15.13		17.0	0.0
10	P12 BPSK	25	14		15.23		17.0	0.0
10	P12 BPSK	25	27		15.13		17.0	0.0
10	P12 BPSK	50	0		15.11			
10	QPSK	1	1		15.30			
10	QPSK	1	26		15.14		17.0	0.0
10	QPSK	1	50		15.17			
10	QPSK	25	0		15.16		17.0	0.0
10	QPSK	25	14		15.23		17.0	0.0
10	QPSK	25	27		15.15		17.0	0.0
10	QPSK	50	0		15.20			
10	16QAM	1	1		15.17		17.0	0.0
10	64QAM	1	1		15.15		17.0	0.0
10	256QAM	1	1		15.12		17.0	0.0
Channel				481500	482000	482500		
Frequency (MHz)				2307.5	2310	2312.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	15.21	15.17	15.25	17.0	0.0



n66_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	23.10	23.15	23.08			
40	PI2 BPSK	1	168	23.20	23.26	23.20	24.0	0.0	
40	PI2 BPSK	1	214	23.24	23.26	23.16			
40	PI2 BPSK	108	0	23.15	23.21	23.17	24.0	0.0	
40	PI2 BPSK	108	54	23.21	23.25	23.17	24.0	0.0	
40	PI2 BPSK	108	108	23.18	23.23	23.21	24.0	0.0	
40	PI2 BPSK	216	0	23.11	23.20	23.18			
40	QPSK	1	1	23.25	23.31	23.30			
40	QPSK	1	168	23.14	23.18	23.12	24.0	0.0	
40	QPSK	1	214	23.21	23.26	23.24			
40	QPSK	108	0	22.75	22.85	22.83	24.0	0.0	
40	QPSK	108	54	23.21	23.26	23.25	24.0	0.0	
40	QPSK	108	108	22.95	22.97	22.87	24.0	0.0	
40	QPSK	216	0	23.05	23.11	23.06			
40	16QAM	1	1	23.03	23.05	23.03	24.0	0.0	
40	64QAM	1	1	21.48	21.51	21.48	22.5	1.5	
40	256QAM	1	1	19.39	19.46	19.41	20.5	3.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	23.21	23.26	23.27	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.23	23.27	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.22	23.25	23.24	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.18	23.23	23.22	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.18	23.22	23.26	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.18	23.26	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.22	23.23	23.22	24.0	0.0	

n66_Ant 1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	17.37	17.47	17.47			
40	PI2 BPSK	1	168	17.46	17.57	17.54	18.5	0.0	
40	PI2 BPSK	1	214	17.43	17.49	17.46			
40	PI2 BPSK	108	0	17.39	17.47	17.49	18.5	0.0	
40	PI2 BPSK	108	54	17.51	17.48	17.55	18.5	0.0	
40	PI2 BPSK	108	108	17.46	17.51	17.55	18.5	0.0	
40	PI2 BPSK	216	0	17.46	17.61	17.54			
40	QPSK	1	1	17.52	17.62	17.59			
40	QPSK	1	168	17.38	17.51	17.54	18.5	0.0	
40	QPSK	1	214	17.49	17.51	17.44			
40	QPSK	108	0	17.38	17.52	17.50	18.5	0.0	
40	QPSK	108	54	17.47	17.61	17.56	18.5	0.0	
40	QPSK	108	108	17.40	17.55	17.46	18.5	0.0	
40	QPSK	216	0	17.44	17.55	17.44			
40	16QAM	1	1	17.46	17.55	17.56	18.5	0.0	
40	64QAM	1	1	17.39	17.58	17.47	18.5	0.0	
40	256QAM	1	1	17.48	17.56	17.55	18.5	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	17.43	17.61	17.53	18.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.46	17.56	17.54	18.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.50	17.58	17.54	18.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.38	17.60	17.54	18.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.51	17.52	17.56	18.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.51	17.45	17.73	18.5	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.42	17.58	17.55	18.5	0.0	

n70_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	PI2 BPSK	1	1		1702.5				
15	PI2 BPSK	1	40		22.88		24.0	0.0	
15	PI2 BPSK	1	77		22.95				
15	PI2 BPSK	36	0		22.80		24.0	0.0	
15	PI2 BPSK	36	22		22.75		24.0	0.0	
15	PI2 BPSK	36	43		22.73		24.0	0.0	
15	PI2 BPSK	75	0		22.90		24.0	0.0	
15	QPSK	1	1		22.97				
15	QPSK	1	40		22.92		24.0	0.0	
15	QPSK	1	77		22.81				
15	QPSK	36	0		22.78		24.0	0.0	
15	QPSK	36	22		22.82		24.0	0.0	
15	QPSK	36	43		22.73		24.0	0.0	
15	QPSK	75	0		22.80		24.0	0.0	
15	16QAM	1	1		22.85		24.0	0.0	
15	64QAM	1	1		21.75		22.5	1.5	
15	256QAM	1	1		19.65		20.5	3.5	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.84	22.95	22.86	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.98	22.99	22.99	24.0	0.0	



n70_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				1702.5			
Frequency (MHz)							
15	PI2 BPSK	1	1	17.85			
15	PI2 BPSK	1	40	17.87			18.5
15	PI2 BPSK	1	77	17.74			
15	PI2 BPSK	36	0	17.81			18.5
15	PI2 BPSK	36	22	17.75			18.5
15	PI2 BPSK	36	43	17.85			18.5
15	PI2 BPSK	75	0	17.82			18.5
15	QPSK	1	1	17.88			
15	QPSK	1	40	17.80			18.5
15	QPSK	1	77	17.84			
15	QPSK	36	0	17.77			18.5
15	QPSK	36	22	17.85			18.5
15	QPSK	36	43	17.80			18.5
15	QPSK	75	0	17.75			18.5
15	16QAM	1	1	17.80			18.5
15	16QAM	1	1	17.83			18.5
15	256QAM	1	1	17.85			18.5
Channel				3405.0	3405.0	3410.0	Tune-up limit
Frequency (MHz)				1700	1702.5	1705	MPR (dB)
10	QPSK	1	1	17.74	17.82	17.79	18.5
Channel				3395.0	3405.0	3415.0	Tune-up limit
Frequency (MHz)				1697.5	1702.5	1707.5	MPR (dB)
5	QPSK	1	1	17.92	17.90	17.88	15.5

n71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				1360.0	1360.0	1360.0	
Frequency (MHz)							
30	PI2 BPSK	1	1	23.05	23.07	22.88	
30	PI2 BPSK	1	80	22.99	22.80	22.99	24.0
30	PI2 BPSK	1	158	22.63	22.68	22.65	
30	PI2 BPSK	80	0	22.65	22.72	22.69	24.0
30	PI2 BPSK	80	40	22.65	22.74	22.66	24.0
30	PI2 BPSK	80	80	22.46	22.51	22.49	24.0
30	PI2 BPSK	160	0	22.66	22.68	22.62	24.0
30	QPSK	1	1	23.08	23.12	23.05	
30	QPSK	1	80	22.64	22.65	22.64	24.0
30	QPSK	1	158	22.68	22.72	22.67	
30	QPSK	80	0	22.66	22.73	22.71	24.0
30	QPSK	80	40	22.68	22.75	22.72	24.0
30	QPSK	80	80	22.38	22.48	22.39	24.0
30	QPSK	160	0	22.66	22.71	22.67	24.0
30	16QAM	1	1	22.99	23.02	22.95	24.0
30	16QAM	1	1	22.01	22.07	22.04	22.5
30	256QAM	1	1	20.07	20.14	20.09	20.5
Channel				1361.0	1361.0	1370.0	Tune-up limit
Frequency (MHz)				1360.0	1361.0	1370.0	MPR (dB)
25	QPSK	1	1	23.06	23.02	22.98	24.0
Channel				1346.0	1361.0	1376.0	Tune-up limit
Frequency (MHz)				673	680.5	688	MPR (dB)
20	QPSK	1	1	23.02	23.04	23.02	24.0
Channel				1341.0	1361.0	1381.0	Tune-up limit
Frequency (MHz)				670.5	680.5	690.5	MPR (dB)
15	QPSK	1	1	22.98	23.05	22.95	24.0
Channel				1326.0	1341.0	1356.0	Tune-up limit
Frequency (MHz)				668	680.5	693	MPR (dB)
10	QPSK	1	1	23.02	23.02	23.00	24.0
Channel				1331.0	1361.0	1391.0	Tune-up limit
Frequency (MHz)				665.5	680.5	695.5	MPR (dB)
5	QPSK	1	1	22.98	23.08	22.95	24.0

n71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				678	680.5	683	
Frequency (MHz)							
30	PI2 BPSK	1	1	20.12	20.11	19.96	
30	PI2 BPSK	1	80	20.18	20.18	20.08	21.0
30	PI2 BPSK	1	158	20.12	20.18	19.96	
30	PI2 BPSK	80	0	20.23	20.24	20.02	21.0
30	PI2 BPSK	80	40	20.18	20.14	19.97	21.0
30	PI2 BPSK	80	80	20.14	20.10	20.00	21.0
30	PI2 BPSK	160	0	20.22	20.20	20.07	21.0
30	QPSK	1	1	20.24	20.25	20.08	
30	QPSK	1	80	20.16	20.11	20.05	21.0
30	QPSK	1	158	20.18	20.18	20.03	
30	QPSK	80	0	20.10	20.15	20.04	21.0
30	QPSK	80	40	20.20	20.22	20.06	21.0
30	QPSK	80	80	20.18	20.17	20.01	21.0
30	QPSK	160	0	20.12	20.20	20.07	21.0
30	16QAM	1	1	20.05	20.18	20.05	21.0
30	16QAM	1	1	20.09	20.22	20.04	21.0
30	256QAM	1	1	19.39	19.42	19.30	20.5
Channel				1361.0	1361.0	1370.0	Tune-up limit
Frequency (MHz)				673	680.5	688	MPR (dB)
25	QPSK	1	1	20.23	20.10	20.07	21.0
Channel				1346.0	1361.0	1376.0	Tune-up limit
Frequency (MHz)				673	680.5	688	MPR (dB)
20	QPSK	1	1	20.16	20.19	20.06	21.0
Channel				1341.0	1361.0	1381.0	Tune-up limit
Frequency (MHz)				670.5	680.5	690.5	MPR (dB)
15	QPSK	1	1	20.10	20.24	20.03	21.0
Channel				1326.0	1341.0	1356.0	Tune-up limit
Frequency (MHz)				668	680.5	693	MPR (dB)
10	QPSK	1	1	20.15	20.17	19.93	21.0
Channel				1331.0	1361.0	1391.0	Tune-up limit
Frequency (MHz)				665.5	680.5	695.5	MPR (dB)
5	QPSK	1	1	20.21	20.12	20.06	21.0



n38_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				518004	518000	518996			
				2590.02	2595	2599.98			
40	Pl2 BPSK	1	1	22.83	22.92	22.88			
40	Pl2 BPSK	1	53	22.81	22.93	22.86	24.0	0.0	
40	Pl2 BPSK	1	104	22.78	22.88	22.58			
40	Pl2 BPSK	50	0	22.78	22.73	22.83	24.0	0.0	
40	Pl2 BPSK	50	28	22.77	22.79	22.77	24.0	0.0	
40	Pl2 BPSK	50	56	22.64	22.65	22.63			
40	Pl2 BPSK	100	0	22.74	22.75	22.68	24.0	0.0	
40	QPSK	1	1	22.98	22.95	22.91			
40	QPSK	1	53	22.88	22.93	22.90	24.0	0.0	
40	QPSK	1	104	22.80	22.73	22.69			
40	QPSK	50	0	22.74	22.75	22.71			
40	QPSK	50	28	22.78	22.80	22.76	24.0	0.0	
40	QPSK	50	56	22.68	22.70	22.63			
40	QPSK	100	0	22.74	22.75	22.70	24.0	0.0	
40	16QAM	1	1	22.81	22.85	22.82	24.0	0.0	
40	16QAM	1	1	22.67	22.77	22.76	24.0	0.0	
40	256QAM	1	1	20.58	20.64	20.58	22.0	2.0	
Channel									
Frequency (MHz)				517002	518000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	22.81	22.85	22.83	24.0	0.0	
Channel									
Frequency (MHz)				518000	518000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	22.83	22.87	22.82	24.0	0.0	
Channel									
Frequency (MHz)				517502	518000	521500	Tune-up limit (dBm)	MPR (dB)	
				2577.51	2595	2612.49			
15	QPSK	1	1	22.84	22.85	22.87	24.0	0.0	
Channel									
Frequency (MHz)				515004	518000	523996	Tune-up limit (dBm)	MPR (dB)	
				2574.02	2595	2614.98			
10	QPSK	1	1	22.85	22.90	22.84	24.0	0.0	

n38_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				518004	518000	518996			
				2590.02	2595	2599.98			
40	Pl2 BPSK	1	1	14.79	14.88	14.79			
40	Pl2 BPSK	1	53	14.84	14.92	14.90	16.0	0.0	
40	Pl2 BPSK	1	104	14.83	14.91	14.86			
40	Pl2 BPSK	50	0	14.74	14.78	14.69	16.0	0.0	
40	Pl2 BPSK	50	28	14.70	14.80	14.64	16.0	0.0	
40	Pl2 BPSK	50	56	14.85	14.90	14.84			
40	Pl2 BPSK	100	0	14.78	14.83	14.76	16.0	0.0	
40	QPSK	1	1	14.93	14.96	14.95			
40	QPSK	1	53	14.82	14.84	14.80	16.0	0.0	
40	QPSK	1	104	14.81	14.89	14.84			
40	QPSK	50	0	14.80	14.74	14.67			
40	QPSK	50	28	14.78	14.80	14.83	16.0	0.0	
40	QPSK	50	56	14.76	14.80	14.77			
40	QPSK	100	0	14.85	14.86	14.82	16.0	0.0	
40	16QAM	1	1	14.81	14.85	14.94	16.0	0.0	
40	16QAM	1	1	14.67	14.70	14.72	16.0	0.0	
40	256QAM	1	1	14.68	14.85	14.78	16.0	0.0	
Channel									
Frequency (MHz)				517002	518000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	14.78	14.81	14.74	16.0	0.0	
Channel									
Frequency (MHz)				518000	518000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	14.78	14.85	14.81	16.0	0.0	
Channel									
Frequency (MHz)				517502	518000	521500	Tune-up limit (dBm)	MPR (dB)	
				2577.51	2595	2612.49			
15	QPSK	1	1	14.78	14.74	14.76	16.0	0.0	
Channel									
Frequency (MHz)				515004	518000	523996	Tune-up limit (dBm)	MPR (dB)	
				2574.02	2595	2614.98			
10	QPSK	1	1	14.71	14.82	14.83	16.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				506002	518000	530000			
				2546.01	2592.99	2640			
100	Pl2 BPSK	1	1	22.71	22.81	22.80			
100	Pl2 BPSK	1	137	22.74	22.85	22.75	24.0	0.0	
100	Pl2 BPSK	1	271	22.58	22.73	22.58			
100	Pl2 BPSK	135	0	22.80	22.74	22.71	24.0	0.0	
100	Pl2 BPSK	135	69	22.67	22.80	22.61	24.0	0.0	
100	Pl2 BPSK	135	138	22.61	22.66	22.65			
100	Pl2 BPSK	270	0	22.62	22.65	22.46	24.0	0.0	
100	QPSK	1	1	22.71	22.97	22.85			
100	QPSK	1	137	22.66	22.88	22.85	24.0	0.0	
100	QPSK	1	271	22.64	22.73	22.53			
100	QPSK	135	0	22.57	22.72	22.58			
100	QPSK	135	69	22.66	22.63	22.73	24.0	0.0	
100	QPSK	135	138	22.54	22.61	22.58			
100	QPSK	270	0	22.53	22.57	22.43	23.5	0.5	
100	16QAM	1	1	22.78	22.86	22.78	24.0	0.0	
100	16QAM	1	1	22.69	22.84	22.79	24.0	0.0	
100	256QAM	1	1	22.81	22.88	22.80	24.0	0.0	
Channel									
Frequency (MHz)				506000	518000	528998	Tune-up limit (dBm)	MPR (dB)	
				2541	2592.99	2641.98			
90	QPSK	1	1	22.58	22.89	22.72	24.0	0.0	
Channel									
Frequency (MHz)				507204	518000	529998	Tune-up limit (dBm)	MPR (dB)	
				2536.02	2592.99	2649.99			
80	QPSK	1	1	22.70	22.92	22.87	24.0	0.0	
Channel									
Frequency (MHz)				506200	518000	531998	Tune-up limit (dBm)	MPR (dB)	
				2536	2592.99	2659.98			
70	QPSK	1	1	22.67	22.92	22.71	24.0	0.0	
Channel									
Frequency (MHz)				505200	518000	533996	Tune-up limit (dBm)	MPR (dB)	
				2531.01	2592.99	2665			
60	QPSK	1	1	22.65	22.95	22.82	24.0	0.0	
Channel									
Frequency (MHz)				504204	518000	535998	Tune-up limit (dBm)	MPR (dB)	
				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.53	22.79	22.61	24.0	0.0	
Channel									
Frequency (MHz)				503202	518000	537000	Tune-up limit (dBm)	MPR (dB)	
				2516.01	2592.99	2670			
40	QPSK	1	1	22.62	22.86	22.86	24.0	0.0	
Channel									
Frequency (MHz)				502200	518000	538000	Tune-up limit (dBm)	MPR (dB)	
				2511	2592.99	2674.98			
30	QPSK	1	1	22.55	22.86	22.70	24.0	0.0	
Channel									
Frequency (MHz)				501204	518000	539998	Tune-up limit (dBm)	MPR (dB)	
				2506.02	2592.99	2679.99			
20	QPSK	1	1	22.58	22.85	22.71	24.0	0.0	
Channel									
Frequency (MHz)				500700	518000	538498	Tune-up limit (dBm)	MPR (dB)	
				2503.5	2592.99	2683.48			
15	QPSK	1	1	22.56	22.91	22.84	24.0	0.0	
Channel									
Frequency (MHz)				500202	518000	537000	Tune-up limit (dBm)	MPR (dB)	
				2501.01	2592.99	2685			
10	QPSK	1	1	22.67	22.89	22.89	24.0	0.0	



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BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.		
Channel				506202	518998	529200		
Frequency (MHz)				2546.01	2592.99	2550		
100	PQ2 BPSK	1	1	25.68	25.82	25.72		
100	PQ2 BPSK	1	137	25.96	25.90	25.80		
100	PQ2 BPSK	1	271	25.94	25.77	25.73	27.0	0.0
100	PQ2 BPSK	135	0	25.71	25.69	25.63	26.5	0.5
100	PQ2 BPSK	135	69	25.73	25.70	25.71	27.0	0.0
100	PQ2 BPSK	135	138	25.70	25.68	25.60	26.5	0.5
100	PQ2 BPSK	270	0	25.70	25.25	25.52		
100	QPSK	1	1	25.70	25.01	25.53		
100	QPSK	1	137	25.75	25.92	25.87	27.0	0.0
100	QPSK	1	271	25.96	25.81	25.73		
100	QPSK	135	0	25.62	25.68	25.60		
100	QPSK	135	69	25.71	25.70	25.71	27.0	0.0
100	QPSK	135	138	25.73	25.60	25.55		
100	QPSK	270	0	25.68	25.70	25.63	26.5	0.5
100	16QAM	1	1	25.78	25.86	25.83	27.0	0.0
100	64QAM	1	1	24.85	24.52	24.62	26.0	1.0
100	256QAM	1	1	22.71	22.84	22.81	24.0	3.0
Channel				508200	518998	528996	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2544	2592.99	2544.98		
80	QPSK	1	1	25.80	25.83	25.83	27.0	0.0
Channel				507204	518998	529996	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2549.99		
80	QPSK	1	1	25.93	25.93	25.86	27.0	0.0
Channel				506202	518998	531000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2585		
70	QPSK	1	1	25.97	25.92	25.90	27.0	0.0
Channel				505200	518998	531996	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2524	2592.99	2559.99		
60	QPSK	1	1	25.91	25.97	25.85	27.0	0.0
Channel				504204	518998	532996	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2511.02	2592.99	2584.99		
50	QPSK	1	1	25.93	25.92	25.84	27.0	0.0
Channel				503202	518998	534000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2570		
40	QPSK	1	1	25.90	25.96	25.87	27.0	0.0
Channel				502200	518998	535996	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2511	2592.99	2574.98		
30	QPSK	1	1	25.85	25.96	25.83	27.0	0.0
Channel				501204	518998	536996	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2508.02	2592.99	2579.99		
20	QPSK	1	1	25.92	25.95	25.85	27.0	0.0
Channel				500200	518998	538496	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2503.5	2592.99	2582.48		
15	QPSK	1	1	25.83	25.81	25.84	27.0	0.0
Channel				499202	518998	539100	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2585		
10	QPSK	1	1	25.97	25.95	25.86	27.0	0.0





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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	14.37	14.26	14.23				
100	PI2 BPSK	1	137	14.26	14.21	14.23				
100	PI2 BPSK	1	271	14.22	14.31	14.26	16.0	0.0		
100	PI2 BPSK	135	9	14.33	14.31	14.19	16.0	0.0		
100	PI2 BPSK	135	69	14.31	14.28	14.20	16.0	0.0		
100	PI2 BPSK	135	138	14.26	14.27	14.23	16.0	0.0		
100	PI2 BPSK	270	0	14.14	14.22	14.27				
100	QPSK	1	1	14.33	14.47	14.41				
100	QPSK	1	137	14.31	14.36	14.30	16.0	0.0		
100	QPSK	1	271	14.23	14.34	14.34				
100	QPSK	135	0	14.17	14.17	14.17				
100	QPSK	135	69	14.33	14.40	14.34	16.0	0.0		
100	QPSK	135	138	14.12	14.17	14.15				
100	QPSK	270	0	14.33	14.37	14.36	16.0	0.0		
100	16QAM	1	1	14.34	14.43	14.39	16.0	0.0		
100	64QAM	1	1	14.16	14.31	14.18	16.0	0.0		
100	256QAM	1	1	14.08	14.18	14.08	16.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.26	14.29	14.29	16.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.27	14.32	14.22	16.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.27	14.32	14.28	16.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.29	14.35	14.29	16.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.31	14.33	14.23	16.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.24	14.39	14.23	16.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.24	14.30	14.32	16.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.30	14.37	14.24	16.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.25	14.25	14.25	16.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.27	14.28	14.24	16.0	0.0		

FCC_n41 HPUE_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	14.37	14.26	14.30				
100	PI2 BPSK	1	137	14.26	14.21	14.23	16.0	0.0		
100	PI2 BPSK	1	271	14.22	14.31	14.26				
100	PI2 BPSK	135	9	14.33	14.31	14.19	16.0	0.0		
100	PI2 BPSK	135	69	14.31	14.28	14.20	16.0	0.0		
100	PI2 BPSK	135	138	14.26	14.27	14.23	16.0	0.0		
100	PI2 BPSK	270	0	14.14	14.22	14.27				
100	QPSK	1	1	14.33	14.47	14.41				
100	QPSK	1	137	14.31	14.36	14.30	16.0	0.0		
100	QPSK	1	271	14.23	14.34	14.34				
100	QPSK	135	0	14.17	14.17	14.17				
100	QPSK	135	69	14.33	14.40	14.34	16.0	0.0		
100	QPSK	135	138	14.12	14.17	14.15				
100	QPSK	270	0	14.33	14.37	14.36	16.0	0.0		
100	16QAM	1	1	14.34	14.43	14.39	16.0	0.0		
100	64QAM	1	1	14.16	14.31	14.18	16.0	0.0		
100	256QAM	1	1	14.08	14.18	14.08	16.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.26	14.29	14.29	16.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.27	14.32	14.22	16.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.27	14.32	14.28	16.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.29	14.35	14.29	16.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.31	14.33	14.23	16.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.24	14.39	14.23	16.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.24	14.30	14.32	16.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.30	14.37	14.24	16.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.25	14.25	14.25	16.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.27	14.28	14.24	16.0	0.0		

FCC_n41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	22.41	22.60	22.75				
100	PI2 BPSK	1	137	22.47	22.57	22.71	24.0	0.0		
100	PI2 BPSK	1	271	22.43	22.58	22.72				
100	PI2 BPSK	135	9	22.43	22.55	22.74	24.0	0.0		
100	PI2 BPSK	135	69	22.47	22.58	22.71	24.0	0.0		
100	PI2 BPSK	135	138	22.49	22.58	22.76	24.0	0.0		
100	PI2 BPSK	270	0	22.47	22.58	22.70				
100	QPSK	1	1	22.51	22.63	22.78				
100	QPSK	1	137	22.49	22.61	22.71	24.0	0.0		
100	QPSK	1	271	22.42	22.59	22.76				
100	QPSK	135	0	22.48	22.61	22.71				
100	QPSK	135	69	22.50	22.60	22.71	24.0	0.0		
100	QPSK	135	138	22.42	22.54	22.75				
100	QPSK	270	0	22.48	22.56	22.72	24.0	0.0		
100	16QAM	1	1	22.44	22.60	22.70	24.0	0.0		
100	64QAM	1	1	22.66	22.71	22.72	23.5	0.5		
100	256QAM	1	1	20.69	20.76	20.84	21.5	2.5		
Channel										
Frequency (MHz)										
80	QPSK	1	1	22.42	22.57	22.73	24.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	22.45	22.60	22.67	24.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	22.49	22.60	22.76	24.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	22.44	22.55	22.71	24.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	22.48	22.59	22.77	24.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	22.41	22.54	22.69	24.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	22.44	22.57	22.74	24.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	22.42	22.54	22.74	24.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	22.42	22.59	22.77	24.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	22.44	22.60	22.76	24.0	0.0		



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				502622	518598	528030		
Frequency (MHz)				2548.01	2592.99	2640		
100	PI2 BPSK	1	1	24.46	24.54	24.57		
100	PI2 BPSK	1	137	24.47	24.65	24.71	26.0	0.0
100	PI2 BPSK	1	271	24.38	24.56	24.56		
100	PI2 BPSK	136	0	24.32	24.52	24.53	25.5	0.0
100	PI2 BPSK	136	69	24.45	24.61	24.72	26.0	0.0
100	PI2 BPSK	136	138	24.43	24.55	24.58		
100	PI2 BPSK	270	0	24.36	24.48	24.62	25.5	0.5
100	QPSK	1	1	23.51	23.98	26.74		
100	QPSK	1	137	24.47	24.55	24.60	26.0	0.0
100	QPSK	1	271	24.40	24.58	24.58		
100	QPSK	136	0	23.96	23.82	23.79	26.0	0.0
100	QPSK	136	69	24.46	24.41	24.67		
100	QPSK	136	138	23.94	24.12	24.15		
100	QPSK	270	0	23.85	23.91	23.97	25.0	1.0
100	16QAM	1	1	22.73	23.83	23.82	25.0	1.0
100	16QAM	1	1	22.66	22.71	22.72	23.5	2.5
100	256QAM	1	1	20.69	20.76	20.84	21.5	4.5
Channel								
Frequency (MHz)				508200	518598	528998		
Frequency (MHz)				2241	2592.99	2644.98		
80	QPSK	1	1	24.39	24.52	24.73	23.0	0.0
Channel								
Frequency (MHz)				507204	518598	529998		
Frequency (MHz)				2536.02	2592.99	2648.98		
80	QPSK	1	1	24.45	24.52	24.69	26.0	0.0
Channel								
Frequency (MHz)				502202	518598	531000		
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	24.42	24.53	24.59	26.0	0.0
Channel								
Frequency (MHz)				505200	518598	531998		
Frequency (MHz)				2526	2592.99	2658.98		
60	QPSK	1	1	24.37	24.46	24.55	26.0	0.0
Channel								
Frequency (MHz)				504204	518598	532998		
Frequency (MHz)				2521.02	2592.99	2664.98		
50	QPSK	1	1	24.33	24.49	24.69	23.0	0.0
Channel								
Frequency (MHz)				503202	518598	534000		
Frequency (MHz)				2518.01	2592.99	2670		
40	QPSK	1	1	24.45	24.62	24.60	26.0	0.0
Channel								
Frequency (MHz)				502200	518598	534998		
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	24.33	24.56	24.69	26.0	0.0
Channel								
Frequency (MHz)				501204	518598	535998		
Frequency (MHz)				2508.02	2592.99	2679.98		
20	QPSK	1	1	24.44	24.49	24.68	23.0	0.0
Channel								
Frequency (MHz)				500700	518598	536998		
Frequency (MHz)				2503.5	2592.99	2682.48		
15	QPSK	1	1	24.49	24.59	24.58	23.0	0.0
Channel								
Frequency (MHz)				500202	518598	537000		
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	24.35	24.62	24.62	26.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				502622	518598	528030		
Frequency (MHz)				2548.01	2592.99	2640		
100	PI2 BPSK	1	1	19.21	19.23	19.12		
100	PI2 BPSK	1	137	19.31	19.35	19.20	20.5	0.0
100	PI2 BPSK	1	271	19.25	19.27	19.55		
100	PI2 BPSK	136	0	19.20	19.27	19.16	20.5	0.0
100	PI2 BPSK	136	69	19.22	19.29	19.19	20.5	0.0
100	PI2 BPSK	136	138	19.20	19.26	19.20		
100	PI2 BPSK	270	0	19.19	19.32	18.63	20.5	0.0
100	QPSK	1	1	19.33	19.37	19.33		
100	QPSK	1	137	19.30	19.34	19.24	20.5	0.0
100	QPSK	1	271	19.25	19.03	18.61		
100	QPSK	136	0	19.16	19.26	19.14		
100	QPSK	136	69	19.27	19.32	19.25	20.5	0.0
100	QPSK	136	138	19.22	18.99	18.58		
100	QPSK	270	0	19.22	19.27	19.26	20.5	0.0
100	16QAM	1	1	19.21	19.32	19.21	20.5	0.0
100	16QAM	1	1	19.22	19.32	19.16	20.5	0.0
100	256QAM	1	1	19.24	18.88	18.56	20.5	0.0
Channel								
Frequency (MHz)				508200	518598	528998		
Frequency (MHz)				2241	2592.99	2644.98		
80	QPSK	1	1	19.18	19.12	19.11	20.5	0.0
Channel								
Frequency (MHz)				507204	518598	529998		
Frequency (MHz)				2536.02	2592.99	2648.98		
80	QPSK	1	1	19.17	19.12	19.12	20.5	0.0
Channel								
Frequency (MHz)				502202	518598	531000		
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	19.14	19.16	19.10	20.5	0.0
Channel								
Frequency (MHz)				505200	518598	531998		
Frequency (MHz)				2526	2592.99	2658.98		
60	QPSK	1	1	19.18	19.19	19.09	20.5	0.0
Channel								
Frequency (MHz)				504204	518598	532998		
Frequency (MHz)				2521.02	2592.99	2664.98		
50	QPSK	1	1	19.21	19.06	19.18	20.5	0.0
Channel								
Frequency (MHz)				503202	518598	534000		
Frequency (MHz)				2518.01	2592.99	2670		
40	QPSK	1	1	19.16	19.09	19.14	20.5	0.0
Channel								
Frequency (MHz)				502200	518598	534998		
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	19.13	19.14	19.18	20.5	0.0
Channel								
Frequency (MHz)				501204	518598	535998		
Frequency (MHz)				2508.02	2592.99	2679.98		
20	QPSK	1	1	19.07	19.06	19.14	20.5	0.0
Channel								
Frequency (MHz)				500700	518598	536998		
Frequency (MHz)				2503.5	2592.99	2682.48		
15	QPSK	1	1	19.13	19.20	19.19	20.5	0.0
Channel								
Frequency (MHz)				500202	518598	537000		
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	19.19	19.18	19.10	20.5	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				502622	518598	528030		
Frequency (MHz)				2548.01	2592.99	2640		
100	PI2 BPSK	1	1	19.21	19.23	19.12		
100	PI2 BPSK	1	137	19.31	19.35	19.20	20.5	0.0
100	PI2 BPSK	1	271	19.25	19.27	19.55		
100	PI2 BPSK	136	0	19.20	19.27	19.16	20.5	0.0
100	PI2 BPSK	136	69	19.22	19.29	19.19	20.5	0.0
100	PI2 BPSK	136	138	19.20	19.26	19.20		
100	PI2 BPSK	270	0	19.19	19.32	18.63	20.5	0.0
100	QPSK	1	1	19.33	19.37	19.33		
100	QPSK	1	137	19.30	19.34	19.24	20.5	0.0
100	QPSK	1	271	19.25	19.03	18.61		
100	QPSK	136	0	19.16	19.26	19.14		
100	QPSK	136	69	19.27	19.32	19.25	20.5	0.0
100	QPSK	136	138	19.22	18.99	18.58		
100	QPSK	270	0	19.22	19.27	19.26	20.5	0.0
100	16QAM	1	1	19.21	19.32	19.21	20.5	0.0
100	16QAM	1	1	19.22	19.32	19.16	20.5	0.0
100	256QAM	1	1	19.24	18.88	18.56	20.5	0.0
Channel								
Frequency (MHz)				508200	518598	528998		
Frequency (MHz)				2241	2592.99	2644.98		
80	QPSK	1	1	19.18	19.12	19.11	20.5	0.0
Channel								
Frequency (MHz)				507204	518598	529998		
Frequency (MHz)				2536.02	2592.99	2648.98		
80	QPSK	1	1	19.17	19.12	19.12	20.5	0.0
Channel								
Frequency (MHz)				502202	518598	531000		
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	19.14	19.16	19.10	20.5	0.0
Channel								
Frequency (MHz)				505200	518598	531998		
Frequency (MHz)				2526	2592.99	2658.98		
60	QPSK	1	1	19.18	19.19	19.09	20.5	0.0
Channel								
Frequency (MHz)				504204	518598	532998		
Frequency (MHz)				2521.02	2592.99	2664.98		
50	QPSK	1	1	19.21	19.06	19.18	20.5	0.0
Channel								
Frequency (MHz)				503202	518598	534000		
Frequency (MHz)				2518.01	2592.99	2670		
40	QPSK	1	1	19.16	19.09	19.14	20.5	0.0
Channel								
Frequency (MHz)				502200	518598	534998		
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	19.13	19.14	19.18	20.5	0.0
Channel								
Frequency (MHz)				501204	518598	535998		
Frequency (MHz)				2508.02	2592.99	2679.98		
20	QPSK	1	1	19.07	19.06	19.14	20.5	0.0
Channel								
Frequency (MHz)				500700				



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				506202	518598	530990			
Frequency (MHz)				2546.01	2592.99	2650			
100	PI2 BPSK	1	1	21.69	22.00	21.71			
100	PI2 BPSK	1	137	21.66	22.00	21.60	23.0	0.0	
100	PI2 BPSK	1	271	21.71	21.98	21.69			
100	PI2 BPSK	135	9	21.66	22.04	21.67	23.0	0.0	
100	PI2 BPSK	135	69	21.77	22.03	21.59	23.0	0.0	
100	PI2 BPSK	135	138	21.67	21.98	21.62			
100	PI2 BPSK	270	0	21.72	22.01	21.66	23.0	0.0	
100	QPSK	1	1	21.75	22.07	21.74			
100	QPSK	1	137	21.74	22.02	21.62	23.0	0.0	
100	QPSK	1	271	21.76	22.02	21.71			
100	QPSK	135	0	21.66	21.98	21.59			
100	QPSK	135	69	21.72	22.02	21.69	23.0	0.0	
100	QPSK	135	138	21.68	21.98	21.62			
100	QPSK	270	0	21.76	21.98	21.68	23.0	0.0	
100	16QAM	1	1	21.64	21.87	21.73	23.0	0.0	
100	64QAM	1	1	21.38	21.43	21.21	22.5	0.5	
100	256QAM	1	1	20.33	20.41	20.15	21.5	1.5	
Channel				506200	518598	530996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	21.72	22.03	21.61	23.0	0.0	
Channel				507204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2636.02	2662.99	2649.99			
80	QPSK	1	1	21.73	21.93	21.70	23.0	0.0	
Channel				2632.02	518598	531000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2631.01	2692.99	2655			
70	QPSK	1	1	21.78	21.96	21.59	23.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2521.02	2592.99	2604.99			
60	QPSK	1	1	21.75	21.96	21.62	23.0	0.0	
Channel				504204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2521.02	2592.99	2604.99			
50	QPSK	1	1	21.71	22.00	21.73	23.0	0.0	
Channel				503202	518598	534000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2616.01	2662.99	2670			
40	QPSK	1	1	21.64	22.01	21.72	23.0	0.0	
Channel				502200	518598	535996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2611	2692.99	2674.98			
30	QPSK	1	1	21.69	21.98	21.62	23.0	0.0	
Channel				501204	518598	535998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2606.02	2692.99	2679.99			
20	QPSK	1	1	21.74	21.95	21.61	23.0	0.0	
Channel				500700	518598	536496	Tune-up limit (dB)	MPR	
Frequency (MHz)				2503.5	2662.99	2682.48			
15	QPSK	1	1	21.74	22.04	21.59	23.0	0.0	
Channel				510202	518598	537000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2601.01	2662.99	2685			
10	QPSK	1	1	21.68	22.03	21.72	23.0	0.0	

FCC_n41 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				506202	518598	530990			
Frequency (MHz)				2546.01	2592.99	2650			
100	PI2 BPSK	1	1	23.78	23.90	23.60			
100	PI2 BPSK	1	137	23.64	23.85	23.65	25.0	0.0	
100	PI2 BPSK	1	271	23.71	23.89	23.62			
100	PI2 BPSK	135	9	23.47	23.56	23.31	24.5	0.5	
100	PI2 BPSK	135	69	23.69	23.87	23.65	25.0	0.0	
100	PI2 BPSK	135	138	23.35	23.60	23.27			
100	PI2 BPSK	270	0	23.45	23.60	23.22	24.5	0.5	
100	QPSK	1	1	23.70	23.99	23.69			
100	QPSK	1	137	23.65	23.89	23.51	25.0	0.0	
100	QPSK	1	271	23.70	23.88	23.59			
100	QPSK	135	0	22.68	22.60	22.43			
100	QPSK	135	69	21.60	23.95	23.01	25.0	0.0	
100	QPSK	135	138	22.70	22.88	22.37			
100	QPSK	270	0	22.69	22.94	22.52	24.0	1.0	
100	16QAM	1	1	22.66	22.97	22.64	24.0	1.0	
100	64QAM	1	1	21.38	21.43	21.21	22.5	2.5	
100	256QAM	1	1	20.33	20.41	20.15	21.5	3.5	
Channel				506200	518598	530996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	23.65	23.83	23.52	23.0	0.0	
Channel				507204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2636.02	2662.99	2649.99			
80	QPSK	1	1	23.67	23.83	23.50	25.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2631.01	2692.99	2655			
70	QPSK	1	1	23.62	23.87	23.59	25.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2631.01	2692.99	2655			
60	QPSK	1	1	23.65	23.90	23.54	25.0	0.0	
Channel				504204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2521.02	2592.99	2604.99			
50	QPSK	1	1	23.65	23.81	22.47	23.0	0.0	
Channel				503202	518598	534000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2616.01	2662.99	2670			
40	QPSK	1	1	23.65	23.88	23.56	25.0	0.0	
Channel				502200	518598	535996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2611	2692.99	2674.98			
30	QPSK	1	1	23.71	23.91	23.58	25.0	0.0	
Channel				501204	518598	535998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2606.02	2692.99	2679.99			
20	QPSK	1	1	23.69	23.93	23.53	23.0	0.0	
Channel				500700	518598	536496	Tune-up limit (dB)	MPR	
Frequency (MHz)				2503.5	2662.99	2682.48			
15	QPSK	1	1	23.66	23.84	23.49	25.0	0.0	
Channel				510202	518598	537000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2601.01	2662.99	2685			
10	QPSK	1	1	23.63	23.79	23.56	25.0	0.0	



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63600	64166	64532		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	17.08	17.03	17.09	18.0	0.0
40	Pl2 BPSK	1	53	17.16	17.24	17.15	18.0	0.0
40	Pl2 BPSK	1	104	16.97	17.15	17.04	18.0	0.0
40	Pl2 BPSK	50	0	16.93	16.96	17.03	18.0	0.0
40	Pl2 BPSK	50	28	17.01	16.90	16.96	18.0	0.0
40	Pl2 BPSK	50	56	17.14	17.21	17.10	18.0	0.0
40	Pl2 BPSK	100	0	16.92	17.14	16.99	18.0	0.0
40	QPSK	1	1	17.16	17.20	17.22	18.0	0.0
40	QPSK	1	53	17.12	17.13	17.17	18.0	0.0
40	QPSK	1	104	17.06	17.25	17.14	18.0	0.0
40	QPSK	50	0	17.11	17.17	17.08	18.0	0.0
40	QPSK	50	28	17.15	17.16	17.13	18.0	0.0
40	QPSK	50	56	17.02	17.17	17.09	18.0	0.0
40	QPSK	100	0	17.11	17.13	17.12	18.0	0.0
40	16QAM	1	1	17.10	17.20	17.20	18.0	0.0
40	64QAM	1	1	17.14	17.06	17.06	18.0	0.0
40	256QAM	1	1	17.07	17.16	17.09	18.0	0.0
Channel								
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3674.99	19.0	0.0
30	QPSK	1	1	17.11	17.16	16.97	19.0	0.0
Channel								
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)
				3660.01	3624.99	3690	18.0	0.0
20	QPSK	1	1	17.12	17.11	17.11	18.0	0.0
Channel								
Frequency (MHz)				635003	641666	645332	Tune-up limit (dBm)	MPR (dB)
				3565	3624.99	3694.98	18.0	0.0
10	QPSK	1	1	17.04	17.08	17.01	18.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63800	641666	645332		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	22.71	22.53	22.30	24.0	0.0
40	Pl2 BPSK	1	53	22.54	22.51	22.30	24.0	0.0
40	Pl2 BPSK	1	104	22.27	22.26	22.29	24.0	0.0
40	Pl2 BPSK	50	0	22.07	22.12	22.09	23.5	0.5
40	Pl2 BPSK	50	28	22.50	22.51	22.28	24.0	0.0
40	Pl2 BPSK	50	56	21.98	22.07	21.99	23.5	0.5
40	Pl2 BPSK	100	0	21.71	21.83	21.72	24.0	0.0
40	QPSK	1	1	22.93	22.95	22.94	24.0	0.0
40	QPSK	1	53	22.44	22.34	22.28	24.0	0.0
40	QPSK	1	104	22.31	22.17	22.16	24.0	0.0
40	QPSK	50	0	21.16	21.23	21.20	24.0	0.0
40	QPSK	50	28	22.04	22.12	22.11	24.0	0.0
40	QPSK	50	56	20.81	20.88	20.82	24.0	0.0
40	QPSK	100	0	21.45	21.40	21.35	23.0	1.0
40	16QAM	1	1	20.99	20.25	20.93	23.0	1.0
40	64QAM	1	1	18.71	18.92	18.92	21.5	2.5
40	256QAM	1	1	16.87	16.83	17.12	19.5	4.5
Channel								
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3674.99	19.0	0.0
30	QPSK	1	1	22.68	22.47	22.32	24.0	0.0
Channel								
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)
				3660.01	3624.99	3690	18.0	0.0
20	QPSK	1	1	22.67	22.46	22.25	24.0	0.0
Channel								
Frequency (MHz)				635003	641666	645332	Tune-up limit (dBm)	MPR (dB)
				3565	3624.99	3694.98	18.0	0.0
10	QPSK	1	1	22.68	22.49	22.26	24.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63600	641666	645332		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	23.00	23.00	22.99	24.0	0.0
40	Pl2 BPSK	1	53	23.03	23.05	23.04	24.0	0.0
40	Pl2 BPSK	1	104	23.00	23.02	23.02	24.0	0.0
40	Pl2 BPSK	50	0	22.83	22.91	22.80	23.5	0.5
40	Pl2 BPSK	50	28	22.83	22.89	22.80	24.0	0.0
40	Pl2 BPSK	50	56	22.83	22.90	22.82	23.5	0.5
40	Pl2 BPSK	100	0	22.81	22.87	22.84	24.0	0.0
40	QPSK	1	1	23.08	23.10	23.05	24.0	0.0
40	QPSK	1	53	22.98	23.02	22.93	24.0	0.0
40	QPSK	1	104	23.01	23.09	23.03	24.0	0.0
40	QPSK	50	0	22.84	22.90	22.82	24.0	0.0
40	QPSK	50	28	22.85	22.93	22.86	24.0	0.0
40	QPSK	50	56	22.74	22.83	22.78	24.0	0.0
40	QPSK	100	0	22.86	22.90	22.86	24.0	0.0
40	16QAM	1	1	20.93	21.03	20.94	23.0	1.0
40	64QAM	1	1	18.44	18.52	18.50	21.5	2.5
40	256QAM	1	1	17.48	17.55	17.52	19.5	4.5
Channel								
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3674.99	19.0	0.0
30	QPSK	1	1	22.99	23.04	23.01	24.0	0.0
Channel								
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)
				3660.01	3624.99	3690	18.0	0.0
20	QPSK	1	1	23.03	23.08	22.99	24.0	0.0
Channel								
Frequency (MHz)				635003	641666	645332	Tune-up limit (dBm)	MPR (dB)
				3565	3624.99	3694.98	18.0	0.0
10	QPSK	1	1	23.00	23.07	23.01	24.0	0.0



Part96_n48_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				636000	641666	645332			
Frequency (MHz)				3570	3624.99	3679.98			
40	PI2 BPSK	1	1	16.03	16.10	15.94			
40	PI2 BPSK	1	53	15.81	16.10	15.84	17.5	0.0	
40	PI2 BPSK	1	104	15.96	16.06	15.89			
40	PI2 BPSK	50	0	15.97	16.15	16.02	17.5	0.0	
40	PI2 BPSK	50	28	16.01	16.02	15.99	17.5	0.0	
40	PI2 BPSK	50	56	15.94	16.09	15.92			
40	PI2 BPSK	100	0	15.94	16.00	15.85	17.5	0.0	
40	QPSK	1	1	16.10	16.23	15.95			
40	QPSK	1	63	16.08	16.18	15.81	17.5	0.0	
40	QPSK	1	104	15.83	15.97	15.84			
40	QPSK	50	0	16.10	16.07	15.88			
40	QPSK	50	28	16.11	16.15	15.93	17.5	0.0	
40	QPSK	50	56	15.81	15.85	15.80			
40	QPSK	100	0	16.01	16.10	15.81	17.5	0.0	
40	16QAM	1	1	16.05	16.15	15.79	17.5	0.0	
40	64QAM	1	1	15.94	16.08	15.77	17.5	0.0	
40	256QAM	1	1	15.81	15.86	15.81	17.5	0.0	
Channel				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3655.02	3624.99	3694.99			
30	QPSK	1	1	15.95	15.97	15.82	17.5	0.0	
Channel				637234	641666	646000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3660.01	3624.99	3690			
20	QPSK	1	1	16.08	16.03	15.77	17.5	0.0	
Channel				637000	641666	646332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3655	3624.99	3694.98			
10	QPSK	1	1	15.96	16.00	15.73	17.5	0.0	

Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				633332	633332	633332			
Frequency (MHz)				3499.98	3499.98	3499.98			
100	PI2 BPSK	1	1	17.47					
100	PI2 BPSK	1	137	17.56			18.5	0.0	
100	PI2 BPSK	1	271	17.53					
100	PI2 BPSK	135	0	17.49			18.5	0.0	
100	PI2 BPSK	135	69	17.54			18.5	0.0	
100	PI2 BPSK	135	138	17.54					
100	PI2 BPSK	270	0	17.56			18.5	0.0	
100	QPSK	1	1	17.75					
100	QPSK	1	137	17.53			18.5	0.0	
100	QPSK	1	271	17.51					
100	QPSK	135	0	17.66					
100	QPSK	135	69	17.69			18.5	0.0	
100	QPSK	135	138	17.54					
100	QPSK	270	0	17.66			18.5	0.0	
100	16QAM	1	1	17.60			18.5	0.0	
100	64QAM	1	1	17.54			18.5	0.0	
100	256QAM	1	1	17.56			18.0	0.5	
Channel				633000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3495	3499.98	3504.98			
90	QPSK	1	1	17.55	17.53	17.52	18.5	0.0	
Channel				632668	633332	634000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3490.02	3499.98	3510			
80	QPSK	1	1	17.58	17.52	17.52	18.5	0.0	
Channel				632334	633332	634332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3485.01	3499.98	3514.98			
70	QPSK	1	1	17.56	17.50	17.40	18.5	0.0	
Channel				632000	633332	634666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3480	3499.98	3519.99			
60	QPSK	1	1	17.51	17.54	17.63	18.5	0.0	
Channel				631668	633332	635000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3475.02	3499.98	3525			
50	QPSK	1	1	17.64	17.57	17.60	18.5	0.0	
Channel				631334	633332	635332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3470.01	3499.98	3529.98			
40	QPSK	1	1	17.59	17.63	17.58	18.5	0.0	
Channel				631000	633332	635666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3465	3499.98	3534.99			
30	QPSK	1	1	17.53	17.61	17.56	18.5	0.0	
Channel				630668	633332	636000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3460.02	3499.98	3540			
20	QPSK	1	1	17.62	17.54	17.61	18.5	0.0	
Channel				630300	633332	636366	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455.05	3499.98	3542.49			
15	QPSK	1	1	17.61	17.62	17.62	18.5	0.0	
Channel				630000	633332	636666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455.01	3499.98	3544.98			
10	QPSK	1	1	17.59	17.54	17.61	18.5	0.0	



### Part270\_n77\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	17.46	17.66	17.56		
100	Pl2 BPSK	1	137	17.67	17.70	17.62	18.5	0.0
100	Pl2 BPSK	1	271	17.60	17.64	17.64		
100	Pl2 BPSK	135	0	17.52	17.63	17.63	18.5	0.0
100	Pl2 BPSK	135	69	17.58	17.59	17.55	18.5	0.0
100	Pl2 BPSK	135	138	17.56	17.77	17.75		
100	Pl2 BPSK	270	0	17.59	17.69	17.62	18.5	0.0
100	QPSK	1	1	17.70	17.80	17.75		
100	QPSK	1	137	17.56	17.60	17.63	18.5	0.0
100	QPSK	1	271	17.67	17.65	17.69		
100	QPSK	135	0	17.53	17.58	17.53		
100	QPSK	135	69	17.77	17.77	17.72	18.5	0.0
100	QPSK	135	138	17.59	17.72	17.64		
100	QPSK	270	0	17.66	17.75	17.73	18.5	0.0
100	16QAM	1	1	17.67	17.71	17.65	18.5	0.0
100	64QAM	1	1	17.63	17.57	17.54	18.5	0.0
100	256QAM	1	1	17.55	17.68	17.58	18.0	0.5
Channel								
Frequency (MHz)								
648668 656000 662332								
80	QPSK	1	1	17.69	17.63	17.62	18.5	0.0
Channel								
Frequency (MHz)								
648334 656000 663666								
80	QPSK	1	1	17.63	17.74	17.69	18.5	0.0
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	17.60	17.63	17.60	18.5	0.0
Channel								
Frequency (MHz)								
648668 656000 663666								
60	QPSK	1	1	17.63	17.64	17.66	18.5	0.0
Channel								
Frequency (MHz)								
648334 656000 663666								
50	QPSK	1	1	17.65	17.68	17.68	18.5	0.0
Channel								
Frequency (MHz)								
648000 656000 664000								
40	QPSK	1	1	17.65	17.67	17.66	18.5	0.0
Channel								
Frequency (MHz)								
647668 656000 664332								
30	QPSK	1	1	17.62	17.63	17.66	18.5	0.0
Channel								
Frequency (MHz)								
647334 656000 664666								
20	QPSK	1	1	17.57	17.75	17.69	18.5	0.0
Channel								
Frequency (MHz)								
647168 656000 664832								
15	QPSK	1	1	17.65	17.74	17.64	18.5	0.0
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	17.65	17.74	17.58	18.5	0.0

### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1		17.47			
100	Pl2 BPSK	1	137		17.56		18.5	0.0
100	Pl2 BPSK	1	271		17.53			
100	Pl2 BPSK	135	0		17.49		18.5	0.0
100	Pl2 BPSK	135	69		17.54		18.5	0.0
100	Pl2 BPSK	135	138		17.54			
100	Pl2 BPSK	270	0		17.56		18.5	0.0
100	QPSK	1	1		17.75			
100	QPSK	1	137		17.53		18.5	0.0
100	QPSK	1	271		17.51			
100	QPSK	135	0		17.66			
100	QPSK	135	69		17.66		18.5	0.0
100	QPSK	135	138		17.54			
100	QPSK	270	0		17.65		18.5	0.0
100	16QAM	1	1		17.60		18.5	0.0
100	64QAM	1	1		17.54		18.5	0.0
100	256QAM	1	1		17.56		18.5	0.0
Channel								
Frequency (MHz)								
633000 633332 633666								
80	QPSK	1	1	3495	3499.98	3504.98	18.5	0.0
Channel								
Frequency (MHz)								
632968 633332 634000								
80	QPSK	1	1	3490.02	3499.98	3510	18.5	0.0
Channel								
Frequency (MHz)								
3485.01 3489.98 3514.98								
70	QPSK	1	1	17.55	17.58	17.60	18.5	0.0
Channel								
Frequency (MHz)								
632000 633332 634666								
60	QPSK	1	1	17.51	17.54	17.63	18.5	0.0
Channel								
Frequency (MHz)								
631868 633332 635000								
50	QPSK	1	1	17.54	17.57	17.60	18.5	0.0
Channel								
Frequency (MHz)								
631334 633332 635332								
40	QPSK	1	1	3470.01	3489.98	3529.98	18.5	0.0
Channel								
Frequency (MHz)								
631000 633332 635666								
30	QPSK	1	1	17.53	17.61	17.55	18.5	0.0
Channel								
Frequency (MHz)								
630668 633332 636000								
20	QPSK	1	1	3465.02	3489.98	3534.98	18.5	0.0
Channel								
Frequency (MHz)								
630300 633332 636366								
15	QPSK	1	1	3457.5	3489.98	3544.48	18.5	0.0
Channel								
Frequency (MHz)								
630000 633332 636700								
10	QPSK	1	1	17.59	17.54	17.61	18.5	0.0

### Part270\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	17.46	17.66	17.56		
100	Pl2 BPSK	1	137	17.67	17.70	17.62	18.5	0.0
100	Pl2 BPSK	1	271	17.60	17.64	17.64		
100	Pl2 BPSK	135	0	17.52	17.63	17.63	18.5	0.0
100	Pl2 BPSK	135	69	17.58	17.59	17.55	18.5	0.0
100	Pl2 BPSK	135	138	17.56	17.77	17.75		
100	Pl2 BPSK	270	0	17.59	17.69	17.62	18.5	0.0
100	QPSK	1	1	17.70	17.80	17.75		
100	QPSK	1	137	17.56	17.60	17.63	18.5	0.0
100	QPSK	1	271	17.67	17.65	17.69		
100	QPSK	135	0	17.53	17.58	17.53		
100	QPSK	135	69	17.77	17.77	17.72	18.5	0.0
100	QPSK	135	138	17.59	17.72	17.64		
100	QPSK	270	0	17.66	17.75	17.73	18.5	0.0
100	16QAM	1	1	17.67	17.71	17.65	18.5	0.0
100	64QAM	1	1	17.63	17.57	17.54	18.5	0.0
100	256QAM	1	1	17.55	17.68	17.58	18.5	0.0
Channel								
Frequency (MHz)								
648668 656000 662332								
80	QPSK	1	1	17.69	17.63	17.62	18.5	0.0
Channel								
Frequency (MHz)								
648334 656000 663666								
80	QPSK	1	1	17.63	17.74	17.69	18.5	0.0
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	17.60	17.63	17.60	18.5	0.0
Channel								
Frequency (MHz)								
648668 656000 663666								
60	QPSK	1	1	17.63	17.64	17.66	18.5	0.0
Channel								
Frequency (MHz)								
648334 656000 663666								
50	QPSK	1	1	17.65	17.68	17.68	18.5	0.0
Channel								
Frequency (MHz)								
648000 656000 664000								
40	QPSK	1	1	17.65	17.67	17.66	18.5	0.0
Channel								
Frequency (MHz)								
647668 656000 664332								
30	QPSK	1	1	17.62	17.63	17.66	18.5	0.0
Channel								
Frequency (MHz)								
647334 656000 664666								
20	QPSK	1	1	17.57	17.75	17.69	18.5	0.0
Channel								
Frequency (MHz)								
647168 656000 664832								
15	QPSK	1	1	17.65	17.74	17.64	18.5	0.0
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	17.65	17.74	17.58	18.5	0.0



### Part27Q\_n77\_Ant 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				63332	63666	64000		
100	PI2 BPSK	1	1	20.94				
100	PI2 BPSK	1	137	20.93			22.0	0.0
100	PI2 BPSK	1	271	20.96				
100	PI2 BPSK	135	0	20.97			22.0	0.0
100	PI2 BPSK	135	69	20.94			22.0	0.0
100	PI2 BPSK	135	138	20.92			22.0	0.0
100	PI2 BPSK	270	0	20.96			22.0	0.0
100	QPSK	1	1	21.04				
100	QPSK	1	137	20.96			22.0	0.0
100	QPSK	1	271	20.98				
100	QPSK	135	0	20.92			22.0	0.0
100	QPSK	135	69	20.96			22.0	0.0
100	QPSK	135	138	20.94			22.0	0.0
100	QPSK	270	0	20.94			22.0	0.0
100	16QAM	1	1	20.94			22.0	0.0
100	64QAM	1	1	20.46			21.5	0.5
100	256QAM	1	1	18.42			19.5	2.5
Channel								
Frequency (MHz)								
				63300	63332	63366		
80	QPSK	1	1	3495	3499.98	3504.99		
Channel								
Frequency (MHz)								
				63298	63332	63400		
80	QPSK	1	1	3496.02	3499.98	3510		
Channel								
Frequency (MHz)								
				63234	63332	63432		
70	QPSK	1	1	20.93			22.0	0.0
Channel								
Frequency (MHz)								
				63200	63332	63466		
60	QPSK	1	1	20.90			22.0	0.0
Channel								
Frequency (MHz)								
				63168	63332	63500		
50	QPSK	1	1	3475.02	3499.98	3525		
Channel								
Frequency (MHz)								
				63134	63332	63532		
40	QPSK	1	1	3470.01	3499.98	3529.98		
Channel								
Frequency (MHz)								
				63100	63332	63566		
30	QPSK	1	1	20.97			22.0	0.0
Channel								
Frequency (MHz)								
				63068	63332	63600		
20	QPSK	1	1	3460.02	3488.88	3500		
Channel								
Frequency (MHz)								
				63000	63332	63666		
15	QPSK	1	1	20.97			22.0	0.0
Channel								
Frequency (MHz)								
				63334	63332	63332		
10	QPSK	1	1	3455.01	3499.98	3544.98		
Channel								
Frequency (MHz)								
				20.94			22.0	0.0

### Part270\_n77\_Ant 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				65000	65000	65000		
100	PI2 BPSK	1	1	20.97	21.00	21.01		
100	PI2 BPSK	1	137	20.98	21.01	20.96	22.0	0.0
100	PI2 BPSK	1	271	20.90	21.00	20.96		
100	PI2 BPSK	135	0	20.93	21.03	20.95	22.0	0.0
100	PI2 BPSK	135	69	20.95	21.03	20.99	22.0	0.0
100	PI2 BPSK	135	138	20.95	21.00	20.95	22.0	0.0
100	PI2 BPSK	270	0	20.92	21.02	21.00	22.0	0.0
100	QPSK	1	1	21.00	21.06	21.03		
100	QPSK	1	137	20.94	21.02	21.00	22.0	0.0
100	QPSK	1	271	20.94	20.97	20.99		
100	QPSK	135	0	20.94	20.98	21.00	22.0	0.0
100	QPSK	135	69	20.95	21.05	21.02	22.0	0.0
100	QPSK	135	138	20.90	20.96	20.98	22.0	0.0
100	QPSK	270	0	20.90	20.97	20.95	22.0	0.0
100	16QAM	1	1	20.98	20.96	20.94	22.0	0.0
100	64QAM	1	1	20.44	20.96	20.40	21.5	0.5
100	256QAM	1	1	18.35	18.44	18.33	19.5	2.5
Channel								
Frequency (MHz)								
				64968	65000	65032		
80	QPSK	1	1	3742.02	3840	3924.98		
Channel								
Frequency (MHz)								
				64800	65000	65200		
80	QPSK	1	1	20.98	21.03	21.01	22.0	0.0
Channel								
Frequency (MHz)								
				64734	65000	65466		
70	QPSK	1	1	20.98	21.03	20.94	22.0	0.0
Channel								
Frequency (MHz)								
				64688	65000	65332		
60	QPSK	1	1	20.96	21.00	20.95	22.0	0.0
Channel								
Frequency (MHz)								
				64634	65000	65366		
50	QPSK	1	1	3725.01	3840	3924.98		
Channel								
Frequency (MHz)								
				64500	65000	65400		
40	QPSK	1	1	3720	3840	3960		
Channel								
Frequency (MHz)								
				64398	65000	65432		
30	QPSK	1	1	20.91	21.02	20.94	22.0	0.0
Channel								
Frequency (MHz)								
				64334	65000	65466		
20	QPSK	1	1	3710.01	3840	3929.98		
Channel								
Frequency (MHz)								
				64268	65000	65498		
15	QPSK	1	1	20.93	20.99	21.00	22.0	0.0
Channel								
Frequency (MHz)								
				64200	65000	65500		
10	QPSK	1	1	3705	3840	3975	22.0	0.0
Channel								
Frequency (MHz)								
				20.93	20.97	20.96	22.0	0.0

### Part270\_n77 HPUE\_Ant 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				63332	63666	64000		
100	PI2 BPSK	1	1				24.0	0.0
100	PI2 BPSK	1	137	22.84				
100	PI2 BPSK	1	271	22.86				
100	PI2 BPSK	135	0	22.87			23.5	0.5
100	PI2 BPSK	135	69	22.83			24.0	0.0
100	PI2 BPSK	135	138	22.44			23.5	0.5
100	PI2 BPSK	270	0	22.41			24.0	0.0
100	QPSK	1	1	22.01				
100	QPSK	1	137	22.51			24.0	0.0
100	QPSK	1	271	22.06				
100	QPSK	135	0	21.96			24.0	0.0
100	QPSK	135	69	22.86				
100	QPSK	135	138	21.34			24.0	0.0
100	QPSK	270	0	21.56			23.0	1.0
100	16QAM	1	1	20.94			23.0	1.0
100	64QAM	1	1	20.51			21.5	2.5
100	256QAM	1	1	18.42			19.5	4.5
Channel								
Frequency (MHz)								
				63295	63298	63298		
80	QPSK	1	1	22.85	22.95	22.89		
Channel								
Frequency (MHz)								
				63268	63332	63400		
80	QPSK	1	1	22.91	22.94	22.93	24.0	0.0
Channel								
Frequency (MHz)								
				63200	63332	63466		
60	QPSK	1	1	22.94	22.99	22.87	24.0	0.0
Channel								
Frequency (MHz)								
				63168	63332	63500		
50	QPSK	1	1	22.53	22.58	22.52	24.0	0.0
Channel								
Frequency (MHz)								
				63134	63332	63532		
40	QPSK	1	1	22.83	22.95	22.93	24.0	0.0
Channel								
Frequency (MHz)								
				63100	63332	63566		
30	QPSK	1	1	22.96	22.96	22.88	24.0	0.0
Channel								
Frequency (MHz)								
				63068	63332	63600		
20	QPSK	1	1	22.98	23.00	22.94	24.0	0.0
Channel								
Frequency (MHz)								
				63000	63332	63666		
15	QPSK	1	1	22.97	22.96	22.91	24.0	0.0
Channel								
Frequency (MHz)								
				63334	63332	63332		
10	QPSK	1	1	22.94	22.96	22.92	24.0	0.0



Part270_n77 HPUe_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3760										
100	PI2 BPSK	1	1	22.97	23.03	22.91				
100	PI2 BPSK	1	137	23.04	23.07	23.04	24.0	0.0		
100	PI2 BPSK	1	271	22.95	22.96	22.91				
100	PI2 BPSK	135	0	22.34	22.38	22.36	24.0	0.0		
100	PI2 BPSK	135	69	22.92	23.02	22.87	24.0	0.0		
100	PI2 BPSK	135	138	22.40	22.43	22.34				
100	PI2 BPSK	270	0	22.26	22.41	22.38	24.0	0.0		
100	QPSK	1	1	23.01	23.03	23.04				
100	QPSK	1	137	22.99	23.07	23.01	24.0	0.0		
100	QPSK	1	271	22.98	23.02	22.87				
100	QPSK	135	0	21.94	21.94	21.86				
100	QPSK	135	69	22.71	22.97	22.74	24.0	0.0		
100	QPSK	135	138	21.90	21.95	21.86				
100	QPSK	270	0	21.73	21.87	21.76	23.0	1.0		
100	16QAM	1	1	21.96	22.11	22.08	23.0	1.0		
100	64QAM	1	1	20.44	20.56	20.48	21.5	2.5		
100	256QAM	1	1	18.35	18.44	18.33	19.5	4.5		
Channel										
Frequency (MHz)										
65000										
80	QPSK	1	1	22.96	23.08	22.98	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
80	QPSK	1	1	22.83	23.01	22.91	24.0	0.0		
Channel										
Frequency (MHz)										
3760										
70	QPSK	1	1	22.98	22.94	22.90	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
60	QPSK	1	1	22.96	23.05	22.87	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
50	QPSK	1	1	22.50	23.05	22.98	24.0	0.0		
Channel										
Frequency (MHz)										
3760										
40	QPSK	1	1	22.87	23.03	22.93	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
30	QPSK	1	1	22.92	23.07	22.93	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
20	QPSK	1	1	22.88	23.02	22.88	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
15	QPSK	1	1	22.83	23.04	22.87	24.0	0.0		
Channel										
Frequency (MHz)										
3760										
10	QPSK	1	1	22.84	23.08	22.88	24.0	0.0		

Part270_n77_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1			22.80				
100	PI2 BPSK	1	137			22.77	24.0	0.0		
100	PI2 BPSK	1	271			22.72				
100	PI2 BPSK	135	0			22.75	24.0	0.0		
100	PI2 BPSK	135	69			22.69	24.0	0.0		
100	PI2 BPSK	135	138			22.72	24.0	0.0		
100	PI2 BPSK	270	0			22.76				
100	QPSK	1	1			22.81				
100	QPSK	1	137			22.75	24.0	0.0		
100	QPSK	1	271			22.71				
100	QPSK	135	0			22.70	24.0	0.0		
100	QPSK	135	69			22.73				
100	QPSK	135	138			22.48	24.0	0.0		
100	QPSK	270	0			22.84	24.0	0.0		
100	16QAM	1	1			22.89	24.0	0.0		
100	64QAM	1	1			22.43	23.0	1.0		
100	256QAM	1	1			21.08	22.5	1.5		
Channel										
Frequency (MHz)										
63000										
80	QPSK	1	1	3495	3499.98	3504.99	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
80	QPSK	1	1	3495.02	3499.98	3510	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
70	QPSK	1	1	3485.01	3499.98	3514.98	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
60	QPSK	1	1	3470.01	3499.98	3529.98	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
50	QPSK	1	1	3475.02	3499.98	3535	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
40	QPSK	1	1	3470.01	3499.98	3529.98	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
30	QPSK	1	1	3460.02	3499.98	3540	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
20	QPSK	1	1	3455.01	3499.98	3545.98	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
15	QPSK	1	1	3450.01	3499.98	3541.98	24.0	0.0		
Channel										
Frequency (MHz)										
63000										
10	QPSK	1	1	3445.01	3499.98	3544.98	24.0	0.0		

Part270_n77_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3760										
100	PI2 BPSK	1	1	22.87	22.82	22.76				
100	PI2 BPSK	1	137	22.90	22.87	22.81	24.0	0.0		
100	PI2 BPSK	1	271	22.87	22.87	22.76				
100	PI2 BPSK	135	0	22.88	22.88	22.79	24.0	0.0		
100	PI2 BPSK	135	69	22.93	22.90	22.79	24.0	0.0		
100	PI2 BPSK	135	138	22.87	22.86	22.81				
100	PI2 BPSK	270	0	22.89	22.87	22.78	24.0	0.0		
100	QPSK	1	1	22.98	22.91	22.84				
100	QPSK	1	137	22.88	22.82	22.80	24.0	0.0		
100	QPSK	1	271	22.91	22.85	22.79				
100	QPSK	135	0	22.89	22.83	22.73				
100	QPSK	135	69	22.90	22.78	22.75	24.0	0.0		
100	QPSK	135	138	22.82	22.85	22.77				
100	QPSK	270	0	22.88	22.85	22.77	24.0	0.0		
100	16QAM	1	1	22.88	22.87	22.74	24.0	0.0		
100	64QAM	1	1	22.90	22.85	22.79	24.0	0.0		
100	256QAM	1	1	21.88	22.00	21.96	23.0	1.0		
Channel										
Frequency (MHz)										
65000										
80	QPSK	1	1	22.88	22.88	22.73	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
80	QPSK	1	1	22.87	22.80	22.77	24.0	0.0		
Channel										
Frequency (MHz)										
3760										
70	QPSK	1	1	22.85	22.78	22.77	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
60	QPSK	1	1	22.84	22.86	22.73	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
50	QPSK	1	1	22.53	22.90	22.79	24.0	0.0		
Channel										
Frequency (MHz)										
3760										
40	QPSK	1	1	22.91	22.82	22.78	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
30	QPSK	1	1	22.97	22.80	22.77	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
20	QPSK	1	1	22.93	22.88	22.89	24.0	0.0		
Channel										
Frequency (MHz)										
65000										
15	QPSK	1	1	22.91	22.86	22.89	24.0	0.0		
Channel										
Frequency (MHz)										
3760										
10	QPSK	1	1	22.95	22.80	22.72	24.0	0.0		





### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	26.12				
100	PI2 BPSK	1	137	26.03			27.0	0.0
100	PI2 BPSK	1	271	26.08				
100	PI2 BPSK	135	0	26.02			26.5	0.5
100	PI2 BPSK	135	69	26.01			27.0	0.0
100	PI2 BPSK	135	138	25.97			26.5	0.5
100	PI2 BPSK	270	0	25.91			27.0	0.0
100	QPSK	1	1	26.15				
100	QPSK	1	137	26.03			27.0	0.0
100	QPSK	1	271	26.11				
100	QPSK	135	0	25.98			27.0	0.0
100	QPSK	135	69	25.92				
100	QPSK	135	138	25.42				
100	QPSK	270	0	25.21			26.0	1.0
100	16QAM	1	1	25.91			26.0	1.0
100	64QAM	1	1	24.42			24.5	2.5
100	256QAM	1	1	22.31			22.5	4.5
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	25.07	26.03	25.98	27.0	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	25.91	25.85	25.96	27.0	0.0
Channel								
Frequency (MHz)								
3485.01								
3489.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	25.91	25.84	25.82	27.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	25.80	25.89	25.83	27.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	24.75	24.82	24.88	27.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	23.77	23.82	23.85	27.0	0.0
Channel								
Frequency (MHz)								
3470.01								
3469.98								
3529.98								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	25.87	25.98	25.97	27.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	25.78	25.84	25.88	27.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	25.98	25.98	25.79	27.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63616								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	25.98	25.97	25.96	27.0	0.0
Channel								
Frequency (MHz)								
63234								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	25.88	25.82	25.97	27.0	0.0

### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	PI2 BPSK	1	1	25.82	25.89	25.76		
100	PI2 BPSK	1	137	25.84	25.89	25.74	27.0	0.0
100	PI2 BPSK	1	271	25.90	25.86	25.83		
100	PI2 BPSK	135	0	25.73	25.82	25.88	26.5	0.5
100	PI2 BPSK	135	69	25.78	25.69	25.72	27.0	0.0
100	PI2 BPSK	135	138	25.77	25.71	25.86	26.5	0.5
100	PI2 BPSK	270	0	25.86	25.81	25.63	27.0	0.0
100	QPSK	1	1	25.91	25.88	25.77		
100	QPSK	1	137	25.85	25.86	25.70	27.0	0.0
100	QPSK	1	271	25.90	25.73	25.85		
100	QPSK	135	0	25.25	25.02	25.08	27.0	0.0
100	QPSK	135	69	25.72	25.62	25.61		
100	QPSK	135	138	25.33	25.13	25.08		
100	QPSK	270	0	25.24	24.88	24.82	26.0	1.0
100	16QAM	1	1	25.39	24.77	24.73	26.0	1.0
100	64QAM	1	1	23.94	23.45	23.98	23.5	2.5
100	256QAM	1	1	21.89	22.00	21.96	22.5	4.5
Channel								
Frequency (MHz)								
64860								
65000								
65200								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	25.83	25.70	25.78	27.0	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65066								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	25.78	25.74	25.68	27.0	0.0
Channel								
Frequency (MHz)								
3735								
3840								
3945								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	25.73	25.72	25.69	27.0	0.0
Channel								
Frequency (MHz)								
64868								
65000								
65332								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	25.74	25.86	25.85	27.0	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65366								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	25.78	25.82	25.83	27.0	0.0
Channel								
Frequency (MHz)								
64800								
65000								
65400								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	25.77	25.77	25.65	27.0	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65432								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	25.85	25.87	25.58	27.0	0.0
Channel								
Frequency (MHz)								
64734								
65000								
65666								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	25.75	25.70	25.72	27.0	0.0
Channel								
Frequency (MHz)								
64768								
65000								
66482								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	25.78	25.71	25.67	27.0	0.0
Channel								
Frequency (MHz)								
64700								
65000								
66200								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	25.71	25.87	25.85	27.0	0.0

### Part27Q\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1			14.23		
100	PI2 BPSK	1	137			14.35	15.5	0.0
100	PI2 BPSK	1	271			14.17		
100	PI2 BPSK	135	0			14.32	15.5	0.0
100	PI2 BPSK	135	69			14.27	15.5	0.0
100	PI2 BPSK	135	138			14.33		
100	PI2 BPSK	270	0			14.31	15.5	0.0
100	QPSK	1	1			14.22		
100	QPSK	1	137			14.16	15.5	0.0
100	QPSK	1	271			14.27		
100	QPSK	135	0			14.35		
100	QPSK	135	69			14.38	15.5	0.0
100	QPSK	135	138			14.19		
100	QPSK	270	0			14.30	15.5	0.0
100	16QAM	1	1			14.41	15.5	0.0
100	64QAM	1	1			14.15	15.5	0.0
100	256QAM	1	1			14.25	15.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.23	14.29	14.29	15.5	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.26	14.15	14.15	15.5	0.0
Channel								
Frequency (MHz)								
3485.01								
3489.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.21	14.29	14.26	15.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.28	14.20	14.18	15.5	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.22	14.24	14.18	15.5	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.23	14.29	14.27	15.5	0.0
Channel								
Frequency (MHz)								
3470.01								
3469.98								
3529.98								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.23	14.29	14.27	15.5	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	14.29	14.22	14.25	15.5	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	14.21	14.21	14.14	15.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63616								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	14.20	14.20	14.18	15.5	0.0
Channel								
Frequency (MHz)								
63234								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	14.22	14.15	14.18	15.5	0.0



### Part270\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000	65000	66000		
Frequency (MHz)				3760	3840	3930		
100	PI2 BPSK	1	1	13.66	13.89	13.68		
100	PI2 BPSK	1	137	13.58	13.70	13.71	15.5	0.0
100	PI2 BPSK	1	271	13.75	13.85	13.76		
100	PI2 BPSK	135	0	13.75	13.85	13.74	15.5	0.0
100	PI2 BPSK	135	69	13.66	13.91	13.75	15.5	0.0
100	PI2 BPSK	135	138	13.63	13.82	13.76		
100	PI2 BPSK	270	0	13.79	13.84	13.82	15.5	0.0
100	QPSK	1	1	13.78	14.18	13.79		
100	QPSK	1	137	13.67	13.92	13.74	15.5	0.0
100	QPSK	1	271	13.69	13.77	13.68		
100	QPSK	135	0	13.69	13.88	13.77		
100	QPSK	135	69	13.70	13.90	13.75	15.5	0.0
100	QPSK	135	138	13.67	13.77	13.70		
100	QPSK	270	0	13.69	13.89	13.81	15.5	0.0
100	16QAM	1	1	13.81	13.81	13.85	15.5	0.0
100	64QAM	1	1	13.71	13.96	13.92	15.5	0.0
100	256QAM	1	1	13.71	13.75	13.81	15.5	0.0
Channel								
Frequency (MHz)				64868	65000	66232	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3742.02	3840	3924.98		
80	QPSK	1	1	13.79	13.73	13.75	15.5	0.0
Channel								
Frequency (MHz)				64834	65000	66066	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3909.99		
80	QPSK	1	1	13.68	13.76	13.73	15.5	0.0
Channel								
Frequency (MHz)				64800	65000	66000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	13.70	13.80	13.77	15.5	0.0
Channel								
Frequency (MHz)				64868	65000	66332	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720.02	3840	3949.98		
60	QPSK	1	1	13.73	13.79	13.73	15.5	0.0
Channel								
Frequency (MHz)				64834	65000	66366	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3954.99		
50	QPSK	1	1	13.68	13.74	13.78	15.5	0.0
Channel								
Frequency (MHz)				64800	65000	66400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	13.79	13.81	13.75	15.5	0.0
Channel								
Frequency (MHz)				64768	65000	66432	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3954.98		
30	QPSK	1	1	13.72	13.74	13.66	15.5	0.0
Channel								
Frequency (MHz)				64734	65000	66466	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3959.99		
20	QPSK	1	1	13.75	13.75	13.70	15.5	0.0
Channel								
Frequency (MHz)				64768	65000	66482	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.48		
15	QPSK	1	1	13.72	13.70	13.74	15.5	0.0
Channel								
Frequency (MHz)				64700	65000	66500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	13.74	13.80	13.73	15.5	0.0

### Part27Q\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63900	63332	63998		
100	PI2 BPSK	1	1		14.23			
100	PI2 BPSK	1	137		14.35		15.5	0.0
100	PI2 BPSK	1	271		14.17			
100	PI2 BPSK	135	0		14.32		15.5	0.0
100	PI2 BPSK	135	69		14.27		15.5	0.0
100	PI2 BPSK	135	138		14.33		15.5	0.0
100	PI2 BPSK	270	0		14.31			
100	QPSK	1	1		14.42			
100	QPSK	1	137		14.16		15.5	0.0
100	QPSK	1	271		14.27			
100	QPSK	135	0		14.35		15.5	0.0
100	QPSK	135	69		14.38		15.5	0.0
100	QPSK	135	138		14.39		15.5	0.0
100	QPSK	270	0		14.30		15.5	0.0
100	16QAM	1	1		14.41		15.5	0.0
100	64QAM	1	1		14.15		15.5	0.0
100	256QAM	1	1		14.25		15.5	0.0
Channel								
Frequency (MHz)				63900	63332	63998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3405	3499.98	3544.98		
80	QPSK	1	1	14.23	14.29	14.29	15.5	0.0
Channel								
Frequency (MHz)				63968	63332	63900	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3400	3499.98	3514.98		
80	QPSK	1	1	14.26	14.15	14.15	15.5	0.0
Channel								
Frequency (MHz)				63850	63332	63866	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3405.01	3499.98	3514.98		
70	QPSK	1	1	14.21	14.29	14.26	15.5	0.0
Channel								
Frequency (MHz)				63900	63332	63866	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3400	3499.98	3514.98		
60	QPSK	1	1	14.28	14.20	14.18	15.5	0.0
Channel								
Frequency (MHz)				63868	63332	63900	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3475.02	3499.98	3525		
50	QPSK	1	1	14.22	14.24	14.18	15.5	0.0
Channel								
Frequency (MHz)				63834	63332	63832	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3405.01	3499.98	3529.98		
40	QPSK	1	1	14.23	14.29	14.27	15.5	0.0
Channel								
Frequency (MHz)				63800	63332	63866	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3405	3499.98	3534.98		
30	QPSK	1	1	14.29	14.22	14.25	15.5	0.0
Channel								
Frequency (MHz)				63968	63332	63900	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3405.02	3499.98	3540		
20	QPSK	1	1	14.21	14.21	14.18	15.5	0.0
Channel								
Frequency (MHz)				63900	63332	63866	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3407.01	3499.98	3544.98		
15	QPSK	1	1	14.20	14.20	14.18	15.5	0.0
Channel								
Frequency (MHz)				63834	63332	63832	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3405.01	3499.98	3544.98		
10	QPSK	1	1	14.22	14.15	14.18	15.5	0.0

### Part270\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000	65000	66000		
Frequency (MHz)				3760	3840	3930		
100	PI2 BPSK	1	1	13.66	13.89	13.68		
100	PI2 BPSK	1	137	13.58	13.70	13.71	15.5	0.0
100	PI2 BPSK	1	271	13.75	13.85	13.76		
100	PI2 BPSK	135	0	13.75	13.85	13.74	15.5	0.0
100	PI2 BPSK	135	69	13.66	13.91	13.75	15.5	0.0
100	PI2 BPSK	135	138	13.63	13.82	13.76		
100	PI2 BPSK	270	0	13.79	13.84	13.82	15.5	0.0
100	QPSK	1	1	13.78	14.18	13.79		
100	QPSK	1	137	13.67	13.92	13.74	15.5	0.0
100	QPSK	1	271	13.69	13.77	13.68		
100	QPSK	135	0	13.69	13.88	13.77		
100	QPSK	135	69	13.70	13.90	13.75	15.5	0.0
100	QPSK	135	138	13.67	13.77	13.70		
100	QPSK	270	0	13.69	13.89	13.81	15.5	0.0
100	16QAM	1	1	13.81	13.81	13.85	15.5	0.0
100	64QAM	1	1	13.71	13.96	13.92	15.5	0.0
100	256QAM	1	1	13.71	13.75	13.81	15.5	0.0
Channel								
Frequency (MHz)				64868	65000	66232	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3742.02	3840	3924.98		
80	QPSK	1	1	13.79	13.73	13.75	15.5	0.0
Channel								
Frequency (MHz)				64834	65000	66066	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3909.99		
80	QPSK	1	1	13.68	13.76	13.73	15.5	0.0
Channel								
Frequency (MHz)				64800	65000	66000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	13.70	13.80	13.77	15.5	0.0
Channel								
Frequency (MHz)				64868	65000	66332	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720.02	3840	3949.98		
60	QPSK	1	1	13.73	13.79	13.73	15.5	0.0
Channel								
Frequency (MHz)				64834	65000	66366	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3954.99		
50	QPSK	1	1	13.68	13.74	13.78	15.5	0.0
Channel								
Frequency (MHz)				64800	65000	66400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	13.79	13.81	13.75	15.5	0.0
Channel								
Frequency (MHz)				64768	65000	66432	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3954.98		
30	QPSK	1	1	13.72	13.74	13.66	15.5	0.0
Channel								
Frequency (MHz)				64734	65000	66466	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3959.99		
20	QPSK	1	1	13.75	13.75	13.70	15.5	0.0
Channel								
Frequency (MHz)				64768	65000	66482	Tune-up limit (dBm)	MPR (dB)
Frequency (								



Part27Q_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	16.20					
100	PI2 BPSK	1	137	18.17			17.5	0.0	
100	PI2 BPSK	1	271	16.20					
100	PI2 BPSK	135	9	18.32			17.5	0.0	
100	PI2 BPSK	135	69	16.24			17.5	0.0	
100	PI2 BPSK	135	138	18.26					
100	PI2 BPSK	270	0	16.25			17.5	0.0	
100	QPSK	1	1	16.38					
100	QPSK	1	137	16.18			17.5	0.0	
100	QPSK	1	271	18.26					
100	QPSK	135	9	18.30					
100	QPSK	135	69	16.33			17.5	0.0	
100	QPSK	135	138	18.27					
100	QPSK	270	0	16.29			17.5	0.0	
100	16QAM	1	1	18.27			17.5	0.0	
100	64QAM	1	1	16.29			17.5	0.0	
100	256QAM	1	1	18.21			17.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3450	3499.98	3504.99	17.5	0.0	MPR
Channel									
Frequency (MHz)									
80	QPSK	1	1	3460.02	3499.98	3510	17.5	0.0	MPR
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.19	16.26	16.23	17.5	0.0	MPR
Channel									
Frequency (MHz)									
60	QPSK	1	1	3465.01	3499.98	3514.98	17.5	0.0	MPR
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.16	16.21	16.20	17.5	0.0	MPR
Channel									
Frequency (MHz)									
40	QPSK	1	1	631968	633332	635000	17.5	0.0	MPR
Channel									
Frequency (MHz)									
30	QPSK	1	1	3470.02	3499.98	3525	17.5	0.0	MPR
Channel									
Frequency (MHz)									
20	QPSK	1	1	631334	633332	635332	17.5	0.0	MPR
Channel									
Frequency (MHz)									
15	QPSK	1	1	3470.01	3499.98	3529.98	17.5	0.0	MPR
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.17	16.24	16.21	17.5	0.0	MPR
Channel									
Frequency (MHz)									
10	QPSK	1	1	3455.01	3499.98	3544.98	17.5	0.0	MPR
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.27	18.22	18.26	17.5	0.0	MPR

Part27O_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	16.30					
100	PI2 BPSK	1	137	18.22			17.5	0.0	
100	PI2 BPSK	1	271	16.27					
100	PI2 BPSK	135	9	18.26			17.5	0.0	
100	PI2 BPSK	135	69	16.16			17.5	0.0	
100	PI2 BPSK	135	138	18.10					
100	PI2 BPSK	270	0	16.15			17.5	0.0	
100	QPSK	1	1	16.33					
100	QPSK	1	137	16.18			17.5	0.0	
100	QPSK	1	271	18.23					
100	QPSK	135	9	18.22					
100	QPSK	135	69	16.20			17.5	0.0	
100	QPSK	135	138	18.23					
100	QPSK	270	0	16.18			17.5	0.0	
100	16QAM	1	1	18.26			17.5	0.0	
100	64QAM	1	1	16.25			17.5	0.0	
100	256QAM	1	1	18.17			17.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	648668	650000	650332	17.5	0.0	MPR
Channel									
Frequency (MHz)									
80	QPSK	1	1	3745.02	3750	3754.98	17.5	0.0	MPR
Channel									
Frequency (MHz)									
80	QPSK	1	1	649334	650000	650666	17.5	0.0	MPR
Channel									
Frequency (MHz)									
70	QPSK	1	1	3740.01	3750	3759.99	17.5	0.0	MPR
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.19	16.25	16.12	17.5	0.0	MPR
Channel									
Frequency (MHz)									
60	QPSK	1	1	648500	650000	651000	17.5	0.0	MPR
Channel									
Frequency (MHz)									
60	QPSK	1	1	3735	3750	3765	17.5	0.0	MPR
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.15	16.15	16.15	17.5	0.0	MPR
Channel									
Frequency (MHz)									
50	QPSK	1	1	648668	650000	651666	17.5	0.0	MPR
Channel									
Frequency (MHz)									
50	QPSK	1	1	3725.01	3750	3774.99	17.5	0.0	MPR
Channel									
Frequency (MHz)									
40	QPSK	1	1	648000	650000	652000	17.5	0.0	MPR
Channel									
Frequency (MHz)									
40	QPSK	1	1	3720	3750	3780	17.5	0.0	MPR
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.19	16.15	16.16	17.5	0.0	MPR
Channel									
Frequency (MHz)									
30	QPSK	1	1	647668	650000	652332	17.5	0.0	MPR
Channel									
Frequency (MHz)									
30	QPSK	1	1	3715.02	3750	3784.98	17.5	0.0	MPR
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.13	16.11	16.13	17.5	0.0	MPR
Channel									
Frequency (MHz)									
20	QPSK	1	1	647334	650000	652666	17.5	0.0	MPR
Channel									
Frequency (MHz)									
20	QPSK	1	1	3710.01	3750	3789.99	17.5	0.0	MPR
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.24	16.20	16.20	17.5	0.0	MPR
Channel									
Frequency (MHz)									
15	QPSK	1	1	647168	650000	652832	17.5	0.0	MPR
Channel									
Frequency (MHz)									
15	QPSK	1	1	3707.52	3750	3792.48	17.5	0.0	MPR
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.14	16.25	16.13	17.5	0.0	MPR
Channel									
Frequency (MHz)									
10	QPSK	1	1	3705	3750	3765	17.5	0.0	MPR
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.19	18.20	18.12	17.5	0.0	MPR



Part27Q_n78 HPUe_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1		16.20					
100	PI2 BPSK	1	137		16.17		17.5	0.0		
100	PI2 BPSK	1	271		16.26					
100	PI2 BPSK	136	0		16.32		17.5	0.0		
100	PI2 BPSK	136	69		16.24		17.5	0.0		
100	PI2 BPSK	136	138		16.26					
100	PI2 BPSK	270	0		16.25		17.5	0.0		
100	QPSK	1	1		16.30					
100	QPSK	1	137		16.16		17.5	0.0		
100	QPSK	1	271		16.26					
100	QPSK	136	0		16.30		17.5	0.0		
100	QPSK	136	69		16.33					
100	QPSK	136	138		16.27					
100	QPSK	270	0		16.29		17.5	0.0		
100	16QAM	1	1		16.27		17.5	0.0		
100	64QAM	1	1		16.26		17.5	0.0		
100	256QAM	1	1		16.21		17.5	0.0		
Channel										
Frequency (MHz)										
633000										
633332										
633666										
Tune-up limit (dBm)										
MPR (dB)										
80	QPSK	1	1	3495	3499.98	3504.98				
Channel										
Frequency (MHz)										
633968										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
80	QPSK	1	1	3496.02	3499.98	3510				
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
70	QPSK	1	1	16.27	16.21	16.26	17.5	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
60	QPSK	1	1	16.16	16.21	16.20	17.5	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
50	QPSK	1	1	16.20	16.20	16.16	17.5	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
40	QPSK	1	1	16.16	16.23	16.15	17.5	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
30	QPSK	1	1	16.17	16.20	16.19	17.5	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
20	QPSK	1	1	16.15	16.15	16.21	17.5	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
15	QPSK	1	1	16.17	16.24	16.21	17.5	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
10	QPSK	1	1	16.27	16.22	16.26	17.5	0.0		

Part27Q_n78 HPUe_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1		16.30					
100	PI2 BPSK	1	137		16.22		17.5	0.0		
100	PI2 BPSK	1	271		16.27					
100	PI2 BPSK	136	0		16.26		17.5	0.0		
100	PI2 BPSK	136	69		16.16		17.5	0.0		
100	PI2 BPSK	136	138		16.10					
100	PI2 BPSK	270	0		16.15		17.5	0.0		
100	QPSK	1	1		16.33					
100	QPSK	1	137		16.18		17.5	0.0		
100	QPSK	1	271		16.23					
100	QPSK	136	0		16.22		17.5	0.0		
100	QPSK	136	69		16.26					
100	QPSK	136	138		16.23					
100	QPSK	270	0		16.18		17.5	0.0		
100	16QAM	1	1		16.26		17.5	0.0		
100	64QAM	1	1		16.25		17.5	0.0		
100	256QAM	1	1		16.17		17.5	0.0		
Channel										
Frequency (MHz)										
649668										
650000										
650332										
Tune-up limit (dBm)										
MPR (dB)										
80	QPSK	1	1	3495	3499.98	3504.98				
Channel										
Frequency (MHz)										
649668										
650000										
650668										
Tune-up limit (dBm)										
MPR (dB)										
80	QPSK	1	1	16.19	16.25	16.12	17.5	0.0		
Channel										
Frequency (MHz)										
649668										
650000										
651332										
Tune-up limit (dBm)										
MPR (dB)										
70	QPSK	1	1	16.15	16.15	16.15	17.5	0.0		
Channel										
Frequency (MHz)										
649668										
650000										
651332										
Tune-up limit (dBm)										
MPR (dB)										
60	QPSK	1	1	16.23	16.11	16.19	17.5	0.0		
Channel										
Frequency (MHz)										
649668										
650000										
651668										
Tune-up limit (dBm)										
MPR (dB)										
50	QPSK	1	1	16.11	16.19	16.22	17.5	0.0		
Channel										
Frequency (MHz)										
649668										
650000										
652000										
Tune-up limit (dBm)										
MPR (dB)										
40	QPSK	1	1	16.19	16.15	16.16	17.5	0.0		
Channel										
Frequency (MHz)										
649668										
650000										
652332										
Tune-up limit (dBm)										
MPR (dB)										
30	QPSK	1	1	16.13	16.11	16.13	17.5	0.0		
Channel										
Frequency (MHz)										
647334										
650000										
652668										
Tune-up limit (dBm)										
MPR (dB)										
20	QPSK	1	1	16.24	16.25	16.20	17.5	0.0		
Channel										
Frequency (MHz)										
647168										
650000										
652932										
Tune-up limit (dBm)										
MPR (dB)										
15	QPSK	1	1	16.14	16.25	16.13	17.5	0.0		
Channel										
Frequency (MHz)										
647000										
650000										
653168										
Tune-up limit (dBm)										
MPR (dB)										
10	QPSK	1	1	16.19	16.20	16.12	17.5	0.0		

Part27Q_n78 Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1		20.72					
100	PI2 BPSK	1	137		20.83		22.0	0.0		
100	PI2 BPSK	1	271		20.80					
100	PI2 BPSK	136	0		20.82		22.0	0.0		
100	PI2 BPSK	136	69		20.87		22.0	0.0		
100	PI2 BPSK	136	138		20.79					
100	PI2 BPSK	270	0		20.77		22.0	0.0		
100	QPSK	1	1		20.89					
100	QPSK	1	137		20.79		22.0	0.0		
100	QPSK	1	271		20.73					
100	QPSK	136	0		20.80					
100	QPSK	136	69		20.85		22.0	0.0		
100	QPSK	136	138		20.74					
100	QPSK	270	0		20.83		22.0	0.0		
100	16QAM	1	1		20.81		22.0	0.0		
100	64QAM	1	1		20.85		22.0	0.0		
100	256QAM	1	1		19.25		20.5	1.5		
Channel										
Frequency (MHz)										
633000										
633332										
633666										
Tune-up limit (dBm)										
MPR (dB)										
80	QPSK	1	1	3495	3499.98	3504.98				
Channel										
Frequency (MHz)										
633968										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
80	QPSK	1	1	3496.02	3499.98	3510				
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
70	QPSK	1	1	20.77	20.80	20.87	22.0	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
60	QPSK	1	1	20.81	20.84	20.82	22.0	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
50	QPSK	1	1	20.78	20.84	20.85	22.0	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
40	QPSK	1	1	20.75	20.83	20.76	22.0	0.0		
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
30	QPSK	1	1	20.85	20.85	20.86	22.0	0.0		
Channel										
Frequency (MHz)										
633968										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
20	QPSK	1	1	20.79	20.88	20.85	22.0	0.0		
Channel										
Frequency (MHz)										
633000										
633332										
633666										
Tune-up limit (dBm)										
MPR (dB)										
15	QPSK	1	1	3497.5	3499.98	3502.48				
Channel										
Frequency (MHz)										
634000										
633332										
634000										
Tune-up limit (dBm)										
MPR (dB)										
10	QPSK	1	1	20.80	20.86	20.85	22.0	0.0		



Part270\_n78\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				65000				
Frequency (MHz)				3750				
100	Pl2 BPSK	1	1		21.12			
100	Pl2 BPSK	1	137		21.06		22.0	0.0
100	Pl2 BPSK	1	271		21.14			
100	Pl2 BPSK	135	0		21.16		22.0	0.0
100	Pl2 BPSK	135	69		21.14		22.0	0.0
100	Pl2 BPSK	135	138		21.11			
100	Pl2 BPSK	270	0		21.15		22.0	0.0
100	QPSK	1	1		21.20			
100	QPSK	1	137		21.19		22.0	0.0
100	QPSK	1	271		21.17			
100	QPSK	135	0		21.08			
100	QPSK	135	69		21.13		22.0	0.0
100	QPSK	135	138		21.10			
100	QPSK	270	0		21.07		22.0	0.0
100	16QAM	1	1		21.06		22.0	0.0
100	64QAM	1	1		20.93		22.0	0.0
100	256QAM	1	1		19.46		20.5	1.5
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	21.08	21.09	21.09	22.0	0.0
Channel				648334	650000	650666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	21.11	21.12	21.12	22.0	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	21.14	21.19	21.15	22.0	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3728.02	3750	3761.98	(dBm)	(dB)
60	QPSK	1	1	21.08	21.15	21.13	22.0	0.0
Channel				648334	650000	651666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	21.16	21.10	21.12	22.0	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	21.07	21.08	21.18	22.0	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.00	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	21.16	21.16	21.15	22.0	0.0
Channel				647334	650000	652666	Tune-up limit	MPR
Frequency (MHz)				3711.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	21.15	21.19	21.13	22.0	0.0
Channel				647168	650000	652832	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	21.08	21.16	21.15	22.0	0.0
Channel				646990	650000	653150	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	21.14	21.08	21.09	22.0	0.0



Part27Q_n78 HPUe_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1		22.71					
100	PI2 BPSK	1	137		22.72		24.0	0.0		
100	PI2 BPSK	1	271		22.67					
100	PI2 BPSK	135	0		22.69		24.0	0.0		
100	PI2 BPSK	135	69		22.74					
100	PI2 BPSK	135	138		22.18					
100	PI2 BPSK	270	0		22.06		24.0	0.0		
100	QPSK	1	1		22.90					
100	QPSK	1	137		22.77		24.0	0.0		
100	QPSK	1	271		22.22					
100	QPSK	135	0		22.72		24.0	0.0		
100	QPSK	135	69		22.77					
100	QPSK	135	138		21.40					
100	QPSK	270	0		22.21		23.5	0.5		
100	16QAM	1	1		22.78		24.0	0.0		
100	64QAM	1	1		21.26		22.5	1.5		
100	256QAM	1	1		19.25		20.5	3.5		
Channel										
Frequency (MHz)										
633000										
80	QPSK	1	1		3495	3499.98	3504.98			
Channel										
Frequency (MHz)										
633332										
80	QPSK	1	1		3496.02	3499.98	3510			
Channel										
Frequency (MHz)										
633668										
70	QPSK	1	1		22.78	22.76	22.07	24.0	0.0	
Channel										
Frequency (MHz)										
634000										
60	QPSK	1	1		22.71	22.65	22.76	24.0	0.0	
Channel										
Frequency (MHz)										
633332										
50	QPSK	1	1		3475.02	3499.98	3525			
Channel										
Frequency (MHz)										
633332										
40	QPSK	1	1		3470.01	3499.98	3529.98			
Channel										
Frequency (MHz)										
633000										
30	QPSK	1	1		22.76	22.65	22.72	24.0	0.0	
Channel										
Frequency (MHz)										
633668										
20	QPSK	1	1		22.75	22.68	22.72	24.0	0.0	
Channel										
Frequency (MHz)										
633000										
15	QPSK	1	1		3457.5	3499.98	3542.48			
Channel										
Frequency (MHz)										
633332										
10	QPSK	1	1		22.73	22.73	22.75	24.0	0.0	

Part27Q_n78 HPUe_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3750										
100	PI2 BPSK	1	1		22.94					
100	PI2 BPSK	1	137		23.04		24.0	0.0		
100	PI2 BPSK	1	271		22.90					
100	PI2 BPSK	135	0		22.96		24.0	0.0		
100	PI2 BPSK	135	69		23.00					
100	PI2 BPSK	135	138		23.04					
100	PI2 BPSK	270	0		22.94		24.0	0.0		
100	QPSK	1	1		23.05					
100	QPSK	1	137		22.96		24.0	0.0		
100	QPSK	1	271		22.92					
100	QPSK	135	0		22.55		24.0	0.0		
100	QPSK	135	69		22.97					
100	QPSK	135	138		22.44					
100	QPSK	270	0		22.54		23.5	0.5		
100	16QAM	1	1		22.85		24.0	0.0		
100	64QAM	1	1		21.23		22.5	1.5		
100	256QAM	1	1		19.26		20.5	3.5		
Channel										
Frequency (MHz)										
649668										
80	QPSK	1	1		3742.02	3750	3754.98			
Channel										
Frequency (MHz)										
650000										
80	QPSK	1	1		22.91	23.00	22.93	24.0	0.0	
Channel										
Frequency (MHz)										
649334										
70	QPSK	1	1		22.95	22.96	22.86	24.0	0.0	
Channel										
Frequency (MHz)										
650000										
60	QPSK	1	1		23.04	22.97	22.97	24.0	0.0	
Channel										
Frequency (MHz)										
649334										
50	QPSK	1	1		3725.01	3750	3774.98			
Channel										
Frequency (MHz)										
650000										
40	QPSK	1	1		22.96	22.95	22.99	24.0	0.0	
Channel										
Frequency (MHz)										
649668										
30	QPSK	1	1		22.90	22.90	22.90	24.0	0.0	
Channel										
Frequency (MHz)										
647334										
20	QPSK	1	1		23.00	22.99	22.91	24.0	0.0	
Channel										
Frequency (MHz)										
647168										
15	QPSK	1	1		22.99	23.01	22.96	24.0	0.0	
Channel										
Frequency (MHz)										
649334										
10	QPSK	1	1		23.04	22.99	22.95	24.0	0.0	

Part27Q_n78_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1		23.11					
100	PI2 BPSK	1	137		22.88		24.0	0.0		
100	PI2 BPSK	1	271		22.98					
100	PI2 BPSK	135	0		23.03		24.0	0.0		
100	PI2 BPSK	135	69		22.94					
100	PI2 BPSK	135	138		23.02					
100	PI2 BPSK	270	0		22.93		24.0	0.0		
100	QPSK	1	1		23.11					
100	QPSK	1	137		23.01		24.0	0.0		
100	QPSK	1	271		23.05					
100	QPSK	135	0		22.98					
100	QPSK	135	69		23.01					
100	QPSK	135	138		22.99					
100	QPSK	270	0		22.89		24.0	0.0		
100	16QAM	1	1		22.99		24.0	0.0		
100	64QAM	1	1		22.96		24.0	0.0		
100	256QAM	1	1		22.80		23.5	0.5		
Channel										
Frequency (MHz)										
633000										
80	QPSK	1	1		3495	3499.98	3504.98			
Channel										
Frequency (MHz)										
633332										
80	QPSK	1	1		3496.02	3499.98	3510			
Channel										
Frequency (MHz)										
633668										
70	QPSK	1	1		23.02	23.01	22.88	24.0	0.0	
Channel										
Frequency (MHz)										
634000										
60	QPSK	1	1		23.08	23.04	23.05	24.0	0.0	
Channel										
Frequency (MHz)										
633332										
50	QPSK	1	1		3475.02	3499.98	3525			
Channel										
Frequency (MHz)										
633332										
40	QPSK	1	1		3470.01	3499.98	3529.98			
Channel										
Frequency (MHz)										
633000										
30	QPSK	1	1		23.07	23.10	23.02	24.0	0.0	
Channel										
Frequency (MHz)										
633668										
20	QPSK	1	1		22.99	23.07	23.03	24.0	0.0	
Channel										
Frequency (MHz)										
633000										
15	QPSK	1	1		3457.5	3499.98	3542.48			
Channel										
Frequency (MHz)										
633332										
10	QPSK	1	1		23.04	22.98	23.07	24.0	0.0	



**Part270\_n78\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				65000				
Frequency (MHz)				3750				
100	Pl2 BPSK	1	1	22.93				
100	Pl2 BPSK	1	137	23.00			24.0	0.0
100	Pl2 BPSK	1	271	22.98				
100	Pl2 BPSK	135	0	22.91			24.0	0.0
100	Pl2 BPSK	135	69	23.00				
100	Pl2 BPSK	135	138	22.95				
100	Pl2 BPSK	270	0	22.96			24.0	0.0
100	QPSK	1	1	23.01				
100	QPSK	1	137	22.97			24.0	0.0
100	QPSK	1	271	22.93				
100	QPSK	135	0	22.91				
100	QPSK	135	69	22.97			24.0	0.0
100	QPSK	135	138	22.95				
100	QPSK	270	0	22.94			24.0	0.0
100	16QAM	1	1	22.96			24.0	0.0
100	64QAM	1	1	22.98			24.0	0.0
100	256QAM	1	1	22.94			23.5	0.5
Channel				64968	65000	65032	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	22.80	22.78	22.81	24.0	0.0
Channel				64834	65000	65068	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	22.82	22.76	22.79	24.0	0.0
Channel				64800	65000	65100	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	22.80	22.76	22.87	24.0	0.0
Channel				64868	65000	65132	Tune-up limit	MPR
Frequency (MHz)				3740.02	3750	3749.98	(dBm)	(dB)
60	QPSK	1	1	22.80	22.79	22.86	24.0	0.0
Channel				64834	65000	65168	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	22.82	22.82	22.84	24.0	0.0
Channel				64800	65000	65200	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	22.83	22.80	22.84	24.0	0.0
Channel				64768	65000	65232	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	22.84	22.80	22.82	24.0	0.0
Channel				64734	65000	65268	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	22.79	22.79	22.83	24.0	0.0
Channel				64768	65000	65332	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	22.82	22.80	22.81	24.0	0.0
Channel				64800	65000	65310	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	22.80	22.79	22.82	24.0	0.0



### Part27Q\_n78 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.97	25.97	25.97	27.0	0.0
100	PI2 BPSK	1	137	25.79	25.79	25.79	27.0	0.0
100	PI2 BPSK	1	271	25.88	25.88	25.88	27.0	0.0
100	PI2 BPSK	135	0	25.94	25.94	25.94	27.0	0.0
100	PI2 BPSK	135	69	25.78	25.78	25.78	27.0	0.0
100	PI2 BPSK	135	138	25.88	25.88	25.88	27.0	0.0
100	PI2 BPSK	270	0	25.76	25.76	25.76	27.0	0.0
100	QPSK	1	1	25.93	25.93	25.93	27.0	0.0
100	QPSK	1	137	25.97	25.97	25.97	27.0	0.0
100	QPSK	1	271	25.84	25.84	25.84	27.0	0.0
100	QPSK	135	0	25.97	25.97	25.97	27.0	0.0
100	QPSK	135	69	25.98	25.98	25.98	27.0	0.0
100	QPSK	135	138	25.79	25.79	25.79	27.0	0.0
100	QPSK	270	0	25.96	25.96	25.96	28.5	0.5
100	16QAM	1	1	25.83	25.83	25.83	27.0	0.0
100	64QAM	1	1	24.70	24.70	24.70	25.5	1.5
100	256QAM	1	1	22.60	22.60	22.60	23.5	3.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	34.95	34.95	34.95	35.00	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	34.96	34.96	34.96	35.00	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.88	25.88	25.88	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	26.00	25.99	25.92	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	31.68	31.68	31.68	31.68	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.97	25.97	25.97	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.97	25.91	26.02	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.97	25.90	25.92	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.93	25.96	25.88	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.95	25.92	25.98	27.0	0.0

### Part27Q\_n78 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.78	25.78	25.78	27.0	0.0
100	PI2 BPSK	1	137	25.88	25.88	25.88	27.0	0.0
100	PI2 BPSK	1	271	25.97	25.97	25.97	27.0	0.0
100	PI2 BPSK	135	0	25.86	25.86	25.86	27.0	0.0
100	PI2 BPSK	135	69	25.54	25.54	25.54	27.0	0.0
100	PI2 BPSK	135	138	25.58	25.58	25.58	27.0	0.0
100	PI2 BPSK	270	0	25.52	25.52	25.52	27.0	0.0
100	QPSK	1	1	25.89	25.89	25.89	27.0	0.0
100	QPSK	1	137	25.79	25.79	25.79	27.0	0.0
100	QPSK	1	271	25.81	25.81	25.81	27.0	0.0
100	QPSK	135	0	25.71	25.71	25.71	27.0	0.0
100	QPSK	135	69	25.74	25.74	25.74	27.0	0.0
100	QPSK	135	138	25.70	25.70	25.70	27.0	0.0
100	QPSK	270	0	25.72	25.72	25.72	28.5	0.5
100	16QAM	1	1	25.57	25.57	25.57	27.0	0.0
100	64QAM	1	1	24.40	24.40	24.40	25.5	1.5
100	256QAM	1	1	22.37	22.37	22.37	23.5	3.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.77	25.88	25.84	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.80	25.86	25.87	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.77	25.87	25.85	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.81	25.80	25.88	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	31.68	31.68	31.68	31.68	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.74	25.85	25.84	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.81	25.85	25.74	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.77	25.87	25.78	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.07	25.81	25.79	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.77	25.87	25.79	27.0	0.0

### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	14.06	14.06	14.06	15.5	0.0
100	PI2 BPSK	1	137	14.01	14.01	14.01	15.5	0.0
100	PI2 BPSK	1	271	14.07	14.07	14.07	15.5	0.0
100	PI2 BPSK	135	0	14.06	14.06	14.06	15.5	0.0
100	PI2 BPSK	135	69	14.12	14.12	14.12	15.5	0.0
100	PI2 BPSK	135	138	14.01	14.01	14.01	15.5	0.0
100	PI2 BPSK	270	0	14.00	14.00	14.00	15.5	0.0
100	QPSK	1	1	14.06	14.06	14.06	15.5	0.0
100	QPSK	1	137	14.07	14.07	14.07	15.5	0.0
100	QPSK	1	271	14.04	14.04	14.04	15.5	0.0
100	QPSK	135	0	14.09	14.09	14.09	15.5	0.0
100	QPSK	135	69	14.15	14.15	14.15	15.5	0.0
100	QPSK	135	138	14.06	14.06	14.06	15.5	0.0
100	QPSK	270	0	14.11	14.11	14.11	15.5	0.0
100	16QAM	1	1	14.17	14.17	14.17	15.5	0.0
100	64QAM	1	1	14.06	14.06	14.06	15.5	0.0
100	256QAM	1	1	14.08	14.08	14.08	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	13.98	14.09	14.00	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	13.97	13.99	14.02	15.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	14.08	14.06	13.88	15.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	13.97	14.08	14.10	15.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.06	13.97	13.98	15.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	14.00	14.07	14.03	15.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	13.97	13.99	13.96	15.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	13.98	14.08	13.97	15.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	13.99	13.96	14.06	15.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	14.01	14.01	14.08	15.5	0.0





Part270\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3750				
100	PI2 BPSK	1	1	14.40	14.46		15.5	0.0
100	PI2 BPSK	1	137	14.39	14.45			
100	PI2 BPSK	1	271	14.41	14.47		15.5	0.0
100	PI2 BPSK	135	0	14.41	14.47		15.5	0.0
100	PI2 BPSK	135	69	14.47	14.53		15.5	0.0
100	PI2 BPSK	135	138	14.45	14.51		15.5	0.0
100	PI2 BPSK	270	0	14.39	14.45		15.5	0.0
100	QPSK	1	1	14.40	14.46		15.5	0.0
100	QPSK	1	137	14.48	14.54		15.5	0.0
100	QPSK	1	271	14.48	14.54		15.5	0.0
100	QPSK	135	0	14.55	14.61		15.5	0.0
100	QPSK	135	69	14.57	14.63		15.5	0.0
100	QPSK	135	138	14.48	14.54		15.5	0.0
100	QPSK	270	0	14.51	14.57		15.5	0.0
100	16QAM	1	1	14.48	14.54		15.5	0.0
100	16QAM	1	1	14.43	14.49		15.5	0.0
100	256QAM	1	1	14.38	14.44		15.5	0.0
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3757.98	(dBm)	(dB)
90	QPSK	1	1	14.40	14.37	14.40	15.5	0.0
Channel				648334	650000	650668	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	14.42	14.43	14.37	15.5	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	14.38	14.44	14.44	15.5	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3728.02	3750	3761.98	(dBm)	(dB)
60	QPSK	1	1	14.41	14.47	14.47	15.5	0.0
Channel				648334	650000	651668	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	14.50	14.45	14.37	15.5	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	14.37	14.42	14.43	15.5	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.00	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	14.50	14.41	14.41	15.5	0.0
Channel				647334	650000	652668	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	14.45	14.42	14.50	15.5	0.0
Channel				647000	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3707.50	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	14.41	14.50	14.44	15.5	0.0
Channel				646668	650000	653332	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	14.49	14.39	14.38	15.5	0.0



Part27Q_n78 HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi/2 BPSK	1	1		14.06				
100	Pi/2 BPSK	1	137		14.01		15.5	0.0	
100	Pi/2 BPSK	1	271		14.07				
100	Pi/2 BPSK	135	0		14.06		15.5	0.0	
100	Pi/2 BPSK	135	69		14.12		15.5	0.0	
100	Pi/2 BPSK	135	138		14.01				
100	Pi/2 BPSK	270	0		14.00		15.5	0.0	
100	QPSK	1	1		14.08				
100	QPSK	1	137		14.07		15.5	0.0	
100	QPSK	1	271		14.04				
100	QPSK	135	0		14.09				
100	QPSK	135	69		14.15		15.5	0.0	
100	QPSK	135	138		14.08				
100	QPSK	270	0		14.11		15.5	0.0	
100	16QAM	1	1		14.17		15.5	0.0	
100	16QAM	1	1		14.06		15.5	0.0	
100	256QAM	1	1		14.08		15.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633332	633668	Tune-up limit (dBm)	MPR (dB)	
				3495	3497.98	3501.97			
				13.96	14.09	14.00	15.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632968	633332	634000	Tune-up limit (dBm)	MPR (dB)	
				3490.02	3499.98	3510			
				13.97	13.99	14.02	15.5	0.0	
				14.08	14.06	13.98	15.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632000	633332	634668	Tune-up limit (dBm)	MPR (dB)	
				3485.01	3499.98	3514.98			
				14.08	14.06	13.98	15.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	631668	633332	636000	Tune-up limit (dBm)	MPR (dB)	
				3475.02	3499.98	3525			
				14.02	13.97	13.98	15.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631000	633332	636668	Tune-up limit (dBm)	MPR (dB)	
				3470.01	3499.98	3529.98			
				14.00	14.07	14.03	15.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631000	633332	636668	Tune-up limit (dBm)	MPR (dB)	
				3465	3499.98	3534.98			
				13.97	13.99	13.96	15.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	630968	633332	636000	Tune-up limit (dBm)	MPR (dB)	
				3460.02	3499.98	3540			
				13.96	14.08	13.97	15.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630500	633332	636168	Tune-up limit (dBm)	MPR (dB)	
				3457.5	3499.98	3542.48			
				13.99	13.96	14.06	15.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630334	633332	636332	Tune-up limit (dBm)	MPR (dB)	
				3455.01	3499.98	3544.98			
				14.01	14.01	14.08	15.5	0.0	
10	QPSK	1	1						

Part27O_n78 HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi/2 BPSK	1	1		14.40				
100	Pi/2 BPSK	1	137		14.46		15.5	0.0	
100	Pi/2 BPSK	1	271		14.39				
100	Pi/2 BPSK	135	0		14.41		15.5	0.0	
100	Pi/2 BPSK	135	69		14.47		15.5	0.0	
100	Pi/2 BPSK	135	138		14.45				
100	Pi/2 BPSK	270	0		14.39		15.5	0.0	
100	QPSK	1	1		14.40				
100	QPSK	1	137		14.49		15.5	0.0	
100	QPSK	1	271		14.48				
100	QPSK	135	0		14.55				
100	QPSK	135	69		14.57		15.5	0.0	
100	QPSK	135	138		14.48				
100	QPSK	270	0		14.51		15.5	0.0	
100	16QAM	1	1		14.48		15.5	0.0	
100	16QAM	1	1		14.43		15.5	0.0	
100	256QAM	1	1		14.39		15.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	649668	650000	650332	Tune-up limit (dBm)	MPR (dB)	
				3745.02	3750	3744.98			
				14.40	14.37	14.40	15.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	649334	650000	650968	Tune-up limit (dBm)	MPR (dB)	
				3740.01	3750	3759.98			
				14.42	14.43	14.47	15.5	0.0	
				14.38	14.44	14.44	15.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	648668	650000	651332	Tune-up limit (dBm)	MPR (dB)	
				3735	3750	3765			
				14.37	14.44	14.47	15.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	648000	650000	651668	Tune-up limit (dBm)	MPR (dB)	
				3730	3750	3760			
				14.37	14.42	14.43	15.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	647668	650000	652000	Tune-up limit (dBm)	MPR (dB)	
				3725.01	3750	3744.98			
				14.50	14.45	14.37	15.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	647000	650000	652332	Tune-up limit (dBm)	MPR (dB)	
				3720	3750	3760			
				14.37	14.42	14.43	15.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	647168	650000	652668	Tune-up limit (dBm)	MPR (dB)	
				3715.02	3750	3764.98			
				14.50	14.41	14.41	15.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	647334	650000	652968	Tune-up limit (dBm)	MPR (dB)	
				3710.01	3750	3769.98			
				14.45	14.42	14.50	15.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	647168	650000	653332	Tune-up limit (dBm)	MPR (dB)	
				3707.52	3750	3762.48			
				14.41	14.50	14.44	15.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	647000	650000	653668	Tune-up limit (dBm)	MPR (dB)	
				3705	3750	3765			
				14.49	14.39	14.38	15.5	0.0	



Reduced Power Mode for DSI3

n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 372000	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	17.03	17.22	17.09			
20	PI2 BPSK	1	53	17.03	17.20	17.16	18.0	0.0	
20	PI2 BPSK	1	104	17.17	17.27	17.09			
20	PI2 BPSK	50	0	17.11	17.20	17.06	18.0	0.0	
20	PI2 BPSK	50	28	17.15	17.22	17.10	18.0	0.0	
20	PI2 BPSK	50	56	17.16	17.23	17.16			
20	PI2 BPSK	100	0	17.12	17.21	17.15	18.0	0.0	
20	QPSK	1	1	17.16	17.34	17.17			
20	QPSK	1	53	17.16	17.24	17.03	18.0	0.0	
20	QPSK	1	104	17.12	17.23	17.08			
20	QPSK	50	0	17.12	17.21	17.10	18.0	0.0	
20	QPSK	50	28	17.17	17.27	17.06	18.0	0.0	
20	QPSK	50	56	17.13	17.21	17.16			
20	QPSK	100	0	17.14	17.17	17.09	18.0	0.0	
20	16QAM	1	1	17.14	17.24	17.13	18.0	0.0	
20	64QAM	1	1	17.14	17.24	17.10	18.0	0.0	
20	256QAM	1	1	17.02	17.13	17.07	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	37100	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.07	17.15	17.11	19.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.10	17.15	17.17	18.0	0.0	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 372000	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	17.89	17.83	17.79			
20	PI2 BPSK	1	53	17.82	18.02	17.93	19.0	0.0	
20	PI2 BPSK	1	104	17.74	17.83	17.81			
20	PI2 BPSK	50	0	17.93	17.93	17.87	19.0	0.0	
20	PI2 BPSK	50	28	17.85	17.86	17.75	19.0	0.0	
20	PI2 BPSK	50	56	17.90	17.90	17.94			
20	PI2 BPSK	100	0	17.75	17.87	17.79	19.0	0.0	
20	QPSK	1	1	18.06	18.15	18.11			
20	QPSK	1	53	17.81	17.86	17.83	19.0	0.0	
20	QPSK	1	104	17.91	17.90	17.85			
20	QPSK	50	0	17.87	17.84	17.87	19.0	0.0	
20	QPSK	50	28	17.89	18.09	17.86	19.0	0.0	
20	QPSK	50	56	17.88	17.84	17.84			
20	QPSK	100	0	17.83	17.87	17.86	19.0	0.0	
20	16QAM	1	1	17.82	17.86	17.84	19.0	0.0	
20	64QAM	1	1	17.86	17.85	17.86	19.0	0.0	
20	256QAM	1	1	17.82	17.85	17.84	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	37100	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.94	18.07	17.90	19.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.85	17.85	17.83	19.0	0.0	

n5_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 166800	Power Middle Ch. Freq. 167500	Power High Ch. Freq. 168000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.78	22.82	22.80			
20	PI2 BPSK	1	53	22.80	22.96	22.87	24.0	0.0	
20	PI2 BPSK	1	104	22.76	22.86	22.78			
20	PI2 BPSK	50	0	22.78	22.86	22.86	24.0	0.0	
20	PI2 BPSK	50	28	22.90	22.85	22.90	24.0	0.0	
20	PI2 BPSK	50	56	22.77	22.82	22.79			
20	PI2 BPSK	100	0	22.78	22.88	22.83	24.0	0.0	
20	QPSK	1	1	22.85	23.00	22.91			
20	QPSK	1	53	22.79	22.82	22.79	24.0	0.0	
20	QPSK	1	104	22.82	22.85	22.76			
20	QPSK	50	0	22.76	22.85	22.76	24.0	0.0	
20	QPSK	50	28	22.81	22.86	22.82	24.0	0.0	
20	QPSK	50	56	22.77	22.86	22.84			
20	QPSK	100	0	22.87	22.80	22.84	24.0	0.0	
20	16QAM	1	1	22.87	22.92	22.87	24.0	0.0	
20	64QAM	1	1	21.61	21.65	21.55	22.5	1.5	
20	256QAM	1	1	19.69	19.71	19.67	20.5	3.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	166800	167500	168000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.83	22.98	22.76	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.83	22.83	22.83	24.0	0.0	



n5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 167800	Power Middle Ch. Freq. 167800	Power High Ch. Freq. 167800	MPR (dB)
Channel				834	836.5	839	
Frequency (MHz)							
20	PI2 BPSK	1	1	22.19	22.21	22.07	
20	PI2 BPSK	1	53	22.31	22.35	22.34	
20	PI2 BPSK	1	104	22.21	22.25	22.26	
20	PI2 BPSK	50	0	22.26	22.26	22.14	23.5
20	PI2 BPSK	50	28	22.22	22.17	22.18	23.5
20	PI2 BPSK	50	56	22.30	22.30	22.31	23.5
20	PI2 BPSK	100	0	22.33	22.23	22.29	23.5
20	QPSK	1	1	22.32	22.45	22.33	
20	QPSK	1	53	22.09	22.27	22.17	23.5
20	QPSK	1	104	22.30	22.30	22.21	
20	QPSK	50	0	22.23	22.31	22.18	23.5
20	QPSK	50	28	22.33	22.38	22.24	23.5
20	QPSK	50	56	22.24	22.35	22.14	23.5
20	QPSK	100	0	22.16	22.27	22.16	23.5
20	16QAM	1	1	22.23	22.23	22.21	23.5
20	64QAM	1	1	21.40	21.38	21.26	22.5
20	256QAM	1	1	19.06	19.26	19.20	20.5
Channel				165300	167300	168300	
Frequency (MHz)							
15	QPSK	1	1	22.23	22.33	22.15	23.5
Channel				165800	167300	168800	
Frequency (MHz)							
10	QPSK	1	1	22.20	22.23	22.13	23.5
Channel				165300	167300	169300	
Frequency (MHz)							
5	QPSK	1	1	22.30	22.27	22.15	23.5

n7_Ant 9							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 504500	Power Middle Ch. Freq. 507000	Power High Ch. Freq. 510000	MPR (dB)
Channel				2520	2535	2550	
Frequency (MHz)							
40	PI2 BPSK	1	1	19.23	19.22	19.53	
40	PI2 BPSK	1	108	19.54	19.61	19.55	
40	PI2 BPSK	1	214	19.52	19.60	19.60	
40	PI2 BPSK	108	0	19.37	19.56	19.44	20.5
40	PI2 BPSK	108	54	19.34	19.52	19.48	20.5
40	PI2 BPSK	108	108	19.45	19.71	19.61	20.5
40	PI2 BPSK	216	0	19.54	19.67	19.64	20.5
40	QPSK	1	1	19.57	19.78	19.68	
40	QPSK	1	108	19.31	19.48	19.38	20.5
40	QPSK	1	214	19.50	19.59	19.58	
40	QPSK	108	0	19.55	19.55	19.56	20.5
40	QPSK	108	54	19.67	19.70	19.63	20.5
40	QPSK	108	108	19.56	19.65	19.62	20.5
40	QPSK	216	0	19.60	19.64	19.63	20.5
40	16QAM	1	1	19.56	19.73	19.66	20.5
40	64QAM	1	1	19.39	19.47	19.40	20.5
40	256QAM	1	1	19.56	19.65	19.66	20.5
Channel				505000	507000	511000	
Frequency (MHz)							
30	QPSK	1	1	19.50	19.68	19.57	20.5
Channel				502500	507000	511500	
Frequency (MHz)							
25	QPSK	1	1	19.55	19.60	19.57	20.5
Channel				502000	507000	512000	
Frequency (MHz)							
20	QPSK	1	1	19.53	19.63	19.56	20.5
Channel				501500	507000	512500	
Frequency (MHz)							
15	QPSK	1	1	19.51	19.62	19.54	20.5
Channel				501000	507000	513000	
Frequency (MHz)							
10	QPSK	1	1	19.50	19.68	19.62	20.5
Channel				500500	507000	513500	
Frequency (MHz)							
5	QPSK	1	1	19.60	19.59	19.49	20.5

n7_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 504500	Power Middle Ch. Freq. 507000	Power High Ch. Freq. 510000	MPR (dB)
Channel				2520	2535	2550	
Frequency (MHz)							
40	PI2 BPSK	1	1	15.95	16.01	15.89	
40	PI2 BPSK	1	108	16.06	16.05	16.04	
40	PI2 BPSK	1	214	15.98	16.15	16.14	17.0
40	PI2 BPSK	108	0	15.88	16.03	15.89	17.0
40	PI2 BPSK	108	54	15.86	16.04	15.96	17.0
40	PI2 BPSK	108	108	16.03	16.10	16.04	17.0
40	PI2 BPSK	216	0	15.98	16.06	16.04	17.0
40	QPSK	1	1	16.02	16.18	16.08	
40	QPSK	1	108	15.96	16.04	16.03	17.0
40	QPSK	1	214	16.00	16.02	16.05	
40	QPSK	108	0	16.04	16.13	16.09	17.0
40	QPSK	108	54	16.07	16.16	16.11	17.0
40	QPSK	108	108	16.02	16.09	16.04	17.0
40	QPSK	216	0	16.04	16.14	16.07	17.0
40	16QAM	1	1	15.98	16.14	16.08	17.0
40	64QAM	1	1	15.98	16.09	16.02	17.0
40	256QAM	1	1	16.01	16.05	16.16	17.0
Channel				505000	507000	511000	
Frequency (MHz)							
30	QPSK	1	1	16.02	16.01	15.96	17.0
Channel				502500	507000	511500	
Frequency (MHz)							
25	QPSK	1	1	15.98	16.06	15.99	17.0
Channel				502000	507000	512000	
Frequency (MHz)							
20	QPSK	1	1	15.93	16.01	16.07	17.0
Channel				501500	507000	512500	
Frequency (MHz)							
15	QPSK	1	1	15.99	16.14	16.00	17.0
Channel				501000	507000	513000	
Frequency (MHz)							
10	QPSK	1	1	16.00	16.01	16.00	17.0
Channel				500500	507000	513500	
Frequency (MHz)							
5	QPSK	1	1	15.90	16.03	16.01	17.0



n12_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	22.87	22.90	22.84	24.0	0.0	
15	PI2 BPSK	1	40	22.91	22.96	22.91			
15	PI2 BPSK	1	77	22.83	22.93	22.83			
15	PI2 BPSK	36	0	22.84	22.88	22.86	24.0	0.0	
15	PI2 BPSK	36	22	22.74	22.79	22.77	24.0	0.0	
15	PI2 BPSK	36	43	22.69	22.76	22.70	24.0	0.0	
15	PI2 BPSK	75	0	22.84	22.88	22.86	24.0	0.0	
15	QPSK	1	1	22.96	23.01	22.92			
15	QPSK	1	40	22.85	22.92	22.83	24.0	0.0	
15	QPSK	1	77	22.83	22.93	22.91			
15	QPSK	36	0	22.79	22.86	22.79	24.0	0.0	
15	QPSK	36	22	22.91	22.96	22.93	24.0	0.0	
15	QPSK	36	43	22.70	22.78	22.70	24.0	0.0	
15	QPSK	75	0	22.84	22.86	22.87	24.0	0.0	
15	16QAM	1	1	22.95	22.91	22.86	24.0	0.0	
15	64QAM	1	1	21.43	21.51	21.49	22.5	1.5	
15	256QAM	1	1	19.51	19.55	19.49	20.5	3.5	
Channel				14000	141500	142000	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	22.88	22.99	22.86	24.0	0.0	
Channel				14000	141500	142700	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	22.99	22.94	22.87	24.0	0.0	

n12_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	23.34	23.35	23.31	24.0	0.0	
15	PI2 BPSK	1	40	23.33	23.36	23.31			
15	PI2 BPSK	1	77	23.31	23.32	23.31			
15	PI2 BPSK	36	0	22.89	22.91	22.84	23.5	0.5	
15	PI2 BPSK	36	22	23.15	23.17	23.15	24.0	0.0	
15	PI2 BPSK	36	43	22.82	22.91	22.87	23.5	0.5	
15	PI2 BPSK	75	0	22.95	22.98	22.93	24.0	0.0	
15	QPSK	1	1	23.35	23.37	23.32			
15	QPSK	1	40	23.19	23.28	23.24	24.0	0.0	
15	QPSK	1	77	23.34	23.36	23.34			
15	QPSK	36	0	22.40	22.46	22.44	23.0	1.0	
15	QPSK	36	22	23.19	23.23	23.16	24.0	0.0	
15	QPSK	36	43	22.26	22.35	22.30	23.0	1.0	
15	QPSK	75	0	22.49	22.52	22.45	23.0	1.0	
15	16QAM	1	1	22.97	22.81	22.51	23.0	1.0	
15	64QAM	1	1	21.05	21.11	21.09	21.5	2.5	
15	256QAM	1	1	19.08	19.18	19.17	19.5	4.5	
Channel				14000	141500	142200	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	23.32	23.29	23.26	24.0	0.0	
Channel				14000	141500	142700	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	23.30	23.33	23.27	24.0	0.0	

n14_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				790					
Frequency (MHz)									
10	PI2 BPSK	1	1	22.78			24.0	0.0	
10	PI2 BPSK	1	26	22.80					
10	PI2 BPSK	1	50	22.76					
10	PI2 BPSK	25	0	22.84			24.0	0.0	
10	PI2 BPSK	25	14	22.89			24.0	0.0	
10	PI2 BPSK	25	27	22.83			24.0	0.0	
10	PI2 BPSK	50	0	22.94			24.0	0.0	
10	QPSK	1	1	22.82					
10	QPSK	1	26	22.80			24.0	0.0	
10	QPSK	1	50	22.72					
10	QPSK	25	0	22.85			24.0	0.0	
10	QPSK	25	14	22.71			24.0	0.0	
10	QPSK	25	27	22.88			24.0	0.0	
10	QPSK	50	0	22.86			24.0	0.0	
10	16QAM	1	1	22.90			24.0	0.0	
10	64QAM	1	1	21.57			22.5	1.5	
10	256QAM	1	1	19.45			20.5	3.5	
Channel				158100	158000	158100	Tune-up limit	MPR	
Frequency (MHz)				790.5	793.5	796.5	(dBm)	(dB)	
5	QPSK	1	1	22.74	22.75	22.75	24.0	0.0	



n14_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
10	PI2 BPSK	1	1	23.15			
10	PI2 BPSK	1	26	23.16			
10	PI2 BPSK	1	50	23.16			
10	PI2 BPSK	25	0	23.04			
10	PI2 BPSK	25	14	23.05			
10	PI2 BPSK	25	27	22.96			
10	PI2 BPSK	50	0	23.00			
10	QPSK	1	1	23.21			
10	QPSK	1	26	23.18			
10	QPSK	1	50	23.16			
10	QPSK	25	0	22.55			
10	QPSK	25	14	23.11			
10	QPSK	25	27	22.53			
10	QPSK	50	0	22.51			
10	16QAM	1	1	22.61			
10	64QAM	1	1	21.33			
10	256QAM	1	1	19.15			
Channel							
Frequency (MHz)							
5	QPSK	1	1	23.12	23.14	23.08	24.0

n25_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
40	PI2 BPSK	1	1	17.17	17.23	17.27	
40	PI2 BPSK	1	108	17.31	17.36	17.31	
40	PI2 BPSK	1	214	17.20	17.29	17.30	
40	PI2 BPSK	108	0	17.19	17.18	17.14	
40	PI2 BPSK	108	54	17.16	17.32	17.17	
40	PI2 BPSK	108	108	17.23	17.42	17.27	
40	PI2 BPSK	216	0	17.28	17.24	17.21	
40	QPSK	1	1	17.36	17.46	17.52	
40	QPSK	1	108	17.21	17.31	17.23	
40	QPSK	1	214	17.34	17.32	17.22	
40	QPSK	108	0	17.17	17.21	17.18	
40	QPSK	108	54	17.31	17.42	17.26	
40	QPSK	108	108	17.29	17.40	17.17	
40	QPSK	216	0	17.35	17.36	17.32	
40	16QAM	1	1	17.28	17.42	17.36	
40	64QAM	1	1	17.14	17.21	17.15	
40	256QAM	1	1	17.26	17.36	17.23	
Channel							
Frequency (MHz)							
35	QPSK	1	1	17.14	17.30	17.16	18.0
Channel							
Frequency (MHz)							
30	QPSK	1	1	17.12	17.31	17.17	18.0
Channel							
Frequency (MHz)							
25	QPSK	1	1	17.36	17.29	17.31	18.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	17.25	17.28	17.28	18.0
Channel							
Frequency (MHz)							
15	QPSK	1	1	17.33	17.36	17.38	18.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	17.27	17.29	17.30	18.0
Channel							
Frequency (MHz)							
5	QPSK	1	1	17.28	17.30	17.27	18.0

n25_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
40	PI2 BPSK	1	1	17.59	17.81	17.81	
40	PI2 BPSK	1	108	17.51	17.62	17.64	
40	PI2 BPSK	1	214	17.35	17.43	17.33	
40	PI2 BPSK	108	0	17.51	17.60	17.59	
40	PI2 BPSK	108	54	17.49	17.89	17.50	
40	PI2 BPSK	108	108	17.62	17.62	17.59	
40	PI2 BPSK	216	0	17.53	17.38	17.38	
40	QPSK	1	1	17.68	17.77	17.67	
40	QPSK	1	108	17.56	17.58	17.60	
40	QPSK	1	214	17.37	17.43	17.28	
40	QPSK	108	0	17.62	17.60	17.58	
40	QPSK	108	54	17.64	17.69	17.65	
40	QPSK	108	108	17.59	17.35	17.34	
40	QPSK	216	0	17.60	17.65	17.59	
40	16QAM	1	1	17.30	17.68	17.65	
40	64QAM	1	1	17.63	17.50	17.56	
40	256QAM	1	1	17.51	17.46	17.48	
Channel							
Frequency (MHz)							
35	QPSK	1	1	17.57	17.60	17.50	19.0
Channel							
Frequency (MHz)							
30	QPSK	1	1	17.52	17.67	17.59	19.0
Channel							
Frequency (MHz)							
25	QPSK	1	1	17.52	17.63	17.62	19.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	17.58	17.67	17.64	19.0
Channel							
Frequency (MHz)							
15	QPSK	1	1	17.50	17.68	17.63	19.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	17.51	17.64	17.51	19.0
Channel							
Frequency (MHz)							
5	QPSK	1	1	17.63	17.56	17.53	19.0



n26(FCC)_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F Freq. 164800	Power Middle Ch. F Freq. 166300	Power High Ch. F Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	22.84	22.90	22.87			
20	PI2 BPSK	1	53	22.99	23.02	22.97	24.0	0.0	
20	PI2 BPSK	1	104	22.92	23.00	22.98			
20	PI2 BPSK	50	0	22.84	22.90	22.88	24.0	0.0	
20	PI2 BPSK	50	28	22.89	22.95	22.89	24.0	0.0	
20	PI2 BPSK	50	56	22.88	22.90	22.89			
20	PI2 BPSK	100	0	22.82	22.92	22.95	24.0	0.0	
20	QPSK	1	1	22.95	23.09	23.05			
20	QPSK	1	53	22.88	22.95	22.93	24.0	0.0	
20	QPSK	1	104	22.92	23.02	23.00			
20	QPSK	50	0	22.47	22.53	22.45	23.5	0.5	
20	QPSK	50	28	22.88	22.96	22.87	24.0	0.0	
20	QPSK	50	56	22.85	22.71	22.85			
20	QPSK	100	0	22.80	22.86	22.98	23.5	0.5	
20	16QAM	1	1	22.57	22.65	22.59	23.5	0.5	
20	84QAM	1	1	21.08	21.15	21.07	22.0	2.0	
20	256QAM	1	1	19.13	19.17	19.14	20.0	4.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	22.95	23.03	22.95	24.0	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	22.97	23.05	22.96	24.0	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.94	23.07	23.01	24.0	0.0	

n26(FCC)_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F Freq. 164800	Power Middle Ch. F Freq. 166300	Power High Ch. F Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	22.50	22.49	22.50			
20	PI2 BPSK	1	53	22.42	22.48	22.39	23.5	0.0	
20	PI2 BPSK	1	104	22.62	22.65	22.58			
20	PI2 BPSK	50	0	22.52	22.46	22.43	23.5	0.0	
20	PI2 BPSK	50	28	22.47	22.49	22.51	23.5	0.0	
20	PI2 BPSK	50	56	22.50	22.55	22.43			
20	PI2 BPSK	100	0	22.61	22.62	22.57	23.5	0.0	
20	QPSK	1	1	22.68	22.69	22.66			
20	QPSK	1	53	22.48	22.80	22.48	23.5	0.0	
20	QPSK	1	104	22.66	22.53	22.61			
20	QPSK	50	0	22.00	21.95	22.07	23.0	0.5	
20	QPSK	50	28	22.48	22.51	22.42	23.5	0.0	
20	QPSK	50	56	22.14	22.19	22.17			
20	QPSK	100	0	21.86	22.05	22.02	23.0	0.5	
20	16QAM	1	1	21.96	21.95	22.03	23.0	0.5	
20	84QAM	1	1	20.41	20.60	20.46	21.5	2.0	
20	256QAM	1	1	18.70	18.62	18.59	19.5	4.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	22.34	22.43	22.30	23.5	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	22.34	22.44	22.35	23.5	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.39	22.39	22.38	23.5	0.0	

n30_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F Freq. 460000	Power Middle Ch. F Freq. 462000	Power High Ch. F Freq. 464000	Tune-up limit (dBm)	MPR (dB)	
Channel				2310					
Frequency (MHz)									
10	PI2 BPSK	1	1	22.85					
10	PI2 BPSK	1	26	22.85			24.0	0.0	
10	PI2 BPSK	1	50	22.78					
10	PI2 BPSK	26	0	22.86			24.0	0.0	
10	PI2 BPSK	26	14	22.73			24.0	0.0	
10	PI2 BPSK	26	27	22.67					
10	PI2 BPSK	50	0	22.72			24.0	0.0	
10	QPSK	1	1	22.90					
10	QPSK	1	26	22.88			24.0	0.0	
10	QPSK	1	50	22.86					
10	QPSK	26	0	22.81			24.0	0.0	
10	QPSK	26	14	22.75			24.0	0.0	
10	QPSK	26	27	22.71					
10	QPSK	50	0	22.73			24.0	0.0	
10	16QAM	1	1	22.78			22.5	1.5	
10	84QAM	1	1	22.05			22.5	3.5	
10	256QAM	1	1	19.86			20.5	4.0	
Channel				461500	462000	462500	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.77	22.80	22.78	24.0	0.0	



n30\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Free	Power Middle Ch. / Free	Power High Ch. / Free	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)					2310			
10	P12 BPSK	1	1		15.59			
10	P12 BPSK	1	26		15.55		17.5	0.0
10	P12 BPSK	1	50		15.60			
10	P12 BPSK	25	0		15.59		17.5	0.0
10	P12 BPSK	25	14		15.60		17.5	0.0
10	P12 BPSK	25	27		15.57		17.5	0.0
10	P12 BPSK	50	0		15.64			
10	QPSK	1	1		15.71			
10	QPSK	1	26		15.57		17.5	0.0
10	QPSK	1	50		15.57			
10	QPSK	25	0		15.59		17.5	0.0
10	QPSK	25	14		15.67		17.5	0.0
10	QPSK	25	27		15.61		17.5	0.0
10	QPSK	50	0		15.56		17.5	0.0
10	16QAM	1	1		15.60		17.5	0.0
10	64QAM	1	1		15.62		17.5	0.0
10	256QAM	1	1		15.57		17.5	0.0
Channel				481500	482000	482500		
Frequency (MHz)				2307.5	2310	2312.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	15.61	15.67	15.64	17.5	0.0





n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	17.16	17.16	17.16	18.0	0.0	
40	PI2 BPSK	1	168	16.99	17.11	16.99			
40	PI2 BPSK	1	214	17.13	17.17	17.15			
40	PI2 BPSK	108	0	17.24	17.20	17.17	18.0	0.0	
40	PI2 BPSK	108	54	17.14	17.19	17.19	18.0	0.0	
40	PI2 BPSK	108	108	17.11	17.03	17.01			
40	PI2 BPSK	216	0	17.18	17.23	17.21	18.0	0.0	
40	QPSK	1	1	17.23	17.27	17.23			
40	QPSK	1	168	17.06	17.05	16.99	18.0	0.0	
40	QPSK	1	214	17.15	17.19	17.16			
40	QPSK	108	0	17.19	17.17	17.15	18.0	0.0	
40	QPSK	108	54	17.20	17.23	17.21	18.0	0.0	
40	QPSK	108	108	17.07	17.19	17.18			
40	QPSK	216	0	17.17	17.21	17.20	18.0	0.0	
40	16QAM	1	1	17.23	17.20	17.18	18.0	0.0	
40	64QAM	1	1	17.08	17.10	17.01	18.0	0.0	
40	256QAM	1	1	17.18	17.21	17.16	18.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	17.18	17.21	17.06	18.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.05	17.10	17.10	18.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.05	17.10	17.14	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.14	17.14	17.09	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.19	17.18	17.06	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.11	17.16	17.11	18.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.10	17.19	17.08	18.0	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	17.47	17.52	17.39	18.5	0.0	
40	PI2 BPSK	1	168	17.36	17.47	17.43			
40	PI2 BPSK	1	214	17.27	17.36	17.36			
40	PI2 BPSK	108	0	17.43	17.45	17.45	18.5	0.0	
40	PI2 BPSK	108	54	17.36	17.50	17.42	18.5	0.0	
40	PI2 BPSK	108	108	17.44	17.54	17.47			
40	PI2 BPSK	216	0	17.28	17.40	17.35	18.5	0.0	
40	QPSK	1	1	17.45	17.40	17.51			
40	QPSK	1	168	17.32	17.48	17.44	18.5	0.0	
40	QPSK	1	214	17.26	17.32	17.27			
40	QPSK	108	0	17.45	17.47	17.40	18.5	0.0	
40	QPSK	108	54	17.45	17.53	17.42	18.5	0.0	
40	QPSK	108	108	17.29	17.39	17.30			
40	QPSK	216	0	17.46	17.49	17.40	18.5	0.0	
40	16QAM	1	1	17.36	17.44	17.51	18.5	0.0	
40	64QAM	1	1	17.31	17.40	17.34	18.5	0.0	
40	256QAM	1	1	17.33	17.33	17.33	18.5	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	17.38	17.50	17.38	18.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.40	17.41	17.52	18.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.40	17.48	17.39	18.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.33	17.41	17.31	18.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.44	17.39	17.28	18.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.32	17.49	17.33	18.5	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.35	17.48	17.33	18.5	0.0	

n70_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	PI2 BPSK	1	1		17.025				
15	PI2 BPSK	1	40		16.77		20.0	0.0	
15	PI2 BPSK	1	77		16.74				
15	PI2 BPSK	36	0		16.86		20.0	0.0	
15	PI2 BPSK	36	22		16.87		20.0	0.0	
15	PI2 BPSK	36	43		16.91		20.0	0.0	
15	PI2 BPSK	75	0		16.74				
15	QPSK	1	1		16.95				
15	QPSK	1	40		16.83		20.0	0.0	
15	QPSK	1	77		16.73				
15	QPSK	36	0		16.86		20.0	0.0	
15	QPSK	36	22		16.90		20.0	0.0	
15	QPSK	36	43		16.71		20.0	0.0	
15	QPSK	75	0		16.83				
15	16QAM	1	1		16.85		20.0	0.0	
15	64QAM	1	1		16.82		20.0	0.0	
15	256QAM	1	1		16.76		20.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.72	16.79	16.68	20.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	16.75	16.82	16.78	20.0	0.0	



n70_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				1702.5					
Frequency (MHz)									
15	PI2 BPSK	1	1	18.32					
15	PI2 BPSK	1	40	18.26			19.0	0.0	
15	PI2 BPSK	1	77	18.21					
15	PI2 BPSK	36	0	18.31			19.0	0.0	
15	PI2 BPSK	36	22	18.33			19.0	0.0	
15	PI2 BPSK	36	43	18.21			19.0	0.0	
15	PI2 BPSK	75	0	18.17					
15	QPSK	1	1	18.34					
15	QPSK	1	40	18.27			19.0	0.0	
15	QPSK	1	77	18.16					
15	QPSK	36	0	18.22			19.0	0.0	
15	QPSK	36	22	18.27			19.0	0.0	
15	QPSK	36	43	18.12			19.0	0.0	
15	QPSK	75	0	18.23					
15	16QAM	1	1	18.22			19.0	0.0	
15	64QAM	1	1	18.24			19.0	0.0	
15	256QAM	1	1	18.20			19.0	0.0	
Channel				3405.0	3405.0	3410.0	Tune-up limit	MPR	
Frequency (MHz)				1702.5	1702.5	1705	(dBm)	(dB)	
10	QPSK	1	1	18.16	18.10	18.22	19.0	0.0	
Channel				3395.0	3405.0	3415.0	Tune-up limit	MPR	
Frequency (MHz)				1697.5	1702.5	1707.5	(dBm)	(dB)	
5	QPSK	1	1	18.16	18.22	18.16	19.0	0.0	

n71_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				1360.0	1360.0	1360.0			
Frequency (MHz)									
30	PI2 BPSK	1	1	23.05	23.07	22.86			
30	PI2 BPSK	1	80	22.99	22.80	22.99	24.0	0.0	
30	PI2 BPSK	1	158	22.63	22.68	22.65			
30	PI2 BPSK	80	0	22.65	22.72	22.69	24.0	0.0	
30	PI2 BPSK	80	40	22.65	22.74	22.66	24.0	0.0	
30	PI2 BPSK	80	80	22.46	22.51	22.49			
30	PI2 BPSK	160	0	22.66	22.68	22.62	24.0	0.0	
30	QPSK	1	1	23.06	23.12	23.05			
30	QPSK	1	80	22.64	22.65	22.64	24.0	0.0	
30	QPSK	1	158	22.68	22.72	22.67			
30	QPSK	80	0	22.66	22.73	22.71	24.0	0.0	
30	QPSK	80	40	22.68	22.75	22.72	24.0	0.0	
30	QPSK	80	80	22.38	22.48	22.39			
30	QPSK	160	0	22.66	22.71	22.67	24.0	0.0	
30	16QAM	1	1	22.99	23.02	22.95	24.0	0.0	
30	64QAM	1	1	22.01	22.07	22.04	22.5	1.5	
30	256QAM	1	1	20.07	20.14	20.09	20.5	3.5	
Channel				1361.0	1361.0	1370.0	Tune-up limit	MPR	
Frequency (MHz)				670.5	680.5	685.5	(dBm)	(dB)	
25	QPSK	1	1	23.06	23.02	22.98	24.0	0.0	
Channel				1346.0	1361.0	1376.0	Tune-up limit	MPR	
Frequency (MHz)				673	683.5	688	(dBm)	(dB)	
20	QPSK	1	1	23.02	23.04	23.02	24.0	0.0	
Channel				1341.0	1361.0	1381.0	Tune-up limit	MPR	
Frequency (MHz)				670.5	680.5	690.5	(dBm)	(dB)	
15	QPSK	1	1	22.98	23.05	22.95	24.0	0.0	
Channel				1325.0	1341.0	1355.0	Tune-up limit	MPR	
Frequency (MHz)				668	680.5	693	(dBm)	(dB)	
10	QPSK	1	1	23.02	23.02	23.00	24.0	0.0	
Channel				1331.0	1361.0	1391.0	Tune-up limit	MPR	
Frequency (MHz)				665.5	680.5	685.5	(dBm)	(dB)	
5	QPSK	1	1	22.98	23.08	22.95	24.0	0.0	

n71_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				678	680.5	683			
Frequency (MHz)									
30	PI2 BPSK	1	1	23.22	23.27	23.15			
30	PI2 BPSK	1	80	23.02	23.08	23.00	24.0	0.0	
30	PI2 BPSK	1	158	22.85	22.89	22.83			
30	PI2 BPSK	80	0	22.83	22.91	22.75	24.0	0.0	
30	PI2 BPSK	80	40	22.92	22.95	22.79	24.0	0.0	
30	PI2 BPSK	80	80	22.86	22.88	22.88			
30	PI2 BPSK	160	0	22.94	23.01	22.83	24.0	0.0	
30	QPSK	1	1	23.26	23.30	23.15			
30	QPSK	1	80	22.93	23.02	22.86	24.0	0.0	
30	QPSK	1	158	22.93	22.95	22.83			
30	QPSK	80	0	22.99	22.88	22.94	24.0	0.0	
30	QPSK	80	40	22.90	22.96	22.81	24.0	0.0	
30	QPSK	80	80	22.52	22.55	22.35			
30	QPSK	160	0	22.94	22.96	22.87	24.0	0.0	
30	16QAM	1	1	22.90	22.88	22.84	24.0	0.0	
30	64QAM	1	1	21.38	21.43	21.26	22.5	1.5	
30	256QAM	1	1	19.39	19.42	19.30	20.5	3.5	
Channel				1361.0	1361.0	1371.0	Tune-up limit	MPR	
Frequency (MHz)				673	683.5	688	(dBm)	(dB)	
25	QPSK	1	1	23.18	23.27	23.09	24.0	0.0	
Channel				1346.0	1361.0	1376.0	Tune-up limit	MPR	
Frequency (MHz)				673	683.5	688	(dBm)	(dB)	
20	QPSK	1	1	23.01	23.24	23.06	24.0	0.0	
Channel				1341.0	1361.0	1381.0	Tune-up limit	MPR	
Frequency (MHz)				670.5	680.5	690.5	(dBm)	(dB)	
15	QPSK	1	1	23.26	23.27	23.09	24.0	0.0	
Channel				1325.0	1341.0	1355.0	Tune-up limit	MPR	
Frequency (MHz)				668	680.5	693	(dBm)	(dB)	
10	QPSK	1	1	23.18	23.24	23.05	24.0	0.0	
Channel				1331.0	1361.0	1391.0	Tune-up limit	MPR	
Frequency (MHz)				665.5	680.5	685.5	(dBm)	(dB)	
5	QPSK	1	1	23.23	23.23	23.05	24.0	0.0	



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	Pl2 BPSK	1	1	17.76	17.80	17.81		
40	Pl2 BPSK	1	53	17.84	17.86	17.78	19.0	0.0
40	Pl2 BPSK	1	104	17.72	17.66	17.56		
40	Pl2 BPSK	50	0	17.84	17.84	17.82	19.0	0.0
40	Pl2 BPSK	50	28	17.75	17.80	17.77	19.0	0.0
40	Pl2 BPSK	50	56	17.84	17.87	17.78		
40	Pl2 BPSK	100	0	17.73	17.62	17.62	19.0	0.0
40	QPSK	1	1	17.88	17.93	17.88		
40	QPSK	1	53	17.74	17.83	17.85	19.0	0.0
40	QPSK	1	104	17.69	17.62	17.68		
40	QPSK	50	0	17.75	17.76	17.72		
40	QPSK	50	28	17.76	17.76	17.76	19.0	0.0
40	QPSK	50	56	17.77	17.61	17.68		
40	QPSK	100	0	17.71	17.77	17.76	19.0	0.0
40	16QAM	1	1	17.79	17.82	17.86	19.0	0.0
40	64QAM	1	1	17.96	17.93	17.84	19.0	0.0
40	256QAM	1	1	17.75	17.71	17.97	19.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	2592.02	2595	2593.98		
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.68	17.76	17.83	19.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	17.73	17.64	17.67	19.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.64	17.72	17.80	19.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	Pl2 BPSK	1	1	15.42	15.35	15.44		
40	Pl2 BPSK	1	53	15.22	15.20	15.17	16.5	0.0
40	Pl2 BPSK	1	104	15.17	15.24	15.31		
40	Pl2 BPSK	50	0	15.30	15.37	15.36	16.5	0.0
40	Pl2 BPSK	50	28	15.30	15.20	15.29	16.5	0.0
40	Pl2 BPSK	50	56	15.16	15.27	15.26		
40	Pl2 BPSK	100	0	15.42	15.41	15.42	16.5	0.0
40	QPSK	1	1	15.36	15.47	15.43		
40	QPSK	1	53	15.22	15.34	15.25	16.5	0.0
40	QPSK	1	104	15.28	15.41	15.38		
40	QPSK	50	0	15.31	15.27	15.28		
40	QPSK	50	28	15.35	15.36	15.36	16.5	0.0
40	QPSK	50	56	15.27	15.28	15.34		
40	QPSK	100	0	15.17	15.25	15.24	16.5	0.0
40	16QAM	1	1	15.40	15.43	15.38	16.5	0.0
40	64QAM	1	1	15.16	15.31	15.21	16.5	0.0
40	256QAM	1	1	15.26	15.32	15.30	16.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	2592.01	2595	2593.99		
Channel								
Frequency (MHz)								
20	QPSK	1	1	15.20	15.35	15.31	16.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	15.18	15.24	15.26	16.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.24	15.34	15.33	16.5	0.0

**FCC\_n41\_Ant 9**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pl2 BPSK	1	1	17.96	17.84	17.91		
100	Pl2 BPSK	1	137	17.61	17.81	17.86	19.0	0.0
100	Pl2 BPSK	1	271	17.94	17.69	17.66		
100	Pl2 BPSK	135	0	17.89	17.86	17.80	19.0	0.0
100	Pl2 BPSK	135	69	17.61	17.85	17.86	19.0	0.0
100	Pl2 BPSK	135	138	17.83	17.74	17.59		
100	Pl2 BPSK	270	0	17.85	17.89	17.89	19.0	0.0
100	QPSK	1	1	17.93	17.97	17.94		
100	QPSK	1	137	17.85	17.69	17.63	19.0	0.0
100	QPSK	1	271	17.85	17.89	17.87		
100	QPSK	135	0	17.85	17.83	17.78		
100	QPSK	135	69	17.94	17.97	17.93	19.0	0.0
100	QPSK	135	138	17.79	17.84	17.75		
100	QPSK	270	0	17.71	17.81	17.79	18.5	0.5
100	16QAM	1	1	17.93	17.96	17.90	19.0	0.0
100	64QAM	1	1	17.73	17.81	17.83	19.0	0.0
100	256QAM	1	1	17.82	17.78	17.72	19.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	17.73	17.85	17.73	19.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.70	17.80	17.67	19.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	17.76	17.76	17.79	19.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	17.74	17.82	17.66	19.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	17.72	17.79	17.69	19.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	17.76	17.84	17.74	19.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.75	17.80	17.70	19.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.70	17.73	17.76	19.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	17.73	17.72	17.76	19.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.75	17.77	17.89	19.0	0.0



FCC\_n41 HPUE\_Ant 9

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel	506200	518998	530790		
Frequency (MHz)	2546.01	2592.99	2640.99		
100	100	100	100	19.0	0.0
Modulation	RB Size	RB Offset			
100	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.96	17.84	17.91			
17.61	17.91	17.86			
17.94	17.89	17.88			
17.89	17.86	17.80			
17.61	17.85	17.86			
17.83	17.74	17.59			
17.85	17.89	17.89			
17.93	17.87	17.94			
17.85	17.69	17.63			
17.85	17.89	17.87			
17.65	17.83	17.79			
17.74	17.87	17.81			
17.79	17.84	17.75			
17.71	17.81	17.79			
17.93	17.85	17.80			
17.73	17.81	17.83			
17.82	17.78	17.72			
Channel	508200	518998	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)	2547	2592.99	2644.98		
90	90	90	90	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.73	17.83	17.73			
507204	518998	529996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2536.02	2592.99	2649.99		
80	80	80	80	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.70	17.80	17.67			
506200	518998	530790	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2531.01	2592.99	2655		
70	70	70	70	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.78	17.76	17.79			
505200	518998	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2521.02	2592.99	2664.99		
60	60	60	60	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.74	17.82	17.69			
504204	518998	532996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2511.02	2592.99	2674.99		
50	50	50	50	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.72	17.73	17.69			
503200	518998	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2516.01	2592.99	2670		
40	40	40	40	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.76	17.84	17.74			
502200	518998	535996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2511	2592.99	2674.98		
30	30	30	30	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.75	17.80	17.70			
501204	518998	535996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2506.02	2592.99	2679.99		
20	20	20	20	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.70	17.73	17.76			
500700	518998	536496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2503.5	2592.99	2682.48		
15	15	15	15	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.71	17.72	17.73			
500200	518998	537000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	2501.01	2592.99	2686		
10	10	10	10	19.0	0.0
Modulation	RB Size	RB Offset			
1	1	1			
Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.			
17.76	17.77	17.69			



FCC_n41_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	P12 BPSK	1	1	14.91	14.91	14.87				
100	P12 BPSK	1	137	14.70	14.75	14.76				
100	P12 BPSK	1	271	14.81	14.88	14.85			16.5	0.0
100	P12 BPSK	135	9	14.90	14.95	14.94			16.5	0.0
100	P12 BPSK	135	69	14.62	14.68	14.74			16.5	0.0
100	P12 BPSK	135	138	14.63	14.70	14.55			16.5	0.0
100	P12 BPSK	270	0	14.81	14.86	14.92				
100	QPSK	1	1	14.95	14.97	14.91				
100	QPSK	1	137	14.51	14.71	14.59			16.5	0.0
100	QPSK	1	271	14.84	14.84	14.74				
100	QPSK	135	0	14.68	14.68	14.74				
100	QPSK	135	69	14.65	14.62	14.65			16.5	0.0
100	QPSK	135	138	14.81	14.89	14.86				
100	QPSK	270	0	14.62	14.69	14.68			16.5	0.0
100	16QAM	1	1	14.81	14.82	14.80			16.5	0.0
100	64QAM	1	1	14.71	14.69	14.75			16.5	0.0
100	256QAM	1	1	14.56	14.67	14.63			16.5	0.0
Channel										
508200	518996	528996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
90	QPSK	1	1	24.1	23.92	24.43			16.5	0.0
Channel										
507204	518996	529996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
80	QPSK	1	1	14.81	14.82	14.83			16.5	0.0
Channel										
2931.01	2992.99	2985					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
70	QPSK	1	1	14.73	14.80	14.80			16.5	0.0
Channel										
505200	518996	531996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
60	QPSK	1	1	14.79	14.81	14.79			16.5	0.0
Channel										
504204	518996	532996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
50	QPSK	1	1	14.74	14.79	14.84			16.5	0.0
Channel										
503204	518996	534000					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
40	QPSK	1	1	14.73	14.81	14.82			16.5	0.0
Channel										
502200	518996	535996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
30	QPSK	1	1	14.79	14.79	14.86			16.5	0.0
Channel										
501204	518996	535996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
20	QPSK	1	1	14.70	14.83	14.83			16.5	0.0
Channel										
500700	518996	536496					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
15	QPSK	1	1	14.75	14.86	14.76			16.5	0.0
Channel										
2901.01	2992.99	2985					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
10	QPSK	1	1	14.73	14.86	14.86			16.5	0.0

FCC_n41 HPUE_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	P12 BPSK	1	1	14.91	14.91	14.87				
100	P12 BPSK	1	137	14.70	14.75	14.76			16.5	0.0
100	P12 BPSK	1	271	14.81	14.88	14.85				
100	P12 BPSK	135	9	14.90	14.95	14.94			16.5	0.0
100	P12 BPSK	135	69	14.62	14.68	14.74			16.5	0.0
100	P12 BPSK	135	138	14.63	14.70	14.55			16.5	0.0
100	P12 BPSK	270	0	14.81	14.86	14.92				
100	QPSK	1	1	14.95	14.97	14.91				
100	QPSK	1	137	14.51	14.71	14.59			16.5	0.0
100	QPSK	1	271	14.84	14.84	14.74				
100	QPSK	135	0	14.68	14.68	14.74				
100	QPSK	135	69	14.65	14.62	14.65			16.5	0.0
100	QPSK	135	138	14.81	14.89	14.86				
100	QPSK	270	0	14.62	14.69	14.68			16.5	0.0
100	16QAM	1	1	14.81	14.82	14.80			16.5	0.0
100	64QAM	1	1	14.71	14.69	14.75			16.5	0.0
100	256QAM	1	1	14.56	14.67	14.63			16.5	0.0
Channel										
508200	518996	528996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
90	QPSK	1	1	24.1	23.92	24.43			16.5	0.0
Channel										
507204	518996	529996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
80	QPSK	1	1	14.81	14.82	14.83			16.5	0.0
Channel										
2931.01	2992.99	2985					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
70	QPSK	1	1	14.73	14.80	14.80			16.5	0.0
Channel										
505200	518996	531996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
60	QPSK	1	1	14.79	14.81	14.79			16.5	0.0
Channel										
504204	518996	532996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
50	QPSK	1	1	14.74	14.79	14.84			16.5	0.0
Channel										
503204	518996	534000					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
40	QPSK	1	1	14.73	14.81	14.82			16.5	0.0
Channel										
502200	518996	535996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
30	QPSK	1	1	14.79	14.79	14.86			16.5	0.0
Channel										
501204	518996	535996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
20	QPSK	1	1	14.70	14.83	14.83			16.5	0.0
Channel										
500700	518996	536496					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
15	QPSK	1	1	14.75	14.86	14.76			16.5	0.0
Channel										
2901.01	2992.99	2985					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
10	QPSK	1	1	14.73	14.86	14.86			16.5	0.0

FCC_n41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	P12 BPSK	1	1	21.41	21.53	21.56				
100	P12 BPSK	1	137	21.47	21.69	21.66			23.0	0.0
100	P12 BPSK	1	271	21.41	21.56	21.54				
100	P12 BPSK	135	9	21.48	21.56	21.57			23.0	0.0
100	P12 BPSK	135	69	21.41	21.57	21.53			23.0	0.0
100	P12 BPSK	135	138	21.41	21.69	21.74			23.0	0.0
100	P12 BPSK	270	0	21.28	21.47	21.48				
100	QPSK	1	1	21.35	21.58	21.58				
100	QPSK	1	137	21.42	21.52	21.52			23.0	0.0
100	QPSK	1	271	21.33	21.54	21.61				
100	QPSK	135	0	21.37	21.56	21.50				
100	QPSK	135	69	21.32	21.71	21.76			23.0	0.0
100	QPSK	135	138	21.48	21.60	21.70				
100	QPSK	270	0	21.41	21.63	21.64			23.0	0.0
100	16QAM	1	1	21.41	21.51	21.51			23.0	0.0
100	64QAM	1	1	21.34	21.60	21.62			23.0	0.0
100	256QAM	1	1	20.63	20.77	20.85			22.0	1.0
Channel										
508200	518996	528996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
90	QPSK	1	1	24.1	23.92	24.43			16.5	0.0
Channel										
507204	518996	529996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
80	QPSK	1	1	21.33	21.48	21.72			23.0	0.0
Channel										
2931.01	2992.99	2985					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
70	QPSK	1	1	21.32	21.54	21.65			23.0	0.0
Channel										
505200	518996	531996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
60	QPSK	1	1	21.40	21.55	21.67			23.0	0.0
Channel										
504204	518996	532996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
50	QPSK	1	1	21.41	21.52	21.60			23.0	0.0
Channel										
503204	518996	534000					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
40	QPSK	1	1	21.42	21.51	21.64			23.0	0.0
Channel										
502200	518996	535996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
30	QPSK	1	1	21.38	21.60	21.71			23.0	0.0
Channel										
501204	518996	535996					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
20	QPSK	1	1	21.40	21.54	21.64			23.0	0.0
Channel										
500700	518996	536496					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
15	QPSK	1	1	21.42	21.63	21.63			23.0	0.0
Channel										
2901.01	2992.99	2985					Tune-up limit (dBm)	MPR		
Frequency (MHz)										
10	QPSK	1	1	21.36	21.55	21.71			23.0	0.0



### FCC\_n41 HPUE\_Ant 2

Bandwidth (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				50202	51898	53600		
				2546.01	2592.99	2640		
100	Pi/2 BPSK	1	1	2141	2153	2156		
100	Pi/2 BPSK	1	137	2147	2169	2166	23.0	0.0
100	Pi/2 BPSK	1	271	2141	2156	2154		
100	Pi/2 BPSK	136	0	2148	2156	2157	23.0	0.0
100	Pi/2 BPSK	136	69	2141	2157	2153	23.0	0.0
100	Pi/2 BPSK	136	136	2141	2169	2174		
100	Pi/2 BPSK	270	0	2128	2147	2146	23.0	0.0
100	QPSK	1	1	2128	2138	2137		
100	QPSK	1	137	2142	2152	2152	23.0	0.0
100	QPSK	1	271	2133	2154	2161		
100	QPSK	136	0	2137	2156	2150		
100	QPSK	136	69	2125	2170	2176	23.0	0.0
100	QPSK	136	136	2146	2160	2170		
100	QPSK	270	0	2141	2163	2164	23.0	0.0
100	16QAM	1	1	2141	2151	2151	23.0	0.0
100	64QAM	1	1	2134	2160	2162	23.0	0.0
100	256QAM	1	1	2063	2077	2085	22.0	1.0
Channel								
Frequency (MHz)								
				508200	518998	528998		
				2541	2592.99	2644.98		
80	QPSK	1	1	2135	2161	2170	23.0	0.0
Channel								
Frequency (MHz)								
				507204	518998	529998		
				2536.02	2592.99	2648.98		
80	QPSK	1	1	2133	2148	2172	23.0	0.0
Channel								
Frequency (MHz)								
				503202	518998	531000		
				2531.01	2592.99	2655		
70	QPSK	1	1	2132	2154	2165	23.0	0.0
Channel								
Frequency (MHz)								
				505200	518998	531998		
				2548	2592.99	2659.98		
60	QPSK	1	1	2140	2155	2167	23.0	0.0
Channel								
Frequency (MHz)								
				504204	518998	530998		
				2521.02	2592.99	2654.98		
50	QPSK	1	1	2141	2152	2160	23.0	0.0
Channel								
Frequency (MHz)								
				502202	518998	530000		
				2518.01	2592.99	2670		
40	QPSK	1	1	2142	2151	2164	23.0	0.0
Channel								
Frequency (MHz)								
				502200	518998	530998		
				2511	2592.99	2674.98		
30	QPSK	1	1	2138	2160	2171	23.0	0.0
Channel								
Frequency (MHz)								
				501204	518998	530998		
				2508.02	2592.99	2678.98		
20	QPSK	1	1	2140	2154	2164	23.0	0.0
Channel								
Frequency (MHz)								
				500700	518998	530498		
				2503.5	2592.99	2662.48		
15	QPSK	1	1	2142	2158	2166	23.0	0.0
Channel								
Frequency (MHz)								
				502022	518998	532000		
				2501.01	2592.99	2685		
10	QPSK	1	1	2136	2155	2171	23.0	0.0

### FCC\_n41\_Ant 6

Bandwidth (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				1756	1775	1781		
100	Pi/2 BPSK	1	1	1775	1775	1771		
100	Pi/2 BPSK	1	137	1771	1775	1771	19.0	0.0
100	Pi/2 BPSK	1	271	1772	1773	1772		
100	Pi/2 BPSK	136	0	1775	1779	1774	19.0	0.0
100	Pi/2 BPSK	136	69	1773	1772	1772	19.0	0.0
100	Pi/2 BPSK	136	136	1776	1777	1787		
100	Pi/2 BPSK	270	0	1775	1776	1788	19.0	0.0
100	QPSK	1	1	1778	1778	1778		
100	QPSK	1	137	1773	1772	1772	19.0	0.0
100	QPSK	1	271	1788	1771	1772		
100	QPSK	136	0	1788	1775	1787		
100	QPSK	136	69	1778	1780	1776	19.0	0.0
100	QPSK	136	136	1771	1771	1774		
100	QPSK	270	0	1771	1778	1787	19.0	0.0
100	16QAM	1	1	1788	1777	1774	19.0	0.0
100	64QAM	1	1	1774	1777	1788	19.0	0.0
100	256QAM	1	1	1776	1773	1776	19.0	0.0
Channel								
Frequency (MHz)								
				508200	518998	528998		
				2541	2592.99	2644.98		
80	QPSK	1	1	1759	1773	1771	19.0	0.0
Channel								
Frequency (MHz)								
				507204	518998	529998		
				2536.02	2592.99	2648.98		
80	QPSK	1	1	1770	1771	1770	19.0	0.0
Channel								
Frequency (MHz)								
				505200	518998	531998		
				2531.01	2592.99	2655		
70	QPSK	1	1	1767	1776	1774	19.0	0.0
Channel								
Frequency (MHz)								
				502200	518998	530998		
				2521.02	2592.99	2654.98		
60	QPSK	1	1	1773	1778	1773	19.0	0.0
Channel								
Frequency (MHz)								
				504204	518998	530998		
				2521.02	2592.99	2654.98		
50	QPSK	1	1	1770	1777	1771	19.0	0.0
Channel								
Frequency (MHz)								
				502202	518998	530000		
				2511	2592.99	2674.98		
40	QPSK	1	1	1773	1773	1772	19.0	0.0
Channel								
Frequency (MHz)								
				502200	518998	530998		
				2511	2592.99	2674.98		
30	QPSK	1	1	1767	1772	1776	19.0	0.0
Channel								
Frequency (MHz)								
				501204	518998	530998		
				2508.02	2592.99	2678.98		
20	QPSK	1	1	1776	1775	1787	19.0	0.0
Channel								
Frequency (MHz)								
				500700	518998	530498		
				2503.5	2592.99	2662.48		
15	QPSK	1	1	1769	1774	1788	19.0	0.0
Channel								
Frequency (MHz)								
				502022	518998	532000		
				2501.01	2592.99	2685		
10	QPSK	1	1	1768	1779	1773	19.0	0.0

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Bandwidth (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				1756	1775	1781		
100	Pi/2 BPSK	1	1	1775	1775	1771		
100	Pi/2 BPSK	1	137	1771	1775	1771	19.0	0.0
100	Pi/2 BPSK	1	271	1772	1773	1772		
100	Pi/2 BPSK	136	0	1775	1779	1774	19.0	0.0
100	Pi/2 BPSK	136	69	1773	1772	1772	19.0	0.0
100	Pi/2 BPSK	136	136	1776	1777	1787		
100	Pi/2 BPSK	270	0	1775	1776	1788	19.0	0.0
100	QPSK	1	1	1778	1778	1778		
100	QPSK	1	137	1773	1772	1772	19.0	0.0
100	QPSK	1	271	1788	1771	1772		
100	QPSK	136	0	1788	1775	1787		
100	QPSK	136	69	1778	1780	1776	19.0	0.0
100	QPSK	136	136	1771	1771	1774		
100	QPSK	270	0	1771	1778	1787	19.0	0.0
100	16QAM	1	1	1788	1777	1774	19.0	0.0
100	64QAM	1	1	1774	1777	1788	19.0	0.0
100	256QAM	1	1	1776	1773	1776	19.0	0.0
Channel								
Frequency (MHz)								
				508200	518998	528998		
				2541	2592.99	2644.98		
80	QPSK	1	1	1759	1773	1771	19.0	0.0
Channel								
Frequency (MHz)								
				507204	518998	529998		
				2536.02	2592.99	2648.98		
80	QPSK	1	1	1770	1771	1770	19.0	0.0
Channel								
Frequency (MHz)								
				505200	518998	531998		
				2531.01	2592.99	2655		
70	QPSK	1	1	1767	1776	1774	19.0	0.0
Channel								
Frequency (MHz)								
				502200	518998	530998		
				2521.02	2592.99	2654.98		
60	QPSK	1	1	1773	1778	1773	19.0	0.0
Channel								
Frequency (MHz)								
				504204	518998	530998		
				2521.02	2592.99	2654.98		
50	QPSK	1	1	1770	1777	1771	19.0	0.0
Channel								
Frequency (MHz)								
				502202	518998	530000		
				2511	2592.99	2674.98		
40	QPSK	1	1	1773	1773	1772	19.0	0.0
Channel								
Frequency (MHz)								
				502200	518998	530998		
				2511	2592.99	2674.98		
30	QPSK	1	1	1767	1772	1776	19.0	0.0
Channel								
Frequency (MHz)								
				501204	518998	530998		
				2508.02	2592.99	2678.98		
20	QPSK	1	1	1776	1775	1787	19.0	0.0
Channel								
Frequency (MHz)								
				500700	518998	530498		
				2503.5	2592.99	2662.48		
15	QPSK	1	1	1769	1774	1788	19.0	0.0
Channel								
Frequency (MHz)								
				502022	518998	532000		
				2501.01	2592.99	2685		
10	QPSK	1	1	1768	1779	1773	19.0	0.0



FCC_n41_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				506202	518598	530994			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	21.69	22.00	21.71			
100	PI2 BPSK	1	137	21.66	22.00	21.60	23.0	0.0	
100	PI2 BPSK	1	271	21.71	21.98	21.69			
100	PI2 BPSK	135	9	21.66	22.04	21.67	23.0	0.0	
100	PI2 BPSK	135	69	21.77	22.03	21.59	23.0	0.0	
100	PI2 BPSK	135	138	21.67	21.98	21.62	23.0	0.0	
100	PI2 BPSK	270	0	21.72	22.01	21.66			
100	QPSK	1	1	21.75	22.07	21.74			
100	QPSK	1	137	21.74	22.02	21.62	23.0	0.0	
100	QPSK	1	271	21.76	22.02	21.71			
100	QPSK	135	0	21.66	21.98	21.59			
100	QPSK	135	69	21.72	22.02	21.69	23.0	0.0	
100	QPSK	135	138	21.68	21.98	21.62			
100	QPSK	270	0	21.76	21.98	21.68	23.0	0.0	
100	16QAM	1	1	21.64	21.97	21.73	23.0	0.0	
100	64QAM	1	1	21.38	21.43	21.21	22.5	0.5	
100	256QAM	1	1	20.33	20.41	20.15	21.5	1.5	
Channel									
Frequency (MHz)				506200	518598	529996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	21.72	22.03	21.61	23.0	0.0	
Channel									
Frequency (MHz)				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2636.02	2692.99	2649.99			
80	QPSK	1	1	21.73	21.93	21.70	23.0	0.0	
Channel									
Frequency (MHz)				2631.01	2692.99	2655	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				21.78	21.96	21.59	23.0	0.0	
70	QPSK	1	1	21.78	21.96	21.59	23.0	0.0	
Channel									
Frequency (MHz)				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
60	QPSK	1	1	21.75	21.96	21.62	23.0	0.0	
Channel									
Frequency (MHz)				504204	518598	530998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	21.71	22.00	21.73	23.0	0.0	
Channel									
Frequency (MHz)				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2616.01	2692.99	2670			
40	QPSK	1	1	21.64	22.01	21.72	23.0	0.0	
Channel									
Frequency (MHz)				502200	518598	535996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	21.69	21.98	21.62	23.0	0.0	
Channel									
Frequency (MHz)				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	21.74	21.99	21.61	23.0	0.0	
Channel									
Frequency (MHz)				500700	518598	536496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	21.74	22.04	21.59	23.0	0.0	
Channel									
Frequency (MHz)				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	21.68	22.03	21.72	23.0	0.0	

FCC_n41 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				506202	518598	530994			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.08	22.28	22.01			
100	PI2 BPSK	1	137	22.16	22.28	21.98	23.5	0.0	
100	PI2 BPSK	1	271	22.08	22.33	21.97			
100	PI2 BPSK	135	9	22.21	22.37	21.99	23.5	0.0	
100	PI2 BPSK	135	69	22.16	22.30	22.05	23.5	0.0	
100	PI2 BPSK	135	138	22.21	22.38	22.09	23.5	0.0	
100	PI2 BPSK	270	0	22.12	22.29	22.05			
100	QPSK	1	1	22.22	22.42	22.11			
100	QPSK	1	137	22.21	22.41	22.00	23.5	0.0	
100	QPSK	1	271	22.18	22.34	22.04			
100	QPSK	135	0	22.13	22.29	22.02			
100	QPSK	135	69	22.15	22.35	22.01	23.5	0.0	
100	QPSK	135	138	22.11	22.34	21.98			
100	QPSK	270	0	22.21	22.32	22.06	23.5	0.0	
100	16QAM	1	1	22.11	22.28	22.07	23.5	0.0	
100	64QAM	1	1	21.38	21.43	21.21	22.5	1.0	
100	256QAM	1	1	20.33	20.41	20.15	21.5	2.0	
Channel									
Frequency (MHz)				506200	518598	529996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	22.21	22.33	21.99	23.5	0.0	
Channel									
Frequency (MHz)				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2636.02	2692.99	2649.99			
80	QPSK	1	1	22.10	22.40	22.08	23.5	0.0	
Channel									
Frequency (MHz)				2631.01	2692.99	2655	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				22.13	22.41	22.03	23.5	0.0	
70	QPSK	1	1	22.13	22.41	22.03	23.5	0.0	
Channel									
Frequency (MHz)				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
60	QPSK	1	1	22.15	22.35	22.01	23.5	0.0	
Channel									
Frequency (MHz)				504204	518598	530998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.22	22.33	22.04	23.5	0.0	
Channel									
Frequency (MHz)				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2616.01	2692.99	2670			
40	QPSK	1	1	22.22	22.38	21.98	23.5	0.0	
Channel									
Frequency (MHz)				502200	518598	535996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	22.09	22.33	21.98	23.5	0.0	
Channel									
Frequency (MHz)				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	22.08	22.33	22.02	23.5	0.0	
Channel									
Frequency (MHz)				500700	518598	536496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	22.06	22.23	21.67	23.5	0.0	
Channel									
Frequency (MHz)				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	22.16	22.41	21.99	23.5	0.0	



Part96_n48_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				63600	64166	64532			
Frequency (MHz)				3590	3624.99	3679.98			
40	Pi2 BPSK	1	1	14.66	14.69	14.62			
40	Pi2 BPSK	1	53	14.67	14.69	14.67	15.5	0.0	
40	Pi2 BPSK	1	104	14.72	14.74	14.68			
40	Pi2 BPSK	50	0	14.64	14.71	14.64	15.5	0.0	
40	Pi2 BPSK	50	28	14.66	14.66	14.61	15.5	0.0	
40	Pi2 BPSK	50	56	14.71	14.68	14.60			
40	Pi2 BPSK	100	0	14.69	14.68	14.61	15.5	0.0	
40	QPSK	1	1	14.74	14.70	14.70			
40	QPSK	1	53	14.67	14.68	14.59	15.5	0.0	
40	QPSK	1	104	14.72	14.70	14.63			
40	QPSK	50	0	14.68	14.69	14.65			
40	QPSK	50	28	14.70	14.70	14.67	15.5	0.0	
40	QPSK	50	56	14.67	14.73	14.63			
40	QPSK	100	0	14.68	14.72	14.65	15.5	0.0	
40	16QAM	1	1	14.67	14.67	14.68	15.5	0.0	
40	16QAM	1	1	14.66	14.68	14.59	15.5	0.0	
40	256QAM	1	1	14.69	14.68	14.65	15.5	0.0	
Channel									
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3562.02	3624.99	3674.99			
30	QPSK	1	1	14.67	14.69	14.68	15.5	0.0	
Channel									
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3560.01	3624.99	3690			
20	QPSK	1	1	14.68	14.70	14.64	15.5	0.0	
Channel									
Frequency (MHz)				637000	641666	645332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3555	3624.99	3694.98			
10	QPSK	1	1	14.64	14.71	14.59	15.5	0.0	

Part96_n48_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				63800	64166	64532			
Frequency (MHz)				3590	3624.99	3679.98			
40	Pi2 BPSK	1	1	14.72	14.57	14.33			
40	Pi2 BPSK	1	53	14.75	14.58	14.29	16.0	0.0	
40	Pi2 BPSK	1	104	14.74	14.52	14.29			
40	Pi2 BPSK	50	0	14.73	14.53	14.32	16.0	0.0	
40	Pi2 BPSK	50	28	14.68	14.59	14.39	16.0	0.0	
40	Pi2 BPSK	50	56	14.71	14.59	14.43			
40	Pi2 BPSK	100	0	14.74	14.56	14.37	16.0	0.0	
40	QPSK	1	1	14.76	14.60	14.45			
40	QPSK	1	53	14.68	14.51	14.42	16.0	0.0	
40	QPSK	1	104	14.73	14.55	14.34			
40	QPSK	50	0	14.73	14.51	14.27			
40	QPSK	50	28	14.74	14.77	14.76	16.0	0.0	
40	QPSK	50	56	14.73	14.53	14.24			
40	QPSK	100	0	14.67	14.59	14.31	16.0	0.0	
40	16QAM	1	1	14.74	14.56	14.35	16.0	0.0	
40	16QAM	1	1	14.67	14.48	14.37	16.0	0.0	
40	256QAM	1	1	14.67	14.60	14.36	16.0	0.0	
Channel									
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3562.02	3624.99	3674.99			
30	QPSK	1	1	14.70	14.58	14.39	16.0	0.0	
Channel									
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3560.01	3624.99	3690			
20	QPSK	1	1	14.70	14.56	14.34	16.0	0.0	
Channel									
Frequency (MHz)				637000	641666	645332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3555	3624.99	3694.98			
10	QPSK	1	1	14.66	14.51	14.34	16.0	0.0	

Part96_n48_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				63600	64166	64532			
Frequency (MHz)				3590	3624.99	3679.98			
40	Pi2 BPSK	1	1	10.59	10.56	10.61			
40	Pi2 BPSK	1	53	10.53	10.60	10.55	11.5	0.0	
40	Pi2 BPSK	1	104	10.53	10.54	10.56			
40	Pi2 BPSK	50	0	10.62	10.55	10.59	11.5	0.0	
40	Pi2 BPSK	50	28	10.58	10.60	10.61	11.5	0.0	
40	Pi2 BPSK	50	56	10.59	10.56	10.50			
40	Pi2 BPSK	100	0	10.58	10.62	10.52	11.5	0.0	
40	QPSK	1	1	10.59	10.63	10.57			
40	QPSK	1	53	10.57	10.61	10.48	11.5	0.0	
40	QPSK	1	104	10.56	10.59	10.52			
40	QPSK	50	0	10.53	10.56	10.53			
40	QPSK	50	28	10.58	10.61	10.71	11.5	0.0	
40	QPSK	50	56	10.55	10.59	10.41			
40	QPSK	100	0	10.52	10.59	10.55	11.5	0.0	
40	16QAM	1	1	10.56	10.57	10.53	11.5	0.0	
40	16QAM	1	1	10.54	10.53	10.51	11.5	0.0	
40	256QAM	1	1	10.58	10.56	10.61	11.5	0.0	
Channel									
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3562.02	3624.99	3674.99			
30	QPSK	1	1	10.51	10.55	10.47	11.5	0.0	
Channel									
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3560.01	3624.99	3690			
20	QPSK	1	1	10.57	10.55	10.46	11.5	0.0	
Channel									
Frequency (MHz)				637000	641666	645332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3555	3624.99	3694.98			
10	QPSK	1	1	10.53	10.58	10.55	11.5	0.0	





Part96_n48_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				636000	641666	646332			
Frequency (MHz)				3270	3024.99	3079.98			
40	PI2 BPSK	1	1	14.66	14.70	14.44			
40	PI2 BPSK	1	53	14.82	14.67	14.47	16.0	0.0	
40	PI2 BPSK	1	104	14.97	14.72	14.36			
40	PI2 BPSK	50	0	14.62	14.71	14.30	16.0	0.0	
40	PI2 BPSK	50	28	14.64	14.65	14.33	16.0	0.0	
40	PI2 BPSK	50	56	14.69	14.69	14.35			
40	PI2 BPSK	100	0	14.70	14.68	14.40	16.0	0.0	
40	QPSK	1	1	14.68	14.73	14.51			
40	QPSK	1	63	14.62	14.68	14.39	16.0	0.0	
40	QPSK	1	104	14.67	14.71	14.44			
40	QPSK	50	0	14.64	14.71	14.25			
40	QPSK	50	28	14.63	14.72	14.47	16.0	0.0	
40	QPSK	50	56	14.66	14.71	14.38			
40	QPSK	100	0	14.63	14.68	14.38	16.0	0.0	
40	16QAM	1	1	14.25	14.65	14.40	16.0	0.0	
40	64QAM	1	1	14.63	14.68	14.32	16.0	0.0	
40	256QAM	1	1	14.60	14.65	14.43	16.0	0.0	
Channel				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3255.02	3024.99	3094.99			
30	QPSK	1	1	14.58	14.64	14.43	16.0	0.0	
Channel				637334	641666	646000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3260.01	3024.99	3090			
20	QPSK	1	1	14.58	14.65	14.46	16.0	0.0	
Channel				637000	641666	646332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3255	3024.99	3094.98			
10	QPSK	1	1	14.57	14.65	14.40	16.0	0.0	

Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				633332	633332	633332			
Frequency (MHz)				3499.98	3499.98	3499.98			
100	PI2 BPSK	1	1	16.71					
100	PI2 BPSK	1	137	16.72			17.5	0.0	
100	PI2 BPSK	1	271	16.73					
100	PI2 BPSK	135	0	16.70			17.5	0.0	
100	PI2 BPSK	135	69	16.73			17.5	0.0	
100	PI2 BPSK	135	138	16.65			17.5	0.0	
100	PI2 BPSK	270	0	16.72			17.5	0.0	
100	QPSK	1	1	16.74					
100	QPSK	1	137	16.68			17.5	0.0	
100	QPSK	1	271	16.68					
100	QPSK	135	0	16.70			17.5	0.0	
100	QPSK	135	69	16.73			17.5	0.0	
100	QPSK	135	138	16.70			17.5	0.0	
100	QPSK	270	0	16.72			17.5	0.0	
100	16QAM	1	1	16.64			17.5	0.0	
100	64QAM	1	1	16.68			17.5	0.0	
100	256QAM	1	1	16.63			17.5	0.0	
Channel				633000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3495	3499.98	3504.98			
90	QPSK	1	1	16.65	16.67	16.63	17.5	0.0	
Channel				632668	633332	634000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3490.02	3499.98	3510			
80	QPSK	1	1	16.67	16.68	16.72	17.5	0.0	
Channel				632334	633332	634332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3485.01	3499.98	3514.98			
70	QPSK	1	1	16.64	16.63	16.64	17.5	0.0	
Channel				632000	633332	634666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3480	3499.98	3519.98			
60	QPSK	1	1	16.66	16.64	16.70	17.5	0.0	
Channel				631668	633332	635000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3475.02	3499.98	3525			
50	QPSK	1	1	16.71	16.64	16.63	17.5	0.0	
Channel				631334	633332	635332	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3470.01	3499.98	3529.98			
40	QPSK	1	1	16.66	16.66	16.69	17.5	0.0	
Channel				631000	633332	635666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3465	3499.98	3534.98			
30	QPSK	1	1	16.68	16.67	16.69	17.5	0.0	
Channel				630668	633332	636000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3460.02	3499.98	3540			
20	QPSK	1	1	16.64	16.65	16.64	17.5	0.0	
Channel				630300	633332	636366	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455.0	3499.98	3542.49			
15	QPSK	1	1	16.72	16.70	16.65	17.5	0.0	
Channel				630000	633332	636666	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455.01	3499.98	3544.98			
10	QPSK	1	1	16.67	16.70	16.65	17.5	0.0	



### Part270\_n77\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	16.77	16.83	16.79		
100	Pl2 BPSK	1	137	16.82	16.83	16.72	17.5	0.0
100	Pl2 BPSK	1	271	16.76	16.81	16.83		
100	Pl2 BPSK	135	0	16.78	16.83	16.69	17.5	0.0
100	Pl2 BPSK	135	69	16.82	16.85	16.76	17.5	0.0
100	Pl2 BPSK	135	138	16.83	16.84	16.67		
100	Pl2 BPSK	270	0	16.85	16.84	16.72	17.5	0.0
100	QPSK	1	1	16.88	16.87	16.82		
100	QPSK	1	137	16.80	16.82	16.81	17.5	0.0
100	QPSK	1	271	16.83	16.80	16.75		
100	QPSK	135	0	16.80	16.79	16.78		
100	QPSK	135	69	16.82	16.85	16.81	17.5	0.0
100	QPSK	135	138	16.80	16.81	16.69		
100	QPSK	270	0	16.77	16.81	16.74	17.5	0.0
100	16QAM	1	1	16.73	16.83	16.78	17.5	0.0
100	64QAM	1	1	16.74	16.85	16.75	17.5	0.0
100	256QAM	1	1	16.78	16.78	16.77	17.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
80	QPSK	1	1	16.81	16.85	16.76	17.5	0.0
Channel								
Frequency (MHz)								
64834 65000 65098								
80	QPSK	1	1	16.80	16.83	16.76	17.5	0.0
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	16.76	16.81	16.80	17.5	0.0
Channel								
Frequency (MHz)								
64868 65000 65332								
60	QPSK	1	1	16.83	16.80	16.79	17.5	0.0
Channel								
Frequency (MHz)								
64834 65000 65098								
50	QPSK	1	1	16.75	16.80	16.73	17.5	0.0
Channel								
Frequency (MHz)								
64800 65000 65000								
40	QPSK	1	1	16.80	16.76	16.74	17.5	0.0
Channel								
Frequency (MHz)								
64768 65000 65432								
30	QPSK	1	1	16.81	16.79	16.71	17.5	0.0
Channel								
Frequency (MHz)								
64734 65000 65498								
20	QPSK	1	1	16.81	16.84	16.78	17.5	0.0
Channel								
Frequency (MHz)								
64768 65000 65432								
15	QPSK	1	1	16.80	16.84	16.79	17.5	0.0
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	16.76	16.77	16.76	17.5	0.0

### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1		16.71			
100	Pl2 BPSK	1	137		16.72		17.5	0.0
100	Pl2 BPSK	1	271		16.73			
100	Pl2 BPSK	135	0		16.70		17.5	0.0
100	Pl2 BPSK	135	69		16.73		17.5	0.0
100	Pl2 BPSK	135	138		16.65			
100	Pl2 BPSK	270	0		16.72		17.5	0.0
100	QPSK	1	1		16.74			
100	QPSK	1	137		16.68		17.5	0.0
100	QPSK	1	271		16.68			
100	QPSK	135	0		16.70			
100	QPSK	135	69		16.73		17.5	0.0
100	QPSK	135	138		16.70			
100	QPSK	270	0		16.72		17.5	0.0
100	16QAM	1	1		16.64		17.5	0.0
100	64QAM	1	1		16.68		17.5	0.0
100	256QAM	1	1		16.63		17.5	0.0
Channel								
Frequency (MHz)								
633000 633332 633668								
80	QPSK	1	1	16.68	16.67	16.63	17.5	0.0
Channel								
Frequency (MHz)								
3499.98 3510								
80	QPSK	1	1	16.67	16.66	16.72	17.5	0.0
Channel								
Frequency (MHz)								
3485.01 3499.98 3514.98								
70	QPSK	1	1	16.64	16.63	16.64	17.5	0.0
Channel								
Frequency (MHz)								
633000 633332 633668								
60	QPSK	1	1	16.68	16.64	16.70	17.5	0.0
Channel								
Frequency (MHz)								
631668 633332 635000								
50	QPSK	1	1	16.75	16.68	16.65	17.5	0.0
Channel								
Frequency (MHz)								
631334 633332 635332								
40	QPSK	1	1	16.71	16.64	16.63	17.5	0.0
Channel								
Frequency (MHz)								
3470.01 3499.98 3529.98								
40	QPSK	1	1	16.66	16.66	16.69	17.5	0.0
Channel								
Frequency (MHz)								
631000 633332 635668								
30	QPSK	1	1	16.68	16.67	16.69	17.5	0.0
Channel								
Frequency (MHz)								
630668 633332 635000								
20	QPSK	1	1	16.74	16.68	16.64	17.5	0.0
Channel								
Frequency (MHz)								
630300 633332 636168								
15	QPSK	1	1	16.72	16.70	16.66	17.5	0.0
Channel								
Frequency (MHz)								
3485.01 3499.98 3544.98								
10	QPSK	1	1	16.67	16.70	16.65	17.5	0.0

### Part270\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	16.77	16.83	16.79		
100	Pl2 BPSK	1	137	16.82	16.83	16.72	17.5	0.0
100	Pl2 BPSK	1	271	16.76	16.81	16.83		
100	Pl2 BPSK	135	0	16.78	16.83	16.69	17.5	0.0
100	Pl2 BPSK	135	69	16.82	16.85	16.76	17.5	0.0
100	Pl2 BPSK	135	138	16.83	16.84	16.67		
100	Pl2 BPSK	270	0	16.85	16.84	16.72	17.5	0.0
100	QPSK	1	1	16.88	16.87	16.82		
100	QPSK	1	137	16.80	16.82	16.81	17.5	0.0
100	QPSK	1	271	16.83	16.80	16.75		
100	QPSK	135	0	16.80	16.79	16.78		
100	QPSK	135	69	16.82	16.85	16.81	17.5	0.0
100	QPSK	135	138	16.80	16.81	16.69		
100	QPSK	270	0	16.77	16.81	16.74	17.5	0.0
100	16QAM	1	1	16.73	16.83	16.78	17.5	0.0
100	64QAM	1	1	16.74	16.85	16.75	17.5	0.0
100	256QAM	1	1	16.78	16.78	16.77	17.5	0.0
Channel								
Frequency (MHz)								
650000 65000 65000								
80	QPSK	1	1	16.81	16.85	16.76	17.5	0.0
Channel								
Frequency (MHz)								
64834 65000 65098								
80	QPSK	1	1	16.80	16.83	16.76	17.5	0.0
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	16.76	16.81	16.80	17.5	0.0
Channel								
Frequency (MHz)								
64868 65000 65332								
60	QPSK	1	1	16.83	16.80	16.79	17.5	0.0
Channel								
Frequency (MHz)								
64834 65000 65098								
50	QPSK	1	1	16.75	16.80	16.73	17.5	0.0
Channel								
Frequency (MHz)								
64800 65000 65000								
40	QPSK	1	1	16.80	16.76	16.74	17.5	0.0
Channel								
Frequency (MHz)								
64768 65000 65432								
30	QPSK	1	1	16.81	16.79	16.71	17.5	0.0
Channel								
Frequency (MHz)								
64734 65000 65498								
20	QPSK	1	1	16.81	16.84	16.78	17.5	0.0
Channel								
Frequency (MHz)								
64768 65000 65432								
15	QPSK	1	1	16.80	16.84	16.79	17.5	0.0
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	16.76	16.77	16.76	17.5	0.0



### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	15.99				
100	PI2 BPSK	1	137	15.98			17.0	0.0
100	PI2 BPSK	1	271	15.99				
100	PI2 BPSK	135	0	16.02			17.0	0.0
100	PI2 BPSK	135	69	15.98			17.0	0.0
100	PI2 BPSK	135	138	16.01			17.0	0.0
100	PI2 BPSK	270	0	16.03			17.0	0.0
100	QPSK	1	1	16.00				
100	QPSK	1	137	16.03			17.0	0.0
100	QPSK	1	271	16.01				
100	QPSK	135	0	15.98			17.0	0.0
100	QPSK	135	69	16.03				
100	QPSK	135	138	15.98			17.0	0.0
100	QPSK	270	0	16.01			17.0	0.0
100	16QAM	1	1	15.98			17.0	0.0
100	64QAM	1	1	15.95			17.0	0.0
100	256QAM	1	1	16.02			17.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	3455.01	3459.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.97	16.03	16.00	17.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	15.97	15.95	16.01	17.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
50	QPSK	1	1	3440.01	3459.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	QPSK	1	1	15.94	15.94	16.01	17.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	3455.01	3459.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
15	QPSK	1	1	16.03	15.98	15.98	17.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.99	16.02	15.98	17.0	0.0

### Part270\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	15.94	15.94	15.99		
100	PI2 BPSK	1	137	16.01	16.01	16.01	17.0	0.0
100	PI2 BPSK	1	271	15.98	15.95	15.94		
100	PI2 BPSK	135	0	15.98	15.94	15.96	17.0	0.0
100	PI2 BPSK	135	69	16.02	15.98	15.95	17.0	0.0
100	PI2 BPSK	135	138	16.02	15.97	15.97	17.0	0.0
100	PI2 BPSK	270	0	16.02	15.94	15.97		
100	QPSK	1	1	15.91	16.04	16.02		
100	QPSK	1	137	15.96	15.98	16.00	17.0	0.0
100	QPSK	1	271	15.98	16.00	16.01		
100	QPSK	135	0	15.97	15.98	15.95		
100	QPSK	135	69	16.01	16.02	15.95	17.0	0.0
100	QPSK	135	138	15.95	15.97	15.90		
100	QPSK	270	0	15.95	16.00	15.96	17.0	0.0
100	16QAM	1	1	15.98	16.00	16.02	17.0	0.0
100	64QAM	1	1	15.96	15.96	15.98	17.0	0.0
100	256QAM	1	1	16.01	15.99	15.98	17.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	648668	650000	651332	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	3745.02	3740	3741.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.91	16.02	15.96	17.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	15.98	15.99	15.93	17.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	648668	650000	651332	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
50	QPSK	1	1	3725.01	3740	3741.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	QPSK	1	1	15.92	15.93	15.93	17.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	647334	650000	651668	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	3715.02	3740	3741.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
15	QPSK	1	1	15.92	15.97	15.94	17.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.99	16.02	15.99	17.0	0.0

### Part270\_n77 HPUE\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	15.99				
100	PI2 BPSK	1	137	15.98			17.0	0.0
100	PI2 BPSK	1	271	15.99				
100	PI2 BPSK	135	0	16.02			17.0	0.0
100	PI2 BPSK	135	69	15.98			17.0	0.0
100	PI2 BPSK	135	138	16.01			17.0	0.0
100	PI2 BPSK	270	0	16.03			17.0	0.0
100	QPSK	1	1	16.00				
100	QPSK	1	137	16.03			17.0	0.0
100	QPSK	1	271	16.01				
100	QPSK	135	0	15.98			17.0	0.0
100	QPSK	135	69	16.03				
100	QPSK	135	138	15.98			17.0	0.0
100	QPSK	270	0	16.01			17.0	0.0
100	16QAM	1	1	15.98			17.0	0.0
100	64QAM	1	1	15.95			17.0	0.0
100	256QAM	1	1	16.02			17.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	3455.01	3459.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.97	16.03	16.00	17.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	15.97	15.95	16.01	17.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
50	QPSK	1	1	3440.01	3459.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	QPSK	1	1	15.94	15.94	16.01	17.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	3455.01	3459.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
15	QPSK	1	1	16.03	15.98	15.98	17.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.96	16.02	15.98	17.0	0.0



**Part270\_n77 HPUUE\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000	65000	66000		
				3760	3840	3930		
100	Pl2 BPSK	1	1	15.94	15.94	15.99		
100	Pl2 BPSK	1	137	16.01	16.01	16.01	17.0	0.0
100	Pl2 BPSK	1	271	15.98	15.98	15.94		
100	Pl2 BPSK	135	0	15.98	15.94	15.99	17.0	0.0
100	Pl2 BPSK	135	69	16.02	15.98	15.95	17.0	0.0
100	Pl2 BPSK	135	138	16.02	15.97	15.97	17.0	0.0
100	Pl2 BPSK	270	0	16.02	15.94	15.97		
100	QPSK	1	1	15.01	16.04	16.02		
100	QPSK	1	137	15.96	15.98	16.00	17.0	0.0
100	QPSK	1	271	15.98	16.00	16.01		
100	QPSK	135	0	15.97	15.98	15.95		
100	QPSK	135	69	15.97	16.02	15.95	17.0	0.0
100	QPSK	135	138	15.95	15.97	15.90		
100	QPSK	270	0	15.95	16.00	15.96	17.0	0.0
100	16QAM	1	1	15.98	16.00	16.02	17.0	0.0
100	64QAM	1	1	15.98	15.96	15.98	17.0	0.0
100	256QAM	1	1	16.01	15.99	15.98	17.0	0.0
Channel								
Frequency (MHz)				65000	65000	66232	Tune-up limit (dBm)	MPR (dB)
				3742.02	3840	3924.98		
80	QPSK	1	1	15.98	15.98	15.98	17.0	0.0
Channel								
Frequency (MHz)				64834	65000	65066	Tune-up limit (dBm)	MPR (dB)
				3740.01	3840	3929.99		
80	QPSK	1	1	15.91	16.02	15.96	17.0	0.0
Channel								
Frequency (MHz)				64834	65000	65332	Tune-up limit (dBm)	MPR (dB)
				3735	3840	3945		
70	QPSK	1	1	15.98	15.99	15.93	17.0	0.0
Channel								
Frequency (MHz)				64834	65000	65332	Tune-up limit (dBm)	MPR (dB)
				3726.01	3840	3924.99		
60	QPSK	1	1	15.98	16.00	15.99	17.0	0.0
Channel								
Frequency (MHz)				64834	65000	66366	Tune-up limit (dBm)	MPR (dB)
				3725.01	3840	3924.99		
50	QPSK	1	1	15.92	15.93	15.93	17.0	0.0
Channel								
Frequency (MHz)				64800	65000	65400	Tune-up limit (dBm)	MPR (dB)
				3720	3840	3960		
40	QPSK	1	1	15.95	15.97	16.00	17.0	0.0
Channel								
Frequency (MHz)				64768	65000	66432	Tune-up limit (dBm)	MPR (dB)
				3715.02	3840	3924.98		
30	QPSK	1	1	15.99	16.01	15.96	17.0	0.0
Channel								
Frequency (MHz)				64734	65000	65666	Tune-up limit (dBm)	MPR (dB)
				3710.01	3840	3929.99		
20	QPSK	1	1	15.92	15.97	15.94	17.0	0.0
Channel								
Frequency (MHz)				64768	65000	66432	Tune-up limit (dBm)	MPR (dB)
				3707.52	3840	3972.48		
15	QPSK	1	1	15.98	15.94	15.96	17.0	0.0
Channel								
Frequency (MHz)				64700	65000	66000	Tune-up limit (dBm)	MPR (dB)
				3705	3840	3975		
10	QPSK	1	1	15.99	16.02	15.99	17.0	0.0

**Part270\_n77\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63000	63332	63666		
				3499.98				
100	Pl2 BPSK	1	1		11.60			
100	Pl2 BPSK	1	137		11.61		12.5	0.0
100	Pl2 BPSK	1	271		11.63			
100	Pl2 BPSK	135	0		11.69		12.5	0.0
100	Pl2 BPSK	135	69		11.69		12.5	0.0
100	Pl2 BPSK	135	138		11.65		12.5	0.0
100	Pl2 BPSK	270	0		11.66			
100	QPSK	1	1		11.70			
100	QPSK	1	137		11.64		12.5	0.0
100	QPSK	1	271		11.68			
100	QPSK	135	0		11.65		12.5	0.0
100	QPSK	135	69		11.69		12.5	0.0
100	QPSK	135	138		11.66		12.5	0.0
100	QPSK	270	0		11.65		12.5	0.0
100	16QAM	1	1		11.64		12.5	0.0
100	64QAM	1	1		11.66		12.5	0.0
100	256QAM	1	1		11.63		12.5	0.0
Channel								
Frequency (MHz)				63000	63332	63666	Tune-up limit (dBm)	MPR (dB)
				3495	3499.98	3504.98		
80	QPSK	1	1	11.68	11.67	11.61	12.5	0.0
Channel								
Frequency (MHz)				63268	63332	63400	Tune-up limit (dBm)	MPR (dB)
				3490.02	3499.98	3510		
80	QPSK	1	1	11.68	11.63	11.62	12.5	0.0
Channel								
Frequency (MHz)				63268	63332	63466	Tune-up limit (dBm)	MPR (dB)
				3485.01	3499.98	3514.98		
70	QPSK	1	1	11.65	11.65	11.66	12.5	0.0
Channel								
Frequency (MHz)				63200	63332	63466	Tune-up limit (dBm)	MPR (dB)
				3480	3499.98	3518.98		
60	QPSK	1	1	11.61	11.65	11.64	12.5	0.0
Channel								
Frequency (MHz)				63168	63332	63500	Tune-up limit (dBm)	MPR (dB)
				3475.02	3499.98	3525		
50	QPSK	1	1	11.68	11.68	11.61	12.5	0.0
Channel								
Frequency (MHz)				63134	63332	63532	Tune-up limit (dBm)	MPR (dB)
				3465	3499.98	3524.98		
40	QPSK	1	1	11.63	11.66	11.63	12.5	0.0
Channel								
Frequency (MHz)				63100	63332	63566	Tune-up limit (dBm)	MPR (dB)
				3455	3499.98	3524.98		
30	QPSK	1	1	11.61	11.60	11.65	12.5	0.0
Channel								
Frequency (MHz)				63068	63332	63600	Tune-up limit (dBm)	MPR (dB)
				3445.02	3499.98	3530		
20	QPSK	1	1	11.65	11.60	11.67	12.5	0.0
Channel								
Frequency (MHz)				63000	63332	63636	Tune-up limit (dBm)	MPR (dB)
				3437.5	3499.98	3524.48		
15	QPSK	1	1	11.68	11.67	11.67	12.5	0.0
Channel								
Frequency (MHz)				63034	63332	63632	Tune-up limit (dBm)	MPR (dB)
				3435.01	3499.98	3524.98		
10	QPSK	1	1	11.66	11.59	11.67	12.5	0.0

**Part270\_n77\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000	65000	66000		
				3760	3840	3930		
100	Pl2 BPSK	1	1	11.31	11.34	11.17		
100	Pl2 BPSK	1	137	11.30	11.35	11.17	12.5	0.0
100	Pl2 BPSK	1	271	11.33	11.29	11.19		
100	Pl2 BPSK	135	0	11.30	11.26	11.21	12.5	0.0
100	Pl2 BPSK	135	69	11.31	11.30	11.34	12.5	0.0
100	Pl2 BPSK	135	138	11.28	11.31	11.20	12.5	0.0
100	Pl2 BPSK	270	0	11.34	11.31	11.24		
100	QPSK	1	1	11.30	11.33	11.33		
100	QPSK	1	137	11.28	11.33	11.33	12.5	0.0
100	QPSK	1	271	11.29	11.28	11.21		
100	QPSK	135	0	11.31	11.28	11.26		
100	QPSK	135	69	11.33	11.31	11.25	12.5	0.0
100	QPSK	135	138	11.28	11.29	11.26		
100	QPSK	270	0	11.34	11.28	11.28	12.5	0.0
100	16QAM	1	1	11.30	11.33	11.30	12.5	0.0
100	64QAM	1	1	11.33	11.33	11.23	12.5	0.0
100	256QAM	1	1	11.29	11.32	11.23	12.5	0.0
Channel								
Frequency (MHz)				64868	65000	66232	Tune-up limit (dBm)	MPR (dB)
				3742.02	3840	3924.98		
80	QPSK	1	1	11.29	11.30	11.23	12.5	0.0
Channel								
Frequency (MHz)				64834	65000	66266	Tune-up limit (dBm)	MPR (dB)
				3740.01	3840	3929.98		
80	QPSK	1	1	11.31	11.31	11.26	12.5	0.0
Channel								
Frequency (MHz)				64834	65000	66332	Tune-up limit (dBm)	MPR (dB)
				3735	3840	3945		
70	QPSK	1	1	11.32	11.27	11.24	12.5	0.0
Channel								
Frequency (MHz)				64868	65000	66332	Tune-up limit (dBm)	MPR (dB)
				3726.01	3840	3924.98		
60	QPSK	1	1	11.29	11.27	11.31	12.5	0.0
Channel								
Frequency (MHz)				64834	65000	66366	Tune-up limit (dBm)	MPR (dB)
				3725.01	3840	3924.98		
50	QPSK	1	1	11.24	11.28	11.26	12.5	0.0
Channel								
Frequency (MHz)				64800	65000	66400	Tune-up limit (dBm)	MPR (dB)
				3720	3840	3960		
40	QPSK	1	1	11.28	11.30	11.31	12.5	0.0
Channel								
Frequency (MHz)				64768	65000	66432	Tune-up limit (dBm)	MPR (dB)
				3715.02	3840	3924.98		
30	QPSK	1	1	11.33	11.33	11.22	12.5	0.0
Channel								
Frequency (MHz)				64734	65000	66466	Tune-up limit (dBm)	MPR (dB)
				3710.01	3840	3929.99		
20	QPSK	1	1	11.33	11.30	11.29	12.5	0.0
Channel								
Frequency (MHz)				64768	65000	66432	Tune-up limit (dBm)	MPR (dB)
				3707.52	3840	3972.48		
15	QPSK							



### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	11.60				
100	PI2 BPSK	1	137	11.61			12.5	0.0
100	PI2 BPSK	1	271	11.63				
100	PI2 BPSK	135	0	11.69			12.5	0.0
100	PI2 BPSK	135	69	11.69			12.5	0.0
100	PI2 BPSK	135	138	11.65				
100	PI2 BPSK	270	0	11.66			12.5	0.0
100	QPSK	1	1	11.70				
100	QPSK	1	137	11.64			12.5	0.0
100	QPSK	1	271	11.68				
100	QPSK	135	0	11.65			12.5	0.0
100	QPSK	135	69	11.66				
100	QPSK	135	138	11.66				
100	QPSK	270	0	11.65			12.5	0.0
100	16QAM	1	1	11.64			12.5	0.0
100	64QAM	1	1	11.66			12.5	0.0
100	256QAM	1	1	11.63			12.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.68	11.67	11.61	12.5	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.68	11.63	11.62	12.5	0.0
Channel								
Frequency (MHz)								
3485.01								
3489.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	11.65	11.65	11.66	12.5	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63466								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	11.61	11.65	11.64	12.5	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	11.68	11.65	11.61	12.5	0.0
Channel								
Frequency (MHz)								
3475.02								
3489.98								
3525								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	11.63	11.66	11.63	12.5	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	11.61	11.60	11.65	12.5	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	11.65	11.60	11.67	12.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	11.68	11.67	11.67	12.5	0.0
Channel								
Frequency (MHz)								
3455.01								
3489.98								
3544.98								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	11.66	11.59	11.67	12.5	0.0

### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
65000								
65000								
65000								
100	PI2 BPSK	1	1	11.31	11.34	11.17		
100	PI2 BPSK	1	137	11.30	11.35	11.17	12.5	0.0
100	PI2 BPSK	1	271	11.33	11.29	11.19		
100	PI2 BPSK	135	0	11.30	11.26	11.21	12.5	0.0
100	PI2 BPSK	135	69	11.31	11.30	11.34	12.5	0.0
100	PI2 BPSK	135	138	11.26	11.31	11.20		
100	PI2 BPSK	270	0	11.34	11.31	11.24	12.5	0.0
100	QPSK	1	1	11.36	11.33	11.33		
100	QPSK	1	137	11.28	11.33	11.33	12.5	0.0
100	QPSK	1	271	11.29	11.28	11.21		
100	QPSK	135	0	11.31	11.28	11.26		
100	QPSK	135	69	11.35	11.33	11.25	12.5	0.0
100	QPSK	135	138	11.26	11.29	11.26		
100	QPSK	270	0	11.34	11.28	11.28	12.5	0.0
100	16QAM	1	1	11.30	11.33	11.30	12.5	0.0
100	64QAM	1	1	11.35	11.33	11.23	12.5	0.0
100	256QAM	1	1	11.29	11.32	11.23	12.5	0.0
Channel								
Frequency (MHz)								
64968								
65000								
65032								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.29	11.30	11.23	12.5	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65066								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.31	11.31	11.26	12.5	0.0
Channel								
Frequency (MHz)								
3735								
3840								
3945								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	11.32	11.27	11.24	12.5	0.0
Channel								
Frequency (MHz)								
64868								
65000								
65332								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	11.29	11.27	11.31	12.5	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65066								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	11.24	11.28	11.26	12.5	0.0
Channel								
Frequency (MHz)								
64800								
65000								
65000								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	11.26	11.30	11.31	12.5	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65432								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	11.33	11.33	11.22	12.5	0.0
Channel								
Frequency (MHz)								
64734								
65000								
65666								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	11.33	11.30	11.23	12.5	0.0
Channel								
Frequency (MHz)								
64718								
65000								
66432								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	11.30	11.31	11.27	12.5	0.0
Channel								
Frequency (MHz)								
3705								
3840								
3975								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	11.30	11.32	11.30	12.5	0.0

### Part27Q\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	13.95				
100	PI2 BPSK	1	137	13.91			15.0	0.0
100	PI2 BPSK	1	271	13.89				
100	PI2 BPSK	135	0	13.88			15.0	0.0
100	PI2 BPSK	135	69	13.89			15.0	0.0
100	PI2 BPSK	135	138	13.95				
100	PI2 BPSK	270	0	13.86			15.0	0.0
100	QPSK	1	1	13.96				
100	QPSK	1	137	13.92			15.0	0.0
100	QPSK	1	271	13.94				
100	QPSK	135	0	13.91				
100	QPSK	135	69	13.95			15.0	0.0
100	QPSK	135	138	13.91				
100	QPSK	270	0	13.86			15.0	0.0
100	16QAM	1	1	13.91			15.0	0.0
100	64QAM	1	1	13.96			15.0	0.0
100	256QAM	1	1	13.93			15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	13.94	13.93	13.87	15.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	13.87	13.88	13.80	15.0	0.0
Channel								
Frequency (MHz)								
3485.01								
3489.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	13.94	13.93	13.83	15.0	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63466								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	13.86	13.89	13.92	15.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	13.89	13.88	13.92	15.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	13.86	13.93	13.93	15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	13.90	13.91	13.88	15.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	13.94	13.88	13.85	15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	13.93	13.87	13.88	15.0	0.0
Channel								
Frequency (MHz)								
3455.01								
3489.98								
3544.98								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	13.92	13.86	13.86	15.0	0.0



### Part270\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				3760	3840	3930		
100	PI2 BPSK	1	1	13.37	13.40	13.41		
100	PI2 BPSK	1	137	13.34	13.47	13.48	15.0	0.0
100	PI2 BPSK	1	271	13.35	13.47	13.33		
100	PI2 BPSK	135	0	13.36	13.47	13.48	15.0	0.0
100	PI2 BPSK	135	69	13.28	13.48	13.42	15.0	0.0
100	PI2 BPSK	135	138	13.29	13.48	13.46		
100	PI2 BPSK	270	0	13.32	13.42	13.44	15.0	0.0
100	QPSK	1	1	13.38	13.50	13.41		
100	QPSK	1	137	13.29	13.41	13.41	15.0	0.0
100	QPSK	1	271	13.34	13.47	13.34		
100	QPSK	135	0	13.37	13.43	13.43		
100	QPSK	135	69	13.37	13.47	13.46	15.0	0.0
100	QPSK	135	138	13.31	13.41	13.43		
100	QPSK	270	0	13.33	13.43	13.40	15.0	0.0
100	16QAM	1	1	13.34	13.46	13.37	15.0	0.0
100	64QAM	1	1	13.26	13.43	13.46	15.0	0.0
100	256QAM	1	1	13.30	13.40	13.47	15.0	0.0
Channel								
Frequency (MHz)								
				648688	650000	662332	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	13.12	13.45	13.41	15.0	0.0
Channel								
Frequency (MHz)								
				648334	650000	660966	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	13.37	13.46	13.42	15.0	0.0
Channel								
Frequency (MHz)								
				3735	3840	3945	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	13.32	13.39	13.35	15.0	0.0
Channel								
Frequency (MHz)								
				648688	650000	663332	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	13.31	13.47	13.41	15.0	0.0
Channel								
Frequency (MHz)								
				648334	650000	663666	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	13.25	13.40	13.54	15.0	0.0
Channel								
Frequency (MHz)								
				648000	650000	664000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	13.29	13.43	13.41	15.0	0.0
Channel								
Frequency (MHz)								
				647668	650000	664332	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	13.30	13.41	13.35	15.0	0.0
Channel								
Frequency (MHz)								
				647334	650000	664666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	13.28	13.47	13.37	15.0	0.0
Channel								
Frequency (MHz)								
				647168	650000	664832	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	13.30	13.41	13.42	15.0	0.0
Channel								
Frequency (MHz)								
				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	13.35	13.41	13.34	15.0	0.0

### Part27Q\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				3499.98				
100	PI2 BPSK	1	1		13.95			
100	PI2 BPSK	1	137		13.91		15.0	0.0
100	PI2 BPSK	1	271		13.89			
100	PI2 BPSK	135	0		13.88		15.0	0.0
100	PI2 BPSK	135	69		13.89		15.0	0.0
100	PI2 BPSK	135	138		13.95			
100	PI2 BPSK	270	0		13.86		15.0	0.0
100	QPSK	1	1		13.96			
100	QPSK	1	137		13.92		15.0	0.0
100	QPSK	1	271		13.94			
100	QPSK	135	0		13.91			
100	QPSK	135	69		13.95		15.0	0.0
100	QPSK	135	138		13.91			
100	QPSK	270	0		13.86		15.0	0.0
100	16QAM	1	1		13.91		15.0	0.0
100	64QAM	1	1		13.86		15.0	0.0
100	256QAM	1	1		13.93		15.0	0.0
Channel								
Frequency (MHz)								
				633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	13.94	13.99	13.97	15.0	0.0
Channel								
Frequency (MHz)								
				632668	633332	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	13.87	13.88	13.90	15.0	0.0
Channel								
Frequency (MHz)								
				3485.01	3489.98	3514.98	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	13.94	13.93	13.93	15.0	0.0
Channel								
Frequency (MHz)								
				633000	633332	634666	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	13.86	13.89	13.92	15.0	0.0
Channel								
Frequency (MHz)								
				631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	13.79	13.88	13.92	15.0	0.0
Channel								
Frequency (MHz)								
				631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	13.86	13.93	13.93	15.0	0.0
Channel								
Frequency (MHz)								
				3465	3469.98	3534.98	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	13.90	13.91	13.88	15.0	0.0
Channel								
Frequency (MHz)								
				630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	13.84	13.86	13.85	15.0	0.0
Channel								
Frequency (MHz)								
				630000	633332	636332	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	13.83	13.87	13.88	15.0	0.0
Channel								
Frequency (MHz)								
				3455.01	3489.98	3544.98	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	13.92	13.86	13.86	15.0	0.0

### Part270\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				3750	3840	3930		
100	PI2 BPSK	1	1	13.37	13.40	13.41		
100	PI2 BPSK	1	137	13.34	13.47	13.48	15.0	0.0
100	PI2 BPSK	1	271	13.35	13.47	13.33		
100	PI2 BPSK	135	0	13.36	13.47	13.48	15.0	0.0
100	PI2 BPSK	135	69	13.28	13.48	13.42	15.0	0.0
100	PI2 BPSK	135	138	13.29	13.48	13.46		
100	PI2 BPSK	270	0	13.32	13.42	13.44	15.0	0.0
100	QPSK	1	1	13.38	13.50	13.41		
100	QPSK	1	137	13.29	13.41	13.41	15.0	0.0
100	QPSK	1	271	13.34	13.47	13.34		
100	QPSK	135	0	13.37	13.43	13.43		
100	QPSK	135	69	13.38	13.47	13.46	15.0	0.0
100	QPSK	135	138	13.31	13.41	13.43		
100	QPSK	270	0	13.33	13.43	13.40	15.0	0.0
100	16QAM	1	1	13.34	13.46	13.37	15.0	0.0
100	64QAM	1	1	13.26	13.43	13.46	15.0	0.0
100	256QAM	1	1	13.30	13.40	13.47	15.0	0.0
Channel								
Frequency (MHz)								
				648688	650000	662332	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	13.12	13.45	13.41	15.0	0.0
Channel								
Frequency (MHz)								
				648334	650000	660966	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	13.37	13.46	13.42	15.0	0.0
Channel								
Frequency (MHz)								
				3735	3840	3945	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	13.32	13.39	13.35	15.0	0.0
Channel								
Frequency (MHz)								
				648688	650000	663332	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	13.31	13.47	13.41	15.0	0.0
Channel								
Frequency (MHz)								
				648334	650000	663666	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	13.25	13.40	13.54	15.0	0.0
Channel								
Frequency (MHz)								
				648000	650000	664000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	13.29	13.43	13.41	15.0	0.0
Channel								
Frequency (MHz)								
				647668	650000	664332	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	13.30	13.41	13.35	15.0	0.0
Channel								
Frequency (MHz)								
				647334	650000	664666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	13.28	13.47	13.37	15.0	0.0
Channel								
Frequency (MHz)								
				647168	650000	664832	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	13.30	13.41	13.42	15.0	0.0
Channel								
Frequency (MHz)								
				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	13.35	13.41	13.34	15.0	0.0



Part27Q_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.79					
100	PI2 BPSK	1	137	14.82			16.0	0.0	
100	PI2 BPSK	1	271	14.86					
100	PI2 BPSK	135	0	14.78			16.0	0.0	
100	PI2 BPSK	135	69	14.85			16.0	0.0	
100	PI2 BPSK	135	138	14.85			16.0	0.0	
100	PI2 BPSK	270	0	14.80					
100	QPSK	1	1	14.87					
100	QPSK	1	137	14.82			16.0	0.0	
100	QPSK	1	271	14.83					
100	QPSK	135	0	14.78			16.0	0.0	
100	QPSK	135	69	14.85			16.0	0.0	
100	QPSK	135	138	14.83			16.0	0.0	
100	QPSK	270	0	14.84			16.0	0.0	
100	16QAM	1	1	14.77			16.0	0.0	
100	64QAM	1	1	14.83			16.0	0.0	
100	256QAM	1	1	14.85			16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.84	14.80	14.82	16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.79	14.85	14.83	16.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.83	14.81	14.76	16.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.83	14.76	14.79	16.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.79	14.73	14.77	16.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.83	14.83	14.80	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.83	14.83	14.84	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.79	14.78	14.80	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.82	14.85	14.82	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.80	14.79	14.81	16.0	0.0	

Part27O_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.78					
100	PI2 BPSK	1	137	14.79			16.0	0.0	
100	PI2 BPSK	1	271	14.78					
100	PI2 BPSK	135	0	14.80			16.0	0.0	
100	PI2 BPSK	135	69	14.84			16.0	0.0	
100	PI2 BPSK	135	138	14.78			16.0	0.0	
100	PI2 BPSK	270	0	14.79					
100	QPSK	1	1	14.85					
100	QPSK	1	137	14.83			16.0	0.0	
100	QPSK	1	271	14.78					
100	QPSK	135	0	14.78			16.0	0.0	
100	QPSK	135	69	14.82			16.0	0.0	
100	QPSK	135	138	14.78			16.0	0.0	
100	QPSK	270	0	14.74			16.0	0.0	
100	16QAM	1	1	14.77			16.0	0.0	
100	64QAM	1	1	14.77			16.0	0.0	
100	256QAM	1	1	14.77			16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.75	14.76	14.83	16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.81	14.78	14.79	16.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.76	14.74	14.83	16.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.75	14.77	14.75	16.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.73	14.74	14.87	16.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.74	14.82	14.78	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.81	14.76	14.75	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.79	14.79	14.81	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.76	14.78	14.77	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.76	14.76	14.77	16.0	0.0	



### Part27Q\_n78 HPUe\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1		14.79			
100	PI2 BPSK	1	137		14.82		16.0	0.0
100	PI2 BPSK	1	271		14.86			
100	PI2 BPSK	135	0		14.78		16.0	0.0
100	PI2 BPSK	135	69		14.85		16.0	0.0
100	PI2 BPSK	135	138		14.85			
100	PI2 BPSK	270	0		14.80		16.0	0.0
100	QPSK	1	1		14.87			
100	QPSK	1	137		14.82		16.0	0.0
100	QPSK	1	271		14.83			
100	QPSK	135	0		14.79		16.0	0.0
100	QPSK	135	69		14.85			
100	QPSK	135	138		14.83		16.0	0.0
100	QPSK	270	0		14.84		16.0	0.0
100	16QAM	1	1		14.77		16.0	0.0
100	64QAM	1	1		14.83		16.0	0.0
100	256QAM	1	1		14.85		16.0	0.0
Channel								
Frequency (MHz)								
633000								
633332								
633666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3495	3499.98	3504.98		
Channel								
Frequency (MHz)								
14.84								
14.83								
14.82								
14.82								
14.83								
14.84								
14.85								
14.86								
14.87								
14.88								
14.89								
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**Part270\_n78\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3750				
100	PI2 BPSK	1	1		16.02			
100	PI2 BPSK	1	137		16.04		17.0	0.0
100	PI2 BPSK	1	271		16.03			
100	PI2 BPSK	135	0		15.96		17.0	0.0
100	PI2 BPSK	135	69		15.96			
100	PI2 BPSK	135	138		16.00		17.0	0.0
100	PI2 BPSK	270	0		16.01			
100	QPSK	1	1		16.03			
100	QPSK	1	137		15.97		17.0	0.0
100	QPSK	1	271		16.03			
100	QPSK	135	0		16.03			
100	QPSK	135	69		16.04		17.0	0.0
100	QPSK	135	138		16.00			
100	QPSK	270	0		16.03		17.0	0.0
100	16QAM	1	1		15.96		17.0	0.0
100	64QAM	1	1		15.96		17.0	0.0
100	256QAM	1	1		16.00		17.0	0.0
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	15.96	16.00	15.98	17.0	0.0
Channel				648334	650000	650666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	15.99	16.01	15.97	17.0	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	15.96	16.03	16.04	17.0	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3738.02	3750	3749.98	(dBm)	(dB)
60	QPSK	1	1	16.04	16.03	16.02	17.0	0.0
Channel				648334	650000	651666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	16.02	15.96	16.02	17.0	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	16.01	16.00	15.95	17.0	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	16.04	16.01	15.96	17.0	0.0
Channel				647334	650000	652666	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	15.99	16.01	15.97	17.0	0.0
Channel				647000	650000	652666	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	16.04	16.01	16.02	17.0	0.0
Channel				646334	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	15.96	16.02	15.96	17.0	0.0



Part27Q\_n78 HPUe\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1		15.77			
100	PI2 BPSK	1	137		15.74		17.0	0.0
100	PI2 BPSK	1	271		15.76			
100	PI2 BPSK	135	0		15.78		17.0	0.0
100	PI2 BPSK	135	69		15.77		17.0	0.0
100	PI2 BPSK	135	138		15.73			
100	PI2 BPSK	270	0		15.79		17.0	0.0
100	QPSK	1	1		15.92			
100	QPSK	1	137		15.78		17.0	0.0
100	QPSK	1	271		15.80			
100	QPSK	135	0		15.78		17.0	0.0
100	QPSK	135	69		15.80			
100	QPSK	135	138		15.77			
100	QPSK	270	0		15.78		17.0	0.0
100	16QAM	1	1		15.78		17.0	0.0
100	64QAM	1	1		15.74		17.0	0.0
100	256QAM	1	1		15.79		17.0	0.0
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1		3495	3499.98	3504.98	MPR (dB)
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1		632968	633332	633000	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3499.98								
80	QPSK	1	1		3496.02	3499.98	3510	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
15.71								
70	QPSK	1	1		15.71	15.77	15.75	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
632000								
60	QPSK	1	1		632000	63332	63666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
631668								
50	QPSK	1	1		631668	63332	63600	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3499.98								
40	QPSK	1	1		3476.02	3499.98	3525	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
631000								
30	QPSK	1	1		631000	63332	63666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1		630668	63332	63600	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
630000								
15	QPSK	1	1		630000	63332	63666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3499.98								
10	QPSK	1	1		3455.01	3499.98	3544.98	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
15.78								

Part27Q\_n78 HPUe\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	PI2 BPSK	1	1		16.02			
100	PI2 BPSK	1	137		16.04		17.0	0.0
100	PI2 BPSK	1	271		16.03			
100	PI2 BPSK	135	0		15.96		17.0	0.0
100	PI2 BPSK	135	69		15.96		17.0	0.0
100	PI2 BPSK	135	138		16.00			
100	PI2 BPSK	270	0		16.01		17.0	0.0
100	QPSK	1	1		16.06			
100	QPSK	1	137		15.97		17.0	0.0
100	QPSK	1	271		16.03			
100	QPSK	135	0		16.03		17.0	0.0
100	QPSK	135	69		16.04			
100	QPSK	135	138		16.00			
100	QPSK	270	0		16.03		17.0	0.0
100	16QAM	1	1		15.98		17.0	0.0
100	64QAM	1	1		15.98		17.0	0.0
100	256QAM	1	1		16.00		17.0	0.0
Channel								
Frequency (MHz)								
649668								
80	QPSK	1	1		649668	650000	650332	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
648334								
80	QPSK	1	1		648334	650000	650666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3750								
80	QPSK	1	1		3740.01	3750	3760	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
15.96								
70	QPSK	1	1		15.96	16.03	16.04	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
648668								
60	QPSK	1	1		648668	650000	651332	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
648000								
60	QPSK	1	1		648000	650000	651000	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3750								
40	QPSK	1	1		3725.01	3750	3774.98	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
647668								
40	QPSK	1	1		647668	650000	652000	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
647334								
30	QPSK	1	1		647334	650000	652666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
647000								
30	QPSK	1	1		647000	650000	653000	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
647168								
20	QPSK	1	1		647168	650000	653666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
647000								
20	QPSK	1	1		647000	650000	653332	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
64752								
15	QPSK	1	1		64752	650000	652448	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
16.04								
10	QPSK	1	1		16.04	16.01	16.02	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
15.96								

Part27Q\_n78\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1		11.44			
100	PI2 BPSK	1	137		11.49		12.5	0.0
100	PI2 BPSK	1	271		11.52			
100	PI2 BPSK	135	0		11.48		12.5	0.0
100	PI2 BPSK	135	69		11.52		12.5	0.0
100	PI2 BPSK	135	138		11.50			
100	PI2 BPSK	270	0		11.49		12.5	0.0
100	QPSK	1	1		11.53			
100	QPSK	1	137		11.44		12.5	0.0
100	QPSK	1	271		11.48			
100	QPSK	135	0		11.49		12.5	0.0
100	QPSK	135	69		11.52			
100	QPSK	135	138		11.51			
100	QPSK	270	0		11.49		12.5	0.0
100	16QAM	1	1		11.49		12.5	0.0
100	64QAM	1	1		11.47		12.5	0.0
100	256QAM	1	1		11.47		12.5	0.0
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1		632968	633332	634000	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1		632968	633332	634000	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3499.98								
80	QPSK	1	1		3490.02	3499.98	3510	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
11.47								
70	QPSK	1	1		11.47	11.47	11.47	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
632000								
60	QPSK	1	1		632000	63332	63666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
631668								
50	QPSK	1	1		631668	63332	63600	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3499.98								
40	QPSK	1	1		3475.02	3499.98	3525	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
631000								
30	QPSK	1	1		631000	63332	63666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1		630668	63332	63600	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
630000								
15	QPSK	1	1		630000	63332	63666	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
3499.98								
10	QPSK	1	1		3455.01	3499.98	3544.98	Tune-up limit (dBm)
Channel								
Frequency (MHz)								
11.48								



**Part270\_n78\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				65000	3750			
100	PI2 BPSK	1	1		11.36			
100	PI2 BPSK	1	137		11.34		12.5	0.0
100	PI2 BPSK	1	271		11.40			
100	PI2 BPSK	135	0		11.37		12.5	0.0
100	PI2 BPSK	135	69		11.40			
100	PI2 BPSK	135	138		11.31		12.5	0.0
100	PI2 BPSK	270	0		11.40			
100	QPSK	1	1		11.41			
100	QPSK	1	137		11.34		12.5	0.0
100	QPSK	1	271		11.37			
100	QPSK	135	0		11.38			
100	QPSK	135	69		11.40		12.5	0.0
100	QPSK	135	138		11.38			
100	QPSK	270	0		11.38		12.5	0.0
100	16QAM	1	1		11.32		12.5	0.0
100	64QAM	1	1		11.32		12.5	0.0
100	256QAM	1	1		11.38		12.5	0.0
Channel								
Frequency (MHz)								
				649668	650000	650332	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3742.02	3750	3754.98		
				11.34	11.39	11.33	12.5	0.0
Channel								
Frequency (MHz)								
				648334	650000	650666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3750	3759.99		
				11.37	11.33	11.30	12.5	0.0
Channel								
Frequency (MHz)								
				648000	650000	651000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	11.33	11.32	11.31	12.5	0.0
Channel								
Frequency (MHz)								
				648688	650000	651332	Tune-up limit (dBm)	MPR (dB)
100	QPSK	1	1	3740.02	3750	3749.98		
				11.31	11.36	11.35	12.5	0.0
60	QPSK	1	1	11.31	11.36	11.35	12.5	0.0
Channel								
Frequency (MHz)								
				648334	650000	651666	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3725.01	3750	3774.99		
				11.32	11.31	11.36	12.5	0.0
Channel								
Frequency (MHz)								
				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3720	3750	3760		
				11.32	11.33	11.39	12.5	0.0
Channel								
Frequency (MHz)								
				647968	650000	652332	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3715.02	3750	3784.98		
				11.34	11.32	11.34	12.5	0.0
Channel								
Frequency (MHz)								
				647334	650000	652666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3710.01	3750	3789.99		
				11.31	11.30	11.37	12.5	0.0
Channel								
Frequency (MHz)								
				647168	650000	652932	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3707.52	3750	3792.48		
				11.32	11.38	11.37	12.5	0.0
Channel								
Frequency (MHz)								
				646000	650000	653000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	3705	3750	3795		
				11.31	11.33	11.34	12.5	0.0



Part27Q_n78 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	1144					
100	Pi2 BPSK	1	137	1149			12.5		
100	Pi2 BPSK	1	271	1152					
100	Pi2 BPSK	135	0	1148			12.5		
100	Pi2 BPSK	135	69	1152			12.5		
100	Pi2 BPSK	135	138	1150			12.5		
100	Pi2 BPSK	270	0	1149					
100	QPSK	1	1	1153					
100	QPSK	1	137	1144			12.5		
100	QPSK	1	271	1148					
100	QPSK	135	0	1149			12.5		
100	QPSK	135	69	1152					
100	QPSK	135	138	1151			12.5		
100	QPSK	270	0	1148			12.5		
100	16QAM	1	1	1149			12.5		
100	64QAM	1	1	1147			12.5		
100	256QAM	1	1	1147			12.5		
Channel									
Frequency (MHz)									
80	QPSK	1	1	1142	63300	63386	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
80	QPSK	1	1	1147	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
80	QPSK	1	1	1147	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
70	QPSK	1	1	1147	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
60	QPSK	1	1	1149	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
50	QPSK	1	1	1144	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
40	QPSK	1	1	1149	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
30	QPSK	1	1	1144	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
20	QPSK	1	1	1144	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
15	QPSK	1	1	1142	63068	63000	Tune-up limit (dBm)		
Channel									
Frequency (MHz)									
10	QPSK	1	1	1148	63068	63000	Tune-up limit (dBm)		

Part27O_n78 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	1136					
100	Pi2 BPSK	1	137	1134			12.5	0.0	
100	Pi2 BPSK	1	271	1140					
100	Pi2 BPSK	135	0	1137			12.5	0.0	
100	Pi2 BPSK	135	69	1140			12.5	0.0	
100	Pi2 BPSK	135	138	1131			12.5	0.0	
100	Pi2 BPSK	270	0	1140					
100	QPSK	1	1	1141					
100	QPSK	1	137	1134			12.5	0.0	
100	QPSK	1	271	1137					
100	QPSK	135	0	1138			12.5	0.0	
100	QPSK	135	69	1140					
100	QPSK	135	138	1136			12.5	0.0	
100	QPSK	270	0	1138			12.5	0.0	
100	16QAM	1	1	1132			12.5	0.0	
100	64QAM	1	1	1132			12.5	0.0	
100	256QAM	1	1	1138			12.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	1134	64868	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	1137	64868	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	1133	64868	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	1131	64868	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	1132	64868	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	1132	64868	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	1134	64734	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	1131	64734	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	1132	64734	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	1131	64734	65000	Tune-up limit (dBm)	MPR	



Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	13.70				
100	Pl2 BPSK	1	137	13.70			15.0	0.0
100	Pl2 BPSK	1	271	13.68				
100	Pl2 BPSK	136	0	13.71			15.0	0.0
100	Pl2 BPSK	136	69	13.68			15.0	0.0
100	Pl2 BPSK	136	138	13.74				
100	Pl2 BPSK	270	0	13.71			15.0	0.0
100	QPSK	1	1	13.70				
100	QPSK	1	137	13.73			15.0	0.0
100	QPSK	1	271	13.68				
100	QPSK	136	0	13.68			15.0	0.0
100	QPSK	136	69	13.74				
100	QPSK	136	138	13.66			15.0	0.0
100	QPSK	270	0	13.70			15.0	0.0
100	16QAM	1	1	13.74			15.0	0.0
100	64QAM	1	1	13.67			15.0	0.0
100	256QAM	1	1	13.67			15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	13.65	13.71	13.64	15.0	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3496.02	3499.98	3510	15.0	0.0
Channel								
Frequency (MHz)								
63214								
63332								
63452								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	13.71	13.64	13.69	15.0	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63466								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	13.72	13.69	13.71	15.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3475.02	3499.98	3525	15.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	13.70	13.65	13.69	15.0	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	13.70	13.66	13.64	15.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	13.69	13.66	13.68	15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	13.68	13.70	13.72	15.0	0.0
Channel								
Frequency (MHz)								
62934								
63332								
63700								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	13.73	13.69	13.64	15.0	0.0

Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	14.02				
100	Pl2 BPSK	1	137	14.07			15.0	0.0
100	Pl2 BPSK	1	271	14.07				
100	Pl2 BPSK	136	0	14.01			15.0	0.0
100	Pl2 BPSK	136	69	14.07			15.0	0.0
100	Pl2 BPSK	136	138	14.09				
100	Pl2 BPSK	270	0	14.00			15.0	0.0
100	QPSK	1	1	14.03				
100	QPSK	1	137	14.06			15.0	0.0
100	QPSK	1	271	14.08				
100	QPSK	136	0	14.07			15.0	0.0
100	QPSK	136	69	14.06				
100	QPSK	136	138	14.03			15.0	0.0
100	QPSK	270	0	14.03			15.0	0.0
100	16QAM	1	1	14.03			15.0	0.0
100	64QAM	1	1	14.06			15.0	0.0
100	256QAM	1	1	14.06			15.0	0.0
Channel								
Frequency (MHz)								
64968								
65000								
65032								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.04	14.05	14.03	15.0	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65066								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3740.01	3750	3759.98	15.0	0.0
Channel								
Frequency (MHz)								
64860								
65000								
65100								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.06	14.06	14.04	15.0	0.0
Channel								
Frequency (MHz)								
64888								
65000								
65132								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.04	14.07	14.04	15.0	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65166								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.03	14.00	14.01	15.0	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65232								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.07	14.05	14.07	15.0	0.0
Channel								
Frequency (MHz)								
64700								
65000								
65300								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	14.06	14.00	14.07	15.0	0.0
Channel								
Frequency (MHz)								
64734								
65000								
65366								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	14.01	14.07	14.02	15.0	0.0
Channel								
Frequency (MHz)								
64716								
65000								
65432								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	14.03	14.00	14.06	15.0	0.0
Channel								
Frequency (MHz)								
64650								
65000								
65500								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	14.07	14.04	14.00	15.0	0.0

Part27Q\_n78\_HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	13.70				
100	Pl2 BPSK	1	137	13.70			15.0	0.0
100	Pl2 BPSK	1	271	13.68				
100	Pl2 BPSK	136	0	13.71			15.0	0.0
100	Pl2 BPSK	136	69	13.68			15.0	0.0
100	Pl2 BPSK	136	138	13.74				
100	Pl2 BPSK	270	0	13.71			15.0	0.0
100	QPSK	1	1	13.70				
100	QPSK	1	137	13.73			15.0	0.0
100	QPSK	1	271	13.68				
100	QPSK	136	0	13.68			15.0	0.0
100	QPSK	136	69	13.74				
100	QPSK	136	138	13.66			15.0	0.0
100	QPSK	270	0	13.70			15.0	0.0
100	16QAM	1	1	13.74			15.0	0.0
100	64QAM	1	1	13.67			15.0	0.0
100	256QAM	1	1	13.67			15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	13.65	13.71	13.64	15.0	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3496.02	3499.98	3510	15.0	0.0
Channel								
Frequency (MHz)								
63214								
63332								
63452								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	13.71	13.64	13.69	15.0	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63466								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	13.72	13.69	13.71	15.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3475.02	3499.98	3525	15.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	13.70	13.65	13.69	15.0	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	13.70	13.66	13.64	15.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	13.69	13.66	13.68	15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	13.68	13.70	13.72	15.0	0.0
Channel								
Frequency (MHz)								
62934								
63332								
63700								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	13.73	13.69	13.64	15.0	0.0



**Part27O\_n78 HPUe\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3750				
100	PI2 BPSK	1	1		14.02			
100	PI2 BPSK	1	137		14.07		15.0	0.0
100	PI2 BPSK	1	271		14.07			
100	PI2 BPSK	135	0		14.01		15.0	0.0
100	PI2 BPSK	135	69		14.07			
100	PI2 BPSK	135	138		14.09			
100	PI2 BPSK	270	0		14.00		15.0	0.0
100	QPSK	1	1		14.10			
100	QPSK	1	137		14.06		15.0	0.0
100	QPSK	1	271		14.08			
100	QPSK	135	0		14.07			
100	QPSK	135	69		14.06		15.0	0.0
100	QPSK	135	138		14.03			
100	QPSK	270	0		14.03		15.0	0.0
100	16QAM	1	1		14.03		15.0	0.0
100	16QAM	1	1		14.06		15.0	0.0
100	256QAM	1	1		14.09		15.0	0.0
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3757.98	(dBm)	(dB)
90	QPSK	1	1	14.04	14.05	14.03	15.0	0.0
Channel				648334	650000	650666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	13.99	14.06	14.08	15.0	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	14.06	14.06	14.04	15.0	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3738.02	3750	3761.98	(dBm)	(dB)
60	QPSK	1	1	14.04	14.07	14.04	15.0	0.0
Channel				648334	650000	651666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	14.03	14.00	14.01	15.0	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	14.07	14.05	14.07	15.0	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	14.06	14.00	14.07	15.0	0.0
Channel				647334	650000	652666	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	14.01	14.07	14.02	15.0	0.0
Channel				647000	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	14.03	14.00	14.06	15.0	0.0
Channel				646000	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	14.07	14.04	14.00	15.0	0.0



Reduced Power Mode for DSI4

n2_Ant 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 372000	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	PI2 BPSK	1	1	23.18	23.27	23.17	24.0	0.0
20	PI2 BPSK	1	53	23.18	23.28	23.18		
20	PI2 BPSK	1	104	23.24	23.28	23.16		
20	PI2 BPSK	50	0	23.11	23.16	23.09	24.0	0.0
20	PI2 BPSK	50	28	23.06	23.16	23.14	24.0	0.0
20	PI2 BPSK	50	56	23.09	23.19	23.16	24.0	0.0
20	PI2 BPSK	100	0	23.16	23.20	23.12	24.0	0.0
20	QPSK	1	1	23.25	23.30	23.27	24.0	0.0
20	QPSK	1	53	23.24	23.28	23.18		
20	QPSK	1	104	23.17	23.24	23.20		
20	QPSK	50	0	22.73	22.83	22.77	24.0	0.0
20	QPSK	50	28	23.16	23.19	23.11	24.0	0.0
20	QPSK	50	56	22.77	22.82	22.76	24.0	0.0
20	QPSK	100	0	23.03	23.11	23.09	24.0	0.0
20	16QAM	1	1	23.05	23.07	23.05	24.0	0.0
20	64QAM	1	1	21.56	21.62	21.62	22.5	1.5
20	256QAM	1	1	19.48	19.53	19.47	20.5	3.5
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.18	23.26	23.18	24.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.22	23.20	23.16	24.0	0.0
Channel								
Frequency (MHz)								
5	QPSK	1	1	23.15	23.22	23.16	24.0	0.0

n2_Ant 1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 372000	Power Middle Ch. Freq. 376000	Power High Ch. Freq. 380000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	PI2 BPSK	1	1	22.94	22.96	22.89	24.0	0.0
20	PI2 BPSK	1	53	22.94	23.04	22.85		
20	PI2 BPSK	1	104	22.89	22.98	22.89		
20	PI2 BPSK	50	0	22.44	22.49	22.46	23.5	0.5
20	PI2 BPSK	50	28	22.93	22.95	22.87	24.0	0.0
20	PI2 BPSK	50	56	22.38	22.45	22.44	23.5	0.5
20	PI2 BPSK	100	0	22.49	22.52	22.45	24.0	0.0
20	QPSK	1	1	23.02	23.10	23.03	24.0	0.0
20	QPSK	1	53	22.93	22.99	22.96		
20	QPSK	1	104	22.94	23.03	23.00		
20	QPSK	50	0	21.85	21.89	21.81	23.0	1.0
20	QPSK	50	28	22.93	22.98	22.91	24.0	0.0
20	QPSK	50	56	21.85	21.93	21.83	23.0	1.0
20	QPSK	100	0	21.91	21.99	21.89	23.0	1.0
20	16QAM	1	1	22.05	22.10	22.02	23.0	1.0
20	64QAM	1	1	20.46	20.54	20.47	21.5	2.5
20	256QAM	1	1	18.43	18.51	18.43	19.5	4.5
Channel								
Frequency (MHz)								
15	QPSK	1	1	22.91	22.87	22.88	24.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	22.90	22.90	22.83	24.0	0.0
Channel								
Frequency (MHz)								
5	QPSK	1	1	22.90	22.93	22.86	24.0	0.0

n5_Ant 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 166000	Power Middle Ch. Freq. 167500	Power High Ch. Freq. 167600	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	PI2 BPSK	1	1	22.78	22.82	22.80	24.0	0.0
20	PI2 BPSK	1	53	22.89	22.86	22.87		
20	PI2 BPSK	1	104	22.78	22.88	22.78		
20	PI2 BPSK	50	0	22.78	22.88	22.86	24.0	0.0
20	PI2 BPSK	50	28	22.90	22.95	22.90	24.0	0.0
20	PI2 BPSK	50	56	22.77	22.82	22.79	24.0	0.0
20	PI2 BPSK	100	0	22.78	22.88	22.83	24.0	0.0
20	QPSK	1	1	22.90	23.00	22.90	24.0	0.0
20	QPSK	1	53	22.79	22.82	22.79		
20	QPSK	1	104	22.82	22.86	22.78		
20	QPSK	50	0	22.76	22.85	22.76	24.0	0.0
20	QPSK	50	28	22.91	22.98	22.90	24.0	0.0
20	QPSK	50	56	22.77	22.86	22.84	24.0	0.0
20	QPSK	100	0	22.87	22.99	22.84	24.0	0.0
20	16QAM	1	1	22.87	22.92	22.87	24.0	0.0
20	64QAM	1	1	21.61	21.66	21.56	22.5	1.5
20	256QAM	1	1	19.69	19.71	19.67	20.5	3.5
Channel								
Frequency (MHz)								
15	QPSK	1	1	22.78	22.83	22.84	24.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	22.83	22.93	22.76	24.0	0.0
Channel								
Frequency (MHz)								
5	QPSK	1	1	22.83	22.83	22.83	24.0	0.0



n5_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 166800	Power Middle Ch. F.Freq. 167300	Power High Ch. F.Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				834	836.5	839			
Frequency (MHz)				22.74	22.77	22.70			
20	PI2 BPSK	1	1	22.91	22.88	22.86	24.0	0.0	
20	PI2 BPSK	1	104	22.85	22.88	22.82			
20	PI2 BPSK	50	0	22.81	22.85	22.79	24.0	0.0	
20	PI2 BPSK	50	28	22.79	22.89	22.79	24.0	0.0	
20	PI2 BPSK	50	56	22.79	22.80	22.84	24.0	0.0	
20	PI2 BPSK	100	0	22.88	22.78	22.75	24.0	0.0	
20	QPSK	1	1	22.85	22.88	22.88	24.0	0.0	
20	QPSK	1	53	22.72	22.78	22.73	24.0	0.0	
20	QPSK	1	104	22.85	22.88	22.81	24.0	0.0	
20	QPSK	50	0	22.73	22.82	22.74	24.0	0.0	
20	QPSK	50	28	22.80	22.90	22.82	24.0	0.0	
20	QPSK	50	56	22.74	22.80	22.74	24.0	0.0	
20	QPSK	100	0	22.85	22.89	22.83	24.0	0.0	
20	16QAM	1	1	22.81	22.85	22.78	24.0	0.0	
20	64QAM	1	1	21.51	21.61	21.56	22.5	1.5	
20	256QAM	1	1	19.62	19.64	19.62	20.5	3.5	
Channel				165300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	22.87	22.93	22.87	24.0	0.0	
Channel				165300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831	836.5	841			
10	QPSK	1	1	22.90	22.90	22.87	24.0	0.0	
Channel				165300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				830.5	836.5	846.5			
5	QPSK	1	1	22.93	22.96	22.83	24.0	0.0	

n7_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 504900	Power Middle Ch. F.Freq. 507000	Power High Ch. F.Freq. 510000	Tune-up limit (dBm)	MPR (dB)	
Channel				2520	2535	2550			
Frequency (MHz)				22.88	23.08	23.05			
40	PI2 BPSK	1	1	23.10	23.24	23.15	24.0	0.0	
40	PI2 BPSK	1	214	23.07	23.23	23.21			
40	PI2 BPSK	108	0	22.90	23.05	23.01	24.0	0.0	
40	PI2 BPSK	108	54	22.89	23.15	23.10	24.0	0.0	
40	PI2 BPSK	108	108	22.99	23.12	23.04	24.0	0.0	
40	PI2 BPSK	216	0	22.99	23.11	23.07	24.0	0.0	
40	QPSK	1	1	23.11	23.26	23.22	24.0	0.0	
40	QPSK	1	108	22.96	23.11	23.03	24.0	0.0	
40	QPSK	1	214	23.07	23.23	23.20			
40	QPSK	108	0	22.85	23.05	22.96	24.0	0.0	
40	QPSK	108	54	23.05	23.20	23.11	24.0	0.0	
40	QPSK	108	108	22.89	23.09	23.05	24.0	0.0	
40	QPSK	216	0	23.05	23.16	23.08	24.0	0.0	
40	16QAM	1	1	23.13	23.25	23.23	24.0	0.0	
40	64QAM	1	1	22.31	22.51	22.44	23.0	1.0	
40	256QAM	1	1	20.29	20.47	20.37	21.0	3.0	
Channel				504900	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	23.04	23.16	23.14	24.0	0.0	
Channel				505000	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2537.5			
25	QPSK	1	1	23.06	23.24	23.18	24.0	0.0	
Channel				505000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	23.05	23.17	23.19	24.0	0.0	
Channel				505000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	23.04	23.22	23.13	24.0	0.0	
Channel				505000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	23.01	23.20	23.16	24.0	0.0	
Channel				505000	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	23.07	23.23	23.19	24.0	0.0	

n7_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 504900	Power Middle Ch. F.Freq. 507000	Power High Ch. F.Freq. 510000	Tune-up limit (dBm)	MPR (dB)	
Channel				2520	2535	2550			
Frequency (MHz)				22.88	23.07	22.98			
40	PI2 BPSK	1	1	23.12	23.17	23.11	24.0	0.0	
40	PI2 BPSK	1	214	23.11	23.21	23.17			
40	PI2 BPSK	108	0	22.50	22.55	22.83	23.5	0.5	
40	PI2 BPSK	108	54	23.04	23.06	22.97	24.0	0.0	
40	PI2 BPSK	108	108	22.84	22.71	22.70	23.5	0.5	
40	PI2 BPSK	216	0	22.70	22.72	22.68	23.5	0.5	
40	QPSK	1	1	23.14	23.23	23.18	24.0	0.0	
40	QPSK	1	108	23.10	23.14	23.09	24.0	0.0	
40	QPSK	1	214	23.13	23.17	23.17			
40	QPSK	108	0	22.03	22.11	22.06	23.0	1.0	
40	QPSK	108	54	23.05	23.08	23.04	24.0	0.0	
40	QPSK	108	108	22.19	22.22	22.16	23.0	1.0	
40	QPSK	216	0	22.12	22.16	22.15	23.0	1.0	
40	16QAM	1	1	22.34	22.36	22.32	23.0	1.0	
40	64QAM	1	1	20.78	20.86	20.84	21.5	2.5	
40	256QAM	1	1	18.80	18.82	18.77	19.5	4.5	
Channel				504900	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	22.93	23.03	22.96	24.0	0.0	
Channel				505000	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2537.5			
25	QPSK	1	1	22.92	23.06	22.92	24.0	0.0	
Channel				505000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	22.93	22.99	22.97	24.0	0.0	
Channel				505000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	22.96	23.06	22.97	24.0	0.0	
Channel				505000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	22.97	23.00	22.91	24.0	0.0	
Channel				505000	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	22.93	23.03	22.94	24.0	0.0	





n12_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	22.87	22.90	22.84	24.0	0.0	
15	PI2 BPSK	1	40	22.91	22.96	22.91			
15	PI2 BPSK	1	77	22.83	22.93	22.83			
15	PI2 BPSK	36	0	22.84	22.88	22.86	24.0	0.0	
15	PI2 BPSK	36	22	22.74	22.79	22.77	24.0	0.0	
15	PI2 BPSK	36	43	22.69	22.76	22.70	24.0	0.0	
15	PI2 BPSK	75	0	22.84	22.88	22.86	24.0	0.0	
15	QPSK	1	1	22.96	23.01	22.92			
15	QPSK	1	40	22.85	22.92	22.83	24.0	0.0	
15	QPSK	1	77	22.83	22.93	22.91			
15	QPSK	36	0	22.79	22.86	22.79	24.0	0.0	
15	QPSK	36	22	22.91	22.96	22.93	24.0	0.0	
15	QPSK	36	43	22.70	22.78	22.70	24.0	0.0	
15	QPSK	75	0	22.84	22.86	22.87	24.0	0.0	
15	16QAM	1	1	22.95	22.91	22.86	24.0	0.0	
15	64QAM	1	1	21.43	21.51	21.49	22.5	1.5	
15	256QAM	1	1	19.51	19.55	19.49	20.5	3.5	
Channel				14000	141500	142000	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	22.88	22.99	22.86	24.0	0.0	
Channel				14000	141500	142700	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	22.99	22.94	22.87	24.0	0.0	

n12_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	23.34	23.35	23.31	24.0	0.0	
15	PI2 BPSK	1	40	23.33	23.36	23.31			
15	PI2 BPSK	1	77	23.31	23.32	23.31			
15	PI2 BPSK	36	0	22.89	22.91	22.84	23.5	0.5	
15	PI2 BPSK	36	22	23.15	23.17	23.15	24.0	0.0	
15	PI2 BPSK	36	43	22.82	22.91	22.87	23.5	0.5	
15	PI2 BPSK	75	0	22.95	22.98	22.93	23.5	0.5	
15	QPSK	1	1	23.35	23.37	23.32			
15	QPSK	1	40	23.19	23.28	23.24	24.0	0.0	
15	QPSK	1	77	23.34	23.36	23.34			
15	QPSK	36	0	22.40	22.46	22.44	23.0	1.0	
15	QPSK	36	22	23.19	23.23	23.16	24.0	0.0	
15	QPSK	36	43	22.26	22.35	22.30	23.0	1.0	
15	QPSK	75	0	22.49	22.52	22.45	23.0	1.0	
15	16QAM	1	1	22.97	22.81	22.51	23.0	1.0	
15	64QAM	1	1	21.05	21.11	21.09	21.5	2.5	
15	256QAM	1	1	19.08	19.18	19.17	19.5	4.5	
Channel				14000	141500	142200	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	23.32	23.29	23.26	24.0	0.0	
Channel				14000	141500	142700	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	23.30	23.33	23.27	24.0	0.0	

n14_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				790					
Frequency (MHz)									
10	PI2 BPSK	1	1		22.78				
10	PI2 BPSK	1	26		22.80		24.0	0.0	
10	PI2 BPSK	1	50		22.76				
10	PI2 BPSK	26	0		22.84		24.0	0.0	
10	PI2 BPSK	26	14		22.89		24.0	0.0	
10	PI2 BPSK	26	27		22.83		24.0	0.0	
10	PI2 BPSK	50	0		22.84		24.0	0.0	
10	QPSK	1	1		22.82				
10	QPSK	1	26		22.80		24.0	0.0	
10	QPSK	1	50		22.72				
10	QPSK	26	0		22.85		24.0	0.0	
10	QPSK	26	14		22.71		24.0	0.0	
10	QPSK	26	27		22.88		24.0	0.0	
10	QPSK	50	0		22.86		24.0	0.0	
10	16QAM	1	1		22.80		24.0	0.0	
10	64QAM	1	1		21.57		22.5	1.5	
10	256QAM	1	1		19.45		20.5	3.5	
Channel				158100	158000	158100	Tune-up limit	MPR	
Frequency (MHz)				790.5	790.5	790.5	(dBm)	(dB)	
5	QPSK	1	1	22.74	22.75	22.75	24.0	0.0	



n14_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	PI2 BPSK	1	1	23.15	23.15	23.15			
10	PI2 BPSK	1	26	23.16	23.16	23.16	24.0	0.0	
10	PI2 BPSK	1	50	23.16	23.16	23.16			
10	PI2 BPSK	25	0	23.04	23.04	23.04	24.0	0.0	
10	PI2 BPSK	25	14	23.05	23.05	23.05	24.0	0.0	
10	PI2 BPSK	25	27	22.98	22.98	22.98	24.0	0.0	
10	PI2 BPSK	50	0	23.00	23.00	23.00	24.0	0.0	
10	QPSK	1	1	23.21	23.21	23.21			
10	QPSK	1	26	23.18	23.18	23.18	24.0	0.0	
10	QPSK	1	50	23.18	23.18	23.18			
10	QPSK	25	0	22.55	22.55	22.55	23.5	0.5	
10	QPSK	25	14	23.11	23.11	23.11	24.0	0.0	
10	QPSK	25	27	22.53	22.53	22.53	23.5	0.5	
10	QPSK	50	0	22.51	22.51	22.51	23.5	0.5	
10	16QAM	1	1	22.61	22.61	22.61	23.5	0.5	
10	64QAM	1	1	21.33	21.33	21.33	22.0	2.0	
10	256QAM	1	1	19.15	19.15	19.15	20.0	4.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.12	23.14	23.08	24.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	23.16	23.23	23.18			
40	PI2 BPSK	1	108	23.26	23.33	23.23	24.0	0.0	
40	PI2 BPSK	1	214	23.22	23.28	23.24			
40	PI2 BPSK	108	0	22.81	22.89	22.85	23.5	0.5	
40	PI2 BPSK	108	54	23.11	23.18	23.08	24.0	0.0	
40	PI2 BPSK	108	108	22.90	22.99	22.94	23.5	0.5	
40	PI2 BPSK	216	0	22.99	23.01	22.93	23.5	0.5	
40	QPSK	1	1	23.26	23.36	23.34			
40	QPSK	1	108	23.18	23.25	23.18	24.0	0.0	
40	QPSK	1	214	23.26	23.32	23.22			
40	QPSK	108	0	22.29	22.38	22.32	23.0	1.0	
40	QPSK	108	54	23.15	23.25	23.16	24.0	0.0	
40	QPSK	108	108	22.39	22.43	22.38	23.0	1.0	
40	QPSK	216	0	22.41	22.43	22.39	23.0	1.0	
40	16QAM	1	1	22.38	22.45	22.35	23.0	1.0	
40	64QAM	1	1	20.89	20.96	20.90	21.5	2.5	
40	256QAM	1	1	19.11	19.14	19.09	19.5	4.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	23.24	23.34	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.22	23.33	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.25	23.32	23.30	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.26	23.29	23.30	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.26	23.34	23.28	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.23	23.28	23.25	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.23	23.34	23.28	24.0	0.0	

n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	22.64	22.72	22.64			
40	PI2 BPSK	1	108	22.66	22.75	22.74	24.0	0.0	
40	PI2 BPSK	1	214	22.46	22.47	22.39			
40	PI2 BPSK	108	0	22.12	22.19	22.18	23.5	0.5	
40	PI2 BPSK	108	54	22.47	22.53	22.45	24.0	0.0	
40	PI2 BPSK	108	108	22.15	22.18	22.12	23.5	0.5	
40	PI2 BPSK	216	0	22.10	22.14	22.12	23.5	0.5	
40	QPSK	1	1	22.72	22.78	22.72			
40	QPSK	1	108	22.68	22.73	22.68	24.0	0.0	
40	QPSK	1	214	22.42	22.49	22.39			
40	QPSK	108	0	21.63	21.64	21.61	23.0	1.0	
40	QPSK	108	54	22.47	22.53	22.44	24.0	0.0	
40	QPSK	108	108	21.54	21.62	21.60	23.0	1.0	
40	QPSK	216	0	21.63	21.64	21.63	23.0	1.0	
40	16QAM	1	1	21.91	21.94	21.92	23.0	1.0	
40	64QAM	1	1	20.46	20.48	20.43	21.5	2.5	
40	256QAM	1	1	18.36	18.43	18.36	19.5	4.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	22.63	22.71	22.61	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.62	22.63	22.59	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.63	22.70	22.60	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.62	22.69	22.63	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.56	22.68	22.62	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.59	22.71	22.61	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.63	22.69	22.55	24.0	0.0	



n26(FCC)_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	22.84	22.90	22.87			
20	PI2 BPSK	1	53	22.99	23.02	22.97	24.0	0.0	
20	PI2 BPSK	1	104	22.92	23.00	22.98			
20	PI2 BPSK	50	0	22.84	22.90	22.88	24.0	0.0	
20	PI2 BPSK	50	28	22.89	22.95	22.89	24.0	0.0	
20	PI2 BPSK	50	56	22.88	22.90	22.89	24.0	0.0	
20	PI2 BPSK	100	0	22.82	22.92	22.95			
20	QPSK	1	1	23.05	23.09	23.05			
20	QPSK	1	53	22.88	22.95	22.93	24.0	0.0	
20	QPSK	1	104	22.92	23.02	23.00			
20	QPSK	50	0	22.47	22.53	22.45	23.5	0.5	
20	QPSK	50	28	22.88	22.96	22.87	24.0	0.0	
20	QPSK	50	56	22.85	22.71	22.85			
20	QPSK	100	0	22.80	22.86	22.98	23.5	0.5	
20	16QAM	1	1	22.57	22.65	22.59	23.5	0.5	
20	84QAM	1	1	21.08	21.15	21.07	22.0	2.0	
20	256QAM	1	1	19.13	19.17	19.14	20.0	4.0	
Channel				16300	166300	168300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	22.95	23.03	23.03	24.0	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	22.97	23.05	22.96	24.0	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.94	23.07	23.01	24.0	0.0	

n26(FCC)_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	23.07	23.10	23.08			
20	PI2 BPSK	1	53	23.04	23.12	23.03	24.0	0.0	
20	PI2 BPSK	1	104	23.23	23.26	23.20			
20	PI2 BPSK	50	0	22.80	22.82	22.74	23.5	0.5	
20	PI2 BPSK	50	28	23.16	23.22	23.13	24.0	0.0	
20	PI2 BPSK	50	56	22.81	22.90	22.96	23.5	0.5	
20	PI2 BPSK	100	0	22.87	22.90	22.92			
20	QPSK	1	1	23.25	23.30	23.26			
20	QPSK	1	53	23.07	23.13	23.06	24.0	0.0	
20	QPSK	1	104	23.23	23.26	23.22			
20	QPSK	50	0	22.23	22.33	22.26	23.0	1.0	
20	QPSK	50	28	23.18	23.25	23.21	24.0	0.0	
20	QPSK	50	56	22.42	22.47	22.44			
20	QPSK	100	0	22.38	22.43	22.39	23.0	1.0	
20	16QAM	1	1	22.45	22.46	22.45	23.0	1.0	
20	84QAM	1	1	20.88	20.95	20.94	21.5	2.5	
20	256QAM	1	1	18.78	18.88	18.86	19.5	4.5	
Channel				164300	166300	168300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	23.15	23.25	23.16	24.0	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	23.22	23.21	23.21	24.0	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	23.17	23.20	23.23	24.0	0.0	

n30_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 460000	Power Middle Ch. / Freq. 462000	Power High Ch. / Freq. 464000	Tune-up limit (dBm)	MPR (dB)	
Channel				2310					
Frequency (MHz)									
10	PI2 BPSK	1	1	22.85					
10	PI2 BPSK	1	26	22.85			24.0	0.0	
10	PI2 BPSK	1	50	22.78					
10	PI2 BPSK	26	0	22.86			24.0	0.0	
10	PI2 BPSK	26	14	22.73			24.0	0.0	
10	PI2 BPSK	26	27	22.87			24.0	0.0	
10	PI2 BPSK	50	0	22.72					
10	QPSK	1	1	22.90					
10	QPSK	1	26	22.88			24.0	0.0	
10	QPSK	1	50	22.86					
10	QPSK	26	0	22.81			24.0	0.0	
10	QPSK	26	14	22.75			24.0	0.0	
10	QPSK	26	27	22.71			24.0	0.0	
10	QPSK	50	0	22.73			24.0	0.0	
10	16QAM	1	1	22.78			22.5	1.5	
10	84QAM	1	1	22.05			22.5	3.5	
10	256QAM	1	1	19.86			20.5	4.5	
Channel				461500	462000	462500	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.77	22.80	22.78	24.0	0.0	



n30\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Free	Power Middle Ch. / Free 462000	Power High Ch. / Free	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)					2310			
10	P12 BPSK	1	1		22.08			
10	P12 BPSK	1	26		22.12		24.0	0.0
10	P12 BPSK	1	50		22.08			
10	P12 BPSK	25	0		21.59		23.5	0.5
10	P12 BPSK	25	14		22.10		24.0	0.0
10	P12 BPSK	25	27		21.54		23.5	0.5
10	P12 BPSK	50	0		21.63			
10	QPSK	1	1		22.18			
10	QPSK	1	26		22.14		24.0	0.0
10	QPSK	1	50		22.03			
10	QPSK	25	0		21.15		23.0	1.0
10	QPSK	25	14		22.10		24.0	0.0
10	QPSK	25	27		21.05		23.0	1.0
10	QPSK	50	0		21.09		23.0	1.0
10	16QAM	1	1		21.17		23.0	1.0
10	64QAM	1	1		19.85		21.5	2.5
10	256QAM	1	1		17.63		19.5	4.5
Channel				481500	462000	462500		
Frequency (MHz)				2307.5	2310	2312.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	22.06	22.11	22.09	24.0	0.0



n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	23.10	23.15	23.08			
40	PI2 BPSK	1	168	23.20	23.26	23.20	24.0	0.0	
40	PI2 BPSK	1	214	23.24	23.26	23.16			
40	PI2 BPSK	108	0	23.15	23.21	23.17	24.0	0.0	
40	PI2 BPSK	108	54	23.21	23.25	23.17	24.0	0.0	
40	PI2 BPSK	108	108	23.18	23.23	23.21	24.0	0.0	
40	PI2 BPSK	216	0	23.11	23.20	23.18			
40	QPSK	1	1	23.25	23.31	23.30			
40	QPSK	1	168	23.14	23.18	23.12	24.0	0.0	
40	QPSK	1	214	23.21	23.26	23.24			
40	QPSK	108	0	22.75	22.85	22.83	24.0	0.0	
40	QPSK	108	54	23.21	23.26	23.25	24.0	0.0	
40	QPSK	108	108	22.95	22.97	22.87	24.0	0.0	
40	QPSK	216	0	23.05	23.11	23.06			
40	16QAM	1	1	23.03	23.05	23.03	24.0	0.0	
40	64QAM	1	1	21.48	21.51	21.48	22.5	1.5	
40	256QAM	1	1	19.39	19.46	19.41	20.5	3.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	23.21	23.26	23.27	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.23	23.27	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.22	23.25	23.24	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.18	23.23	23.22	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.18	23.22	23.26	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.18	23.26	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.22	23.23	23.22	24.0	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	22.90	22.96	22.91			
40	PI2 BPSK	1	168	22.86	22.95	22.89	24.0	0.0	
40	PI2 BPSK	1	214	22.91	22.92	22.84			
40	PI2 BPSK	108	0	22.91	22.97	22.95	24.0	0.0	
40	PI2 BPSK	108	54	22.96	23.05	22.95	24.0	0.0	
40	PI2 BPSK	108	108	22.95	23.04	22.99	24.0	0.0	
40	PI2 BPSK	216	0	22.99	23.01	22.91			
40	QPSK	1	1	23.00	23.08	23.04			
40	QPSK	1	168	22.96	23.05	22.88	24.0	0.0	
40	QPSK	1	214	22.89	22.95	22.86			
40	QPSK	108	0	22.37	22.45	22.35	23.5	0.5	
40	QPSK	108	54	22.87	22.75	22.81	24.0	0.0	
40	QPSK	108	108	22.38	22.44	22.36	23.5	0.5	
40	QPSK	216	0	22.41	22.45	22.37			
40	16QAM	1	1	22.81	22.71	22.84	23.5	0.5	
40	64QAM	1	1	21.10	21.16	21.13	22.0	2.0	
40	256QAM	1	1	19.07	19.13	19.05	20.0	4.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	22.95	23.04	22.97	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.94	23.03	22.94	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.94	23.03	22.96	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.92	22.99	22.96	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.91	23.00	22.94	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.98	23.02	22.91	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.90	23.04	22.85	24.0	0.0	

n70_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	PI2 BPSK	1	1		1702.5				
15	PI2 BPSK	1	40				24.0	0.0	
15	PI2 BPSK	1	77						
15	PI2 BPSK	36	0				24.0	0.0	
15	PI2 BPSK	36	22				24.0	0.0	
15	PI2 BPSK	36	43				24.0	0.0	
15	PI2 BPSK	75	0				24.0	0.0	
15	QPSK	1	1						
15	QPSK	1	40				24.0	0.0	
15	QPSK	1	77						
15	QPSK	36	0				24.0	0.0	
15	QPSK	36	22				24.0	0.0	
15	QPSK	36	43				24.0	0.0	
15	QPSK	75	0				24.0	0.0	
15	16QAM	1	1				22.5	1.5	
15	64QAM	1	1				22.5	1.5	
15	256QAM	1	1				20.5	3.5	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.84	22.95	22.86	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.98	22.99	22.99	24.0	0.0	



n70_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				1702.5			
Frequency (MHz)							
15	PI2 BPSK	1	1	23.28	23.28	23.28	
15	PI2 BPSK	1	40	23.30	23.30	23.30	24.0
15	PI2 BPSK	1	77	23.25	23.25	23.25	
15	PI2 BPSK	36	0	22.83	22.83	22.83	23.5
15	PI2 BPSK	36	22	23.15	23.15	23.15	24.0
15	PI2 BPSK	36	43	22.72	22.72	22.72	23.5
15	PI2 BPSK	75	0	22.75	22.75	22.75	24.0
15	QPSK	1	1	23.36	23.36	23.36	
15	QPSK	1	40	23.30	23.30	23.30	24.0
15	QPSK	1	77	23.25	23.25	23.25	
15	QPSK	36	0	22.36	22.36	22.36	23.0
15	QPSK	36	22	23.21	23.21	23.21	24.0
15	QPSK	36	43	22.23	22.23	22.23	23.0
15	QPSK	75	0	22.22	22.22	22.22	23.0
15	16QAM	1	1	22.64	22.64	22.64	23.0
15	64QAM	1	1	21.28	21.28	21.28	21.5
15	256QAM	1	1	19.03	19.03	19.03	19.5
Channel				3405.0	3405.0	3410.0	
Frequency (MHz)							
10	QPSK	1	1	23.28	23.28	23.22	24.0
Channel				3395.0	3405.0	3415.0	
Frequency (MHz)							
5	QPSK	1	1	23.23	23.33	23.27	24.0

n71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				1360.0	1360.0	1360.0	
Frequency (MHz)							
30	PI2 BPSK	1	1	23.05	23.07	22.86	
30	PI2 BPSK	1	80	22.59	22.80	22.59	24.0
30	PI2 BPSK	1	158	22.63	22.68	22.65	
30	PI2 BPSK	80	0	22.65	22.72	22.69	24.0
30	PI2 BPSK	80	40	22.65	22.74	22.66	24.0
30	PI2 BPSK	80	80	22.46	22.51	22.49	24.0
30	PI2 BPSK	160	0	22.66	22.68	22.62	24.0
30	QPSK	1	1	23.06	23.12	23.05	
30	QPSK	1	80	22.64	22.65	22.64	24.0
30	QPSK	1	158	22.66	22.72	22.67	
30	QPSK	80	0	22.66	22.73	22.71	24.0
30	QPSK	80	40	22.68	22.75	22.72	24.0
30	QPSK	80	80	22.38	22.48	22.39	24.0
30	QPSK	160	0	22.66	22.71	22.67	24.0
30	16QAM	1	1	22.99	23.02	22.95	24.0
30	64QAM	1	1	22.01	22.07	22.04	22.5
30	256QAM	1	1	20.07	20.14	20.09	20.5
Channel				1370.0	1370.0	1370.0	
Frequency (MHz)							
25	QPSK	1	1	23.06	23.02	22.98	24.0
Channel				1360.0	1360.0	1370.0	
Frequency (MHz)							
20	QPSK	1	1	23.02	23.04	23.02	24.0
Channel				1340.0	1340.0	1340.0	
Frequency (MHz)							
15	QPSK	1	1	22.98	23.05	22.95	24.0
Channel				1320.0	1320.0	1320.0	
Frequency (MHz)							
10	QPSK	1	1	23.02	23.02	23.00	24.0
Channel				1330.0	1330.0	1330.0	
Frequency (MHz)							
5	QPSK	1	1	22.98	23.08	22.95	24.0

n71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				678	680.5	683	
Frequency (MHz)							
30	PI2 BPSK	1	1	23.22	23.27	23.15	
30	PI2 BPSK	1	80	23.02	23.08	23.00	24.0
30	PI2 BPSK	1	158	22.85	22.89	22.83	
30	PI2 BPSK	80	0	22.83	22.91	22.75	24.0
30	PI2 BPSK	80	40	22.92	22.95	22.79	24.0
30	PI2 BPSK	80	80	22.86	22.88	22.88	24.0
30	PI2 BPSK	160	0	22.94	23.01	22.83	24.0
30	QPSK	1	1	23.25	23.30	23.15	
30	QPSK	1	80	22.93	23.02	22.86	24.0
30	QPSK	1	158	22.93	22.95	22.83	
30	QPSK	80	0	22.99	22.88	22.94	24.0
30	QPSK	80	40	22.90	22.96	22.80	24.0
30	QPSK	80	80	22.52	22.55	22.35	24.0
30	QPSK	160	0	22.54	22.56	22.57	24.0
30	16QAM	1	1	22.90	22.98	22.84	24.0
30	64QAM	1	1	21.38	21.43	21.26	22.5
30	256QAM	1	1	19.39	19.42	19.30	20.5
Channel				1360.0	1360.0	1370.0	
Frequency (MHz)							
25	QPSK	1	1	23.18	23.27	23.09	24.0
Channel				1360.0	1360.0	1370.0	
Frequency (MHz)							
20	QPSK	1	1	23.01	23.04	23.06	24.0
Channel				1340.0	1340.0	1340.0	
Frequency (MHz)							
15	QPSK	1	1	23.26	23.27	23.09	24.0
Channel				1320.0	1320.0	1320.0	
Frequency (MHz)							
10	QPSK	1	1	23.18	23.24	23.05	24.0
Channel				1330.0	1330.0	1330.0	
Frequency (MHz)							
5	QPSK	1	1	23.23	23.23	23.05	24.0



n38_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				518004	518000	518996			
				2590.02	2595	2599.98			
40	Pl2 BPSK	1	1	22.83	22.92	22.88			
40	Pl2 BPSK	1	53	22.81	22.93	22.86	24.0	0.0	
40	Pl2 BPSK	1	104	22.78	22.88	22.58			
40	Pl2 BPSK	50	0	22.78	22.73	22.83	24.0	0.0	
40	Pl2 BPSK	50	28	22.77	22.79	22.77	24.0	0.0	
40	Pl2 BPSK	50	56	22.64	22.65	22.63			
40	Pl2 BPSK	100	0	22.74	22.75	22.68	24.0	0.0	
40	QPSK	1	1	22.98	22.95	22.91			
40	QPSK	1	53	22.88	22.93	22.90	24.0	0.0	
40	QPSK	1	104	22.80	22.73	22.69			
40	QPSK	50	0	22.74	22.75	22.71			
40	QPSK	50	28	22.78	22.80	22.76	24.0	0.0	
40	QPSK	50	56	22.68	22.70	22.63			
40	QPSK	100	0	22.74	22.75	22.70	24.0	0.0	
40	16QAM	1	1	22.81	22.89	22.82	24.0	0.0	
40	64QAM	1	1	22.07	22.77	22.76	24.0	0.0	
40	256QAM	1	1	20.58	20.64	20.58	22.0	2.0	
Channel									
Frequency (MHz)				517002	518000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	22.81	22.85	22.89	24.0	0.0	
Channel									
Frequency (MHz)				518000	518000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	22.83	22.87	22.82	24.0	0.0	
Channel									
Frequency (MHz)				517502	518000	520500	Tune-up limit (dBm)	MPR (dB)	
				2577.51	2595	2612.49			
15	QPSK	1	1	22.84	22.85	22.87	24.0	0.0	
Channel									
Frequency (MHz)				515004	518000	523996	Tune-up limit (dBm)	MPR (dB)	
				2578.02	2595	2614.98			
10	QPSK	1	1	22.85	22.90	22.84	24.0	0.0	

n38_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				518004	518000	518996			
				2590.02	2595	2599.98			
40	Pl2 BPSK	1	1	22.79	22.88	22.79			
40	Pl2 BPSK	1	53	22.94	22.92	22.90	24.0	0.0	
40	Pl2 BPSK	1	104	22.83	22.91	22.86			
40	Pl2 BPSK	50	0	22.84	22.94	22.93	23.5	0.5	
40	Pl2 BPSK	50	28	22.92	22.95	22.91	24.0	0.0	
40	Pl2 BPSK	50	56	22.54	22.58	22.52			
40	Pl2 BPSK	100	0	22.84	22.84	22.52	23.5	0.5	
40	QPSK	1	1	22.93	22.90	22.85			
40	QPSK	1	53	22.82	22.84	22.80	24.0	0.0	
40	QPSK	1	104	22.81	22.89	22.84			
40	QPSK	50	0	22.38	22.39	22.33			
40	QPSK	50	28	22.92	22.93	22.88	24.0	0.0	
40	QPSK	50	56	22.29	22.30	22.26			
40	QPSK	100	0	22.28	22.33	22.31	23.0	1.0	
40	16QAM	1	1	22.40	22.48	22.42	23.0	1.0	
40	64QAM	1	1	21.04	21.05	20.96	21.5	2.5	
40	256QAM	1	1	18.91	18.98	18.95	19.5	4.5	
Channel									
Frequency (MHz)				517002	518000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	22.73	22.80	22.78	24.0	0.0	
Channel									
Frequency (MHz)				518000	518000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	22.80	22.88	22.86	24.0	0.0	
Channel									
Frequency (MHz)				517502	518000	520500	Tune-up limit (dBm)	MPR (dB)	
				2577.51	2595	2612.49			
15	QPSK	1	1	22.76	22.86	22.84	24.0	0.0	
Channel									
Frequency (MHz)				515004	518000	523996	Tune-up limit (dBm)	MPR (dB)	
				2578.02	2595	2614.98			
10	QPSK	1	1	22.80	22.82	22.85	24.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				506002	518000	530000			
				2546.01	2592.99	2600			
100	Pl2 BPSK	1	1	22.71	22.81	22.80			
100	Pl2 BPSK	1	137	22.74	22.85	22.75	24.0	0.0	
100	Pl2 BPSK	1	271	22.58	22.73	22.58			
100	Pl2 BPSK	135	0	22.80	22.74	22.71	24.0	0.0	
100	Pl2 BPSK	135	69	22.67	22.80	22.61	24.0	0.0	
100	Pl2 BPSK	135	138	22.61	22.66	22.65			
100	Pl2 BPSK	270	0	22.62	22.65	22.46	24.0	0.0	
100	QPSK	1	1	22.71	22.67	22.63			
100	QPSK	1	137	22.66	22.88	22.85	24.0	0.0	
100	QPSK	1	271	22.64	22.73	22.53			
100	QPSK	135	0	22.57	22.72	22.58			
100	QPSK	135	69	22.66	22.63	22.73	24.0	0.0	
100	QPSK	135	138	22.54	22.61	22.58			
100	QPSK	270	0	22.53	22.57	22.43	23.5	0.5	
100	16QAM	1	1	22.78	22.86	22.78	24.0	0.0	
100	64QAM	1	1	22.09	22.94	22.79	24.0	0.0	
100	256QAM	1	1	22.81	22.88	22.80	24.0	0.0	
Channel									
Frequency (MHz)				506000	518000	528998	Tune-up limit (dBm)	MPR (dB)	
				2541	2592.99	2644.98			
90	QPSK	1	1	22.58	22.89	22.72	24.0	0.0	
Channel									
Frequency (MHz)				507204	518000	529998	Tune-up limit (dBm)	MPR (dB)	
				2536.02	2592.99	2648.99			
80	QPSK	1	1	22.70	22.92	22.87	24.0	0.0	
Channel									
Frequency (MHz)				506200	518000	531000	Tune-up limit (dBm)	MPR (dB)	
				2531.01	2592.99	2655			
70	QPSK	1	1	22.67	22.92	22.71	24.0	0.0	
Channel									
Frequency (MHz)				505200	518000	531996	Tune-up limit (dBm)	MPR (dB)	
				2526	2592.99	2660.98			
60	QPSK	1	1	22.65	22.95	22.82	24.0	0.0	
Channel									
Frequency (MHz)				504204	518000	532998	Tune-up limit (dBm)	MPR (dB)	
				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.53	22.79	22.61	24.0	0.0	
Channel									
Frequency (MHz)				503202	518000	534000	Tune-up limit (dBm)	MPR (dB)	
				2516.01	2592.99	2670			
40	QPSK	1	1	22.62	22.86	22.86	24.0	0.0	
Channel									
Frequency (MHz)				502200	518000	534996	Tune-up limit (dBm)	MPR (dB)	
				2511	2592.99	2674.98			
30	QPSK	1	1	22.55	22.86	22.70	24.0	0.0	
Channel									
Frequency (MHz)				501204	518000	535998	Tune-up limit (dBm)	MPR (dB)	
				2506.02	2592.99	2679.99			
20	QPSK	1	1	22.58	22.65	22.71	24.0	0.0	
Channel									
Frequency (MHz)				500700	518000	536998	Tune-up limit (dBm)	MPR (dB)	
				2503.5	2592.99	2683.48			
15	QPSK	1	1	22.56	22.91	22.84	24.0	0.0	
Channel									
Frequency (MHz)				500202	518000	537000	Tune-up limit (dBm)	MPR (dB)	
				2501.01	2592.99	2685			
10	QPSK	1	1	22.67	22.89	22.89	24.0	0.0	



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BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.		
Channel				506202	518998	529200		
Frequency (MHz)				2546.01	2592.99	2550		
100	PI2 BPSK	1	1	25.68	25.82	25.72		
100	PI2 BPSK	1	137	25.96	25.90	25.80		
100	PI2 BPSK	1	271	25.94	25.77	25.73	27.0	0.0
100	PI2 BPSK	135	0	25.71	25.69	25.63	26.5	0.5
100	PI2 BPSK	135	69	25.73	25.70	25.71	27.0	0.0
100	PI2 BPSK	135	138	25.70	25.68	25.60	26.5	0.5
100	PI2 BPSK	270	0	25.70	25.25	25.52		
100	QPSK	1	1	25.70	25.01	25.53		
100	QPSK	1	137	25.75	25.92	25.87	27.0	0.0
100	QPSK	1	271	25.96	25.81	25.73		
100	QPSK	135	0	25.62	25.68	25.60	27.0	0.0
100	QPSK	135	69	25.71	25.70	25.71		
100	QPSK	135	138	25.73	25.60	25.55		
100	QPSK	270	0	25.66	25.70	25.63	26.5	0.5
100	16QAM	1	1	25.78	25.86	25.83	27.0	0.0
100	64QAM	1	1	24.85	24.52	24.62	26.0	1.0
100	256QAM	1	1	22.71	22.84	22.81	24.0	3.0
Channel				508200	518998	528996	Tune-up limit (dB)	MPR
Frequency (MHz)				2544	2592.99	2544.98		
80	QPSK	1	1	25.90	25.83	25.83	27.0	0.0
Channel				507204	518998	529996	Tune-up limit (dB)	MPR
Frequency (MHz)				2536.02	2592.99	2549.99		
80	QPSK	1	1	25.93	25.93	25.86	27.0	0.0
Channel				506202	518998	531000	Tune-up limit (dB)	MPR
Frequency (MHz)				2531.01	2592.99	2555		
70	QPSK	1	1	25.97	25.92	25.90	27.0	0.0
Channel				505200	518998	531996	Tune-up limit (dB)	MPR
Frequency (MHz)				2524	2592.99	2559.99		
60	QPSK	1	1	25.91	25.97	25.85	27.0	0.0
Channel				504204	518998	532996	Tune-up limit (dB)	MPR
Frequency (MHz)				2511.02	2592.99	2564.99		
50	QPSK	1	1	25.93	25.92	25.84	27.0	0.0
Channel				503202	518998	534000	Tune-up limit (dB)	MPR
Frequency (MHz)				2516.01	2592.99	2570		
40	QPSK	1	1	25.90	25.96	25.87	27.0	0.0
Channel				502200	518998	535996	Tune-up limit (dB)	MPR
Frequency (MHz)				2511	2592.99	2574.98		
30	QPSK	1	1	25.85	25.96	25.83	27.0	0.0
Channel				501204	518998	536996	Tune-up limit (dB)	MPR
Frequency (MHz)				2508.02	2592.99	2579.99		
20	QPSK	1	1	25.92	25.95	25.85	27.0	0.0
Channel				500700	518998	538496	Tune-up limit (dB)	MPR
Frequency (MHz)				2503.5	2592.99	2582.48		
15	QPSK	1	1	25.83	25.81	25.84	27.0	0.0
Channel				500202	518998	531000	Tune-up limit (dB)	MPR
Frequency (MHz)				2501.01	2592.99	2585		
10	QPSK	1	1	25.97	25.95	25.86	27.0	0.0





FCC_n41_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	22.76	22.85	22.79			
100	PI2 BPSK	1	137	22.84	22.91	22.82	24.0	0.0	
100	PI2 BPSK	1	271	22.78	22.82	22.83			
100	PI2 BPSK	135	9	22.67	22.79	22.64	24.0	0.0	
100	PI2 BPSK	135	69	22.83	22.85	22.84	24.0	0.0	
100	PI2 BPSK	135	138	22.47	22.66	22.58			
100	PI2 BPSK	270	0	22.51	22.70	22.60	24.0	0.0	
100	QPSK	1	1	22.52	22.98	22.75			
100	QPSK	1	137	22.79	22.93	22.82	24.0	0.0	
100	QPSK	1	271	22.77	22.82	22.73			
100	QPSK	135	0	22.68	22.77	22.57			
100	QPSK	135	69	22.70	22.86	22.77	24.0	0.0	
100	QPSK	135	138	22.60	22.77	22.66			
100	QPSK	270	0	22.81	22.83	22.81	24.0	0.0	
100	16QAM	1	1	22.88	22.94	22.87	24.0	0.0	
100	64QAM	1	1	22.81	22.86	22.76	24.0	0.0	
100	256QAM	1	1	20.81	20.88	20.83	22.5	1.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	22.41	22.69	22.44	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.64	22.90	22.66	24.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.80	22.82	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.85	22.85	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.72	22.83	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.74	22.81	22.75	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.82	22.97	22.76	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.84	22.85	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.76	22.87	22.76	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.76	22.86	22.69	24.0	0.0	

FCC_n41 HPUE_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.38	25.40	25.32			
100	PI2 BPSK	1	137	25.27	25.36	25.28	27.0	0.0	
100	PI2 BPSK	1	271	25.28	25.33	25.31			
100	PI2 BPSK	135	9	24.72	24.70	24.69	26.5	0.5	
100	PI2 BPSK	135	69	25.28	25.33	25.29	27.0	0.0	
100	PI2 BPSK	135	138	24.60	24.69	24.67			
100	PI2 BPSK	270	0	24.57	24.64	24.55	26.5	0.5	
100	QPSK	1	1	25.32	25.48	25.35			
100	QPSK	1	137	25.27	25.32	25.28	27.0	0.0	
100	QPSK	1	271	25.14	25.23	25.20			
100	QPSK	135	0	24.22	24.28	24.21	27.0	0.0	
100	QPSK	135	69	25.20	25.30	25.25			
100	QPSK	135	138	24.64	24.14	24.12			
100	QPSK	270	0	24.33	24.38	24.32	26.0	1.0	
100	16QAM	1	1	24.49	24.55	24.46	26.0	1.0	
100	64QAM	1	1	22.84	22.89	22.86	24.5	2.5	
100	256QAM	1	1	20.81	20.88	20.83	22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	22.41	22.69	22.44	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.64	22.90	22.66	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.80	22.82	22.82	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.85	22.85	22.85	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.72	22.83	22.82	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.74	22.81	22.75	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.82	22.97	22.76	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.84	22.85	22.85	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.35	22.45	22.35	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.36	22.39	22.35	27.0	0.0	

FCC_n41_Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.59	21.53	21.71			
100	PI2 BPSK	1	137	21.49	21.51	21.50	23.0	0.0	
100	PI2 BPSK	1	271	21.38	21.46	21.44			
100	PI2 BPSK	135	9	21.46	21.55	21.60	23.0	0.0	
100	PI2 BPSK	135	69	21.52	21.59	21.73	23.0	0.0	
100	PI2 BPSK	135	138	21.47	21.43	21.47			
100	PI2 BPSK	270	0	21.26	21.50	21.49	23.0	0.0	
100	QPSK	1	1	21.52	21.59	21.75			
100	QPSK	1	137	21.44	21.49	21.55	23.0	0.0	
100	QPSK	1	271	21.45	21.45	21.56			
100	QPSK	135	0	21.50	21.51	21.48			
100	QPSK	135	69	21.51	21.60	21.77	23.0	0.0	
100	QPSK	135	138	21.44	21.48	21.47			
100	QPSK	270	0	21.48	21.61	21.63	23.0	0.0	
100	16QAM	1	1	21.53	21.59	21.66	23.0	0.0	
100	64QAM	1	1	21.42	21.51	21.58	23.0	0.0	
100	256QAM	1	1	19.90	19.95	19.94	21.5	1.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.47	21.53	21.67	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.38	21.58	21.69	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.45	21.60	21.68	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.59	21.59	21.64	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.45	21.60	21.60	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.45	21.50	21.60	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.43	21.58	21.66	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.40	21.51	21.62	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.43	21.53	21.61	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.36	21.48	21.62	23.0	0.0	



### FCC\_n41 HPUE\_Ant 2

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
2546.01 2592.99 2640								
100	Pi2 BPSK	1	1	21.59	21.53	21.71		
100	Pi2 BPSK	1	137	21.49	21.51	21.80	23.0	0.0
100	Pi2 BPSK	1	271	21.38	21.46	21.44		
100	Pi2 BPSK	135	0	21.46	21.55	21.80	23.0	0.0
100	Pi2 BPSK	135	69	21.52	21.59	21.73	23.0	0.0
100	Pi2 BPSK	135	135	21.47	21.43	21.47		
100	Pi2 BPSK	270	0	21.35	21.50	21.49	23.0	0.0
100	QPSK	1	1	21.58	21.58	21.75		
100	QPSK	1	137	21.44	21.48	21.55	23.0	0.0
100	QPSK	1	271	21.45	21.45	21.56		
100	QPSK	135	0	21.50	21.51	21.48		
100	QPSK	135	69	21.01	21.01	21.72	23.0	0.0
100	QPSK	135	135	21.44	21.48	21.47		
100	QPSK	270	0	21.48	21.61	21.63	23.0	0.0
100	16QAM	1	1	21.53	21.59	21.86	23.0	0.0
100	64QAM	1	1	21.42	21.51	21.58	23.0	0.0
100	256QAM	1	1	19.90	19.95	19.94	21.5	1.5
Channel								
Frequency (MHz)								
5020.0 51898 53998								
80	QPSK	1	1	21.47	21.53	21.67	23.0	0.0
Channel								
Frequency (MHz)								
50720.4 51898 52998								
80	QPSK	1	1	2536.02	2592.99	2649.99		
Channel								
Frequency (MHz)								
2531.01 2592.99 2655								
70	QPSK	1	1	21.45	21.60	21.68	23.0	0.0
Channel								
Frequency (MHz)								
50520 51898 53198								
60	QPSK	1	1	21.39	21.59	21.64	23.0	0.0
Channel								
Frequency (MHz)								
50420.4 51898 53998								
50	QPSK	1	1	2321.02	2592.99	2644.99		
Channel								
Frequency (MHz)								
2516.01 2592.99 2670								
40	QPSK	1	1	21.45	21.50	21.60	23.0	0.0
Channel								
Frequency (MHz)								
50220 51898 53698								
30	QPSK	1	1	21.43	21.58	21.66	23.0	0.0
Channel								
Frequency (MHz)								
50120.4 51898 53998								
20	QPSK	1	1	21.40	21.51	21.62	23.0	0.0
Channel								
Frequency (MHz)								
50070 51898 53498								
15	QPSK	1	1	2503.5	2592.99	2652.48		
Channel								
Frequency (MHz)								
2501.01 2592.99 2685								
10	QPSK	1	1	21.38	21.48	21.62	23.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
2546.01 2592.99 2640								
100	Pi2 BPSK	1	1	22.17	22.24	22.15		
100	Pi2 BPSK	1	137	22.17	22.25	22.17	23.5	0.0
100	Pi2 BPSK	1	271	22.16	22.29	22.16		
100	Pi2 BPSK	135	0	22.21	22.25	22.15	23.5	0.0
100	Pi2 BPSK	135	69	22.20	22.28	22.10	23.5	0.0
100	Pi2 BPSK	135	135	22.16	22.28	22.11		
100	Pi2 BPSK	270	0	22.16	22.29	22.11	23.5	0.0
100	QPSK	1	1	22.28	22.33	22.20		
100	QPSK	1	137	22.22	22.30	22.10	23.5	0.0
100	QPSK	1	271	22.18	22.30	22.13		
100	QPSK	135	0	22.20	22.24	22.13		
100	QPSK	135	69	22.22	22.28	22.11	23.5	0.0
100	QPSK	135	135	22.17	22.24	22.14		
100	QPSK	270	0	22.18	22.23	22.12	23.5	0.0
100	16QAM	1	1	22.16	22.31	22.10	23.5	0.0
100	64QAM	1	1	21.90	21.92	21.85	23.0	0.5
100	256QAM	1	1	19.80	19.82	19.75	21.0	2.5
Channel								
Frequency (MHz)								
50420 51898 53998								
80	QPSK	1	1	22.41	2592.99	2644.99		
Channel								
Frequency (MHz)								
50720.4 51898 52998								
80	QPSK	1	1	2536.02	2592.99	2649.99		
Channel								
Frequency (MHz)								
2531.01 2592.99 2655								
70	QPSK	1	1	22.24	22.30	22.17	23.5	0.0
Channel								
Frequency (MHz)								
50520 51898 53198								
60	QPSK	1	1	22.24	22.27	22.10	23.5	0.0
Channel								
Frequency (MHz)								
50420.4 51898 53998								
50	QPSK	1	1	2321.02	2592.99	2644.99		
Channel								
Frequency (MHz)								
2516.01 2592.99 2670								
40	QPSK	1	1	22.24	22.23	22.18	23.5	0.0
Channel								
Frequency (MHz)								
50220 51898 53698								
30	QPSK	1	1	22.22	22.28	22.12	23.5	0.0
Channel								
Frequency (MHz)								
50120.4 51898 53998								
20	QPSK	1	1	22.23	22.25	22.10	23.5	0.0
Channel								
Frequency (MHz)								
50070 51898 53498								
15	QPSK	1	1	2503.5	2592.99	2652.48		
Channel								
Frequency (MHz)								
2501.01 2592.99 2685								
10	QPSK	1	1	22.22	22.24	22.12	23.5	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
2546.01 2592.99 2640								
100	Pi2 BPSK	1	1	24.25	24.30	24.18		
100	Pi2 BPSK	1	137	24.30	24.33	24.18	25.5	0.0
100	Pi2 BPSK	1	271	24.25	24.29	24.58		
100	Pi2 BPSK	135	0	23.81	23.78	23.55	25.0	0.5
100	Pi2 BPSK	135	69	24.31	24.28	24.21	25.5	0.0
100	Pi2 BPSK	135	135	23.78	23.80	23.76		
100	Pi2 BPSK	270	0	24.72	24.76	23.68	25.0	0.5
100	QPSK	1	1	25.01	25.05	25.05		
100	QPSK	1	137	24.25	24.31	24.20	25.5	0.0
100	QPSK	1	271	24.30	23.98	23.65		
100	QPSK	135	0	23.15	23.24	23.08		
100	QPSK	135	69	24.01	24.05	24.11	25.5	0.0
100	QPSK	135	135	23.22	23.23	23.98		
100	QPSK	270	0	23.13	23.15	22.90	24.5	1.0
100	16QAM	1	1	23.33	23.36	23.22	24.5	1.0
100	64QAM	1	1	21.90	21.92	21.85	23.0	2.5
100	256QAM	1	1	19.80	19.82	19.75	21.0	4.5
Channel								
Frequency (MHz)								
50420 51898 53998								
80	QPSK	1	1	24.21	2592.99	2644.99		
Channel								
Frequency (MHz)								
50720.4 51898 52998								
80	QPSK	1	1	2536.02	2592.99	2649.99		
Channel								
Frequency (MHz)								
2531.01 2592.99 2655								
70	QPSK	1	1	24.22	24.25	24.14	25.5	0.0
Channel								
Frequency (MHz)								
50520 51898 53198								
60	QPSK	1	1	24.29	24.22	24.20	25.5	0.0
Channel								
Frequency (MHz)								
50420.4 51898 53998								
50	QPSK	1	1	2321.02	2592.99	2644.99		
Channel								
Frequency (MHz)								
2516.01 2592.99 2670								
40	QPSK	1	1	24.26	24.34	24.19	25.5	0.0
Channel								
Frequency (MHz)								
50220 51898 53698								
30	QPSK	1	1	24.21	24.25	24.21	25.5	0.0
Channel								
Frequency (MHz)								
50120.4 51898 53998								
20	QPSK	1	1	24.23	24.14	24.14	25.5	0.0
Channel								
Frequency (MHz)								
50070 51898 53498								
15	QPSK	1	1	24.27	24.24	24.18	25.5	0.0
Channel								
Frequency (MHz)								
2501.01 2592.99 2685								
10	QPSK	1	1	24.27	24.33	24.10	25.5	0.0



FCC_n41_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				506202	518598	530990			
Frequency (MHz)				2546.01	2592.99	2650			
100	PI2 BPSK	1	1	21.69	22.00	21.71			
100	PI2 BPSK	1	137	21.66	22.00	21.60	23.0	0.0	
100	PI2 BPSK	1	271	21.71	21.98	21.69			
100	PI2 BPSK	135	0	21.66	22.04	21.67	23.0	0.0	
100	PI2 BPSK	135	69	21.77	22.03	21.59	23.0	0.0	
100	PI2 BPSK	135	138	21.67	21.98	21.62			
100	PI2 BPSK	270	0	21.72	22.01	21.66	23.0	0.0	
100	QPSK	1	1	21.75	22.07	21.74			
100	QPSK	1	137	21.74	22.02	21.62	23.0	0.0	
100	QPSK	1	271	21.76	22.02	21.71			
100	QPSK	135	0	21.66	21.98	21.59			
100	QPSK	135	69	21.72	22.02	21.69	23.0	0.0	
100	QPSK	135	138	21.68	21.98	21.62			
100	QPSK	270	0	21.76	21.98	21.68	23.0	0.0	
100	16QAM	1	1	21.64	21.97	21.73	23.0	0.0	
100	64QAM	1	1	21.38	21.43	21.21	22.5	0.5	
100	256QAM	1	1	20.33	20.41	20.15	21.5	1.5	
Channel				506200	518598	530996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	21.72	22.03	21.61	23.0	0.0	
Channel				507204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2636.02	2662.99	2649.99			
80	QPSK	1	1	21.73	21.93	21.70	23.0	0.0	
Channel				2632.02	518598	531000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2631.01	2692.99	2655			
70	QPSK	1	1	21.78	21.96	21.59	23.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2521.02	2592.99	2604.99			
60	QPSK	1	1	21.75	21.95	21.62	23.0	0.0	
Channel				504204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2521.02	2592.99	2604.99			
50	QPSK	1	1	21.71	22.00	21.73	23.0	0.0	
Channel				503202	518598	530400	Tune-up limit (dB)	MPR	
Frequency (MHz)				2616.01	2662.99	2670			
40	QPSK	1	1	21.64	22.01	21.72	23.0	0.0	
Channel				502200	518598	530496	Tune-up limit (dB)	MPR	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	21.69	21.98	21.62	23.0	0.0	
Channel				501204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2501.02	2592.99	2679.99			
20	QPSK	1	1	21.74	21.99	21.61	23.0	0.0	
Channel				500700	518598	530496	Tune-up limit (dB)	MPR	
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	21.74	22.04	21.59	23.0	0.0	
Channel				510202	518598	531000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2601.01	2662.99	2685			
10	QPSK	1	1	21.68	22.03	21.72	23.0	0.0	

FCC_n41 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				506202	518598	530990			
Frequency (MHz)				2546.01	2592.99	2650			
100	PI2 BPSK	1	1	23.76	23.90	23.60			
100	PI2 BPSK	1	137	23.64	23.85	23.65	25.0	0.0	
100	PI2 BPSK	1	271	23.71	23.89	23.62			
100	PI2 BPSK	135	0	23.47	23.56	23.31	24.5	0.5	
100	PI2 BPSK	135	69	23.69	23.87	23.65	25.0	0.0	
100	PI2 BPSK	135	138	23.35	23.60	23.27			
100	PI2 BPSK	270	0	23.45	23.60	23.22	24.5	0.5	
100	QPSK	1	1	23.70	23.99	23.69			
100	QPSK	1	137	23.65	23.89	23.51	25.0	0.0	
100	QPSK	1	271	23.70	23.88	23.59			
100	QPSK	135	0	22.68	22.80	22.43			
100	QPSK	135	69	21.60	23.95	23.01	25.0	0.0	
100	QPSK	135	138	22.73	22.88	22.37			
100	QPSK	270	0	22.69	22.94	22.52	24.0	1.0	
100	16QAM	1	1	22.66	22.97	22.64	24.0	1.0	
100	64QAM	1	1	21.38	21.43	21.21	22.5	2.5	
100	256QAM	1	1	20.33	20.41	20.15	21.5	3.5	
Channel				506200	518598	530996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	23.65	23.85	23.62	23.0	0.0	
Channel				507204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2636.02	2662.99	2649.99			
80	QPSK	1	1	23.67	23.83	23.50	25.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2631.01	2692.99	2655			
70	QPSK	1	1	23.62	23.87	23.59	25.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2631.01	2692.99	2655			
60	QPSK	1	1	23.65	23.90	23.54	25.0	0.0	
Channel				504204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2621.02	2692.99	2604.99			
50	QPSK	1	1	23.65	23.81	22.47	23.0	0.0	
Channel				503202	518598	530400	Tune-up limit (dB)	MPR	
Frequency (MHz)				2616.01	2662.99	2670			
40	QPSK	1	1	23.65	23.88	23.56	25.0	0.0	
Channel				502200	518598	530496	Tune-up limit (dB)	MPR	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	23.71	23.91	23.58	25.0	0.0	
Channel				501204	518598	530998	Tune-up limit (dB)	MPR	
Frequency (MHz)				2501.02	2592.99	2679.99			
20	QPSK	1	1	23.69	23.93	23.53	23.0	0.0	
Channel				500700	518598	530496	Tune-up limit (dB)	MPR	
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	23.66	23.84	23.49	25.0	0.0	
Channel				510202	518598	531000	Tune-up limit (dB)	MPR	
Frequency (MHz)				2601.01	2662.99	2685			
10	QPSK	1	1	23.63	23.70	23.56	25.0	0.0	



### Part96\_n48\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63600	64166	64532		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	23.09	23.11	23.10		
40	Pl2 BPSK	1	53	23.20	23.21	23.15	24.0	0.0
40	Pl2 BPSK	1	104	23.05	23.20	23.06		
40	Pl2 BPSK	50	0	22.96	22.99	22.94	24.0	0.0
40	Pl2 BPSK	50	28	22.85	23.01	22.88	24.0	0.0
40	Pl2 BPSK	50	56	22.93	22.95	22.91		
40	Pl2 BPSK	100	0	22.88	22.90	22.87	24.0	0.0
40	QPSK	1	1	23.18	23.20	23.17		
40	QPSK	1	53	23.12	23.15	23.12	24.0	0.0
40	QPSK	1	104	23.03	23.24	23.10		
40	QPSK	50	0	23.15	23.18	23.13		
40	QPSK	50	28	23.11	23.20	23.14	24.0	0.0
40	QPSK	50	56	23.10	23.11	23.08		
40	QPSK	100	0	23.14	23.18	23.12	24.0	0.0
40	16QAM	1	1	23.15	23.18	23.15	24.0	0.0
40	64QAM	1	1	22.66	22.68	22.62	23.5	0.5
40	256QAM	1	1	21.10	21.11	21.18	21.5	2.5
Channel								
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3624.99		
30	QPSK	1	1	23.04	23.09	23.01	24.0	0.0
Channel								
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)
				3560.01	3624.99	3690		
20	QPSK	1	1	23.08	23.13	23.04	24.0	0.0
Channel								
Frequency (MHz)				637000	641666	645332	Tune-up limit (dBm)	MPR (dB)
				3565	3624.99	3694.98		
10	QPSK	1	1	23.05	23.12	22.97	24.0	0.0

### Part96\_n48\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63800	64166	64532		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	22.71	22.53	22.30		
40	Pl2 BPSK	1	53	22.54	22.51	22.30	24.0	0.0
40	Pl2 BPSK	1	104	22.27	22.28	22.29		
40	Pl2 BPSK	50	0	22.07	22.12	22.09	23.5	0.5
40	Pl2 BPSK	50	28	22.50	22.51	22.28	24.0	0.0
40	Pl2 BPSK	50	56	21.98	22.07	21.99		
40	Pl2 BPSK	100	0	21.71	21.83	21.72	23.5	0.5
40	QPSK	1	1	22.93	22.95	22.94		
40	QPSK	1	53	22.44	22.34	22.28	24.0	0.0
40	QPSK	1	104	22.31	22.17	22.16		
40	QPSK	50	0	21.18	21.23	21.20		
40	QPSK	50	28	22.04	22.12	22.11	24.0	0.0
40	QPSK	50	56	20.81	20.88	20.82		
40	QPSK	100	0	21.45	21.40	21.35	23.0	1.0
40	16QAM	1	1	20.39	20.25	20.33	23.0	1.0
40	64QAM	1	1	18.71	18.92	18.92	21.5	2.5
40	256QAM	1	1	16.87	16.83	17.12	19.5	4.5
Channel								
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3624.99		
30	QPSK	1	1	22.68	22.47	22.32	24.0	0.0
Channel								
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)
				3560.01	3624.99	3690		
20	QPSK	1	1	22.67	22.46	22.25	24.0	0.0
Channel								
Frequency (MHz)				637000	641666	645332	Tune-up limit (dBm)	MPR (dB)
				3565	3624.99	3694.98		
10	QPSK	1	1	22.68	22.49	22.26	24.0	0.0

### Part96\_n48\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63600	64166	64532		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	23.00	23.00	22.99		
40	Pl2 BPSK	1	53	23.03	23.05	23.04	24.0	0.0
40	Pl2 BPSK	1	104	23.00	23.02	23.02		
40	Pl2 BPSK	50	0	22.83	22.91	22.80	23.5	0.5
40	Pl2 BPSK	50	28	22.83	22.89	22.80	24.0	0.0
40	Pl2 BPSK	50	56	22.83	22.90	22.82		
40	Pl2 BPSK	100	0	22.81	22.87	22.84	23.5	0.5
40	QPSK	1	1	23.08	23.10	23.05		
40	QPSK	1	53	22.98	23.02	22.93	24.0	0.0
40	QPSK	1	104	23.01	23.09	23.03		
40	QPSK	50	0	22.84	22.90	22.82		
40	QPSK	50	28	22.85	22.93	22.86	24.0	0.0
40	QPSK	50	56	22.74	22.83	22.78		
40	QPSK	100	0	22.86	22.90	22.86	24.0	0.0
40	16QAM	1	1	20.93	21.03	20.94	23.0	1.0
40	64QAM	1	1	19.44	19.52	19.50	21.5	2.5
40	256QAM	1	1	17.48	17.55	17.52	19.5	4.5
Channel								
Frequency (MHz)				637668	641666	645666	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3624.99		
30	QPSK	1	1	22.99	23.04	23.01	24.0	0.0
Channel								
Frequency (MHz)				637334	641666	645000	Tune-up limit (dBm)	MPR (dB)
				3560.01	3624.99	3690		
20	QPSK	1	1	23.03	23.08	22.99	24.0	0.0
Channel								
Frequency (MHz)				637000	641666	645332	Tune-up limit (dBm)	MPR (dB)
				3565	3624.99	3694.98		
10	QPSK	1	1	23.00	23.07	23.01	24.0	0.0



Part96_n48_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	22.59	22.67	22.57			
40	PI2 BPSK	1	53	22.46	22.61	22.47	24.0	0.0	
40	PI2 BPSK	1	104	22.50	22.62	22.49			
40	PI2 BPSK	50	0	21.77	21.82	21.73	23.5	0.5	
40	PI2 BPSK	50	28	22.58	22.65	22.58	24.0	0.0	
40	PI2 BPSK	50	56	21.86	21.70	21.61			
40	PI2 BPSK	100	0	21.36	21.43	21.29	23.5	0.5	
40	QPSK	1	1	22.55	22.72	22.35			
40	QPSK	1	63	22.58	22.68	22.31	24.0	0.0	
40	QPSK	1	104	22.33	22.47	22.34			
40	QPSK	50	0	20.76	20.82	20.72			
40	QPSK	50	56	20.76	20.88	20.81	24.0	0.0	
40	QPSK	100	0	21.62	21.68	21.62	23.0	1.0	
40	16QAM	1	1	19.72	19.77	19.75	23.0	1.0	
40	64QAM	1	1	18.29	18.29	18.16	21.5	2.5	
40	256QAM	1	1	16.16	16.29	16.17	19.5	4.5	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.59	22.63	22.31	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.55	22.66	22.31	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.62	22.63	22.33	24.0	0.0	

Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	22.96					
100	PI2 BPSK	1	137	23.15			24.0	0.0	
100	PI2 BPSK	1	271	23.13					
100	PI2 BPSK	135	0	22.98			24.0	0.0	
100	PI2 BPSK	135	69	23.11			24.0	0.0	
100	PI2 BPSK	135	138	23.08			24.0	0.0	
100	PI2 BPSK	270	0	23.03					
100	QPSK	1	1	23.16					
100	QPSK	1	137	23.11			24.0	0.0	
100	QPSK	1	271	23.10					
100	QPSK	135	0	22.92					
100	QPSK	135	69	23.00			24.0	0.0	
100	QPSK	135	138	23.02					
100	QPSK	270	0	22.98			24.0	0.0	
100	16QAM	1	1	23.10			24.0	0.0	
100	64QAM	1	1	23.08			24.0	0.0	
100	256QAM	1	1	22.11			23.5	0.5	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.10	23.13	23.09	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.09	23.07	23.06	24.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.06	23.14	23.14	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.12	23.07	23.15	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.09	23.12	23.15	24.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.06	23.15	23.15	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.13	23.06	23.13	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.12	23.00	23.11	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.06	23.07	23.08	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.07	23.13	23.15	24.0	0.0	



Part270_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3760 3840 3930									
100	PI2 BPSK	1	1	23.15	23.23	23.17	24.0	0.0	
100	PI2 BPSK	1	137	23.20	23.25	23.15			
100	PI2 BPSK	1	271	23.18	23.21	23.22			
100	PI2 BPSK	135	0	23.13	23.12	23.17	24.0	0.0	
100	PI2 BPSK	135	69	23.10	23.13	23.10	24.0	0.0	
100	PI2 BPSK	135	138	23.12	23.04	23.10			
100	PI2 BPSK	270	0	23.05	23.09	23.08	24.0	0.0	
100	QPSK	1	1	23.25	23.28	23.25			
100	QPSK	1	137	23.18	23.25	23.19	24.0	0.0	
100	QPSK	1	271	23.20	23.21	23.19			
100	QPSK	135	0	23.05	23.09	23.08			
100	QPSK	135	69	23.12	23.15	23.11	24.0	0.0	
100	QPSK	135	138	23.08	23.11	23.04			
100	QPSK	270	0	23.03	23.05	23.00	24.0	0.0	
100	16QAM	1	1	23.12	23.12	23.12	24.0	0.0	
100	64QAM	1	1	23.10	23.10	23.14	24.0	0.0	
100	256QAM	1	1	22.27	22.21	22.24	23.5	0.5	
Channel									
Frequency (MHz)									
652000 656000 662332									
80	QPSK	1	1	3742.02	3740	3743.98			
Channel									
Frequency (MHz)									
658334 659000 660968									
80	QPSK	1	1	3740.01	3740	3740.99			
Channel									
Frequency (MHz)									
3785 3840 3945									
70	QPSK	1	1	23.21	23.23	23.18	24.0	0.0	
Channel									
Frequency (MHz)									
648668 656000 663332									
60	QPSK	1	1	23.20	23.21	23.16	24.0	0.0	
Channel									
Frequency (MHz)									
648334 656000 663668									
Channel									
Frequency (MHz)									
3725.01 3740 3754.99									
50	QPSK	1	1	23.23	23.23	23.17	24.0	0.0	
Channel									
Frequency (MHz)									
648000 656000 664000									
Channel									
Frequency (MHz)									
3720 3840 3960									
40	QPSK	1	1	23.16	23.19	23.15	24.0	0.0	
Channel									
Frequency (MHz)									
647668 656000 664332									
Channel									
Frequency (MHz)									
3715.02 3740 3754.98									
30	QPSK	1	1	23.19	23.18	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
647334 656000 664668									
Channel									
Frequency (MHz)									
3710.01 3740 3759.99									
20	QPSK	1	1	23.21	23.22	23.17	24.0	0.0	
Channel									
Frequency (MHz)									
647168 656000 664832									
Channel									
Frequency (MHz)									
3707.52 3740 3772.48									
15	QPSK	1	1	23.22	23.22	23.22	24.0	0.0	
Channel									
Frequency (MHz)									
647000 656000 665000									
Channel									
Frequency (MHz)									
3705 3840 3975									
10	QPSK	1	1	23.15	23.25	23.18	24.0	0.0	

Part27Q_n77 HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3499.98									
100	PI2 BPSK	1	1			26.07			
100	PI2 BPSK	1	137			26.16			27.0
100	PI2 BPSK	1	271			26.14			
100	PI2 BPSK	135	0			26.02			27.0
100	PI2 BPSK	135	69			26.07			27.0
100	PI2 BPSK	135	138			25.79			27.0
100	PI2 BPSK	270	0			26.07			27.0
100	QPSK	1	1			26.20			
100	QPSK	1	137			26.11			27.0
100	QPSK	1	271			26.08			
100	QPSK	135	0			26.01			27.0
100	QPSK	135	69			26.06			27.0
100	QPSK	135	138			26.00			27.0
100	QPSK	270	0			26.08			27.0
100	16QAM	1	1			26.11			27.0
100	64QAM	1	1			26.33			25.5
100	256QAM	1	1			22.91			23.5
Channel									
Frequency (MHz)									
633000 633332 633668									
80	QPSK	1	1	3495	3499.98	3504.97			
Channel									
Frequency (MHz)									
632968 633332 634000									
80	QPSK	1	1	3490.02	3499.98	3510			
Channel									
Frequency (MHz)									
3485.01 3499.98 3514.98									
70	QPSK	1	1	26.06	26.16	26.01	27.0	0.0	
Channel									
Frequency (MHz)									
632000 633332 634668									
60	QPSK	1	1	26.09	26.10	26.04	27.0	0.0	
Channel									
Frequency (MHz)									
631668 633332 635000									
Channel									
Frequency (MHz)									
3475.02 3499.98 3505									
50	QPSK	1	1	26.06	26.13	26.06	27.0	0.0	
Channel									
Frequency (MHz)									
631334 633332 635332									
Channel									
Frequency (MHz)									
3470.01 3499.98 3509.98									
40	QPSK	1	1	26.06	26.11	26.02	27.0	0.0	
Channel									
Frequency (MHz)									
631000 633332 635668									
Channel									
Frequency (MHz)									
3465 3499.98 3504.98									
30	QPSK	1	1	26.09	26.10	26.01	27.0	0.0	
Channel									
Frequency (MHz)									
630668 633332 636000									
Channel									
Frequency (MHz)									
3460.02 3499.98 3500									
20	QPSK	1	1	26.07	26.13	26.04	27.0	0.0	
Channel									
Frequency (MHz)									
630300 633332 636368									
Channel									
Frequency (MHz)									
3457.5 3499.98 3504.98									
15	QPSK	1	1	26.08	26.18	26.01	27.0	0.0	
Channel									
Frequency (MHz)									
630168 633332 636668									
Channel									
Frequency (MHz)									
3455.01 3499.98 3504.98									
10	QPSK	1	1	26.10	26.13	26.08	27.0	0.0	

Part270_n77 HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3750 3840 3930									
100	PI2 BPSK	1	1	26.11	26.20	26.14			
100	PI2 BPSK	1	137	26.19	26.29	26.26	27.0	0.0	
100	PI2 BPSK	1	271	26.21	26.25	26.18			
100	PI2 BPSK	135	0	26.08	26.11	26.04	27.0	0.0	
100	PI2 BPSK	135	69	26.15	26.21	26.19	27.0	0.0	
100	PI2 BPSK	135	138	26.09	26.15	26.05			
100	PI2 BPSK	270	0	26.09	26.04	26.02	27.0	0.0	
100	QPSK	1	1	26.30	26.34	26.27			
100	QPSK	1	137	26.15	26.21	26.14	27.0	0.0	
100	QPSK	1	271	26.20	26.30	26.23			
100	QPSK	135	0	26.09	26.15	26.05			
100	QPSK	135	69	26.15	26.25	26.18	27.0	0.0	
100	QPSK	135	138	26.07	26.05	26.06			
100	QPSK	270	0	26.01	26.05	26.06	27.0	0.0	
100	16QAM	1	1	26.73	26.81	26.77	27.0	0.0	
100	64QAM	1	1	24.26	24.35	24.30	23.5	1.5	
100	256QAM	1	1	22.88	22.92	22.87	23.5	3.5	
Channel									
Frequency (MHz)									
648668 656000 663332									
80	QPSK	1	1	3742.02	3740	3743.98			
Channel									
Frequency (MHz)									
648334 656000 663668									
80	QPSK	1	1	3740.01	3740	3740.99			
Channel									
Frequency (MHz)									
3735 3840 3945									
70	QPSK	1	1	26.20	26.28	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
648000 656000 664000									
60	QPSK	1	1	26.26	26.31	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
648334 656000 663668									
Channel									
Frequency (MHz)									
3725.01 3740 3754.99									
50	QPSK	1	1	26.21	26.25	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
648000 656000 664000									
Channel									
Frequency (MHz)									
3720 3840 3960									
40	QPSK	1	1	26.25	26.29	26.24	27.0	0.0	
Channel									
Frequency (MHz)									
647668 656000 664332									
Channel									
Frequency (MHz)									
3715.02 3740 3754.98									
30	QPSK	1	1	26.24	26.29	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
647334 656000 664668									
Channel									
Frequency (MHz)									
3710.01 3740 3759.99									
20	QPSK	1	1	26.24	26.25	26.18	27.0	0.0	
Channel									
Frequency (MHz)									
647168 656000 664832									
Channel									
Frequency (MHz)									
3707.52 3740 3772.48									
15	QPSK	1	1	26.20	26.24	26.21	27.0	0.0	
Channel									
Frequency (MHz)									
647000 656000 665000									
Channel									
Frequency (MHz)									
3705 3840 3975									
10	QPSK	1	1	26.25	26.31	26.17	27.0	0.0	



**Part27Q\_n77\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	20.94				
100	PI2 BPSK	1	137	20.93			22.0	0.0
100	PI2 BPSK	1	271	20.98				
100	PI2 BPSK	135	0	20.97			22.0	0.0
100	PI2 BPSK	135	69	20.94			22.0	0.0
100	PI2 BPSK	135	138	20.92				
100	PI2 BPSK	270	0	20.96			22.0	0.0
100	QPSK	1	1	21.04				
100	QPSK	1	137	20.96			22.0	0.0
100	QPSK	1	271	20.88				
100	QPSK	135	0	20.92			22.0	0.0
100	QPSK	135	69	20.96				
100	QPSK	135	138	20.94				
100	QPSK	270	0	20.94			22.0	0.0
100	16QAM	1	1	20.94			22.0	0.0
100	64QAM	1	1	20.46			21.5	0.5
100	256QAM	1	1	18.42			19.5	2.5
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3495.02	3499.98	3510	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
70	QPSK	1	1	20.93			22.0	0.0
Channel								
Frequency (MHz)								
633000								
50	QPSK	1	1	3475.02	3499.98	3525	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
40	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633000								
30	QPSK	1	1	20.97			22.0	0.0
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1	3460.02	3489.98	3540	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
15	QPSK	1	1	3455.01	3499.98	3542.49	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
10	QPSK	1	1	20.94			22.0	0.0

**Part270\_n77\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
100	PI2 BPSK	1	1	20.97	21.00	21.01		
100	PI2 BPSK	1	137	20.98	21.01	20.96	22.0	0.0
100	PI2 BPSK	1	271	20.90	21.00	20.96		
100	PI2 BPSK	135	0	20.93	21.03	20.95	22.0	0.0
100	PI2 BPSK	135	69	20.95	21.03	20.99	22.0	0.0
100	PI2 BPSK	135	138	20.95	21.00	20.95		
100	PI2 BPSK	270	0	20.92	21.02	21.00	22.0	0.0
100	QPSK	1	1	21.00	21.06	21.03		
100	QPSK	1	137	20.84	21.02	21.00	22.0	0.0
100	QPSK	1	271	20.84	20.97	20.99		
100	QPSK	135	0	20.94	20.98	21.00		
100	QPSK	135	69	20.96	21.05	21.02	22.0	0.0
100	QPSK	135	138	20.90	20.96	20.98		
100	QPSK	270	0	20.90	20.97	20.95	22.0	0.0
100	16QAM	1	1	20.98	20.96	20.94	22.0	0.0
100	64QAM	1	1	20.44	20.96	20.49	21.5	0.5
100	256QAM	1	1	18.35	18.44	18.33	19.5	2.5
Channel								
Frequency (MHz)								
656000								
80	QPSK	1	1	3742.02	3840	3924.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
656000								
80	QPSK	1	1	3740.01	3840	3929.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
656000								
70	QPSK	1	1	20.98	21.03	21.01	22.0	0.0
Channel								
Frequency (MHz)								
656000								
60	QPSK	1	1	20.96	21.00	20.95	22.0	0.0
Channel								
Frequency (MHz)								
656000								
50	QPSK	1	1	3725.01	3840	3924.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
656000								
40	QPSK	1	1	3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
656000								
30	QPSK	1	1	20.91	21.02	20.94	22.0	0.0
Channel								
Frequency (MHz)								
656000								
20	QPSK	1	1	3715.02	3840	3924.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
656000								
15	QPSK	1	1	3707.52	3840	3924.48	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
656000								
10	QPSK	1	1	20.93	20.97	20.96	22.0	0.0

**Part270\_n77 HPUE\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	22.98				
100	PI2 BPSK	1	137	22.84			24.0	0.0
100	PI2 BPSK	1	271	22.96				
100	PI2 BPSK	135	0	22.97			23.5	0.5
100	PI2 BPSK	135	69	22.93			24.0	0.0
100	PI2 BPSK	135	138	22.44			23.5	0.5
100	PI2 BPSK	270	0	22.41			22.41	
100	QPSK	1	1	23.01				
100	QPSK	1	137	22.51			24.0	0.0
100	QPSK	1	271	22.06				
100	QPSK	135	0	21.96			24.0	0.0
100	QPSK	135	69	22.86				
100	QPSK	135	138	21.34			23.0	1.0
100	QPSK	270	0	21.56			23.0	1.0
100	16QAM	1	1	20.94			23.0	1.0
100	64QAM	1	1	20.51			21.5	2.5
100	256QAM	1	1	18.42			19.5	4.5
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3495.02	3499.98	3510	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
70	QPSK	1	1	22.91	22.94	22.93	24.0	0.0
Channel								
Frequency (MHz)								
633000								
50	QPSK	1	1	3480	3489.98	3489.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
40	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633000								
30	QPSK	1	1	22.83	22.95	22.93	24.0	0.0
Channel								
Frequency (MHz)								
633332								
20	QPSK	1	1	3460.02	3489.98	3540	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
15	QPSK	1	1	3455.01	3499.98	3542.48	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
10	QPSK	1	1	22.94	22.96	22.92	24.0	0.0



Part270_n77 HPUe_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
				65000	65000	65000			
				3760	3840	3930			
100	Pl2 BPSK	1	1	22.97	23.03	22.91			
100	Pl2 BPSK	1	137	23.04	23.07	23.04	24.0	0.0	
100	Pl2 BPSK	1	271	22.95	22.96	22.91			
100	Pl2 BPSK	135	0	22.34	22.38	22.36	24.0	0.0	
100	Pl2 BPSK	135	69	22.92	23.02	22.97	24.0	0.0	
100	Pl2 BPSK	135	138	22.40	22.43	22.34			
100	Pl2 BPSK	270	0	22.26	22.41	22.38	24.0	0.0	
100	QPSK	1	1	23.01	23.03	23.04			
100	QPSK	1	137	22.99	23.07	23.01			
100	QPSK	1	271	22.98	23.02	22.87			
100	QPSK	135	0	21.94	21.94	21.85			
100	QPSK	135	69	22.71	22.97	22.74	24.0	0.0	
100	QPSK	135	138	21.90	21.95	21.86			
100	QPSK	270	0	21.73	21.87	21.76	23.0	1.0	
100	16QAM	1	1	21.96	22.11	22.08	23.0	1.0	
100	64QAM	1	1	20.44	20.56	20.48	21.5	2.5	
100	256QAM	1	1	18.35	18.44	18.33	19.5	4.5	
Channel									
Frequency (MHz)									
				64968	65000	65032	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	22.95	23.08	22.98	24.0	0.0	
Channel									
Frequency (MHz)									
				64934	65000	65066	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	22.83	23.01	22.91	24.0	0.0	
Channel									
Frequency (MHz)									
				3735	3840	3945	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	22.88	22.94	22.90	24.0	0.0	
Channel									
Frequency (MHz)									
				64868	65000	65332	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	22.96	23.05	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
				64834	65000	65366	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	22.50	23.05	22.98	24.0	0.0	
Channel									
Frequency (MHz)									
				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	22.87	23.03	22.93	24.0	0.0	
Channel									
Frequency (MHz)									
				64768	65000	65432	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	22.92	23.07	22.93	24.0	0.0	
Channel									
Frequency (MHz)									
				64734	65000	65466	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	22.55	23.02	22.98	24.0	0.0	
Channel									
Frequency (MHz)									
				64768	65000	65432	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	22.53	23.04	22.97	24.0	0.0	
Channel									
Frequency (MHz)									
				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	22.84	23.08	22.86	24.0	0.0	

Part270_n77_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
				63900	63332	63968			
100	Pl2 BPSK	1	1	22.80					
100	Pl2 BPSK	1	137	22.77			24.0	0.0	
100	Pl2 BPSK	1	271	22.72					
100	Pl2 BPSK	135	0	22.75			24.0	0.0	
100	Pl2 BPSK	135	69	22.69			24.0	0.0	
100	Pl2 BPSK	135	138	22.72			24.0	0.0	
100	Pl2 BPSK	270	0	22.76					
100	QPSK	1	1	22.81					
100	QPSK	1	137	22.75			24.0	0.0	
100	QPSK	1	271	22.71					
100	QPSK	135	0	22.70			24.0	0.0	
100	QPSK	135	69	22.73					
100	QPSK	135	138	22.48					
100	QPSK	270	0	22.64			24.0	0.0	
100	16QAM	1	1	22.89			24.0	0.0	
100	64QAM	1	1	22.43			24.0	0.0	
100	256QAM	1	1	21.08			22.5	1.5	
Channel									
Frequency (MHz)									
				63900	63332	63968	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	22.95	3499.98	3504.99	24.0	0.0	
Channel									
Frequency (MHz)									
				63968	63332	63400	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	22.87	3499.98	3510	24.0	0.0	
Channel									
Frequency (MHz)									
				3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	22.85			24.0	0.0	
Channel									
Frequency (MHz)									
				63200	63332	63466	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	22.84	3499.98	3518.98	24.0	0.0	
Channel									
Frequency (MHz)									
				63168	63332	63500	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	22.75	3499.98	3525	24.0	0.0	
Channel									
Frequency (MHz)									
				63134	63332	63532	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	22.73	3499.98	3529.98	24.0	0.0	
Channel									
Frequency (MHz)									
				63100	63332	63566	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	22.69	3499.98	3534.98	24.0	0.0	
Channel									
Frequency (MHz)									
				63068	63332	63600	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	22.67	3499.98	3540	24.0	0.0	
Channel									
Frequency (MHz)									
				63000	63332	63666	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	22.64	3499.98	3544.98	24.0	0.0	
Channel									
Frequency (MHz)									
				63034	63332	63732	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	22.61	3499.98	3544.98	24.0	0.0	

Part270_n77_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
				64900	65000	65000			
100	Pl2 BPSK	1	1	22.87	22.82	22.76			
100	Pl2 BPSK	1	137	22.90	22.87	22.81	24.0	0.0	
100	Pl2 BPSK	1	271	22.87	22.87	22.76			
100	Pl2 BPSK	135	0	22.88	22.88	22.79	24.0	0.0	
100	Pl2 BPSK	135	69	22.93	22.90	22.79	24.0	0.0	
100	Pl2 BPSK	135	138	22.87	22.86	22.81			
100	Pl2 BPSK	270	0	22.89	22.87	22.74	24.0	0.0	
100	QPSK	1	1	22.98	22.91	22.84			
100	QPSK	1	137	22.88	22.82	22.80	24.0	0.0	
100	QPSK	1	271	22.91	22.85	22.79			
100	QPSK	135	0	22.89	22.83	22.73			
100	QPSK	135	69	22.90	22.78	22.76	24.0	0.0	
100	QPSK	135	138	22.82	22.85	22.77			
100	QPSK	270	0	22.88	22.85	22.77	24.0	0.0	
100	16QAM	1	1	22.86	22.87	22.74	24.0	0.0	
100	64QAM	1	1	22.90	22.85	22.79	24.0	0.0	
100	256QAM	1	1	21.88	22.00	21.96	23.0	1.0	
Channel									
Frequency (MHz)									
				64968	65000	65032	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	22.98	22.98	22.74	24.0	0.0	
Channel									
Frequency (MHz)									
				64934	65000	65066	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	22.87	22.80	22.77	24.0	0.0	
Channel									
Frequency (MHz)									
				3735	3840	3945	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	22.85	22.78	22.77	24.0	0.0	
Channel									
Frequency (MHz)									
				64868	65000	65332	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	22.94	22.86	22.73	24.0	0.0	
Channel									
Frequency (MHz)									
				64834	65000	65366	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	22.53	22.90	22.79	24.0	0.0	
Channel									
Frequency (MHz)									
				64800	65000	65400	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	22.91	22.82	22.79	24.0	0.0	
Channel									
Frequency (MHz)									
				64768	65000	65432	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	22.97	22.80	22.77	24.0	0.0	
Channel									
Frequency (MHz)									
				64734	65000	65466	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	22.55	22.98	22.89	24.0	0.0	
Channel									
Frequency (MHz)									
				64768	65000	65432	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	22.51	22.86	22.89	24.0	0.0	
Channel									
Frequency (MHz)									
				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	22.95	22.80	22.72	24.0	0.0	





### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1		26.12			
100	PI2 BPSK	1	137		26.03		27.0	0.0
100	PI2 BPSK	1	271		26.08			
100	PI2 BPSK	135	0		26.02		26.5	0.5
100	PI2 BPSK	135	69		26.01		27.0	0.0
100	PI2 BPSK	135	138		25.97		26.5	0.5
100	PI2 BPSK	270	0		25.91			
100	QPSK	1	1		26.10			
100	QPSK	1	137		26.03		27.0	0.0
100	QPSK	1	271		26.11			
100	QPSK	135	0		25.98		27.0	0.0
100	QPSK	135	69		25.92			
100	QPSK	135	138		25.42			
100	QPSK	270	0		25.21		26.0	1.0
100	16QAM	1	1		25.91		26.0	1.0
100	64QAM	1	1		24.42		24.5	2.5
100	256QAM	1	1		22.31		22.5	4.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3465	3469.98	3504.99		
Channel								
Frequency (MHz)								
80	QPSK	1	1	632968	633332	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3466.02	3469.98	3510		
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.91	25.85	25.96	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.91	25.84	25.82	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3460	3469.98	3519.99		
Channel								
Frequency (MHz)								
40	QPSK	1	1	631868	633332	635000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3475.02	3469.98	3525		
Channel								
Frequency (MHz)								
50	QPSK	1	1	631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3470.01	3469.98	3529.98		
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.87	25.98	25.97	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	631000	633332	636666	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3465	3469.98	3534.99		
Channel								
Frequency (MHz)								
20	QPSK	1	1	630968	633332	636000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3465.02	3469.98	3530		
Channel								
Frequency (MHz)								
15	QPSK	1	1	630500	633332	636166	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3467.5	3469.98	3542.49		
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.98	25.87	25.96	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	630334	633332	637000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	3455.01	3469.98	3544.98		

### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1		25.82	25.89	25.76	
100	PI2 BPSK	1	137		25.84	25.89	25.74	27.0
100	PI2 BPSK	1	271		25.90	25.86	25.83	0.0
100	PI2 BPSK	135	0		25.73	25.82	25.88	26.5
100	PI2 BPSK	135	69		25.78	25.69	25.72	0.0
100	PI2 BPSK	135	138		25.77	25.71	25.86	26.5
100	PI2 BPSK	270	0		25.96	25.61	25.63	0.0
100	QPSK	1	1		25.91	25.88	25.77	
100	QPSK	1	137		25.85	25.86	25.70	27.0
100	QPSK	1	271		25.90	25.73	25.65	
100	QPSK	135	0		25.25	25.02	25.06	27.0
100	QPSK	135	69		25.72	25.82	25.71	
100	QPSK	135	138		25.33	25.13	25.08	
100	QPSK	270	0		25.24	24.88	24.82	26.0
100	16QAM	1	1		25.39	24.77	24.73	26.0
100	64QAM	1	1		23.94	23.45	23.98	24.5
100	256QAM	1	1		21.89	22.00	21.96	22.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	646868	646900	646932	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3742.02	3840	3924.99		
Channel								
Frequency (MHz)								
80	QPSK	1	1	646800	646900	646932	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3929.98		
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.73	25.72	25.69	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	646868	646900	646932	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3742.02	3840	3929.98		
Channel								
Frequency (MHz)								
50	QPSK	1	1	646800	646900	646932	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3740.01	3840	3930		
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.77	25.77	25.65	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	647334	646900	646968	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3710.01	3840	3929.98		
Channel								
Frequency (MHz)								
20	QPSK	1	1	647168	646900	646932	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3707.52	3840	3924.48		
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.78	25.71	25.67	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	647000	646900	646932	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	3705	3840	3915	27.0	0.0

### Part27Q\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1			20.86		
100	PI2 BPSK	1	137			20.89	22.0	0.0
100	PI2 BPSK	1	271			20.81		
100	PI2 BPSK	135	0			20.89	22.0	0.0
100	PI2 BPSK	135	69			20.85	22.0	0.0
100	PI2 BPSK	135	138			20.88		
100	PI2 BPSK	270	0			20.82	22.0	0.0
100	QPSK	1	1			20.91		
100	QPSK	1	137			20.89	22.0	0.0
100	QPSK	1	271			20.86		
100	QPSK	135	0			20.87		
100	QPSK	135	69			20.83	22.0	0.0
100	QPSK	135	138			20.85		
100	QPSK	270	0			20.85	22.0	0.0
100	16QAM	1	1			20.84	22.0	0.0
100	64QAM	1	1			20.38	21.5	0.5
100	256QAM	1	1			18.47	19.5	2.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3475	3469.98	3524.99		
Channel								
Frequency (MHz)								
80	QPSK	1	1	632968	633332	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3470.02	3469.98	3510		
Channel								
Frequency (MHz)								
70	QPSK	1	1	20.77	20.88	20.77	22.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3460	3469.98	3519.99		
Channel								
Frequency (MHz)								
50	QPSK	1	1	631868	633332	635000	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3475.02	3469.98	3525		
Channel								
Frequency (MHz)								
40	QPSK	1	1	631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3470.01	3469.98	3529.98		
Channel								
Frequency (MHz)								
30	QPSK	1	1	20.78	20.81	20.71	22.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	630968	633332	636000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3465.02	3469.98	3530		
Channel								
Frequency (MHz)								
15	QPSK	1	1	630500	633332	636166	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3467.5	3469.98	3542.48		
Channel								
Frequency (MHz)								
10	QPSK	1	1	20.82	20.86	20.78	22.0	0.0



### Part270\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760								
100	PI2 BPSK	1	1	20.29	20.41	20.34		
100	PI2 BPSK	1	137	20.27	20.39	20.34	22.0	0.0
100	PI2 BPSK	1	271	20.24	20.37	20.37		
100	PI2 BPSK	135	0	20.25	20.44	20.36	22.0	0.0
100	PI2 BPSK	135	69	20.30	20.40	20.34	22.0	0.0
100	PI2 BPSK	135	138	20.27	20.44	20.30		
100	PI2 BPSK	270	0	20.28	20.39	20.37	22.0	0.0
100	QPSK	1	1	20.33	20.46	20.40		
100	QPSK	1	137	20.29	20.36	20.31	22.0	0.0
100	QPSK	1	271	20.24	20.41	20.34		
100	QPSK	135	0	20.26	20.41	20.36		
100	QPSK	135	69	20.31	20.45	20.38	22.0	0.0
100	QPSK	135	138	20.27	20.36	20.33		
100	QPSK	270	0	20.31	20.43	20.31	22.0	0.0
100	16QAM	1	1	20.23	20.44	20.33	22.0	0.0
100	64QAM	1	1	19.94	19.91	19.89	21.5	0.5
100	256QAM	1	1	17.90	17.96	17.93	19.5	2.5
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3742.02	3840	3924.98		
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3740.01	3840	3929.99		
Channel								
Frequency (MHz)								
3760								
70	QPSK	1	1	20.23	20.40	20.30	22.0	0.0
Channel								
Frequency (MHz)								
65000								
60	QPSK	1	1	20.24	20.41	20.33	22.0	0.0
Channel								
Frequency (MHz)								
65000								
50	QPSK	1	1	3725.01	3840	3954.99		
Channel								
Frequency (MHz)								
65000								
40	QPSK	1	1	20.28	20.41	20.33	22.0	0.0
Channel								
Frequency (MHz)								
64768								
30	QPSK	1	1	20.31	20.37	20.33	22.0	0.0
Channel								
Frequency (MHz)								
64734								
20	QPSK	1	1	20.31	20.44	20.36	22.0	0.0
Channel								
Frequency (MHz)								
64768								
15	QPSK	1	1	20.28	20.38	20.30	22.0	0.0
Channel								
Frequency (MHz)								
3760								
10	QPSK	1	1	20.28	20.38	20.38	22.0	0.0

### Part27Q\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1		22.86			
100	PI2 BPSK	1	137		22.91		24.0	0.0
100	PI2 BPSK	1	271		22.82			
100	PI2 BPSK	135	0		22.44		23.5	0.5
100	PI2 BPSK	135	69		22.89		24.0	0.0
100	PI2 BPSK	135	138		22.46		23.5	0.5
100	PI2 BPSK	270	0		22.33			
100	QPSK	1	1		22.93			
100	QPSK	1	137		22.47		24.0	0.0
100	QPSK	1	271		22.54			
100	QPSK	135	0		21.86		24.0	0.0
100	QPSK	135	69		22.76			
100	QPSK	135	138		21.65		24.0	0.0
100	QPSK	270	0		21.78		23.0	1.0
100	16QAM	1	1		21.95		23.0	1.0
100	64QAM	1	1		20.38		21.5	2.5
100	256QAM	1	1		18.47		19.5	4.5
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	3495	3499.98	3504.99		
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	3490.02	3499.98	3510		
Channel								
Frequency (MHz)								
3499.98								
70	QPSK	1	1	22.74	22.87	22.81	24.0	0.0
Channel								
Frequency (MHz)								
63000								
60	QPSK	1	1	22.85	22.75	22.79	24.0	0.0
Channel								
Frequency (MHz)								
63000								
50	QPSK	1	1	22.77	22.78	22.86	24.0	0.0
Channel								
Frequency (MHz)								
63134								
40	QPSK	1	1	22.73	22.74	22.87	24.0	0.0
Channel								
Frequency (MHz)								
63000								
30	QPSK	1	1	22.85	22.82	22.75	24.0	0.0
Channel								
Frequency (MHz)								
63000								
20	QPSK	1	1	22.85	22.74	22.86	24.0	0.0
Channel								
Frequency (MHz)								
63000								
15	QPSK	1	1	22.83	22.82	22.82	24.0	0.0
Channel								
Frequency (MHz)								
3499.98								
10	QPSK	1	1	22.84	22.86	22.78	24.0	0.0

### Part270\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3930								
100	PI2 BPSK	1	1	22.28	22.43	22.29		
100	PI2 BPSK	1	137	22.21	22.35	22.28	24.0	0.0
100	PI2 BPSK	1	271	22.32	22.42	22.39		
100	PI2 BPSK	135	0	21.85	21.88	21.79	23.5	0.5
100	PI2 BPSK	135	69	22.32	22.33	22.32	24.0	0.0
100	PI2 BPSK	135	138	21.73	21.83	21.81	23.5	0.5
100	PI2 BPSK	270	0	21.66	21.79	21.68		
100	QPSK	1	1	22.31	22.45	22.41		
100	QPSK	1	137	22.31	22.43	22.35	24.0	0.0
100	QPSK	1	271	22.24	22.37	22.22		
100	QPSK	135	0	21.22	21.31	21.17		
100	QPSK	135	69	22.20	22.21	22.15	24.0	0.0
100	QPSK	135	138	21.19	21.22	21.08		
100	QPSK	270	0	21.09	21.16	21.10	23.0	1.0
100	16QAM	1	1	21.50	21.57	21.52	23.0	1.0
100	64QAM	1	1	19.94	19.91	19.89	21.5	2.5
100	256QAM	1	1	17.90	17.96	17.93	19.5	4.5
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3742.02	3840	3924.98		
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3740.01	3840	3929.99		
Channel								
Frequency (MHz)								
3760								
70	QPSK	1	1	22.20	22.36	22.35	24.0	0.0
Channel								
Frequency (MHz)								
65000								
60	QPSK	1	1	22.21	22.38	22.30	24.0	0.0
Channel								
Frequency (MHz)								
65000								
50	QPSK	1	1	3725.01	3840	3954.99		
Channel								
Frequency (MHz)								
65000								
40	QPSK	1	1	22.12	22.44	22.41	24.0	0.0
Channel								
Frequency (MHz)								
64768								
30	QPSK	1	1	22.26	22.37	22.41	24.0	0.0
Channel								
Frequency (MHz)								
64734								
20	QPSK	1	1	22.22	22.38	22.39	24.0	0.0
Channel								
Frequency (MHz)								
64768								
15	QPSK	1	1	22.21	22.42	22.41	24.0	0.0
Channel								
Frequency (MHz)								
3760								
10	QPSK	1	1	22.22	22.43	22.42	24.0	0.0



Part27Q_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1		22.69				
100	PI2 BPSK	1	137		22.66		24.0	0.0	
100	PI2 BPSK	1	271		22.74				
100	PI2 BPSK	135	9		22.67		24.0	0.0	
100	PI2 BPSK	135	69		22.67		24.0	0.0	
100	PI2 BPSK	135	138		22.71				
100	PI2 BPSK	270	0		22.75		24.0	0.0	
100	QPSK	1	1		22.75				
100	QPSK	1	137		22.73		24.0	0.0	
100	QPSK	1	271		22.73				
100	QPSK	135	9		22.69				
100	QPSK	135	69		22.75		24.0	0.0	
100	QPSK	135	138		22.69				
100	QPSK	270	0		22.74		24.0	0.0	
100	16QAM	1	1		22.68		24.0	0.0	
100	64QAM	1	1		22.65		24.0	0.0	
100	256QAM	1	1		22.62		24.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	63332	63666	Tune-up limit (dBm)	MPR (dB)	
				3492	3499.98	3504.99	(dBm)	(dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	63268	63332	63400	Tune-up limit (dBm)	MPR (dB)	
				3490.02	3499.98	3510	(dBm)	(dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	63268	63332	63400	Tune-up limit (dBm)	MPR (dB)	
				3485.01	3499.98	3514.98	(dBm)	(dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	63198	63332	63500	Tune-up limit (dBm)	MPR (dB)	
				3479.02	3499.98	3525	(dBm)	(dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	63134	63332	63532	Tune-up limit (dBm)	MPR (dB)	
				3470.01	3499.98	3529.98	(dBm)	(dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	63100	63332	63600	Tune-up limit (dBm)	MPR (dB)	
				3465	3499.98	3534.99	(dBm)	(dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	63098	63332	63600	Tune-up limit (dBm)	MPR (dB)	
				3460.02	3499.98	3540	(dBm)	(dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	63050	63332	63686	Tune-up limit (dBm)	MPR (dB)	
				3457.5	3499.98	3542.49	(dBm)	(dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	63034	63332	63702	Tune-up limit (dBm)	MPR (dB)	
				3455.01	3499.98	3544.98	(dBm)	(dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	63000	63332	63800	Tune-up limit (dBm)	MPR (dB)	
				3450	3499.98	3549.99	(dBm)	(dB)	

Part27O_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1		22.74				
100	PI2 BPSK	1	137		22.72		24.0	0.0	
100	PI2 BPSK	1	271		22.78				
100	PI2 BPSK	135	9		22.72		24.0	0.0	
100	PI2 BPSK	135	69		22.73		24.0	0.0	
100	PI2 BPSK	135	138		22.72				
100	PI2 BPSK	270	0		22.82		24.0	0.0	
100	QPSK	1	1		22.82				
100	QPSK	1	137		22.74		24.0	0.0	
100	QPSK	1	271		22.75				
100	QPSK	135	9		22.73				
100	QPSK	135	69		22.82		24.0	0.0	
100	QPSK	135	138		22.78				
100	QPSK	270	0		22.78		24.0	0.0	
100	16QAM	1	1		22.70		24.0	0.0	
100	64QAM	1	1		22.62		24.0	0.0	
100	256QAM	1	1		22.75		24.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	64668	65000	65032	Tune-up limit (dBm)	MPR (dB)	
				3745.02	3750	3754.98	(dBm)	(dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	64634	65000	65066	Tune-up limit (dBm)	MPR (dB)	
				3740.01	3750	3759.99	(dBm)	(dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	64634	65000	65066	Tune-up limit (dBm)	MPR (dB)	
				3735	3750	3765	(dBm)	(dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	64600	65000	65100	Tune-up limit (dBm)	MPR (dB)	
				3725	3750	3765	(dBm)	(dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	64568	65000	65132	Tune-up limit (dBm)	MPR (dB)	
				3720.01	3750	3768.98	(dBm)	(dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	64534	65000	65200	Tune-up limit (dBm)	MPR (dB)	
				3720	3750	3780	(dBm)	(dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	64500	65000	65200	Tune-up limit (dBm)	MPR (dB)	
				3720	3750	3780	(dBm)	(dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	64468	65000	65266	Tune-up limit (dBm)	MPR (dB)	
				3715.02	3750	3784.98	(dBm)	(dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	64434	65000	65266	Tune-up limit (dBm)	MPR (dB)	
				3710.01	3750	3789.99	(dBm)	(dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	64400	65000	65300	Tune-up limit (dBm)	MPR (dB)	
				3705	3750	3795	(dBm)	(dB)	



### Part27Q\_n78 HPUe\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.85				
100	PI2 BPSK	1	137	25.79			27.0	0.0
100	PI2 BPSK	1	271	25.85				
100	PI2 BPSK	135	0	25.70			27.0	0.0
100	PI2 BPSK	135	69	25.83			27.0	0.0
100	PI2 BPSK	135	138	25.78			27.0	0.0
100	PI2 BPSK	270	0	25.73				
100	QPSK	1	1	25.90				
100	QPSK	1	137	25.81			27.0	0.0
100	QPSK	1	271	25.86				
100	QPSK	135	0	25.74			27.0	0.0
100	QPSK	135	69	25.83			27.0	0.0
100	QPSK	135	138	25.73			27.0	0.0
100	QPSK	270	0	25.80			27.0	0.0
100	16QAM	1	1	25.83			27.0	0.0
100	64QAM	1	1	25.96			25.5	0.5
100	256QAM	1	1	23.46			24.5	2.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.31	25.37	25.30	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.31	25.33	25.37	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.38	25.32	25.32	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.29	25.33	25.28	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.34	25.37	25.33	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.29	25.32	25.30	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.36	25.28	25.28	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.26	25.30	25.28	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.28	25.37	25.28	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.30	25.37	25.30	27.0	0.0

### Part27Q\_n78 HPUe\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.80				
100	PI2 BPSK	1	137	25.72			27.0	0.0
100	PI2 BPSK	1	271	25.77				
100	PI2 BPSK	135	0	25.66			27.0	0.0
100	PI2 BPSK	135	69	25.75			27.0	0.0
100	PI2 BPSK	135	138	25.72			27.0	0.0
100	PI2 BPSK	270	0	25.69				
100	QPSK	1	1	25.81				
100	QPSK	1	137	25.79			27.0	0.0
100	QPSK	1	271	25.76				
100	QPSK	135	0	25.70			27.0	0.0
100	QPSK	135	69	25.75			27.0	0.0
100	QPSK	135	138	25.69			27.0	0.0
100	QPSK	270	0	25.70			27.0	0.0
100	16QAM	1	1	25.71			27.0	0.0
100	64QAM	1	1	25.30			25.5	0.5
100	256QAM	1	1	23.37			24.5	2.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.73	25.74	25.76	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.72	25.72	25.78	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.73	25.74	25.71	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.72	25.76	25.76	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.71	25.72	25.72	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.78	25.74	25.71	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.74	25.75	25.71	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.71	25.72	25.76	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.73	25.72	25.72	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.78	25.71	25.75	27.0	0.0

### Part27Q\_n78 Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	20.72				
100	PI2 BPSK	1	137	20.83			22.0	0.0
100	PI2 BPSK	1	271	20.80				
100	PI2 BPSK	135	0	20.82			22.0	0.0
100	PI2 BPSK	135	69	20.87			22.0	0.0
100	PI2 BPSK	135	138	20.79			22.0	0.0
100	PI2 BPSK	270	0	20.77				
100	QPSK	1	1	20.89				
100	QPSK	1	137	20.79			22.0	0.0
100	QPSK	1	271	20.73				
100	QPSK	135	0	20.80			22.0	0.0
100	QPSK	135	69	20.85			22.0	0.0
100	QPSK	135	138	20.70			22.0	0.0
100	QPSK	270	0	20.83			22.0	0.0
100	16QAM	1	1	20.81			22.0	0.0
100	64QAM	1	1	20.85			22.0	0.0
100	256QAM	1	1	19.25			20.5	1.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.82	20.80	20.79	22.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.77	20.80	20.87	22.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	20.80	20.78	20.83	22.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	20.81	20.84	20.82	22.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	20.88	20.84	20.85	22.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	20.75	20.83	20.76	22.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	20.85	20.85	20.86	22.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	20.79	20.88	20.85	22.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	20.76	20.84	20.87	22.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	20.80	20.86	20.85	22.0	0.0



Part270\_n78\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000				
100	Pi2 BPSK	1	1		21.12			
100	Pi2 BPSK	1	137		21.06		22.0	0.0
100	Pi2 BPSK	1	271		21.14			
100	Pi2 BPSK	135	0		21.16		22.0	0.0
100	Pi2 BPSK	135	69		21.14		22.0	0.0
100	Pi2 BPSK	135	138		21.11			
100	Pi2 BPSK	270	0		21.15		22.0	0.0
100	QPSK	1	1		21.20			
100	QPSK	1	137		21.19		22.0	0.0
100	QPSK	1	271		21.17			
100	QPSK	135	0		21.08			
100	QPSK	135	69		21.13		22.0	0.0
100	QPSK	135	138		21.10			
100	QPSK	270	0		21.07		22.0	0.0
100	16QAM	1	1		21.06		22.0	0.0
100	64QAM	1	1		20.93		22.0	0.0
100	256QAM	1	1		19.46		20.5	1.5
Channel								
Frequency (MHz)				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	21.08	21.09	21.09	22.0	0.0
Channel								
Frequency (MHz)				648334	650000	650666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	21.11	21.12	21.12	22.0	0.0
Channel								
Frequency (MHz)				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	21.14	21.19	21.15	22.0	0.0
Channel								
Frequency (MHz)				648668	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3740.02	3750	3749.98	(dBm)	(dB)
60	QPSK	1	1	21.08	21.15	21.13	22.0	0.0
Channel								
Frequency (MHz)				648334	650000	651666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	21.15	21.10	21.12	22.0	0.0
Channel								
Frequency (MHz)				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	21.07	21.08	21.18	22.0	0.0
Channel								
Frequency (MHz)				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.00	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	21.16	21.16	21.15	22.0	0.0
Channel								
Frequency (MHz)				647334	650000	652666	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	21.15	21.19	21.13	22.0	0.0
Channel								
Frequency (MHz)				647000	650000	652999	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	21.08	21.16	21.15	22.0	0.0
Channel								
Frequency (MHz)				646000	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	21.14	21.08	21.09	22.0	0.0



Part27Q_n78 HPUe_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1		22.71					
100	PI2 BPSK	1	137		22.72		24.0	0.0		
100	PI2 BPSK	1	271		22.67					
100	PI2 BPSK	135	0		22.69		24.0	0.0		
100	PI2 BPSK	135	69		22.74					
100	PI2 BPSK	135	138		22.18					
100	PI2 BPSK	270	0		22.06		24.0	0.0		
100	QPSK	1	1		22.90					
100	QPSK	1	137		22.77		24.0	0.0		
100	QPSK	1	271		22.22					
100	QPSK	135	0		22.72		24.0	0.0		
100	QPSK	135	69		22.77					
100	QPSK	135	138		21.40					
100	QPSK	270	0		22.21		23.5	0.5		
100	16QAM	1	1		22.78		24.0	0.0		
100	64QAM	1	1		21.26		22.5	1.5		
100	256QAM	1	1		19.25		20.5	3.5		
Channel										
Frequency (MHz)										
633000										
80	QPSK	1	1		3495	3499.98	3504.98			
Channel										
Frequency (MHz)										
633332										
80	QPSK	1	1		3496.02	3499.98	3510			
Channel										
Frequency (MHz)										
633668										
70	QPSK	1	1		22.78	22.76	22.07	24.0	0.0	
Channel										
Frequency (MHz)										
633000										
60	QPSK	1	1		22.71	22.65	22.76	24.0	0.0	
Channel										
Frequency (MHz)										
631668										
50	QPSK	1	1		3475.02	3499.98	3525			
Channel										
Frequency (MHz)										
631334										
40	QPSK	1	1		3470.01	3499.98	3529.98			
Channel										
Frequency (MHz)										
631000										
30	QPSK	1	1		22.76	22.65	22.72	24.0	0.0	
Channel										
Frequency (MHz)										
630668										
20	QPSK	1	1		22.75	22.68	22.72	24.0	0.0	
Channel										
Frequency (MHz)										
630000										
15	QPSK	1	1		3457.5	3499.98	3542.48			
Channel										
Frequency (MHz)										
633332										
10	QPSK	1	1		22.73	22.73	22.75	24.0	0.0	

Part27Q_n78 HPUe_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3750										
100	PI2 BPSK	1	1		22.94					
100	PI2 BPSK	1	137		23.04		24.0	0.0		
100	PI2 BPSK	1	271		22.90					
100	PI2 BPSK	135	0		22.96		24.0	0.0		
100	PI2 BPSK	135	69		23.00					
100	PI2 BPSK	135	138		23.04					
100	PI2 BPSK	270	0		22.94		24.0	0.0		
100	QPSK	1	1		23.05					
100	QPSK	1	137		22.96		24.0	0.0		
100	QPSK	1	271		22.92					
100	QPSK	135	0		22.55		24.0	0.0		
100	QPSK	135	69		22.97					
100	QPSK	135	138		22.44					
100	QPSK	270	0		22.54		23.5	0.5		
100	16QAM	1	1		22.85		24.0	0.0		
100	64QAM	1	1		21.23		22.5	1.5		
100	256QAM	1	1		19.26		20.5	3.5		
Channel										
Frequency (MHz)										
649668										
80	QPSK	1	1		3742.02	3750	3754.98			
Channel										
Frequency (MHz)										
649334										
80	QPSK	1	1		22.91	23.00	22.93	24.0	0.0	
Channel										
Frequency (MHz)										
649000										
70	QPSK	1	1		22.95	22.96	22.86	24.0	0.0	
Channel										
Frequency (MHz)										
648668										
60	QPSK	1	1		22.59	23.00	22.93	24.0	0.0	
Channel										
Frequency (MHz)										
648334										
50	QPSK	1	1		3725.01	3750	3754.98			
Channel										
Frequency (MHz)										
648000										
40	QPSK	1	1		3720	3750	3760			
Channel										
Frequency (MHz)										
647668										
30	QPSK	1	1		22.90	22.90	22.90	24.0	0.0	
Channel										
Frequency (MHz)										
647334										
20	QPSK	1	1		22.90	22.99	22.91	24.0	0.0	
Channel										
Frequency (MHz)										
647000										
15	QPSK	1	1		3707.52	3750	3752.48			
Channel										
Frequency (MHz)										
646668										
10	QPSK	1	1		23.04	22.99	22.95	24.0	0.0	

Part27Q_n78_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
3499.98										
100	PI2 BPSK	1	1		23.11					
100	PI2 BPSK	1	137		22.88		24.0	0.0		
100	PI2 BPSK	1	271		22.98					
100	PI2 BPSK	135	0		23.03		24.0	0.0		
100	PI2 BPSK	135	69		22.94					
100	PI2 BPSK	135	138		23.02					
100	PI2 BPSK	270	0		22.93		24.0	0.0		
100	QPSK	1	1		23.11					
100	QPSK	1	137		23.01		24.0	0.0		
100	QPSK	1	271		23.05					
100	QPSK	135	0		22.98					
100	QPSK	135	69		23.01					
100	QPSK	135	138		22.99					
100	QPSK	270	0		22.89		24.0	0.0		
100	16QAM	1	1		22.99		24.0	0.0		
100	64QAM	1	1		22.96		24.0	0.0		
100	256QAM	1	1		22.80		23.5	0.5		
Channel										
Frequency (MHz)										
633000										
80	QPSK	1	1		3495	3499.98	3504.98			
Channel										
Frequency (MHz)										
633332										
80	QPSK	1	1		3496.02	3499.98	3510			
Channel										
Frequency (MHz)										
633668										
70	QPSK	1	1		23.02	23.01	22.88	24.0	0.0	
Channel										
Frequency (MHz)										
633000										
60	QPSK	1	1		23.08	23.04	23.06	24.0	0.0	
Channel										
Frequency (MHz)										
631668										
50	QPSK	1	1		3475.02	3499.98	3525			
Channel										
Frequency (MHz)										
631334										
40	QPSK	1	1		3470.01	3499.98	3529.98			
Channel										
Frequency (MHz)										
631000										
30	QPSK	1	1		23.07	23.10	23.02	24.0	0.0	
Channel										
Frequency (MHz)										
630668										
20	QPSK	1	1		22.99	23.07	23.03	24.0	0.0	
Channel										
Frequency (MHz)										
630000										
15	QPSK	1	1		3457.5	3499.98	3542.48			
Channel										
Frequency (MHz)										
633332										
10	QPSK	1	1		23.04	22.98	23.07	24.0	0.0	



**Part270\_n78\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				65000				
Frequency (MHz)				3750				
100	PI2 BPSK	1	1	22.93				
100	PI2 BPSK	1	137	23.00			24.0	0.0
100	PI2 BPSK	1	271	22.98				
100	PI2 BPSK	135	0	22.91			24.0	0.0
100	PI2 BPSK	135	69	23.00				
100	PI2 BPSK	135	138	22.95				
100	PI2 BPSK	270	0	22.96			24.0	0.0
100	QPSK	1	1	23.01				
100	QPSK	1	137	22.97			24.0	0.0
100	QPSK	1	271	22.93				
100	QPSK	135	0	22.91				
100	QPSK	135	69	22.97			24.0	0.0
100	QPSK	135	138	22.95				
100	QPSK	270	0	22.94			24.0	0.0
100	16QAM	1	1	22.96			24.0	0.0
100	64QAM	1	1	22.98			24.0	0.0
100	256QAM	1	1	22.94			23.5	0.5
Channel				64968	65000	65032	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	22.80	22.78	22.81	24.0	0.0
Channel				64834	65000	65068	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	22.82	22.76	22.79	24.0	0.0
Channel				64800	65000	65100	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	22.80	22.76	22.87	24.0	0.0
Channel				64868	65000	65132	Tune-up limit	MPR
Frequency (MHz)				3740.02	3750	3749.98	(dBm)	(dB)
60	QPSK	1	1	22.80	22.79	22.86	24.0	0.0
Channel				64834	65000	65168	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	22.82	22.82	22.84	24.0	0.0
Channel				64800	65000	65200	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	22.83	22.80	22.84	24.0	0.0
Channel				64768	65000	65232	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	22.84	22.80	22.82	24.0	0.0
Channel				64734	65000	65268	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	22.79	22.79	22.83	24.0	0.0
Channel				64768	65000	65332	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	22.82	22.80	22.81	24.0	0.0
Channel				64800	65000	65310	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	22.80	22.79	22.82	24.0	0.0



### Part27Q\_n78 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	25.97				
100	PI2 BPSK	1	137	25.79			27.0	0.0
100	PI2 BPSK	1	271	25.88				
100	PI2 BPSK	135	0	25.94			27.0	0.0
100	PI2 BPSK	135	69	25.78			27.0	0.0
100	PI2 BPSK	135	138	25.88			27.0	0.0
100	PI2 BPSK	270	0	25.76				
100	QPSK	1	1	25.03				
100	QPSK	1	137	25.97			27.0	0.0
100	QPSK	1	271	25.84				
100	QPSK	135	0	25.98			27.0	0.0
100	QPSK	135	69	25.97				
100	QPSK	135	138	25.79			27.0	0.0
100	QPSK	270	0	25.98			28.5	0.5
100	16QAM	1	1	25.83			27.0	0.0
100	64QAM	1	1	24.70			25.5	1.5
100	256QAM	1	1	22.60			23.5	3.5
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.99		
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3496.02	3499.98	3500		
Channel								
Frequency (MHz)								
633666								
70	QPSK	1	1	25.97	25.89	26.00	27.0	0.0
Channel								
Frequency (MHz)								
633998								
60	QPSK	1	1	3485.01	3499.98	3514.98		
Channel								
Frequency (MHz)								
634332								
70	QPSK	1	1	25.88	25.89	26.02	27.0	0.0
Channel								
Frequency (MHz)								
634666								
60	QPSK	1	1	26.00	25.89	25.92	27.0	0.0
Channel								
Frequency (MHz)								
635000								
50	QPSK	1	1	3476.02	3499.98	3525		
Channel								
Frequency (MHz)								
635332								
40	QPSK	1	1	3470.01	3499.98	3529.98		
Channel								
Frequency (MHz)								
635666								
30	QPSK	1	1	25.97	25.91	26.02	27.0	0.0
Channel								
Frequency (MHz)								
636000								
20	QPSK	1	1	3465.02	3499.98	3534.98		
Channel								
Frequency (MHz)								
636332								
15	QPSK	1	1	3457.5	3499.98	3542.49		
Channel								
Frequency (MHz)								
636666								
10	QPSK	1	1	25.95	25.92	25.98	27.0	0.0

### Part27Q\_n78 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	PI2 BPSK	1	1	25.78				
100	PI2 BPSK	1	137	25.88			27.0	0.0
100	PI2 BPSK	1	271	25.97				
100	PI2 BPSK	135	0	25.86			27.0	0.0
100	PI2 BPSK	135	69	25.54			27.0	0.0
100	PI2 BPSK	135	138	25.58			27.0	0.0
100	PI2 BPSK	270	0	25.52				
100	QPSK	1	1	25.89				
100	QPSK	1	137	25.79			27.0	0.0
100	QPSK	1	271	25.81				
100	QPSK	135	0	25.71			27.0	0.0
100	QPSK	135	69	25.74				
100	QPSK	135	138	25.70			27.0	0.0
100	QPSK	270	0	25.72			28.5	0.5
100	16QAM	1	1	25.57			27.0	0.0
100	64QAM	1	1	24.40			23.5	1.5
100	256QAM	1	1	22.37			23.5	3.5
Channel								
Frequency (MHz)								
649666								
80	QPSK	1	1	3742.02	3750	3744.98		
Channel								
Frequency (MHz)								
650000								
80	QPSK	1	1	25.80	25.86	25.87	27.0	0.0
Channel								
Frequency (MHz)								
650332								
70	QPSK	1	1	25.77	25.87	25.85	27.0	0.0
Channel								
Frequency (MHz)								
650666								
60	QPSK	1	1	25.81	25.80	25.88	27.0	0.0
Channel								
Frequency (MHz)								
651000								
50	QPSK	1	1	3725.01	3750	3744.98		
Channel								
Frequency (MHz)								
651332								
40	QPSK	1	1	3720	3750	3760		
Channel								
Frequency (MHz)								
651666								
30	QPSK	1	1	25.74	25.85	25.84	27.0	0.0
Channel								
Frequency (MHz)								
652000								
20	QPSK	1	1	3710.01	3750	3749.98		
Channel								
Frequency (MHz)								
652332								
15	QPSK	1	1	3707.52	3750	3752.48		
Channel								
Frequency (MHz)								
652666								
10	QPSK	1	1	25.77	25.87	25.79	27.0	0.0

### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	20.63				
100	PI2 BPSK	1	137	20.59			22.0	0.0
100	PI2 BPSK	1	271	20.54				
100	PI2 BPSK	135	0	20.62			22.0	0.0
100	PI2 BPSK	135	69	20.61			22.0	0.0
100	PI2 BPSK	135	138	20.55			22.0	0.0
100	PI2 BPSK	270	0	20.58				
100	QPSK	1	1	20.66				
100	QPSK	1	137	20.63			22.0	0.0
100	QPSK	1	271	20.66				
100	QPSK	135	0	20.65			22.0	0.0
100	QPSK	135	69	20.67				
100	QPSK	135	138	20.58			22.0	0.0
100	QPSK	270	0	20.60			22.0	0.0
100	16QAM	1	1	20.54			22.0	0.0
100	64QAM	1	1	20.60			21.5	0.5
100	256QAM	1	1	19.17			19.5	2.5
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.99		
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3496.02	3499.98	3500		
Channel								
Frequency (MHz)								
633666								
70	QPSK	1	1	20.66	20.63	20.64	22.0	0.0
Channel								
Frequency (MHz)								
633998								
60	QPSK	1	1	20.55	20.56	20.66	22.0	0.0
Channel								
Frequency (MHz)								
634332								
50	QPSK	1	1	3476.02	3499.98	3525		
Channel								
Frequency (MHz)								
634666								
40	QPSK	1	1	3470.01	3499.98	3529.98		
Channel								
Frequency (MHz)								
635000								
30	QPSK	1	1	20.66	20.66	20.66	22.0	0.0
Channel								
Frequency (MHz)								
635332								
20	QPSK	1	1	3465.02	3499.98	3534.98		
Channel								
Frequency (MHz)								
635666								
15	QPSK	1	1	3457.5	3499.98	3542.48		
Channel								
Frequency (MHz)								
636000								
10	QPSK	1	1	20.66	20.63	20.68	22.0	0.0





Part270\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				65000				
Frequency (MHz)				3750				
100	Pl2 BPSK	1	1		21.10			
100	Pl2 BPSK	1	137		21.06		22.0	0.0
100	Pl2 BPSK	1	271		21.12			
100	Pl2 BPSK	135	0		21.06		22.0	0.0
100	Pl2 BPSK	135	69		21.06		22.0	0.0
100	Pl2 BPSK	135	138		21.15			
100	Pl2 BPSK	270	0		21.15		22.0	0.0
100	QPSK	1	1		21.16			
100	QPSK	1	137		21.09		22.0	0.0
100	QPSK	1	271		21.11			
100	QPSK	135	0		21.06			
100	QPSK	135	69		21.10		22.0	0.0
100	QPSK	135	138		21.07			
100	QPSK	270	0		21.04		22.0	0.0
100	16QAM	1	1		21.02		22.0	0.0
100	64QAM	1	1		20.98		21.5	0.5
100	256QAM	1	1		18.58		19.5	2.5
Channel				64968	65000	65032	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3744.98	(dBm)	(dB)
90	QPSK	1	1	21.11	21.13	21.01	22.0	0.0
Channel				64834	65000	65066	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3750.99	(dBm)	(dB)
80	QPSK	1	1	21.05	21.14	21.12	22.0	0.0
Channel				64800	65000	65100	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	21.07	21.07	21.01	22.0	0.0
Channel				64868	65000	65132	Tune-up limit	MPR
Frequency (MHz)				3740.02	3750	3740.98	(dBm)	(dB)
60	QPSK	1	1	21.15	21.07	21.11	22.0	0.0
Channel				64834	65000	65166	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	21.14	21.14	21.09	22.0	0.0
Channel				64800	65000	65200	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	21.10	21.09	21.12	22.0	0.0
Channel				64768	65000	65232	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	21.09	21.11	21.12	22.0	0.0
Channel				64734	65000	65266	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	21.14	21.13	21.04	22.0	0.0
Channel				64768	65000	65332	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3752.48	(dBm)	(dB)
15	QPSK	1	1	21.15	21.10	21.01	22.0	0.0
Channel				64800	65000	65310	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	21.03	21.13	21.09	22.0	0.0



Part27Q_n78 HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				63332					
Frequency (MHz)				3499.98					
100	Pi/2 BPSK	1	1	22.64					
100	Pi/2 BPSK	1	137	22.54			24.0	0.0	
100	Pi/2 BPSK	1	271	22.60					
100	Pi/2 BPSK	135	0	22.55			23.5	0.5	
100	Pi/2 BPSK	135	69	22.51			24.0	0.0	
100	Pi/2 BPSK	135	138	22.43					
100	Pi/2 BPSK	270	0	22.50			23.5	0.5	
100	QPSK	1	1	22.73					
100	QPSK	1	137	22.64			24.0	0.0	
100	QPSK	1	271	22.65					
100	QPSK	135	0	22.47					
100	QPSK	135	69	22.68			24.0	0.0	
100	QPSK	135	138	21.95					
100	QPSK	270	0	22.20			23.0	1.0	
100	16QAM	1	1	22.36			23.0	1.0	
100	64QAM	1	1	21.29			21.5	2.5	
100	256QAM	1	1	19.17			19.5	4.5	
Channel				633000	63332	633668	Tune-up limit	MPR	
Frequency (MHz)				3495	3499.98	3504.98	(dBm)	(dB)	
90	QPSK	1	1	22.70	22.58	22.68	24.0	0.0	
Channel				632968	63332	634000	Tune-up limit	MPR	
Frequency (MHz)				3490.02	3499.98	3510	(dBm)	(dB)	
80	QPSK	1	1	22.71	22.59	22.64	24.0	0.0	
Channel				632934	63332	634566	Tune-up limit	MPR	
Frequency (MHz)				3485.01	3499.98	3514.98	(dBm)	(dB)	
70	QPSK	1	1	22.62	22.00	22.58	24.0	0.0	
Channel				632000	63332	634666	Tune-up limit	MPR	
Frequency (MHz)				3480	3499.98	3489.98	(dBm)	(dB)	
60	QPSK	1	1	22.59	22.71	22.68	24.0	0.0	
Channel				631668	63332	636000	Tune-up limit	MPR	
Frequency (MHz)				3475.02	3499.98	3505	(dBm)	(dB)	
50	QPSK	1	1	22.24	22.53	22.71	24.0	0.0	
Channel				631334	63332	63532	Tune-up limit	MPR	
Frequency (MHz)				3470.01	3499.98	3509.98	(dBm)	(dB)	
40	QPSK	1	1	22.59	22.61	22.67	24.0	0.0	
Channel				631000	63332	635966	Tune-up limit	MPR	
Frequency (MHz)				3465	3499.98	3504.98	(dBm)	(dB)	
30	QPSK	1	1	22.68	22.62	22.71	24.0	0.0	
Channel				630668	63332	636000	Tune-up limit	MPR	
Frequency (MHz)				3460.02	3499.98	3500	(dBm)	(dB)	
20	QPSK	1	1	22.63	22.60	22.70	24.0	0.0	
Channel				630300	63332	636166	Tune-up limit	MPR	
Frequency (MHz)				3457.5	3499.98	3504.98	(dBm)	(dB)	
15	QPSK	1	1	22.69	22.68	22.72	24.0	0.0	
Channel				630000	63332	636332	Tune-up limit	MPR	
Frequency (MHz)				3455.01	3499.98	3504.98	(dBm)	(dB)	
10	QPSK	1	1	22.65	22.66	22.63	24.0	0.0	

Part27O_n78 HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				65000					
Frequency (MHz)				3750					
100	Pi/2 BPSK	1	1	23.05					
100	Pi/2 BPSK	1	137	22.98			24.0	0.0	
100	Pi/2 BPSK	1	271	22.92					
100	Pi/2 BPSK	135	0	22.48			23.5	0.5	
100	Pi/2 BPSK	135	69	23.03			24.0	0.0	
100	Pi/2 BPSK	135	138	22.44					
100	Pi/2 BPSK	270	0	22.51			23.5	0.5	
100	QPSK	1	1	23.12					
100	QPSK	1	137	23.06			24.0	0.0	
100	QPSK	1	271	23.02					
100	QPSK	135	0	22.06					
100	QPSK	135	69	23.06			24.0	0.0	
100	QPSK	135	138	22.02					
100	QPSK	270	0	22.09			23.0	1.0	
100	16QAM	1	1	22.13			23.0	1.0	
100	64QAM	1	1	20.16			21.5	2.5	
100	256QAM	1	1	18.98			19.5	4.5	
Channel				649668	650000	650332	Tune-up limit	MPR	
Frequency (MHz)				3745.02	3750	3754.98	(dBm)	(dB)	
90	QPSK	1	1	23.05	22.98	23.02	24.0	0.0	
Channel				649334	650000	650966	Tune-up limit	MPR	
Frequency (MHz)				3740.01	3750	3759.98	(dBm)	(dB)	
80	QPSK	1	1	23.05	23.00	23.02	24.0	0.0	
Channel				649000	650000	651000	Tune-up limit	MPR	
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)	
70	QPSK	1	1	22.96	23.03	22.97	24.0	0.0	
Channel				648668	650000	651332	Tune-up limit	MPR	
Frequency (MHz)				3730.02	3750	3739.98	(dBm)	(dB)	
60	QPSK	1	1	23.03	23.00	23.06	24.0	0.0	
Channel				648334	650000	651666	Tune-up limit	MPR	
Frequency (MHz)				3725.01	3750	3744.98	(dBm)	(dB)	
50	QPSK	1	1	23.03	23.10	23.02	24.0	0.0	
Channel				648000	650000	652000	Tune-up limit	MPR	
Frequency (MHz)				3720	3750	3760	(dBm)	(dB)	
40	QPSK	1	1	23.08	23.11	23.09	24.0	0.0	
Channel				647668	650000	652332	Tune-up limit	MPR	
Frequency (MHz)				3715.02	3750	3734.98	(dBm)	(dB)	
30	QPSK	1	1	23.10	23.08	23.10	24.0	0.0	
Channel				647334	650000	652666	Tune-up limit	MPR	
Frequency (MHz)				3710.01	3750	3739.98	(dBm)	(dB)	
20	QPSK	1	1	23.10	23.00	23.04	24.0	0.0	
Channel				647000	650000	652832	Tune-up limit	MPR	
Frequency (MHz)				3707.52	3750	3732.48	(dBm)	(dB)	
15	QPSK	1	1	23.01	22.98	23.04	24.0	0.0	
Channel				646668	650000	653166	Tune-up limit	MPR	
Frequency (MHz)				3705	3750	3755	(dBm)	(dB)	
10	QPSK	1	1	23.03	23.07	23.06	24.0	0.0	



Reduced Power Mode for DSI6

n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 372000	Power Middle Ch. F.Freq. 376000	Power High Ch. F.Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	19.14	19.17	19.07			
20	PI2 BPSK	1	53	19.03	19.22	19.06	20.0	0.0	
20	PI2 BPSK	1	104	19.16	19.31	19.10			
20	PI2 BPSK	50	0	19.12	19.15	19.05	20.0	0.0	
20	PI2 BPSK	50	28	19.12	19.25	19.17	20.0	0.0	
20	PI2 BPSK	50	56	19.17	19.24	19.10			
20	PI2 BPSK	100	0	19.12	19.17	19.12	20.0	0.0	
20	QPSK	1	1	19.21	19.39	19.17			
20	QPSK	1	53	19.18	19.21	19.98	20.0	0.0	
20	QPSK	1	104	19.16	19.19	19.13			
20	QPSK	50	0	19.13	19.19	19.11	20.0	0.0	
20	QPSK	50	28	19.20	19.32	19.30	20.0	0.0	
20	QPSK	50	56	19.12	19.23	19.29			
20	QPSK	100	0	19.20	19.25	19.09	20.0	0.0	
20	16QAM	1	1	19.10	19.24	19.10	20.0	0.0	
20	64QAM	1	1	19.12	19.28	19.04	20.0	0.0	
20	256QAM	1	1	19.07	19.07	19.06	20.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	37.13	37.600	38.000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.19	19.36	19.14	20.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	19.19	19.36	19.09	20.0	0.0	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 372000	Power Middle Ch. F.Freq. 376000	Power High Ch. F.Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	21.02	21.06	21.12			
20	PI2 BPSK	1	53	20.98	21.09	21.07	22.0	0.0	
20	PI2 BPSK	1	104	20.97	21.13	21.07			
20	PI2 BPSK	50	0	20.98	21.13	20.96	22.0	0.0	
20	PI2 BPSK	50	28	21.04	21.09	20.99	22.0	0.0	
20	PI2 BPSK	50	56	21.05	21.09	21.09			
20	PI2 BPSK	100	0	21.00	21.12	21.13	22.0	0.0	
20	QPSK	1	1	21.08	21.14	21.08			
20	QPSK	1	53	21.04	21.12	21.05	22.0	0.0	
20	QPSK	1	104	21.03	21.05	20.95			
20	QPSK	50	0	21.05	21.07	21.05	22.0	0.0	
20	QPSK	50	28	21.08	21.10	21.08	22.0	0.0	
20	QPSK	50	56	21.07	21.07	21.03			
20	QPSK	100	0	21.03	21.08	21.06	22.0	0.0	
20	16QAM	1	1	21.05	21.12	21.08	22.0	0.0	
20	64QAM	1	1	20.46	20.54	20.47	21.5	0.5	
20	256QAM	1	1	18.43	18.51	18.43	19.5	2.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.99	21.12	21.01	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.06	21.05	21.03	22.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	21.04	21.06	21.06	22.0	0.0	

n5_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 166800	Power Middle Ch. F.Freq. 167500	Power High Ch. F.Freq. 168000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.78	22.82	22.80			
20	PI2 BPSK	1	53	22.80	22.95	22.87	24.0	0.0	
20	PI2 BPSK	1	104	22.76	22.86	22.78			
20	PI2 BPSK	50	0	22.78	22.88	22.86	24.0	0.0	
20	PI2 BPSK	50	28	22.90	22.95	22.90	24.0	0.0	
20	PI2 BPSK	50	56	22.77	22.82	22.79			
20	PI2 BPSK	100	0	22.78	22.98	22.83	24.0	0.0	
20	QPSK	1	1	22.95	23.00	22.90			
20	QPSK	1	53	22.79	22.82	22.79	24.0	0.0	
20	QPSK	1	104	22.82	22.85	22.76			
20	QPSK	50	0	22.76	22.85	22.76	24.0	0.0	
20	QPSK	50	28	22.81	22.86	22.82	24.0	0.0	
20	QPSK	50	56	22.77	22.86	22.84			
20	QPSK	100	0	22.87	22.90	22.84	24.0	0.0	
20	16QAM	1	1	22.87	22.92	22.87	24.0	0.0	
20	64QAM	1	1	21.61	21.65	21.55	22.5	1.5	
20	256QAM	1	1	19.69	19.71	19.67	20.5	3.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	166.90	167.300	168.000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	167.5	168.0	169.5	22.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	166.90	167.300	168.000	Tune-up limit (dBm)	MPR (dB)	



n5_Ant 1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 167800	Power Middle Ch. / Freq. 167800	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)
Channel				834	836.5	839		
Frequency (MHz)								
20	PI2 BPSK	1	1	22.74	22.77	22.76		0.0
20	PI2 BPSK	1	53	22.91	22.86	22.86	24.0	0.0
20	PI2 BPSK	1	104	22.85	22.88	22.82		
20	PI2 BPSK	50	0	22.81	22.85	22.79	24.0	0.0
20	PI2 BPSK	50	28	22.79	22.89	22.79	24.0	0.0
20	PI2 BPSK	50	56	22.78	22.88	22.84	24.0	0.0
20	PI2 BPSK	100	0	22.68	22.78	22.75		
20	QPSK	1	1	22.95	22.98	22.80		
20	QPSK	1	53	22.72	22.78	22.73	24.0	0.0
20	QPSK	1	104	22.86	22.88	22.81		
20	QPSK	50	0	22.73	22.82	22.74	24.0	0.0
20	QPSK	50	28	22.80	22.90	22.82	24.0	0.0
20	QPSK	50	56	22.74	22.80	22.74	24.0	0.0
20	QPSK	100	0	22.65	22.69	22.63		
20	16QAM	1	1	22.81	22.85	22.78	24.0	0.0
20	64QAM	1	1	21.51	21.61	21.56	22.5	3.5
20	256QAM	1	1	19.62	19.64	19.62	20.5	3.5
Channel				165300	167300	168900	Tune-up limit (dB)	MPR
Frequency (MHz)								
15	QPSK	1	1	22.87	22.93	22.87	24.0	0.0
Channel				165800	167300	168900	Tune-up limit (dB)	MPR
Frequency (MHz)								
10	QPSK	1	1	22.90	22.90	22.87	24.0	0.0
Channel				165300	167300	169300	Tune-up limit (dB)	MPR
Frequency (MHz)								
5	QPSK	1	1	22.93	22.96	22.83	24.0	0.0

n7_Ant 9								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 504500	Power Middle Ch. / Freq. 507000	Power High Ch. / Freq. 510000	Tune-up limit (dBm)	MPR (dB)
Channel				2520	2535	2550		
Frequency (MHz)								
40	PI2 BPSK	1	1	19.73	20.01	19.83		0.0
40	PI2 BPSK	1	108	20.06	20.09	20.03	21.0	0.0
40	PI2 BPSK	1	214	20.06	20.06	20.13		
40	PI2 BPSK	108	0	19.83	20.04	20.03	21.0	0.0
40	PI2 BPSK	108	54	19.81	19.97	20.08	21.0	0.0
40	PI2 BPSK	108	108	19.97	20.17	20.01	21.0	0.0
40	PI2 BPSK	216	0	20.09	20.21	20.08		
40	QPSK	1	1	20.10	20.28	20.18		
40	QPSK	1	108	19.79	19.85	19.78	21.0	0.0
40	QPSK	1	214	20.10	20.09	20.09		
40	QPSK	108	0	20.01	20.06	20.16	21.0	0.0
40	QPSK	108	54	20.14	20.23	20.18	21.0	0.0
40	QPSK	108	108	20.07	20.16	20.15	21.0	0.0
40	QPSK	216	0	20.04	20.21	20.16		
40	16QAM	1	1	20.09	20.19	20.19	21.0	0.0
40	64QAM	1	1	19.84	19.94	19.93	21.0	0.0
40	256QAM	1	1	20.12	20.20	20.10	21.0	0.0
Channel				502000	507000	511900	Tune-up limit (dB)	MPR
Frequency (MHz)								
30	QPSK	1	1	20.10	20.23	20.12	21.0	0.0
Channel				502500	507000	511900	Tune-up limit (dB)	MPR
Frequency (MHz)								
25	QPSK	1	1	20.15	20.22	20.07	21.0	0.0
Channel				502000	507000	512000	Tune-up limit (dB)	MPR
Frequency (MHz)								
20	QPSK	1	1	20.04	20.26	20.11	21.0	0.0
Channel				501500	507000	512100	Tune-up limit (dB)	MPR
Frequency (MHz)								
15	QPSK	1	1	20.09	20.23	20.16	21.0	0.0
Channel				501000	507000	513000	Tune-up limit (dB)	MPR
Frequency (MHz)								
10	QPSK	1	1	20.09	20.24	20.13	21.0	0.0
Channel				500500	507000	513000	Tune-up limit (dB)	MPR
Frequency (MHz)								
5	QPSK	1	1	20.00	20.20	20.10	21.0	0.0

n7_Ant 1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 504500	Power Middle Ch. / Freq. 507000	Power High Ch. / Freq. 510000	Tune-up limit (dBm)	MPR (dB)
Channel				2520	2535	2550		
Frequency (MHz)								
40	PI2 BPSK	1	1	18.43	18.53	18.45		0.0
40	PI2 BPSK	1	108	18.61	18.59	18.62	19.5	0.0
40	PI2 BPSK	1	214	18.49	18.58	18.57		
40	PI2 BPSK	108	0	18.39	18.56	18.32	19.5	0.0
40	PI2 BPSK	108	54	18.32	18.57	18.51	19.5	0.0
40	PI2 BPSK	108	108	18.50	18.56	18.56	19.5	0.0
40	PI2 BPSK	216	0	18.53	18.53	18.54		
40	QPSK	1	1	18.51	18.63	18.58		
40	QPSK	1	108	18.42	18.52	18.52	19.5	0.0
40	QPSK	1	214	18.46	18.55	18.54		
40	QPSK	108	0	18.50	18.55	18.53	19.5	0.0
40	QPSK	108	54	18.52	18.62	18.61	19.5	0.0
40	QPSK	108	108	18.47	18.57	18.53	19.5	0.0
40	QPSK	216	0	18.49	18.58	18.57		
40	16QAM	1	1	18.45	18.58	18.54	19.5	0.0
40	64QAM	1	1	18.45	18.52	18.49	19.5	0.0
40	256QAM	1	1	18.44	18.58	18.59	19.5	0.0
Channel				502000	507000	511900	Tune-up limit (dB)	MPR
Frequency (MHz)								
30	QPSK	1	1	18.48	18.55	18.52	19.5	0.0
Channel				502500	507000	511900	Tune-up limit (dB)	MPR
Frequency (MHz)								
25	QPSK	1	1	18.45	18.57	18.54	19.5	0.0
Channel				502000	507000	512000	Tune-up limit (dB)	MPR
Frequency (MHz)								
20	QPSK	1	1	18.40	18.54	18.47	19.5	0.0
Channel				501500	507000	512100	Tune-up limit (dB)	MPR
Frequency (MHz)								
15	QPSK	1	1	18.49	18.56	18.53	19.5	0.0
Channel				501000	507000	513000	Tune-up limit (dB)	MPR
Frequency (MHz)								
10	QPSK	1	1	18.44	18.53	18.55	19.5	0.0
Channel				500500	507000	513000	Tune-up limit (dB)	MPR
Frequency (MHz)								
5	QPSK	1	1	18.20	18.28	18.28	19.5	0.0



n12_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	22.87	22.90	22.84	24.0	0.0	
15	PI2 BPSK	1	40	22.91	22.96	22.91			
15	PI2 BPSK	1	77	22.83	22.93	22.83			
15	PI2 BPSK	36	0	22.84	22.88	22.86	24.0	0.0	
15	PI2 BPSK	36	22	22.74	22.79	22.77	24.0	0.0	
15	PI2 BPSK	36	43	22.69	22.76	22.70	24.0	0.0	
15	PI2 BPSK	75	0	22.84	22.88	22.86	24.0	0.0	
15	QPSK	1	1	22.96	23.01	22.92			
15	QPSK	1	40	22.85	22.92	22.83	24.0	0.0	
15	QPSK	1	77	22.83	22.93	22.91			
15	QPSK	36	0	22.79	22.86	22.79	24.0	0.0	
15	QPSK	36	22	22.91	22.96	22.93	24.0	0.0	
15	QPSK	36	43	22.70	22.78	22.70	24.0	0.0	
15	QPSK	75	0	22.84	22.86	22.87	24.0	0.0	
15	16QAM	1	1	22.95	22.91	22.86	24.0	0.0	
15	64QAM	1	1	21.43	21.51	21.49	22.5	1.5	
15	256QAM	1	1	19.51	19.55	19.49	20.5	3.5	
Channel				14000	141500	142000	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	22.88	22.99	22.86	24.0	0.0	
Channel				14000	141500	142700	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	22.99	22.94	22.87	24.0	0.0	

n12_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	23.34	23.35	23.31	24.0	0.0	
15	PI2 BPSK	1	40	23.33	23.36	23.31			
15	PI2 BPSK	1	77	23.31	23.32	23.31			
15	PI2 BPSK	36	0	22.89	22.91	22.84	23.5	0.5	
15	PI2 BPSK	36	22	23.15	23.17	23.15	24.0	0.0	
15	PI2 BPSK	36	43	22.82	22.91	22.87	23.5	0.5	
15	PI2 BPSK	75	0	22.95	22.98	22.93	23.5	0.5	
15	QPSK	1	1	23.35	23.37	23.32			
15	QPSK	1	40	23.19	23.28	23.24	24.0	0.0	
15	QPSK	1	77	23.34	23.36	23.34			
15	QPSK	36	0	22.40	22.46	22.44	23.0	1.0	
15	QPSK	36	22	23.19	23.23	23.16	24.0	0.0	
15	QPSK	36	43	22.26	22.35	22.30	23.0	1.0	
15	QPSK	75	0	22.49	22.52	22.45	23.0	1.0	
15	16QAM	1	1	22.97	22.81	22.51	23.0	1.0	
15	64QAM	1	1	21.05	21.11	21.09	21.5	2.5	
15	256QAM	1	1	19.08	19.18	19.17	19.5	4.5	
Channel				14000	141500	142200	Tune-up limit	MPR	
Frequency (MHz)				704	707.5	711	(dBm)	(dB)	
10	QPSK	1	1	23.32	23.29	23.26	24.0	0.0	
Channel				14000	141500	142700	Tune-up limit	MPR	
Frequency (MHz)				701.5	707.5	713.5	(dBm)	(dB)	
5	QPSK	1	1	23.30	23.33	23.27	24.0	0.0	

n14_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				790					
Frequency (MHz)									
10	PI2 BPSK	1	1	22.78			24.0	0.0	
10	PI2 BPSK	1	26	22.80					
10	PI2 BPSK	1	50	22.76					
10	PI2 BPSK	25	0	22.84			24.0	0.0	
10	PI2 BPSK	25	14	22.89			24.0	0.0	
10	PI2 BPSK	25	27	22.83			24.0	0.0	
10	PI2 BPSK	50	0	22.84			24.0	0.0	
10	QPSK	1	1	22.82					
10	QPSK	1	26	22.80			24.0	0.0	
10	QPSK	1	50	22.72					
10	QPSK	25	0	22.85			24.0	0.0	
10	QPSK	25	14	22.71			24.0	0.0	
10	QPSK	25	27	22.88			24.0	0.0	
10	QPSK	50	0	22.86			24.0	0.0	
10	16QAM	1	1	22.90			24.0	0.0	
10	64QAM	1	1	21.57			22.5	1.5	
10	256QAM	1	1	19.45			20.5	3.5	
Channel				158100	158000	158100	Tune-up limit	MPR	
Frequency (MHz)				790.5	790.5	790.5	(dBm)	(dB)	
5	QPSK	1	1	22.74	22.75	22.75	24.0	0.0	



n14_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	PI2 BPSK	1	1	23.15					
10	PI2 BPSK	1	26	23.16			24.0	0.0	
10	PI2 BPSK	1	50	23.16					
10	PI2 BPSK	25	0	23.04			24.0	0.0	
10	PI2 BPSK	25	14	23.05			24.0	0.0	
10	PI2 BPSK	25	27	22.96			24.0	0.0	
10	PI2 BPSK	50	0	23.00					
10	QPSK	1	1	23.21					
10	QPSK	1	26	23.18			24.0	0.0	
10	QPSK	1	50	23.16					
10	QPSK	25	0	22.55			23.5	0.5	
10	QPSK	25	14	23.11			24.0	0.0	
10	QPSK	25	27	22.53			23.5	0.5	
10	QPSK	50	0	22.61					
10	16QAM	1	1	22.61			23.5	0.5	
10	64QAM	1	1	21.33			22.0	2.0	
10	256QAM	1	1	19.15			20.0	4.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.12	23.14	23.08	24.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	19.03	19.17	19.13			
40	PI2 BPSK	1	108	19.16	19.21	19.22	20.0	0.0	
40	PI2 BPSK	1	214	19.11	19.14	19.22			
40	PI2 BPSK	108	0	19.08	19.07	19.06	20.0	0.0	
40	PI2 BPSK	108	54	19.08	19.26	19.07	20.0	0.0	
40	PI2 BPSK	108	108	19.16	19.30	19.14	20.0	0.0	
40	PI2 BPSK	216	0	19.17	19.18	19.12	20.0	0.0	
40	QPSK	1	1	19.31	19.41	19.20			
40	QPSK	1	108	19.12	19.22	19.16	20.0	0.0	
40	QPSK	1	214	19.19	19.26	19.12			
40	QPSK	108	0	19.09	19.12	19.13	20.0	0.0	
40	QPSK	108	54	19.17	19.36	19.15	20.0	0.0	
40	QPSK	108	108	19.16	19.33	19.00	20.0	0.0	
40	QPSK	216	0	19.25	19.25	19.29	20.0	0.0	
40	16QAM	1	1	19.15	19.26	19.24	20.0	0.0	
40	64QAM	1	1	18.97	19.09	19.05	20.0	0.0	
40	256QAM	1	1	19.11	19.14	19.09	19.5	0.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	19.29	19.32	19.14	20.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.21	19.37	19.17	20.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.29	19.37	19.14	20.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.29	19.38	19.11	20.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.24	19.31	19.10	20.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.20	19.38	19.18	20.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	19.21	19.38	19.13	20.0	0.0	

n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	20.76	20.78	20.73			
40	PI2 BPSK	1	108	20.69	20.81	20.70	22.0	0.0	
40	PI2 BPSK	1	214	20.72	20.78	20.82			
40	PI2 BPSK	108	0	20.74	20.78	20.76	22.0	0.0	
40	PI2 BPSK	108	54	20.69	20.79	20.76	22.0	0.0	
40	PI2 BPSK	108	108	20.67	20.80	20.76	22.0	0.0	
40	PI2 BPSK	216	0	20.71	20.75	20.78	22.0	0.0	
40	QPSK	1	1	20.76	20.82	20.72			
40	QPSK	1	108	20.68	20.78	20.68	22.0	0.0	
40	QPSK	1	214	20.77	20.76	20.71			
40	QPSK	108	0	20.71	20.79	20.69	22.0	0.0	
40	QPSK	108	54	20.75	20.80	20.71	22.0	0.0	
40	QPSK	108	108	20.68	20.78	20.70	22.0	0.0	
40	QPSK	216	0	20.67	20.77	20.74	22.0	0.0	
40	16QAM	1	1	20.69	20.74	20.73	22.0	0.0	
40	64QAM	1	1	20.46	20.48	20.43	21.5	0.5	
40	256QAM	1	1	18.36	18.43	18.36	19.5	2.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	20.70	20.73	20.62	22.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.69	20.80	20.67	22.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.71	20.77	20.66	22.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.76	20.75	20.68	22.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.67	20.73	20.62	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.70	20.76	20.69	22.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	20.73	20.72	20.63	22.0	0.0	



n26(FCC)_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	22.84	22.90	22.87			
20	PI2 BPSK	1	53	22.99	23.02	22.97	24.0	0.0	
20	PI2 BPSK	1	104	22.92	23.00	22.98			
20	PI2 BPSK	50	0	22.84	22.90	22.88	24.0	0.0	
20	PI2 BPSK	50	28	22.89	22.95	22.89	24.0	0.0	
20	PI2 BPSK	50	56	22.88	22.90	22.89			
20	PI2 BPSK	100	0	22.82	22.92	22.95	24.0	0.0	
20	QPSK	1	1	23.09	23.09	23.09			
20	QPSK	1	53	22.88	22.95	22.93	24.0	0.0	
20	QPSK	1	104	22.92	23.02	23.00			
20	QPSK	50	0	22.47	22.53	22.45	23.5	0.5	
20	QPSK	50	28	22.88	22.96	22.87	24.0	0.0	
20	QPSK	50	56	22.85	22.71	22.85			
20	QPSK	100	0	22.80	22.86	22.98	23.5	0.5	
20	16QAM	1	1	22.57	22.65	22.59	23.5	0.5	
20	84QAM	1	1	21.08	21.15	21.07	22.0	2.0	
20	256QAM	1	1	19.13	19.17	19.14	20.0	4.0	
Channel				16300	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	22.95	23.03	23.03	24.0	0.0	
Channel				163800	166300	166800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	22.97	23.05	22.96	24.0	0.0	
Channel				163300	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.94	23.07	23.01	24.0	0.0	

n26(FCC)_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	23.07	23.10	23.08			
20	PI2 BPSK	1	53	23.04	23.12	23.03	24.0	0.0	
20	PI2 BPSK	1	104	23.23	23.26	23.20			
20	PI2 BPSK	50	0	22.80	22.82	22.74	23.5	0.5	
20	PI2 BPSK	50	28	23.16	23.22	23.13	24.0	0.0	
20	PI2 BPSK	50	56	22.81	22.90	22.96			
20	PI2 BPSK	100	0	22.87	22.90	22.92	23.5	0.5	
20	QPSK	1	1	23.25	23.30	23.26			
20	QPSK	1	53	23.07	23.13	23.06	24.0	0.0	
20	QPSK	1	104	23.23	23.26	23.22			
20	QPSK	50	0	22.23	22.33	22.26	23.0	1.0	
20	QPSK	50	28	23.18	23.25	23.21	24.0	0.0	
20	QPSK	50	56	22.42	22.47	22.44			
20	QPSK	100	0	22.38	22.43	22.39	23.0	1.0	
20	16QAM	1	1	22.45	22.46	22.45	23.0	1.0	
20	84QAM	1	1	20.89	20.95	20.94	21.5	2.5	
20	256QAM	1	1	18.78	18.88	18.86	19.5	4.5	
Channel				16300	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	23.15	23.25	23.16	24.0	0.0	
Channel				163800	166300	166800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	23.22	23.21	23.21	24.0	0.0	
Channel				163300	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	23.17	23.20	23.23	24.0	0.0	

n30_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 460000	Power Middle Ch. / Freq. 462500	Power High Ch. / Freq. 465000	Tune-up limit (dBm)	MPR (dB)	
Channel				2310					
Frequency (MHz)									
10	PI2 BPSK	1	1			21.29			
10	PI2 BPSK	1	26			21.30			
10	PI2 BPSK	1	50			21.33	22.5	0.0	
10	PI2 BPSK	26	0			21.34			
10	PI2 BPSK	26	14			21.35			
10	PI2 BPSK	26	27			21.35			
10	PI2 BPSK	50	0			21.33	22.5	0.0	
10	QPSK	1	1			21.37			
10	QPSK	1	26			21.29			
10	QPSK	1	50			21.31	22.5	0.0	
10	QPSK	26	0			21.30			
10	QPSK	26	14			21.35			
10	QPSK	26	27			21.30			
10	QPSK	50	0			21.28	22.5	0.0	
10	16QAM	1	1			21.34			
10	84QAM	1	1			21.34	22.5	0.0	
10	256QAM	1	1			19.86	20.5	2.0	
Channel				461500	462500	462500	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	21.30	21.27	21.34	22.5	0.0	



n30\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Free	Power Middle Ch. / Free 462000	Power High Ch. / Free	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)					2310			
10	P12 BPSK	1	1		17.69			
10	P12 BPSK	1	26		17.76		19.5	0.0
10	P12 BPSK	1	50		17.71			
10	P12 BPSK	25	0		17.74		19.5	0.0
10	P12 BPSK	25	14		17.67		19.5	0.0
10	P12 BPSK	25	27		17.71		19.5	0.0
10	P12 BPSK	50	0		17.72			
10	QPSK	1	1		17.78			
10	QPSK	1	26		17.70		19.5	0.0
10	QPSK	1	50		17.72			
10	QPSK	25	0		17.72		19.5	0.0
10	QPSK	25	14		17.77		19.5	0.0
10	QPSK	25	27		17.76		19.5	0.0
10	QPSK	50	0		17.84		19.5	0.0
10	16QAM	1	1		17.71		19.5	0.0
10	64QAM	1	1		17.71		19.5	0.0
10	256QAM	1	1		17.73		19.5	0.0
Channel				481500	462000	462000		
Frequency (MHz)				2307.5	2310	2312.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	17.63	17.58	17.57	19.5	0.0





n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	20.73	20.68	20.74			
40	PI2 BPSK	1	168	20.70	20.73	20.73	21.5	0.0	
40	PI2 BPSK	1	214	20.67	20.68	20.67			
40	PI2 BPSK	108	0	20.75	20.68	20.68	21.5	0.0	
40	PI2 BPSK	108	54	20.71	20.71	20.74	21.5	0.0	
40	PI2 BPSK	108	108	20.74	20.67	20.72	21.5	0.0	
40	PI2 BPSK	216	0	20.70	20.68	20.68			
40	QPSK	1	1	20.75	20.76	20.75			
40	QPSK	1	168	20.69	20.70	20.68	21.5	0.0	
40	QPSK	1	214	20.70	20.72	20.71			
40	QPSK	108	0	20.72	20.70	20.68	21.5	0.0	
40	QPSK	108	54	20.73	20.74	20.72	21.5	0.0	
40	QPSK	108	108	20.70	20.70	20.70	21.5	0.0	
40	QPSK	216	0	20.71	20.73	20.67			
40	16QAM	1	1	20.71	20.72	20.74	21.5	0.0	
40	64QAM	1	1	20.73	20.69	20.66	21.5	0.0	
40	256QAM	1	1	19.39	19.46	19.41	20.5	1.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	20.69	20.71	20.73	21.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.69	20.73	20.67	21.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.68	20.68	20.68	21.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.69	20.73	20.72	21.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.67	20.67	20.67	21.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.64	20.74	20.71	21.5	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	20.67	20.66	20.64	21.5	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	20.03	20.03	19.98			
40	PI2 BPSK	1	168	19.97	20.04	19.95	21.0	0.0	
40	PI2 BPSK	1	214	20.05	20.00	19.97			
40	PI2 BPSK	108	0	20.04	20.01	20.03	21.0	0.0	
40	PI2 BPSK	108	54	19.97	20.04	19.98	21.0	0.0	
40	PI2 BPSK	108	108	20.02	20.02	19.95	21.0	0.0	
40	PI2 BPSK	216	0	19.99	20.03	20.03			
40	QPSK	1	1	20.02	20.06	20.04			
40	QPSK	1	168	19.97	20.01	19.94	21.0	0.0	
40	QPSK	1	214	19.98	20.03	20.02			
40	QPSK	108	0	19.98	19.96	19.96	21.0	0.0	
40	QPSK	108	54	20.00	20.04	20.00	21.0	0.0	
40	QPSK	108	108	19.97	20.03	19.93	21.0	0.0	
40	QPSK	216	0	19.96	20.02	19.97			
40	16QAM	1	1	20.01	19.97	19.97	21.0	0.0	
40	64QAM	1	1	20.03	20.03	19.98	21.0	0.0	
40	256QAM	1	1	19.07	19.13	19.05	20.0	1.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	19.99	19.96	19.96	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.97	19.98	20.00	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.92	20.04	19.98	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.92	20.04	19.99	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.96	20.02	19.94	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.94	19.98	20.01	21.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	19.94	19.96	20.01	21.0	0.0	

n70_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	PI2 BPSK	1	1		20.91				
15	PI2 BPSK	1	40		20.95		22.0	0.0	
15	PI2 BPSK	1	77		20.92				
15	PI2 BPSK	36	0		20.94		22.0	0.0	
15	PI2 BPSK	36	22		20.85		22.0	0.0	
15	PI2 BPSK	36	43		20.93		22.0	0.0	
15	PI2 BPSK	75	0		20.93				
15	QPSK	1	1		20.95				
15	QPSK	1	40		20.94		22.0	0.0	
15	QPSK	1	77		20.94				
15	QPSK	36	0		20.91		22.0	0.0	
15	QPSK	36	22		20.93		22.0	0.0	
15	QPSK	36	43		20.90		22.0	0.0	
15	QPSK	75	0		20.91				
15	16QAM	1	1		20.93		22.0	0.0	
15	64QAM	1	1		20.94		22.0	0.0	
15	256QAM	1	1		19.65		20.5	1.5	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.90	20.85	20.89	22.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	20.88	20.90	20.92	22.0	0.0	



n70_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				1702.5			
Frequency (MHz)							
15	PI2 BPSK	1	1	21.24			
15	PI2 BPSK	1	40	21.26			22.0
15	PI2 BPSK	1	77	21.22			
15	PI2 BPSK	36	0	21.23			22.0
15	PI2 BPSK	36	22	21.23			22.0
15	PI2 BPSK	36	43	21.26			22.0
15	PI2 BPSK	75	0	21.24			22.0
15	QPSK	1	1	21.31			
15	QPSK	1	40	21.26			22.0
15	QPSK	1	77	21.22			
15	QPSK	36	0	21.21			22.0
15	QPSK	36	22	21.23			22.0
15	QPSK	36	43	21.27			22.0
15	QPSK	75	0	21.26			22.0
15	16QAM	1	1	21.21			22.0
15	64QAM	1	1	21.28			21.5
15	256QAM	1	1	19.03			19.5
Channel				34050	34050	341000	
Frequency (MHz)							
10	QPSK	1	1	21.24	21.21	21.23	22.0
Channel				33950	34050	341500	
Frequency (MHz)							
5	QPSK	1	1	21.22	21.29	21.27	22.0

n71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				136000	136100	136600	
Frequency (MHz)							
30	PI2 BPSK	1	1	23.05	23.07	22.86	
30	PI2 BPSK	1	80	22.99	22.80	22.99	24.0
30	PI2 BPSK	1	158	22.63	22.68	22.65	
30	PI2 BPSK	80	0	22.65	22.72	22.69	24.0
30	PI2 BPSK	80	40	22.65	22.74	22.66	24.0
30	PI2 BPSK	80	80	22.46	22.51	22.49	24.0
30	PI2 BPSK	160	0	22.66	22.68	22.62	24.0
30	QPSK	1	1	23.06	23.12	23.05	
30	QPSK	1	80	22.64	22.65	22.64	24.0
30	QPSK	1	158	22.66	22.72	22.67	
30	QPSK	80	0	22.66	22.73	22.71	24.0
30	QPSK	80	40	22.68	22.75	22.72	24.0
30	QPSK	80	80	22.38	22.48	22.39	24.0
30	QPSK	160	0	22.66	22.71	22.67	24.0
30	16QAM	1	1	22.99	23.02	22.95	24.0
30	64QAM	1	1	22.01	22.07	22.04	22.5
30	256QAM	1	1	20.07	20.14	20.09	20.5
Channel				136100	136100	137100	
Frequency (MHz)							
25	QPSK	1	1	23.06	23.02	22.98	24.0
Channel				136600	136100	137600	
Frequency (MHz)							
20	QPSK	1	1	23.02	23.04	23.02	24.0
Channel				136100	136100	136100	
Frequency (MHz)							
15	QPSK	1	1	22.98	23.05	22.95	24.0
Channel				680	680.5	680	
Frequency (MHz)							
10	QPSK	1	1	23.02	23.02	23.00	24.0
Channel				133100	136100	139100	
Frequency (MHz)							
5	QPSK	1	1	22.98	23.08	22.95	24.0

n71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel				136000	136100	136600	
Frequency (MHz)							
30	PI2 BPSK	1	1	23.22	23.27	23.15	
30	PI2 BPSK	1	80	23.02	23.08	23.00	24.0
30	PI2 BPSK	1	158	22.85	22.89	22.83	
30	PI2 BPSK	80	0	22.83	22.91	22.75	24.0
30	PI2 BPSK	80	40	22.92	22.95	22.79	24.0
30	PI2 BPSK	80	80	22.86	22.88	22.88	24.0
30	PI2 BPSK	160	0	22.94	23.01	22.83	24.0
30	QPSK	1	1	23.23	23.30	23.15	
30	QPSK	1	80	22.93	23.02	22.86	24.0
30	QPSK	1	158	22.93	22.95	22.83	
30	QPSK	80	0	22.99	22.88	22.94	24.0
30	QPSK	80	40	22.90	22.96	22.80	24.0
30	QPSK	80	80	22.52	22.55	22.35	24.0
30	QPSK	160	0	22.94	22.96	22.87	24.0
30	16QAM	1	1	22.90	22.98	22.84	24.0
30	64QAM	1	1	21.38	21.43	21.26	22.5
30	256QAM	1	1	19.39	19.42	19.30	20.5
Channel				136100	136100	137100	
Frequency (MHz)							
25	QPSK	1	1	23.18	23.27	23.09	24.0
Channel				136600	136100	137600	
Frequency (MHz)							
20	QPSK	1	1	23.01	23.04	23.06	24.0
Channel				136100	136100	136100	
Frequency (MHz)							
15	QPSK	1	1	23.26	23.27	23.09	24.0
Channel				680	680.5	680	
Frequency (MHz)							
10	QPSK	1	1	23.18	23.24	23.05	24.0
Channel				133100	136100	139100	
Frequency (MHz)							
5	QPSK	1	1	23.23	23.23	23.05	24.0



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				516004	516000	516996			
				2580.02	2595	2599.98			
40	Pl2 BPSK	1	1	19.78	19.82	19.75			
40	Pl2 BPSK	1	53	19.83	19.85	19.88	21.0	0.0	
40	Pl2 BPSK	1	104	19.73	19.82	19.84			
40	Pl2 BPSK	50	0	19.81	19.86	19.79	21.0	0.0	
40	Pl2 BPSK	50	28	19.74	19.81	19.83	21.0	0.0	
40	Pl2 BPSK	50	56	19.85	19.84	19.78			
40	Pl2 BPSK	100	0	19.89	19.87	19.84	21.0	0.0	
40	QPSK	1	1	19.85	19.88	19.88			
40	QPSK	1	53	19.78	19.85	19.80	21.0	0.0	
40	QPSK	1	104	19.74	19.85	19.73			
40	QPSK	50	0	19.74	19.74	19.82			
40	QPSK	50	28	19.75	19.85	19.81	21.0	0.0	
40	QPSK	50	56	19.74	19.58	19.80			
40	QPSK	100	0	19.77	19.81	19.75	21.0	0.0	
40	16QAM	1	1	19.76	19.79	19.86	21.0	0.0	
40	64QAM	1	1	19.87	19.84	19.77	21.0	0.0	
40	256QAM	1	1	19.77	19.75	19.84	21.0	0.0	
Channel									
Frequency (MHz)				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	19.83	19.79	19.82	21.0	0.0	
Channel									
Frequency (MHz)				518000	519000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	19.87	19.47	19.34	19.5	0.0	
Channel									
Frequency (MHz)				2577.51	2595	2612.49	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
15	QPSK	1	1	19.82	19.38	19.39	19.5	0.0	
Channel									
Frequency (MHz)				515004	519000	523996	Tune-up limit (dBm)	MPR (dB)	
				2578.02	2595	2614.98			
10	QPSK	1	1	19.75	19.83	19.76	21.0	0.0	

n38_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				516004	519000	519996			
				2580.02	2595	2599.98			
40	Pl2 BPSK	1	1	19.38	19.31	19.43			
40	Pl2 BPSK	1	53	19.27	19.20	19.10	19.5	0.0	
40	Pl2 BPSK	1	104	19.15	19.29	19.29			
40	Pl2 BPSK	50	0	19.26	19.42	19.38	19.5	0.0	
40	Pl2 BPSK	50	28	19.33	19.19	19.30	19.5	0.0	
40	Pl2 BPSK	50	56	19.20	19.26	19.18			
40	Pl2 BPSK	100	0	19.42	19.41	19.32	19.5	0.0	
40	QPSK	1	1	19.40	19.40	19.43			
40	QPSK	1	53	19.19	19.30	19.31	19.5	0.0	
40	QPSK	1	104	19.24	19.39	19.42			
40	QPSK	50	0	19.26	19.25	19.34			
40	QPSK	50	28	19.37	19.45	19.38	19.5	0.0	
40	QPSK	50	56	19.24	19.27	19.25			
40	QPSK	100	0	19.18	19.23	19.18	19.5	0.0	
40	16QAM	1	1	19.46	19.47	19.43	19.5	0.0	
40	64QAM	1	1	19.13	19.36	19.20	19.5	0.0	
40	256QAM	1	1	19.24	19.35	19.35	19.5	0.0	
Channel									
Frequency (MHz)				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	19.36	19.44	19.35	19.5	0.0	
Channel									
Frequency (MHz)				518000	519000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	19.37	19.47	19.34	19.5	0.0	
Channel									
Frequency (MHz)				2577.51	2595	2612.49	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
15	QPSK	1	1	19.32	19.38	19.39	19.5	0.0	
Channel									
Frequency (MHz)				515004	519000	523996	Tune-up limit (dBm)	MPR (dB)	
				2578.02	2595	2614.98			
10	QPSK	1	1	19.35	19.42	19.41	19.5	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				505002	518000	530000			
				2546.01	2592.99	2590			
100	Pl2 BPSK	1	1	19.85	19.85	19.88			
100	Pl2 BPSK	1	137	19.81	19.89	19.83	21.0	0.0	
100	Pl2 BPSK	1	271	19.89	19.73	19.72			
100	Pl2 BPSK	135	0	19.86	19.90	19.84	21.0	0.0	
100	Pl2 BPSK	135	69	19.65	19.90	19.76	21.0	0.0	
100	Pl2 BPSK	135	138	19.88	19.72	19.51			
100	Pl2 BPSK	270	0	19.89	19.87	19.86	21.0	0.0	
100	QPSK	1	1	19.85	19.92	19.91			
100	QPSK	1	137	19.80	19.70	19.71	21.0	0.0	
100	QPSK	1	271	19.83	19.83	19.90			
100	QPSK	135	0	19.81	19.81	19.85			
100	QPSK	135	69	19.76	19.91	19.76	21.0	0.0	
100	QPSK	135	138	19.74	19.81	19.65			
100	QPSK	270	0	19.70	19.89	19.84	21.0	0.0	
100	16QAM	1	1	19.85	19.83	19.85	21.0	0.0	
100	64QAM	1	1	19.89	19.74	19.77	21.0	0.0	
100	256QAM	1	1	19.88	19.76	19.78	21.0	0.0	
Channel									
Frequency (MHz)				506000	518000	528998	Tune-up limit (dBm)	MPR (dB)	
				2547	2592.99	2644.98			
90	QPSK	1	1	19.79	19.83	19.87	21.0	0.0	
Channel									
Frequency (MHz)				507204	518000	529998	Tune-up limit (dBm)	MPR (dB)	
				2536.02	2592.99	2649.99			
80	QPSK	1	1	19.75	19.81	19.81	21.0	0.0	
Channel									
Frequency (MHz)				2531.01	2592.99	2655	Tune-up limit (dBm)	MPR (dB)	
				2536	2592.99	2659.98			
70	QPSK	1	1	19.74	19.83	19.87	21.0	0.0	
Channel									
Frequency (MHz)				505200	518000	531996	Tune-up limit (dBm)	MPR (dB)	
				2536	2592.99	2659.98			
60	QPSK	1	1	19.83	19.86	19.80	21.0	0.0	
Channel									
Frequency (MHz)				504204	518000	532998	Tune-up limit (dBm)	MPR (dB)	
				2531.02	2592.99	2654.99			
50	QPSK	1	1	19.75	19.88	19.80	21.0	0.0	
Channel									
Frequency (MHz)				503202	518000	533000	Tune-up limit (dBm)	MPR (dB)	
				2516.01	2592.99	2670			
40	QPSK	1	1	19.76	19.88	19.87	21.0	0.0	
Channel									
Frequency (MHz)				502200	518000	533996	Tune-up limit (dBm)	MPR (dB)	
				2511	2592.99	2674.98			
30	QPSK	1	1	19.83	19.81	19.86	21.0	0.0	
Channel									
Frequency (MHz)				501204	518000	535998	Tune-up limit (dBm)	MPR (dB)	
				2506.02	2592.99	2679.99			
20	QPSK	1	1	19.81	19.83	19.81	21.0	0.0	
Channel									
Frequency (MHz)				500300	518000	536998	Tune-up limit (dBm)	MPR (dB)	
				2503.5	2592.99	2683.48			
15	QPSK	1	1	19.74	19.82	19.86	21.0	0.0	
Channel									
Frequency (MHz)				500002	518000	537000	Tune-up limit (dBm)	MPR (dB)	
				2501.01	2592.99	2685			
10	QPSK	1	1	19.77	19.84	19.83	21.0	0.0	



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Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	260292	518598	260300					
Frequency (MHz)	2546.91	2592.99	2550					
100	PI2 BPSK	1	1	19.85	19.85	19.88		
100	PI2 BPSK	1	137	19.61	19.89	19.83		
100	PI2 BPSK	1	271	19.89	19.73	19.72		
100	PI2 BPSK	135	9	19.86	19.80	19.84	21.0	0.0
100	PI2 BPSK	135	69	19.65	19.90	19.76	21.0	0.0
100	PI2 BPSK	135	138	19.88	19.72	19.51		
100	PI2 BPSK	270	0	19.89	19.87	19.86	21.0	0.0
100	QPSK	1	1	19.85	19.85	19.81		
100	QPSK	1	137	19.80	19.70	19.71		
100	QPSK	1	271	19.83	19.83	19.90		
100	QPSK	135	0	19.61	19.81	19.85		
100	QPSK	135	69	19.85	19.91	19.91	21.0	0.0
100	QPSK	135	138	19.74	19.81	19.65		
100	QPSK	270	0	19.70	19.88	19.84	21.0	0.0
100	16QAM	1	1	19.85	19.83	19.85	21.0	0.0
100	64QAM	1	1	19.69	19.74	19.77	21.0	0.0
100	256QAM	1	1	19.89	19.76	19.78	21.0	0.0
Channel	508200	518598	528996	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2547	2592.99	2544.98					
90	QPSK	1	1	19.70	19.83	19.87	21.0	0.0
Channel	507204	518598	529996	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2536.62	2592.99	2549.99					
80	QPSK	1	1	19.75	19.81	19.81	21.0	0.0
Channel	506204	518598	531000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2531.91	2592.99	2555					
70	QPSK	1	1	19.74	19.83	19.87	21.0	0.0
Channel	505200	518598	531996	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2524	2592.99	2559.99					
60	QPSK	1	1	19.83	19.86	19.90	21.0	0.0
Channel	504204	518598	532996	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2521.02	2592.99	2564.99					
50	QPSK	1	1	19.75	19.83	19.80	21.0	0.0
Channel	503204	518598	534000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2516.91	2592.99	2570					
40	QPSK	1	1	19.76	19.88	19.87	21.0	0.0
Channel	502200	518598	535996	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2511	2592.99	2574.98					
30	QPSK	1	1	19.83	19.81	19.86	21.0	0.0
Channel	501204	518598	535996	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2508.92	2592.99	2579.99					
20	QPSK	1	1	19.81	19.83	19.81	21.0	0.0
Channel	500700	518598	536496	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2503.5	2592.99	2582.48					
15	QPSK	1	1	19.74	19.82	19.85	21.0	0.0
Channel	500200	518598	537000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2501.01	2592.99	2586					
10	QPSK	1	1	19.77	19.84	19.83	21.0	0.0



FCC_n41_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	17.86	17.91	17.94				
100	PI2 BPSK	1	137	17.85	17.78	17.82				
100	PI2 BPSK	1	271	17.82	17.89	17.86				
100	PI2 BPSK	135	9	17.87	17.84	17.92	19.5	0.0		
100	PI2 BPSK	135	69	17.87	17.67	17.69	19.5	0.0		
100	PI2 BPSK	135	138	17.83	17.68	17.54				
100	PI2 BPSK	270	0	17.76	17.90	17.83	19.5	0.0		
100	QPSK	1	1	17.84	17.85	17.85				
100	QPSK	1	137	17.83	17.67	17.53				
100	QPSK	1	271	17.87	17.79	17.79				
100	QPSK	135	0	17.88	17.70	17.80				
100	QPSK	135	69	17.81	17.80	17.87	19.5	0.0		
100	QPSK	135	138	17.80	17.85	17.73				
100	QPSK	270	0	17.69	17.87	17.61	19.5	0.0		
100	16QAM	1	1	17.77	17.85	17.78	19.5	0.0		
100	64QAM	1	1	17.69	17.73	17.72	19.5	0.0		
100	256QAM	1	1	17.51	17.61	17.63	19.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	17.87	17.87	17.85	19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	17.84	17.87	17.82	19.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	17.87	17.85	17.87	19.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	17.85	17.80	17.81	19.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	17.85	17.80	17.85	19.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	17.92	17.91	17.83	19.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	17.91	17.85	17.83	19.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	17.92	17.91	17.83	19.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	17.88	17.85	17.86	19.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	17.92	17.85	17.88	19.5	0.0		

FCC_n41 HPUE_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	17.86	17.91	17.94				
100	PI2 BPSK	1	137	17.85	17.78	17.82				
100	PI2 BPSK	1	271	17.82	17.89	17.86				
100	PI2 BPSK	135	9	17.87	17.84	17.92	19.5	0.0		
100	PI2 BPSK	135	69	17.87	17.67	17.69	19.5	0.0		
100	PI2 BPSK	135	138	17.83	17.68	17.54				
100	PI2 BPSK	270	0	17.76	17.90	17.83	19.5	0.0		
100	QPSK	1	1	17.84	17.85	17.85				
100	QPSK	1	137	17.83	17.67	17.53				
100	QPSK	1	271	17.87	17.79	17.79				
100	QPSK	135	0	17.88	17.70	17.80				
100	QPSK	135	69	17.81	17.80	17.87	19.5	0.0		
100	QPSK	135	138	17.80	17.85	17.73				
100	QPSK	270	0	17.69	17.87	17.61	19.5	0.0		
100	16QAM	1	1	17.77	17.85	17.78	19.5	0.0		
100	64QAM	1	1	17.69	17.73	17.72	19.5	0.0		
100	256QAM	1	1	17.51	17.61	17.63	19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	17.87	17.87	17.85	19.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	17.87	17.85	17.87	19.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	17.85	17.80	17.81	19.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	17.85	17.80	17.85	19.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	17.92	17.91	17.83	19.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	17.91	17.85	17.83	19.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	17.92	17.91	17.83	19.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	17.88	17.85	17.86	19.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	17.92	17.85	17.88	19.5	0.0		

FCC_n41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	21.68	21.80	21.83				
100	PI2 BPSK	1	137	21.74	21.96	21.93				
100	PI2 BPSK	1	271	21.68	21.83	21.81				
100	PI2 BPSK	135	9	21.75	21.83	21.84	23.0	0.0		
100	PI2 BPSK	135	69	21.68	21.84	21.80	23.0	0.0		
100	PI2 BPSK	135	138	21.68	21.96	22.01				
100	PI2 BPSK	270	0	21.65	21.74	21.73	23.0	0.0		
100	QPSK	1	1	21.77	21.85	21.85				
100	QPSK	1	137	21.69	21.79	21.79				
100	QPSK	1	271	21.60	21.81	21.88				
100	QPSK	135	0	21.64	21.83	21.77				
100	QPSK	135	69	21.75	21.87	22.03	23.0	0.0		
100	QPSK	135	138	21.73	21.87	21.97				
100	QPSK	270	0	21.68	21.91	21.92	23.0	0.0		
100	16QAM	1	1	21.68	21.78	21.78	23.0	0.0		
100	64QAM	1	1	21.61	21.87	21.88	23.0	0.0		
100	256QAM	1	1	20.90	21.04	21.12	22.0	1.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	21.35	21.61	21.70	23.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	21.32	21.54	21.65	23.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	21.40	21.55	21.67	23.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	21.41	21.52	21.63	23.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	21.42	21.51	21.64	23.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	21.38	21.60	21.71	23.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	21.43	21.54	21.64	23.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	21.42	21.53	21.63	23.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	21.36	21.55	21.71	23.0	0.0		



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	21.68	21.80	21.83		
100	PI2 BPSK	1	137	21.74	21.96	21.93		
100	PI2 BPSK	1	271	21.68	21.83	21.81	23.0	0.0
100	PI2 BPSK	135	9	21.75	21.83	21.84	23.0	0.0
100	PI2 BPSK	135	69	21.68	21.84	21.80	23.0	0.0
100	PI2 BPSK	135	138	21.68	21.96	22.01		
100	PI2 BPSK	270	0	21.55	21.74	21.73		
100	QPSK	1	1	21.77	21.98	22.05		
100	QPSK	1	137	21.69	21.79	21.79	23.0	0.0
100	QPSK	1	271	21.60	21.81	21.88		
100	QPSK	135	9	21.64	21.83	21.77	23.0	0.0
100	QPSK	135	69	21.79	21.97	22.03		
100	QPSK	135	138	21.73	21.87	21.97		
100	QPSK	270	0	21.68	21.91	21.92	23.0	0.0
100	16QAM	1	1	21.68	21.78	21.78	23.0	0.0
100	64QAM	1	1	21.61	21.87	21.89	23.0	0.0
100	256QAM	1	1	20.90	21.04	21.12	22.0	1.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	23.41	23.62	23.44	23.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.33	23.48	23.72	23.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.32	21.54	21.66	23.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	21.40	21.55	21.67	23.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	21.41	21.52	21.60	23.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	21.42	21.51	21.64	23.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.38	21.60	21.71	23.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	21.43	21.54	21.64	23.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	21.42	21.56	21.66	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.36	21.56	21.71	23.0	0.0

FCC\_n41\_Ant 6

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	17.29	17.23	17.11		
100	PI2 BPSK	1	137	17.17	17.21	17.29		
100	PI2 BPSK	1	271	17.26	17.20	17.12	18.5	0.0
100	PI2 BPSK	135	9	17.26	17.25	17.15	18.5	0.0
100	PI2 BPSK	135	69	17.21	17.23	17.12	18.5	0.0
100	PI2 BPSK	135	138	17.24	17.32	17.08	18.5	0.0
100	PI2 BPSK	270	0	17.26	17.23	17.12		
100	QPSK	1	1	17.32	17.36	17.28		
100	QPSK	1	137	17.26	17.27	17.25	18.5	0.0
100	QPSK	1	271	17.23	17.23	17.12		
100	QPSK	135	9	17.21	17.29	17.11	18.5	0.0
100	QPSK	135	69	17.27	17.33	17.23		
100	QPSK	135	138	17.25	17.16	17.13		
100	QPSK	270	0	17.14	17.24	17.21	18.5	0.0
100	16QAM	1	1	17.24	17.23	17.19	18.5	0.0
100	64QAM	1	1	17.25	17.22	17.20	18.5	0.0
100	256QAM	1	1	17.19	17.20	17.33	18.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	23.41	23.62	23.44	23.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.20	17.21	17.15	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	17.23	17.26	17.22	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	17.22	17.33	17.15	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	17.24	17.23	17.19	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	17.26	17.34	17.22	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.22	17.27	17.24	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.24	17.31	17.21	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	17.27	17.23	17.20	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.28	17.33	17.17	18.5	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	17.29	17.23	17.11		
100	PI2 BPSK	1	137	17.17	17.21	17.29		
100	PI2 BPSK	1	271	17.26	17.20	17.12	18.5	0.0
100	PI2 BPSK	135	9	17.26	17.25	17.15	18.5	0.0
100	PI2 BPSK	135	69	17.21	17.23	17.12	18.5	0.0
100	PI2 BPSK	135	138	17.24	17.32	17.08	18.5	0.0
100	PI2 BPSK	270	0	17.26	17.23	17.12		
100	QPSK	1	1	17.32	17.36	17.28		
100	QPSK	1	137	17.26	17.27	17.25	18.5	0.0
100	QPSK	1	271	17.23	17.23	17.12		
100	QPSK	135	9	17.21	17.29	17.11	18.5	0.0
100	QPSK	135	69	17.27	17.33	17.23		
100	QPSK	135	138	17.25	17.16	17.13		
100	QPSK	270	0	17.14	17.24	17.21	18.5	0.0
100	16QAM	1	1	17.24	17.23	17.19	18.5	0.0
100	64QAM	1	1	17.25	17.22	17.20	18.5	0.0
100	256QAM	1	1	17.19	17.20	17.33	18.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	23.41	23.62	23.44	23.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.20	17.21	17.15	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	17.23	17.26	17.22	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	17.22	17.33	17.15	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	17.24	17.23	17.19	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	17.26	17.34	17.22	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.22	17.27	17.24	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.24	17.31	17.21	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	17.27	17.23	17.20	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.28	17.33	17.17	18.5	0.0



### FCC\_n41\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	21.89	22.00	21.71		
100	Pi2 BPSK	1	137	21.86	22.00	21.80	23.0	0.0
100	Pi2 BPSK	1	271	21.71	21.98	21.59		
100	Pi2 BPSK	135	0	21.86	22.04	21.87	23.0	0.0
100	Pi2 BPSK	135	69	21.77	22.03	21.59	23.0	0.0
100	Pi2 BPSK	135	135	21.67	21.98	21.62		
100	Pi2 BPSK	270	0	21.73	22.01	21.66	23.0	0.0
100	QPSK	1	1	21.78	22.07	21.74		
100	QPSK	1	137	21.74	22.02	21.62	23.0	0.0
100	QPSK	1	271	21.76	22.02	21.71		
100	QPSK	135	0	21.86	21.98	21.59		
100	QPSK	135	69	21.77	22.02	21.66	23.0	0.0
100	QPSK	135	135	21.88	21.98	21.62		
100	QPSK	270	0	21.76	21.98	21.66	23.0	0.0
100	16QAM	1	1	21.84	21.97	21.73	23.0	0.0
100	64QAM	1	1	21.96	21.43	21.21	22.5	0.5
100	256QAM	1	1	20.33	20.41	20.15	21.5	1.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.41	25.92	25.44		
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.36.02	25.92.99	25.49.99		
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.73	21.93	21.70	23.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.78	21.96	21.59	23.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	21.78	21.98	21.62	23.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	20.202	20.208	20.154	23.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.16.01	25.92.99	25.70		
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.64	22.01	21.72	23.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.71	21.96	21.62	23.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	21.74	21.98	21.61	23.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	21.74	22.04	21.59	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.68	22.03	21.72	23.0	0.0

### FCC\_n41 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	23.76	23.90	23.60		
100	Pi2 BPSK	1	137	23.64	23.85	23.65	25.0	0.0
100	Pi2 BPSK	1	271	23.73	23.89	23.62		
100	Pi2 BPSK	135	0	23.47	23.56	23.31	24.5	0.5
100	Pi2 BPSK	135	69	23.69	23.87	23.65	25.0	0.0
100	Pi2 BPSK	135	135	23.35	23.60	23.27		
100	Pi2 BPSK	270	0	23.45	23.60	23.22	24.5	0.5
100	QPSK	1	1	23.70	23.99	23.66		
100	QPSK	1	137	23.65	23.89	23.51	25.0	0.0
100	QPSK	1	271	23.70	23.88	23.59		
100	QPSK	135	0	22.88	22.80	22.43		
100	QPSK	135	69	23.19	23.95	23.71	25.0	0.0
100	QPSK	135	135	22.73	22.88	22.37		
100	QPSK	270	0	22.86	22.94	22.52	24.0	1.0
100	16QAM	1	1	22.86	22.97	22.84	24.0	1.0
100	64QAM	1	1	21.96	21.43	21.21	22.5	2.5
100	256QAM	1	1	20.33	20.41	20.15	21.5	3.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.41	23.92	23.44		
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.65	23.85	23.52	25.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.67	23.83	23.50	25.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.65	23.90	23.54	25.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	23.12	23.81	23.47	25.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	23.65	23.88	23.56	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.71	23.91	23.58	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.59	23.93	23.58	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.09	23.84	23.49	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.63	23.79	23.56	25.0	0.0

### Part96\_n48\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	Pi2 BPSK	1	1	17.18	17.18	17.10		
40	Pi2 BPSK	1	53	17.17	17.21	17.13	18.0	0.0
40	Pi2 BPSK	1	104	17.24	17.27	17.16		
40	Pi2 BPSK	50	0	17.16	17.20	17.19	18.0	0.0
40	Pi2 BPSK	50	26	17.13	17.13	17.12	18.0	0.0
40	Pi2 BPSK	50	56	17.22	17.19	17.14		
40	Pi2 BPSK	100	0	17.15	17.15	17.17	18.0	0.0
40	QPSK	1	1	17.27	17.31	17.21		
40	QPSK	1	53	17.17	17.19	17.11	18.0	0.0
40	QPSK	1	104	17.23	17.18	17.07		
40	QPSK	50	0	17.13	17.19	17.15		
40	QPSK	50	26	17.25	17.28	17.23	18.0	0.0
40	QPSK	50	56	17.21	17.18	17.11		
40	QPSK	100	0	17.19	17.24	17.08	18.0	0.0
40	16QAM	1	1	17.19	17.22	17.12	18.0	0.0
40	64QAM	1	1	17.21	17.11	17.07	18.0	0.0
40	256QAM	1	1	17.12	17.18	17.15	18.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	35.02	35.19	35.19		
Channel								
Frequency (MHz)								
20	QPSK	1	1	35.01	35.24	35.00	18.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.24	17.25	17.10	18.0	0.0



**Part96\_n48\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				63800	64866	64832		
Frequency (MHz)				3570	3524.99	3579.98		
40	PI2 BPSK	1	1	21.22	21.02	20.74		
40	PI2 BPSK	1	53	21.24	21.05	20.74	22.5	0.0
40	PI2 BPSK	1	104	21.26	20.99	20.89		
40	PI2 BPSK	50	0	21.24	21.04	20.90	22.5	0.0
40	PI2 BPSK	50	28	21.18	21.12	20.95	22.5	0.0
40	PI2 BPSK	50	56	21.26	21.12	20.98		
40	PI2 BPSK	100	0	21.19	21.07	20.92	22.5	0.0
40	QPSK	1	1	21.27	21.10	20.97		
40	QPSK	1	53	21.17	20.97	20.92	22.5	0.0
40	QPSK	1	104	21.26	21.04	20.89		
40	QPSK	50	0	21.25	20.97	20.74		
40	QPSK	50	28	21.26	21.17	20.95	22.5	0.0
40	QPSK	50	56	21.24	21.05	20.71		
40	QPSK	100	0	21.20	21.04	20.74	22.5	0.0
40	16QAM	1	1	21.24	21.13	20.78	22.5	0.0
40	16QAM	1	1	18.71	18.82	18.92	21.5	1.0
40	256QAM	1	1	16.87	16.83	17.12	19.5	3.0
Channel				637668	641666	645666		
Frequency (MHz)				3562.02	3524.99	3574.99		
30	QPSK	1	1	21.25	21.00	20.93	22.5	0.0
Channel				637334	641666	645000		
Frequency (MHz)				3560.01	3524.99	3590		
20	QPSK	1	1	21.17	21.07	20.87	22.5	0.0
Channel				637000	641666	645332		
Frequency (MHz)				3555	3524.99	3594.98		
10	QPSK	1	1	21.16	21.01	20.92	22.5	0.0





### Part96\_n48\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	Pi2 BPSK	1	1	15.05	14.98	15.03		
40	Pi2 BPSK	1	53	15.00	15.06	14.97	16.0	0.0
40	Pi2 BPSK	1	104	15.02	14.98	15.05		
40	Pi2 BPSK	50	0	15.07	15.01	15.06	16.0	0.0
40	Pi2 BPSK	50	28	15.04	15.06	15.04	16.0	0.0
40	Pi2 BPSK	50	56	15.07	15.07	14.95		
40	Pi2 BPSK	100	0	15.02	15.06	15.05	16.0	0.0
40	QPSK	1	1	15.05	15.08	15.01		
40	QPSK	1	53	15.03	15.06	14.91	16.0	0.0
40	QPSK	1	104	15.02	15.04	14.93		
40	QPSK	50	0	15.03	15.06	14.94		
40	QPSK	50	28	15.04	15.07	15.02	16.0	0.0
40	QPSK	50	56	15.02	15.00	14.96		
40	QPSK	100	0	15.05	15.06	15.00	16.0	0.0
40	16QAM	1	1	15.01	15.00	14.97	16.0	0.0
40	64QAM	1	1	15.01	15.06	15.02	16.0	0.0
40	256QAM	1	1	14.98	15.05	15.00	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	3562.02	3624.99	3624.99	15.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	637334	641666	646000	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	14.99	14.98	14.95	16.0	0.0

### Part96\_n48\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	Pi2 BPSK	1	1	19.14	19.19	18.88		
40	Pi2 BPSK	1	53	19.10	19.17	19.01	20.5	0.0
40	Pi2 BPSK	1	104	19.14	19.14	18.93		
40	Pi2 BPSK	50	0	19.09	19.13	18.81	20.5	0.0
40	Pi2 BPSK	50	28	19.14	19.20	18.90	20.5	0.0
40	Pi2 BPSK	50	56	19.15	19.11	18.85		
40	Pi2 BPSK	100	0	19.17	19.17	18.96	20.5	0.0
40	QPSK	1	1	19.16	19.21	19.07		
40	QPSK	1	53	19.16	19.14	18.96	20.5	0.0
40	QPSK	1	104	19.18	19.19	18.95		
40	QPSK	50	0	19.15	19.17	18.75		
40	QPSK	50	28	19.16	19.16	19.05	20.5	0.0
40	QPSK	50	56	19.11	19.18	18.93		
40	QPSK	100	0	19.16	19.17	18.91	20.5	0.0
40	16QAM	1	1	19.02	19.11	18.90	20.5	0.0
40	64QAM	1	1	19.15	19.16	18.90	20.5	0.0
40	256QAM	1	1	18.16	18.26	18.17	19.5	1.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	3562.02	3624.99	3624.99	20.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	637334	641666	646000	20.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	19.11	19.13	18.93	20.5	0.0

### Part27Q\_n77\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1			17.68		
100	Pi2 BPSK	1	137			17.70	18.5	0.0
100	Pi2 BPSK	1	271			17.70		
100	Pi2 BPSK	135	0			17.68	18.5	0.0
100	Pi2 BPSK	135	69			17.68		
100	Pi2 BPSK	135	138			17.60	18.5	0.0
100	Pi2 BPSK	270	0			17.72		
100	QPSK	1	1			17.74		
100	QPSK	1	137			17.71	18.5	0.0
100	QPSK	1	271			17.67		
100	QPSK	135	0			17.70		
100	QPSK	135	69			17.72	18.5	0.0
100	QPSK	135	138			17.68		
100	QPSK	270	0			17.68	18.5	0.0
100	16QAM	1	1			17.60	18.5	0.0
100	64QAM	1	1			17.68	18.5	0.0
100	256QAM	1	1			17.61	18.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	633000	633332	633666	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	3450.02	3499.98	3510	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	17.65	17.72	17.67	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	17.68	17.67	17.72	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	631668	633332	635000	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	3470.01	3499.98	3529.98	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.72	17.65	17.68	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.71	17.63	17.67	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	3457.5	3499.98	3542.48	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.66	17.71	17.71	18.5	0.0



### Part270\_n77\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	17.73	17.80	17.70	18.5	0.0
100	Pl2 BPSK	1	137	17.85	17.82	17.79		
100	Pl2 BPSK	1	271	17.79	17.86	17.79		
100	Pl2 BPSK	135	0	17.81	17.85	17.84		
100	Pl2 BPSK	135	69	17.78	17.85	17.78		
100	Pl2 BPSK	135	138	17.86	17.81	17.88		
100	Pl2 BPSK	270	0	17.85	17.83	17.76		
100	QPSK	1	1	17.84	17.87	17.85		
100	QPSK	1	137	17.76	17.77	17.80		
100	QPSK	1	271	17.83	17.76	17.76		
100	QPSK	135	0	17.77	17.76	17.79		
100	QPSK	135	69	17.81	17.86	17.85		
100	QPSK	135	138	17.79	17.80	17.66		
100	QPSK	270	0	17.80	17.84	17.67		
100	16QAM	1	1	17.75	17.85	17.74		
100	64QAM	1	1	17.77	17.77	17.76		
100	256QAM	1	1	17.81	17.76	17.76		
Channel								
Frequency (MHz)								
65000 65000 662332								
80	QPSK	1	1	17.73	17.84	17.73		
Channel								
Frequency (MHz)								
64834 65000 66366								
80	QPSK	1	1	17.82	17.77	17.77		
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	17.82	17.79	17.85		
Channel								
Frequency (MHz)								
64868 65000 66332								
60	QPSK	1	1	17.82	17.78	17.74		
Channel								
Frequency (MHz)								
64834 65000 66366								
50	QPSK	1	1	17.73	17.81	17.77		
Channel								
Frequency (MHz)								
3720 3840 3960								
40	QPSK	1	1	17.77	17.78	17.78		
Channel								
Frequency (MHz)								
64768 65000 66432								
30	QPSK	1	1	17.73	17.81	17.74		
Channel								
Frequency (MHz)								
64734 65000 66466								
20	QPSK	1	1	17.76	17.82	17.73		
Channel								
Frequency (MHz)								
64768 65000 66432								
15	QPSK	1	1	17.80	17.81	17.71		
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	17.78	17.84	17.80		

### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1		17.68		18.5	0.0
100	Pl2 BPSK	1	137		17.70			
100	Pl2 BPSK	1	271		17.70			
100	Pl2 BPSK	135	0		17.68			
100	Pl2 BPSK	135	69		17.68			
100	Pl2 BPSK	135	138		17.60			
100	Pl2 BPSK	270	0		17.72			
100	QPSK	1	1		17.74			
100	QPSK	1	137		17.71			
100	QPSK	1	271		17.67			
100	QPSK	135	0		17.70			
100	QPSK	135	69		17.72			
100	QPSK	135	138		17.68			
100	QPSK	270	0		17.68			
100	16QAM	1	1		17.80			
100	64QAM	1	1		17.68			
100	256QAM	1	1		17.61			
Channel								
Frequency (MHz)								
639000 633332 633668								
80	QPSK	1	1	17.68	17.67	17.67		
Channel								
Frequency (MHz)								
632968 633332 634000								
80	QPSK	1	1	17.66	17.72	17.69		
Channel								
Frequency (MHz)								
3485.01 3489.98 3514.98								
70	QPSK	1	1	17.65	17.72	17.67		
Channel								
Frequency (MHz)								
632000 633332 634668								
60	QPSK	1	1	17.68	17.67	17.72		
Channel								
Frequency (MHz)								
631668 633332 635000								
50	QPSK	1	1	17.65	17.67	17.68		
Channel								
Frequency (MHz)								
3470.01 3489.98 3529.98								
40	QPSK	1	1	17.68	17.70	17.69		
Channel								
Frequency (MHz)								
631000 633332 635668								
30	QPSK	1	1	17.72	17.65	17.68		
Channel								
Frequency (MHz)								
630668 633332 636000								
20	QPSK	1	1	17.71	17.63	17.67		
Channel								
Frequency (MHz)								
630000 633332 636668								
15	QPSK	1	1	17.68	17.72	17.72		
Channel								
Frequency (MHz)								
3455.01 3489.98 3544.98								
10	QPSK	1	1	17.66	17.71	17.71		

### Part270\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	17.73	17.80	17.70	18.5	0.0
100	Pl2 BPSK	1	137	17.85	17.82	17.79		
100	Pl2 BPSK	1	271	17.79	17.86	17.79		
100	Pl2 BPSK	135	0	17.81	17.85	17.84		
100	Pl2 BPSK	135	69	17.78	17.85	17.78		
100	Pl2 BPSK	135	138	17.86	17.81	17.88		
100	Pl2 BPSK	270	0	17.85	17.83	17.76		
100	QPSK	1	1	17.84	17.87	17.85		
100	QPSK	1	137	17.76	17.77	17.80		
100	QPSK	1	271	17.83	17.76	17.76		
100	QPSK	135	0	17.77	17.76	17.79		
100	QPSK	135	69	17.81	17.86	17.85		
100	QPSK	135	138	17.79	17.80	17.66		
100	QPSK	270	0	17.80	17.84	17.67		
100	16QAM	1	1	17.75	17.85	17.74		
100	64QAM	1	1	17.77	17.77	17.76		
100	256QAM	1	1	17.81	17.76	17.76		
Channel								
Frequency (MHz)								
65000 65000 662332								
80	QPSK	1	1	17.73	17.84	17.73		
Channel								
Frequency (MHz)								
64834 65000 66366								
80	QPSK	1	1	17.82	17.77	17.77		
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	17.82	17.79	17.85		
Channel								
Frequency (MHz)								
64868 65000 66332								
60	QPSK	1	1	17.82	17.78	17.74		
Channel								
Frequency (MHz)								
64834 65000 66366								
50	QPSK	1	1	17.73	17.81	17.77		
Channel								
Frequency (MHz)								
3720 3840 3960								
40	QPSK	1	1	17.77	17.78	17.78		
Channel								
Frequency (MHz)								
64768 65000 66432								
30	QPSK	1	1	17.73	17.81	17.74		
Channel								
Frequency (MHz)								
64734 65000 66466								
20	QPSK	1	1	17.76	17.82	17.73		
Channel								
Frequency (MHz)								
64768 65000 66432								
15	QPSK	1	1	17.80	17.81	17.71		
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	17.78	17.84	17.80		



### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	20.94				
100	PI2 BPSK	1	137	20.93			22.0	0.0
100	PI2 BPSK	1	271	20.98				
100	PI2 BPSK	135	0	20.97			22.0	0.0
100	PI2 BPSK	135	69	20.94			22.0	0.0
100	PI2 BPSK	135	138	20.92				
100	PI2 BPSK	270	0	20.96			22.0	0.0
100	QPSK	1	1	21.04				
100	QPSK	1	137	20.96			22.0	0.0
100	QPSK	1	271	20.88				
100	QPSK	135	0	20.92				
100	QPSK	135	69	20.96			22.0	0.0
100	QPSK	135	138	20.94				
100	QPSK	270	0	20.94			22.0	0.0
100	16QAM	1	1	20.94			22.0	0.0
100	64QAM	1	1	20.46			21.5	0.5
100	256QAM	1	1	18.42			19.5	2.5
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3495.02	3499.98	3510	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633666								
70	QPSK	1	1	3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
634000								
60	QPSK	1	1	3475.02	3499.98	3519.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
634334								
50	QPSK	1	1	3465.01	3499.98	3524.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
634668								
40	QPSK	1	1	3455.01	3499.98	3529.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
635000								
30	QPSK	1	1	3445.02	3499.98	3534.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
635332								
20	QPSK	1	1	3435.01	3499.98	3539.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
635666								
15	QPSK	1	1	3425.02	3499.98	3544.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
636000								
10	QPSK	1	1	3415.01	3499.98	3549.98	Tune-up limit (dBm)	MPR (dB)

### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
100	PI2 BPSK	1	1	20.97	21.00	21.01		
100	PI2 BPSK	1	137	20.98	21.01	20.96	22.0	0.0
100	PI2 BPSK	1	271	20.90	21.00	20.96		
100	PI2 BPSK	135	0	20.93	21.03	20.95	22.0	0.0
100	PI2 BPSK	135	69	20.95	21.03	20.99	22.0	0.0
100	PI2 BPSK	135	138	20.95	21.00	20.95		
100	PI2 BPSK	270	0	20.92	21.02	21.00	22.0	0.0
100	QPSK	1	1	21.00	21.06	21.03		
100	QPSK	1	137	20.94	21.02	21.00	22.0	0.0
100	QPSK	1	271	20.94	20.97	20.99		
100	QPSK	135	0	20.94	20.98	21.00		
100	QPSK	135	69	20.95	21.05	21.02	22.0	0.0
100	QPSK	135	138	20.90	20.96	20.98		
100	QPSK	270	0	20.90	20.97	20.95	22.0	0.0
100	16QAM	1	1	20.98	20.96	20.94	22.0	0.0
100	64QAM	1	1	20.44	20.96	20.40	21.5	0.5
100	256QAM	1	1	18.35	18.44	18.33	19.5	2.5
Channel								
Frequency (MHz)								
650000								
80	QPSK	1	1	3742.02	3840	3924.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
80	QPSK	1	1	3740.01	3840	3929.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
70	QPSK	1	1	3735	3840	3945	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
60	QPSK	1	1	3725.01	3840	3949.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
50	QPSK	1	1	3720.02	3840	3949.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
40	QPSK	1	1	3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
30	QPSK	1	1	3715.02	3840	3964.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
20	QPSK	1	1	3710.01	3840	3969.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
15	QPSK	1	1	3707.52	3840	3972.48	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
10	QPSK	1	1	3705	3840	3975	Tune-up limit (dBm)	MPR (dB)

### Part27Q\_n77 HPUE\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	21.47				
100	PI2 BPSK	1	137	21.44			22.5	0.0
100	PI2 BPSK	1	271	21.48				
100	PI2 BPSK	135	0	21.46			22.5	0.0
100	PI2 BPSK	135	69	21.44			22.5	0.0
100	PI2 BPSK	135	138	21.39				
100	PI2 BPSK	270	0	21.48			22.5	0.0
100	QPSK	1	1	21.49				
100	QPSK	1	137	21.44			22.5	0.0
100	QPSK	1	271	21.40				
100	QPSK	135	0	21.40				
100	QPSK	135	69	21.41			22.5	0.0
100	QPSK	135	138	21.42				
100	QPSK	270	0	21.39			22.5	0.0
100	16QAM	1	1	20.97			22.5	0.0
100	64QAM	1	1	20.51			21.5	1.0
100	256QAM	1	1	18.42			19.5	3.0
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3514.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3490.02	3499.98	3510	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633666								
70	QPSK	1	1	3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
634000								
60	QPSK	1	1	3475.02	3499.98	3519.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
634334								
50	QPSK	1	1	3465.01	3499.98	3524.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
634668								
40	QPSK	1	1	3455.01	3499.98	3529.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
635000								
30	QPSK	1	1	3445.02	3499.98	3534.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
635332								
20	QPSK	1	1	3435.01	3499.98	3539.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
635666								
15	QPSK	1	1	3425.02	3499.98	3544.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
636000								
10	QPSK	1	1	3415.01	3499.98	3549.98	Tune-up limit (dBm)	MPR (dB)



**Part270\_n77 HPUUE\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760								
100	Pi2 BPSK	1	1	2148	2145	2143		
100	Pi2 BPSK	1	137	2149	2155	2146	22.5	0.0
100	Pi2 BPSK	1	271	2143	2149	2146		
100	Pi2 BPSK	135	0	2147	2156	2137	22.5	0.0
100	Pi2 BPSK	135	69	2143	2148	2144	22.5	0.0
100	Pi2 BPSK	135	138	2140	2151	2143		
100	Pi2 BPSK	270	0	2146	2149	2154	22.5	0.0
100	QPSK	1	1	2138	2150	2135		
100	QPSK	1	137	2139	2153	2150	22.5	0.0
100	QPSK	1	271	2140	2151	2145		
100	QPSK	135	0	2144	2153	2152		
100	QPSK	135	69	2145	2154	2153	22.5	0.0
100	QPSK	135	138	2142	2148	2147		
100	QPSK	270	0	2144	2152	2149	22.5	0.0
100	16QAM	1	1	2144	2141	2139	22.5	0.0
100	64QAM	1	1	2044	2056	2049	21.5	1.0
100	256QAM	1	1	1835	1844	1833	19.5	3.0
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3742.02	3840	3924.98		
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3740.01	3840	3929.99		
Channel								
Frequency (MHz)								
65000								
70	QPSK	1	1	2142	2153	2143	22.5	0.0
Channel								
Frequency (MHz)								
65000								
60	QPSK	1	1	2139	2149	2147	22.5	0.0
Channel								
Frequency (MHz)								
65000								
50	QPSK	1	1	3725.01	3840	3924.99		
Channel								
Frequency (MHz)								
65000								
40	QPSK	1	1	2143	2154	2153	22.5	0.0
Channel								
Frequency (MHz)								
65000								
30	QPSK	1	1	2141	2151	2148	22.5	0.0
Channel								
Frequency (MHz)								
65000								
20	QPSK	1	1	2145	2152	2152	22.5	0.0
Channel								
Frequency (MHz)								
65000								
15	QPSK	1	1	3707.52	3840	3927.48		
Channel								
Frequency (MHz)								
65000								
10	QPSK	1	1	2145	2149	2144	22.5	0.0

**Part270\_n77\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pi2 BPSK	1	1			15.10		
100	Pi2 BPSK	1	137			15.06	16.0	0.0
100	Pi2 BPSK	1	271			15.12		
100	Pi2 BPSK	135	0			15.05	16.0	0.0
100	Pi2 BPSK	135	69			15.05	16.0	0.0
100	Pi2 BPSK	135	138			15.08		
100	Pi2 BPSK	270	0			15.08	16.0	0.0
100	QPSK	1	1			15.15		
100	QPSK	1	137			15.07	16.0	0.0
100	QPSK	1	271			15.11		
100	QPSK	135	0			15.11		
100	QPSK	135	69			15.14	16.0	0.0
100	QPSK	135	138			15.13		
100	QPSK	270	0			15.12	16.0	0.0
100	16QAM	1	1			15.10	16.0	0.0
100	64QAM	1	1			15.09	16.0	0.0
100	256QAM	1	1			15.08	16.0	0.0
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	3495.02	3499.98	3504.98		
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	3496.02	3499.98	3510		
Channel								
Frequency (MHz)								
63000								
70	QPSK	1	1	15.11	15.11	15.12	16.0	0.0
Channel								
Frequency (MHz)								
63000								
60	QPSK	1	1	15.11	15.09	15.11	16.0	0.0
Channel								
Frequency (MHz)								
63000								
50	QPSK	1	1	15.08	15.04	15.08	16.0	0.0
Channel								
Frequency (MHz)								
63000								
40	QPSK	1	1	15.12	15.08	15.04	16.0	0.0
Channel								
Frequency (MHz)								
63000								
30	QPSK	1	1	15.10	15.04	15.08	16.0	0.0
Channel								
Frequency (MHz)								
63000								
20	QPSK	1	1	15.09	15.04	15.07	16.0	0.0
Channel								
Frequency (MHz)								
63000								
15	QPSK	1	1	15.06	15.09	15.11	16.0	0.0
Channel								
Frequency (MHz)								
63000								
10	QPSK	1	1	15.05	15.11	15.04	16.0	0.0

**Part270\_n77\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760								
100	Pi2 BPSK	1	1	1481	1479	1470		
100	Pi2 BPSK	1	137	1477	1477	1474	16.0	0.0
100	Pi2 BPSK	1	271	1480	1481	1471		
100	Pi2 BPSK	135	0	1479	1473	1471	16.0	0.0
100	Pi2 BPSK	135	69	1476	1481	1480	16.0	0.0
100	Pi2 BPSK	135	138	1474	1480	1476		
100	Pi2 BPSK	270	0	1472	1473	1473	16.0	0.0
100	QPSK	1	1	1482	1480	1475		
100	QPSK	1	137	1478	1478	1477	16.0	0.0
100	QPSK	1	271	1474	1475	1475		
100	QPSK	135	0	1476	1477	1472		
100	QPSK	135	69	1480	1475	1475	16.0	0.0
100	QPSK	135	138	1478	1478	1470		
100	QPSK	270	0	1475	1478	1474	16.0	0.0
100	16QAM	1	1	1476	1481	1479	16.0	0.0
100	64QAM	1	1	1474	1474	1466	16.0	0.0
100	256QAM	1	1	1474	1477	1470	16.0	0.0
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3742.02	3840	3924.98		
Channel								
Frequency (MHz)								
65000								
80	QPSK	1	1	3740.01	3840	3929.99		
Channel								
Frequency (MHz)								
65000								
70	QPSK	1	1	1474	1476	1468	16.0	0.0
Channel								
Frequency (MHz)								
65000								
60	QPSK	1	1	1473	1476	1469	16.0	0.0
Channel								
Frequency (MHz)								
65000								
50	QPSK	1	1	1474	1475	1477	16.0	0.0
Channel								
Frequency (MHz)								
65000								
40	QPSK	1	1	1474	1477	1476	16.0	0.0
Channel								
Frequency (MHz)								
65000								
30	QPSK	1	1	1478	1473	1473	16.0	0.0
Channel								
Frequency (MHz)								
65000								
20	QPSK	1	1	1472	1470	1470	16.0	0.0
Channel								
Frequency (MHz)								
65000								
15	QPSK	1	1	1475	1469	1476	16.0	0.0
Channel								
Frequency (MHz)								
65000								
10	QPSK	1	1	1472	1476	1473	16.0	0.0



### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	15.10				
100	PI2 BPSK	1	137	15.06			16.0	0.0
100	PI2 BPSK	1	271	15.12				
100	PI2 BPSK	136	0	15.05			16.0	0.0
100	PI2 BPSK	136	69	15.05			16.0	0.0
100	PI2 BPSK	136	138	15.08			16.0	0.0
100	PI2 BPSK	270	0	15.10				
100	QPSK	1	1	15.15				
100	QPSK	1	137	15.07			16.0	0.0
100	QPSK	1	271	15.11				
100	QPSK	136	0	15.11			16.0	0.0
100	QPSK	136	69	15.14				
100	QPSK	136	138	15.13				
100	QPSK	270	0	15.12			16.0	0.0
100	16QAM	1	1	15.10			16.0	0.0
100	64QAM	1	1	15.06			16.0	0.0
100	256QAM	1	1	15.08			16.0	0.0
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.98		
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3496.02	3499.98	3503.98		
Channel								
Frequency (MHz)								
633668								
70	QPSK	1	1	15.11	15.11	15.11	16.0	0.0
Channel								
Frequency (MHz)								
634000								
60	QPSK	1	1	15.11	15.09	15.11	16.0	0.0
Channel								
Frequency (MHz)								
634332								
50	QPSK	1	1	3476.02	3499.98	3523.98		
Channel								
Frequency (MHz)								
634668								
40	QPSK	1	1	15.12	15.08	15.04	16.0	0.0
Channel								
Frequency (MHz)								
635000								
30	QPSK	1	1	15.10	15.04	15.08	16.0	0.0
Channel								
Frequency (MHz)								
635332								
20	QPSK	1	1	15.09	15.04	15.07	16.0	0.0
Channel								
Frequency (MHz)								
635668								
15	QPSK	1	1	15.05	15.09	15.11	16.0	0.0
Channel								
Frequency (MHz)								
636000								
10	QPSK	1	1	15.05	15.11	15.04	16.0	0.0

### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
100	PI2 BPSK	1	1	14.81	14.79	14.70		
100	PI2 BPSK	1	137	14.77	14.77	14.74	16.0	0.0
100	PI2 BPSK	1	271	14.80	14.81	14.71		
100	PI2 BPSK	136	0	14.79	14.73	14.71	16.0	0.0
100	PI2 BPSK	136	69	14.76	14.81	14.80	16.0	0.0
100	PI2 BPSK	136	138	14.74	14.80	14.76		
100	PI2 BPSK	270	0	14.72	14.73	14.73		
100	QPSK	1	1	14.82	14.80	14.75		
100	QPSK	1	137	14.78	14.78	14.77	16.0	0.0
100	QPSK	1	271	14.74	14.75	14.75		
100	QPSK	136	0	14.76	14.77	14.72		
100	QPSK	136	69	14.80	14.76	14.75	16.0	0.0
100	QPSK	136	138	14.78	14.78	14.70		
100	QPSK	270	0	14.79	14.78	14.74	16.0	0.0
100	16QAM	1	1	14.76	14.81	14.79	16.0	0.0
100	64QAM	1	1	14.74	14.74	14.66	16.0	0.0
100	256QAM	1	1	14.74	14.77	14.70	16.0	0.0
Channel								
Frequency (MHz)								
650332								
80	QPSK	1	1	14.77	14.77	14.73	16.0	0.0
Channel								
Frequency (MHz)								
650668								
80	QPSK	1	1	14.80	14.80	14.71	16.0	0.0
Channel								
Frequency (MHz)								
651000								
70	QPSK	1	1	14.74	14.76	14.68	16.0	0.0
Channel								
Frequency (MHz)								
651332								
60	QPSK	1	1	14.73	14.75	14.69	16.0	0.0
Channel								
Frequency (MHz)								
651668								
50	QPSK	1	1	14.74	14.75	14.77	16.0	0.0
Channel								
Frequency (MHz)								
652000								
40	QPSK	1	1	14.74	14.77	14.76	16.0	0.0
Channel								
Frequency (MHz)								
652332								
30	QPSK	1	1	14.78	14.73	14.73	16.0	0.0
Channel								
Frequency (MHz)								
652668								
20	QPSK	1	1	14.72	14.70	14.70	16.0	0.0
Channel								
Frequency (MHz)								
653000								
15	QPSK	1	1	14.75	14.69	14.76	16.0	0.0
Channel								
Frequency (MHz)								
653332								
10	QPSK	1	1	14.72	14.76	14.73	16.0	0.0

### Part27Q\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	18.40				
100	PI2 BPSK	1	137	18.40			19.5	0.0
100	PI2 BPSK	1	271	18.31				
100	PI2 BPSK	136	0	18.35			19.5	0.0
100	PI2 BPSK	136	69	18.35			19.5	0.0
100	PI2 BPSK	136	138	18.31			19.5	0.0
100	PI2 BPSK	270	0	18.38			19.5	0.0
100	QPSK	1	1	18.41				
100	QPSK	1	137	18.38			19.5	0.0
100	QPSK	1	271	18.31				
100	QPSK	136	0	18.31			19.5	0.0
100	QPSK	136	69	18.40				
100	QPSK	136	138	18.33			19.5	0.0
100	QPSK	270	0	18.39			19.5	0.0
100	16QAM	1	1	18.33			19.5	0.0
100	64QAM	1	1	18.39			19.5	0.0
100	256QAM	1	1	18.39			19.5	0.0
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.98		
Channel								
Frequency (MHz)								
633332								
80	QPSK	1	1	3496.02	3499.98	3503.98		
Channel								
Frequency (MHz)								
633668								
70	QPSK	1	1	18.30	18.36	18.30	19.5	0.0
Channel								
Frequency (MHz)								
634000								
60	QPSK	1	1	18.33	18.33	18.35	19.5	0.0
Channel								
Frequency (MHz)								
634332								
50	QPSK	1	1	3475.02	3499.98	3524.98		
Channel								
Frequency (MHz)								
634668								
40	QPSK	1	1	18.34	18.30	18.34	19.5	0.0
Channel								
Frequency (MHz)								
635000								
30	QPSK	1	1	18.39	18.39	18.38	19.5	0.0
Channel								
Frequency (MHz)								
635332								
20	QPSK	1	1	18.33	18.37	18.34	19.5	0.0
Channel								
Frequency (MHz)								
635668								
15	QPSK	1	1	18.30	18.33	18.34	19.5	0.0
Channel								
Frequency (MHz)								
636000								
10	QPSK	1	1	18.33	18.32	18.31	19.5	0.0



### Part270\_n77\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3760	3840	3930		
100	Pl2 BPSK	1	1	17.83	17.88	17.95		
100	Pl2 BPSK	1	137	17.89	17.96	17.96	19.5	0.0
100	Pl2 BPSK	1	271	17.90	17.90	17.73		
100	Pl2 BPSK	135	0	17.85	17.95	17.90	19.5	0.0
100	Pl2 BPSK	135	69	17.82	17.97	17.86	19.5	0.0
100	Pl2 BPSK	135	138	17.77	17.93	17.98	19.5	0.0
100	Pl2 BPSK	270	0	17.77	17.90	17.92		
100	QPSK	1	1	17.97	18.00	17.93		
100	QPSK	1	137	17.77	17.89	17.89	19.5	0.0
100	QPSK	1	271	17.86	17.96	17.92		
100	QPSK	135	0	17.84	17.90	17.86		
100	QPSK	135	69	17.81	17.96	17.88	19.5	0.0
100	QPSK	135	138	17.76	17.86	17.97		
100	QPSK	270	0	17.86	17.97	17.90	19.5	0.0
100	16QAM	1	1	17.97	17.98	17.80	19.5	0.0
100	64QAM	1	1	17.74	17.94	17.97	19.5	0.0
100	256QAM	1	1	17.85	17.97	17.98	19.5	0.0
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3742.02	3840	3924.98		
80	QPSK	1	1	17.54	17.54	17.53	19.5	0.0
Channel								
Frequency (MHz)								
				64834	65000	65066		
				3740.01	3840	3929.99		
80	QPSK	1	1	17.85	17.93	17.82	19.5	0.0
Channel								
Frequency (MHz)								
				64834	65000	65332		
				3735	3840	3945		
70	QPSK	1	1	17.77	17.97	17.82	19.5	0.0
Channel								
Frequency (MHz)								
				64868	65000	65332		
				3720.02	3840	3949.98		
60	QPSK	1	1	17.78	17.96	17.88	19.5	0.0
Channel								
Frequency (MHz)								
				64834	65000	66366		
				3725.01	3840	3954.99		
50	QPSK	1	1	17.50	17.57	17.55	19.5	0.0
Channel								
Frequency (MHz)								
				64800	65000	66000		
				3720	3840	3960		
40	QPSK	1	1	17.76	17.94	17.84	19.5	0.0
Channel								
Frequency (MHz)								
				64768	65000	66432		
				3715.02	3840	3954.98		
30	QPSK	1	1	17.82	17.89	17.91	19.5	0.0
Channel								
Frequency (MHz)								
				64734	65000	65698		
				3710.01	3840	3959.99		
20	QPSK	1	1	17.54	17.56	17.52	19.5	0.0
Channel								
Frequency (MHz)								
				64768	65000	66432		
				3707.52	3840	3972.48		
15	QPSK	1	1	17.62	17.92	17.83	19.5	0.0
Channel								
Frequency (MHz)								
				64700	65000	66000		
				3705	3840	3975		
10	QPSK	1	1	17.83	17.94	17.89	19.5	0.0

### Part27Q\_n77 HPUE\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				63300	63332	63366		
				3499.98				
100	Pl2 BPSK	1	1	18.40	18.40			
100	Pl2 BPSK	1	137	18.40	18.40		19.5	0.0
100	Pl2 BPSK	1	271	18.31	18.31			
100	Pl2 BPSK	135	0	18.35	18.35		19.5	0.0
100	Pl2 BPSK	135	69	18.35	18.35		19.5	0.0
100	Pl2 BPSK	135	138	18.31	18.31		19.5	0.0
100	Pl2 BPSK	270	0	18.38	18.38			
100	QPSK	1	1	18.41	18.41			
100	QPSK	1	137	18.38	18.38		19.5	0.0
100	QPSK	1	271	18.31	18.31			
100	QPSK	135	0	18.31	18.31			
100	QPSK	135	69	18.40	18.40		19.5	0.0
100	QPSK	135	138	18.35	18.35		19.5	0.0
100	QPSK	270	0	18.38	18.38		19.5	0.0
100	16QAM	1	1	18.33	18.33	18.35	19.5	0.0
100	64QAM	1	1	18.36	18.36	18.35	19.5	0.0
100	256QAM	1	1	18.39	18.39	18.35	19.5	0.0
Channel								
Frequency (MHz)								
				63300	63332	63366		
				3495	3499.98	3504.97		
80	QPSK	1	1	18.37	18.38	18.39	19.5	0.0
Channel								
Frequency (MHz)								
				63268	63332	63400		
				3490.02	3499.98	3510		
80	QPSK	1	1	18.33	18.35	18.37	19.5	0.0
Channel								
Frequency (MHz)								
				63268	63332	63666		
				3485.01	3499.98	3514.98		
70	QPSK	1	1	18.30	18.36	18.30	19.5	0.0
Channel								
Frequency (MHz)								
				63200	63332	63666		
				3480	3499.98	3518.98		
60	QPSK	1	1	18.33	18.33	18.35	19.5	0.0
Channel								
Frequency (MHz)								
				63168	63332	63600		
				3475.02	3499.98	3525		
50	QPSK	1	1	18.35	18.31	18.32	19.5	0.0
Channel								
Frequency (MHz)								
				63134	63332	63332		
				3470.01	3499.98	3529.98		
40	QPSK	1	1	18.34	18.30	18.34	19.5	0.0
Channel								
Frequency (MHz)								
				63100	63332	63666		
				3465	3499.98	3534.98		
30	QPSK	1	1	18.39	18.39	18.38	19.5	0.0
Channel								
Frequency (MHz)								
				63068	63332	63600		
				3460.02	3499.98	3540		
20	QPSK	1	1	18.33	18.37	18.38	19.5	0.0
Channel								
Frequency (MHz)								
				63000	63332	63666		
				3457.5	3499.98	3544.98		
15	QPSK	1	1	18.30	18.33	18.34	19.5	0.0
Channel								
Frequency (MHz)								
				62934	63332	63332		
				3455.01	3499.98	3544.98		
10	QPSK	1	1	18.33	18.32	18.31	19.5	0.0

### Part270\_n77 HPUE\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3750	3840	3930		
100	Pl2 BPSK	1	1	17.83	17.88	17.95		
100	Pl2 BPSK	1	137	17.89	17.96	17.96	19.5	0.0
100	Pl2 BPSK	1	271	17.90	17.90	17.73		
100	Pl2 BPSK	135	0	17.85	17.95	17.90	19.5	0.0
100	Pl2 BPSK	135	69	17.82	17.97	17.86	19.5	0.0
100	Pl2 BPSK	135	138	17.77	17.93	17.98	19.5	0.0
100	Pl2 BPSK	270	0	17.77	17.90	17.92		
100	QPSK	1	1	17.97	18.00	17.93		
100	QPSK	1	137	17.77	17.89	17.89	19.5	0.0
100	QPSK	1	271	17.86	17.96	17.92		
100	QPSK	135	0	17.84	17.90	17.86		
100	QPSK	135	69	17.81	17.96	17.88	19.5	0.0
100	QPSK	135	138	17.76	17.86	17.97		
100	QPSK	270	0	17.86	17.97	17.90	19.5	0.0
100	16QAM	1	1	17.97	17.98	17.80	19.5	0.0
100	64QAM	1	1	17.74	17.94	17.97	19.5	0.0
100	256QAM	1	1	17.85	17.97	17.98	19.5	0.0
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3742.02	3840	3924.98		
80	QPSK	1	1	17.54	17.54	17.53	19.5	0.0
Channel								
Frequency (MHz)								
				64834	65000	65066		
				3740.01	3840	3929.99		
80	QPSK	1	1	17.85	17.93	17.82	19.5	0.0
Channel								
Frequency (MHz)								
				64834	65000	65332		
				3735	3840	3945		
70	QPSK	1	1	17.77	17.97	17.82	19.5	0.0
Channel								
Frequency (MHz)								
				64868	65000	65332		
				3720.02	3840	3949.98		
60	QPSK	1	1	17.78	17.96	17.88	19.5	0.0
Channel								
Frequency (MHz)								
				64834	65000	66366		
				3725.01	3840	3954.99		
50	QPSK	1	1	17.50	17.57	17.55	19.5	0.0
Channel								
Frequency (MHz)								
				64800	65000	66000		
				3720	3840	3960		
40	QPSK	1	1	17.76	17.94	17.84	19.5	0.0
Channel								
Frequency (MHz)								
				64768	65000	66432		
				3715.02	3840	3954.98		
30	QPSK	1	1	17.82	17.89	17.91	19.5	0.0
Channel								
Frequency (MHz)								
				64734	65000	65698		
				3710.01	3840	3959.99		
20	QPSK	1	1	17.54	17.56	17.52	19.5	0.0
Channel								
Frequency (MHz)								
				64768	65000	66432		
				3707.52	3840	3972.48		
15	QPSK	1	1	17.62	17.92	17.83	19.5	0.0
Channel								
Frequency (MHz)								
				64700	65000	66000		
				3705	3840	3975		
10	QPSK	1	1	17.83	17.94	17.89	19.5	0.0



### Part27Q\_n78\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pl2 BPSK	1	1	17.27				
100	Pl2 BPSK	1	137	17.29			18.5	0.0
100	Pl2 BPSK	1	271	17.33				
100	Pl2 BPSK	135	0	17.33			18.5	0.0
100	Pl2 BPSK	135	69	17.33			18.5	0.0
100	Pl2 BPSK	135	138	17.30				
100	Pl2 BPSK	270	0	17.27			18.5	0.0
100	QPSK	1	1	17.30				
100	QPSK	1	137	17.27			18.5	0.0
100	QPSK	1	271	17.34				
100	QPSK	135	0	17.30			18.5	0.0
100	QPSK	135	69	17.30				
100	QPSK	135	138	17.30				
100	QPSK	270	0	17.29			18.5	0.0
100	16QAM	1	1	17.28			18.5	0.0
100	64QAM	1	1	17.33			18.5	0.0
100	256QAM	1	1	17.29			18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.31	17.31	17.27	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.28	17.28	17.34	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	17.28	17.32	17.30	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	17.29	17.27	17.31	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	17.25	17.29	17.28	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	17.25	17.29	17.31	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.29	17.28	17.30	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.30	17.28	17.27	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	17.31	17.32	17.30	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.29	17.32	17.26	18.5	0.0

### Part27Q\_n78\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pl2 BPSK	1	1	17.28				
100	Pl2 BPSK	1	137	17.26			18.5	0.0
100	Pl2 BPSK	1	271	17.27				
100	Pl2 BPSK	135	0	17.21			18.5	0.0
100	Pl2 BPSK	135	69	17.26			18.5	0.0
100	Pl2 BPSK	135	138	17.27				
100	Pl2 BPSK	270	0	17.29			18.5	0.0
100	QPSK	1	1	17.30				
100	QPSK	1	137	17.28			18.5	0.0
100	QPSK	1	271	17.25				
100	QPSK	135	0	17.22			18.5	0.0
100	QPSK	135	69	17.26				
100	QPSK	135	138	17.26				
100	QPSK	270	0	17.22			18.5	0.0
100	16QAM	1	1	17.22			18.5	0.0
100	64QAM	1	1	17.26			18.5	0.0
100	256QAM	1	1	17.20			18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.29	17.25	17.20	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.27	17.25	17.25	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	17.19	17.22	17.26	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	17.26	17.23	17.23	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	17.28	17.23	17.22	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	17.25	17.28	17.21	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.23	17.19	17.28	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.20	17.21	17.20	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	17.26	17.24	17.23	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.28	17.27	17.26	18.5	0.0

### Part27Q\_n78\_HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pl2 BPSK	1	1	17.27				
100	Pl2 BPSK	1	137	17.29			18.5	0.0
100	Pl2 BPSK	1	271	17.33				
100	Pl2 BPSK	135	0	17.33			18.5	0.0
100	Pl2 BPSK	135	69	17.33			18.5	0.0
100	Pl2 BPSK	135	138	17.30				
100	Pl2 BPSK	270	0	17.27			18.5	0.0
100	QPSK	1	1	17.30				
100	QPSK	1	137	17.27			18.5	0.0
100	QPSK	1	271	17.34				
100	QPSK	135	0	17.30			18.5	0.0
100	QPSK	135	69	17.30				
100	QPSK	135	138	17.30				
100	QPSK	270	0	17.29			18.5	0.0
100	16QAM	1	1	17.28			18.5	0.0
100	64QAM	1	1	17.33			18.5	0.0
100	256QAM	1	1	17.29			18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.31	17.31	17.27	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	17.28	17.26	17.34	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	17.28	17.32	17.30	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	17.29	17.27	17.31	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	17.25	17.29	17.28	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	17.30	17.28	17.31	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.29	17.28	17.30	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.30	17.28	17.27	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	17.31	17.32	17.30	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.29	17.32	17.26	18.5	0.0



**Part270\_n78 HPU\_E\_Ant 4**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				65000	3750			
100	PI2 BPSK	1	1		17.28			
100	PI2 BPSK	1	137		17.26		18.5	0.0
100	PI2 BPSK	1	271		17.27			
100	PI2 BPSK	135	0		17.21		18.5	0.0
100	PI2 BPSK	135	69		17.26		18.5	0.0
100	PI2 BPSK	135	138		17.27			
100	PI2 BPSK	270	0		17.29		18.5	0.0
100	QPSK	1	1		17.30			
100	QPSK	1	137		17.28		18.5	0.0
100	QPSK	1	271		17.25			
100	QPSK	135	0		17.22			
100	QPSK	135	69		17.26		18.5	0.0
100	QPSK	135	138		17.24			
100	QPSK	270	0		17.22		18.5	0.0
100	16QAM	1	1		17.22		18.5	0.0
100	16QAM	1	1		17.26		18.5	0.0
100	256QAM	1	1		17.20		18.5	0.0
Channel								
Frequency (MHz)								
				649688	650000	650332	Tune-up limit	MPR
90	QPSK	1	1	3742.02	3750	3754.98	(dBm)	(dB)
Channel								
Frequency (MHz)								
				648334	650000	650666	Tune-up limit	MPR
80	QPSK	1	1	3740.01	3750	3759.99	(dBm)	(dB)
Channel								
Frequency (MHz)								
				648000	650000	651000	Tune-up limit	MPR
70	QPSK	1	1	3735	3750	3765	(dBm)	(dB)
Channel								
Frequency (MHz)								
				648688	650000	651332	Tune-up limit	MPR
60	QPSK	1	1	3728.02	3750	3769.98	(dBm)	(dB)
Channel								
Frequency (MHz)								
				648334	650000	651666	Tune-up limit	MPR
50	QPSK	1	1	3725.01	3750	3774.99	(dBm)	(dB)
Channel								
Frequency (MHz)								
				647688	650000	652332	Tune-up limit	MPR
40	QPSK	1	1	3722	3723	3722	18.5	0.0
Channel								
Frequency (MHz)								
				648000	650000	652000	Tune-up limit	MPR
30	QPSK	1	1	3720	3750	3780	(dBm)	(dB)
Channel								
Frequency (MHz)								
				647168	650000	652632	Tune-up limit	MPR
20	QPSK	1	1	3715.09	3750	3784.98	(dBm)	(dB)
Channel								
Frequency (MHz)								
				647334	650000	652888	Tune-up limit	MPR
15	QPSK	1	1	3710.61	3750	3789.99	(dBm)	(dB)
Channel								
Frequency (MHz)								
				647168	650000	653332	Tune-up limit	MPR
10	QPSK	1	1	3707.52	3750	3792.48	(dBm)	(dB)
Channel								
Frequency (MHz)								
				647000	650000	653500	Tune-up limit	MPR
10	QPSK	1	1	3705	3750	3795	(dBm)	(dB)
Channel								
Frequency (MHz)								
				64728	17.27	17.26	18.5	0.0





### Part27Q\_n78\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	19.69				
100	PI2 BPSK	1	137	19.71			21.0	0.0
100	PI2 BPSK	1	271	19.72				
100	PI2 BPSK	135	0	19.69			21.0	0.0
100	PI2 BPSK	135	69	19.78			21.0	0.0
100	PI2 BPSK	135	138	19.75			21.0	0.0
100	PI2 BPSK	270	0	19.75				
100	QPSK	1	1	19.79				
100	QPSK	1	137	19.75			21.0	0.0
100	QPSK	1	271	19.76				
100	QPSK	135	0	19.77				
100	QPSK	135	69	19.76			21.0	0.0
100	QPSK	135	138	19.69				
100	QPSK	270	0	19.75			21.0	0.0
100	16QAM	1	1	19.72			21.0	0.0
100	64QAM	1	1	19.68			21.0	0.0
100	256QAM	1	1	19.25			20.5	0.5
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
632968								
80	QPSK	1	1	3496.02	3499.98	3503.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
3495.02								
80	QPSK	1	1	19.75	19.71	19.77	21.0	0.0
Channel								
Frequency (MHz)								
3485.01								
70	QPSK	1	1	19.69	19.76	19.71	21.0	0.0
Channel								
Frequency (MHz)								
632000								
60	QPSK	1	1	3475.02	3499.98	3525	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
631668								
50	QPSK	1	1	3475.02	3499.98	3525	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
631334								
40	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
631000								
30	QPSK	1	1	19.72	19.75	19.70	21.0	0.0
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1	3465.01	3499.98	3534.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
630334								
15	QPSK	1	1	19.71	19.70	19.76	21.0	0.0
Channel								
Frequency (MHz)								
630000								
10	QPSK	1	1	19.68	19.73	19.69	21.0	0.0
Channel								
Frequency (MHz)								
629668								
10	QPSK	1	1	19.69	19.72	19.72	21.0	0.0
Channel								
Frequency (MHz)								
629334								
10	QPSK	1	1	19.71	19.72	19.75	21.0	0.0

### Part27O\_n78\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	PI2 BPSK	1	1	20.04				
100	PI2 BPSK	1	137	20.01			21.0	0.0
100	PI2 BPSK	1	271	20.06				
100	PI2 BPSK	135	0	19.98			21.0	0.0
100	PI2 BPSK	135	69	19.98			21.0	0.0
100	PI2 BPSK	135	138	20.03			21.0	0.0
100	PI2 BPSK	270	0	19.98				
100	QPSK	1	1	20.08				
100	QPSK	1	137	19.95			21.0	0.0
100	QPSK	1	271	20.00				
100	QPSK	135	0	20.03				
100	QPSK	135	69	20.05			21.0	0.0
100	QPSK	135	138	19.95				
100	QPSK	270	0	20.04			21.0	0.0
100	16QAM	1	1	20.03			21.0	0.0
100	64QAM	1	1	19.97			21.0	0.0
100	256QAM	1	1	19.26			20.5	0.5
Channel								
Frequency (MHz)								
649668								
80	QPSK	1	1	3742.02	3750	3742.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
649334								
80	QPSK	1	1	3740.01	3750	3750.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
3740.01								
80	QPSK	1	1	20.06	20.00	20.00	21.0	0.0
Channel								
Frequency (MHz)								
648668								
70	QPSK	1	1	3735	3750	3765	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
648334								
60	QPSK	1	1	20.01	19.97	20.06	21.0	0.0
Channel								
Frequency (MHz)								
648000								
60	QPSK	1	1	19.98	20.03	20.03	21.0	0.0
Channel								
Frequency (MHz)								
647668								
50	QPSK	1	1	3725.01	3750	3744.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
647334								
40	QPSK	1	1	3720.01	3750	3760	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
647000								
40	QPSK	1	1	20.06	20.06	20.06	21.0	0.0
Channel								
Frequency (MHz)								
646668								
30	QPSK	1	1	20.02	20.02	19.99	21.0	0.0
Channel								
Frequency (MHz)								
646334								
20	QPSK	1	1	3715.01	3750	3769.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
646000								
20	QPSK	1	1	20.03	20.02	20.00	21.0	0.0
Channel								
Frequency (MHz)								
645668								
15	QPSK	1	1	19.97	20.06	20.06	21.0	0.0
Channel								
Frequency (MHz)								
645334								
10	QPSK	1	1	19.99	20.02	20.03	21.0	0.0

### Part27Q\_n78\_HPUE\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	19.69				
100	PI2 BPSK	1	137	19.71			21.0	0.0
100	PI2 BPSK	1	271	19.72				
100	PI2 BPSK	135	0	19.69			21.0	0.0
100	PI2 BPSK	135	69	19.78			21.0	0.0
100	PI2 BPSK	135	138	19.75			21.0	0.0
100	PI2 BPSK	270	0	19.75				
100	QPSK	1	1	19.79				
100	QPSK	1	137	19.75			21.0	0.0
100	QPSK	1	271	19.76				
100	QPSK	135	0	19.77				
100	QPSK	135	69	19.76			21.0	0.0
100	QPSK	135	138	19.69				
100	QPSK	270	0	19.75			21.0	0.0
100	16QAM	1	1	19.72			21.0	0.0
100	64QAM	1	1	19.68			21.0	0.0
100	256QAM	1	1	19.25			20.5	0.5
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	3495	3499.98	3504.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
632968								
80	QPSK	1	1	3496.02	3499.98	3503.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
3495.02								
80	QPSK	1	1	19.75	19.71	19.77	21.0	0.0
Channel								
Frequency (MHz)								
3485.01								
70	QPSK	1	1	19.69	19.76	19.71	21.0	0.0
Channel								
Frequency (MHz)								
632000								
60	QPSK	1	1	3475.02	3499.98	3525	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
631668								
50	QPSK	1	1	3475.02	3499.98	3525	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
631334								
40	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
631000								
30	QPSK	1	1	19.72	19.75	19.70	21.0	0.0
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1	3465.01	3499.98	3534.98	Tune-up limit (dB)	MPR
Channel								
Frequency (MHz)								
630334								
15	QPSK	1	1	19.71	19.70	19.76	21.0	0.0
Channel								
Frequency (MHz)								
630000								
10	QPSK	1	1	19.68	19.73	19.69	21.0	0.0
Channel								
Frequency (MHz)								
629668								
10	QPSK	1	1	19.69	19.72	19.72	21.0	0.0
Channel								
Frequency (MHz)								
629334								
10	QPSK	1	1	19.71	19.72	19.75	21.0	0.0



**Part27O\_n78 HPUe\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				650000					
Frequency (MHz)				3750					
100	PI2 BPSK	1	1		20.04				
100	PI2 BPSK	1	137		20.01		21.0	0.0	
100	PI2 BPSK	1	271		20.06				
100	PI2 BPSK	135	0		19.98		21.0	0.0	
100	PI2 BPSK	135	69		19.98				
100	PI2 BPSK	135	138		20.03				
100	PI2 BPSK	270	0		19.98		21.0	0.0	
100	QPSK	1	1		20.08				
100	QPSK	1	137		19.95		21.0	0.0	
100	QPSK	1	271		20.00				
100	QPSK	135	0		20.03				
100	QPSK	135	69		20.05		21.0	0.0	
100	QPSK	135	138		19.95				
100	QPSK	270	0		20.04		21.0	0.0	
100	16QAM	1	1		20.03		21.0	0.0	
100	64QAM	1	1		19.97		21.0	0.0	
100	256QAM	1	1		19.26		20.5	0.5	
Channel				649668	650000	650332	Tune-up limit	MPR	
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)	
90	QPSK	1	1		20.03	20.05	20.03	21.0	0.0
Channel				648334	650000	650666	Tune-up limit	MPR	
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)	
80	QPSK	1	1		20.06	20.00	20.00	21.0	0.0
Channel				648000	650000	651000	Tune-up limit	MPR	
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)	
70	QPSK	1	1		20.01	19.97	20.06	21.0	0.0
Channel				648688	650000	651332	Tune-up limit	MPR	
Frequency (MHz)				3748.02	3750	3749.98	(dBm)	(dB)	
60	QPSK	1	1		19.98	20.03	20.03	21.0	0.0
Channel				648334	650000	651666	Tune-up limit	MPR	
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)	
50	QPSK	1	1		20.03	20.02	20.00	21.0	0.0
Channel				648000	650000	652000	Tune-up limit	MPR	
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)	
40	QPSK	1	1		20.06	20.06	20.06	21.0	0.0
Channel				647668	650000	652332	Tune-up limit	MPR	
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)	
30	QPSK	1	1		20.02	20.02	19.99	21.0	0.0
Channel				647334	650000	652666	Tune-up limit	MPR	
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)	
20	QPSK	1	1		20.03	19.97	20.01	21.0	0.0
Channel				647000	650000	653000	Tune-up limit	MPR	
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)	
15	QPSK	1	1		19.97	20.06	20.06	21.0	0.0
Channel				646000	650000	653000	Tune-up limit	MPR	
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)	
10	QPSK	1	1		19.99	20.02	20.03	21.0	0.0



### Part27Q\_n78\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	14.93				
100	PI2 BPSK	1	137	14.96			16.0	0.0
100	PI2 BPSK	1	271	14.95				
100	PI2 BPSK	135	0	14.95			16.0	0.0
100	PI2 BPSK	135	69	14.94			16.0	0.0
100	PI2 BPSK	135	138	15.00				
100	PI2 BPSK	270	0	14.96			16.0	0.0
100	QPSK	1	1	15.04				
100	QPSK	1	137	14.92			16.0	0.0
100	QPSK	1	271	15.01				
100	QPSK	135	0	15.02			16.0	0.0
100	QPSK	135	69	15.03				
100	QPSK	135	138	15.02			16.0	0.0
100	QPSK	270	0	14.99			16.0	0.0
100	16QAM	1	1	14.99			16.0	0.0
100	64QAM	1	1	15.02			16.0	0.0
100	256QAM	1	1	15.02			16.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	15.00	14.98	15.02	15.0	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	15.00	15.01	14.97	16.0	0.0
Channel								
Frequency (MHz)								
3499.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.98	15.01	15.06	16.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.95	14.95	14.93	16.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.95	14.97	15.02	16.0	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.95	14.97	15.01	16.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	15.02	14.97	14.94	16.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	15.00	14.97	15.00	15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	15.01	14.94	15.02	16.0	0.0
Channel								
Frequency (MHz)								
63034								
63332								
63632								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	15.00	14.96	15.02	16.0	0.0

### Part27Q\_n78\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
65000								
3750								
100	PI2 BPSK	1	1	14.88				
100	PI2 BPSK	1	137	14.87			16.0	0.0
100	PI2 BPSK	1	271	14.87				
100	PI2 BPSK	135	0	14.89			16.0	0.0
100	PI2 BPSK	135	69	14.94			16.0	0.0
100	PI2 BPSK	135	138	14.82				
100	PI2 BPSK	270	0	14.92			16.0	0.0
100	QPSK	1	1	16.95				
100	QPSK	1	137	14.81			16.0	0.0
100	QPSK	1	271	14.85				
100	QPSK	135	0	14.89			16.0	0.0
100	QPSK	135	69	14.91				
100	QPSK	135	138	14.87			16.0	0.0
100	QPSK	270	0	14.85			16.0	0.0
100	16QAM	1	1	14.76			16.0	0.0
100	64QAM	1	1	14.76			16.0	0.0
100	256QAM	1	1	14.88			16.0	0.0
Channel								
Frequency (MHz)								
64968								
65000								
65032								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.92	14.84	14.89	15.0	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65066								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.92	14.90	14.88	16.0	0.0
Channel								
Frequency (MHz)								
3750								
3750								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.89	14.89	14.87	16.0	0.0
Channel								
Frequency (MHz)								
64868								
65000								
65132								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.94	14.86	14.94	16.0	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65166								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.87	14.91	14.87	16.0	0.0
Channel								
Frequency (MHz)								
64800								
65000								
65200								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.85	14.88	14.87	16.0	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65232								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	14.93	14.91	14.86	16.0	0.0
Channel								
Frequency (MHz)								
64734								
65000								
65266								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	14.92	14.90	14.91	15.0	0.0
Channel								
Frequency (MHz)								
64702								
65000								
65302								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	14.90	14.91	14.89	16.0	0.0
Channel								
Frequency (MHz)								
64670								
65000								
65330								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	14.89	14.91	14.89	16.0	0.0

### Part27Q\_n78 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	14.93				
100	PI2 BPSK	1	137	14.96			16.0	0.0
100	PI2 BPSK	1	271	14.95				
100	PI2 BPSK	135	0	14.95			16.0	0.0
100	PI2 BPSK	135	69	14.94			16.0	0.0
100	PI2 BPSK	135	138	15.00				
100	PI2 BPSK	270	0	14.96			16.0	0.0
100	QPSK	1	1	15.04				
100	QPSK	1	137	14.92			16.0	0.0
100	QPSK	1	271	15.01				
100	QPSK	135	0	15.02			16.0	0.0
100	QPSK	135	69	15.03				
100	QPSK	135	138	15.02			16.0	0.0
100	QPSK	270	0	14.99			16.0	0.0
100	16QAM	1	1	14.99			16.0	0.0
100	64QAM	1	1	15.02			16.0	0.0
100	256QAM	1	1	15.02			16.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	15.00	14.98	15.02	15.0	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	15.00	15.01	14.97	16.0	0.0
Channel								
Frequency (MHz)								
3499.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.98	15.01	15.06	16.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.95	14.95	14.93	16.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.95	14.97	15.02	16.0	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.95	14.97	15.01	16.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	15.02	14.97	14.94	16.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	15.00	14.97	15.00	15.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	15.01	14.94	15.02	16.0	0.0
Channel								
Frequency (MHz)								
63034								
63332								
63632								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	15.00	14.96	15.02	16.0	0.0



**Part270\_n78 HPUE\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3750				
100	PI2 BPSK	1	1		14.88			
100	PI2 BPSK	1	137		14.87		16.0	0.0
100	PI2 BPSK	1	271		14.87			
100	PI2 BPSK	135	0		14.89		16.0	0.0
100	PI2 BPSK	135	69		14.94			
100	PI2 BPSK	135	138		14.82			
100	PI2 BPSK	270	0		14.92		16.0	0.0
100	QPSK	1	1		16.95			
100	QPSK	1	137		14.81		16.0	0.0
100	QPSK	1	271		14.85			
100	QPSK	135	0		14.89			
100	QPSK	135	69		14.91		16.0	0.0
100	QPSK	135	138		14.87			
100	QPSK	270	0		14.85		16.0	0.0
100	16QAM	1	1		14.76		16.0	0.0
100	64QAM	1	1		14.76		16.0	0.0
100	256QAM	1	1		14.88		16.0	0.0
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3757.98	(dBm)	(dB)
90	QPSK	1	1	14.92	14.84	14.89	15.0	0.0
Channel				648334	650000	650668	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	14.92	14.90	14.88	16.0	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	14.89	14.89	14.87	16.0	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3728.02	3750	3781.98	(dBm)	(dB)
60	QPSK	1	1	14.84	14.86	14.84	16.0	0.0
Channel				648334	650000	651668	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	14.87	14.91	14.87	16.0	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	14.85	14.88	14.87	16.0	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.00	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	14.83	14.91	14.86	16.0	0.0
Channel				647334	650000	652668	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	14.92	14.90	14.91	15.0	0.0
Channel				647000	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	14.90	14.91	14.89	16.0	0.0
Channel				646000	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	14.89	14.91	14.89	16.0	0.0



### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	18.19				
100	PI2 BPSK	1	137	18.15			19.5	0.0
100	PI2 BPSK	1	271	18.13				
100	PI2 BPSK	135	0	18.16			19.5	0.0
100	PI2 BPSK	135	69	18.16			19.5	0.0
100	PI2 BPSK	135	138	18.19			19.5	0.0
100	PI2 BPSK	270	0	18.26				
100	QPSK	1	1	18.28				
100	QPSK	1	137	18.18			19.5	0.0
100	QPSK	1	271	18.17				
100	QPSK	135	0	18.19			19.5	0.0
100	QPSK	135	69	18.25				
100	QPSK	135	138	18.19			19.5	0.0
100	QPSK	270	0	18.22			19.5	0.0
100	16QAM	1	1	18.17			19.5	0.0
100	64QAM	1	1	18.15			19.5	0.0
100	256QAM	1	1	18.19			19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	18.21	18.23	18.21	19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3495.02	3499.98	3504.94	19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	18.21	18.19	18.19	19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	18.21	18.24	18.25	19.5	0.0
Channel								
Frequency (MHz)								
631668								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3475.02	3499.98	3525	19.5	0.0
Channel								
Frequency (MHz)								
631334								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	3470.01	3499.98	3529.98	19.5	0.0
Channel								
Frequency (MHz)								
631000								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	18.23	18.18	18.25	19.5	0.0
Channel								
Frequency (MHz)								
630668								
63332								
636000								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	18.21	18.17	18.28	19.5	0.0
Channel								
Frequency (MHz)								
630500								
63332								
636168								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	18.19	18.22	18.21	19.5	0.0
Channel								
Frequency (MHz)								
635000								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	18.23	18.26	18.26	19.5	0.0

### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	PI2 BPSK	1	1	18.56				
100	PI2 BPSK	1	137	18.61			19.5	0.0
100	PI2 BPSK	1	271	18.56				
100	PI2 BPSK	135	0	18.52			19.5	0.0
100	PI2 BPSK	135	69	18.61			19.5	0.0
100	PI2 BPSK	135	138	18.63			19.5	0.0
100	PI2 BPSK	270	0	18.45				
100	QPSK	1	1	18.55				
100	QPSK	1	137	18.59			19.5	0.0
100	QPSK	1	271	18.54				
100	QPSK	135	0	18.62			19.5	0.0
100	QPSK	135	69	18.63				
100	QPSK	135	138	18.49			19.5	0.0
100	QPSK	270	0	18.55			19.5	0.0
100	16QAM	1	1	18.52			19.5	0.0
100	64QAM	1	1	18.51			19.5	0.0
100	256QAM	1	1	18.62			19.5	0.0
Channel								
Frequency (MHz)								
649668								
650000								
650332								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	18.59	18.59	18.62	19.5	0.0
Channel								
Frequency (MHz)								
649334								
650000								
650666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3740.01	3750	3760.98	19.5	0.0
Channel								
Frequency (MHz)								
649668								
650000								
651332								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	18.54	18.56	18.59	19.5	0.0
Channel								
Frequency (MHz)								
648888								
650000								
651332								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	18.60	18.61	18.56	19.5	0.0
Channel								
Frequency (MHz)								
648334								
650000								
651668								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3725.01	3750	3774.98	19.5	0.0
Channel								
Frequency (MHz)								
648000								
650000								
652000								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	3720	3750	3780	19.5	0.0
Channel								
Frequency (MHz)								
647668								
650000								
652332								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	18.54	18.54	18.59	19.5	0.0
Channel								
Frequency (MHz)								
647334								
650000								
652668								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	18.53	18.59	18.61	19.5	0.0
Channel								
Frequency (MHz)								
647168								
650000								
652932								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	18.57	18.60	18.58	19.5	0.0
Channel								
Frequency (MHz)								
646800								
650000								
653100								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	18.54	18.56	18.62	19.5	0.0

### Part27Q\_n78 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	18.19				
100	PI2 BPSK	1	137	18.15			19.5	0.0
100	PI2 BPSK	1	271	18.13				
100	PI2 BPSK	135	0	18.16			19.5	0.0
100	PI2 BPSK	135	69	18.16			19.5	0.0
100	PI2 BPSK	135	138	18.19			19.5	0.0
100	PI2 BPSK	270	0	18.26				
100	QPSK	1	1	18.28				
100	QPSK	1	137	18.18			19.5	0.0
100	QPSK	1	271	18.17				
100	QPSK	135	0	18.19			19.5	0.0
100	QPSK	135	69	18.25				
100	QPSK	135	138	18.19			19.5	0.0
100	QPSK	270	0	18.22			19.5	0.0
100	16QAM	1	1	18.17			19.5	0.0
100	64QAM	1	1	18.15			19.5	0.0
100	256QAM	1	1	18.19			19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	18.21	18.23	18.21	19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3495.02	3499.98	3504.94	19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	18.21	18.19	18.19	19.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	18.21	18.24	18.25	19.5	0.0
Channel								
Frequency (MHz)								
631668								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3475.02	3499.98	3525	19.5	0.0
Channel								
Frequency (MHz)								
631334								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	3470.01	3499.98	3529.98	19.5	0.0
Channel								
Frequency (MHz)								
631000								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	18.23	18.18	18.25	19.5	0.0
Channel								
Frequency (MHz)								
630668								
63332								
636000								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	18.21	18.17	18.28	19.5	0.0
Channel								
Frequency (MHz)								
630500								
63332								
636168								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	18.19	18.22	18.21	19.5	0.0
Channel								
Frequency (MHz)								
635000								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	18.23	18.26	18.26	19.5	0.0



**Part27O\_n78 HPUe\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				3750	65000			
100	PI2 BPSK	1	1		18.56			
100	PI2 BPSK	1	137		18.61		19.5	0.0
100	PI2 BPSK	1	271		18.56			
100	PI2 BPSK	135	0		18.52		19.5	0.0
100	PI2 BPSK	135	69		18.61			
100	PI2 BPSK	135	138		18.63			
100	PI2 BPSK	270	0		18.45		19.5	0.0
100	QPSK	1	1		18.55			
100	QPSK	1	137		18.59		19.5	0.0
100	QPSK	1	271		18.54			
100	QPSK	135	0		18.62			
100	QPSK	135	69		18.63		19.5	0.0
100	QPSK	135	138		18.49			
100	QPSK	270	0		18.55		19.5	0.0
100	16QAM	1	1		18.52		19.5	0.0
100	64QAM	1	1		18.51		19.5	0.0
100	256QAM	1	1		18.62		19.5	0.0
Channel								
Frequency (MHz)								
				649668	650000	650332	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	3742.02	3750	3754.98		
				18.59	18.59	18.62	19.5	0.0
Channel								
Frequency (MHz)								
				648334	650000	650666	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3750	3759.99		
				18.57	18.60	18.54	19.5	0.0
Channel								
Frequency (MHz)								
				648000	650000	651000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	3735	3750	3765		
				18.54	18.56	18.59	19.5	0.0
Channel								
Frequency (MHz)								
				648688	650000	651332	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	3728.92	3750	3768.98		
				18.60	18.61	18.56	19.5	0.0
Channel								
Frequency (MHz)								
				648334	650000	651666	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	3725.01	3750	3774.99		
				18.50	18.54	18.57	19.5	0.0
Channel								
Frequency (MHz)								
				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	3720	3750	3780		
				18.60	18.54	18.55	19.5	0.0
Channel								
Frequency (MHz)								
				647668	650000	652332	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	3715.05	3750	3784.95		
				18.54	18.54	18.59	19.5	0.0
Channel								
Frequency (MHz)								
				647334	650000	652666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	3710.01	3750	3789.99		
				18.53	18.59	18.61	19.5	0.0
Channel								
Frequency (MHz)								
				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	3707.52	3750	3792.48		
				18.57	18.60	18.58	19.5	0.0
Channel								
Frequency (MHz)								
				646000	650000	653000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	3705	3750	3795		
				18.54	18.56	18.62	19.5	0.0



Reduced Power Mode for DSR7

n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F Freq. 372000	Power Middle Ch. F Freq. 376000	Power High Ch. F Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	15.11	15.23	15.17			
20	PI2 BPSK	1	53	15.02	15.19	15.10	16.0	0.0	
20	PI2 BPSK	1	104	15.19	15.26	15.02			
20	PI2 BPSK	50	0	15.06	15.21	15.04	16.0	0.0	
20	PI2 BPSK	50	28	15.11	15.23	15.10	16.0	0.0	
20	PI2 BPSK	50	56	15.11	15.19	15.23	16.0	0.0	
20	PI2 BPSK	100	0	15.16	15.26	15.14	16.0	0.0	
20	QPSK	1	1	15.13	15.31	15.15			
20	QPSK	1	53	15.11	15.25	15.09	16.0	0.0	
20	QPSK	1	104	15.11	15.20	14.99			
20	QPSK	50	0	15.12	15.26	15.04	16.0	0.0	
20	QPSK	50	28	15.14	15.28	15.22	16.0	0.0	
20	QPSK	50	56	15.11	15.20	15.21	16.0	0.0	
20	QPSK	100	0	15.09	15.23	15.02	16.0	0.0	
20	16QAM	1	1	15.07	15.22	15.10	16.0	0.0	
20	64QAM	1	1	15.07	15.22	15.08	16.0	0.0	
20	256QAM	1	1	15.09	15.18	15.03	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.04	15.25	15.07	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.02	15.29	15.12	15.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.08	15.28	15.09	16.0	0.0	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F Freq. 372000	Power Middle Ch. F Freq. 376000	Power High Ch. F Freq. 380000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	15.89	15.86	15.82			
20	PI2 BPSK	1	53	15.81	16.05	15.88	17.0	0.0	
20	PI2 BPSK	1	104	15.70	15.84	15.86			
20	PI2 BPSK	50	0	15.88	15.86	15.92	17.0	0.0	
20	PI2 BPSK	50	28	15.80	15.83	15.77	17.0	0.0	
20	PI2 BPSK	50	56	15.86	15.89	15.86	17.0	0.0	
20	PI2 BPSK	100	0	15.76	15.91	15.77	17.0	0.0	
20	QPSK	1	1	16.05	16.16	16.11			
20	QPSK	1	53	15.82	15.92	15.88	17.0	0.0	
20	QPSK	1	104	15.92	15.86	15.81			
20	QPSK	50	0	15.90	15.86	15.90	17.0	0.0	
20	QPSK	50	28	16.00	16.09	15.92	17.0	0.0	
20	QPSK	50	56	15.87	15.98	15.79	17.0	0.0	
20	QPSK	100	0	15.86	16.05	15.92	17.0	0.0	
20	16QAM	1	1	15.94	15.91	15.91	17.0	0.0	
20	64QAM	1	1	15.81	15.82	15.92	17.0	0.0	
20	256QAM	1	1	15.84	15.99	16.01	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.01	16.11	16.08	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.98	16.11	16.00	17.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	16.02	16.06	16.00	17.0	0.0	

n5_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F Freq. 166800	Power Middle Ch. F Freq. 167500	Power High Ch. F Freq. 168000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.78	22.82	22.80			
20	PI2 BPSK	1	53	22.89	22.95	22.87	24.0	0.0	
20	PI2 BPSK	1	104	22.76	22.86	22.78			
20	PI2 BPSK	50	0	22.78	22.86	22.86	24.0	0.0	
20	PI2 BPSK	50	28	22.90	22.85	22.90	24.0	0.0	
20	PI2 BPSK	50	56	22.77	22.82	22.79	24.0	0.0	
20	PI2 BPSK	100	0	22.78	22.88	22.83	24.0	0.0	
20	QPSK	1	1	22.95	23.00	22.91			
20	QPSK	1	53	22.79	22.82	22.79	24.0	0.0	
20	QPSK	1	104	22.82	22.85	22.76			
20	QPSK	50	0	22.76	22.85	22.76	24.0	0.0	
20	QPSK	50	28	22.91	22.86	22.92	24.0	0.0	
20	QPSK	50	56	22.77	22.86	22.84	24.0	0.0	
20	QPSK	100	0	22.87	22.89	22.84	24.0	0.0	
20	16QAM	1	1	22.87	22.92	22.87	24.0	0.0	
20	64QAM	1	1	21.61	21.65	21.55	22.5	1.5	
20	256QAM	1	1	19.69	19.71	19.67	20.5	3.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.78	22.83	22.84	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.83	22.98	22.76	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.83	22.83	22.83	24.0	0.0	



n5_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 16600	Power Middle Ch. Freq. 16700	Power High Ch. Freq. 16780	Tune-up limit (dBm)	MPR (dB)	
Channel				834	836.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	20.87	20.89	20.84	21.5	0.0	
20	PI2 BPSK	1	53	20.96	20.85	20.92			
20	PI2 BPSK	1	104	20.84	20.86	20.90			
20	PI2 BPSK	50	0	20.86	20.91	20.83	21.5	0.0	
20	PI2 BPSK	50	28	20.87	20.85	20.85			
20	PI2 BPSK	50	56	20.91	20.85	20.80	21.5	0.0	
20	PI2 BPSK	100	0	20.87	20.84	20.92			
20	QPSK	1	1	20.92	20.94	20.88			
20	QPSK	1	53	20.91	20.90	20.88	21.5	0.0	
20	QPSK	1	104	20.90	20.88	20.85			
20	QPSK	50	0	20.90	20.87	20.82	21.5	0.0	
20	QPSK	50	28	20.91	20.92	20.85			
20	QPSK	50	56	20.88	20.88	20.80	21.5	0.0	
20	QPSK	100	0	20.87	20.92	20.86			
20	16QAM	1	1	20.88	20.87	20.90	21.5	0.0	
20	64QAM	1	1	20.90	20.91	20.84	21.5	0.0	
20	256QAM	1	1	19.82	19.84	19.82	20.5	1.0	
Channel				166300	167300	168300	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
15	QPSK	1	1	20.84	20.86	20.75	21.5	0.0	
Channel				165800	167300	168800	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
10	QPSK	1	1	20.87	20.83	20.81	21.5	0.0	
Channel				165300	167300	169300	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
5	QPSK	1	1	20.86	20.88	20.83	21.5	0.0	

n7_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 50400	Power Middle Ch. Freq. 50700	Power High Ch. Freq. 51000	Tune-up limit (dBm)	MPR (dB)	
Channel				2510	2535	2550			
Frequency (MHz)									
40	PI2 BPSK	1	1	17.76	17.65	18.93	18.0	0.0	
40	PI2 BPSK	1	108	17.76	17.66	17.72			
40	PI2 BPSK	1	214	17.00	17.11	17.18			
40	PI2 BPSK	108	0	18.86	17.04	18.98	18.0	0.0	
40	PI2 BPSK	108	54	18.82	17.02	18.92	18.0	0.0	
40	PI2 BPSK	108	108	18.89	17.20	17.15	18.0	0.0	
40	PI2 BPSK	216	0	17.00	17.12	17.10			
40	QPSK	1	1	17.12	17.28	17.11			
40	QPSK	1	108	18.76	18.86	18.85	18.0	0.0	
40	QPSK	1	214	17.11	17.04	17.08			
40	QPSK	108	0	17.04	17.04	17.07	18.0	0.0	
40	QPSK	108	54	17.18	17.22	17.20	18.0	0.0	
40	QPSK	108	108	17.04	17.13	17.08			
40	QPSK	216	0	17.17	17.19	17.12	18.0	0.0	
40	16QAM	1	1	17.04	17.22	17.21	18.0	0.0	
40	64QAM	1	1	18.85	17.03	18.92	18.0	0.0	
40	256QAM	1	1	17.09	17.20	17.23	18.0	0.0	
Channel				505000	507000	511000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
30	QPSK	1	1	17.10	17.24	17.01	18.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
25	QPSK	1	1	17.09	17.17	17.07	18.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
20	QPSK	1	1	17.00	17.18	17.02	18.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
15	QPSK	1	1	20.975	20.95	20.925	18.0	0.0	
Channel				5097.5	20.95	20.925	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
10	QPSK	1	1	17.01	17.18	17.09	18.0	0.0	
Channel				509500	507000	513500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
5	QPSK	1	1	17.03	17.20	17.07	18.0	0.0	

n7_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 50400	Power Middle Ch. Freq. 50700	Power High Ch. Freq. 51000	Tune-up limit (dBm)	MPR (dB)	
Channel				2510	2535	2550			
Frequency (MHz)									
40	PI2 BPSK	1	1	14.25	14.59	14.48			
40	PI2 BPSK	1	108	14.69	14.60	14.68	15.5	0.0	
40	PI2 BPSK	1	214	14.59	14.71	14.75			
40	PI2 BPSK	108	0	14.66	14.59	14.45	15.5	0.0	
40	PI2 BPSK	108	54	14.44	14.68	14.48	15.5	0.0	
40	PI2 BPSK	108	108	14.60	14.69	14.59	15.5	0.0	
40	PI2 BPSK	216	0	14.62	14.67	14.73			
40	QPSK	1	1	14.63	14.77	14.75			
40	QPSK	1	108	14.55	14.65	14.72	15.5	0.0	
40	QPSK	1	214	14.59	14.65	14.65			
40	QPSK	108	0	14.64	14.68	14.68	15.5	0.0	
40	QPSK	108	54	14.65	14.75	14.70	15.5	0.0	
40	QPSK	108	108	14.58	14.64	14.68			
40	QPSK	216	0	14.70	14.72	14.70	15.5	0.0	
40	16QAM	1	1	14.68	14.73	14.75	15.5	0.0	
40	64QAM	1	1	14.51	14.70	14.64	15.5	0.0	
40	256QAM	1	1	14.62	14.67	14.73	15.5	0.0	
Channel				503500	507000	511000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
30	QPSK	1	1	14.52	14.68	14.68	15.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
25	QPSK	1	1	14.52	14.71	14.64	15.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
20	QPSK	1	1	14.60	14.70	14.70	15.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
15	QPSK	1	1	14.53	14.68	14.72	15.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
10	QPSK	1	1	14.59	14.70	14.71	15.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)									
5	QPSK	1	1	14.55	14.67	14.68	15.5	0.0	





n12_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	22.87	22.90	22.84	24.0	0.0	
15	PI2 BPSK	1	40	22.91	22.96	22.91			
15	PI2 BPSK	1	77	22.83	22.93	22.83			
15	PI2 BPSK	36	0	22.84	22.88	22.86	24.0	0.0	
15	PI2 BPSK	36	22	22.74	22.79	22.77	24.0	0.0	
15	PI2 BPSK	36	43	22.69	22.76	22.70	24.0	0.0	
15	PI2 BPSK	75	0	22.84	22.88	22.86	24.0	0.0	
15	QPSK	1	1	22.96	23.01	22.92			
15	QPSK	1	40	22.85	22.92	22.83	24.0	0.0	
15	QPSK	1	77	22.83	22.93	22.91			
15	QPSK	36	0	22.79	22.86	22.79	24.0	0.0	
15	QPSK	36	22	22.91	22.96	22.93	24.0	0.0	
15	QPSK	36	43	22.70	22.78	22.70	24.0	0.0	
15	QPSK	75	0	22.84	22.86	22.87	24.0	0.0	
15	16QAM	1	1	22.85	22.91	22.86	24.0	0.0	
15	64QAM	1	1	21.43	21.51	21.48	22.5	1.5	
15	256QAM	1	1	19.51	19.55	19.49	20.5	3.5	
Channel				14000	141500	142000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				704	707.5	711			
10	QPSK	1	1	22.88	22.99	22.86	24.0	0.0	
Channel				140000	141500	142700	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	1	22.99	22.94	22.87	24.0	0.0	

n12_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				706.5	707.5	708.5			
Frequency (MHz)									
15	PI2 BPSK	1	1	22.34	22.39	22.27	23.0	0.0	
15	PI2 BPSK	1	40	22.36	22.34	22.38			
15	PI2 BPSK	1	77	22.37	22.31	22.27			
15	PI2 BPSK	36	0	22.39	22.36	22.38	23.0	0.0	
15	PI2 BPSK	36	22	22.37	22.38	22.32	23.0	0.0	
15	PI2 BPSK	36	43	22.33	22.36	22.33	23.0	0.0	
15	PI2 BPSK	75	0	22.34	22.34	22.30	23.0	0.0	
15	QPSK	1	1	22.38	22.40	22.38			
15	QPSK	1	40	22.36	22.36	22.27	23.0	0.0	
15	QPSK	1	77	22.37	22.33	22.38			
15	QPSK	36	0	22.34	22.30	22.26	23.0	0.0	
15	QPSK	36	22	22.37	22.38	22.36	23.0	0.0	
15	QPSK	36	43	22.36	22.36	22.35	23.0	0.0	
15	QPSK	75	0	22.29	22.37	22.35	23.0	0.0	
15	16QAM	1	1	22.37	22.35	22.37	23.0	0.0	
15	64QAM	1	1	21.05	21.11	21.09	21.5	1.5	
15	256QAM	1	1	19.08	19.18	19.17	19.5	3.5	
Channel				140000	141500	142200	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				704	707.5	711			
10	QPSK	1	1	22.35	22.34	22.34	23.0	0.0	
Channel				140000	141500	142700	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	1	22.27	22.34	22.30	23.0	0.0	

n14_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				790					
Frequency (MHz)									
10	PI2 BPSK	1	1	22.78			24.0	0.0	
10	PI2 BPSK	1	26	22.80					
10	PI2 BPSK	1	50	22.76					
10	PI2 BPSK	25	0	22.84			24.0	0.0	
10	PI2 BPSK	25	14	22.89			24.0	0.0	
10	PI2 BPSK	25	27	22.83			24.0	0.0	
10	PI2 BPSK	50	0	22.84			24.0	0.0	
10	QPSK	1	1	22.82					
10	QPSK	1	26	22.80			24.0	0.0	
10	QPSK	1	50	22.72					
10	QPSK	25	0	22.85			24.0	0.0	
10	QPSK	25	14	22.71			24.0	0.0	
10	QPSK	25	27	22.88			24.0	0.0	
10	QPSK	50	0	22.86			24.0	0.0	
10	16QAM	1	1	22.80			24.0	0.0	
10	64QAM	1	1	21.57			22.5	1.5	
10	256QAM	1	1	19.45			20.5	3.5	
Channel				158100	158000	158100	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				790.5	793	795.5			
5	QPSK	1	1	22.74	22.75	22.75	24.0	0.0	



n14_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	PI2 BPSK	1	1	23.15					
10	PI2 BPSK	1	26	23.16			24.0	0.0	
10	PI2 BPSK	1	50	23.16					
10	PI2 BPSK	25	0	23.04			24.0	0.0	
10	PI2 BPSK	25	14	23.05			24.0	0.0	
10	PI2 BPSK	25	27	22.96			24.0	0.0	
10	PI2 BPSK	50	0	23.00					
10	QPSK	1	1	23.21					
10	QPSK	1	26	23.18			24.0	0.0	
10	QPSK	1	50	23.16					
10	QPSK	25	0	22.55			23.5	0.5	
10	QPSK	25	14	23.11			24.0	0.0	
10	QPSK	25	27	22.53			23.5	0.5	
10	QPSK	50	0	22.91					
10	16QAM	1	1	22.91			23.5	0.5	
10	64QAM	1	1	21.33			22.0	2.0	
10	256QAM	1	1	19.15			20.0	4.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.12	23.14	23.08	24.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	15.02	15.11	15.27			
40	PI2 BPSK	1	108	15.21	15.21	15.26	16.0	0.0	
40	PI2 BPSK	1	214	15.07	15.14	15.26			
40	PI2 BPSK	108	0	15.05	15.11	15.11	16.0	0.0	
40	PI2 BPSK	108	54	15.02	15.23	15.04	16.0	0.0	
40	PI2 BPSK	108	108	15.12	15.30	15.11	16.0	0.0	
40	PI2 BPSK	216	0	15.14	15.10	15.12	16.0	0.0	
40	QPSK	1	1	15.30	15.38	15.26			
40	QPSK	1	108	15.06	15.22	15.19	16.0	0.0	
40	QPSK	1	214	15.26	15.26	15.03			
40	QPSK	108	0	15.02	15.11	15.00	16.0	0.0	
40	QPSK	108	54	15.24	15.30	15.06	16.0	0.0	
40	QPSK	108	108	15.16	15.28	15.06	16.0	0.0	
40	QPSK	216	0	15.21	15.26	15.26	16.0	0.0	
40	16QAM	1	1	15.12	15.32	15.32	16.0	0.0	
40	64QAM	1	1	15.11	15.04	15.04	16.0	0.0	
40	256QAM	1	1	15.18	15.24	15.14	16.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	15.22	15.32	15.22	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.22	15.30	15.18	15.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.21	15.29	15.20	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.24	15.36	15.23	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.21	15.29	15.19	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.19	15.27	15.23	16.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.19	15.28	15.21	16.0	0.0	

n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	15.64	15.61	15.69			
40	PI2 BPSK	1	108	15.52	15.57	15.71	17.0	0.0	
40	PI2 BPSK	1	214	15.37	15.42	15.35			
40	PI2 BPSK	108	0	15.47	15.62	15.55	17.0	0.0	
40	PI2 BPSK	108	54	15.53	15.64	15.53	17.0	0.0	
40	PI2 BPSK	108	108	15.64	15.64	15.77	17.0	0.0	
40	PI2 BPSK	216	0	15.35	15.37	15.34	17.0	0.0	
40	QPSK	1	1	15.65	15.78	15.70			
40	QPSK	1	108	15.61	15.55	15.68	17.0	0.0	
40	QPSK	1	214	15.40	15.39	15.20			
40	QPSK	108	0	15.65	15.60	15.64	17.0	0.0	
40	QPSK	108	54	15.68	15.70	15.66	17.0	0.0	
40	QPSK	108	108	15.42	15.30	15.21	17.0	0.0	
40	QPSK	216	0	15.62	15.65	15.55			
40	16QAM	1	1	15.55	15.63	15.65	17.0	0.0	
40	64QAM	1	1	15.64	15.43	15.62	17.0	0.0	
40	256QAM	1	1	15.50	15.49	15.54	17.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	15.60	15.74	15.69	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.63	15.74	15.68	17.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.62	15.75	15.65	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.61	15.70	15.73	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.66	15.70	15.71	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.59	15.67	15.66	17.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.61	15.71	15.72	17.0	0.0	



n26(FCC)_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	22.84	22.90	22.87			
20	PI2 BPSK	1	53	22.99	23.02	22.97	24.0	0.0	
20	PI2 BPSK	1	104	22.92	23.00	22.98			
20	PI2 BPSK	50	0	22.84	22.90	22.88	24.0	0.0	
20	PI2 BPSK	50	28	22.89	22.95	22.89	24.0	0.0	
20	PI2 BPSK	50	56	22.88	22.90	22.89			
20	PI2 BPSK	100	0	22.82	22.92	22.85	24.0	0.0	
20	QPSK	1	1	22.95	23.09	23.05			
20	QPSK	1	53	22.88	22.95	22.93	24.0	0.0	
20	QPSK	1	104	22.92	23.02	23.00			
20	QPSK	50	0	22.47	22.53	22.45	23.5	0.5	
20	QPSK	50	28	22.88	22.96	22.87	24.0	0.0	
20	QPSK	50	56	22.85	22.71	22.85			
20	QPSK	100	0	22.80	22.86	22.86	23.5	0.5	
20	16QAM	1	1	22.57	22.65	22.59	23.5	0.5	
20	16QAM	1	1	21.08	21.15	21.07	22.0	2.0	
20	256QAM	1	1	19.13	19.17	19.14	20.0	4.0	
Channel				16300	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	22.95	23.03	22.95	24.0	0.0	
Channel				163800	166300	166800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	22.97	23.05	22.96	24.0	0.0	
Channel				163300	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	22.94	23.07	23.01	24.0	0.0	

n26(FCC)_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 164800	Power Middle Ch. / Freq. 166300	Power High Ch. / Freq. 167800	Tune-up limit (dBm)	MPR (dB)	
Channel				824	831.5	839			
Frequency (MHz)									
20	PI2 BPSK	1	1	20.71	20.78	20.70			
20	PI2 BPSK	1	53	20.70	20.69	20.74	21.5	0.0	
20	PI2 BPSK	1	104	20.77	20.78	20.72			
20	PI2 BPSK	50	0	20.73	20.69	20.74	21.5	0.0	
20	PI2 BPSK	50	28	20.76	20.74	20.70	21.5	0.0	
20	PI2 BPSK	50	56	20.73	20.76	20.68			
20	PI2 BPSK	100	0	20.70	20.73	20.71	21.5	0.0	
20	QPSK	1	1	20.73	20.79	20.75			
20	QPSK	1	53	20.69	20.77	20.73	21.5	0.0	
20	QPSK	1	104	20.70	20.71	20.74			
20	QPSK	50	0	20.72	20.77	20.73	21.5	0.0	
20	QPSK	50	28	20.75	20.76	20.74	21.5	0.0	
20	QPSK	50	56	20.73	20.77	20.70			
20	QPSK	100	0	20.70	20.77	20.72	21.5	0.0	
20	16QAM	1	1	20.73	20.74	20.71	21.5	0.0	
20	16QAM	1	1	20.72	20.77	20.70	21.5	0.0	
20	256QAM	1	1	18.78	18.88	18.86	19.5	2.0	
Channel				164800	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
15	QPSK	1	1	20.66	20.73	20.69	21.5	0.0	
Channel				163800	166300	166800	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
10	QPSK	1	1	20.62	20.73	20.71	21.5	0.0	
Channel				163300	166300	166300	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	20.69	20.74	20.68	21.5	0.0	

n30_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 460000	Power Middle Ch. / Freq. 462500	Power High Ch. / Freq. 465000	Tune-up limit (dBm)	MPR (dB)	
Channel				2310					
Frequency (MHz)									
10	PI2 BPSK	1	1	20.79					
10	PI2 BPSK	1	26	20.83			22.0	0.0	
10	PI2 BPSK	1	50	20.84					
10	PI2 BPSK	26	0	20.81			22.0	0.0	
10	PI2 BPSK	26	14	20.82					
10	PI2 BPSK	26	27	20.81			22.0	0.0	
10	PI2 BPSK	50	0	20.82			22.0	0.0	
10	QPSK	1	1	20.89					
10	QPSK	1	26	20.80			22.0	0.0	
10	QPSK	1	50	20.87					
10	QPSK	26	0	20.83			22.0	0.0	
10	QPSK	26	14	20.87					
10	QPSK	26	27	20.85			22.0	0.0	
10	QPSK	50	0	20.85			22.0	0.0	
10	16QAM	1	1	20.86			22.0	0.0	
10	16QAM	1	1	20.82			22.0	0.0	
10	256QAM	1	1	19.86			20.5	1.5	
Channel				461500	462500	462500	Tune-up limit	MPR	
Frequency (MHz)							(dBm)	(dB)	
5	QPSK	1	1	20.85	20.80	20.87	22.0	0.0	



n30\_Ant 1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Free	Power Middle Ch. / Free 462000	Power High Ch. / Free	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)					2310			
10	P12 BPSK	1	1		14.12			
10	P12 BPSK	1	26		14.19		16.0	0.0
10	P12 BPSK	1	50		14.07			
10	P12 BPSK	25	0		14.14		16.0	0.0
10	P12 BPSK	25	14		14.08		16.0	0.0
10	P12 BPSK	25	27		14.07		16.0	0.0
10	P12 BPSK	50	0		14.14		16.0	0.0
10	QPSK	1	1		14.20			
10	QPSK	1	26		14.06		16.0	0.0
10	QPSK	1	50		14.02			
10	QPSK	25	0		14.08		16.0	0.0
10	QPSK	25	14		14.15		16.0	0.0
10	QPSK	25	27		14.14		16.0	0.0
10	QPSK	50	0		14.06		16.0	0.0
10	16QAM	1	1		14.06		16.0	0.0
10	64QAM	1	1		14.15		16.0	0.0
10	256QAM	1	1		14.07		16.0	0.0
Channel				481500	462000	462500		
Frequency (MHz)				2307.5	2310	2312.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	14.13	14.17	14.15	16.0	0.0



n66_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	16.17	16.20	16.09			
40	PI2 BPSK	1	168	16.00	16.07	15.99	17.0	0.0	
40	PI2 BPSK	1	214	16.16	16.21	16.17			
40	PI2 BPSK	108	0	16.19	16.22	16.08	17.0	0.0	
40	PI2 BPSK	108	54	16.17	16.16	16.19	17.0	0.0	
40	PI2 BPSK	108	108	16.15	16.01	15.93	17.0	0.0	
40	PI2 BPSK	216	0	16.21	16.20	16.18			
40	QPSK	1	1	16.15	16.24	16.16			
40	QPSK	1	168	16.09	16.10	16.04	17.0	0.0	
40	QPSK	1	214	16.13	16.19	16.07			
40	QPSK	108	0	16.14	16.16	16.09	17.0	0.0	
40	QPSK	108	54	16.18	16.20	16.16	17.0	0.0	
40	QPSK	108	108	16.07	16.16	16.14	17.0	0.0	
40	QPSK	216	0	16.16	16.16	16.15			
40	16QAM	1	1	16.17	16.21	16.14	17.0	0.0	
40	64QAM	1	1	16.03	16.04	16.01	17.0	0.0	
40	256QAM	1	1	16.16	16.14	16.10	17.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	16.04	16.22	16.08	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.12	16.22	16.16	17.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.07	16.18	16.08	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.20	17.45	17.70			
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.05	16.13	16.10	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.05	16.13	16.14	17.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	16.07	16.14	16.13	17.0	0.0	

n66_Ant 1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	15.92	16.00	15.92			
40	PI2 BPSK	1	168	15.86	15.95	15.84	17.0	0.0	
40	PI2 BPSK	1	214	15.77	15.90	15.93			
40	PI2 BPSK	108	0	15.88	15.92	15.99	17.0	0.0	
40	PI2 BPSK	108	54	15.90	15.97	16.02	17.0	0.0	
40	PI2 BPSK	108	108	15.86	16.03	16.00	17.0	0.0	
40	PI2 BPSK	216	0	15.79	15.95	15.78			
40	QPSK	1	1	15.95	16.14	16.03			
40	QPSK	1	168	15.84	15.99	15.92	17.0	0.0	
40	QPSK	1	214	16.71	16.81	16.71			
40	QPSK	108	0	15.92	15.95	15.96	17.0	0.0	
40	QPSK	108	54	15.93	16.03	15.99	17.0	0.0	
40	QPSK	108	108	15.81	15.86	15.87	17.0	0.0	
40	QPSK	216	0	15.83	15.86	15.85			
40	16QAM	1	1	15.84	15.96	16.00	17.0	0.0	
40	64QAM	1	1	15.79	15.94	15.83	17.0	0.0	
40	256QAM	1	1	15.90	15.79	15.83	17.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	15.86	16.09	15.94	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.88	16.11	15.99	17.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.90	16.05	15.99	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.85	16.03	15.98	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.91	16.11	15.97	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.93	16.05	15.95	17.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.87	16.12	16.01	17.0	0.0	

n70_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 345000	Power Middle Ch. / Freq. 349000	Power High Ch. / Freq. 353000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	PI2 BPSK	1	1	17.85					
15	PI2 BPSK	1	40	17.99			19.0	0.0	
15	PI2 BPSK	1	77	17.95					
15	PI2 BPSK	36	0	17.93			19.0	0.0	
15	PI2 BPSK	36	22	17.84			19.0	0.0	
15	PI2 BPSK	36	43	17.97			19.0	0.0	
15	PI2 BPSK	75	0	17.98					
15	QPSK	1	1	18.02					
15	QPSK	1	40	17.92			19.0	0.0	
15	QPSK	1	77	17.97					
15	QPSK	36	0	17.95			19.0	0.0	
15	QPSK	36	22	17.97			19.0	0.0	
15	QPSK	36	43	17.93			19.0	0.0	
15	QPSK	75	0	17.95			19.0	0.0	
15	16QAM	1	1	17.81			19.0	0.0	
15	64QAM	1	1	17.99			19.0	0.0	
15	256QAM	1	1	17.92			19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.92	17.99	17.92	19.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.99	17.95	17.99	19.0	0.0	



n70_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				1702.5					
Frequency (MHz)				1702.5					
15	PI2 BPSK	1	1	16.90			17.5	0.0	
15	PI2 BPSK	1	40	16.90					
15	PI2 BPSK	1	77	16.85					
15	PI2 BPSK	36	0	16.81			17.5	0.0	
15	PI2 BPSK	36	22	16.89			17.5	0.0	
15	PI2 BPSK	36	43	16.80					
15	PI2 BPSK	75	0	16.82			17.5	0.0	
15	QPSK	1	1	16.91					
15	QPSK	1	40	16.90			17.5	0.0	
15	QPSK	1	77	16.90					
15	QPSK	36	0	16.88			17.5	0.0	
15	QPSK	36	22	16.90			17.5	0.0	
15	QPSK	36	43	16.89					
15	QPSK	75	0	16.87			17.5	0.0	
15	16QAM	1	1	16.84			17.5	0.0	
15	64QAM	1	1	16.83			17.5	0.0	
15	256QAM	1	1	16.84			17.5	0.0	
Channel				3405.0	3405.0	3410.0	Tune-up limit	MPR	
Frequency (MHz)				1700	1702.5	1705	(dBm)	(dB)	
10	QPSK	1	1	16.81	16.88	16.82	17.5	0.0	
Channel				3395.0	3405.0	3415.0	Tune-up limit	MPR	
Frequency (MHz)				1697.5	1702.5	1707.5	(dBm)	(dB)	
5	QPSK	1	1	16.93	16.91	16.89	17.5	0.0	

n71_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				1360.0	1360.0	1360.0			
Frequency (MHz)				678	680.5	683			
30	PI2 BPSK	1	1	23.05	23.07	22.88			
30	PI2 BPSK	1	80	22.99	22.80	22.99	24.0	0.0	
30	PI2 BPSK	1	158	22.63	22.68	22.65			
30	PI2 BPSK	80	0	22.65	22.72	22.69	24.0	0.0	
30	PI2 BPSK	80	40	22.65	22.74	22.66	24.0	0.0	
30	PI2 BPSK	80	80	22.46	22.51	22.49			
30	PI2 BPSK	160	0	22.66	22.68	22.62	24.0	0.0	
30	QPSK	1	1	23.06	23.12	23.05			
30	QPSK	1	80	22.64	22.65	22.64	24.0	0.0	
30	QPSK	1	158	22.68	22.72	22.67			
30	QPSK	80	0	22.66	22.73	22.71	24.0	0.0	
30	QPSK	80	40	22.68	22.75	22.72	24.0	0.0	
30	QPSK	80	80	22.38	22.48	22.39			
30	QPSK	160	0	22.66	22.71	22.67	24.0	0.0	
30	16QAM	1	1	22.99	23.02	22.95	24.0	0.0	
30	64QAM	1	1	22.01	22.07	22.04	22.5	1.5	
30	256QAM	1	1	20.07	20.14	20.09	20.5	3.5	
Channel				1361.0	1361.0	1370.0	Tune-up limit	MPR	
Frequency (MHz)				675.5	680.5	685.5	(dBm)	(dB)	
25	QPSK	1	1	23.06	23.02	22.98	24.0	0.0	
Channel				1346.0	1361.0	1376.0	Tune-up limit	MPR	
Frequency (MHz)				673	683.5	693	(dBm)	(dB)	
20	QPSK	1	1	23.02	23.04	23.02	24.0	0.0	
Channel				1341.0	1361.0	1381.0	Tune-up limit	MPR	
Frequency (MHz)				670.5	680.5	690.5	(dBm)	(dB)	
15	QPSK	1	1	22.98	23.05	22.95	24.0	0.0	
Channel				1325.0	1341.0	1355.0	Tune-up limit	MPR	
Frequency (MHz)				668	680.5	693	(dBm)	(dB)	
10	QPSK	1	1	23.02	23.02	23.00	24.0	0.0	
Channel				1331.0	1361.0	1391.0	Tune-up limit	MPR	
Frequency (MHz)				665.5	680.5	695.5	(dBm)	(dB)	
5	QPSK	1	1	22.98	23.08	22.95	24.0	0.0	

n71_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				678	680.5	683			
Frequency (MHz)				678	680.5	683			
30	PI2 BPSK	1	1	22.28	22.26	22.14			
30	PI2 BPSK	1	80	22.23	22.25	22.20	23.0	0.0	
30	PI2 BPSK	1	158	22.24	22.28	22.18			
30	PI2 BPSK	80	0	22.29	22.26	22.15	23.0	0.0	
30	PI2 BPSK	80	40	22.27	22.25	22.12	23.0	0.0	
30	PI2 BPSK	80	80	22.20	22.27	22.05			
30	PI2 BPSK	160	0	22.24	22.24	22.08	23.0	0.0	
30	QPSK	1	1	22.25	22.30	22.25			
30	QPSK	1	80	22.28	22.27	22.23	23.0	0.0	
30	QPSK	1	158	22.28	22.29	22.22			
30	QPSK	80	0	22.24	22.25	22.10	23.0	0.0	
30	QPSK	80	40	22.26	22.29	22.24	23.0	0.0	
30	QPSK	80	80	22.25	22.25	22.01			
30	QPSK	160	0	22.26	22.27	22.22	23.0	0.0	
30	16QAM	1	1	22.25	22.27	22.14	23.0	0.0	
30	64QAM	1	1	21.38	21.43	21.26	22.5	1.5	
30	256QAM	1	1	19.39	19.42	19.30	20.5	2.5	
Channel				1361.0	1361.0	1370.0	Tune-up limit	MPR	
Frequency (MHz)				673	683.5	693	(dBm)	(dB)	
25	QPSK	1	1	22.28	22.23	22.15	23.0	0.0	
Channel				1346.0	1361.0	1376.0	Tune-up limit	MPR	
Frequency (MHz)				671	681.5	691	(dBm)	(dB)	
20	QPSK	1	1	22.18	22.23	22.22	23.0	0.0	
Channel				1341.0	1361.0	1381.0	Tune-up limit	MPR	
Frequency (MHz)				670.5	680.5	690.5	(dBm)	(dB)	
15	QPSK	1	1	22.24	22.26	22.20	23.0	0.0	
Channel				1325.0	1341.0	1355.0	Tune-up limit	MPR	
Frequency (MHz)				668	680.5	693	(dBm)	(dB)	
10	QPSK	1	1	22.21	22.28	22.17	23.0	0.0	
Channel				1331.0	1361.0	1391.0	Tune-up limit	MPR	
Frequency (MHz)				665.5	680.5	695.5	(dBm)	(dB)	
5	QPSK	1	1	22.26	22.19	22.21	23.0	0.0	



n38_Ant 9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				518004	518000	518996			
				2590.02	2595	2599.98			
40	Pl2 BPSK	1	1	14.28	14.35	14.21			
40	Pl2 BPSK	1	53	14.34	14.36	14.23	15.5	0.0	
40	Pl2 BPSK	1	104	14.24	14.16	14.09			
40	Pl2 BPSK	50	0	14.35	14.37	14.33	15.5	0.0	
40	Pl2 BPSK	50	28	14.20	14.35	14.21	15.5	0.0	
40	Pl2 BPSK	50	56	14.32	14.41	14.33			
40	Pl2 BPSK	100	0	14.28	14.09	14.03	15.5	0.0	
40	QPSK	1	1	14.35	14.44	14.41			
40	QPSK	1	53	14.22	14.31	14.42	15.5	0.0	
40	QPSK	1	104	14.18	14.08	14.09			
40	QPSK	50	0	14.27	14.23	14.30			
40	QPSK	50	28	14.35	14.40	14.35	15.5	0.0	
40	QPSK	50	56	14.30	14.12	14.03			
40	QPSK	100	0	14.28	14.34	14.24	15.5	0.0	
40	16QAM	1	1	14.30	14.35	14.38	15.5	0.0	
40	16QAM	1	1	14.40	14.36	14.38	15.5	0.0	
40	256QAM	1	1	14.18	14.16	14.12	15.5	0.0	
Channel									
Frequency (MHz)				517002	518000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	14.30	14.40	14.32	15.5	0.0	
Channel									
Frequency (MHz)				518000	519000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	14.37	14.37	14.32	15.5	0.0	
Channel									
Frequency (MHz)				2577.51	2595	2612.49	Tune-up limit (dBm)	MPR (dB)	
				2577.51	2595	2612.49			
15	QPSK	1	1	14.28	14.35	14.39	15.5	0.0	
Channel									
Frequency (MHz)				515004	518000	522996	Tune-up limit (dBm)	MPR (dB)	
				2578.02	2595	2614.98			
10	QPSK	1	1	14.30	14.41	14.36	15.5	0.0	

n38_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				518004	518000	518996			
				2590.02	2595	2599.98			
40	Pl2 BPSK	1	1	13.91	13.85	13.84			
40	Pl2 BPSK	1	53	13.67	13.75	13.57	15.0	0.0	
40	Pl2 BPSK	1	104	13.87	13.74	13.76			
40	Pl2 BPSK	50	0	13.75	13.88	13.91	15.0	0.0	
40	Pl2 BPSK	50	28	13.79	13.66	13.87	15.0	0.0	
40	Pl2 BPSK	50	56	13.71	13.81	13.84			
40	Pl2 BPSK	100	0	13.83	13.93	13.92	15.0	0.0	
40	QPSK	1	1	13.85	13.95	13.93			
40	QPSK	1	53	13.70	13.80	13.67	15.0	0.0	
40	QPSK	1	104	13.80	13.90	13.86			
40	QPSK	50	0	13.80	13.76	13.71			
40	QPSK	50	28	13.74	13.92	13.83	15.0	0.0	
40	QPSK	50	56	13.79	13.78	13.82			
40	QPSK	100	0	13.71	13.80	13.79	15.0	0.0	
40	16QAM	1	1	13.93	13.86	13.94	15.0	0.0	
40	16QAM	1	1	13.71	13.87	13.66	15.0	0.0	
40	256QAM	1	1	13.78	13.88	13.79	15.0	0.0	
Channel									
Frequency (MHz)				517002	518000	520998	Tune-up limit (dBm)	MPR (dB)	
				2582.01	2595	2604.99			
30	QPSK	1	1	13.82	13.93	13.78	15.0	0.0	
Channel									
Frequency (MHz)				518000	519000	520000	Tune-up limit (dBm)	MPR (dB)	
				2580	2595	2610			
20	QPSK	1	1	13.75	13.84	13.86	15.0	0.0	
Channel									
Frequency (MHz)				2577.51	2595	2612.49	Tune-up limit (dBm)	MPR (dB)	
				2577.51	2595	2612.49			
15	QPSK	1	1	13.76	13.89	13.78	15.0	0.0	
Channel									
Frequency (MHz)				515004	518000	522996	Tune-up limit (dBm)	MPR (dB)	
				2578.02	2595	2614.98			
10	QPSK	1	1	13.77	13.86	13.79	15.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				505002	518000	528000			
				2546.01	2592.99	2640			
100	Pl2 BPSK	1	1	14.42	14.47	14.37			
100	Pl2 BPSK	1	137	14.10	14.44	14.39	15.5	0.0	
100	Pl2 BPSK	1	271	14.39	14.21	14.22			
100	Pl2 BPSK	135	0	14.44	14.38	14.39	15.5	0.0	
100	Pl2 BPSK	135	69	14.15	14.36	14.37	15.5	0.0	
100	Pl2 BPSK	135	138	14.28	14.29	14.18			
100	Pl2 BPSK	270	0	14.34	14.34	14.38	15.5	0.0	
100	QPSK	1	1	14.42	14.50	14.45			
100	QPSK	1	137	14.31	14.19	14.04	15.5	0.0	
100	QPSK	1	271	14.34	14.34	14.33			
100	QPSK	135	0	14.18	14.29	14.20			
100	QPSK	135	69	14.33	14.42	14.31	15.5	0.0	
100	QPSK	135	138	14.28	14.29	14.36			
100	QPSK	270	0	14.14	14.36	14.35	15.5	0.0	
100	16QAM	1	1	14.45	14.44	14.46	15.5	0.0	
100	16QAM	1	1	14.20	14.32	14.26	15.5	0.0	
100	256QAM	1	1	14.38	14.28	14.21	15.5	0.0	
Channel									
Frequency (MHz)				506000	518000	528000	Tune-up limit (dBm)	MPR (dB)	
				2541	2592.99	2641.98			
90	QPSK	1	1	14.37	14.44	14.38	15.5	0.0	
Channel									
Frequency (MHz)				507204	518000	529998	Tune-up limit (dBm)	MPR (dB)	
				2536.02	2592.99	2649.99			
80	QPSK	1	1	14.34	14.40	14.34	15.5	0.0	
Channel									
Frequency (MHz)				505002	518000	528000	Tune-up limit (dBm)	MPR (dB)	
				2546	2592.99	2649.99			
70	QPSK	1	1	14.36	14.43	14.39	15.5	0.0	
Channel									
Frequency (MHz)				505000	518000	531996	Tune-up limit (dBm)	MPR (dB)	
				2546	2592.99	2659.98			
60	QPSK	1	1	14.39	14.48	14.36	15.5	0.0	
Channel									
Frequency (MHz)				504004	518000	532998	Tune-up limit (dBm)	MPR (dB)	
				2531.02	2592.99	2641.98			
50	QPSK	1	1	14.40	14.45	14.39	15.5	0.0	
Channel									
Frequency (MHz)				503002	518000	533000	Tune-up limit (dBm)	MPR (dB)	
				2516.01	2592.99	2670			
40	QPSK	1	1	14.31	14.45	14.43	15.5	0.0	
Channel									
Frequency (MHz)				502000	518000	533000	Tune-up limit (dBm)	MPR (dB)	
				2511	2592.99	2674.98			
30	QPSK	1	1	14.33	14.40	14.42	15.5	0.0	
Channel									
Frequency (MHz)				501204	518000	535998	Tune-up limit (dBm)	MPR (dB)	
				2506.02	2592.99	2679.99			
20	QPSK	1	1	14.35	14.44	14.42	15.5	0.0	
Channel									
Frequency (MHz)				500700	518000	536998	Tune-up limit (dBm)	MPR (dB)	
				2503.5	2592.99	2683.48			
15	QPSK	1	1	14.38	14.44	14.37	15.5	0.0	
Channel									
Frequency (MHz)				500002	518000	537000	Tune-up limit (dBm)	MPR (dB)	
				2501.01	2592.99	2685			
10	QPSK	1	1	14.35	14.42	14.38	15.5	0.0	



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Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	508200	518988	529776					
Frequency (MHz)	2541.01	2592.99	2644.98					
100	PI2 BPSK	1	1	14.42	14.47	14.37		
100	PI2 BPSK	1	137	14.10	14.44	14.39		
100	PI2 BPSK	1	271	14.38	14.21	14.22	15.5	0.0
100	PI2 BPSK	135	0	14.44	14.38	14.39	15.5	0.0
100	PI2 BPSK	135	69	14.15	14.36	14.37	15.5	0.0
100	PI2 BPSK	135	138	14.28	14.29	14.18		
100	PI2 BPSK	270	0	14.34	14.34	14.39	15.5	0.0
100	QPSK	1	1	14.25	14.20	14.25		
100	QPSK	1	137	14.31	14.19	14.04	15.5	0.0
100	QPSK	1	271	14.34	14.34	14.33		
100	QPSK	135	0	14.18	14.29	14.20	15.5	0.0
100	QPSK	135	69	14.33	14.42	14.37		
100	QPSK	135	138	14.28	14.29	14.38		
100	QPSK	270	0	14.14	14.38	14.35	15.5	0.0
100	16QAM	1	1	14.45	14.44	14.46	15.5	0.0
100	64QAM	1	1	14.29	14.32	14.26	15.5	0.0
100	256QAM	1	1	14.38	14.28	14.21	15.5	0.0
Channel	508200	518988	529776	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	14.37	14.41	14.33	15.5	0.0
Channel	507204	518988	529776	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2536.02	2592.99	2649.99					
80	QPSK	1	1	14.34	14.40	14.34	15.5	0.0
Channel	506208	518988	529776	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	14.36	14.43	14.39	15.5	0.0
Channel	505200	518988	531988	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	14.39	14.48	14.39	15.5	0.0
Channel	504204	518988	532988	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	14.40	14.43	14.39	15.5	0.0
Channel	503208	518988	534000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	14.31	14.45	14.43	15.5	0.0
Channel	502200	518988	535988	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	1	14.33	14.40	14.42	15.5	0.0
Channel	501204	518988	535988	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	14.39	14.44	14.42	15.5	0.0
Channel	500700	518988	536496	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2503.5	2592.99	2682.48					
15	QPSK	1	1	14.35	14.41	14.37	15.5	0.0
Channel	500208	518988	537000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	14.35	14.42	14.38	15.5	0.0





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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	13.39	13.42	13.44				
100	PI2 BPSK	1	137	13.22	13.23	13.25				
100	PI2 BPSK	1	271	13.04	13.04	13.24				
100	PI2 BPSK	135	9	13.41	13.40	13.44	15.0	0.0		
100	PI2 BPSK	135	69	13.10	13.18	13.17	15.0	0.0		
100	PI2 BPSK	135	138	13.09	13.21	13.02				
100	PI2 BPSK	270	0	13.26	13.36	13.42	15.0	0.0		
100	QPSK	1	1	13.37	13.46	13.36				
100	QPSK	1	137	13.03	13.25	13.14				
100	QPSK	1	271	13.31	13.30	13.20				
100	QPSK	135	0	13.23	13.19	13.15				
100	QPSK	135	69	13.38	13.45	13.37	15.0	0.0		
100	QPSK	135	138	13.35	13.35	13.27				
100	QPSK	270	0	13.12	13.32	13.13	15.0	0.0		
100	16QAM	1	1	13.33	13.36	13.34	15.0	0.0		
100	64QAM	1	1	13.34	13.16	13.23	15.0	0.0		
100	256QAM	1	1	13.10	13.12	13.11	15.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	23.41	23.62	23.44	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	13.33	13.37	13.28	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	13.27	13.44	13.32	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	13.30	13.42	13.32	15.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	13.26	13.37	13.28	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	13.30	13.40	13.27	15.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	13.30	13.43	13.25	15.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	13.29	13.39	13.27	15.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	13.26	13.44	13.24	15.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	13.30	13.36	13.32	15.0	0.0		

FCC_n41 HPUE_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	13.39	13.42	13.44				
100	PI2 BPSK	1	137	13.22	13.23	13.25				
100	PI2 BPSK	1	271	13.04	13.04	13.24				
100	PI2 BPSK	135	9	13.41	13.40	13.44	15.0	0.0		
100	PI2 BPSK	135	69	13.10	13.18	13.17	15.0	0.0		
100	PI2 BPSK	135	138	13.09	13.21	13.02				
100	PI2 BPSK	270	0	13.26	13.36	13.42	15.0	0.0		
100	QPSK	1	1	13.37	13.46	13.36				
100	QPSK	1	137	13.03	13.25	13.14				
100	QPSK	1	271	13.31	13.30	13.20				
100	QPSK	135	0	13.23	13.19	13.15				
100	QPSK	135	69	13.38	13.45	13.37	15.0	0.0		
100	QPSK	135	138	13.35	13.35	13.27				
100	QPSK	270	0	13.12	13.32	13.13	15.0	0.0		
100	16QAM	1	1	13.33	13.36	13.34	15.0	0.0		
100	64QAM	1	1	13.34	13.16	13.23	15.0	0.0		
100	256QAM	1	1	13.10	13.12	13.11	15.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	23.41	23.62	23.44	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	13.33	13.37	13.28	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	13.27	13.44	13.32	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	13.30	13.42	13.32	15.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	13.26	13.37	13.28	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	13.30	13.40	13.27	15.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	13.30	13.43	13.25	15.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	13.29	13.39	13.27	15.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	13.26	13.44	13.24	15.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	13.30	13.36	13.32	15.0	0.0		

FCC_n41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	20.12	20.03	20.13				
100	PI2 BPSK	1	137	19.95	20.00	20.03			21.5	0.0
100	PI2 BPSK	1	271	19.84	19.96	19.89				
100	PI2 BPSK	135	9	19.98	20.10	20.00	21.5	0.0		
100	PI2 BPSK	135	69	20.06	20.10	20.14	21.5	0.0		
100	PI2 BPSK	135	138	19.98	19.96	19.94			21.5	0.0
100	PI2 BPSK	270	0	19.84	20.04	20.06				
100	QPSK	1	1	20.08	20.14	20.07				
100	QPSK	1	137	19.91	19.97	20.12			21.5	0.0
100	QPSK	1	271	19.92	19.90	20.02				
100	QPSK	135	0	19.96	20.03	20.04				
100	QPSK	135	69	20.09	20.11	20.22	21.5	0.0		
100	QPSK	135	138	19.98	19.95	19.95				
100	QPSK	270	0	20.02	20.09	20.12	21.5	0.0		
100	16QAM	1	1	20.02	20.15	20.23	21.5	0.0		
100	64QAM	1	1	19.96	19.95	20.15	21.5	0.0		
100	256QAM	1	1	20.05	20.04	20.25	21.5	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	23.41	23.62	23.44	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.06	20.07	20.25	21.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.01	20.12	20.18	21.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.02	20.07	20.18	21.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.00	20.08	20.17	21.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	19.99	20.06	20.17	21.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.03	20.09	20.25	21.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	20.05	20.05	20.23	21.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	19.97	20.09	20.17	21.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	20.06	20.04	20.22	21.5	0.0		



FCC_n41 HPUE_Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel											
Frequency (MHz)				2666.01	2692.99	2699.99	2666				
100	PI2 BPSK	1	1	20.12	20.03	20.13					
100	PI2 BPSK	1	137	19.95	20.00	20.03		21.5	0.0		
100	PI2 BPSK	1	271	19.94	19.98	19.99					
100	PI2 BPSK	135	9	19.98	20.10	20.00	21.5	0.0			
100	PI2 BPSK	135	69	20.06	20.10	20.14	21.5	0.0			
100	PI2 BPSK	135	138	19.98	19.96	19.94		21.5	0.0		
100	PI2 BPSK	270	0	19.84	20.04	20.06					
100	QPSK	1	1	20.38	20.14	20.27					
100	QPSK	1	137	19.91	19.97	20.12		21.5	0.0		
100	QPSK	1	271	19.92	19.90	20.02					
100	QPSK	135	0	19.96	20.03	20.04		21.5	0.0		
100	QPSK	135	69	20.06	20.11	20.22					
100	QPSK	135	138	19.98	19.95	19.95					
100	QPSK	270	0	20.02	20.09	20.12	21.5	0.0			
100	16QAM	1	1	20.02	20.15	20.23	21.5	0.0			
100	64QAM	1	1	19.98	19.95	20.15	21.5	0.0			
100	256QAM	1	1	20.05	20.04	20.25	21.5	0.0			
Channel											
Frequency (MHz)				5082.00	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)			
				2541	2592.99	2644.98	(dB)	(dB)			
90	QPSK	1	1	20.00	20.05	20.20	21.5	0.0			
Channel											
Frequency (MHz)				5072.04	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)			
				2536.02	2592.99	2649.99	(dB)	(dB)			
80	QPSK	1	1	20.06	20.07	20.25	21.5	0.0			
Channel											
Frequency (MHz)				2531.01	2592.99	2655	Tune-up limit (dBm)	MPR (dB)			
				2531.01	2592.99	2655	(dB)	(dB)			
70	QPSK	1	1	20.01	20.12	20.18	21.5	0.0			
Channel											
Frequency (MHz)				5052.00	5189.98	5319.96	Tune-up limit (dBm)	MPR (dB)			
				2525	2592.99	2659.99	(dB)	(dB)			
60	QPSK	1	1	20.02	20.07	20.19	21.5	0.0			
Channel											
Frequency (MHz)				5042.04	5189.98	5329.96	Tune-up limit (dBm)	MPR (dB)			
				2521.02	2592.99	2664.99	(dB)	(dB)			
50	QPSK	1	1	20.00	20.03	20.17	21.5	0.0			
Channel											
Frequency (MHz)				5032.04	5189.98	5340.00	Tune-up limit (dBm)	MPR (dB)			
				2516.01	2592.99	2670	(dB)	(dB)			
40	QPSK	1	1	19.99	20.06	20.17	21.5	0.0			
Channel											
Frequency (MHz)				5022.00	5189.98	5359.96	Tune-up limit (dBm)	MPR (dB)			
				2511	2592.99	2674.98	(dB)	(dB)			
30	QPSK	1	1	20.03	20.09	20.25	21.5	0.0			
Channel											
Frequency (MHz)				5012.04	5189.98	5359.96	Tune-up limit (dBm)	MPR (dB)			
				2508.02	2592.99	2679.99	(dB)	(dB)			
20	QPSK	1	1	20.05	20.09	20.23	21.5	0.0			
Channel											
Frequency (MHz)				5007.00	5189.98	5364.96	Tune-up limit (dBm)	MPR (dB)			
				2503.5	2592.99	2682.48	(dB)	(dB)			
15	QPSK	1	1	19.97	20.05	20.17	21.5	0.0			
Channel											
Frequency (MHz)				2501.01	2592.99	2685	Tune-up limit (dBm)	MPR (dB)			
				2501.01	2592.99	2685	(dB)	(dB)			
10	QPSK	1	1	20.06	20.04	20.22	21.5	0.0			

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel											
Frequency (MHz)				2666.01	2692.99	2699.99	2666				
100	PI2 BPSK	1	1	14.22	14.24	14.22					
100	PI2 BPSK	1	137	14.20	14.23	14.23		15.5	0.0		
100	PI2 BPSK	1	271	14.21	14.24	14.19					
100	PI2 BPSK	135	9	14.28	14.24	14.20	15.5	0.0			
100	PI2 BPSK	135	69	14.24	14.19	14.18	15.5	0.0			
100	PI2 BPSK	135	138	14.26	14.21	14.10		15.5	0.0		
100	PI2 BPSK	270	0	14.25	14.23	14.21					
100	QPSK	1	1	14.24	14.27	14.28					
100	QPSK	1	137	14.20	14.18	14.25		15.5	0.0		
100	QPSK	1	271	14.17	14.21	14.19					
100	QPSK	135	0	14.16	14.23	14.21					
100	QPSK	135	69	14.27	14.25	14.21	15.5	0.0			
100	QPSK	135	138	14.20	14.24	14.22					
100	QPSK	270	0	14.18	14.22	14.21	15.5	0.0			
100	16QAM	1	1	14.21	14.21	14.20	15.5	0.0			
100	64QAM	1	1	14.25	14.22	14.12	15.5	0.0			
100	256QAM	1	1	14.25	14.16	14.19	15.5	0.0			
Channel											
Frequency (MHz)				5082.00	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)			
				2541	2592.99	2644.98	(dB)	(dB)			
90	QPSK	1	1	14.15	14.23	14.20	15.5	0.0			
Channel											
Frequency (MHz)				5072.04	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)			
				2536.02	2592.99	2649.99	(dB)	(dB)			
80	QPSK	1	1	14.19	14.23	14.22	15.5	0.0			
Channel											
Frequency (MHz)				2531.01	2592.99	2655	Tune-up limit (dBm)	MPR (dB)			
				2531.01	2592.99	2655	(dB)	(dB)			
70	QPSK	1	1	14.14	14.21	14.24	15.5	0.0			
Channel											
Frequency (MHz)				5052.00	5189.98	5319.96	Tune-up limit (dBm)	MPR (dB)			
				2525	2592.99	2659.99	(dB)	(dB)			
60	QPSK	1	1	14.13	14.18	14.21	15.5	0.0			
Channel											
Frequency (MHz)				5042.04	5189.98	5329.96	Tune-up limit (dBm)	MPR (dB)			
				2521.02	2592.99	2664.99	(dB)	(dB)			
50	QPSK	1	1	14.10	14.21	14.23	15.5	0.0			
Channel											
Frequency (MHz)				5032.04	5189.98	5340.00	Tune-up limit (dBm)	MPR (dB)			
				2516.01	2592.99	2670	(dB)	(dB)			
40	QPSK	1	1	14.15	14.19	14.24	15.5	0.0			
Channel											
Frequency (MHz)				5022.00	5189.98	5359.96	Tune-up limit (dBm)	MPR (dB)			
				2511	2592.99	2674.98	(dB)	(dB)			
30	QPSK	1	1	14.21	14.19	14.24	15.5	0.0			
Channel											
Frequency (MHz)				5012.04	5189.98	5359.96	Tune-up limit (dBm)	MPR (dB)			
				2508.02	2592.99	2679.99	(dB)	(dB)			
20	QPSK	1	1	14.23	14.25	14.23	15.5	0.0			
Channel											
Frequency (MHz)				5007.00	5189.98	5364.96	Tune-up limit (dBm)	MPR (dB)			
				2503.5	2592.99	2682.48	(dB)	(dB)			
15	QPSK	1	1	14.21	14.16	14.15	15.5	0.0			
Channel											
Frequency (MHz)				2501.01	2592.99	2685	Tune-up limit (dBm)	MPR (dB)			
				2501.01	2592.99	2685	(dB)	(dB)			
10	QPSK	1	1	14.19	14.19	14.20	15.5	0.0			

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel											
Frequency (MHz)				2666.01	2692.99	2699.99	2666				
100	PI2 BPSK	1	1	14.22	14.24	14.22					
100	PI2 BPSK	1	137	14.20	14.23	14.23		15.5	0.0		
100	PI2 BPSK	1	271	14.21	14.24	14.19					
100	PI2 BPSK	135	9	14.28	14.24	14.20	15.5	0.0			
100	PI2 BPSK	135	69	14.24	14.19	14.18	15.5	0.0			
100	PI2 BPSK	135	138	14.26	14.21	14.10		15.5	0.0		
100	PI2 BPSK	270	0	14.25	14.23	14.21					
100	QPSK	1	1	14.24	14.27	14.28					
100	QPSK	1	137	14.20	14.18	14.25		15.5	0.0		
100	QPSK	1	271	14.17	14.21	14.19					
100	QPSK	135	0	14.16	14.23	14.21					
100	QPSK	135	69	14.27	14.25	14.21	15.5	0.0			
100	QPSK	135	138	14.20	14.24	14.22					
100	QPSK	270	0	14.18	14.22	14.21	15.5	0.0			
100	16QAM	1	1	14.21	14.21	14.20	15.5	0.0			
100	64QAM	1	1	14.25	14.22	14.12	15.5	0.0			
100	256QAM	1	1	14.25	14.16	14.19	15.5	0.0			
Channel											
Frequency (MHz)				5082.00	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)			
				2541	2592.99	2644.98	(dB)	(dB)			
90	QPSK	1	1	14.15	14.23	14.20	15.5	0.0			
Channel											
Frequency (MHz)				5072.04	5189.98	5299.96	Tune-up limit (dBm)	MPR (dB)			
				2536.02	2592.99	2649.99	(dB)	(dB)			
80	QPSK	1	1	14.19	14.23	14.22	15.5	0.0			
Channel											
Frequency (MHz)				2531.01	2592.99	2655	Tune-up limit (dBm)	MPR (dB)			
				2531.01	2592.99	2655	(dB)	(dB)			
70	QPSK	1	1	14.14	14.21	14.24	15.5	0.0			
Channel											
Frequency (MHz)				5052.00	5189.98	5319.96	Tune-up limit (dBm)	MPR (dB)			
				25							



**FCC\_n41\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	20.78	21.05	20.77	22.0	0.0
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	137	20.81	20.97	20.87	22.0	0.0
100	PI2 BPSK	1	271	20.82	21.06	20.75	22.0	0.0
100	PI2 BPSK	135	0	20.70	21.05	20.77	22.0	0.0
100	PI2 BPSK	135	69	20.78	20.97	20.70	22.0	0.0
100	PI2 BPSK	135	138	20.83	21.06	20.72	22.0	0.0
100	PI2 BPSK	270	0	20.84	21.06	20.75	22.0	0.0
100	QPSK	1	1	20.85	21.12	20.75	22.0	0.0
100	QPSK	1	137	20.73	21.09	20.73	22.0	0.0
100	QPSK	1	271	20.84	20.99	20.71	22.0	0.0
100	QPSK	135	0	20.74	21.04	20.88	22.0	0.0
100	QPSK	135	69	20.76	21.11	20.78	22.0	0.0
100	QPSK	135	138	20.78	20.98	20.71	22.0	0.0
100	QPSK	270	0	20.71	21.06	20.78	22.0	0.0
100	16QAM	1	1	20.75	21.05	20.75	22.0	0.0
100	64QAM	1	1	20.74	21.06	20.84	22.0	0.0
100	256QAM	1	1	20.33	20.41	20.15	21.5	0.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.83	21.03	20.84	22.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.84	21.01	20.71	22.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	20.82	21.04	20.87	22.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	20.74	21.02	20.86	22.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	20.81	20.99	20.89	22.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	20.78	20.98	20.72	22.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	20.77	20.99	20.76	22.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	20.76	21.05	20.71	22.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	20.75	21.08	20.88	22.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	20.72	21.05	20.87	22.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	20.78	21.05	20.77	22.0	0.0
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	137	20.81	20.97	20.87	22.0	0.0
100	PI2 BPSK	1	271	20.82	21.06	20.75	22.0	0.0
100	PI2 BPSK	135	0	20.70	21.05	20.77	22.0	0.0
100	PI2 BPSK	135	69	20.78	20.97	20.70	22.0	0.0
100	PI2 BPSK	135	138	20.83	21.06	20.72	22.0	0.0
100	PI2 BPSK	270	0	20.84	21.06	20.75	22.0	0.0
100	QPSK	1	1	20.85	21.12	20.75	22.0	0.0
100	QPSK	1	137	20.73	21.09	20.73	22.0	0.0
100	QPSK	1	271	20.84	20.99	20.71	22.0	0.0
100	QPSK	135	0	20.74	21.04	20.88	22.0	0.0
100	QPSK	135	69	20.76	21.11	20.78	22.0	0.0
100	QPSK	135	138	20.78	20.98	20.71	22.0	0.0
100	QPSK	270	0	20.71	21.06	20.78	22.0	0.0
100	16QAM	1	1	20.75	21.05	20.75	22.0	0.0
100	64QAM	1	1	20.74	21.06	20.84	22.0	0.0
100	256QAM	1	1	20.33	20.41	20.15	21.5	0.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.83	21.03	20.84	22.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.84	21.01	20.71	22.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	20.82	21.04	20.87	22.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	20.74	21.02	20.86	22.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	20.81	20.99	20.89	22.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	20.78	20.98	20.72	22.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	20.77	20.99	20.76	22.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	20.76	21.05	20.71	22.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	20.75	21.08	20.88	22.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	20.72	21.05	20.87	22.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	PI2 BPSK	1	1	12.14	12.20	12.04	13.0	0.0
40	PI2 BPSK	1	53	12.19	12.18	12.18	13.0	0.0
40	PI2 BPSK	1	104	12.16	12.19	12.12	13.0	0.0
40	PI2 BPSK	50	0	12.10	12.17	12.05	13.0	0.0
40	PI2 BPSK	50	26	12.21	12.16	12.09	13.0	0.0
40	PI2 BPSK	50	56	12.19	12.18	12.15	13.0	0.0
40	PI2 BPSK	100	0	12.16	12.18	12.12	13.0	0.0
40	QPSK	1	1	12.21	12.22	12.15	13.0	0.0
40	QPSK	1	53	12.14	12.17	12.15	13.0	0.0
40	QPSK	1	104	12.15	12.15	12.09	13.0	0.0
40	QPSK	50	0	12.13	12.15	12.17	13.0	0.0
40	QPSK	50	26	12.20	12.21	12.15	13.0	0.0
40	QPSK	50	56	12.18	12.16	12.16	13.0	0.0
40	QPSK	100	0	12.15	12.20	12.19	13.0	0.0
40	16QAM	1	1	12.12	12.20	12.16	13.0	0.0
40	64QAM	1	1	12.21	12.17	12.05	13.0	0.0
40	256QAM	1	1	12.21	12.20	12.10	13.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	12.19	12.11	12.12	13.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	12.18	12.12	12.11	13.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	12.13	12.11	12.12	13.0	0.0



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				63800	64866	64832		
Frequency (MHz)				3690	3624.99	3693.98		
40	PI2 BPSK	1	1	13.14	13.09	12.89		
40	PI2 BPSK	1	53	13.15	13.06	12.73	14.5	0.0
40	PI2 BPSK	1	104	13.16	13.06	12.75		
40	PI2 BPSK	50	0	13.20	13.03	12.92	14.5	0.0
40	PI2 BPSK	50	28	13.19	13.11	12.82	14.5	0.0
40	PI2 BPSK	50	56	13.19	13.04	13.03		
40	PI2 BPSK	100	0	13.17	13.10	12.77	14.5	0.0
40	QPSK	1	1	13.04	13.13	13.01		
40	QPSK	1	53	13.17	13.00	12.86	14.5	0.0
40	QPSK	1	104	13.16	13.10	12.88		
40	QPSK	50	0	13.20	13.05	12.73		
40	QPSK	50	28	13.22	13.06	12.81	14.5	0.0
40	QPSK	50	56	13.20	13.00	12.74		
40	QPSK	100	0	13.15	13.11	12.82	14.5	0.0
40	16QAM	1	1	13.21	13.10	12.90	14.5	0.0
40	16QAM	1	1	13.16	13.02	12.86	14.5	0.0
40	256QAM	1	1	13.18	13.13	12.92	14.5	0.0
Channel				63966	64866	64866	Tune-up limit	MPR
Frequency (MHz)				3692.02	3624.99	3693.99	(dBm)	(dB)
30	QPSK	1	1	13.19	13.04	12.92	14.5	0.0
Channel				637334	64866	649000	Tune-up limit	MPR
Frequency (MHz)				3690.01	3624.99	3690	(dBm)	(dB)
20	QPSK	1	1	13.20	13.08	12.92	14.5	0.0
Channel				63800	64866	64832	Tune-up limit	MPR
Frequency (MHz)				3695	3624.99	3694.98	(dBm)	(dB)
10	QPSK	1	1	13.19	13.07	12.92	14.5	0.0



### Part96\_n48\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63600	64166	64532		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	9.55	9.54	9.57		
40	Pl2 BPSK	1	53	9.58	9.54	9.63	10.5	0.0
40	Pl2 BPSK	1	104	9.58	9.59	9.62		
40	Pl2 BPSK	50	0	9.64	9.59	9.49	10.5	0.0
40	Pl2 BPSK	50	28	9.56	9.61	9.57	10.5	0.0
40	Pl2 BPSK	50	56	9.58	9.58	9.53		
40	Pl2 BPSK	100	0	9.61	9.64	9.52	10.5	0.0
40	QPSK	1	1	9.57	9.57	9.58		
40	QPSK	1	53	9.55	9.60	9.42	10.5	0.0
40	QPSK	1	104	9.54	9.54	9.43		
40	QPSK	50	0	9.53	9.59	9.52		
40	QPSK	50	28	9.55	9.53	9.52	10.5	0.0
40	QPSK	50	56	9.51	9.57	9.51		
40	QPSK	100	0	9.56	9.58	9.51	10.5	0.0
40	16QAM	1	1	9.62	9.61	9.48	10.5	0.0
40	64QAM	1	1	9.59	9.53	9.45	10.5	0.0
40	256QAM	1	1	9.62	9.56	9.57	10.5	0.0
Channel								
Frequency (MHz)				63768	64166	64566	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3624.99		
30	QPSK	1	1	9.47	9.3	9.3	10.5	0.0
Channel								
Frequency (MHz)				63734	64166	64500	Tune-up limit (dBm)	MPR (dB)
				3660.01	3624.99	3690		
20	QPSK	1	1	9.54	9.59	9.57	10.5	0.0
Channel								
Frequency (MHz)				63700	64166	64532	Tune-up limit (dBm)	MPR (dB)
				3655	3624.99	3694.98		
10	QPSK	1	1	9.52	9.65	9.60	10.5	0.0

### Part96\_n48\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63800	64166	64532		
				3670	3624.99	3679.98		
40	Pl2 BPSK	1	1	13.17	13.18	13.04		
40	Pl2 BPSK	1	53	13.09	13.18	12.88	14.5	0.0
40	Pl2 BPSK	1	104	13.10	13.12	12.86		
40	Pl2 BPSK	50	0	13.08	13.15	12.83	14.5	0.0
40	Pl2 BPSK	50	28	13.09	13.15	12.79	14.5	0.0
40	Pl2 BPSK	50	56	13.14	13.15	12.78		
40	Pl2 BPSK	100	0	13.13	13.16	12.88	14.5	0.0
40	QPSK	1	1	13.17	13.20	13.05		
40	QPSK	1	53	13.08	13.15	12.86	14.5	0.0
40	QPSK	1	104	13.14	13.13	13.03		
40	QPSK	50	0	13.11	13.16	12.88		
40	QPSK	50	28	13.16	13.16	13.02	14.5	0.0
40	QPSK	50	56	13.15	13.10	13.00		
40	QPSK	100	0	13.10	13.12	12.93	14.5	0.0
40	16QAM	1	1	13.11	13.16	12.95	14.5	0.0
40	64QAM	1	1	13.14	13.16	12.87	14.5	0.0
40	256QAM	1	1	13.13	13.14	12.93	14.5	0.0
Channel								
Frequency (MHz)				63768	64166	64566	Tune-up limit (dBm)	MPR (dB)
				3662.02	3624.99	3624.99		
30	QPSK	1	1	13.07	13.15	13.03	14.5	0.0
Channel								
Frequency (MHz)				63734	64166	64500	Tune-up limit (dBm)	MPR (dB)
				3660.01	3624.99	3690		
20	QPSK	1	1	13.10	13.12	12.99	14.5	0.0
Channel								
Frequency (MHz)				63700	64166	64532	Tune-up limit (dBm)	MPR (dB)
				3655	3624.99	3694.98		
10	QPSK	1	1	13.05	13.14	12.95	14.5	0.0

### Part27Q\_n77\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				63300	63332	63398		
				3499.98				
100	Pl2 BPSK	1	1		14.18			
100	Pl2 BPSK	1	137		14.21		15.0	0.0
100	Pl2 BPSK	1	271		14.20			
100	Pl2 BPSK	135	0		14.20		15.0	0.0
100	Pl2 BPSK	135	69		14.23			
100	Pl2 BPSK	135	138		14.11		15.0	0.0
100	Pl2 BPSK	270	0		14.21			
100	QPSK	1	1		14.27			
100	QPSK	1	137		14.15		15.0	0.0
100	QPSK	1	271		14.20			
100	QPSK	135	0		14.22			
100	QPSK	135	69		14.25		15.0	0.0
100	QPSK	135	138		14.24			
100	QPSK	270	0		14.23		15.0	0.0
100	16QAM	1	1		14.10		15.0	0.0
100	64QAM	1	1		14.21		15.0	0.0
100	256QAM	1	1		14.08		15.0	0.0
Channel								
Frequency (MHz)				63300	63332	63398	Tune-up limit (dBm)	MPR (dB)
				3495	3493.98	3524.98		
90	QPSK	1	1	14.23	14.19	14.24	15.0	0.0
Channel								
Frequency (MHz)				63268	63332	63400	Tune-up limit (dBm)	MPR (dB)
				3490.02	3499.98	3510		
80	QPSK	1	1	14.19	14.20	14.16	15.0	0.0
Channel								
Frequency (MHz)				63440	63332	63458	Tune-up limit (dBm)	MPR (dB)
				3485.01	3499.98	3514.98		
70	QPSK	1	1	14.16	14.17	14.17	15.0	0.0
Channel								
Frequency (MHz)				63200	63332	63486	Tune-up limit (dBm)	MPR (dB)
				3480	3499.98	3519.98		
60	QPSK	1	1	14.19	14.18	14.16	15.0	0.0
Channel								
Frequency (MHz)				63168	63332	63500	Tune-up limit (dBm)	MPR (dB)
				3475.02	3499.98	3525		
50	QPSK	1	1	14.21	14.18	14.16	15.0	0.0
Channel								
Frequency (MHz)				63134	63332	63532	Tune-up limit (dBm)	MPR (dB)
				3470.01	3499.98	3529.98		
40	QPSK	1	1	14.17	14.25	14.23	15.0	0.0
Channel								
Frequency (MHz)				63100	63332	63566	Tune-up limit (dBm)	MPR (dB)
				3465	3499.98	3534.98		
30	QPSK	1	1	14.25	14.17	14.16	15.0	0.0
Channel								
Frequency (MHz)				63068	63332	63600	Tune-up limit (dBm)	MPR (dB)
				3460.02	3499.98	3540		
20	QPSK	1	1	14.22	14.23	14.19	15.0	0.0
Channel								
Frequency (MHz)				63000	63332	63636	Tune-up limit (dBm)	MPR (dB)
				3457.5	3499.98	3542.48		
15	QPSK	1	1	14.18	14.18	14.18	15.0	0.0
Channel								
Frequency (MHz)				63034	63332	63632	Tune-up limit (dBm)	MPR (dB)
				3455.01	3499.98	3544.98		
10	QPSK	1	1	14.18	14.17	14.25	15.0	0.0



### Part270\_n77\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pi2 BPSK	1	1	14.30	14.25	14.23		
100	Pi2 BPSK	1	137	14.31	14.30	14.32	15.0	0.0
100	Pi2 BPSK	1	271	14.25	14.29	14.29		
100	Pi2 BPSK	135	0	14.29	14.25	14.22	15.0	0.0
100	Pi2 BPSK	135	69	14.30	14.28	14.18	15.0	0.0
100	Pi2 BPSK	135	138	14.24	14.31	14.15		
100	Pi2 BPSK	270	0	14.25	14.30	14.13	15.0	0.0
100	QPSK	1	1	14.20	14.34	14.32		
100	QPSK	1	137	14.25	14.27	14.30	15.0	0.0
100	QPSK	1	271	14.28	14.31	14.25		
100	QPSK	135	0	14.25	14.31	14.20		
100	QPSK	135	69	14.25	14.33	14.27	15.0	0.0
100	QPSK	135	138	14.28	14.29	14.24		
100	QPSK	270	0	14.27	14.31	14.19	15.0	0.0
100	16QAM	1	1	14.19	14.25	14.25	15.0	0.0
100	16QAM	1	1	14.20	14.26	14.18	15.0	0.0
100	256QAM	1	1	14.31	14.22	14.22	15.0	0.0
Channel								
Frequency (MHz)								
659000 659000 662332								
80	QPSK	1	1	14.22	14.26	14.21	15.0	0.0
Channel								
Frequency (MHz)								
645334 650000 650966								
80	QPSK	1	1	14.28	14.24	14.30	15.0	0.0
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	14.20	14.32	14.23	15.0	0.0
Channel								
Frequency (MHz)								
648668 650000 663332								
60	QPSK	1	1	14.20	14.23	14.26	15.0	0.0
Channel								
Frequency (MHz)								
648334 650000 663666								
50	QPSK	1	1	14.23	14.30	14.29	15.0	0.0
Channel								
Frequency (MHz)								
645000 650000 660000								
40	QPSK	1	1	14.28	14.29	14.22	15.0	0.0
Channel								
Frequency (MHz)								
647668 650000 664332								
30	QPSK	1	1	14.25	14.23	14.26	15.0	0.0
Channel								
Frequency (MHz)								
647334 650000 664666								
20	QPSK	1	1	14.20	14.28	14.30	15.0	0.0
Channel								
Frequency (MHz)								
647168 650000 664832								
15	QPSK	1	1	14.20	14.25	14.27	15.0	0.0
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	14.24	14.25	14.26	15.0	0.0

### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pi2 BPSK	1	1		14.18			
100	Pi2 BPSK	1	137		14.21		15.0	0.0
100	Pi2 BPSK	1	271		14.20			
100	Pi2 BPSK	135	0		14.20		15.0	0.0
100	Pi2 BPSK	135	69		14.23		15.0	0.0
100	Pi2 BPSK	135	138		14.11			
100	Pi2 BPSK	270	0		14.21		15.0	0.0
100	QPSK	1	1		14.27			
100	QPSK	1	137		14.15		15.0	0.0
100	QPSK	1	271		14.20			
100	QPSK	135	0		14.22			
100	QPSK	135	69		14.25		15.0	0.0
100	QPSK	135	138		14.24			
100	QPSK	270	0		14.23		15.0	0.0
100	16QAM	1	1		14.10		15.0	0.0
100	16QAM	1	1		14.21		15.0	0.0
100	256QAM	1	1		14.08		15.0	0.0
Channel								
Frequency (MHz)								
633000 633332 633666								
80	QPSK	1	1	14.19	14.19	14.24	15.0	0.0
Channel								
Frequency (MHz)								
632968 633332 634000								
80	QPSK	1	1	14.19	14.20	14.16	15.0	0.0
Channel								
Frequency (MHz)								
3485.01 3489.98 3514.98								
70	QPSK	1	1	14.18	14.17	14.17	15.0	0.0
Channel								
Frequency (MHz)								
632000 633332 634666								
60	QPSK	1	1	14.19	14.18	14.16	15.0	0.0
Channel								
Frequency (MHz)								
631668 633332 635000								
50	QPSK	1	1	14.21	14.18	14.16	15.0	0.0
Channel								
Frequency (MHz)								
631334 633332 635332								
40	QPSK	1	1	14.17	14.25	14.23	15.0	0.0
Channel								
Frequency (MHz)								
3470.01 3489.98 3529.98								
30	QPSK	1	1	14.25	14.17	14.16	15.0	0.0
Channel								
Frequency (MHz)								
630968 633332 636000								
20	QPSK	1	1	14.22	14.23	14.19	15.0	0.0
Channel								
Frequency (MHz)								
630900 633332 636366								
15	QPSK	1	1	14.18	14.18	14.18	15.0	0.0
Channel								
Frequency (MHz)								
3455.01 3489.98 3544.98								
10	QPSK	1	1	14.18	14.17	14.25	15.0	0.0

### Part270\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750 3840 3930								
100	Pi2 BPSK	1	1	14.30	14.25	14.23		
100	Pi2 BPSK	1	137	14.31	14.30	14.32	15.0	0.0
100	Pi2 BPSK	1	271	14.25	14.29	14.29		
100	Pi2 BPSK	135	0	14.29	14.25	14.22	15.0	0.0
100	Pi2 BPSK	135	69	14.30	14.28	14.18	15.0	0.0
100	Pi2 BPSK	135	138	14.24	14.31	14.15		
100	Pi2 BPSK	270	0	14.25	14.30	14.13	15.0	0.0
100	QPSK	1	1	14.20	14.34	14.32		
100	QPSK	1	137	14.25	14.27	14.30	15.0	0.0
100	QPSK	1	271	14.28	14.31	14.25		
100	QPSK	135	0	14.25	14.31	14.20		
100	QPSK	135	69	14.25	14.33	14.27	15.0	0.0
100	QPSK	135	138	14.28	14.29	14.24		
100	QPSK	270	0	14.27	14.31	14.19	15.0	0.0
100	16QAM	1	1	14.19	14.25	14.25	15.0	0.0
100	16QAM	1	1	14.20	14.26	14.18	15.0	0.0
100	256QAM	1	1	14.31	14.22	14.22	15.0	0.0
Channel								
Frequency (MHz)								
645000 650000 660000								
80	QPSK	1	1	14.22	14.26	14.21	15.0	0.0
Channel								
Frequency (MHz)								
645334 650000 660966								
80	QPSK	1	1	14.28	14.24	14.30	15.0	0.0
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	14.20	14.32	14.23	15.0	0.0
Channel								
Frequency (MHz)								
648668 650000 663332								
60	QPSK	1	1	14.20	14.23	14.26	15.0	0.0
Channel								
Frequency (MHz)								
648334 650000 663666								
50	QPSK	1	1	14.23	14.30	14.29	15.0	0.0
Channel								
Frequency (MHz)								
645000 650000 660000								
40	QPSK	1	1	14.28	14.29	14.22	15.0	0.0
Channel								
Frequency (MHz)								
647668 650000 664332								
30	QPSK	1	1	14.25	14.23	14.26	15.0	0.0
Channel								
Frequency (MHz)								
647334 650000 664666								
20	QPSK	1	1	14.20	14.28	14.30	15.0	0.0
Channel								
Frequency (MHz)								
647168 650000 664832								
15	QPSK	1	1	14.20	14.25	14.27	15.0	0.0
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	14.24	14.25	14.26	15.0	0.0



### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	14.45				
100	PI2 BPSK	1	137	14.46			15.5	0.0
100	PI2 BPSK	1	271	14.46				
100	PI2 BPSK	135	0	14.43			15.5	0.0
100	PI2 BPSK	135	69	14.47			15.5	0.0
100	PI2 BPSK	135	138	14.47			15.5	0.0
100	PI2 BPSK	270	0	14.45				
100	QPSK	1	1	14.50				
100	QPSK	1	137	14.45			15.5	0.0
100	QPSK	1	271	14.42				
100	QPSK	135	0	14.47			15.5	0.0
100	QPSK	135	69	14.46			15.5	0.0
100	QPSK	135	138	14.40			15.5	0.0
100	QPSK	270	0	14.47			15.5	0.0
100	16QAM	1	1	14.44			15.5	0.0
100	64QAM	1	1	14.36			15.5	0.0
100	256QAM	1	1	14.47			15.5	0.0
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	3495	3499.98	3504.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	14.42	14.42	14.39	15.5	0.0
Channel								
Frequency (MHz)								
3499.98								
80	QPSK	1	1	14.48	14.48	14.42	15.5	0.0
Channel								
Frequency (MHz)								
3485.01								
70	QPSK	1	1	14.40	14.42	14.42	15.5	0.0
Channel								
Frequency (MHz)								
63000								
60	QPSK	1	1	14.41	14.43	14.43	15.5	0.0
Channel								
Frequency (MHz)								
631668								
50	QPSK	1	1	3476.02	3499.98	3525	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
631334								
40	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
631000								
30	QPSK	1	1	14.45	14.40	14.46	15.5	0.0
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1	3485.01	3499.98	3514.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
630000								
15	QPSK	1	1	14.41	14.47	14.42	15.5	0.0
Channel								
Frequency (MHz)								
3455.01								
10	QPSK	1	1	14.39	14.48	14.43	15.5	0.0

### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
65000								
100	PI2 BPSK	1	1	14.44	14.47	14.46		
100	PI2 BPSK	1	137	14.49	14.46	14.47	15.5	0.0
100	PI2 BPSK	1	271	14.49	14.45	14.43		
100	PI2 BPSK	135	0	14.50	14.43	14.47	15.5	0.0
100	PI2 BPSK	135	69	14.48	14.47	14.49	15.5	0.0
100	PI2 BPSK	135	138	14.48	14.49	14.44	15.5	0.0
100	PI2 BPSK	270	0	14.46	14.46	14.52		
100	QPSK	1	1	14.39	14.53	14.47		
100	QPSK	1	137	14.41	14.45	14.45	15.5	0.0
100	QPSK	1	271	14.44	14.48	14.46		
100	QPSK	135	0	14.46	14.46	14.44	15.5	0.0
100	QPSK	135	69	14.36	14.45	14.47	15.5	0.0
100	QPSK	135	138	14.46	14.45	14.25	15.5	0.0
100	QPSK	270	0	14.41	14.44	14.43	15.5	0.0
100	16QAM	1	1	14.46	14.44	14.43	15.5	0.0
100	64QAM	1	1	14.46	14.50	14.47	15.5	0.0
100	256QAM	1	1	14.44	14.49	14.49	15.5	0.0
Channel								
Frequency (MHz)								
649668								
80	QPSK	1	1	3742.02	3840	3924.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
80	QPSK	1	1	14.40	14.45	14.45	15.5	0.0
Channel								
Frequency (MHz)								
3499.98								
80	QPSK	1	1	14.39	14.43	14.43	15.5	0.0
Channel								
Frequency (MHz)								
649334								
70	QPSK	1	1	14.43	14.46	14.36	15.5	0.0
Channel								
Frequency (MHz)								
649668								
60	QPSK	1	1	14.39	14.45	14.40	15.5	0.0
Channel								
Frequency (MHz)								
648334								
50	QPSK	1	1	3725.01	3840	3924.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
650000								
50	QPSK	1	1	14.46	14.51	14.44	15.5	0.0
Channel								
Frequency (MHz)								
3499.98								
40	QPSK	1	1	3720	3840	3960	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
649668								
30	QPSK	1	1	14.40	14.51	14.41	15.5	0.0
Channel								
Frequency (MHz)								
647334								
20	QPSK	1	1	3710.01	3840	3929.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
649668								
15	QPSK	1	1	14.45	14.50	14.37	15.5	0.0
Channel								
Frequency (MHz)								
647168								
10	QPSK	1	1	3707.52	3840	3972.48	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
649668								

### Part27Q\_n77 HPUE\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	14.45				
100	PI2 BPSK	1	137	14.46			15.5	0.0
100	PI2 BPSK	1	271	14.46				
100	PI2 BPSK	135	0	14.43			15.5	0.0
100	PI2 BPSK	135	69	14.47			15.5	0.0
100	PI2 BPSK	135	138	14.47			15.5	0.0
100	PI2 BPSK	270	0	14.45			15.5	0.0
100	QPSK	1	1	14.50				
100	QPSK	1	137	14.45			15.5	0.0
100	QPSK	1	271	14.42				
100	QPSK	135	0	14.47			15.5	0.0
100	QPSK	135	69	14.46			15.5	0.0
100	QPSK	135	138	14.40			15.5	0.0
100	QPSK	270	0	14.47			15.5	0.0
100	16QAM	1	1	14.44			15.5	0.0
100	64QAM	1	1	14.36			15.5	0.0
100	256QAM	1	1	14.47			15.5	0.0
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	3495	3499.98	3504.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
63000								
80	QPSK	1	1	14.42	14.42	14.39	15.5	0.0
Channel								
Frequency (MHz)								
3499.98								
80	QPSK	1	1	14.48	14.48	14.42	15.5	0.0
Channel								
Frequency (MHz)								
3485.01								
70	QPSK	1	1	14.40	14.42	14.42	15.5	0.0
Channel								
Frequency (MHz)								
63000								
60	QPSK	1	1	14.41	14.43	14.43	15.5	0.0
Channel								
Frequency (MHz)								
631668								
50	QPSK	1	1	3476.02	3499.98	3525	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
631334								
40	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
631000								
30	QPSK	1	1	14.45	14.40	14.46	15.5	0.0
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1	3485.01	3499.98	3514.98	Tune-up limit (dB)	MPR (dB)
Channel								
Frequency (MHz)								
630000								
15	QPSK	1	1	14.41	14.47	14.42	15.5	0.0
Channel								
Frequency (MHz)								
3455.01								
10	QPSK	1	1	14.39	14.48	14.43	15.5	0.0



### Part270\_n77 HPUUE\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3760	3840	3930		
100	PI2 BPSK	1	1	14.44	14.47	14.46		
100	PI2 BPSK	1	137	14.49	14.46	14.47	15.5	0.0
100	PI2 BPSK	1	271	14.49	14.45	14.43		
100	PI2 BPSK	135	0	14.50	14.43	14.47	15.5	0.0
100	PI2 BPSK	135	69	14.48	14.47	14.49	15.5	0.0
100	PI2 BPSK	135	138	14.48	14.49	14.44		
100	PI2 BPSK	270	0	14.46	14.46	14.52	15.5	0.0
100	QPSK	1	1	14.48	14.50	14.47		
100	QPSK	1	137	14.41	14.45	14.45	15.5	0.0
100	QPSK	1	271	14.44	14.48	14.46		
100	QPSK	135	0	14.46	14.46	14.44		
100	QPSK	135	69	14.46	14.45	14.47	15.5	0.0
100	QPSK	135	138	14.46	14.45	14.25		
100	QPSK	270	0	14.41	14.44	14.43	15.5	0.0
100	16QAM	1	1	14.46	14.44	14.43	15.5	0.0
100	64QAM	1	1	14.46	14.50	14.47	15.5	0.0
100	256QAM	1	1	14.44	14.49	14.48	15.5	0.0
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3742.02	3840	3924.98		
80	QPSK	1	1	14.49	14.45	14.45	15.5	0.0
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3740.01	3840	3929.99		
80	QPSK	1	1	14.39	14.43	14.43	15.5	0.0
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3735	3840	3945		
70	QPSK	1	1	14.43	14.46	14.36	15.5	0.0
Channel								
Frequency (MHz)								
				648688	65000	66332		
				3729.02	3840	3949.98		
60	QPSK	1	1	14.39	14.45	14.40	15.5	0.0
Channel								
Frequency (MHz)								
				648334	65000	66366		
				3725.01	3840	3954.99		
50	QPSK	1	1	14.45	14.51	14.44	15.5	0.0
Channel								
Frequency (MHz)								
				648000	65000	66400		
				3720	3840	3960		
40	QPSK	1	1	14.46	14.45	14.37	15.5	0.0
Channel								
Frequency (MHz)								
				647668	65000	66432		
				3715.02	3840	3954.98		
30	QPSK	1	1	14.40	14.51	14.41	15.5	0.0
Channel								
Frequency (MHz)								
				647334	65000	66466		
				3710.01	3840	3959.99		
20	QPSK	1	1	14.45	14.50	14.37	15.5	0.0
Channel								
Frequency (MHz)								
				647168	65000	66482		
				3707.52	3840	3972.48		
15	QPSK	1	1	14.41	14.49	14.42	15.5	0.0
Channel								
Frequency (MHz)								
				647000	65000	66500		
				3705	3840	3975		
10	QPSK	1	1	14.43	14.50	14.42	15.5	0.0

### Part270\_n77\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				633000	63332	63366		
				3499.98				
100	PI2 BPSK	1	1	10.62				
100	PI2 BPSK	1	137	10.59			11.5	0.0
100	PI2 BPSK	1	271	10.67				
100	PI2 BPSK	135	0	10.67			11.5	0.0
100	PI2 BPSK	135	69	10.66			11.5	0.0
100	PI2 BPSK	135	138	10.66			11.5	0.0
100	PI2 BPSK	270	0	10.68				
100	QPSK	1	1	10.70				
100	QPSK	1	137	10.68			11.5	0.0
100	QPSK	1	271	10.61				
100	QPSK	135	0	10.60				
100	QPSK	135	69	10.66			11.5	0.0
100	QPSK	135	138	10.68				
100	QPSK	270	0	10.68			11.5	0.0
100	16QAM	1	1	10.64			11.5	0.0
100	64QAM	1	1	10.63			11.5	0.0
100	256QAM	1	1	10.59			11.5	0.0
Channel								
Frequency (MHz)								
				633000	63332	63366		
				3495	3499.98	3504.98		
80	QPSK	1	1	10.64	10.67	10.60	11.5	0.0
Channel								
Frequency (MHz)								
				632968	63332	63400		
				3490.02	3499.98	3510		
80	QPSK	1	1	10.60	10.60	10.60	11.5	0.0
Channel								
Frequency (MHz)								
				632851	63332	63432		
				3485.01	3499.98	3514.98		
70	QPSK	1	1	10.63	10.64	10.66	11.5	0.0
Channel								
Frequency (MHz)								
				632800	63332	63466		
				3480	3499.98	3518.98		
60	QPSK	1	1	10.61	10.67	10.68	11.5	0.0
Channel								
Frequency (MHz)								
				631868	63332	63500		
				3475.02	3499.98	3525		
50	QPSK	1	1	10.60	10.63	10.66	11.5	0.0
Channel								
Frequency (MHz)								
				631334	63332	63532		
				3470.01	3499.98	3529.98		
40	QPSK	1	1	10.63	10.59	10.67	11.5	0.0
Channel								
Frequency (MHz)								
				631000	63332	63566		
				3465	3499.98	3534.98		
30	QPSK	1	1	10.62	10.63	10.64	11.5	0.0
Channel								
Frequency (MHz)								
				630968	63332	63600		
				3460.02	3499.98	3540		
20	QPSK	1	1	10.62	10.66	10.62	11.5	0.0
Channel								
Frequency (MHz)								
				630900	63332	63616		
				3457.5	3499.98	3542.48		
15	QPSK	1	1	10.62	10.63	10.66	11.5	0.0
Channel								
Frequency (MHz)								
				630534	63332	63632		
				3455.01	3499.98	3544.98		
10	QPSK	1	1	10.63	10.63	10.60	11.5	0.0

### Part270\_n77\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3760	3840	3930		
100	PI2 BPSK	1	1	10.30	10.30	10.09		
100	PI2 BPSK	1	137	10.32	10.30	10.20	11.5	0.0
100	PI2 BPSK	1	271	10.31	10.31	10.27		
100	PI2 BPSK	135	0	10.28	10.31	10.19	11.5	0.0
100	PI2 BPSK	135	69	10.27	10.28	10.25	11.5	0.0
100	PI2 BPSK	135	138	10.28	10.29	10.15		
100	PI2 BPSK	270	0	10.26	10.33	10.33	11.5	0.0
100	QPSK	1	1	10.30	10.35	10.33		
100	QPSK	1	137	10.28	10.33	10.30	11.5	0.0
100	QPSK	1	271	10.25	10.32	10.29		
100	QPSK	135	0	10.33	10.32	10.19		
100	QPSK	135	69	10.35	10.33	10.31	11.5	0.0
100	QPSK	135	138	10.25	10.30	10.30		
100	QPSK	270	0	10.32	10.30	10.31	11.5	0.0
100	16QAM	1	1	10.25	10.34	10.24	11.5	0.0
100	64QAM	1	1	10.35	10.30	10.26	11.5	0.0
100	256QAM	1	1	10.26	10.32	10.22	11.5	0.0
Channel								
Frequency (MHz)								
				65000	65000	66000		
				3742.02	3840	3944.98		
80	QPSK	1	1	10.29	10.31	10.26	11.5	0.0
Channel								
Frequency (MHz)								
				648334	65000	66366		
				3740.01	3840	3949.98		
80	QPSK	1	1	10.32	10.27	10.23	11.5	0.0
Channel								
Frequency (MHz)								
				648000	65000	66400		
				3735	3840	3945		
70	QPSK	1	1	10.28	10.30	10.23	11.5	0.0
Channel								
Frequency (MHz)								
				648688	65000	66332		
				3729.02	3840	3949.98		
60	QPSK	1	1	10.33	10.26	10.31	11.5	0.0
Channel								
Frequency (MHz)								
				648334	65000	66366		
				3725.01	3840	3954.98		
50	QPSK	1	1	10.30	10.27	10.27	11.5	0.0
Channel								
Frequency (MHz)								
				648000	65000	66400		





### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pi2 BPSK	1	1		10.62			
100	Pi2 BPSK	1	137		10.59		11.5	0.0
100	Pi2 BPSK	1	271		10.67			
100	Pi2 BPSK	135	0		10.67		11.5	0.0
100	Pi2 BPSK	135	69		10.66		11.5	0.0
100	Pi2 BPSK	135	138		10.66		11.5	0.0
100	Pi2 BPSK	270	0		10.68			
100	QPSK	1	1		10.70			
100	QPSK	1	137		10.68		11.5	0.0
100	QPSK	1	271		10.61			
100	QPSK	135	0		10.60		11.5	0.0
100	QPSK	135	69		10.66			
100	QPSK	135	138		10.68			
100	QPSK	270	0		10.68		11.5	0.0
100	16QAM	1	1		10.64		11.5	0.0
100	64QAM	1	1		10.63		11.5	0.0
100	256QAM	1	1		10.59		11.5	0.0
Channel								
Frequency (MHz)								
6330.00								
6333.32								
6336.66								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	10.51	10.67	10.83	11.5	0.0
Channel								
Frequency (MHz)								
6336.68								
6333.32								
6340.00								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	10.60	10.60	10.60	11.5	0.0
Channel								
Frequency (MHz)								
6340.02								
6340.02								
6340.02								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	10.63	10.64	10.66	11.5	0.0
Channel								
Frequency (MHz)								
6340.00								
6333.32								
6346.66								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	10.50	10.63	10.66	11.5	0.0
Channel								
Frequency (MHz)								
6340.00								
6333.32								
6353.32								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	10.63	10.63	10.63	11.5	0.0
Channel								
Frequency (MHz)								
6340.01								
3499.98								
3529.98								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	10.62	10.63	10.64	11.5	0.0
Channel								
Frequency (MHz)								
6306.68								
6333.32								
6360.00								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	10.62	10.66	10.62	11.5	0.0
Channel								
Frequency (MHz)								
6300.00								
6333.32								
6361.66								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	10.62	10.63	10.66	11.5	0.0
Channel								
Frequency (MHz)								
6355.01								
3499.98								
3544.98								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	10.63	10.63	10.66	11.5	0.0

### Part27Q\_n77 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
6500.00								
6500.00								
6500.00								
100	Pi2 BPSK	1	1	10.30	10.30	10.09		
100	Pi2 BPSK	1	137	10.32	10.30	10.20		
100	Pi2 BPSK	1	271	10.31	10.31	10.27	11.5	0.0
100	Pi2 BPSK	135	0	10.28	10.31	10.19	11.5	0.0
100	Pi2 BPSK	135	69	10.27	10.28	10.32	11.5	0.0
100	Pi2 BPSK	135	138	10.28	10.29	10.15		
100	Pi2 BPSK	270	0	10.26	10.33	10.33		
100	QPSK	1	1	10.36	10.35	10.33		
100	QPSK	1	137	10.28	10.33	10.30	11.5	0.0
100	QPSK	1	271	10.25	10.32	10.29		
100	QPSK	135	0	10.33	10.32	10.19		
100	QPSK	135	69	10.35	10.33	10.11	11.5	0.0
100	QPSK	135	138	10.25	10.30	10.30		
100	QPSK	270	0	10.32	10.30	10.31	11.5	0.0
100	16QAM	1	1	10.25	10.34	10.24	11.5	0.0
100	64QAM	1	1	10.35	10.30	10.26	11.5	0.0
100	256QAM	1	1	10.26	10.32	10.22	11.5	0.0
Channel								
Frequency (MHz)								
6496.68								
6500.00								
6503.32								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	10.29	10.31	10.26	11.5	0.0
Channel								
Frequency (MHz)								
6493.34								
6500.00								
6506.66								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	10.32	10.27	10.23	11.5	0.0
Channel								
Frequency (MHz)								
6493.34								
6500.00								
6513.32								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	10.28	10.30	10.23	11.5	0.0
Channel								
Frequency (MHz)								
6496.68								
6500.00								
6513.32								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	10.33	10.26	10.31	11.5	0.0
Channel								
Frequency (MHz)								
6493.34								
6500.00								
6506.66								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	10.30	10.27	10.27	11.5	0.0
Channel								
Frequency (MHz)								
6490.00								
6500.00								
6510.00								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	10.29	10.26	10.25	11.5	0.0
Channel								
Frequency (MHz)								
6471.68								
6500.00								
6513.32								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	10.29	10.30	10.23	11.5	0.0
Channel								
Frequency (MHz)								
6473.34								
6500.00								
6516.66								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	10.28	10.32	10.27	11.5	0.0
Channel								
Frequency (MHz)								
6471.68								
6500.00								
6516.66								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	10.27	10.26	10.24	11.5	0.0
Channel								
Frequency (MHz)								
6470.00								
3705.52								
3840.39								
3975.48								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	10.27	10.25	10.31	11.5	0.0

### Part27Q\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
1243.00								
100	Pi2 BPSK	1	1		12.45			
100	Pi2 BPSK	1	137		12.43		13.5	0.0
100	Pi2 BPSK	1	271		12.36			
100	Pi2 BPSK	135	0		12.38		13.5	0.0
100	Pi2 BPSK	135	69		12.34		13.5	0.0
100	Pi2 BPSK	135	138		12.38		13.5	0.0
100	Pi2 BPSK	270	0		12.32			
100	QPSK	1	1		12.47			
100	QPSK	1	137		12.38		13.5	0.0
100	QPSK	1	271		12.43			
100	QPSK	135	0		12.41		13.5	0.0
100	QPSK	135	69		12.45			
100	QPSK	135	138		12.36			
100	QPSK	270	0		12.40		13.5	0.0
100	16QAM	1	1		12.42		13.5	0.0
100	64QAM	1	1		12.31		13.5	0.0
100	256QAM	1	1		12.38		13.5	0.0
Channel								
Frequency (MHz)								
1245.00								
1245.00								
1245.00								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	12.43	12.36	12.38	13.5	0.0
Channel								
Frequency (MHz)								
1240.02								
1245.00								
1245.00								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	12.39	12.37	12.44	13.5	0.0
Channel								
Frequency (MHz)								
1245.01								
1245.00								
1245.00								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	12.38	12.41	12.39	13.5	0.0
Channel								
Frequency (MHz)								
1240.00								
1245.00								
1246.66								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	12.42	12.37	12.45	13.5	0.0
Channel								
Frequency (MHz)								
1245.00								
1245.00								
1245.00								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	12.42	12.43	12.37	13.5	0.0
Channel								
Frequency (MHz)								
1240.01								
1245.00								
1245.00								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	12.45	12.43	12.40	13.5	0.0
Channel								
Frequency (MHz)								
1240.00								
1245.00								
1246.66								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	12.45	12.36	12.44	13.5	0.0
Channel								
Frequency (MHz)								
1240.00								
1245.00								
1246.66								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	12.37	12.45	12.36	13.5	0.0
Channel								
Frequency (MHz)								
1245.00								
1245.00								
1245.00								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	12.40	12.44	12.40	13.5	0.0
Channel								
Frequency (MHz)								
1245.01								
1245.00								
1245.00								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	12.39	12.39	12.42	13.5	0.0



### Part270\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	11.92	11.90	11.89		
100	Pl2 BPSK	1	137	11.85	11.94	11.91	13.5	0.0
100	Pl2 BPSK	1	271	11.83	11.92	11.88		
100	Pl2 BPSK	135	0	11.84	11.89	11.94	13.5	0.0
100	Pl2 BPSK	135	69	11.75	11.94	11.85	13.5	0.0
100	Pl2 BPSK	135	138	11.74	11.87	11.87		
100	Pl2 BPSK	270	0	11.78	11.83	11.89	13.5	0.0
100	QPSK	1	1	11.91	11.90	11.90		
100	QPSK	1	137	11.83	11.92	11.84	13.5	0.0
100	QPSK	1	271	11.80	11.87	11.74		
100	QPSK	135	0	11.87	11.90	11.85		
100	QPSK	135	69	11.76	11.94	11.85	13.5	0.0
100	QPSK	135	138	11.79	11.87	11.83		
100	QPSK	270	0	11.83	11.93	11.92	13.5	0.0
100	16QAM	1	1	11.85	11.91	11.86	13.5	0.0
100	64QAM	1	1	11.75	11.91	11.88	13.5	0.0
100	256QAM	1	1	11.87	11.93	11.94	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
80	QPSK	1	1	11.89	11.85	11.85	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
80	QPSK	1	1	11.83	11.85	11.79	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
70	QPSK	1	1	11.85	11.86	11.84	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
60	QPSK	1	1	11.85	11.91	11.81	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
50	QPSK	1	1	11.84	11.90	11.81	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
40	QPSK	1	1	11.83	11.93	11.80	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
30	QPSK	1	1	11.85	11.93	11.85	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
20	QPSK	1	1	11.83	11.97	11.80	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
15	QPSK	1	1	11.86	11.89	11.81	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
10	QPSK	1	1	11.87	11.94	11.84	13.5	0.0

### Part27Q\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	12.45				
100	Pl2 BPSK	1	137	12.43			13.5	0.0
100	Pl2 BPSK	1	271	12.36				
100	Pl2 BPSK	135	0	12.38			13.5	0.0
100	Pl2 BPSK	135	69	12.34			13.5	0.0
100	Pl2 BPSK	135	138	12.38			13.5	0.0
100	Pl2 BPSK	270	0	12.32				
100	QPSK	1	1	12.47				
100	QPSK	1	137	12.38			13.5	0.0
100	QPSK	1	271	12.43				
100	QPSK	135	0	12.41			13.5	0.0
100	QPSK	135	69	12.45			13.5	0.0
100	QPSK	135	138	12.38			13.5	0.0
100	QPSK	270	0	12.40			13.5	0.0
100	16QAM	1	1	12.42			13.5	0.0
100	64QAM	1	1	12.31			13.5	0.0
100	256QAM	1	1	12.38			13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
80	QPSK	1	1	12.43	12.38	12.38	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
80	QPSK	1	1	12.39	12.37	12.44	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
70	QPSK	1	1	12.38	12.41	12.39	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
60	QPSK	1	1	12.42	12.37	12.45	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
50	QPSK	1	1	12.42	12.43	12.37	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
40	QPSK	1	1	12.45	12.43	12.40	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
30	QPSK	1	1	12.45	12.36	12.44	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
20	QPSK	1	1	12.37	12.45	12.38	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
15	QPSK	1	1	12.40	12.44	12.40	13.5	0.0
Channel								
Frequency (MHz)								
63000 63332 63666								
10	QPSK	1	1	12.39	12.39	12.42	13.5	0.0

### Part270\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3760 3840 3930								
100	Pl2 BPSK	1	1	11.92	11.90	11.89		
100	Pl2 BPSK	1	137	11.85	11.94	11.91	13.5	0.0
100	Pl2 BPSK	1	271	11.83	11.92	11.88		
100	Pl2 BPSK	135	0	11.84	11.89	11.94	13.5	0.0
100	Pl2 BPSK	135	69	11.75	11.94	11.85	13.5	0.0
100	Pl2 BPSK	135	138	11.74	11.87	11.87		
100	Pl2 BPSK	270	0	11.78	11.83	11.89	13.5	0.0
100	QPSK	1	1	11.91	11.90	11.90		
100	QPSK	1	137	11.83	11.92	11.84	13.5	0.0
100	QPSK	1	271	11.80	11.87	11.74		
100	QPSK	135	0	11.87	11.90	11.85		
100	QPSK	135	69	11.76	11.94	11.85	13.5	0.0
100	QPSK	135	138	11.79	11.87	11.83		
100	QPSK	270	0	11.83	11.93	11.92	13.5	0.0
100	16QAM	1	1	11.85	11.91	11.86	13.5	0.0
100	64QAM	1	1	11.75	11.91	11.88	13.5	0.0
100	256QAM	1	1	11.87	11.93	11.94	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
80	QPSK	1	1	11.89	11.85	11.85	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
80	QPSK	1	1	11.83	11.85	11.79	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
70	QPSK	1	1	11.85	11.86	11.84	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
60	QPSK	1	1	11.85	11.91	11.81	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
50	QPSK	1	1	11.84	11.90	11.81	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
40	QPSK	1	1	11.83	11.93	11.80	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
30	QPSK	1	1	11.85	11.93	11.85	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
20	QPSK	1	1	11.83	11.97	11.80	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
15	QPSK	1	1	11.86	11.89	11.81	13.5	0.0
Channel								
Frequency (MHz)								
65000 65000 65000								
10	QPSK	1	1	11.87	11.94	11.84	13.5	0.0



### Part27Q\_n78\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	11.75				
100	Pl2 BPSK	1	137	11.79			13.0	0.0
100	Pl2 BPSK	1	271	11.80				
100	Pl2 BPSK	135	0	11.81			13.0	0.0
100	Pl2 BPSK	135	69	11.81			13.0	0.0
100	Pl2 BPSK	135	138	11.81			13.0	0.0
100	Pl2 BPSK	270	0	11.75				
100	QPSK	1	1	11.80				
100	QPSK	1	137	11.81			13.0	0.0
100	QPSK	1	271	11.82				
100	QPSK	135	0	11.80			13.0	0.0
100	QPSK	135	69	11.83				
100	QPSK	135	138	11.79				
100	QPSK	270	0	11.77			13.0	0.0
100	16QAM	1	1	11.83			13.0	0.0
100	64QAM	1	1	11.77			13.0	0.0
100	256QAM	1	1	11.81			13.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.75	11.77	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.76	11.81	11.82	13.0	0.0
Channel								
Frequency (MHz)								
3485.02								
3489.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	11.79	11.76	11.74	13.0	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63466								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	11.75	11.82	11.78	13.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	11.82	11.80	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	11.78	11.75	11.74	13.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	11.77	11.82	11.79	13.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	11.77	11.78	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	11.80	11.81	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63534								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	11.83	11.75	11.80	13.0	0.0

### Part27O\_n78\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	Pl2 BPSK	1	1	11.77				
100	Pl2 BPSK	1	137	11.70			13.0	0.0
100	Pl2 BPSK	1	271	11.72				
100	Pl2 BPSK	135	0	11.76			13.0	0.0
100	Pl2 BPSK	135	69	11.75			13.0	0.0
100	Pl2 BPSK	135	138	11.75			13.0	0.0
100	Pl2 BPSK	270	0	11.77				
100	QPSK	1	1	11.80				
100	QPSK	1	137	11.72			13.0	0.0
100	QPSK	1	271	11.72				
100	QPSK	135	0	11.75			13.0	0.0
100	QPSK	135	69	11.76				
100	QPSK	135	138	11.75				
100	QPSK	270	0	11.77			13.0	0.0
100	16QAM	1	1	11.75			13.0	0.0
100	64QAM	1	1	11.76			13.0	0.0
100	256QAM	1	1	11.74			13.0	0.0
Channel								
Frequency (MHz)								
64968								
65000								
65032								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.72	11.69	11.70	13.0	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65066								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.74	11.78	11.76	13.0	0.0
Channel								
Frequency (MHz)								
3735								
3765								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	11.77	11.77	11.76	13.0	0.0
Channel								
Frequency (MHz)								
64868								
65000								
65132								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	11.74	11.74	11.71	13.0	0.0
Channel								
Frequency (MHz)								
64800								
65000								
65200								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	11.73	11.71	11.70	13.0	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65266								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	11.78	11.76	11.74	13.0	0.0
Channel								
Frequency (MHz)								
64700								
65000								
65300								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	11.70	11.70	11.75	13.0	0.0
Channel								
Frequency (MHz)								
64734								
65000								
65266								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	11.75	11.69	11.76	13.0	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65266								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	11.72	11.74	11.69	13.0	0.0
Channel								
Frequency (MHz)								
64700								
65000								
65300								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	11.69	11.71	11.70	13.0	0.0

### Part27Q\_n78\_HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	11.75				
100	Pl2 BPSK	1	137	11.79			13.0	0.0
100	Pl2 BPSK	1	271	11.80				
100	Pl2 BPSK	135	0	11.81			13.0	0.0
100	Pl2 BPSK	135	69	11.81			13.0	0.0
100	Pl2 BPSK	135	138	11.81			13.0	0.0
100	Pl2 BPSK	270	0	11.75				
100	QPSK	1	1	11.80				
100	QPSK	1	137	11.81			13.0	0.0
100	QPSK	1	271	11.82				
100	QPSK	135	0	11.80			13.0	0.0
100	QPSK	135	69	11.83				
100	QPSK	135	138	11.79				
100	QPSK	270	0	11.77			13.0	0.0
100	16QAM	1	1	11.83			13.0	0.0
100	64QAM	1	1	11.77			13.0	0.0
100	256QAM	1	1	11.81			13.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.75	11.77	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	11.76	11.81	11.82	13.0	0.0
Channel								
Frequency (MHz)								
3485.02								
3489.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	11.79	11.76	11.74	13.0	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63466								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	11.75	11.82	11.78	13.0	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63500								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	11.82	11.80	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	11.78	11.75	11.74	13.0	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63566								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	11.77	11.82	11.79	13.0	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	11.77	11.78	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	11.80	11.81	11.80	13.0	0.0
Channel								
Frequency (MHz)								
63534								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	11.83	11.75	11.80	13.0	0.0



**Part27O\_n78 HPUe\_Ant 4**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3750				
100	PI2 BPSK	1	1		11.77			
100	PI2 BPSK	1	137		11.70		13.0	0.0
100	PI2 BPSK	1	271		11.72			
100	PI2 BPSK	135	0		11.76		13.0	0.0
100	PI2 BPSK	135	69		11.75			
100	PI2 BPSK	135	138		11.75		13.0	0.0
100	PI2 BPSK	270	0		11.77			
100	QPSK	1	1		11.80			
100	QPSK	1	137		11.72		13.0	0.0
100	QPSK	1	271		11.72			
100	QPSK	135	0		11.75			
100	QPSK	135	69		11.76		13.0	0.0
100	QPSK	135	138		11.70			
100	QPSK	270	0		11.77		13.0	0.0
100	16QAM	1	1		11.75		13.0	0.0
100	64QAM	1	1		11.76		13.0	0.0
100	256QAM	1	1		11.74		13.0	0.0
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	11.72	11.69	11.70	13.0	0.0
Channel				648334	650000	650666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	11.74	11.78	11.76	13.0	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	11.77	11.77	11.76	13.0	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3728.02	3750	3781.98	(dBm)	(dB)
60	QPSK	1	1	11.74	11.74	11.71	13.0	0.0
Channel				648334	650000	651666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	11.73	11.71	11.70	13.0	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	11.78	11.76	11.74	13.0	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	11.70	11.70	11.75	13.0	0.0
Channel				647334	650000	652666	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	11.75	11.69	11.76	13.0	0.0
Channel				647168	650000	652832	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	11.72	11.74	11.69	13.0	0.0
Channel				646990	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	11.69	11.71	11.70	13.0	0.0



### Part27Q\_n78\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	14.24				
100	PI2 BPSK	1	137	14.20			15.5	0.0
100	PI2 BPSK	1	271	14.23				
100	PI2 BPSK	135	0	14.18			15.5	0.0
100	PI2 BPSK	135	69	14.20			15.5	0.0
100	PI2 BPSK	135	138	14.26				
100	PI2 BPSK	270	0	14.24			15.5	0.0
100	QPSK	1	1	14.28				
100	QPSK	1	137	14.25			15.5	0.0
100	QPSK	1	271	14.22				
100	QPSK	135	0	14.23			15.5	0.0
100	QPSK	135	69	14.26				
100	QPSK	135	138	14.21				
100	QPSK	270	0	14.24			15.5	0.0
100	16QAM	1	1	14.24			15.5	0.0
100	64QAM	1	1	14.20			15.5	0.0
100	256QAM	1	1	14.22			15.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.19	14.25	14.19	15.5	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.21	14.23	14.24	15.5	0.0
Channel								
Frequency (MHz)								
3455.01								
3499.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.28	14.25	14.17	15.5	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.17	14.17	14.18	15.5	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.19	14.19	14.17	15.5	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.20	14.23	14.25	15.5	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	14.20	14.23	14.25	15.5	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	14.24	14.23	14.18	15.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63616								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	14.23	14.26	14.22	15.5	0.0
Channel								
Frequency (MHz)								
63234								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	14.20	14.26	14.25	15.5	0.0

### Part27Q\_n78\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	14.49				
100	PI2 BPSK	1	137	14.44			15.5	0.0
100	PI2 BPSK	1	271	14.49				
100	PI2 BPSK	135	0	14.50			15.5	0.0
100	PI2 BPSK	135	69	14.49			15.5	0.0
100	PI2 BPSK	135	138	14.52				
100	PI2 BPSK	270	0	14.49			15.5	0.0
100	QPSK	1	1	14.54				
100	QPSK	1	137	14.47			15.5	0.0
100	QPSK	1	271	14.45				
100	QPSK	135	0	14.50			15.5	0.0
100	QPSK	135	69	14.53				
100	QPSK	135	138	14.50				
100	QPSK	270	0	14.49			15.5	0.0
100	16QAM	1	1	14.45			15.5	0.0
100	64QAM	1	1	14.45			15.5	0.0
100	256QAM	1	1	14.44			15.5	0.0
Channel								
Frequency (MHz)								
64968								
65000								
65032								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.43	14.52	14.49	15.5	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65068								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.45	14.50	14.43	15.5	0.0
Channel								
Frequency (MHz)								
3735								
3750								
3765								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.48	14.50	14.51	15.5	0.0
Channel								
Frequency (MHz)								
64868								
65000								
65132								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.45	14.45	14.43	15.5	0.0
Channel								
Frequency (MHz)								
64834								
65000								
65168								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.52	14.45	14.51	15.5	0.0
Channel								
Frequency (MHz)								
64800								
65000								
65200								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.46	14.48	14.50	15.5	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65232								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	14.45	14.51	14.52	15.5	0.0
Channel								
Frequency (MHz)								
64734								
65000								
65268								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	14.43	14.44	14.44	15.5	0.0
Channel								
Frequency (MHz)								
64768								
65000								
65332								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	14.48	14.51	14.48	15.5	0.0
Channel								
Frequency (MHz)								
64700								
65000								
65368								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	14.49	14.47	14.47	15.5	0.0

### Part27Q\_n78 HPUE\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	14.24				
100	PI2 BPSK	1	137	14.20			15.5	0.0
100	PI2 BPSK	1	271	14.23				
100	PI2 BPSK	135	0	14.18			15.5	0.0
100	PI2 BPSK	135	69	14.20			15.5	0.0
100	PI2 BPSK	135	138	14.26				
100	PI2 BPSK	270	0	14.24			15.5	0.0
100	QPSK	1	1	14.28				
100	QPSK	1	137	14.25			15.5	0.0
100	QPSK	1	271	14.22				
100	QPSK	135	0	14.23			15.5	0.0
100	QPSK	135	69	14.26				
100	QPSK	135	138	14.21				
100	QPSK	270	0	14.24			15.5	0.0
100	16QAM	1	1	14.24			15.5	0.0
100	64QAM	1	1	14.20			15.5	0.0
100	256QAM	1	1	14.22			15.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.19	14.25	14.19	15.5	0.0
Channel								
Frequency (MHz)								
63268								
63332								
63400								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	14.21	14.23	14.24	15.5	0.0
Channel								
Frequency (MHz)								
3455.01								
3499.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	14.25	14.25	14.17	15.5	0.0
Channel								
Frequency (MHz)								
63200								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	14.17	14.17	14.18	15.5	0.0
Channel								
Frequency (MHz)								
63168								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	14.19	14.19	14.17	15.5	0.0
Channel								
Frequency (MHz)								
63134								
63332								
63532								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	14.20	14.21	14.24	15.5	0.0
Channel								
Frequency (MHz)								
63100								
63332								
63666								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	14.20	14.23	14.25	15.5	0.0
Channel								
Frequency (MHz)								
63068								
63332								
63600								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	14.24	14.23	14.18	15.5	0.0
Channel								
Frequency (MHz)								
63000								
63332								
63616								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	14.23	14.26	14.22	15.5	0.0
Channel								
Frequency (MHz)								
63234								
63332								
63332								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	14.20	14.26	14.25	15.5	0.0



**Part27O\_n78 HPUe\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	650000	650000		
Frequency (MHz)				3750	3750	3750		
100	PI2 BPSK	1	1	14.49	14.44	14.49	15.5	0.0
100	PI2 BPSK	1	137	14.49	14.44	14.49	15.5	0.0
100	PI2 BPSK	1	271	14.49	14.44	14.49	15.5	0.0
100	PI2 BPSK	135	0	14.50	14.50	14.50	15.5	0.0
100	PI2 BPSK	135	69	14.49	14.49	14.49	15.5	0.0
100	PI2 BPSK	135	138	14.52	14.52	14.52	15.5	0.0
100	PI2 BPSK	270	0	14.49	14.49	14.49	15.5	0.0
100	QPSK	1	1	14.51	14.51	14.51	15.5	0.0
100	QPSK	1	137	14.47	14.47	14.47	15.5	0.0
100	QPSK	1	271	14.45	14.45	14.45	15.5	0.0
100	QPSK	135	0	14.50	14.50	14.50	15.5	0.0
100	QPSK	135	69	14.53	14.53	14.53	15.5	0.0
100	QPSK	135	138	14.50	14.50	14.50	15.5	0.0
100	QPSK	270	0	14.49	14.49	14.49	15.5	0.0
100	16QAM	1	1	14.45	14.45	14.45	15.5	0.0
100	256QAM	1	1	14.44	14.44	14.44	15.5	0.0
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	14.43	14.52	14.49	15.5	0.0
Channel				648334	650000	650668	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	14.45	14.50	14.43	15.5	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	14.48	14.50	14.51	15.5	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3738.02	3750	3749.98	(dBm)	(dB)
60	QPSK	1	1	14.45	14.45	14.43	15.5	0.0
Channel				648334	650000	651668	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	14.52	14.45	14.51	15.5	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	14.46	14.48	14.50	15.5	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	14.45	14.51	14.52	15.5	0.0
Channel				647334	650000	652668	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	14.43	14.44	14.44	15.5	0.0
Channel				647000	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	14.48	14.51	14.48	15.5	0.0
Channel				646300	650000	653300	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	14.49	14.47	14.47	15.5	0.0



### Part27Q\_n78\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3499.98									
100	PI2 BPSK	1	1		10.47				
100	PI2 BPSK	1	137		10.47		11.5	0.0	
100	PI2 BPSK	1	271		10.45				
100	PI2 BPSK	135	0		10.41		11.5	0.0	
100	PI2 BPSK	135	69		10.46		11.5	0.0	
100	PI2 BPSK	135	138		10.47				
100	PI2 BPSK	270	0		10.46		11.5	0.0	
100	QPSK	1	1		10.49				
100	QPSK	1	137		10.39		11.5	0.0	
100	QPSK	1	271		10.44				
100	QPSK	135	0		10.41				
100	QPSK	135	69		10.46		11.5	0.0	
100	QPSK	135	138		10.47				
100	QPSK	270	0		10.44		11.5	0.0	
100	16QAM	1	1		10.44		11.5	0.0	
100	64QAM	1	1		10.46		11.5	0.0	
100	256QAM	1	1		10.48		11.5	0.0	
Channel									
Frequency (MHz)									
633000									
80	QPSK	1	1		3499.98	3504.99			
Channel									
Frequency (MHz)									
632968									
80	QPSK	1	1		3499.02	3499.98	3510		
Channel									
Frequency (MHz)									
633000									
70	QPSK	1	1		10.41	10.42	10.47	11.5	0.0
Channel									
Frequency (MHz)									
633000									
60	QPSK	1	1		10.45	10.45	10.45	11.5	0.0
Channel									
Frequency (MHz)									
631668									
50	QPSK	1	1		3476.02	3499.98	3525		
Channel									
Frequency (MHz)									
631334									
40	QPSK	1	1		3470.01	3499.98	3529.98		
Channel									
Frequency (MHz)									
631000									
30	QPSK	1	1		10.41	10.39	10.40	11.5	0.0
Channel									
Frequency (MHz)									
630668									
20	QPSK	1	1		3465.02	3499.98	3534.98		
Channel									
Frequency (MHz)									
630500									
15	QPSK	1	1		3457.5	3499.98	3542.49		
Channel									
Frequency (MHz)									
630334									
10	QPSK	1	1		10.40	10.43	10.45	11.5	0.0

### Part27Q\_n78\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3750									
100	PI2 BPSK	1	1		10.32				
100	PI2 BPSK	1	137		10.35		11.5	0.0	
100	PI2 BPSK	1	271		10.32				
100	PI2 BPSK	135	0		10.31		11.5	0.0	
100	PI2 BPSK	135	69		10.36		11.5	0.0	
100	PI2 BPSK	135	138		10.26				
100	PI2 BPSK	270	0		10.24		11.5	0.0	
100	QPSK	1	1		10.40				
100	QPSK	1	137		10.29		11.5	0.0	
100	QPSK	1	271		10.38				
100	QPSK	135	0		10.33				
100	QPSK	135	69		10.38		11.5	0.0	
100	QPSK	135	138		10.37				
100	QPSK	270	0		10.32		11.5	0.0	
100	16QAM	1	1		10.26		11.5	0.0	
100	64QAM	1	1		10.38		11.5	0.0	
100	256QAM	1	1		10.38		11.5	0.0	
Channel									
Frequency (MHz)									
649668									
80	QPSK	1	1		3742.02	3750	3754.98		
Channel									
Frequency (MHz)									
648334									
80	QPSK	1	1		3740.01	3750	3759.98		
Channel									
Frequency (MHz)									
648000									
70	QPSK	1	1		10.37	10.35	10.29	11.5	0.0
Channel									
Frequency (MHz)									
648668									
60	QPSK	1	1		10.32	10.35	10.30	11.5	0.0
Channel									
Frequency (MHz)									
648334									
50	QPSK	1	1		3725.01	3750	3754.98		
Channel									
Frequency (MHz)									
648000									
40	QPSK	1	1		3720	3750	3760		
Channel									
Frequency (MHz)									
647668									
30	QPSK	1	1		10.31	10.36	10.35	11.5	0.0
Channel									
Frequency (MHz)									
647334									
20	QPSK	1	1		3710.01	3750	3759.98		
Channel									
Frequency (MHz)									
647168									
15	QPSK	1	1		3707.5	3750	3752.48		
Channel									
Frequency (MHz)									
647000									
10	QPSK	1	1		10.34	10.30	10.30	11.5	0.0

### Part27Q\_n78 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3499.98									
100	PI2 BPSK	1	1		10.47				
100	PI2 BPSK	1	137		10.47		11.5	0.0	
100	PI2 BPSK	1	271		10.45				
100	PI2 BPSK	135	0		10.41		11.5	0.0	
100	PI2 BPSK	135	69		10.46		11.5	0.0	
100	PI2 BPSK	135	138		10.47				
100	PI2 BPSK	270	0		10.46		11.5	0.0	
100	QPSK	1	1		10.49				
100	QPSK	1	137		10.39		11.5	0.0	
100	QPSK	1	271		10.44				
100	QPSK	135	0		10.41				
100	QPSK	135	69		10.46		11.5	0.0	
100	QPSK	135	138		10.47				
100	QPSK	270	0		10.44		11.5	0.0	
100	16QAM	1	1		10.44		11.5	0.0	
100	64QAM	1	1		10.46		11.5	0.0	
100	256QAM	1	1		10.48		11.5	0.0	
Channel									
Frequency (MHz)									
633000									
80	QPSK	1	1		3499.02	3499.98	3510		
Channel									
Frequency (MHz)									
632968									
80	QPSK	1	1		3499.02	3499.98	3510		
Channel									
Frequency (MHz)									
633000									
70	QPSK	1	1		10.41	10.42	10.47	11.5	0.0
Channel									
Frequency (MHz)									
633000									
60	QPSK	1	1		10.45	10.45	10.45	11.5	0.0
Channel									
Frequency (MHz)									
631668									
50	QPSK	1	1		3476.02	3499.98	3525		
Channel									
Frequency (MHz)									
631334									
40	QPSK	1	1		3470.01	3499.98	3529.98		
Channel									
Frequency (MHz)									
631000									
30	QPSK	1	1		10.41	10.39	10.40	11.5	0.0
Channel									
Frequency (MHz)									
630668									
20	QPSK	1	1		3465.02	3499.98	3534.98		
Channel									
Frequency (MHz)									
630500									
15	QPSK	1	1		3457.5	3499.98	3542.48		
Channel									
Frequency (MHz)									
630334									
10	QPSK	1	1		10.40	10.43	10.45	11.5	0.0



**Part270\_n78 HPUE\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1		3750			
100	PI2 BPSK	1	137		10.35			
100	PI2 BPSK	1	271		10.32		11.5	0.0
100	PI2 BPSK	135	0		10.31		11.5	0.0
100	PI2 BPSK	135	69		10.36		11.5	0.0
100	PI2 BPSK	135	138		10.26		11.5	0.0
100	PI2 BPSK	270	0		10.24			
100	QPSK	1	1		10.40			
100	QPSK	1	137		10.29		11.5	0.0
100	QPSK	1	271		10.38			
100	QPSK	135	0		10.33		11.5	0.0
100	QPSK	135	69		10.36			
100	QPSK	135	138		10.37			
100	QPSK	270	0		10.32		11.5	0.0
100	16QAM	1	1		10.26		11.5	0.0
100	64QAM	1	1		10.38		11.5	0.0
100	256QAM	1	1		10.38		11.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	649668	650000	650332	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	3742.02	3750	3754.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
80	QPSK	1	1	648334	650000	650666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
70	QPSK	1	1	3740.01	3750	3759.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
70	QPSK	1	1	10.33	10.38	10.32	11.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	648688	650000	651332	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
60	QPSK	1	1	3748.02	3750	3760.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
60	QPSK	1	1	10.32	10.35	10.30	11.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	648334	650000	651666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
50	QPSK	1	1	3725.01	3750	3774.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
50	QPSK	1	1	10.33	10.37	10.35	11.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	QPSK	1	1	3720	3750	3780	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	QPSK	1	1	10.35	10.35	10.31	11.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	647668	650000	652332	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
30	QPSK	1	1	3715.02	3750	3784.98	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
30	QPSK	1	1	10.31	10.36	10.35	11.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	647334	650000	652666	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	3710.01	3750	3789.99	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	10.34	10.34	10.33	11.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	647168	650000	652832	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
15	QPSK	1	1	3707.52	3750	3792.48	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
10	QPSK	1	1	10.38	10.31	10.29	11.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	645000	650000	653000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
10	QPSK	1	1	3705	3750	3795	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
10	QPSK	1	1	10.34	10.30	10.30	11.5	0.0





### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	12.16				
100	Pl2 BPSK	1	137	12.19			13.5	0.0
100	Pl2 BPSK	1	271	12.20				
100	Pl2 BPSK	135	0	12.18			13.5	0.0
100	Pl2 BPSK	135	69	12.16			13.5	0.0
100	Pl2 BPSK	135	138	12.15			13.5	0.0
100	Pl2 BPSK	270	0	12.16			13.5	0.0
100	QPSK	1	1	12.20				
100	QPSK	1	137	12.18			13.5	0.0
100	QPSK	1	271	12.16				
100	QPSK	135	0	12.22			13.5	0.0
100	QPSK	135	69	12.22			13.5	0.0
100	QPSK	135	138	12.12			13.5	0.0
100	QPSK	270	0	12.15			13.5	0.0
100	16QAM	1	1	12.18			13.5	0.0
100	64QAM	1	1	12.22			13.5	0.0
100	256QAM	1	1	12.11			13.5	0.0
Channel								
Frequency (MHz)								
633000								
633332								
633666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	12.19	12.23	12.16	13.5	0.0
Channel								
Frequency (MHz)								
633968								
633332								
634000								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3490.02	3499.98	3510	13.5	0.0
Channel								
Frequency (MHz)								
634000								
633332								
634666								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	12.16	12.16	12.19	13.5	0.0
Channel								
Frequency (MHz)								
635000								
633332								
634666								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	12.18	12.23	12.15	13.5	0.0
Channel								
Frequency (MHz)								
631668								
633332								
635000								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3475.02	3499.98	3525	13.5	0.0
Channel								
Frequency (MHz)								
631000								
633332								
635666								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	631334	633332	635332	13.5	0.0
Channel								
Frequency (MHz)								
3470.01								
3499.98								
3529.98								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	12.21	12.16	12.16	13.5	0.0
Channel								
Frequency (MHz)								
631000								
633332								
635666								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	12.20	12.17	12.21	13.5	0.0
Channel								
Frequency (MHz)								
630668								
633332								
636000								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	3485.01	3499.98	3540	13.5	0.0
Channel								
Frequency (MHz)								
630000								
633332								
636166								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	12.21	12.18	12.16	13.5	0.0
Channel								
Frequency (MHz)								
3455.01								
3499.98								
3544.98								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	12.18	12.18	12.20	13.5	0.0

### Part27O\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	Pl2 BPSK	1	1	12.48				
100	Pl2 BPSK	1	137	12.52			13.5	0.0
100	Pl2 BPSK	1	271	12.54				
100	Pl2 BPSK	135	0	12.53			13.5	0.0
100	Pl2 BPSK	135	69	12.54			13.5	0.0
100	Pl2 BPSK	135	138	12.62			13.5	0.0
100	Pl2 BPSK	270	0	12.51			13.5	0.0
100	QPSK	1	1	12.53				
100	QPSK	1	137	12.55			13.5	0.0
100	QPSK	1	271	12.57				
100	QPSK	135	0	12.53			13.5	0.0
100	QPSK	135	69	12.55			13.5	0.0
100	QPSK	135	138	12.51			13.5	0.0
100	QPSK	270	0	12.47			13.5	0.0
100	16QAM	1	1	12.50			13.5	0.0
100	64QAM	1	1	12.57			13.5	0.0
100	256QAM	1	1	12.56			13.5	0.0
Channel								
Frequency (MHz)								
649668								
650000								
650332								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	12.51	12.53	12.50	13.5	0.0
Channel								
Frequency (MHz)								
649334								
650000								
650666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3740.01	3750	3759.98	13.5	0.0
Channel								
Frequency (MHz)								
648000								
650000								
651000								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	12.55	12.52	12.58	13.5	0.0
Channel								
Frequency (MHz)								
648668								
650000								
651332								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	12.56	12.81	12.57	13.5	0.0
Channel								
Frequency (MHz)								
648334								
650000								
651666								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3742.02	3750	3754.98	13.5	0.0
Channel								
Frequency (MHz)								
647668								
650000								
652000								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	12.56	12.53	12.59	13.5	0.0
Channel								
Frequency (MHz)								
3720								
3750								
3780								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	12.55	12.58	12.59	13.5	0.0
Channel								
Frequency (MHz)								
647000								
650000								
652332								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	649000	650000	652000	13.5	0.0
Channel								
Frequency (MHz)								
3700								
3750								
3780								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	12.60	12.52	12.61	13.5	0.0
Channel								
Frequency (MHz)								
647334								
650000								
652666								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	3710.01	3750	3789.98	13.5	0.0
Channel								
Frequency (MHz)								
646668								
650000								
653000								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	12.60	12.59	12.60	13.5	0.0
Channel								
Frequency (MHz)								
3700								
3750								
3780								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	12.61	12.60	12.55	13.5	0.0

### Part27Q\_n78\_HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1	12.16				
100	Pl2 BPSK	1	137	12.19			13.5	0.0
100	Pl2 BPSK	1	271	12.20				
100	Pl2 BPSK	135	0	12.18			13.5	0.0
100	Pl2 BPSK	135	69	12.16			13.5	0.0
100	Pl2 BPSK	135	138	12.15			13.5	0.0
100	Pl2 BPSK	270	0	12.16			13.5	0.0
100	QPSK	1	1	12.20				
100	QPSK	1	137	12.18			13.5	0.0
100	QPSK	1	271	12.16				
100	QPSK	135	0	12.22			13.5	0.0
100	QPSK	135	69	12.22			13.5	0.0
100	QPSK	135	138	12.12			13.5	0.0
100	QPSK	270	0	12.15			13.5	0.0
100	16QAM	1	1	12.18			13.5	0.0
100	64QAM	1	1	12.22			13.5	0.0
100	256QAM	1	1	12.11			13.5	0.0
Channel								
Frequency (MHz)								
633000								
633332								
633666								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	12.19	12.23	12.16	13.5	0.0
Channel								
Frequency (MHz)								
633968								
633332								
634000								
Tune-up limit (dBm)								
MPR (dB)								
80	QPSK	1	1	3490.02	3499.98	3510	13.5	0.0
Channel								
Frequency (MHz)								
634000								
633332								
634666								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	12.21	12.20	12.21	13.5	0.0
Channel								
Frequency (MHz)								
633534								
633332								
634332								
Tune-up limit (dBm)								
MPR (dB)								
70	QPSK	1	1	12.16	12.16	12.19	13.5	0.0
Channel								
Frequency (MHz)								
6345.01								
3499.98								
3514.98								
Tune-up limit (dBm)								
MPR (dB)								
60	QPSK	1	1	12.18	12.23	12.15	13.5	0.0
Channel								
Frequency (MHz)								
631668								
633332								
635000								
Tune-up limit (dBm)								
MPR (dB)								
50	QPSK	1	1	3475.02	3499.98	3525	13.5	0.0
Channel								
Frequency (MHz)								
631000								
633332								
635666								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	631334	633332	635332	13.5	0.0
Channel								
Frequency (MHz)								
3470.01								
3499.98								
3529.98								
Tune-up limit (dBm)								
MPR (dB)								
40	QPSK	1	1	12.21	12.16	12.16	13.5	0.0
Channel								
Frequency (MHz)								
631000								
633332								
635666								
Tune-up limit (dBm)								
MPR (dB)								
30	QPSK	1	1	12.20	12.17	12.21	13.5	0.0
Channel								
Frequency (MHz)								
630668								
633332								
636000								
Tune-up limit (dBm)								
MPR (dB)								
20	QPSK	1	1	3485.01	3499.98	3540	13.5	0.0
Channel								
Frequency (MHz)								
630000								
633332								
636166								
Tune-up limit (dBm)								
MPR (dB)								
15	QPSK	1	1	12.21	12.18	12.16	13.5	0.0
Channel								
Frequency (MHz)								
3455.01								
3499.98								
3544.98								
Tune-up limit (dBm)								
MPR (dB)								
10	QPSK	1	1	12.18	12.18	12.20	13.5	0.0



**Part27O\_n78 HPUe\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3750				
100	PI2 BPSK	1	1		12.48			
100	PI2 BPSK	1	137		12.52		13.5	0.0
100	PI2 BPSK	1	271		12.54			
100	PI2 BPSK	135	0		12.53		13.5	0.0
100	PI2 BPSK	135	69		12.54			
100	PI2 BPSK	135	138		12.62			
100	PI2 BPSK	270	0		12.51		13.5	0.0
100	QPSK	1	1		12.53			
100	QPSK	1	137		12.55		13.5	0.0
100	QPSK	1	271		12.57			
100	QPSK	135	0		12.53			
100	QPSK	135	69		12.55		13.5	0.0
100	QPSK	135	138		12.51			
100	QPSK	270	0		12.47		13.5	0.0
100	16QAM	1	1		12.50		13.5	0.0
100	64QAM	1	1		12.57		13.5	0.0
100	256QAM	1	1		12.56		13.5	0.0
Channel				649668	650000	650332	Tune-up limit	MPR
Frequency (MHz)				3742.02	3750	3754.98	(dBm)	(dB)
90	QPSK	1	1	12.61	12.53	12.60	13.5	0.0
Channel				648334	650000	650666	Tune-up limit	MPR
Frequency (MHz)				3740.01	3750	3759.99	(dBm)	(dB)
80	QPSK	1	1	12.56	12.60	12.55	13.5	0.0
Channel				648000	650000	651000	Tune-up limit	MPR
Frequency (MHz)				3735	3750	3765	(dBm)	(dB)
70	QPSK	1	1	12.55	12.52	12.58	13.5	0.0
Channel				648688	650000	651332	Tune-up limit	MPR
Frequency (MHz)				3740.02	3750	3749.98	(dBm)	(dB)
60	QPSK	1	1	12.56	12.61	12.57	13.5	0.0
Channel				648334	650000	651666	Tune-up limit	MPR
Frequency (MHz)				3725.01	3750	3774.99	(dBm)	(dB)
50	QPSK	1	1	12.56	12.53	12.59	13.5	0.0
Channel				648000	650000	652000	Tune-up limit	MPR
Frequency (MHz)				3720	3750	3780	(dBm)	(dB)
40	QPSK	1	1	12.55	12.58	12.59	13.5	0.0
Channel				647668	650000	652332	Tune-up limit	MPR
Frequency (MHz)				3715.02	3750	3784.98	(dBm)	(dB)
30	QPSK	1	1	12.60	12.62	12.61	13.5	0.0
Channel				647334	650000	652666	Tune-up limit	MPR
Frequency (MHz)				3710.01	3750	3789.99	(dBm)	(dB)
20	QPSK	1	1	12.54	12.53	12.54	13.5	0.0
Channel				647168	650000	652832	Tune-up limit	MPR
Frequency (MHz)				3707.52	3750	3792.48	(dBm)	(dB)
15	QPSK	1	1	12.60	12.59	12.60	13.5	0.0
Channel				646990	650000	653000	Tune-up limit	MPR
Frequency (MHz)				3705	3750	3795	(dBm)	(dB)
10	QPSK	1	1	12.61	12.60	12.55	13.5	0.0



Band 2_Ant 0																	
Modem	Modem	RB	Power	Power	Power	Turn-up	MPE	Modem	Modem	RB	Power	Power	Power	Turn-up	MPE		
(MHz)	(MHz)	Rate	Ch/Offst	Ch/Offst	Ch/Offst	Time (min)	(dB)	(MHz)	(MHz)	Rate	Ch/Offst	Ch/Offst	Ch/Offst	Time (min)	(dB)		
Channel	Channel		1800	1800	1800			Channel	Channel		1800	1800	1800				
Frequency (MHz)	Frequency (MHz)		1800	1800	1800			Frequency (MHz)	Frequency (MHz)		1800	1800	1800				
20	QPSK	1	0	22.79	22.89	22.83	24	0	20	QPSK	1	0	22.76	22.89	22.89	24	0
20	QPSK	1	49	22.89	22.89	22.89	24	0	20	QPSK	1	49	22.86	22.84	22.86	24	0
20	QPSK	1	99	22.81	22.89	22.84	24	0	20	QPSK	1	99	22.85	22.84	22.85	24	0
20	QPSK	50	0	22.79	22.89	22.83	24	0	20	QPSK	50	0	22.76	22.89	22.89	24	0
20	QPSK	50	49	22.89	22.89	22.89	24	0	20	QPSK	50	49	22.86	22.84	22.86	24	0
20	QPSK	50	99	22.81	22.89	22.84	24	0	20	QPSK	50	99	22.85	22.84	22.85	24	0
20	QPSK	100	0	22.88	22.97	22.91	24	0	20	QPSK	100	0	22.83	22.96	22.90	24	0
20	QPSK	100	49	22.89	22.97	22.91	24	0	20	QPSK	100	49	22.86	22.96	22.90	24	0
20	QPSK	100	99	22.81	22.97	22.91	24	0	20	QPSK	100	99	22.85	22.96	22.90	24	0
20	16QAM	1	49	22.85	22.93	22.88	24	0	20	16QAM	1	49	22.86	22.72	22.84	24	0
20	16QAM	1	99	22.81	22.93	22.88	24	0	20	16QAM	1	99	22.80	22.94	22.88	24	0
20	16QAM	50	0	22.90	22.96	22.96	24	0	20	16QAM	50	0	22.86	22.97	22.96	24	0
20	16QAM	50	49	22.79	22.99	22.96	24	0	20	16QAM	50	49	22.88	22.92	22.95	24	0
20	16QAM	50	99	22.81	22.99	22.96	24	0	20	16QAM	50	99	22.88	22.97	22.93	24	0
20	16QAM	100	0	22.92	22.96	22.96	24	0	20	16QAM	100	0	22.88	22.92	22.95	24	0
20	16QAM	100	49	22.89	22.99	22.91	24	0	20	16QAM	100	49	22.88	22.92	22.92	24	0
20	16QAM	100	99	22.84	22.99	22.96	24	0	20	16QAM	100	99	22.90	22.93	22.93	24	0
20	16QAM	50	0	21.71	21.74	21.64	23	1	20	16QAM	50	0	20.26	20.40	20.29	23	1
20	16QAM	50	24	21.68	21.73	21.67	23	1	20	16QAM	50	24	20.41	20.50	20.40	23	1
20	16QAM	50	49	21.74	21.68	21.76	23	1	20	16QAM	50	49	20.43	20.45	20.38	23	1
20	16QAM	50	99	21.78	21.66	21.79	23	1	20	16QAM	50	99	20.37	20.46	20.38	23	1
20	256QAM	1	0	19.48	19.51	19.40	21	3	20	256QAM	1	0	18.46	18.56	18.48	19	4.5
20	256QAM	1	49	19.49	19.54	19.51	21	3	20	256QAM	1	49	18.53	18.52	18.54	19	4.5
20	256QAM	1	99	19.44	19.56	19.46	21	3	20	256QAM	1	99	18.49	18.53	18.47	19	4.5
20	256QAM	50	0	19.52	19.58	19.48	21	3	20	256QAM	50	0	18.37	18.44	18.42	19	4.5
20	256QAM	50	24	19.52	19.56	19.53	21	3	20	256QAM	50	24	18.41	18.40	18.41	19	4.5
20	256QAM	50	49	19.41	19.58	19.47	21	3	20	256QAM	50	49	18.41	18.45	18.34	19	4.5
20	256QAM	50	99	19.54	19.52	19.51	21	3	20	256QAM	50	99	18.41	18.47	18.42	19	4.5
15	QPSK	1	0	22.77	22.84	22.80	24	0	15	QPSK	1	0	22.61	22.88	22.82	24	0
15	QPSK	1	49	22.87	22.84	22.79	24	0	15	QPSK	1	49	22.81	22.81	22.79	24	0
15	QPSK	1	99	22.77	22.88	22.80	24	0	15	QPSK	1	99	22.70	22.78	22.84	24	0
15	QPSK	36	0	22.79	22.81	22.80	24	0	15	QPSK	36	0	22.30	22.42	22.37	24	0
15	QPSK	36	49	22.86	22.81	22.80	24	0	15	QPSK	36	49	22.37	22.39	22.38	24	0
15	QPSK	36	99	22.71	22.81	22.75	24	0	15	QPSK	36	99	22.29	22.31	22.29	24	0
15	QPSK	75	0	22.80	22.96	22.87	24	0	15	QPSK	75	0	22.32	22.38	22.39	24	0
15	QPSK	75	49	22.87	22.96	22.81	24	0	15	QPSK	75	49	22.43	22.45	22.45	24	0
15	16QAM	1	37	22.77	22.84	22.77	24	0	15	16QAM	1	37	22.63	22.65	22.59	23	0.5
15	16QAM	1	74	22.81	22.87	22.79	24	0	15	16QAM	1	74	22.56	22.68	22.68	23	0.5
15	16QAM	1	119	22.87	22.88	22.76	24	0	15	16QAM	1	119	22.56	22.66	22.64	23	0.5
15	16QAM	36	0	22.77	22.83	22.81	24	0	15	16QAM	36	0	21.28	21.34	21.28	22	1.5
15	16QAM	36	20	22.89	22.88	22.85	24	0	15	16QAM	36	20	21.23	21.27	21.17	22	1.5
15	16QAM	36	24	22.78	22.79	22.78	24	0	15	16QAM	36	24	21.24	21.24	21.24	22	1.5
15	16QAM	36	49	22.71	22.87	22.76	24	0	15	16QAM	36	49	21.48	21.50	21.44	22	1.5
15	16QAM	36	99	22.86	22.85	22.81	24	0	15	16QAM	36	99	21.47	21.49	21.49	22	1.5
15	16QAM	75	0	21.86	21.89	21.86	23	1	15	16QAM	75	0	20.27	20.36	20.26	21	2.5
15	16QAM	75	20	21.58	21.66	21.58	23	1	15	16QAM	75	20	20.35	20.46	20.33	21	2.5
15	16QAM	75	24	21.67	21.64	21.68	23	1	15	16QAM	75	24	20.37	20.37	20.34	21	2.5
15	16QAM	75	49	21.74	21.80	21.68	23	1	15	16QAM	75	49	20.26	20.35	20.36	21	2.5
15	256QAM	1	0	19.38	19.44	19.37	21	3	15	256QAM	1	0	18.36	18.45	18.45	19	4.5
15	256QAM	1	49	19.47	19.54	19.44	21	3	15	256QAM	1	49	18.48	18.54	18.44	19	4.5
15	256QAM	1	99	19.43	19.54	19.44	21	3	15	256QAM	1	99	18.45	18.43	18.43	19	4.5
15	256QAM	50	0	19.49	19.51	19.46	21	3	15	256QAM	50	0	18.20	18.36	18.36	19	4.5
15	256QAM	50	24	19.52	19.44	19.48	21	3	15	256QAM	50	24	18.31	18.35	18.35	19	4.5
15	256QAM	50	49	19.46	19.53	19.38	21	3	15	256QAM	50	49	18.37	18.35	18.32	19	4.5
15	256QAM	50	99	19.47	19.51	19.40	21	3	15	256QAM	50	99	18.39	18.41	18.33	19	4.5
10	QPSK	1	0	22.68	22.87	22.76	24	0	10	QPSK	1	0	22.74	22.87	22.81	24	0
10	QPSK	1	49	22.87	22.84	22.79	24	0	10	QPSK	1	49	22.78	22.78	22.76	24	0
10	QPSK	1	99	22.76	22.85	22.80	24	0	10	QPSK	1	99	22.78	22.73	22.84	24	0
10	QPSK	25	0	22.75	22.84	22.72	24	0	10	QPSK	25	0	22.32	22.43	22.32	24	0
10	QPSK	25	49	22.86	22.81	22.80	24	0	10	QPSK	25	49	22.37	22.39	22.38	24	0
10	QPSK	25	99	22.71	22.81	22.75	24	0	10	QPSK	25	99	22.29	22.31	22.29	24	0
10	QPSK	50	0	22.80	22.88	22.84	24	0	10	QPSK	50	0	22.33	22.41	22.36	24	0
10	QPSK	50	49	22.87	22.96	22.76	24	0	10	QPSK	50	49	22.43	22.45	22.45	24	0
10	16QAM	1	25	22.77	22.81	22.77	24	0	10	16QAM	1	25	22.60	22.68	22.59	23	0.5
10	16QAM	1	49	22.81	22.87	22.84	24	0	10	16QAM	1	49	22.59	22.68	22.68	23	0.5
10	16QAM	1	99	22.77	22.88	22.80	24	0	10	16QAM	1	99	22.56	22.66	22.64	23	0.5
10	16QAM	25	0	22.74	22.83	22.81	24	0	10	16QAM	25	0	21.27	21.33	21.33	22	1.5
10	16QAM	25	12	22.77	22.87	22.82	24	0	10	16QAM	25	12	21.23	21.27	21.17	22	1.5
10	16QAM	25	24	22.89	22.88	22.85	24	0	10	16QAM	25	24	21.23	21.28	21.17	22	1.5
10	16QAM	25	49	22.83	22.86	22.82	24	0	10	16QAM	25	49	21.24	21.24	21.25	22	1.5
10	16QAM	25	99	22.76	22.87	22.76	24	0	10	16QAM	25	99	21.52	21.59	21.45	22	1.5
10	16QAM	50	0	22.83	22.83	22.88	24	0	10	16QAM	50	0	20.25	20.32	20.27	21	2.5
10	16QAM	50	20	21.65	21.69	21.62	23	1	10	16QAM	50	20	20.32	20.41	20.32	21	2.5
10	16QAM	50	24	21.67	21.64	21.68	23	1	10	16QAM	50	24	20.34	20.34	20.34	21	2.5
10	16QAM	50	49	21.74	21.80	21.68	23	1	10	16QAM	50	49	20.26	20.35	20.36	21	2.5
10	256QAM	1	0	19.38	19.44	19.37	21	3	10	256QAM	1	0	18.36	18.45	18.45	19	4.5
10	256QAM	1	49	19.47	19.54	19.44	21	3	10	256QAM	1	49	18.48	18.54	18.44	19	4.5
10	256QAM	1	99	19.43	19.54	19.44	21	3	10	256QAM	1	99	18.45	18.43	18.43	19	



### Band 4\_Ant 1

RF [MHz]	Modulation	RF Rate	RF Offset	Power Chy [W]	Power H/F [W]	Power H/F [W]	Turn-up [dB]	MFR [dB]
Channel								
Frequency (MHz)								
20	QPSK	1	0	22.81	22.93	22.83	24	0
20	QPSK	1	60	22.73	22.89	22.90		
20	QPSK	50	0	22.70	22.93	22.94		
20	QPSK	50	60	22.78	22.89	22.92		
20	QPSK	100	0	22.69	22.87	22.86		
20	QPSK	100	60	22.71	22.81	22.76		
20	HQAM	1	49	22.74	22.90	22.86	24	0
20	HQAM	1	99	22.59	22.78	22.82		
20	HQAM	50	24	22.02	22.17	21.90		
20	HQAM	50	24	22.04	22.21	21.88		
20	HQAM	100	0	21.97	22.20	21.91		
20	HQAM	1	49	21.98	22.21	21.91		
20	HQAM	1	99	22.02	22.06	21.95		
20	HQAM	50	0	21.91	21.15	20.91		
20	HQAM	50	24	21.04	21.23	20.91		
20	HQAM	50	60	20.97	21.14	20.96		
20	HQAM	100	0	21.05	21.17	20.84		
20	25QAM	1	0	18.99	19.15	18.94		
20	25QAM	1	60	18.98	19.14	18.95		
20	25QAM	1	99	18.96	19.18	18.89		
20	25QAM	50	0	18.98	19.18	18.98		
20	25QAM	50	24	19.05	19.22	18.96		
20	25QAM	50	60	18.98	19.22	18.92		
20	25QAM	100	0	19.02	19.23	18.94		
Channel								
Frequency (MHz)								
16	QPSK	1	0	22.79	22.83	22.69		
16	QPSK	1	60	22.73	22.86	22.78		
16	QPSK	1	74	22.52	22.68	22.76		
16	QPSK	36	0	22.73	22.86	22.79		
16	QPSK	36	60	22.68	22.82	22.68		
16	QPSK	36	99	22.58	22.68	22.68		
16	QPSK	75	0	22.57	22.84	22.78		
16	QPSK	75	60	22.52	22.80	22.91		
16	HQAM	1	37	22.52	22.80	22.91		
16	HQAM	1	74	22.54	22.68	22.76		
16	HQAM	1	49	21.93	21.14	20.95		
16	HQAM	36	20	21.97	22.15	21.97		
16	HQAM	36	39	21.93	22.17	21.89		
16	HQAM	36	20	21.98	22.12	21.89		
16	HQAM	1	0	21.99	22.11	21.90		
16	HQAM	1	37	21.98	22.18	21.86		
16	HQAM	1	74	21.94	22.12	21.76		
16	HQAM	36	0	20.99	21.04	20.87		
16	HQAM	36	20	21.00	21.17	20.81		
16	HQAM	36	39	21.02	21.08	20.76		
16	HQAM	75	0	21.02	21.06	20.80		
16	25QAM	1	0	18.90	19.10	18.81		
16	25QAM	1	60	18.98	19.12	18.86		
16	25QAM	1	74	18.89	19.11	18.85		
16	25QAM	50	0	18.97	19.12	18.83		
16	25QAM	50	24	18.92	19.12	18.79		
16	25QAM	50	39	18.89	19.20	18.81		
16	25QAM	75	0	18.99	19.18	18.80		
Channel								
Frequency (MHz)								
10	QPSK	1	0	22.67	22.80	22.74		
10	QPSK	1	20	22.73	22.86	22.82		
10	QPSK	1	49	22.52	22.64	22.64		
10	QPSK	25	0	22.77	22.91	22.84		
10	QPSK	25	19	22.66	22.82	22.71		
10	QPSK	25	26	22.64	22.77	22.70		
10	QPSK	50	0	22.59	22.80	22.70		
10	HQAM	1	25	22.63	22.84	22.86		
10	HQAM	1	25	22.63	22.84	22.86		
10	HQAM	1	49	22.49	22.64	22.78		
10	HQAM	1	25	21.92	22.11	21.90		
10	HQAM	25	12	21.99	22.08	21.85		
10	HQAM	25	25	21.95	22.17	21.77		
10	HQAM	1	0	21.98	22.12	21.77		
10	HQAM	1	0	21.92	22.15	21.84		
10	HQAM	1	25	21.95	22.18	21.83		
10	HQAM	49	12	22.02	22.11	21.82		
10	HQAM	25	0	20.93	21.07	20.80		
10	HQAM	25	12	21.00	21.18	20.83		
10	HQAM	25	25	20.98	21.14	20.84		
10	HQAM	50	0	20.95	21.12	20.81		
10	25QAM	1	0	18.94	19.13	18.74		
10	25QAM	1	60	18.98	19.04	18.83		
10	25QAM	1	49	18.93	19.10	18.84		
10	25QAM	25	0	18.97	19.07	18.90		
10	25QAM	25	12	18.94	19.14	18.78		
10	25QAM	25	25	18.87	19.15	18.81		
10	25QAM	50	0	18.99	19.12	18.76		
Channel								
Frequency (MHz)								
5	QPSK	1	0	22.74	22.84	22.76		
5	QPSK	1	20	22.73	22.86	22.82		
5	QPSK	1	24	22.52	22.69	22.81		
5	QPSK	12	0	22.74	22.79	22.70		
5	QPSK	12	13	22.67	22.77	22.70		
5	QPSK	12	13	22.70	22.82	22.71		
5	QPSK	25	0	22.57	22.77	22.79		
5	HQAM	1	12	22.58	22.81	22.86		
5	HQAM	1	12	22.63	22.85	22.77		
5	HQAM	1	24	22.56	22.83	22.79		
5	HQAM	1	12	21.93	22.11	21.81		
5	HQAM	12	7	21.95	22.14	21.87		
5	HQAM	12	13	22.02	22.17	21.82		
5	HQAM	1	0	21.98	22.15	21.84		
5	HQAM	1	0	21.89	22.17	21.88		
5	HQAM	1	12	21.90	22.17	21.81		
5	HQAM	1	24	22.01	22.08	21.78		
5	HQAM	12	0	20.93	21.06	20.89		
5	HQAM	12	7	20.96	21.13	20.89		
5	HQAM	12	13	20.92	21.11	20.82		
5	HQAM	25	0	21.03	21.13	20.82		
5	25QAM	1	0	18.97	19.16	18.79		
5	25QAM	1	12	18.98	19.11	18.78		
5	25QAM	1	24	18.88	19.13	18.86		
5	25QAM	12	0	18.90	19.14	18.77		
5	25QAM	12	7	18.99	19.13	18.78		
5	25QAM	12	13	18.87	19.15	18.84		
5	25QAM	25	0	18.93	19.15	18.79		
Channel								
Frequency (MHz)								
3	QPSK	1	0	22.69	22.86	22.70		
3	QPSK	1	14	22.73	22.86	22.82		
3	QPSK	1	14	22.50	22.68	22.69		
3	QPSK	8	0	22.68	22.86	22.78		
3	QPSK	8	7	22.61	22.81	22.76		
3	QPSK	8	7	22.74	22.84	22.68		
3	QPSK	15	0	22.54	22.72	22.78		
3	HQAM	1	12	22.52	22.81	22.86		
3	HQAM	1	14	22.47	22.69	22.79		
3	HQAM	1	12	21.95	22.13	21.86		
3	HQAM	1	0	21.91	22.06	21.83		
3	HQAM	8	7	21.96	22.13	21.85		
3	HQAM	8	7	21.90	22.11	21.83		
3	HQAM	1	0	21.92	22.17	21.86		
3	HQAM	1	14	22.04	22.10	21.76		
3	HQAM	8	0	20.98	21.09	20.83		
3	HQAM	8	4	20.93	21.14	20.92		
3	HQAM	8	7	20.95	21.04	20.78		
3	HQAM	15	0	20.97	21.08	20.78		
3	25QAM	1	0	18.91	19.06	18.77		
3	25QAM	1	12	18.94	19.08	18.81		
3	25QAM	1	14	18.94	19.10	18.79		
3	25QAM	8	0	18.92	19.12	18.85		
3	25QAM	8	7	18.99	19.12	18.85		
3	25QAM	15	0	18.97	19.21	18.86		
Channel								
Frequency (MHz)								
1.4	QPSK	1	0	22.78	22.83	22.81		
1.4	QPSK	1	60	22.70	22.83	22.82		
1.4	QPSK	1	60	22.59	22.82	22.89		
1.4	QPSK	3	0	22.68	22.86	22.72		
1.4	QPSK	3	60	22.71	22.84	22.84		
1.4	QPSK	3	60	22.58	22.78	22.77		
1.4	QPSK	6	0	22.73	22.87	22.83		
1.4	HQAM	1	5	22.74	22.87	22.81		
1.4	HQAM	1	5	22.58	22.78	22.72		
1.4	HQAM	1	60	22.68	22.84	22.74		
1.4	HQAM	3	0	22.63	22.83	22.80		
1.4	HQAM	3	3	22.44	22.72	22.71		
1.4	HQAM	3	3	21.95	22.17	21.86		
1.4	HQAM	1	0	21.93	22.17	21.82		
1.4	HQAM	1	3	21.92	22.19	21.84		
1.4	HQAM	1	22	22.02	22.16	21.81		
1.4	HQAM	1	0	21.91	22.16	21.85		
1.4	HQAM	3	1	21.92	22.16	21.84		
1.4	HQAM	3	1	21.87	22.15	21.86		
1.4	HQAM	6	0	20.96	21.11	20.74		
1.4	25QAM	1	0	18.98	19.10	18.80		
1.4	25QAM	1	60	18.98	19.08	18.81		
1.4	25QAM	1	14	18.94	19.10	18.81		
1.4	25QAM	3	0	18.98	19.08	18.85		
1.4	25QAM	3	60	18.99	19.12	18.82		
1.4	25QAM	3	60	18.87	19.18	18.85		
1.4	25QAM	6	0	18.91	19.19	18.73		

### Band 25\_Ant 0

RF [MHz]	Modulation	RF Rate	RF Offset	Power Chy [W]	Power H/F [W]	Power H/F [W]	Turn-up [dB]	MFR [dB]
Channel								
Frequency (MHz)								
30	QPSK	1	0	23.24	23.37	23.23	24	0
30	QPSK	1	60	23.28	23.41	23.29		
30	QPSK	1	99	23.28	23.47	23.31		
30	QPSK	50	0	23.30	23.48	23.35		
30	QPSK	50	60	23.25	23.38	23.29		
30	QPSK	100	0	23.37	23.37	23.20		
30	HQAM	1	49	23.32				



### Band 66\_Ant 0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low PDCCH [dBm]	Power High PDCCH [dBm]	Power Low PDSCH [dBm]	Power High PDSCH [dBm]	Turn-on [min]	MFR [dB]	Channel	
										Frequency [MHz]	Channel
Channel											
Frequency [MHz]											
30	QPSK	1	0	23.05	22.99	22.93		24	0		
30	QPSK	1	49	23.05	22.99	22.93					
30	QPSK	1	99	22.91	22.91	22.81					
30	QPSK	50	0	23.03	23.03	22.94		24	0		
30	QPSK	50	24	23.06	23.06	22.97					
30	QPSK	50	50	22.95	22.92	22.87					
30	QPSK	100	0	22.81	22.82	22.87					
30	QPSK	100	49	22.96	22.91	22.86					
30	16QAM	1	49	22.85	22.94	22.84		24	0		
30	16QAM	1	99	22.88	23.03	22.88					
30	16QAM	50	0	22.92	22.91	22.84		24	0		
30	16QAM	50	24	22.92	22.95	22.81					
30	16QAM	50	50	22.88	22.88	22.82					
30	16QAM	100	0	22.92	22.89	22.82					
30	64QAM	1	0	22.99	22.90	22.82		24	0		
30	64QAM	1	49	22.84	22.85	22.85					
30	64QAM	1	99	22.92	22.92	22.82					
30	64QAM	50	0	21.92	21.93	21.88					
30	64QAM	50	24	21.82	21.96	21.93		23	1		
30	64QAM	50	50	21.89	21.92	21.88					
30	64QAM	100	0	21.80	21.89	21.87					
30	256QAM	1	0	20.23	20.24	20.20		21	3		
30	256QAM	1	49	20.18	20.18	20.10					
30	256QAM	1	99	20.17	20.15	20.07					
30	256QAM	50	0	20.19	20.13	20.06					
30	256QAM	50	24	20.21	20.14	20.06					
30	256QAM	50	50	20.15	20.19	20.14					
30	256QAM	100	0	20.08	20.18	20.07					
Channel											
Frequency [MHz]											
15	QPSK	1	0	22.24	22.22	22.88		24	0		
15	QPSK	1	37	22.27	22.27	22.89					
15	QPSK	1	74	22.81	22.86	22.77					
15	QPSK	36	0	22.00	22.84	22.90					
15	QPSK	36	20	22.02	22.88	22.78					
15	QPSK	36	36	22.93	22.96	22.77		24	0		
15	QPSK	75	0	22.78	22.88	22.85					
15	16QAM	1	37	22.83	22.91	22.74		24	0		
15	16QAM	1	74	22.81	22.92	22.78					
15	16QAM	36	0	22.85	22.90	22.70		24	0		
15	16QAM	36	20	22.90	22.93	22.71					
15	16QAM	36	36	22.86	22.87	22.74					
15	16QAM	75	0	22.78	22.78	22.71					
15	64QAM	1	0	22.04	22.79	22.74		24	0		
15	64QAM	1	37	22.83	22.81	22.74					
15	64QAM	1	74	22.78	22.80	22.82					
15	64QAM	36	0	21.78	21.81	21.89					
15	64QAM	36	20	21.74	21.83	21.84		23	1		
15	64QAM	36	36	21.67	21.83	21.86					
15	256QAM	1	0	20.12	20.21	20.19		21	3		
15	256QAM	1	37	20.04	20.15	20.05					
15	256QAM	1	74	20.05	20.10	19.99					
15	256QAM	36	0	20.17	20.08	20.02					
15	256QAM	36	20	20.11	20.09	19.95					
15	256QAM	36	36	20.10	20.15	20.00					
15	256QAM	75	0	20.01	20.13	19.87					
Channel											
Frequency [MHz]											
10	QPSK	1	0	22.93	22.92	22.86		24	0		
10	QPSK	1	49	22.90	22.96	22.78					
10	QPSK	25	0	22.90	22.99	22.87					
10	QPSK	25	24	22.92	22.92	22.84					
10	QPSK	25	50	22.84	22.92	22.84		24	0		
10	QPSK	50	0	22.82	22.91	22.84					
10	16QAM	1	49	22.85	22.96	22.89		24	0		
10	16QAM	1	99	22.78	22.84	22.74					
10	16QAM	36	0	22.88	22.88	22.78		24	0		
10	16QAM	36	12	22.88	22.89	22.68					
10	16QAM	36	24	22.86	22.87	22.74					
10	16QAM	50	0	22.81	22.74	22.74					
10	64QAM	1	0	22.98	22.88	22.71		24	0		
10	64QAM	1	25	22.87	22.91	22.83					
10	64QAM	1	49	22.87	22.90	22.86					
10	64QAM	36	0	21.83	21.90	21.88					
10	64QAM	36	12	21.80	21.88	21.84		23	1		
10	64QAM	36	25	21.82	21.87	21.87					
10	64QAM	50	0	21.69	21.76	21.84					
10	256QAM	1	0	20.22	20.14	20.14		21	3		
10	256QAM	1	25	20.12	20.10	19.99					
10	256QAM	1	49	20.16	20.04	20.03					
10	256QAM	25	0	20.15	20.03	19.95					
10	256QAM	25	12	20.10	19.99	19.97					
10	256QAM	25	25	20.10	20.08	20.06					
10	256QAM	50	0	19.93	20.04	19.88					
Channel											
Frequency [MHz]											
5	QPSK	1	0	22.91	22.97	22.85		24	0		
5	QPSK	1	24	22.94	22.98	22.99					
5	QPSK	1	24	22.80	22.87	22.74					
5	QPSK	12	0	22.81	22.92	22.88					
5	QPSK	12	7	22.82	22.90	22.81					
5	QPSK	12	13	22.87	22.89	22.79		24	0		
5	QPSK	25	0	22.77	22.87	22.82					
5	16QAM	1	12	22.80	22.85	22.70		24	0		
5	16QAM	1	24	22.82	22.86	22.83					
5	16QAM	12	0	22.83	22.86	22.73					
5	16QAM	12	7	22.84	22.84	22.80		24	0		
5	16QAM	12	13	22.77	22.86	22.78					
5	16QAM	25	0	22.77	22.80	22.78					
5	64QAM	1	0	22.90	22.88	22.71		24	0		
5	64QAM	1	12	22.91	22.88	22.75					
5	64QAM	1	24	22.84	22.89	22.81					
5	64QAM	12	0	21.86	21.86	21.95					
5	64QAM	12	7	21.78	21.79	21.86		23	1		
5	64QAM	12	13	21.85	21.79	21.86					
5	64QAM	25	0	21.67	21.83	21.84					
5	256QAM	1	0	20.22	20.21	20.08		21	3		
5	256QAM	1	12	20.14	20.13	20.03					
5	256QAM	1	24	20.10	20.13	19.97					
5	256QAM	12	0	20.07	20.05	19.92					
5	256QAM	12	7	20.11	20.08	19.95					
5	256QAM	12	13	20.02	20.13	20.04					
5	256QAM	25	0	20.05	20.14	20.04					
Channel											
Frequency [MHz]											
3	QPSK	1	0	22.97	22.87	22.79		24	0		
3	QPSK	1	8	22.92	22.98	22.82					
3	QPSK	1	14	22.79	22.91	22.78					
3	QPSK	8	0	22.80	22.83	22.88					
3	QPSK	8	7	22.88	22.95	22.73					
3	QPSK	8	7	22.92	22.87	22.79		24	0		
3	QPSK	15	0	22.81	22.87	22.86					
3	16QAM	1	8	22.83	22.86	22.78					
3	16QAM	1	8	22.82	22.89	22.89		24	0		
3	16QAM	1	14	22.84	22.86	22.79					
3	16QAM	8	0	22.83	22.86	22.74					
3	16QAM	8	4	22.78	22.83	22.67		24	0		
3	16QAM	15	0	22.87	22.80	22.72					



### Band 48\_Ant 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				55340	55830	56150	56640		
20	QPSK	1	0	22.92	22.89	22.88	22.91		
20	QPSK	1	49	23.04	22.95	22.99	23.06	24	0
20	QPSK	1	99	22.91	22.87	22.93	22.89		
20	QPSK	50	0	21.90	21.86	21.85	21.87		
20	QPSK	50	24	21.74	21.75	21.75	21.71	23	1
20	QPSK	50	50	21.72	21.75	21.76	21.72		
20	QPSK	100	0	21.67	21.69	21.71	21.76		
20	16QAM	1	0	22.19	22.17	22.21	22.15		
20	16QAM	1	49	22.19	22.21	22.14	22.18	23	1
20	16QAM	1	99	22.13	22.12	22.12	22.14		
20	16QAM	50	0	21.62	21.71	21.62	21.63		
20	16QAM	50	24	21.70	21.68	21.71	21.69	23	1
20	16QAM	50	50	21.63	21.64	21.68	21.70		
20	16QAM	100	0	21.63	21.70	21.66	21.71		
20	64QAM	1	0	21.78	21.73	21.78	21.73		
20	64QAM	1	49	21.75	21.79	21.78	21.81	23	1
20	64QAM	1	99	21.80	21.72	21.78	21.73		
20	64QAM	50	0	20.65	20.66	20.66	20.66		
20	64QAM	50	24	20.67	20.60	20.61	20.61	22	2
20	64QAM	50	50	20.62	20.62	20.59	20.62		
20	64QAM	100	0	20.65	20.65	20.67	20.67		
20	256QAM	1	0	18.72	18.75	18.75	18.74		
20	256QAM	1	49	18.78	18.80	18.78	18.79	20	4
20	256QAM	1	99	18.74	18.73	18.77	18.77		
20	256QAM	50	0	18.72	18.65	18.67	18.70		
20	256QAM	50	24	18.74	18.65	18.70	18.65	20	4
20	256QAM	50	50	18.72	18.71	18.66	18.68		
20	256QAM	100	0	18.65	18.69	18.65	18.68		
Channel									
Frequency (MHz)				55315	55820	56160	56665	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	0	22.87	22.79	22.83	22.85		
15	QPSK	1	37	22.90	22.90	22.95	22.91	24	0
15	QPSK	1	74	22.85	22.92	22.90	22.90		
15	QPSK	36	0	21.83	21.76	21.79	21.77		
15	QPSK	36	20	21.73	21.69	21.71	21.71	22	1
15	QPSK	36	39	21.75	21.69	21.75	21.75		
15	QPSK	75	0	21.69	21.67	21.61	21.67		
15	16QAM	1	0	22.12	22.20	22.12	22.16		
15	16QAM	1	37	22.08	22.09	22.07	22.10	23	1
15	16QAM	1	74	22.11	22.05	22.04	22.10		
15	16QAM	36	0	21.61	21.61	21.57	21.61		
15	16QAM	36	20	21.70	21.65	21.62	21.66	23	1
15	16QAM	36	39	21.65	21.66	21.63	21.61		
15	16QAM	75	0	21.62	21.60	21.62	21.60		
15	64QAM	1	0	21.77	21.73	21.72	21.73		
15	64QAM	1	37	21.74	21.69	21.77	21.69	23	1
15	64QAM	1	74	21.77	21.71	21.75	21.69		
15	64QAM	36	0	20.56	20.64	20.59	20.59		
15	64QAM	36	20	20.53	20.51	20.55	20.59	22	2
15	64QAM	36	39	20.52	20.55	20.57	20.57		
15	64QAM	75	0	20.60	20.59	20.62	20.65		
15	256QAM	1	0	18.65	18.73	18.72	18.73		
15	256QAM	1	37	18.72	18.71	18.75	18.69	20	4
15	256QAM	1	74	18.75	18.69	18.67	18.68		
15	256QAM	36	0	18.57	18.58	18.61	18.66		
15	256QAM	36	20	18.62	18.62	18.61	18.68	20	4
15	256QAM	36	39	18.57	18.56	18.58	18.65		
15	256QAM	75	0	18.58	18.62	18.57	18.60		
Channel									
Frequency (MHz)				55290	55815	56165	56690	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	0	22.84	22.85	22.84	22.79		
10	QPSK	1	25	22.95	22.92	22.93	22.89	24	0
10	QPSK	1	49	22.89	22.92	22.91	22.89		
10	QPSK	25	0	21.78	21.77	21.78	21.76		
10	QPSK	25	12	21.65	21.72	21.66	21.73	23	1
10	QPSK	25	25	21.73	21.74	21.71	21.66		
10	QPSK	50	0	21.69	21.61	21.62	21.68		
10	16QAM	1	0	22.19	22.19	22.20	22.16		
10	16QAM	1	25	22.13	22.26	22.26	22.24	23	1
10	16QAM	1	49	22.02	22.07	22.06	22.03		
10	16QAM	25	0	21.60	21.61	21.56	21.57		
10	16QAM	25	12	21.67	21.70	21.67	21.65	23	1
10	16QAM	25	25	21.62	21.62	21.65	21.58		
10	16QAM	50	0	21.60	21.58	21.62	21.64		
10	64QAM	1	0	21.73	21.76	21.68	21.75		
10	64QAM	1	25	21.74	21.74	21.76	21.72	23	1
10	64QAM	1	49	21.71	21.77	21.68	21.70		
10	64QAM	25	0	20.56	20.65	20.62	20.56		
10	64QAM	25	12	20.55	20.60	20.54	20.53	22	2
10	64QAM	25	25	20.51	20.58	20.52	20.51		
10	64QAM	50	0	20.60	20.62	20.57	20.63		
10	256QAM	1	0	18.69	18.68	18.69	18.65		
10	256QAM	1	25	18.72	18.70	18.75	18.70	20	4
10	256QAM	1	49	18.75	18.70	18.68	18.68		
10	256QAM	25	0	18.63	18.60	18.60	18.64		
10	256QAM	25	12	18.63	18.64	18.62	18.65	20	4
10	256QAM	25	25	18.63	18.64	18.58	18.65		
10	256QAM	50	0	18.56	18.64	18.61	18.65		
Channel									
Frequency (MHz)				55265	55810	56170	56715	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	0	22.81	22.81	22.85	22.86		
5	QPSK	1	12	22.94	22.95	22.94	22.98	24	0
5	QPSK	1	24	22.90	22.87	22.85	22.83		
5	QPSK	12	0	21.80	21.78	21.77	21.82		
5	QPSK	12	7	21.69	21.71	21.67	21.72	23	1
5	QPSK	12	13	21.72	21.70	21.72	21.71		
5	QPSK	25	0	21.67	21.68	21.61	21.64		
5	16QAM	1	0	22.11	22.17	22.20	22.20		
5	16QAM	1	12	22.11	22.04	22.05	22.11	23	1
5	16QAM	1	24	22.04	22.10	22.06	22.03		
5	16QAM	12	0	21.56	21.59	21.60	21.59		
5	16QAM	12	7	21.69	21.68	21.62	21.63	23	1
5	16QAM	12	13	21.67	21.66	21.60	21.58		
5	16QAM	25	0	21.60	21.59	21.65	21.57		
5	64QAM	1	0	21.77	21.71	21.74	21.73		
5	64QAM	1	12	21.75	21.73	21.71	21.72	23	1
5	64QAM	1	24	21.75	21.76	21.70	21.68		
5	64QAM	12	0	20.64	20.64	20.64	20.60		
5	64QAM	12	7	20.57	20.51	20.51	20.52	22	2
5	64QAM	12	13	20.53	20.55	20.56	20.50		
5	64QAM	25	0	20.58	20.62	20.65	20.61		
5	256QAM	1	0	18.67	18.65	18.66	18.67		
5	256QAM	1	12	18.68	18.70	18.74	18.68	20	4
5	256QAM	1	24	18.68	18.68	18.71	18.76		
5	256QAM	12	0	18.58	18.60	18.58	18.63		
5	256QAM	12	7	18.64	18.64	18.68	18.62	20	4
5	256QAM	12	13	18.64	18.64	18.57	18.61		
5	256QAM	25	0	18.58	18.57	18.58	18.56		

### Band 48\_Ant 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				55340	55830	56150	56640		
20	QPSK	1	0	21.57	21.51	21.57	21.58		
20	QPSK	1	49	21.57	21.56	21.62	21.63	22.5	0
20	QPSK	1	99	21.54	21.53	21.53	21.53		
20	QPSK	50	0	21.93	21.93	21.93	21.97		
20	QPSK	50	24	20.97	21.03	21.00	21.06	22	0.5
20	QPSK	50	50	20.95	20.98	20.92	21.02		
20	QPSK	100	0	20.97	20.95	21.00	21.05		
20	16QAM	1	0	20.94	20.95	20.99	21.02		



### Band 48\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	22.46	22.46	22.48	22.52	24	0
20	QPSK	1	49	22.60	22.64	22.61	22.72		
20	QPSK	1	99	22.47	22.53	22.54	22.57		
20	QPSK	50	0	20.34	20.32	20.34	20.73		
20	QPSK	50	24	20.47	20.46	20.42	20.64	22	2
20	QPSK	50	50	20.53	20.48	20.53	20.63		
20	QPSK	100	0	20.39	20.44	20.41	20.51		
20	16QAM	1	0	20.88	20.85	20.84	20.97		
20	16QAM	1	49	20.75	20.77	20.77	20.88	22	2
20	16QAM	1	99	20.61	20.85	20.81	20.86		
20	16QAM	50	0	20.30	20.32	20.34	20.40		
20	16QAM	50	24	20.41	20.38	20.40	20.49		
20	16QAM	50	50	20.41	20.45	20.44	20.47	22	2
20	16QAM	100	0	20.39	20.44	20.43	20.52		
20	64QAM	1	0	20.46	20.42	20.45	20.53		
20	64QAM	1	49	20.28	20.34	20.33	20.42		
20	64QAM	1	99	20.42	20.42	20.43	20.48	22	2
20	64QAM	50	0	19.25	19.32	19.30	19.40		
20	64QAM	50	24	19.46	19.49	19.41	19.52		
20	64QAM	50	50	19.42	19.35	19.35	19.45		
20	64QAM	100	0	19.39	19.44	19.45	19.54	21	3
20	256QAM	1	0	17.55	17.46	17.47	17.58		
20	256QAM	1	49	17.47	17.46	17.46	17.61		
20	256QAM	1	99	17.58	17.53	17.50	17.67		
20	256QAM	50	0	17.39	17.37	17.34	17.48	19	5
20	256QAM	50	24	17.50	17.50	17.46	17.59		
20	256QAM	50	50	17.38	17.46	17.39	17.52		
20	256QAM	100	0	17.40	17.37	17.38	17.50		
Channel				55315	55820	56160	56655	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.39	22.44	22.39	22.38	24	0
15	QPSK	1	37	22.54	22.53	22.52	22.60		
15	QPSK	1	74	22.45	22.53	22.44	22.48		
15	QPSK	36	0	20.37	20.35	20.33	20.35		
15	QPSK	36	20	20.45	20.50	20.44	20.51	22	2
15	QPSK	36	39	20.50	20.53	20.50	20.51		
15	QPSK	75	0	20.33	20.31	20.40	20.36		
15	16QAM	1	0	20.77	20.82	20.76	20.82		
15	16QAM	1	37	20.71	20.70	20.74	20.72	22	2
15	16QAM	1	74	20.80	20.79	20.77	20.80		
15	16QAM	36	0	20.28	20.30	20.25	20.31		
15	16QAM	36	20	20.34	20.33	20.36	20.34		
15	16QAM	36	39	20.35	20.38	20.36	20.36	22	2
15	16QAM	75	0	20.39	20.34	20.41	20.41		
15	64QAM	1	0	20.41	20.42	20.38	20.40		
15	64QAM	1	37	20.29	20.30	20.23	20.32		
15	64QAM	1	74	20.33	20.33	20.41	20.41	22	2
15	64QAM	36	0	19.23	19.21	19.25	19.20		
15	64QAM	36	20	19.39	19.37	19.37	19.36		
15	64QAM	36	39	19.25	19.26	19.31	19.30		
15	64QAM	75	0	19.40	19.40	19.36	19.42	21	3
15	256QAM	1	0	17.42	17.45	17.39	17.44		
15	256QAM	1	37	17.44	17.40	17.37	17.45		
15	256QAM	1	74	17.42	17.48	17.40	17.48		
15	256QAM	36	0	17.33	17.30	17.33	17.27	19	5
15	256QAM	36	20	17.37	17.42	17.36	17.38		
15	256QAM	36	39	17.34	17.31	17.32	17.34		
15	256QAM	75	0	17.33	17.36	17.31	17.29		
Channel				55290	55815	56165	56690	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3556	3607.5	3642.5	3695		
10	QPSK	1	0	22.38	22.41	22.44	22.47	24	0
10	QPSK	1	25	22.55	22.54	22.56	22.59		
10	QPSK	1	49	22.48	22.50	22.45	22.48		
10	QPSK	25	0	20.36	20.37	20.41	20.35		
10	QPSK	25	12	20.44	20.53	20.45	20.44	22	2
10	QPSK	25	25	20.53	20.52	20.46	20.44		
10	QPSK	50	0	20.33	20.39	20.33	20.39		
10	16QAM	1	0	20.82	20.81	20.74	20.81		
10	16QAM	1	25	20.74	20.76	20.73	20.70	22	2
10	16QAM	1	49	20.78	20.73	20.74	20.75		
10	16QAM	25	0	20.27	20.29	20.29	20.31		
10	16QAM	25	12	20.35	20.33	20.39	20.38		
10	16QAM	25	25	20.34	20.34	20.39	20.34	22	2
10	16QAM	50	0	20.39	20.35	20.39	20.35		
10	64QAM	1	0	20.36	20.39	20.42	20.35		
10	64QAM	1	25	20.30	20.23	20.28	20.29		
10	64QAM	1	49	20.35	20.38	20.35	20.33	22	2
10	64QAM	25	0	19.21	19.23	19.29	19.25		
10	64QAM	25	12	19.39	19.35	19.37	19.35		
10	64QAM	25	25	19.33	19.26	19.29	19.30		
10	64QAM	50	0	19.44	19.44	19.41	19.38	21	3
10	256QAM	1	0	17.43	17.46	17.40	17.41		
10	256QAM	1	25	17.37	17.41	17.39	17.37		
10	256QAM	1	49	17.41	17.42	17.44	17.40		
10	256QAM	25	0	17.30	17.33	17.28	17.24	19	5
10	256QAM	25	12	17.45	17.42	17.45	17.45		
10	256QAM	25	25	17.31	17.37	17.37	17.33		
10	256QAM	50	0	17.30	17.32	17.32	17.36		
Channel				55265	55810	56170	56715	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.43	22.42	22.47	22.42	24	0
5	QPSK	1	12	22.53	22.52	22.52	22.59		
5	QPSK	1	24	22.44	22.44	22.44	22.51		
5	QPSK	12	0	20.34	20.36	20.33	20.32		
5	QPSK	12	7	20.48	20.46	20.53	20.45	22	2
5	QPSK	12	13	20.47	20.53	20.50	20.51		
5	QPSK	25	0	20.39	20.33	20.33	20.35		
5	16QAM	1	0	20.76	20.76	20.83	20.82		
5	16QAM	1	12	20.76	20.72	20.76	20.69	22	2
5	16QAM	1	24	20.79	20.77	20.76	20.76		
5	16QAM	12	0	20.26	20.28	20.31	20.32		
5	16QAM	12	7	20.37	20.38	20.33	20.33		
5	16QAM	12	13	20.38	20.39	20.40	20.35	22	2
5	16QAM	25	0	20.34	20.36	20.41	20.35		
5	64QAM	1	0	20.35	20.37	20.36	20.41		
5	64QAM	1	12	20.23	20.28	20.24	20.24		
5	64QAM	1	24	20.42	20.34	20.41	20.36	22	2
5	64QAM	12	0	19.27	19.29	19.26	19.29		
5	64QAM	12	7	19.40	19.39	19.39	19.33		
5	64QAM	12	13	19.32	19.32	19.27	19.29		
5	64QAM	25	0	19.44	19.44	19.41	19.44	21	3
5	256QAM	1	0	17.41	17.41	17.38	17.38		
5	256QAM	1	12	17.45	17.44	17.37	17.37		
5	256QAM	1	24	17.42	17.43	17.45	17.47		
5	256QAM	12	0	17.24	17.27	17.25	17.27	19	5
5	256QAM	12	7	17.44	17.44	17.37	17.37		
5	256QAM	12	13	17.29	17.37	17.37	17.33		
5	256QAM	25	0	17.28	17.36	17.37	17.35		



n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.81	22.82	22.89	24.0	0.0	
20	PI2 BPSK	1	53	22.89	22.97	22.92			
20	PI2 BPSK	1	104	22.97	23.01	23.98			
20	PI2 BPSK	50	0	22.80	22.88	22.77	23.5	0.5	
20	PI2 BPSK	50	28	22.85	22.95	22.81	24.0	0.0	
20	PI2 BPSK	50	56	22.97	22.99	22.87	23.5	0.5	
20	PI2 BPSK	100	0	22.80	22.83	22.89			
20	QPSK	1	1	22.91	22.95	22.94	24.0	0.0	
20	QPSK	1	53	22.86	23.01	22.90			
20	QPSK	1	104	22.84	22.98	22.86			
20	QPSK	50	0	22.81	22.86	22.84	24.0	0.0	
20	QPSK	50	28	22.88	23.03	22.90	24.0	0.0	
20	QPSK	50	56	22.83	22.84	22.82	24.0	0.0	
20	QPSK	100	0	22.80	22.81	22.90			
20	16QAM	1	1	22.87	22.94	22.82	24.0	0.0	
20	64QAM	1	1	22.84	22.91	22.78	24.0	0.0	
20	256QAM	1	1	21.05	21.13	21.03	22.0	2.0	
Channel									
Frequency (MHz)									
371500				376000	380500		Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	22.81	22.95	22.90	24.0	0.0	
Channel									
Frequency (MHz)									
371000				376000	381000		Tune-up limit (dBm)	MPR (dB)	
19	QPSK	1	1	18.55	18.80	19.05	24.0	0.0	
Channel									
Frequency (MHz)									
370500				376000	381500		Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	1	18.52	18.80	19.07	24.0	0.0	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	22.80	22.82	22.71	24.0	0.0	
20	PI2 BPSK	1	53	22.87	22.92	22.81			
20	PI2 BPSK	1	104	22.72	22.81	22.68			
20	PI2 BPSK	50	0	22.86	22.81	22.76	24.0	0.0	
20	PI2 BPSK	50	28	22.81	22.83	22.79	24.0	0.0	
20	PI2 BPSK	50	56	22.75	22.81	22.71	24.0	0.0	
20	PI2 BPSK	100	0	22.83	22.84	22.83			
20	QPSK	1	1	22.84	22.95	22.87	24.0	0.0	
20	QPSK	1	53	22.83	22.85	22.78			
20	QPSK	1	104	22.73	22.84	22.72			
20	QPSK	50	0	22.73	22.87	22.73	24.0	0.0	
20	QPSK	50	28	22.75	22.91	22.76	24.0	0.0	
20	QPSK	50	56	22.69	22.83	22.71	24.0	0.0	
20	QPSK	100	0	22.70	22.81	22.77			
20	16QAM	1	1	22.75	22.86	22.86	24.0	0.0	
20	64QAM	1	1	21.40	21.41	21.38	22.5	1.5	
20	256QAM	1	1	19.37	19.42	19.27	20.5	3.5	
Channel									
Frequency (MHz)									
371500				376000	380500		Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	22.81	22.93	22.77	24.0	0.0	
Channel									
Frequency (MHz)									
371000				376000	381000		Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	22.70	22.85	22.81	24.0	0.0	
Channel									
Frequency (MHz)									
370500				376000	381500		Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	1	18.53	18.80	19.07	24.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	23.18	23.25	23.14	24.0	0.0	
40	PI2 BPSK	1	108	23.16	23.21	23.08			
40	PI2 BPSK	1	214	23.07	23.12	23.05			
40	PI2 BPSK	108	0	23.13	23.16	23.07	24.0	0.0	
40	PI2 BPSK	108	54	23.13	23.18	23.07	24.0	0.0	
40	PI2 BPSK	108	108	22.99	23.14	23.07	24.0	0.0	
40	PI2 BPSK	216	0	23.10	23.21	23.19			
40	QPSK	1	1	23.25	23.26	23.24	24.0	0.0	
40	QPSK	1	108	23.17	23.22	23.09			
40	QPSK	1	214	23.02	23.11	22.88			
40	QPSK	108	0	23.17	23.21	23.12	24.0	0.0	
40	QPSK	108	54	23.20	23.23	23.17	24.0	0.0	
40	QPSK	108	108	23.01	23.16	23.10	24.0	0.0	
40	QPSK	216	0	23.14	23.19	23.11			
40	16QAM	1	1	23.12	23.21	23.08	24.0	0.0	
40	64QAM	1	1	22.22	22.28	22.13	23.0	1.0	
40	256QAM	1	1	20.27	20.38	20.24	21.0	3.0	
Channel									
Frequency (MHz)									
373500				376500	379500		Tune-up limit (dBm)	MPR (dB)	
35	QPSK	1	1	23.23	23.19	23.13	24.0	0.0	
Channel									
Frequency (MHz)									
373000				376000	380000		Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	18.65	18.65	18.60	24.0	0.0	
Channel									
Frequency (MHz)									
372500				376500	380500		Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	23.11	23.16	23.10	24.0	0.0	
Channel									
Frequency (MHz)									
372000				376500	380500		Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	23.16	23.11	23.09	24.0	0.0	
Channel									
Frequency (MHz)									
371500				376500	381500		Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	23.22	23.11	23.14	24.0	0.0	
Channel									
Frequency (MHz)									
371000				376000	380000		Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	23.13	23.14	23.12	24.0	0.0	
Channel									
Frequency (MHz)									
370500				376500	380500		Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	1	18.52	18.62	19.12	24.0	0.0	





n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI/2 BPSK	1	1	23.18	23.23	23.10	24.0	0.0	
40	PI/2 BPSK	1	108	23.09	23.21	23.13			
40	PI/2 BPSK	1	214	22.99	23.11	23.09			
40	PI/2 BPSK	108	0	22.76	22.83	22.73	23.5	0.5	
40	PI/2 BPSK	108	54	23.01	23.15	23.14	24.0	0.0	
40	PI/2 BPSK	108	108	22.69	22.76	22.67	23.5	0.5	
40	PI/2 BPSK	216	0	22.72	22.83	22.73			
40	QPSK	1	1	23.15	23.26	23.20	24.0	0.0	
40	QPSK	1	108	23.14	23.26	23.17			
40	QPSK	1	214	22.93	23.08	22.98			
40	QPSK	108	0	22.24	22.38	22.31	23.0	1.0	
40	QPSK	108	54	23.05	23.21	23.07	24.0	0.0	
40	QPSK	108	108	22.20	22.23	22.20	23.0	1.0	
40	QPSK	216	0	22.14	22.28	22.25			
40	8QAM	1	1	22.25	22.39	22.30	23.0	1.0	
40	8QAM	1	1	20.92	20.94	20.89	21.5	2.5	
40	28QAM	1	1	18.88	18.93	18.88	19.5	4.5	
Channel									
Frequency (MHz)									
35	QPSK	1	1	23.06	23.24	23.10	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.00	23.21	23.17	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.82	23.05	22.92	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.13	23.26	23.14	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.07	23.16	23.17	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.00	23.30	23.10	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	23.10	23.15	23.09	24.0	0.0	

n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI/2 BPSK	1	1	22.83	22.93	22.78	24.0	0.0	
40	PI/2 BPSK	1	108	22.91	22.92	22.86			
40	PI/2 BPSK	1	214	22.90	22.98	22.95			
40	PI/2 BPSK	108	0	22.76	22.88	22.79	24.0	0.0	
40	PI/2 BPSK	108	54	22.73	22.86	22.83	24.0	0.0	
40	PI/2 BPSK	108	108	22.86	22.87	22.80	24.0	0.0	
40	PI/2 BPSK	216	0	22.84	22.92	22.92			
40	QPSK	1	1	23.00	23.01	22.98	24.0	0.0	
40	QPSK	1	108	22.88	22.97	22.82			
40	QPSK	1	214	22.84	22.93	22.78			
40	QPSK	108	0	22.74	22.86	22.82	24.0	0.0	
40	QPSK	108	54	22.83	22.97	22.83	24.0	0.0	
40	QPSK	108	108	22.81	22.94	22.81	24.0	0.0	
40	QPSK	216	0	22.83	22.84	22.84			
40	8QAM	1	1	22.73	22.86	22.84	24.0	0.0	
40	8QAM	1	1	22.79	22.84	22.74	24.0	0.0	
40	28QAM	1	1	20.83	20.87	20.72	22.0	2.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	22.88	22.90	22.83	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.88	22.98	22.98	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.86	22.91	22.75	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.91	22.95	22.77	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.89	22.97	22.86	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.82	22.97	22.88	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.95	22.92	22.81	24.0	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI/2 BPSK	1	1	22.82	22.85	22.83	24.0	0.0	
40	PI/2 BPSK	1	108	22.76	22.77	22.66			
40	PI/2 BPSK	1	214	22.65	22.75	22.69			
40	PI/2 BPSK	108	0	22.75	22.76	22.69	24.0	0.0	
40	PI/2 BPSK	108	54	22.66	22.74	22.67	24.0	0.0	
40	PI/2 BPSK	108	108	22.69	22.79	22.78	24.0	0.0	
40	PI/2 BPSK	216	0	22.67	22.77	22.69			
40	QPSK	1	1	22.90	22.93	22.88	24.0	0.0	
40	QPSK	1	108	22.77	22.88	22.83			
40	QPSK	1	214	22.74	22.87	22.82			
40	QPSK	108	0	22.63	22.76	22.72	24.0	0.0	
40	QPSK	108	54	22.80	22.87	22.85	24.0	0.0	
40	QPSK	108	108	22.78	22.85	22.72	24.0	0.0	
40	QPSK	216	0	22.84	22.86	22.78			
40	8QAM	1	1	22.86	22.88	22.78	24.0	0.0	
40	8QAM	1	1	22.03	22.09	22.06	23.0	1.0	
40	28QAM	1	1	20.04	20.11	19.97	21.0	3.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	22.89	22.80	22.77	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.75	22.88	22.74	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.88	22.90	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.80	22.80	22.74	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.88	22.92	22.83	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.83	22.90	22.84	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.88	22.91	22.83	24.0	0.0	



Full&Default Power Other PA Mode for Body

FCC_n41_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	2548.01	2592.99	2640			
100	PI2 BPSK	1	137	22.83	22.89	22.92	24.0	0.0	
100	PI2 BPSK	1	221	22.81	22.76	22.85			
100	PI2 BPSK	135	0	22.81	22.75	22.58	24.0	0.0	
100	PI2 BPSK	135	69	22.59	22.82	22.58	24.0	0.0	
100	PI2 BPSK	135	138	22.58	22.70	22.64			
100	PI2 BPSK	270	0	22.84	22.80	22.82	24.0	0.0	
100	QPSK	1	1	22.98	22.83	22.88			
100	QPSK	1	137	22.80	22.72	22.57	24.0	0.0	
100	QPSK	1	271	22.84	22.75	22.84			
100	QPSK	135	0	22.85	22.76	22.57			
100	QPSK	135	69	22.85	22.78	22.58	24.0	0.0	
100	QPSK	135	138	22.80	22.77	22.55			
100	QPSK	270	0	22.87	22.75	22.61	24.0	0.0	
100	16QAM	1	1	22.80	22.75	22.56	24.0	0.0	
100	64QAM	1	1	22.43	22.51	22.34	23.5	0.5	
100	256QAM	1	1	21.18	21.28	21.18	22.5	1.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	2541	2592.99	2644.98	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	507204	518598	528996	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	2536.02	2592.99	2649.99	24.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.83	22.78	22.60	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	2531.01	2592.99	2655	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.85	22.81	22.62	24.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	2527.02	2592.99	2664.99	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	2516.01	2592.99	2670	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.88	22.69	22.62	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2511	2592.99	2674.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	22.81	22.74	22.65	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	500700	518598	536496	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	2503.5	2592.99	2682.48	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	500302	518598	537000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	2501.01	2592.99	2685	24.0	0.0	

FCC_n41 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.57	24.70	24.44			
100	PI2 BPSK	1	137	24.59	24.58	24.54	26.0	0.0	
100	PI2 BPSK	1	271	24.54	24.67	24.49			
100	PI2 BPSK	135	0	24.13	24.25	24.14	25.5	0.5	
100	PI2 BPSK	135	69	24.56	24.66	24.50	26.0	0.0	
100	PI2 BPSK	135	138	24.11	24.25	24.06			
100	PI2 BPSK	270	0	24.24	24.23	24.08	25.5	0.5	
100	QPSK	1	1	24.71	24.78	24.62			
100	QPSK	1	137	24.84	24.71	24.61	26.0	0.0	
100	QPSK	1	271	24.88	24.68	24.58			
100	QPSK	135	0	24.87	24.58	24.78			
100	QPSK	135	69	24.55	24.73	24.55	26.0	0.0	
100	QPSK	135	138	24.06	24.15	23.99			
100	QPSK	270	0	23.88	23.83	23.75	25.0	1.0	
100	16QAM	1	1	23.73	23.83	23.82	25.0	1.0	
100	64QAM	1	1	22.43	22.51	22.34	23.5	2.5	
100	256QAM	1	1	21.18	21.28	21.18	22.5	3.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	2441	2592.99	2644.98	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	507204	518598	528996	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	2436.02	2592.99	2649.99	24.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.62	24.58	24.50	26.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	508200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	2531.01	2592.99	2655	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.80	24.62	24.44	26.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	2527.02	2592.99	2664.99	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	2516.01	2592.99	2670	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.57	24.70	24.50	26.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.80	24.44	24.44	26.0	0.0	
15	QPSK	1	1	500302	518598	537000	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	24.51	24.62	24.42	26.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	500700	518598	536496	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	2503.5	2592.99	2682.48	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	500302	518598	537000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	24.51	24.58	24.55	26.0	0.0	



Part27Q_n77_Ant 4							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1	3495	3499.98	3500	
100	PI2 BPSK	1	137	21.97	22.05	22.05	0.0
100	PI2 BPSK	1	211	22.02	22.02	22.02	0.0
100	PI2 BPSK	135	0	22.02	22.02	22.02	0.0
100	PI2 BPSK	135	69	22.02	22.02	22.02	0.0
100	PI2 BPSK	135	138	22.02	22.02	22.02	0.0
100	PI2 BPSK	270	0	22.05	22.05	22.05	0.0
100	QPSK	1	1	22.10	22.10	22.10	0.0
100	QPSK	1	137	21.98	22.06	22.06	0.0
100	QPSK	1	271	22.06	22.06	22.06	0.0
100	QPSK	135	0	21.97	22.05	22.05	0.0
100	QPSK	135	69	22.06	22.06	22.06	0.0
100	QPSK	135	138	22.01	22.01	22.01	0.0
100	QPSK	270	0	22.07	22.07	22.07	0.0
100	16QAM	1	1	21.96	21.96	21.96	0.5
100	16QAM	1	1	21.53	21.53	21.53	0.5
100	256QAM	1	1	19.83	19.83	19.83	2.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	63300	63332	63366	MPR (dB)
Channel							
Frequency (MHz)							
80	QPSK	1	1	3495	3499.98	3500	0.0
Channel							
Frequency (MHz)							
70	QPSK	1	1	21.99	22.01	22.00	0.0
Channel							
Frequency (MHz)							
60	QPSK	1	1	63300	63332	63366	MPR (dB)
Channel							
Frequency (MHz)							
50	QPSK	1	1	3495	3499.98	3500	0.0
Channel							
Frequency (MHz)							
40	QPSK	1	1	63168	63332	63500	MPR (dB)
Channel							
Frequency (MHz)							
30	QPSK	1	1	3495	3499.98	3500	0.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	63300	63332	63366	MPR (dB)
Channel							
Frequency (MHz)							
15	QPSK	1	1	3495	3499.98	3500	0.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	63334	63332	63332	MPR (dB)

Part27O_n77_Ant 4							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1	3795	3840	3900	
100	PI2 BPSK	1	137	22.47	22.57	22.33	0.0
100	PI2 BPSK	1	271	22.44	22.56	22.30	0.0
100	PI2 BPSK	135	0	22.45	22.54	22.27	0.0
100	PI2 BPSK	135	69	22.48	22.62	22.31	0.0
100	PI2 BPSK	135	138	22.41	22.52	22.31	0.0
100	PI2 BPSK	270	0	22.40	22.81	22.33	0.0
100	QPSK	1	1	22.47	22.55	22.29	0.0
100	QPSK	1	137	22.46	22.60	22.32	0.0
100	QPSK	1	271	22.42	22.62	22.28	0.0
100	QPSK	135	0	22.46	22.53	22.31	0.0
100	QPSK	135	69	22.45	22.62	22.31	0.0
100	QPSK	135	138	22.45	22.60	22.32	0.0
100	QPSK	270	0	22.44	22.85	22.36	0.0
100	16QAM	1	1	22.50	22.54	22.36	0.5
100	16QAM	1	1	22.20	22.23	22.10	0.5
100	256QAM	1	1	19.96	20.05	20.00	2.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	64968	65000	65332	MPR (dB)
Channel							
Frequency (MHz)							
80	QPSK	1	1	3795	3840	3900	0.0
Channel							
Frequency (MHz)							
70	QPSK	1	1	22.45	22.55	22.29	0.0
Channel							
Frequency (MHz)							
60	QPSK	1	1	64968	65000	65332	MPR (dB)
Channel							
Frequency (MHz)							
50	QPSK	1	1	3795	3840	3900	0.0
Channel							
Frequency (MHz)							
40	QPSK	1	1	64834	65000	66366	MPR (dB)
Channel							
Frequency (MHz)							
30	QPSK	1	1	3795	3840	3900	0.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	64734	65000	66486	MPR (dB)
Channel							
Frequency (MHz)							
15	QPSK	1	1	64700	65000	66500	MPR (dB)
Channel							
Frequency (MHz)							
10	QPSK	1	1	3795	3840	3975	0.0



### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3499.98				
100	Pi2 BPSK	1	1	24.04				
100	Pi2 BPSK	1	137	24.11			25.5	0.0
100	Pi2 BPSK	1	271	24.14				
100	Pi2 BPSK	135	0	23.98			25.0	0.5
100	Pi2 BPSK	135	69	24.03			25.5	0.0
100	Pi2 BPSK	135	138	23.97			25.0	0.5
100	Pi2 BPSK	270	0	23.92				
100	QPSK	1	1	24.19				
100	QPSK	1	137	24.07			25.5	0.0
100	QPSK	1	271	24.09				
100	QPSK	135	0	23.97				
100	QPSK	135	69	24.13			25.5	0.0
100	QPSK	135	138	23.96				
100	QPSK	270	0	23.90			24.5	1.0
100	6QAM	1	1	23.11			24.5	1.0
100	6QAM	1	1	21.53			23.0	2.5
100	256QAM	1	1	19.63			21.0	4.5
Channel								
Frequency (MHz)				633000				
50	QPSK	1	1	23.97	24.00	23.98	25.5	0.0
Channel								
Frequency (MHz)				630668				
80	QPSK	1	1	24.02	24.00	23.98	25.5	0.0
Channel								
Frequency (MHz)				3485.01				
70	QPSK	1	1	23.95	24.01	23.96	25.5	0.0
Channel								
Frequency (MHz)				632000				
60	QPSK	1	1	23.95	24.01	24.06	25.5	0.0
Channel								
Frequency (MHz)				631668				
50	QPSK	1	1	24.02	24.00	23.95	25.5	0.0
Channel								
Frequency (MHz)				631334				
40	QPSK	1	1	23.96	23.99	24.07	25.5	0.0
Channel								
Frequency (MHz)				3465				
30	QPSK	1	1	23.97	23.99	23.98	25.5	0.0
Channel								
Frequency (MHz)				630668				
20	QPSK	1	1	24.07	23.97	24.03	25.5	0.0
Channel								
Frequency (MHz)				630900				
15	QPSK	1	1	24.05	24.03	23.99	24.5	0.0
Channel								
Frequency (MHz)				635334				
10	QPSK	1	1	24.03	24.06	23.99	25.5	0.0

### Part27Q\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3790				
100	Pi2 BPSK	1	1	24.38	24.48	24.46		
100	Pi2 BPSK	1	137	24.40	24.46	24.39	25.5	0.0
100	Pi2 BPSK	1	271	24.35	24.36	24.22		
100	Pi2 BPSK	135	0	23.81	23.92	23.89	25.0	0.5
100	Pi2 BPSK	135	69	24.19	24.34	24.21	25.5	0.0
100	Pi2 BPSK	135	138	23.80	23.85	23.75	25.0	0.5
100	Pi2 BPSK	270	0	23.85	23.89	23.81		
100	QPSK	1	1	24.58	24.63	24.47		
100	QPSK	1	137	24.48	24.58	24.46	25.5	0.0
100	QPSK	1	271	24.29	24.35	24.31		
100	QPSK	135	0	23.88	23.46	23.31		
100	QPSK	135	69	24.34	24.43	24.21	25.5	0.0
100	QPSK	135	138	23.31	23.37	23.36		
100	QPSK	270	0	23.36	23.46	23.43	24.5	1.0
100	6QAM	1	1	23.56	23.69	23.58	24.5	1.0
100	6QAM	1	1	22.20	22.23	22.10	23.0	2.5
100	256QAM	1	1	19.86	20.05	20.00	21.0	4.5
Channel								
Frequency (MHz)				648668				
90	QPSK	1	1	24.54	24.58	24.36	25.5	0.0
Channel								
Frequency (MHz)				648334				
80	QPSK	1	1	24.45	24.54	24.38	25.5	0.0
Channel								
Frequency (MHz)				3485.01				
70	QPSK	1	1	24.49	24.54	24.33	25.5	0.0
Channel								
Frequency (MHz)				648668				
60	QPSK	1	1	24.55	24.62	24.43	25.5	0.0
Channel								
Frequency (MHz)				648334				
50	QPSK	1	1	24.49	24.55	24.35	25.5	0.0
Channel								
Frequency (MHz)				648000				
40	QPSK	1	1	24.48	24.50	24.39	25.5	0.0
Channel								
Frequency (MHz)				3715.02				
30	QPSK	1	1	24.44	24.59	24.34	25.5	0.0
Channel								
Frequency (MHz)				647334				
20	QPSK	1	1	24.44	24.55	24.33	25.5	0.0
Channel								
Frequency (MHz)				647168				
15	QPSK	1	1	24.53	24.50	24.33	25.5	0.0
Channel								
Frequency (MHz)				3705				
10	QPSK	1	1	24.57	24.48	24.44	25.5	0.0

### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3499.98				
100	Pi2 BPSK	1	1	22.95				
100	Pi2 BPSK	1	137	23.13			24.0	0.0
100	Pi2 BPSK	1	271	23.18				
100	Pi2 BPSK	135	0	22.89			24.0	0.0
100	Pi2 BPSK	135	69	23.10			24.0	0.0
100	Pi2 BPSK	135	138	23.14			24.0	0.0
100	Pi2 BPSK	270	0	23.03				
100	QPSK	1	1	23.20				
100	QPSK	1	137	23.17			24.0	0.0
100	QPSK	1	271	23.12				
100	QPSK	135	0	22.96				
100	QPSK	135	69	23.05			24.0	0.0
100	QPSK	135	138	23.02				
100	QPSK	270	0	22.81			24.0	0.0
100	6QAM	1	1	23.03			24.0	0.0
100	6QAM	1	1	23.11			24.0	0.0
100	256QAM	1	1	22.02			22.5	1.5
Channel								
Frequency (MHz)				633000				
90	QPSK	1	1	23.02	23.08	23.16	24.0	0.0
Channel								
Frequency (MHz)				630668				
80	QPSK	1	1	22.88	23.07	23.12	24.0	0.0
Channel								
Frequency (MHz)				635334				
70	QPSK	1	1	22.87	23.04	23.15	24.0	0.0
Channel								
Frequency (MHz)				632000				
60	QPSK	1	1	22.94	23.02	22.98	24.0	0.0
Channel								
Frequency (MHz)				631668				
50	QPSK	1	1	23.00	23.01	23.13	24.0	0.0
Channel								
Frequency (MHz)				631334				
40	QPSK	1	1	22.92	23.03	23.13	24.0	0.0
Channel								
Frequency (MHz)				3465				
30	QPSK	1	1	22.97	23.07	23.01	24.0	0.0
Channel								
Frequency (MHz)				630668				
20	QPSK	1	1	22.96	22.99	22.89	24.0	0.0
Channel								
Frequency (MHz)				630900				
15	QPSK	1	1	22.95	23.07	23.00	24.0	0.0
Channel								
Frequency (MHz)				635334				
10	QPSK	1	1	22.91	22.94	23.10	24.0	0.0



Part27Q_n77_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	MPR (dB)
Channel									
Frequency (MHz)									
100	Plz BPSK	1	1	3760	3840	3930			
100	Plz BPSK	1	137	23.27	23.03	23.10	24.0	0.0	
100	Plz BPSK	1	137	23.21	23.00	23.10			
100	Plz BPSK	1	271	23.21	23.02	23.05			
100	Plz BPSK	135	0	23.17	23.06	23.08	24.0	0.0	
100	Plz BPSK	135	69	23.22	22.98	23.07	24.0	0.0	
100	Plz BPSK	135	138	23.20	22.99	23.07	24.0	0.0	
100	Plz BPSK	270	0	23.23	23.03	23.06			
100	QPSK	1	1	23.28	23.05	23.10			
100	QPSK	1	137	23.20	22.98	23.12	24.0	0.0	
100	QPSK	1	271	23.16	23.00	23.05			
100	QPSK	135	0	23.20	23.00	23.04	24.0	0.0	
100	QPSK	135	69	23.22	23.04	23.05	24.0	0.0	
100	QPSK	135	138	23.21	23.03	23.02	24.0	0.0	
100	QPSK	270	0	23.22	22.98	23.13	24.0	0.0	
100	64QAM	1	1	23.20	23.08	23.12	24.0	0.0	
100	64QAM	1	1	23.00	23.00	23.10	24.0	0.0	
100	256QAM	1	1	22.38	22.24	22.02	22.5	1.5	
Channel									
Frequency (MHz)									
649668	656000	662332	Tune-up limit (dBm)	MPR (dB)					
3145.02	3840	3839.99	24.0	0.0					
646334	656000	662668	Tune-up limit (dBm)	MPR (dB)					
3740.01	3840	3839.99	24.0	0.0					
80	QPSK	1	1	23.10	22.98	23.10	24.0	0.0	
Channel									
Frequency (MHz)									
646334	656000	662668	Tune-up limit (dBm)	MPR (dB)					
3736	3840	3845	24.0	0.0					
70	QPSK	1	1	23.15	23.07	23.01	24.0	0.0	
Channel									
Frequency (MHz)									
646334	656000	662332	Tune-up limit (dBm)	MPR (dB)					
3172.02	3840	3840.98	24.0	0.0					
60	QPSK	1	1	23.17	23.05	23.04	24.0	0.0	
Channel									
Frequency (MHz)									
646334	656000	663668	Tune-up limit (dBm)	MPR (dB)					
3723.01	3840	3839.99	24.0	0.0					
50	QPSK	1	1	23.20	23.00	23.14	24.0	0.0	
Channel									
Frequency (MHz)									
646000	656000	664000	Tune-up limit (dBm)	MPR (dB)					
3720	3840	3960	24.0	0.0					
40	QPSK	1	1	23.22	23.01	23.05	24.0	0.0	
Channel									
Frequency (MHz)									
647168	656000	664332	Tune-up limit (dBm)	MPR (dB)					
3715.02	3840	3844.98	24.0	0.0					
30	QPSK	1	1	23.13	22.99	23.08	24.0	0.0	
Channel									
Frequency (MHz)									
647334	656000	664668	Tune-up limit (dBm)	MPR (dB)					
3714.01	3840	3839.99	24.0	0.0					
20	QPSK	1	1	23.23	23.02	23.01	24.0	0.0	
Channel									
Frequency (MHz)									
647168	656000	664832	Tune-up limit (dBm)	MPR (dB)					
3707.52	3840	3872.48	24.0	0.0					
15	QPSK	1	1	23.23	23.02	23.14	24.0	0.0	
Channel									
Frequency (MHz)									
647000	656000	665000	Tune-up limit (dBm)	MPR (dB)					
3705	3840	3975	24.0	0.0					
10	QPSK	1	1	23.14	23.03	23.02	24.0	0.0	

Part27Q_n77 HPUE_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	MPR (dB)	
Channel										
Frequency (MHz)										
100	Plz BPSK	1	1			25.97				
100	Plz BPSK	1	137			25.96	27.0	0.0		
100	Plz BPSK	1	271			25.90				
100	Plz BPSK	135	0			25.72	26.5	0.5		
100	Plz BPSK	135	69			25.82	27.0	0.0		
100	Plz BPSK	135	138			25.77	26.5	0.5		
100	Plz BPSK	270	0			25.81				
100	QPSK	1	1			25.01				
100	QPSK	1	137			25.88	27.0	0.0		
100	QPSK	1	271			25.94				
100	QPSK	135	0			25.92	27.0	0.0		
100	QPSK	135	69			25.94				
100	QPSK	135	138			25.18				
100	QPSK	270	0			25.15	26.0	1.0		
100	64QAM	1	1			24.76	24.5	2.5		
100	64QAM	1	1			23.58				
100	256QAM	1	1			22.00	22.5	4.5		
Channel										
Frequency (MHz)										
633000	633332	633668	Tune-up limit (dBm)	MPR (dB)						
3485	3489.98	3544.98	27.0	0.0						
90	QPSK	1	1			25.93	27.0	0.0		
Channel										
Frequency (MHz)										
630668	633332	634000	Tune-up limit (dBm)	MPR (dB)						
3490.02	3499.98	3510	27.0	0.0						
80	QPSK	1	1			26.10	26.08	26.81	27.0	0.0
Channel										
Frequency (MHz)										
632534	633332	633332	Tune-up limit (dBm)	MPR (dB)						
3485.01	3499.98	3514.98	27.0	0.0						
70	QPSK	1	1			25.92	25.82	25.68	27.0	0.0
Channel										
Frequency (MHz)										
632000	633332	633668	Tune-up limit (dBm)	MPR (dB)						
3490	3499.98	3519.98	27.0	0.0						
60	QPSK	1	1			25.83	25.73	25.69	27.0	0.0
Channel										
Frequency (MHz)										
631668	633332	633600	Tune-up limit (dBm)	MPR (dB)						
3475.02	3499.98	3500	27.0	0.0						
50	QPSK	1	1			25.14	25.79	25.81	27.0	0.0
Channel										
Frequency (MHz)										
631334	633332	633332	Tune-up limit (dBm)	MPR (dB)						
3470.01	3499.98	3509.98	27.0	0.0						
40	QPSK	1	1			25.92	25.72	25.79	27.0	0.0
Channel										
Frequency (MHz)										
631000	633332	633668	Tune-up limit (dBm)	MPR (dB)						
3485	3499.98	3534.98	27.0	0.0						
30	QPSK	1	1			25.89	25.80	25.85	27.0	0.0
Channel										
Frequency (MHz)										
630668	633332	633000	Tune-up limit (dBm)	MPR (dB)						
3490.02	3499.98	3500	27.0	0.0						
20	QPSK	1	1			25.89	25.77	25.85	27.0	0.0
Channel										
Frequency (MHz)										
630600	633332	636168	Tune-up limit (dBm)	MPR (dB)						
3475.02	3499.98	3542.48	27.0	0.0						
15	QPSK	1	1			25.75	25.73	25.71	27.0	0.0
Channel										
Frequency (MHz)										
630334	633332	633332	Tune-up limit (dBm)	MPR (dB)						
3455.01	3499.98	3544.98	27.0	0.0						
10	QPSK	1	1			25.78	25.65	25.68	27.0	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	MPR (dB)	
Channel										
Frequency (MHz)										
100	Plz BPSK	1	1			26.31	26.14	26.02		
100	Plz BPSK	1	137			26.33	26.16	26.01	27.0	0.0
100	Plz BPSK	1	271			26.31	26.11	25.96		
100	Plz BPSK	135	0			26.29	26.08	25.81	27.0	0.0
100	Plz BPSK	135	69			26.25	26.12	25.97	27.0	0.0
100	Plz BPSK	135	138			26.14	26.06	25.77	27.0	0.0
100	Plz BPSK	270	0			26.22	26.10	25.83		
100	QPSK	1	1			25.36	25.01	25.51		
100	QPSK	1	137			26.32	25.97	25.75	27.0	0.0
100	QPSK	1	271			25.79	25.88	25.76		
100	QPSK	135	0			26.73	26.46	26.51		
100	QPSK	135	69			25.17	25.97	25.73	27.0	0.0
100	QPSK	135	138			25.11	25.21	25.17		
100	QPSK	270	0			25.20	24.96	24.84	26.0	1.0
100	64QAM	1	1			25.60	25.46	25.32	26.0	1.0
100	64QAM	1	1			24.49	24.27	24.01	24.5	2.5
100	256QAM	1	1			22.38	22.24	22.02	22.5	4.5
Channel										
Frequency (MHz)										
646668	650000	662332	Tune-up limit (dBm)	MPR (dB)						
3740.02	3840	3834.98	27.0	0.0						
90	QPSK	1	1			25.22	25.81	25.86	27.0	0.0
Channel										
Frequency (MHz)										
646334	656000	662668	Tune-up limit (dBm)	MPR (dB)						
3740.01	3840	3839.99	27.0	0.0						
80	QPSK	1	1			25.34	25.94	25.80	27.0	0.0
Channel										
Frequency (MHz)										
646000	650000	653000	Tune-up limit (dBm)	MPR (dB)						
3735	3840	3945	27.0	0.0						
70	QPSK	1	1			26.18	25.91	25.71	27.0	0.0
Channel										
Frequency (MHz)										
646000	650000	663332	Tune-up limit (dBm)	MPR (dB)						
3720.02	3840	3843.98	27.0	0.0						
60	QPSK	1	1			26.25	26.00	25.90	27.0	0.0
Channel										
Frequency (MHz)										
646334	656000	663668	Tune-up limit (dBm)	MPR (dB)						
3725.01	3840	3824.99	27.0	0.0						
50	QPSK	1	1			26.21	25.98	25.74	27.0	0.0
Channel										
Frequency (MHz)										
646000	650000	664000	Tune-up limit (dBm)	MPR (dB)						
3720	3840	3960	27.0	0.0						
40	QPSK	1	1			26.16	25.89	25.75	27.0	0.0
Channel										
Frequency (MHz)										
645668	650000	664332	Tune-up limit (dBm)	MPR (dB)						
3715.02	3840	3844.98	27.0	0.0						
30	QPSK	1	1			26.26	25.98	25.86	27.0	0.0
Channel										
Frequency (MHz)										
647334	650000	664668	Tune-up limit (dBm)	MPR (dB)						
3710.01	3840	3839.99	27.0	0.0						
20	QPSK	1	1			26.26	25.95	25.78	27.0	0.0
Channel										
Frequency (MHz)										
647168	656000	6648								



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				3499.98						
Frequency (MHz)				3499.98						
100	Pi2 BPSK	1	1	21.98						
100	Pi2 BPSK	1	137	22.00			23.0	0.0		
100	Pi2 BPSK	1	271	21.98						
100	Pi2 BPSK	135	0	21.97			23.0	0.0		
100	Pi2 BPSK	135	69	22.00			23.0	0.0		
100	Pi2 BPSK	135	138	22.08			23.0	0.0		
100	Pi2 BPSK	270	0	22.03						
100	QPSK	1	1	22.16						
100	QPSK	1	137	21.72			23.0	0.0		
100	QPSK	1	271	22.00						
100	QPSK	135	0	22.00			23.0	0.0		
100	QPSK	135	69	22.11			23.0	0.0		
100	QPSK	135	138	22.09			23.0	0.0		
100	QPSK	270	0	22.08			23.0	0.0		
100	6QAM	1	1	21.99			23.0	0.0		
100	6QAM	1	1	21.78			22.5	0.5		
100	256QAM	1	1	19.63			20.5	2.5		
Channel				633000						
Frequency (MHz)				633332						
50	QPSK	1	1	21.97	22.05	22.01	23.0	0.0		
Channel				630668						
Frequency (MHz)				634002						
80	QPSK	1	1	22.04	21.07	21.08	23.0	0.0		
Channel				3485.01						
Frequency (MHz)				3499.98						
70	QPSK	1	1	22.03	21.94	22.02	23.0	0.0		
Channel				632000						
Frequency (MHz)				633332						
60	QPSK	1	1	22.01	22.07	22.00	23.0	0.0		
Channel				631668						
Frequency (MHz)				633332						
50	QPSK	1	1	21.92	21.97	21.98	23.0	0.0		
Channel				631334						
Frequency (MHz)				633332						
40	QPSK	1	1	22.01	22.04	21.98	23.0	0.0		
Channel				3465						
Frequency (MHz)				3499.98						
30	QPSK	1	1	22.02	21.98	22.04	23.0	0.0		
Channel				630668						
Frequency (MHz)				633332						
20	QPSK	1	1	22.01	21.97	22.03	23.0	0.0		
Channel				630600						
Frequency (MHz)				633332						
15	QPSK	1	1	21.98	22.03	22.04	23.0	0.0		
Channel				630334						
Frequency (MHz)				633332						
10	QPSK	1	1	22.00	21.94	22.01	23.0	0.0		

Part27Q_n77_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				3790					
Frequency (MHz)				3840					
100	Pi2 BPSK	1	1	21.73	21.85	21.77			
100	Pi2 BPSK	1	137	21.78	21.85	21.84	23.0	0.0	
100	Pi2 BPSK	1	271	21.77	21.83	21.70			
100	Pi2 BPSK	135	0	21.85	21.87	21.85	23.0	0.0	
100	Pi2 BPSK	135	69	21.95	21.99	21.93	23.0	0.0	
100	Pi2 BPSK	135	138	21.91	22.03	21.90	23.0	0.0	
100	Pi2 BPSK	270	0	21.85	22.00	21.86			
100	QPSK	1	1	22.09	22.13	22.04			
100	QPSK	1	137	21.72	21.85	21.80	23.0	0.0	
100	QPSK	1	271	21.85	21.92	21.78			
100	QPSK	135	0	21.85	21.92	21.78	23.0	0.0	
100	QPSK	135	69	21.93	22.03	21.91	23.0	0.0	
100	QPSK	135	138	21.82	21.98	21.89	23.0	0.0	
100	QPSK	270	0	21.87	22.02	21.99	23.0	0.0	
100	6QAM	1	1	21.88	21.87	21.72	23.0	0.0	
100	6QAM	1	1	21.19	21.24	21.16	22.5	0.5	
100	256QAM	1	1	19.39	19.34	19.25	20.5	2.5	
Channel				648668					
Frequency (MHz)				650000					
90	QPSK	1	1	21.89	21.89	21.80	23.0	0.0	
Channel				648334					
Frequency (MHz)				650000					
80	QPSK	1	1	21.81	21.88	21.85	23.0	0.0	
Channel				648000					
Frequency (MHz)				650000					
70	QPSK	1	1	21.82	21.89	21.84	23.0	0.0	
Channel				648668					
Frequency (MHz)				650000					
60	QPSK	1	1	21.82	21.88	21.76	23.0	0.0	
Channel				648334					
Frequency (MHz)				650000					
50	QPSK	1	1	21.83	21.90	21.81	23.0	0.0	
Channel				648000					
Frequency (MHz)				650000					
40	QPSK	1	1	21.82	22.01	21.89	23.0	0.0	
Channel				3715.02					
Frequency (MHz)				3840					
30	QPSK	1	1	21.88	21.95	21.89	23.0	0.0	
Channel				647334					
Frequency (MHz)				650000					
20	QPSK	1	1	21.87	21.99	21.85	23.0	0.0	
Channel				647168					
Frequency (MHz)				650000					
15	QPSK	1	1	21.84	21.97	21.90	23.0	0.0	
Channel				3705					
Frequency (MHz)				3840					
10	QPSK	1	1	21.84	21.90	21.87	23.0	0.0	

Part27Q_n77 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				633332					
Frequency (MHz)				633332					
100	Pi2 BPSK	1	1	24.03					
100	Pi2 BPSK	1	137	23.96			25.0	0.0	
100	Pi2 BPSK	1	271	24.03					
100	Pi2 BPSK	135	0	23.95			24.5	0.5	
100	Pi2 BPSK	135	69	23.91			25.0	0.0	
100	Pi2 BPSK	135	138	23.93			24.5	0.5	
100	Pi2 BPSK	270	0	23.92					
100	QPSK	1	1	24.13					
100	QPSK	1	137	23.91			25.0	0.0	
100	QPSK	1	271	23.91					
100	QPSK	135	0	23.92			25.0	0.0	
100	QPSK	135	69	23.96			25.0	0.0	
100	QPSK	135	138	23.93			24.0	1.0	
100	6QAM	1	1	21.71			22.5	2.5	
100	256QAM	1	1	19.64			20.5	4.5	
Channel				633000					
Frequency (MHz)				633332					
90	QPSK	1	1	24.03	24.07	23.98	25.0	0.0	
Channel				630668					
Frequency (MHz)				634000					
80	QPSK	1	1	24.02	23.99	24.11	25.0	0.0	
Channel				630334					
Frequency (MHz)				633332					
70	QPSK	1	1	24.12	24.02	24.04	25.0	0.0	
Channel				632000					
Frequency (MHz)				633332					
60	QPSK	1	1	24.08	24.04	23.99	25.0	0.0	
Channel				631668					
Frequency (MHz)				633332					
50	QPSK	1	1	24.09	23.98	24.07	25.0	0.0	
Channel				631334					
Frequency (MHz)				633332					
40	QPSK	1	1	23.99	24.06	24.08	25.0	0.0	
Channel				3465					
Frequency (MHz)				3499.98					
30	QPSK	1	1	24.10	24.08	24.05	25.0	0.0	
Channel				630668					
Frequency (MHz)				633332					
20	QPSK	1	1	23.99	24.02	24.10	25.0	0.0	
Channel				630600					
Frequency (MHz)				633332					
15	QPSK	1	1	24.08	23.98	24.05	25.0	0.0	
Channel				3485.01					
Frequency (MHz)				3499.98					
10	QPSK	1	1	24.11	24.06	23.99	25.0	0.0	



Part270_n77_HPUe_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	P12 BPSK	1	1	3760	3840	3930				
100	P12 BPSK	1	1	23.19	23.20	23.19				
100	P12 BPSK	1	137	23.29	23.37	23.33	25.0	0.0		
100	P12 BPSK	1	271	23.31	23.40	23.32				
100	P12 BPSK	135	0	23.17	23.22	23.19	24.5	0.5		
100	P12 BPSK	135	69	23.31	23.34	23.22	25.0	0.0		
100	P12 BPSK	135	138	23.20	23.34	23.22	24.5	0.5		
100	P12 BPSK	270	0	23.23	23.38	23.21				
100	QPSK	1	1	23.35	23.41	23.37				
100	QPSK	1	137	23.22	23.36	23.21	25.0	0.0		
100	QPSK	1	271	23.24	23.35	23.22				
100	QPSK	135	0	23.28	23.31	23.26				
100	QPSK	135	69	23.25	23.35	23.33	25.0	0.0		
100	QPSK	135	138	22.72	22.81	22.88				
100	QPSK	270	0	22.71	22.82	22.70	24.0	1.0		
100	64QAM	1	1	22.67	22.71	22.81	24.0	1.0		
100	64QAM	1	1	21.35	21.48	21.42	22.5	2.5		
100	256QAM	1	1	19.25	19.36	19.27	20.5	4.5		
Channel										
Frequency (MHz)										
64968				65000	65000	65232	Tune-up limit (dBm)	MPR (dB)		
64968				65000	65000	65232				
50	QPSK	1	1	23.25	23.36	23.34	25.0	0.0		
Channel										
Frequency (MHz)										
64634				65600	65600	66268	Tune-up limit (dBm)	MPR (dB)		
64634				65600	65600	66268				
80	QPSK	1	1	23.25	23.30	23.23	25.0	0.0		
Channel										
Frequency (MHz)										
64600				65600	65600	66336	Tune-up limit (dBm)	MPR (dB)		
64600				65600	65600	66336				
70	QPSK	1	1	23.35	23.34	23.27	25.0	0.0		
Channel										
Frequency (MHz)										
64968				65000	65332	65668	Tune-up limit (dBm)	MPR (dB)		
64968				65000	65332	65668				
60	QPSK	1	1	23.25	23.31	23.24	25.0	0.0		
Channel										
Frequency (MHz)										
64634				65600	65600	66368	Tune-up limit (dBm)	MPR (dB)		
64634				65600	65600	66368				
50	QPSK	1	1	23.22	23.27	23.14	25.0	0.0		
Channel										
Frequency (MHz)										
64800				65600	65600	66400	Tune-up limit (dBm)	MPR (dB)		
64800				65600	65600	66400				
40	QPSK	1	1	23.21	23.28	23.21	25.0	0.0		
Channel										
Frequency (MHz)										
64708				65600	65600	66432	Tune-up limit (dBm)	MPR (dB)		
64708				65600	65600	66432				
30	QPSK	1	1	23.34	23.40	23.23	25.0	0.0		
Channel										
Frequency (MHz)										
64734				65600	65668	66466	Tune-up limit (dBm)	MPR (dB)		
64734				65600	65668	66466				
20	QPSK	1	1	23.25	23.33	23.30	25.0	0.0		
Channel										
Frequency (MHz)										
64768				65600	66482	66482	Tune-up limit (dBm)	MPR (dB)		
64768				65600	66482	66482				
15	QPSK	1	1	23.32	23.37	23.25	25.0	0.0		
Channel										
Frequency (MHz)										
64700				65600	65600	66500	Tune-up limit (dBm)	MPR (dB)		
64700				65600	65600	66500				
10	QPSK	1	1	23.34	23.27	23.25	25.0	0.0		

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	P12 BPSK	1	1			3499.98				
100	P12 BPSK	1	1			21.34				
100	P12 BPSK	1	137			21.33	23.0	0.0		
100	P12 BPSK	1	271			21.42				
100	P12 BPSK	135	0			21.32	23.0	0.0		
100	P12 BPSK	135	69			21.38	23.0	0.0		
100	P12 BPSK	135	138			21.43	23.0	0.0		
100	P12 BPSK	270	0			21.36				
100	QPSK	1	1			21.48				
100	QPSK	1	137			21.36	23.0	0.0		
100	QPSK	1	271			21.43				
100	QPSK	135	0			21.42				
100	QPSK	135	69			21.44	23.0	0.0		
100	QPSK	135	138			21.42	23.0	0.0		
100	QPSK	270	0			21.43	23.0	0.0		
100	64QAM	1	1			21.41	23.0	0.0		
100	64QAM	1	1			21.35	23.0	0.0		
100	256QAM	1	1			21.33	23.0	0.0		
Channel										
Frequency (MHz)										
63300				63332	63368	63696	Tune-up limit (dBm)	MPR (dB)		
63300				63332	63368	63696				
90	QPSK	1	1	21.32	21.37	21.26	23.0	0.0		
Channel										
Frequency (MHz)										
63068				63332	63400	63400	Tune-up limit (dBm)	MPR (dB)		
63068				63332	63400	63400				
80	QPSK	1	1	21.35	21.29	21.35	23.0	0.0		
Channel										
Frequency (MHz)										
63480				63480	63498	63516	Tune-up limit (dBm)	MPR (dB)		
63480				63480	63498	63516				
70	QPSK	1	1	21.36	21.34	21.26	23.0	0.0		
Channel										
Frequency (MHz)										
63200				63332	63368	63696	Tune-up limit (dBm)	MPR (dB)		
63200				63332	63368	63696				
60	QPSK	1	1	21.38	21.35	21.27	23.0	0.0		
Channel										
Frequency (MHz)										
63168				63332	63500	63500	Tune-up limit (dBm)	MPR (dB)		
63168				63332	63500	63500				
50	QPSK	1	1	21.29	21.26	21.33	23.0	0.0		
Channel										
Frequency (MHz)										
63134				63332	63332	63532	Tune-up limit (dBm)	MPR (dB)		
63134				63332	63332	63532				
40	QPSK	1	1	21.30	21.34	21.26	23.0	0.0		
Channel										
Frequency (MHz)										
63485				63498	63534	63534	Tune-up limit (dBm)	MPR (dB)		
63485				63498	63534	63534				
30	QPSK	1	1	21.35	21.29	21.36	23.0	0.0		
Channel										
Frequency (MHz)										
63068				63332	63600	63600	Tune-up limit (dBm)	MPR (dB)		
63068				63332	63600	63600				
20	QPSK	1	1	21.36	21.40	21.30	23.0	0.0		
Channel										
Frequency (MHz)										
63600				63332	63696	63696	Tune-up limit (dBm)	MPR (dB)		
63600				63332	63696	63696				
15	QPSK	1	1	21.35	21.29	21.40	23.0	0.0		
Channel										
Frequency (MHz)										
63334				63332	63532	63532	Tune-up limit (dBm)	MPR (dB)		
63334				63332	63532	63532				
10	QPSK	1	1	21.39	21.26	21.34	23.0	0.0		

Part270_n77_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	P12 BPSK	1	1			3760				
100	P12 BPSK	1	1			21.18	21.32	21.21		
100	P12 BPSK	1	137			21.15	21.26	21.24	23.0	0.0
100	P12 BPSK	1	271			21.23	21.36	21.22		
100	P12 BPSK	135	0			21.21	21.27	21.18	23.0	0.0
100	P12 BPSK	135	69			21.10	21.23	21.12	23.0	0.0
100	P12 BPSK	135	138			21.22	21.27	21.31	23.0	0.0
100	P12 BPSK	270	0			21.26	21.33	21.26		
100	QPSK	1	1			21.37	21.46	21.44		
100	QPSK	1	137			21.22	21.28	21.21	23.0	0.0
100	QPSK	1	271			21.27	21.41	21.28		
100	QPSK	135	0			21.29	21.37	21.31		
100	QPSK	135	69			21.41	21.42	21.33	23.0	0.0
100	QPSK	135	138			21.21	21.28	21.22		
100	QPSK	270	0			21.27	21.40	21.38	23.0	0.0
100	64QAM	1	1			21.30	21.37	21.36	23.0	0.0
100	64QAM	1	1			21.28	21.32	21.29	23.0	0.0
100	256QAM	1	1			21.05	21.19	21.15	23.0	0.0
Channel										
Frequency (MHz)										
64968				65000	65232	65232	Tune-up limit (dBm)	MPR (dB)		
64968				65000	65232	65232				
90	QPSK	1	1	21.33	21.37	21.29	23.0	0.0		
Channel										
Frequency (MHz)										
64634				65600	65668	65668	Tune-up limit (dBm)	MPR (dB)		
64634				65600	65668	65668				
80	QPSK	1	1	21.23	21.34	21.30	23.0	0.0		
Channel										
Frequency (MHz)										
64600				65600	65668	65668	Tune-up limit (dBm)	MPR (dB)		
64600				65600	65668	65668				
70	QPSK	1	1	21.29	21.35	21.40	23.0	0.0		
Channel										
Frequency (MHz)										
64968				65000	65332	65668	Tune-up limit (dBm)	MPR (dB)		
64968				65000	65332	65668				
60	QPSK	1	1	21.31	21.37	21.30	23.0	0.0		
Channel										
Frequency (MHz)										
64634				65600	65668	65668	Tune-up limit (dBm)	MPR (dB)		
64634				65600	65668	65668				
50	QPSK	1	1	21.21	21.33	21.27	23.0	0.0		
Channel										
Frequency (MHz)										
64800				65600	65600	66400	Tune-up limit (dBm)	MPR (dB)		
64800				65600	65600	66400				
40	QPSK	1	1	21.29	21.38	21.34	23.0	0.0		
Channel										
Frequency (MHz)										
64708				65600	65632	66432	Tune-up limit (dBm)	MPR (dB)		
64708										



### Part27Q\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Plz BPSK	1	1	3495	3499.98	3504.99		
100	Plz BPSK	1	137	23.67			25.0	0.0
100	Plz BPSK	1	271	23.69				
100	Plz BPSK	135	0	23.32			24.5	0.5
100	Plz BPSK	135	69	23.80			25.0	0.0
100	Plz BPSK	135	138	23.36				
100	Plz BPSK	270	0	23.25			24.5	0.5
100	QPSK	1	1	23.95				
100	QPSK	1	137	23.46			25.0	0.0
100	QPSK	1	271	23.34				
100	QPSK	135	0	23.70				
100	QPSK	135	69	23.75			25.0	0.0
100	QPSK	135	138	22.42				
100	QPSK	270	0	22.67			24.0	1.0
100	64QAM	1	1	23.94			24.0	1.0
100	64QAM	1	1	21.38			23.0	2.0
100	256QAM	1	1	21.33			23.0	2.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	63300	63332	63366	Tune-up limit (dBm)	MPR (dB)
				3495	3499.98	3504.99	25.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	63068	63332	63400	Tune-up limit (dBm)	MPR (dB)
				3490.02	3499.98	3510	25.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.61	23.61	23.69	Tune-up limit (dBm)	MPR (dB)
				3485.01	3499.98	3514.98	25.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.88	23.89	23.94	Tune-up limit (dBm)	MPR (dB)
				63200	63332	63466	25.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.81	23.81	23.88	Tune-up limit (dBm)	MPR (dB)
				631668	633332	635000	25.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	23.92	23.91	23.92	Tune-up limit (dBm)	MPR (dB)
				3470.01	3499.98	3529.98	25.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	23.93	23.81	23.81	Tune-up limit (dBm)	MPR (dB)
				63000	63332	63600	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.91	23.88	23.90	Tune-up limit (dBm)	MPR (dB)
				3465	3499.98	3534.99	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.81	23.88	23.92	Tune-up limit (dBm)	MPR (dB)
				63068	63332	63600	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.89	23.93	23.94	Tune-up limit (dBm)	MPR (dB)
				3455.01	3499.98	3544.98	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.85	23.90	23.94	Tune-up limit (dBm)	MPR (dB)

### Part27Q\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Plz BPSK	1	1	3790	3840	3900		
100	Plz BPSK	1	137	23.99	23.72	23.68	25.0	0.0
100	Plz BPSK	1	271	23.60	23.75	23.72		
100	Plz BPSK	135	0	23.00	23.79	23.71	24.5	0.5
100	Plz BPSK	135	69	23.00	23.19	23.14	25.0	0.0
100	Plz BPSK	135	138	23.47	23.84	23.58		
100	Plz BPSK	135	138	22.96	23.18	23.10	24.5	0.5
100	Plz BPSK	270	0	22.92	23.11	23.02		
100	QPSK	1	1	23.69	23.82	23.77		
100	QPSK	1	137	23.67	23.75	23.69	25.0	0.0
100	QPSK	1	271	23.66	23.72	23.68		
100	QPSK	135	0	22.46	22.80	22.48		
100	QPSK	135	69	23.45	23.60	23.45	25.0	0.0
100	QPSK	135	138	22.83	22.45	22.35		
100	QPSK	270	0	22.37	22.49	22.44	24.0	1.0
100	16QAM	1	1	22.70	22.86	22.82	24.0	1.0
100	64QAM	1	1	21.21	21.31	21.25	23.0	2.0
100	256QAM	1	1	21.05	21.19	21.15	23.0	2.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	64868	65000	65232	Tune-up limit (dBm)	MPR (dB)
				3740.01	3840	3929.99	25.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.68	23.75	23.68	Tune-up limit (dBm)	MPR (dB)
				64900	65000	65100	25.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.67	23.70	23.74	Tune-up limit (dBm)	MPR (dB)
				64868	65000	65232	25.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.58	23.73	23.73	Tune-up limit (dBm)	MPR (dB)
				64834	65000	65366	25.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	23.62	23.91	23.68	Tune-up limit (dBm)	MPR (dB)
				64800	65000	65400	25.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	23.59	23.79	23.66	Tune-up limit (dBm)	MPR (dB)
				3715.02	3840	3944.98	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.68	23.72	23.75	Tune-up limit (dBm)	MPR (dB)
				64734	65000	65466	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.81	23.81	23.82	Tune-up limit (dBm)	MPR (dB)
				64718	65000	64832	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.59	23.69	23.72	Tune-up limit (dBm)	MPR (dB)
				3705	3840	3975	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.82	23.81	23.88	Tune-up limit (dBm)	MPR (dB)

### Part27Q\_n78\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Plz BPSK	1	1	3495	3499.98	3504.99		
100	Plz BPSK	1	137	22.10			23.5	0.0
100	Plz BPSK	1	271	21.56				
100	Plz BPSK	135	0	22.01			23.5	0.0
100	Plz BPSK	135	69	22.08			23.5	0.0
100	Plz BPSK	135	138	22.10			23.5	0.0
100	Plz BPSK	270	0	22.00				
100	QPSK	1	1	22.11				
100	QPSK	1	137	22.07			23.5	0.0
100	QPSK	1	271	22.08				
100	QPSK	135	0	21.56				
100	QPSK	135	69	22.07			23.5	0.0
100	QPSK	135	138	22.05				
100	QPSK	270	0	22.03			23.5	0.0
100	16QAM	1	1	22.06			23.5	0.0
100	64QAM	1	1	21.64			23.0	0.5
100	256QAM	1	1	19.66			21.0	2.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	63300	63332	63366	Tune-up limit (dBm)	MPR (dB)
				3495	3499.98	3504.99	23.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	22.03	22.08	21.98	Tune-up limit (dBm)	MPR (dB)
				63254	63332	63432	23.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	22.03	22.00	22.08	Tune-up limit (dBm)	MPR (dB)
				63200	63332	63466	23.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	22.03	22.06	21.98	Tune-up limit (dBm)	MPR (dB)
				631668	633332	635000	23.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	22.07	22.08	22.07	Tune-up limit (dBm)	MPR (dB)
				631334	633332	635332	23.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	22.10	21.98	21.98	Tune-up limit (dBm)	MPR (dB)
				3470.01	3499.98	3529.98	23.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.96	21.99	22.05	Tune-up limit (dBm)	MPR (dB)
				3465	3499.98	3534.99	23.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	22.08	22.02	22.03	Tune-up limit (dBm)	MPR (dB)
				63068	63332	63600	23.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	22.04	22.02	22.05	Tune-up limit (dBm)	MPR (dB)
				3460.02	3499.98	3540	23.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	22.09	22.05	22.02	Tune-up limit (dBm)	MPR (dB)





Part27Q_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	3760	3760	3760			
100	Pi2 BPSK	1	137	2246	2246	2246	23.5	0.0	
100	Pi2 BPSK	1	271	2244	2244	2244			
100	Pi2 BPSK	135	0	2248	2248	2248	23.5	0.0	
100	Pi2 BPSK	135	69	2251	2251	2251	23.5	0.0	
100	Pi2 BPSK	135	138	2238	2238	2238	23.5	0.0	
100	Pi2 BPSK	270	0	2238	2238	2238			
100	QPSK	1	1	2253	2253	2253	23.5	0.0	
100	QPSK	1	137	2238	2238	2238			
100	QPSK	1	271	2238	2238	2238			
100	QPSK	135	0	2242	2242	2242	23.5	0.0	
100	QPSK	135	69	2259	2259	2259	23.5	0.0	
100	QPSK	135	138	2241	2241	2241			
100	QPSK	270	0	2247	2247	2247	23.5	0.0	
100	6QAM	1	1	2251	2251	2251	23.0	0.5	
100	6QAM	1	1	2205	2205	2205	23.0	0.5	
100	256QAM	1	1	2003	2003	2003	21.0	2.5	
Channel									
Frequency (MHz)									
50	QPSK	1	1	64968	65000	65032	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	2242	2239	2244	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	2243	2250	2248	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	2238	2243	2250	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	2247	2251	2249	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	2252	2252	2252	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2241	2240	2241	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2242	2248	2248	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	2246	2252	2240	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2243	2239	2243	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2248	2246	2249	23.5	0.0	

Part27Q_n78_HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	2407	2407	2407			
100	Pi2 BPSK	1	137	2405	2405	2405	25.5	0.0	
100	Pi2 BPSK	1	271	2393	2393	2393			
100	Pi2 BPSK	135	0	2368	2368	2368	25.0	0.5	
100	Pi2 BPSK	135	69	2410	2410	2410	25.5	0.0	
100	Pi2 BPSK	135	138	2363	2363	2363	25.0	0.5	
100	Pi2 BPSK	270	0	2386	2386	2386			
100	QPSK	1	1	2415	2415	2415	25.5	0.0	
100	QPSK	1	137	2359	2359	2359			
100	QPSK	1	271	2351	2351	2351			
100	QPSK	135	0	2392	2392	2392	25.5	0.0	
100	QPSK	135	69	2394	2394	2394			
100	QPSK	135	138	2356	2356	2356	24.5	1.0	
100	16QAM	1	1	2319	2319	2319	24.5	1.0	
100	16QAM	1	1	2184	2184	2184	23.0	2.5	
100	256QAM	1	1	1966	1966	1966	21.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	2414	2402	2411	25.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	2414	2412	2406	25.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	2403	2406	2411	25.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	2412	2404	2402	25.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	2414	2410	2407	25.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2402	2400	2411	25.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2409	2413	2401	25.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	2401	2410	2410	25.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2403	2401	2401	25.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2409	2405	2413	25.5	0.0	

Part27Q_n78_HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	2444	2444	2444			
100	Pi2 BPSK	1	137	2445	2445	2445	25.5	0.0	
100	Pi2 BPSK	1	271	2426	2426	2426			
100	Pi2 BPSK	135	0	2392	2392	2392	25.0	0.5	
100	Pi2 BPSK	135	69	2439	2439	2439	25.5	0.0	
100	Pi2 BPSK	135	138	2382	2382	2382	25.0	0.5	
100	Pi2 BPSK	270	0	2388	2388	2388			
100	QPSK	1	1	2459	2459	2459	25.5	0.0	
100	QPSK	1	137	2451	2451	2451			
100	QPSK	1	271	2441	2441	2441			
100	QPSK	135	0	2446	2446	2446	25.5	0.0	
100	QPSK	135	69	2451	2451	2451			
100	QPSK	135	138	2328	2328	2328	24.5	1.0	
100	QPSK	270	0	2337	2337	2337	24.5	1.0	
100	16QAM	1	1	2361	2361	2361	24.0	2.0	
100	16QAM	1	1	2205	2205	2205	23.0	2.5	
100	256QAM	1	1	2003	2003	2003	21.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	2444	2449	2448	25.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	2447	2447	2444	25.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	2458	2452	2447	25.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	2446	2453	2456	25.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	2450	2452	2445	25.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2458	2454	2454	25.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2451	2453	2456	25.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	2457	2448	2454	25.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2453	2444	2455	25.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2445	2452	2453	25.5	0.0	



Part27Q_n78_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3498.98									
100	Pi2 BPSK	1	1		22.78				
100	Pi2 BPSK	1	137		22.89		24.0	0.0	
100	Pi2 BPSK	1	271		22.84				
100	Pi2 BPSK	135	0		22.79		24.0	0.0	
100	Pi2 BPSK	135	69		22.90		24.0	0.0	
100	Pi2 BPSK	135	138		22.91		24.0	0.0	
100	Pi2 BPSK	270	0		22.79				
100	QPSK	1	1		22.93				
100	QPSK	1	137		22.88		24.0	0.0	
100	QPSK	1	271		22.90				
100	QPSK	135	0		22.89		24.0	0.0	
100	QPSK	135	69		22.91		24.0	0.0	
100	QPSK	135	138		22.86				
100	QPSK	270	0		22.80		24.0	0.0	
100	16QAM	1	1		22.91		24.0	0.0	
100	64QAM	1	1		22.81		24.0	0.0	
100	256QAM	1	1		22.96		23.5	0.5	
Channel									
Frequency (MHz)									
633000									
633332									
633666									
50	QPSK	1	1		22.85	22.89	22.97	24.0	0.0
Channel									
Frequency (MHz)									
630668									
633332									
634000									
80	QPSK	1	1		22.85	22.89	22.92	24.0	0.0
Channel									
Frequency (MHz)									
3485.01									
3498.98									
3514.96									
70	QPSK	1	1		22.89	22.92	22.88	24.0	0.0
Channel									
Frequency (MHz)									
632000									
633332									
634668									
60	QPSK	1	1		22.85	22.90	22.79	24.0	0.0
Channel									
Frequency (MHz)									
631668									
633332									
635000									
50	QPSK	1	1		22.83	22.89	22.85	24.0	0.0
Channel									
Frequency (MHz)									
631334									
633332									
635332									
40	QPSK	1	1		22.88	22.78	22.89	24.0	0.0
Channel									
Frequency (MHz)									
3465									
3498.98									
3534.99									
30	QPSK	1	1		22.83	22.90	22.81	24.0	0.0
Channel									
Frequency (MHz)									
630668									
633332									
636000									
20	QPSK	1	1		22.79	22.83	22.98	24.0	0.0
Channel									
Frequency (MHz)									
630900									
633332									
636366									
15	QPSK	1	1		22.82	22.90	22.83	24.0	0.0
Channel									
Frequency (MHz)									
630334									
633332									
636332									
10	QPSK	1	1		22.81	22.85	22.79	24.0	0.0

Part27Q_n78_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3790									
100	Pi2 BPSK	1	1		23.28				
100	Pi2 BPSK	1	137		23.29		24.0	0.0	
100	Pi2 BPSK	1	271		23.28				
100	Pi2 BPSK	135	0		23.28		24.0	0.0	
100	Pi2 BPSK	135	69		23.22		24.0	0.0	
100	Pi2 BPSK	135	138		23.25		24.0	0.0	
100	Pi2 BPSK	270	0		23.24				
100	QPSK	1	1		23.31				
100	QPSK	1	137		23.27		24.0	0.0	
100	QPSK	1	271		23.20				
100	QPSK	135	0		23.22		24.0	0.0	
100	QPSK	135	69		23.28		24.0	0.0	
100	QPSK	135	138		23.16				
100	QPSK	270	0		23.25		24.0	0.0	
100	16QAM	1	1		23.16		24.0	0.0	
100	64QAM	1	1		23.24		24.0	0.0	
100	256QAM	1	1		22.92		23.5	0.5	
Channel									
Frequency (MHz)									
648668									
650000									
650332									
90	QPSK	1	1		23.17	23.23	23.26	24.0	0.0
Channel									
Frequency (MHz)									
3740.01									
3750									
3759.99									
80	QPSK	1	1		23.28	23.20	23.19	24.0	0.0
Channel									
Frequency (MHz)									
648000									
650000									
651500									
70	QPSK	1	1		23.16	23.18	23.25	24.0	0.0
Channel									
Frequency (MHz)									
648668									
650000									
651332									
60	QPSK	1	1		23.24	23.17	23.24	24.0	0.0
Channel									
Frequency (MHz)									
648334									
650000									
651666									
50	QPSK	1	1		23.20	23.24	23.24	24.0	0.0
Channel									
Frequency (MHz)									
648000									
650000									
652000									
40	QPSK	1	1		23.28	23.25	23.18	24.0	0.0
Channel									
Frequency (MHz)									
3720									
3750									
3780									
30	QPSK	1	1		23.30	23.19	23.16	24.0	0.0
Channel									
Frequency (MHz)									
647334									
650000									
652666									
20	QPSK	1	1		23.28	23.27	23.27	24.0	0.0
Channel									
Frequency (MHz)									
647168									
650000									
652832									
15	QPSK	1	1		23.19	23.19	23.20	24.0	0.0
Channel									
Frequency (MHz)									
647000									
650000									
653000									
10	QPSK	1	1		23.16	23.26	23.18	24.0	0.0

Part27Q_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3498.98									
100	Pi2 BPSK	1	1		25.73				
100	Pi2 BPSK	1	137		25.92		27.0	0.0	
100	Pi2 BPSK	1	271		25.96				
100	Pi2 BPSK	135	0		25.88		27.0	0.0	
100	Pi2 BPSK	135	69		25.92		27.0	0.0	
100	Pi2 BPSK	135	138		25.94		27.0	0.0	
100	Pi2 BPSK	270	0		25.95				
100	QPSK	1	1		25.99				
100	QPSK	1	137		25.88		27.0	0.0	
100	QPSK	1	271		25.82				
100	QPSK	135	0		25.88		27.0	0.0	
100	QPSK	135	69		25.95		27.0	0.0	
100	QPSK	135	138		25.36				
100	QPSK	270	0		25.30		28.5	0.5	
100	16QAM	1	1		25.91		27.0	0.0	
100	64QAM	1	1		24.61		25.5	1.5	
100	256QAM	1	1		22.56		23.5	3.5	
Channel									
Frequency (MHz)									
633000									
633332									
633666									
90	QPSK	1	1		25.74	25.83	25.72	27.0	0.0
Channel									
Frequency (MHz)									
630668									
633332									
634000									
80	QPSK	1	1		25.76	25.81	25.76	27.0	0.0
Channel									
Frequency (MHz)									
3485.01									
3498.98									
3514.96									
70	QPSK	1	1		25.77	25.82	25.82	27.0	0.0
Channel									
Frequency (MHz)									
632000									
633332									
634668									
60	QPSK	1	1		25.83	25.75	25.70	27.0	0.0
Channel									
Frequency (MHz)									
631668									
633332									
635000									
50	QPSK	1	1		25.73	25.98	25.95	27.0	0.0
Channel									
Frequency (MHz)									
631334									
633332									
635332									
40	QPSK	1	1		25.77	25.69	25.78	27.0	0.0
Channel									
Frequency (MHz)									
3465									
3498.98									
3534.99									
30	QPSK	1	1		25.83	25.83	25.69	27.0	0.0
Channel									
Frequency (MHz)									
630668									
633332									
636000									
20	QPSK	1	1		25.74	25.70	25.76	27.0	0.0
Channel									
Frequency (MHz)									
630900									
633332									
636366									
15	QPSK	1	1		25.72	25.82	25.70	27.0	0.0
Channel									
Frequency (MHz)									
630334									
633332									
636332									
10	QPSK	1	1		25.83	25.78	25.72	27.0	0.0



Part270_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	26.24	26.24	26.24			
100	Pi2 BPSK	1	137	26.22	26.22	26.22	27.0	0.0	
100	Pi2 BPSK	1	271	26.23	26.23	26.23			
100	Pi2 BPSK	135	0	26.29	26.29	26.29	27.0	0.0	
100	Pi2 BPSK	135	69	26.23	26.23	26.23			
100	Pi2 BPSK	135	138	26.31	26.31	26.31	27.0	0.0	
100	Pi2 BPSK	270	0	26.23	26.23	26.23			
100	QPSK	1	1	26.32	26.32	26.32			
100	QPSK	1	137	26.28	26.28	26.28	27.0	0.0	
100	QPSK	1	271	26.31	26.31	26.31			
100	QPSK	135	0	26.21	26.21	26.21			
100	QPSK	135	69	26.28	26.28	26.28	27.0	0.0	
100	QPSK	135	138	26.22	26.22	26.22			
100	QPSK	270	0	26.23	26.23	26.23	27.0	0.0	
100	64QAM	1	1	24.89	24.89	24.89	25.5	1.5	
100	256QAM	1	1	22.92	22.92	22.92	23.5	3.5	
Channel									
Frequency (MHz)									
50	QPSK	1	1	649668	650000	650332	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3745.02	3750	3754.98	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	646334	650000	650666	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3740.01	3750	3759.99	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.20	26.17	26.24	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.28	26.18	26.25	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.18	26.31	26.27	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	648334	650000	651666	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3723.01	3750	3774.99	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3720	3750	3780	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.17	26.27	26.31	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	647334	650000	652666	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3715.02	3750	3784.98	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.26	26.24	26.29	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	647168	650000	652832	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3707.52	3750	3792.48	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.21	26.37	26.19	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3705	3750	3795	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.31	26.31	26.24	27.0	0.0	

Part270_n78_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	21.99	21.99	21.99			
100	Pi2 BPSK	1	137	22.01	22.01	22.01	23.0	0.0	
100	Pi2 BPSK	1	271	21.98	21.98	21.98			
100	Pi2 BPSK	135	0	21.98	21.98	21.98	23.0	0.0	
100	Pi2 BPSK	135	69	22.01	22.01	22.01			
100	Pi2 BPSK	135	138	21.92	21.92	21.92	23.0	0.0	
100	Pi2 BPSK	270	0	22.02	22.02	22.02			
100	QPSK	1	1	22.13	22.13	22.13			
100	QPSK	1	137	21.93	21.93	21.93	23.0	0.0	
100	QPSK	1	271	21.97	21.97	21.97			
100	QPSK	135	0	21.96	21.96	21.96			
100	QPSK	135	69	22.08	22.08	22.08	23.0	0.0	
100	QPSK	135	138	22.03	22.03	22.03			
100	QPSK	270	0	21.97	21.97	21.97	23.0	0.0	
100	16QAM	1	1	21.87	21.87	21.87	23.0	0.0	
100	64QAM	1	1	21.96	21.96	21.96	23.0	0.0	
100	256QAM	1	1	21.97	21.97	21.97	23.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3485	3489.98	3544.98	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632668	633332	634000	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3490.02	3499.98	3510	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.88	21.94	21.92	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.89	21.96	22.00	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3485.01	3499.98	3514.98	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.98	21.98	21.88	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631868	633332	635000	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3492.02	3499.98	3520	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633332	635332	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3470.01	3499.98	3529.98	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.93	22.00	21.98	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.88	21.92	21.94	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.88	21.95	22.02	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630668	633332	636000	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3485.01	3499.98	3540	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630900	633332	636166	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3475.75	3499.98	3542.48	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.85	21.92	21.96	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630334	633332	636332	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3458.01	3499.98	3544.98	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.85	21.94	21.93	23.0	0.0	

Part270_n78_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	21.91	21.91	21.91			
100	Pi2 BPSK	1	137	21.93	21.93	21.93	23.0	0.0	
100	Pi2 BPSK	1	271	21.96	21.96	21.96			
100	Pi2 BPSK	135	0	21.92	21.92	21.92	23.0	0.0	
100	Pi2 BPSK	135	69	21.96	21.96	21.96			
100	Pi2 BPSK	135	138	21.93	21.93	21.93	23.0	0.0	
100	Pi2 BPSK	270	0	21.94	21.94	21.94			
100	QPSK	1	1	22.11	22.11	22.11			
100	QPSK	1	137	21.97	21.97	21.97	23.0	0.0	
100	QPSK	1	271	21.96	21.96	21.96			
100	QPSK	135	0	21.98	21.98	21.98			
100	QPSK	135	69	22.05	22.05	22.05	23.0	0.0	
100	QPSK	135	138	21.95	21.95	21.95			
100	QPSK	270	0	21.98	21.98	21.98	23.0	0.0	
100	16QAM	1	1	21.86	21.86	21.86	23.0	0.0	
100	64QAM	1	1	21.98	21.98	21.98	23.0	0.0	
100	256QAM	1	1	22.00	22.00	22.00	23.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	646668	650000	650332	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3745.02	3750	3754.98	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	646334	650000	650666	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3740.01	3750	3759.99	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.85	21.89	22.01	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.90	22.03	21.96	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	646668	650000	651332	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3730.02	3750	3769.98	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.91	21.99	21.97	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	648334	650000	651666	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3723.01	3750	3774.99	23.0	0.0	
Channel									
Frequency (MHz)									
50									



Part27Q_n78 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				63300					
Frequency (MHz)				3499.98					
100	Pi2 BPSK	1	1	23.83	23.83	23.83			
100	Pi2 BPSK	1	137	24.01	24.01	24.01	25.0	0.0	
100	Pi2 BPSK	1	271	23.98	23.98	23.98			
100	Pi2 BPSK	135	0	23.88	23.88	23.88	25.0	0.0	
100	Pi2 BPSK	135	69	23.92	23.92	23.92	25.0	0.0	
100	Pi2 BPSK	135	138	23.87	23.87	23.87	25.0	0.0	
100	Pi2 BPSK	270	0	23.92	23.92	23.92			
100	QPSK	1	1	24.15	24.15	24.15			
100	QPSK	1	137	24.04	24.04	24.04	25.0	0.0	
100	QPSK	1	271	24.13	24.13	24.13			
100	QPSK	135	0	23.88	23.88	23.88	25.0	0.0	
100	QPSK	135	69	23.98	23.98	23.98	25.0	0.0	
100	QPSK	135	138	23.83	23.83	23.83	25.0	0.0	
100	Pi2 BPSK	270	0	23.91	23.91	23.91	25.0	0.0	
100	16QAM	1	1	23.98	23.98	23.98	25.0	0.0	
100	64QAM	1	1	23.89	23.89	23.89	25.0	0.0	
100	256QAM	1	1	22.96	22.96	22.96	23.5	1.5	
Channel				63300					
Frequency (MHz)				3495					
50	QPSK	1	1	23.74	23.80	23.85	25.0	0.0	
Channel				63068					
Frequency (MHz)				3490.02					
80	QPSK	1	1	23.72	23.74	23.78	25.0	0.0	
Channel				63532					
Frequency (MHz)				3485.01					
70	QPSK	1	1	23.74	23.83	23.87	25.0	0.0	
Channel				63000					
Frequency (MHz)				3490					
60	QPSK	1	1	23.82	23.83	23.74	25.0	0.0	
Channel				63168					
Frequency (MHz)				3470.01					
50	QPSK	1	1	23.81	23.77	23.78	25.0	0.0	
Channel				63134					
Frequency (MHz)				3470.01					
40	QPSK	1	1	23.77	23.82	23.81	25.0	0.0	
Channel				3465					
Frequency (MHz)				3465					
30	QPSK	1	1	23.68	23.72	23.87	25.0	0.0	
Channel				63068					
Frequency (MHz)				3469.02					
20	QPSK	1	1	23.75	23.83	23.74	25.0	0.0	
Channel				63000					
Frequency (MHz)				3470.01					
15	QPSK	1	1	23.74	23.73	23.74	25.0	0.0	
Channel				63034					
Frequency (MHz)				3455.01					
10	QPSK	1	1	23.80	23.74	23.86	25.0	0.0	

Part27Q_n78 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				65000					
Frequency (MHz)				3790					
100	Pi2 BPSK	1	1	23.93	23.93	23.93			
100	Pi2 BPSK	1	137	24.10	24.10	24.10	25.0	0.0	
100	Pi2 BPSK	1	271	24.07	24.07	24.07			
100	Pi2 BPSK	135	0	23.95	23.95	23.95	25.0	0.0	
100	Pi2 BPSK	135	69	23.94	23.94	23.94	25.0	0.0	
100	Pi2 BPSK	135	138	23.96	23.96	23.96	25.0	0.0	
100	Pi2 BPSK	270	0	23.97	23.97	23.97			
100	QPSK	1	1	24.16	24.16	24.16			
100	QPSK	1	137	24.12	24.12	24.12	25.0	0.0	
100	QPSK	1	271	24.15	24.15	24.15			
100	QPSK	135	0	23.93	23.93	23.93	25.0	0.0	
100	QPSK	135	69	23.98	23.98	23.98	25.0	0.0	
100	QPSK	135	138	23.95	23.95	23.95	25.0	0.0	
100	Pi2 BPSK	270	0	23.94	23.94	23.94	25.0	0.0	
100	16QAM	1	1	24.01	24.01	24.01	25.0	0.0	
100	64QAM	1	1	24.02	24.02	24.02	25.0	0.0	
100	256QAM	1	1	22.88	22.88	22.88	23.5	1.5	
Channel				64868					
Frequency (MHz)				3783.02					
90	QPSK	1	1	23.80	23.79	23.85	25.0	0.0	
Channel				65000					
Frequency (MHz)				3790					
80	QPSK	1	1	23.70	23.09	23.86	25.0	0.0	
Channel				64900					
Frequency (MHz)				3785					
70	QPSK	1	1	23.80	23.74	23.87	25.0	0.0	
Channel				64868					
Frequency (MHz)				3783.02					
60	QPSK	1	1	23.68	23.78	23.76	25.0	0.0	
Channel				64834					
Frequency (MHz)				3782.01					
50	QPSK	1	1	23.78	23.71	23.81	25.0	0.0	
Channel				64800					
Frequency (MHz)				3780					
40	QPSK	1	1	23.72	23.83	23.87	25.0	0.0	
Channel				3715.02					
Frequency (MHz)				3715.02					
30	QPSK	1	1	23.70	23.73	23.85	25.0	0.0	
Channel				64734					
Frequency (MHz)				3707.52					
20	QPSK	1	1	23.82	23.78	23.86	25.0	0.0	
Channel				64768					
Frequency (MHz)				3702.52					
15	QPSK	1	1	23.73	23.69	23.86	25.0	0.0	
Channel				64700					
Frequency (MHz)				3705					
10	QPSK	1	1	23.80	23.79	23.77	25.0	0.0	

Part27Q_n78_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				63300					
Frequency (MHz)				3499.98					
100	Pi2 BPSK	1	1	22.15	22.15	22.15			
100	Pi2 BPSK	1	137	22.08	22.08	22.08	23.0	0.0	
100	Pi2 BPSK	1	271	22.10	22.10	22.10			
100	Pi2 BPSK	135	0	22.08	22.08	22.08	23.0	0.0	
100	Pi2 BPSK	135	69	22.04	22.04	22.04	23.0	0.0	
100	Pi2 BPSK	135	138	22.07	22.07	22.07	23.0	0.0	
100	Pi2 BPSK	270	0	22.25	22.25	22.25			
100	QPSK	1	1	22.53	22.53	22.53			
100	QPSK	1	137	22.17	22.17	22.17	23.0	0.0	
100	QPSK	1	271	22.14	22.14	22.14			
100	QPSK	135	0	22.18	22.18	22.18	23.0	0.0	
100	QPSK	135	69	22.31	22.31	22.31	23.0	0.0	
100	QPSK	135	138	22.28	22.28	22.28	23.0	0.0	
100	QPSK	270	0	22.20	22.20	22.20	23.0	0.0	
100	16QAM	1	1	22.16	22.16	22.16	23.0	0.0	
100	64QAM	1	1	21.75	21.75	21.75	22.5	0.5	
100	256QAM	1	1	19.83	19.83	19.83	20.5	2.5	
Channel				63300					
Frequency (MHz)				3495					
90	QPSK	1	1	22.24	22.18	22.20	23.0	0.0	
Channel				63068					
Frequency (MHz)				3490.02					
80	QPSK	1	1	22.24	22.30	22.14	23.0	0.0	
Channel				63332					
Frequency (MHz)				3485.01					
70	QPSK	1	1	22.21	22.21	22.14	23.0	0.0	
Channel				63000					
Frequency (MHz)				3490					
60	QPSK	1	1	22.17	22.26	22.16	23.0	0.0	
Channel				63168					
Frequency (MHz)				3470.01					
50	QPSK	1	1	22.25	22.22	22.19	23.0	0.0	
Channel				63134					
Frequency (MHz)				3470.01					
40	QPSK	1	1	22.19	22.31	22.17	23.0	0.0	
Channel				3465					
Frequency (MHz)				3465					
30	QPSK	1	1	22.26	22.18	22.25	23.0	0.0	
Channel				63068					
Frequency (MHz)				3469.02					
20	QPSK	1	1	22.16	22.30	22.13	23.0	0.0	
Channel				63000					
Frequency (MHz)				3470.01					
15	QPSK	1	1	22.19	22.31	22.25	23.0	0.0	
Channel				3460.02					
Frequency (MHz)				3455.01					
10	QPSK	1	1	22.19	22.30	22.15	23.0	0.0	



Part27Q_n78_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3750					
100	Pi2 BPSK	1	1	22.11	22.11	22.11	23.0	0.0	
100	Pi2 BPSK	1	137	22.11	22.11	22.11	23.0	0.0	
100	Pi2 BPSK	1	271	22.12	22.12	22.12	23.0	0.0	
100	Pi2 BPSK	135	0	22.12	22.12	22.12	23.0	0.0	
100	Pi2 BPSK	135	69	22.16	22.16	22.16	23.0	0.0	
100	Pi2 BPSK	135	138	22.21	22.21	22.21	23.0	0.0	
100	Pi2 BPSK	270	0	22.12	22.12	22.12	23.0	0.0	
100	QPSK	1	1	22.33	22.33	22.33	23.0	0.0	
100	QPSK	1	137	22.16	22.16	22.16	23.0	0.0	
100	QPSK	1	271	22.10	22.10	22.10	23.0	0.0	
100	QPSK	135	0	22.16	22.16	22.16	23.0	0.0	
100	QPSK	135	69	22.23	22.23	22.23	23.0	0.0	
100	QPSK	135	138	22.19	22.19	22.19	23.0	0.0	
100	Pi2 BPSK	270	0	22.20	22.20	22.20	23.0	0.0	
100	16QAM	1	1	22.21	22.21	22.21	23.0	0.0	
100	64QAM	1	1	21.88	21.88	21.88	22.5	0.5	
100	256QAM	1	1	19.70	19.70	19.70	20.5	2.5	
Channel									
Frequency (MHz)				649668	650000	650332	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	2143.02	3750	3750.98	23.0	0.0	
Channel									
Frequency (MHz)				646334	650000	650666	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3740.01	3750	3759.99	23.0	0.0	
Channel									
Frequency (MHz)				22.22	22.21	22.18	23.0	0.0	
80	QPSK	1	1	22.22	22.21	22.18	23.0	0.0	
Channel									
Frequency (MHz)				648000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	3735	3750	3765	23.0	0.0	
Channel									
Frequency (MHz)				22.24	22.21	22.24	23.0	0.0	
70	QPSK	1	1	22.24	22.21	22.24	23.0	0.0	
Channel									
Frequency (MHz)				649668	650000	651332	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3715.02	3750	3769.98	23.0	0.0	
Channel									
Frequency (MHz)				22.21	22.30	22.20	23.0	0.0	
60	QPSK	1	1	22.21	22.30	22.20	23.0	0.0	
Channel									
Frequency (MHz)				648334	650000	651666	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3723.01	3750	3774.99	23.0	0.0	
Channel									
Frequency (MHz)				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3720	3750	3780	23.0	0.0	
Channel									
Frequency (MHz)				22.14	22.22	22.20	23.0	0.0	
40	QPSK	1	1	22.14	22.22	22.20	23.0	0.0	
Channel									
Frequency (MHz)				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	3715.02	3750	3784.98	23.0	0.0	
Channel									
Frequency (MHz)				22.15	22.23	22.18	23.0	0.0	
30	QPSK	1	1	22.15	22.23	22.18	23.0	0.0	
Channel									
Frequency (MHz)				647334	650000	652666	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3723	3750	3789	23.0	0.0	
Channel									
Frequency (MHz)				22.23	22.28	22.20	23.0	0.0	
20	QPSK	1	1	22.23	22.28	22.20	23.0	0.0	
Channel									
Frequency (MHz)				647168	650000	652832	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3707.52	3750	3792.48	23.0	0.0	
Channel									
Frequency (MHz)				22.22	22.32	22.15	23.0	0.0	
15	QPSK	1	1	22.22	22.32	22.15	23.0	0.0	
Channel									
Frequency (MHz)				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3705	3750	3795	23.0	0.0	
Channel									
Frequency (MHz)				22.23	22.27	22.26	23.0	0.0	
10	QPSK	1	1	22.23	22.27	22.26	23.0	0.0	

Part27Q_n78_HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3499.98					
100	Pi2 BPSK	1	1	24.28	24.28	24.28	25.0	0.0	
100	Pi2 BPSK	1	137	24.23	24.23	24.23	25.0	0.0	
100	Pi2 BPSK	1	271	24.28	24.28	24.28	25.0	0.0	
100	Pi2 BPSK	135	0	23.68	23.68	23.68	24.5	0.5	
100	Pi2 BPSK	135	69	24.29	24.29	24.29	25.0	0.0	
100	Pi2 BPSK	135	138	23.87	23.87	23.87	24.5	0.5	
100	Pi2 BPSK	270	0	23.76	23.76	23.76	24.0	1.0	
100	QPSK	1	1	24.32	24.32	24.32	22.5	2.5	
100	QPSK	1	137	24.31	24.31	24.31	25.0	0.0	
100	QPSK	1	271	24.22	24.22	24.22	25.0	0.0	
100	QPSK	135	0	23.24	23.24	23.24	24.0	1.0	
100	QPSK	135	69	24.28	24.28	24.28	25.0	0.0	
100	QPSK	135	138	23.36	23.36	23.36	24.0	1.0	
100	QPSK	270	0	23.17	23.17	23.17	24.0	1.0	
100	16QAM	1	1	23.26	23.26	23.26	24.0	1.0	
100	64QAM	1	1	21.89	21.89	21.89	22.5	2.5	
100	256QAM	1	1	19.76	19.76	19.76	20.5	4.5	
Channel									
Frequency (MHz)				633000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3495	3499.98	3504.98	25.0	0.0	
Channel									
Frequency (MHz)				632668	633332	634000	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3490.02	3499.98	3510	25.0	0.0	
Channel									
Frequency (MHz)				632334	633332	633332	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	3485.01	3499.98	3514.98	25.0	0.0	
Channel									
Frequency (MHz)				632000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3480	3499.98	3519.98	25.0	0.0	
Channel									
Frequency (MHz)				631668	633332	633666	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3475.02	3499.98	3524.98	25.0	0.0	
Channel									
Frequency (MHz)				631334	633332	633332	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3470.01	3499.98	3529.98	25.0	0.0	
Channel									
Frequency (MHz)				631000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	3465	3499.98	3534.98	25.0	0.0	
Channel									
Frequency (MHz)				630668	633332	633000	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3460.02	3499.98	3539.98	25.0	0.0	
Channel									
Frequency (MHz)				630334	633332	633332	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3455.01	3499.98	3544.98	25.0	0.0	
Channel									
Frequency (MHz)				630000	633332	633666	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3450	3499.98	3549.98	25.0	0.0	

Part27Q_n78_HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3750					
100	Pi2 BPSK	1	1	24.24	24.24	24.24	25.0	0.0	
100	Pi2 BPSK	1	137	24.32	24.32	24.32	25.0	0.0	
100	Pi2 BPSK	1	271	24.28	24.28	24.28	25.0	0.0	
100	Pi2 BPSK	135	0	23.63	23.63	23.63	24.5	0.5	
100	Pi2 BPSK	135	69	24.30	24.30	24.30	25.0	0.0	
100	Pi2 BPSK	135	138	23.78	23.78	23.78	24.5	0.5	
100	Pi2 BPSK	270	0	23.74	23.74	23.74	24.0	1.0	
100	QPSK	1	1	24.34	24.34	24.34	22.5	2.5	
100	QPSK	1	137	24.31	24.31	24.31	25.0	0.0	
100	QPSK	1	271	24.17	24.17	24.17	25.0	0.0	
100	QPSK	135	0	23.38	23.38	23.38	24.0	1.0	
100	QPSK	135	69	24.20	24.20	24.20	25.0	0.0	
100	QPSK	135	138	23.35	23.35	23.35	24.0	1.0	
100	QPSK	270	0	23.29	23.29	23.29	24.0	1.0	
100	16QAM	1	1	23.38	23.38	23.38	24.0	1.0	
100	64QAM	1	1	21.76	21.76	21.76	22.5	2.5	
100	256QAM	1	1	19.73	19.73	19.73	20.5	4.5	
Channel									
Frequency (MHz)				649668	650000	650332	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3745.02	3750	3754.98	25.0	0.0	
Channel									
Frequency (MHz)				648334	650000	650666	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3740.01	3750	3759.99	25.0	0.0	
Channel									
Frequency (MHz)				23.00	23.36	23.18	25.0	0.0	
80	QPSK	1	1	23.00	23.36	23.18	25.0	0.0	
Channel									
Frequency (MHz)				648000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	3735	3750	3765	25.0	0.0	
Channel									
Frequency (MHz)				23.04	23.37	23.11	25.0	0.0	
70	QPSK	1	1	23.04	23.37	23.11	25.0	0.0	
Channel									
Frequency (MHz)				648668	650000	651332	Tune-up limit (dBm)	MPR (dB)	
60	QPSK								



Band 2_Ant 0										
EW (MHz)	Modulation	RB Spacing	RB Offset	Power (W)	Power (W)	Power (W)	Take-up time (dBm)	MRR (dB)		
Channel	1800	1800	1800	1800	1800	1800				
20	QPSK	1	0	22.79	22.89	22.83	24	0		
20	QPSK	1	0	22.79	22.89	22.83				
20	QPSK	1	99	22.81	22.90	22.84				
20	QPSK	50	0	22.79	22.89	22.83				
20	QPSK	50	99	22.81	22.90	22.84				
20	QPSK	50	99	22.81	22.90	22.84	24	0		
20	QPSK	100	0	22.88	22.97	22.91				
20	QPSK	100	99	22.90	22.99	22.93				
20	HQAM	1	49	22.88	22.93	22.86	24	0		
20	HQAM	1	99	22.91	22.96	22.88				
20	HQAM	50	24	22.79	22.89	22.86	24	0		
20	HQAM	50	24	22.89	22.97	22.88				
20	HQAM	100	0	22.85	22.92	22.85				
20	HQAM	100	99	22.87	22.93	22.91	24	0		
20	HQAM	50	0	21.71	21.74	21.64				
20	HQAM	50	24	21.68	21.73	21.67	23	1		
20	HQAM	50	99	21.74	21.80	21.76				
20	HQAM	100	0	21.78	21.85	21.79				
20	25QAM	1	0	19.48	19.51	19.40	21	3		
20	25QAM	1	99	19.54	19.54	19.51				
20	25QAM	1	99	19.54	19.56	19.48				
20	25QAM	50	0	19.52	19.58	19.48				
20	25QAM	50	99	19.52	19.55	19.53				
20	25QAM	50	99	19.51	19.58	19.47	21	3		
20	25QAM	100	0	19.54	19.57	19.51				
20	25QAM	100	99	19.57	19.61	19.57				
19	QPSK	1	0	22.77	22.84	22.80	24	0		
19	QPSK	1	99	22.81	22.87	22.81				
19	QPSK	1	74	22.77	22.88	22.80				
19	QPSK	36	0	22.79	22.81	22.80				
19	QPSK	36	99	22.82	22.85	22.86				
19	QPSK	36	99	22.71	22.81	22.75	24	0		
19	QPSK	75	0	22.80	22.85	22.81				
19	QPSK	75	99	22.83	22.87	22.81				
19	HQAM	1	37	22.77	22.84	22.77	24	0		
19	HQAM	1	74	22.81	22.87	22.79				
19	HQAM	1	49	22.87	22.92	22.86				
19	HQAM	36	20	22.77	22.83	22.81	24	0		
19	HQAM	36	39	22.89	22.88	22.85				
19	HQAM	75	0	22.78	22.83	22.78				
19	HQAM	75	99	22.71	22.87	22.70	24	0		
19	HQAM	1	37	22.88	22.85	22.81				
19	HQAM	1	49	22.75	22.82	22.76				
19	HQAM	36	0	21.66	21.69	21.59				
19	HQAM	36	20	21.58	21.66	21.59	23	1		
19	HQAM	36	39	21.67	21.74	21.68				
19	HQAM	75	0	21.74	21.80	21.68				
19	25QAM	1	0	19.38	19.44	19.37	21	3		
19	25QAM	1	99	19.47	19.54	19.44				
19	25QAM	1	99	19.44	19.54	19.44				
19	25QAM	50	0	19.46	19.54	19.46				
19	25QAM	50	99	19.45	19.54	19.48				
19	25QAM	50	99	19.46	19.53	19.38	21	3		
19	25QAM	100	0	19.47	19.51	19.40				
19	25QAM	100	99	19.52	19.57	19.52				
19	QPSK	1	0	22.68	22.87	22.76	24	0		
19	QPSK	1	99	22.87	22.96	22.86				
19	QPSK	1	24	22.78	22.85	22.80				
19	QPSK	25	0	22.76	22.84	22.72				
19	QPSK	25	99	22.89	22.97	22.88				
19	QPSK	25	99	22.69	22.81	22.76	24	0		
19	QPSK	50	0	22.80	22.86	22.84				
19	QPSK	50	99	22.86	22.96	22.76				
19	HQAM	1	25	22.77	22.91	22.80	24	0		
19	HQAM	1	49	22.87	22.87	22.84				
19	HQAM	1	49	22.88	22.96	22.81				
19	HQAM	25	12	22.74	22.87	22.82	24	0		
19	HQAM	25	25	22.88	22.88	22.91				
19	HQAM	50	0	22.83	22.86	22.83				
19	HQAM	50	99	22.78	22.87	22.76	24	0		
19	HQAM	1	25	22.83	22.83	22.88				
19	HQAM	1	25	22.77	22.84	21.60				
19	HQAM	25	12	21.65	21.66	21.62	23	1		
19	HQAM	25	12	21.68	21.73	21.65				
19	HQAM	50	0	21.72	21.82	21.68				
19	25QAM	1	0	19.40	19.48	19.33	21	3		
19	25QAM	1	99	19.41	19.52	19.48				
19	25QAM	1	99	19.41	19.48	19.39				
19	25QAM	50	0	19.48	19.56	19.45				
19	25QAM	50	99	19.48	19.53	19.43				
19	25QAM	50	99	19.41	19.52	19.43	21	3		
19	25QAM	100	0	19.45	19.48	19.40				
19	25QAM	100	99	19.52	19.57	19.52				
19	QPSK	1	0	22.71	22.79	22.78	24	0		
19	QPSK	1	99	22.82	22.86	22.78				
19	QPSK	1	24	22.78	22.85	22.74				
19	QPSK	12	0	22.80	22.88	22.79				
19	QPSK	12	99	22.85	22.92	22.76				
19	QPSK	12	13	22.70	22.79	22.79	24	0		
19	QPSK	25	0	22.86	22.89	22.87				
19	QPSK	25	99	22.94	22.95	22.80				
19	HQAM	1	12	22.78	22.91	22.80	24	0		
19	HQAM	1	24	22.83	22.93	22.86				
19	HQAM	1	24	22.88	22.96	22.76				
19	HQAM	12	7	22.70	22.87	22.84	24	0		
19	HQAM	12	13	22.87	22.95	22.85				
19	HQAM	1	0	22.76	22.84	22.76				
19	HQAM	1	0	22.76	22.83	22.69	24	0		
19	HQAM	1	12	22.86	22.91	22.80				
19	HQAM	1	12	22.75	22.84	21.74				
19	HQAM	12	0	21.84	21.65	21.58				
19	HQAM	12	7	21.63	21.65	21.55	23	1		
19	HQAM	12	7	21.68	21.73	21.65				
19	HQAM	25	0	21.70	21.75	21.61				
19	25QAM	1	0	19.41	19.47	19.37	21	3		
19	25QAM	1	99	19.38	19.47	19.48				
19	25QAM	1	99	19.48	19.48	19.39				
19	25QAM	50	0	19.45	19.54	19.37				
19	25QAM	50	99	19.45	19.53	19.48				
19	25QAM	50	99	19.41	19.50	19.44	21	3		
19	25QAM	100	0	19.44	19.54	19.42				
19	25QAM	100	99	19.52	19.57	19.52				
19	QPSK	1	0	22.72	22.83	22.79	24	0		
19	QPSK	1	99	22.84	22.91	22.84				
19	QPSK	1	14	22.76	22.84	22.78				
19	QPSK	8	0	22.84	22.88	22.73				
19	QPSK	8	99	22.87	22.92	22.70				
19	QPSK	8	7	22.76	22.85	22.73	24	0		
19	QPSK	15	0	22.81	22.95	22.89				
19	QPSK	15	99	22.86	22.94	22.84				
19	HQAM	1	8	22.88	22.91	22.78	24	0		
19	HQAM	1	14	22.82	22.92	22.86				
19	HQAM	1	8	22.88	22.91	22.82				
19	HQAM	8	4	22.72	22.86	22.84	24	0		
19	HQAM	1	8	22.74	22.84	22.76				
19	HQAM	1	8	22.79	22.83	22.82	24	0		
19	HQAM	8	0	22.73	22.80	22.79				
19	HQAM	8	0	21.82	21.66	21.59				
19	HQAM	8	4	21.64	21.67	21.60	23	1		
19	HQAM	8	7	21.67	21.76	21.70				
19	HQAM	15	0	21.89	21.80	21.81				
19	25QAM	1	0	19.41	19.49	19.38	21	3		
19	25QAM	1	99	19.40	19.43	19.43				
19	25QAM	1	99	19.48	19.52	19.43				
19	25QAM	50	0	19.46	19.52	19.42				
19	25QAM	50	99	19.47	19.54	19.37	21	3		
19	25QAM	50	99	19.41	19.52	19.43				
19	25QAM	50	99	19.44	19.55	19.44				
19	25QAM	100	0	19.52	19.54	19.45				
19	25QAM	100	99	19.57	19.61	19.57				
19	QPSK	1	0	22.72	22.87	22.79	24	0		
19	QPSK	1	99	22.81	22.87	22.81				
19	QPSK	1	5	22.72	22.85	22.78				
19	QPSK	3	0	22.76	22.89	22.81				
19	QPSK	3	99	22.77	22.87	22.73	24	0		
19	QPSK	3	3	22.73	22.87	22.73				
19	QPSK	6	0	22.88	22.90	22.80	24	0		
19	QPSK	6	99	22.91	22.95	22.86				
19	HQAM	1	5	22.78	22.89	22.75				
19	HQAM	1	5	22.87	22.90	22.80	24	0		
19</										



### Band 4\_Ant 1

EW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch1 (Freq)	Power High Ch1 (Freq)	Power Low Ch2 (Freq)	Power High Ch2 (Freq)	Turnup Int. (dBm)	MFR (dB)
Channel									
Frequency (MHz)									
30	QPSK	1	0	16.69	16.86	16.59	16.76	18.1	0
30	QPSK	1	49	16.69	16.86	16.59	16.76	18.1	0
30	QPSK	1	99	16.68	16.71	16.82	16.82	18.1	0
30	QPSK	50	0	16.73	16.84	16.75	16.75	18.1	0
30	QPSK	24	0	16.62	16.79	16.64	16.74	18.1	0
30	QPSK	60	50	16.70	16.84	16.73	16.73	18.1	0
30	QPSK	100	0	16.71	16.81	16.81	16.81	18.1	0
30	HQAM	1	49	16.68	16.80	16.54	16.54	18.1	0
30	HQAM	1	99	16.67	16.80	16.70	16.70	18.1	0
30	HQAM	50	0	16.62	16.82	16.76	16.76	18.1	0
30	HQAM	60	24	16.52	16.85	16.83	16.83	18.1	0
30	HQAM	50	50	16.62	16.83	16.80	16.80	18.1	0
30	HQAM	1	0	16.65	16.85	16.70	16.70	18.1	0
30	HQAM	1	49	16.60	16.70	16.88	16.88	18.1	0
30	HQAM	50	0	16.69	16.87	16.81	16.81	18.1	0
30	HQAM	50	24	16.68	16.82	16.70	16.70	18.1	0
30	HQAM	50	50	16.63	16.81	16.76	16.76	18.1	0
30	HQAM	100	0	16.64	16.68	16.78	16.78	18.1	0
30	ZSDM	1	0	16.76	16.87	16.54	16.54	18.1	0
30	ZSDM	49	0	16.68	16.69	16.81	16.81	18.1	0
30	ZSDM	1	99	16.77	16.85	16.82	16.82	18.1	0
30	ZSDM	50	0	16.69	16.85	16.81	16.81	18.1	0
30	ZSDM	24	0	16.72	16.79	16.84	16.84	18.1	0
30	ZSDM	60	50	16.84	16.72	16.86	16.72	18.1	0
30	ZSDM	100	0	16.82	16.86	16.89	16.89	18.1	0
Channel									
Frequency (MHz)									
15	QPSK	1	0	16.68	16.75	16.45	16.45	18.1	0
15	QPSK	1	24	16.67	16.75	16.45	16.45	18.1	0
15	QPSK	1	74	16.52	16.56	16.72	16.72	18.1	0
15	QPSK	36	0	16.74	16.80	16.81	16.81	18.1	0
15	QPSK	36	24	16.62	16.74	16.82	16.82	18.1	0
15	QPSK	36	39	16.58	16.53	16.87	16.87	18.1	0
15	QPSK	75	0	16.59	16.68	16.49	16.49	18.1	0
15	HQAM	1	0	16.57	16.71	16.60	16.60	18.1	0
15	HQAM	1	37	16.56	16.53	16.65	16.65	18.1	0
15	HQAM	1	74	16.44	16.56	16.53	16.53	18.1	0
15	HQAM	36	0	16.62	16.69	16.81	16.81	18.1	0
15	HQAM	36	20	16.37	16.59	16.82	16.82	18.1	0
15	HQAM	36	39	16.42	16.53	16.47	16.47	18.1	0
15	HQAM	75	0	16.48	16.74	16.62	16.62	18.1	0
15	HQAM	1	0	16.51	16.62	16.57	16.57	18.1	0
15	HQAM	1	37	16.61	16.58	16.67	16.67	18.1	0
15	HQAM	74	0	16.62	16.55	16.62	16.62	18.1	0
15	HQAM	36	0	16.61	16.64	16.48	16.48	18.1	0
15	HQAM	36	20	16.59	16.51	16.66	16.66	18.1	0
15	HQAM	36	39	16.62	16.69	16.81	16.81	18.1	0
15	HQAM	75	0	16.62	16.64	16.76	16.76	18.1	0
15	ZSDM	1	0	16.69	16.80	16.44	16.44	18.1	0
15	ZSDM	37	0	16.62	16.69	16.81	16.81	18.1	0
15	ZSDM	1	99	16.65	16.58	16.67	16.67	18.1	0
15	ZSDM	50	0	16.56	16.63	16.58	16.58	18.1	0
15	ZSDM	20	0	16.69	16.56	16.59	16.59	18.1	0
15	ZSDM	36	39	16.60	16.59	16.72	16.72	18.1	0
15	ZSDM	75	0	16.62	16.64	16.68	16.68	18.1	0
Channel									
Frequency (MHz)									
10	QPSK	1	0	16.55	16.83	16.56	16.56	18.1	0
10	QPSK	1	24	16.55	16.83	16.56	16.56	18.1	0
10	QPSK	1	49	16.40	16.50	16.73	16.73	18.1	0
10	QPSK	25	0	16.78	16.82	16.60	16.60	18.1	0
10	QPSK	25	24	16.62	16.74	16.82	16.82	18.1	0
10	QPSK	25	25	16.62	16.50	16.69	16.69	18.1	0
10	QPSK	50	0	16.61	16.66	16.47	16.47	18.1	0
10	HQAM	1	0	16.57	16.77	16.68	16.68	18.1	0
10	HQAM	1	25	16.52	16.46	16.59	16.59	18.1	0
10	HQAM	1	49	16.48	16.48	16.53	16.53	18.1	0
10	HQAM	25	0	16.62	16.67	16.73	16.73	18.1	0
10	HQAM	25	12	16.48	16.61	16.75	16.75	18.1	0
10	HQAM	25	25	16.38	16.48	16.55	16.55	18.1	0
10	HQAM	50	0	16.48	16.76	16.62	16.62	18.1	0
10	HQAM	1	0	16.56	16.58	16.63	16.63	18.1	0
10	HQAM	1	25	16.66	16.58	16.55	16.55	18.1	0
10	HQAM	49	0	16.64	16.67	16.70	16.70	18.1	0
10	HQAM	25	0	16.62	16.60	16.58	16.58	18.1	0
10	HQAM	25	12	16.66	16.53	16.60	16.60	18.1	0
10	HQAM	25	25	16.54	16.64	16.54	16.54	18.1	0
10	HQAM	50	0	16.54	16.53	16.65	16.65	18.1	0
10	ZSDM	1	0	16.71	16.52	16.44	16.44	18.1	0
10	ZSDM	25	0	16.64	16.57	16.69	16.69	18.1	0
10	ZSDM	1	49	16.72	16.50	16.78	16.78	18.1	0
10	ZSDM	25	0	16.54	16.57	16.48	16.48	18.1	0
10	ZSDM	25	12	16.59	16.67	16.59	16.59	18.1	0
10	ZSDM	25	25	16.49	16.68	16.69	16.69	18.1	0
10	ZSDM	50	0	16.56	16.50	16.62	16.62	18.1	0
Channel									
Frequency (MHz)									
5	QPSK	1	0	16.67	16.83	16.45	16.45	18.1	0
5	QPSK	1	24	16.67	16.83	16.45	16.45	18.1	0
5	QPSK	1	24	16.45	16.68	16.67	16.67	18.1	0
5	QPSK	12	0	16.77	16.81	16.74	16.74	18.1	0
5	QPSK	12	7	16.58	16.69	16.62	16.62	18.1	0
5	QPSK	12	13	16.59	16.62	16.68	16.68	18.1	0
5	QPSK	25	0	16.62	16.72	16.47	16.47	18.1	0
5	HQAM	1	0	16.56	16.78	16.55	16.55	18.1	0
5	HQAM	1	12	16.63	16.50	16.63	16.63	18.1	0
5	HQAM	1	24	16.47	16.49	16.61	16.61	18.1	0
5	HQAM	12	0	16.61	16.63	16.68	16.68	18.1	0
5	HQAM	12	7	16.40	16.54	16.70	16.70	18.1	0
5	HQAM	12	13	16.48	16.59	16.47	16.47	18.1	0
5	HQAM	25	0	16.62	16.67	16.68	16.68	18.1	0
5	HQAM	1	0	16.58	16.62	16.68	16.68	18.1	0
5	HQAM	1	12	16.68	16.59	16.65	16.65	18.1	0
5	HQAM	24	0	16.61	16.67	16.74	16.74	18.1	0
5	HQAM	12	0	16.55	16.64	16.54	16.54	18.1	0
5	HQAM	12	7	16.54	16.57	16.69	16.69	18.1	0
5	HQAM	12	13	16.58	16.63	16.66	16.66	18.1	0
5	HQAM	25	0	16.63	16.57	16.65	16.65	18.1	0
5	ZSDM	1	0	16.69	16.57	16.47	16.47	18.1	0
5	ZSDM	12	0	16.66	16.63	16.72	16.72	18.1	0
5	ZSDM	1	24	16.63	16.52	16.74	16.74	18.1	0
5	ZSDM	12	0	16.65	16.55	16.46	16.46	18.1	0
5	ZSDM	12	7	16.64	16.56	16.67	16.67	18.1	0
5	ZSDM	12	13	16.63	16.59	16.63	16.63	18.1	0
5	ZSDM	25	0	16.48	16.59	16.55	16.55	18.1	0
Channel									
Frequency (MHz)									
11.4	QPSK	1	0	16.60	16.72	16.51	16.51	18.1	0
11.4	QPSK	1	5	16.69	16.79	16.58	16.58	18.1	0
11.4	QPSK	1	5	16.53	16.70	16.75	16.75	18.1	0
11.4	QPSK	3	0	16.73	16.74	16.83	16.83	18.1	0
11.4	QPSK	3	14	16.58	16.58	16.80	16.80	18.1	0
11.4	QPSK	3	7	16.63	16.51	16.65	16.65	18.1	0
11.4	QPSK	15	0	16.69	16.73	16.68	16.68	18.1	0
11.4	HQAM	1	0	16.56	16.67	16.58	16.58	18.1	0
11.4	HQAM	1	8	16.59	16.57	16.65	16.65	18.1	0
11.4	HQAM	1	14	16.45	16.56	16.52	16.52	18.1	0
11.4	HQAM	3	0	16.46	16.66	16.71	16.71	18.1	0
11.4	HQAM	3	4	16.48	16.50	16.71	16.71	18.1	0
11.4	HQAM	8	7	16.48	16.61	16.67	16.67	18.1	0
11.4	HQAM	15	0	16.63	16.62	16.52	16.52	18.1	0
11.4	HQAM	1	0	16.56	16.65	16.60	16.60	18.1	0
11.4	HQAM	1	14	16.67	16.68	16.70	16.70	18.1	0
11.4	HQAM	8	0	16.66	16.56	16.56	16.56	18.1	0
11.4	HQAM	8	4	16.56	16.49	16.58	16.58	18.1	0
11.4	HQAM	8	7	16.61	16.47	16.72	16.72	18.1	0
11.4	HQAM	15	0	16.63	16.55	16.71	16.71	18.1	0
11.4	ZSDM	1	0	16.66	16.60	16.48	16.48	18.1	0
11.4	ZSDM	8	0	16.59	16.62	16.66	16.66	18.1	0
11.4	ZSDM	1	14	16.66	16.54	16.67	16.67	18.1	0
11.4	ZSDM	1	7	16.74	16.59	16.78	16.78	18.1	0
11.4	ZSDM	3	0	16.62	16.52	16.52	16.52	18.1	0
11.4	ZSDM	3	14	16.70	16.62	16.60	16.60	18.1	0
11.4	ZSDM	3	7	16.62	16.67	16.68	16.68	18.1	0
11.4	ZSDM	0	0	16.61	16.60	16.64	16.64	18.1	0



### Band 66\_Ant 0

Band (MHz)	Modulation	RB Size	RB Offset	Power (W)	Power (W)	Power (W)	Time-up (dBm)	MFR (dB)
Channel	1	2	3	15002	15002	15002		
Channel 15002								
Frequency (MHz)								
20	QPSK	1	0	23.00	22.99	22.93	24	0
20	QPSK	1	48	22.99	22.99	22.93		
20	QPSK	1	96	22.91	23.01	22.87		
20	QPSK	50	0	23.00	23.00	22.94		
20	QPSK	50	24	22.99	22.99	22.93		
20	QPSK	50	50	22.95	23.02	22.87	24	0
20	QPSK	100	0	22.99	23.02	22.97		
20	HQAM	1	0	22.98	23.01	22.86		
20	HQAM	1	48	22.98	23.04	22.84	24	0
20	HQAM	1	96	22.88	23.03	22.88		
20	HQAM	50	0	22.99	23.01	22.84		
20	HQAM	50	24	22.92	22.95	22.81		
20	HQAM	50	50	22.88	22.98	22.82	24	0
20	HQAM	100	0	22.99	23.00	22.86		
20	HQAM	1	0	22.99	23.00	22.82		
20	HQAM	1	48	22.94	22.95	22.85	24	0
20	HQAM	1	96	22.92	23.02	22.80		
20	HQAM	50	0	21.82	21.83	21.86		
20	HQAM	50	24	21.82	21.90	21.83		
20	HQAM	50	50	21.89	21.92	21.88	23	1
20	HQAM	100	0	21.80	21.89	21.87		
20	SSBQAM	1	0	20.23	20.24	20.20	21	3
20	SSBQAM	1	48	20.18	20.18	20.19		
20	SSBQAM	1	96	20.17	20.15	20.07		
20	SSBQAM	50	0	20.19	20.13	20.06		
20	SSBQAM	50	24	20.21	20.14	20.09	21	3
20	SSBQAM	50	50	20.16	20.19	20.14		
20	SSBQAM	100	0	20.20	20.13	20.07		
Channel 1717.5								
Frequency (MHz)								
15	QPSK	1	0	22.94	22.92	22.88	24	0
15	QPSK	1	37	22.97	22.91	22.86		
15	QPSK	1	74	22.81	22.86	22.77		
15	QPSK	36	0	23.00	22.94	22.90		
15	QPSK	36	36	22.98	22.87	22.78	24	0
15	QPSK	36	39	22.90	22.88	22.77		
15	QPSK	75	0	22.78	22.88	22.86		
15	HQAM	1	0	22.85	22.91	22.87		
15	HQAM	1	37	22.83	22.91	22.74	24	0
15	HQAM	1	74	22.81	22.92	22.78		
15	HQAM	36	0	22.85	23.00	22.78		
15	HQAM	36	36	22.80	22.83	22.71	24	0
15	HQAM	36	39	22.86	22.97	22.74		
15	HQAM	75	0	22.78	22.78	22.71		
15	HQAM	1	0	22.94	22.79	22.74	24	0
15	HQAM	1	37	22.83	22.81	22.74		
15	HQAM	1	74	22.78	22.80	22.69		
15	HQAM	36	0	21.78	21.81	21.89		
15	HQAM	36	20	21.78	21.81	21.80	23	1
15	HQAM	75	0	21.87	21.83	21.86		
15	SSBQAM	1	0	20.12	20.21	20.19	21	3
15	SSBQAM	1	48	20.14	20.15	20.09		
15	SSBQAM	1	74	20.05	20.10	19.99		
15	SSBQAM	36	0	20.17	20.08	20.02	21	3
15	SSBQAM	36	20	20.11	19.99	19.95		
15	SSBQAM	36	39	20.10	20.15	20.00		
15	SSBQAM	75	0	20.01	20.13	19.97		
Channel 1715								
Frequency (MHz)								
10	QPSK	1	0	22.93	22.92	22.86	24	0
10	QPSK	1	48	22.90	22.96	22.86		
10	QPSK	1	96	22.80	22.96	22.76		
10	QPSK	25	0	22.90	22.99	22.87		
10	QPSK	25	25	22.84	22.92	22.84	24	0
10	QPSK	50	0	22.82	23.01	22.94		
10	HQAM	1	0	22.88	22.99	22.86		
10	HQAM	1	25	22.82	22.86	22.69	24	0
10	HQAM	1	49	22.78	22.94	22.74		
10	HQAM	25	0	22.88	22.88	22.78		
10	HQAM	25	12	22.88	22.89	22.68		
10	HQAM	25	25	22.86	22.87	22.74	24	0
10	HQAM	50	0	22.81	22.82	22.74		
10	HQAM	1	0	22.86	22.88	22.71	24	0
10	HQAM	1	48	22.87	22.80	22.68		
10	HQAM	25	0	21.83	21.80	21.88		
10	HQAM	25	12	21.80	21.83	21.84	23	1
10	HQAM	25	25	21.85	21.87	21.87		
10	HQAM	50	0	21.89	21.78	21.84		
10	SSBQAM	1	0	20.22	20.14	20.14	21	3
10	SSBQAM	1	25	20.14	20.13	20.03		
10	SSBQAM	1	49	20.16	20.04	20.03		
10	SSBQAM	25	0	20.15	20.03	19.95		
10	SSBQAM	25	12	20.10	19.99	19.97	21	3
10	SSBQAM	25	25	20.10	20.08	20.06		
10	SSBQAM	50	0	19.93	20.04	19.98		
Channel 1715.5								
Frequency (MHz)								
5	QPSK	1	0	22.91	22.87	22.85	24	0
5	QPSK	1	12	22.94	22.88	22.86		
5	QPSK	1	24	22.80	22.87	22.74		
5	QPSK	12	0	22.91	22.92	22.86		
5	QPSK	12	7	22.82	22.80	22.81	24	0
5	QPSK	12	13	22.87	22.89	22.78		
5	QPSK	25	0	22.77	22.87	22.82		
5	HQAM	1	0	22.88	22.87	22.87		
5	HQAM	1	12	22.80	22.85	22.70	24	0
5	HQAM	1	24	22.82	22.96	22.83		
5	HQAM	12	0	22.83	22.86	22.73		
5	HQAM	12	7	22.84	22.84	22.80	24	0
5	HQAM	12	13	22.77	22.96	22.78		
5	HQAM	25	0	22.72	22.80	22.78		
5	HQAM	1	0	22.80	22.88	22.71	24	0
5	HQAM	1	12	22.81	22.88	22.75		
5	HQAM	1	24	22.84	22.80	22.81		
5	HQAM	12	0	21.86	21.86	21.85		
5	HQAM	12	7	21.78	21.79	21.86	23	1
5	HQAM	12	13	21.85	21.79	21.79		
5	HQAM	25	0	21.87	21.83	21.84		
5	SSBQAM	1	0	20.22	20.21	20.08	21	3
5	SSBQAM	1	12	20.14	20.13	20.03		
5	SSBQAM	1	24	20.10	20.13	19.97		
5	SSBQAM	12	0	20.17	20.05	19.92		
5	SSBQAM	12	7	20.11	20.08	19.95	21	3
5	SSBQAM	12	13	20.02	20.13	20.04		
5	SSBQAM	25	0	20.02	20.14	20.04		
Channel 1715.5								
Frequency (MHz)								
3	QPSK	1	0	22.87	22.87	22.79	24	0
3	QPSK	1	8	22.90	22.87	22.82		
3	QPSK	1	14	22.79	22.91	22.78		
3	QPSK	8	0	23.00	22.93	22.88		
3	QPSK	8	7	22.88	22.91	22.78	24	0
3	QPSK	8	7	22.92	22.87	22.79		
3	QPSK	15	0	22.81	22.87	22.86		
3	HQAM	1	0	22.83	22.80	22.78		
3	HQAM	1	8	22.82	22.89	22.69	24	0
3	HQAM	1	14	22.84	22.96	22.79		
3	HQAM	8	0	22.83	22.86	22.74		
3	HQAM	8	4	22.78	22.83	22.67	24	0
3	HQAM	8	7	22.74	22.84	22.78		
3	HQAM	15	0	22.87	22.80	22.72		
3	HQAM	1	0	22.89	22.75	22.75	24	0
3	HQAM	1	8	22.92	22.93	22.84		
3	HQAM	1	14	22.77	22.86	22.82		
3	HQAM	8	0	21.87	21.86	21.86		
3	HQAM	8	4	21.79	21.89	21.80	23	1
3	HQAM	8	7	21.74	21.78	21.87		
3	HQAM	15	0	21.88	21.80	21.80		
3	SSBQAM	1	0	20.17	20.16	20.07	21	3
3	SSBQAM	1	8	20.15	20.13	20.00		
3	SSBQAM	1	14	20.08	20.07	20.02		
3	SSBQAM	8	0	20.10	20.10	20.05		
3	SSBQAM	8	4	20.15	20.08	20.03	21	3
3	SSBQAM	8	7	20.03	20.06	20.08		
3	SSBQAM	15	0	20.12	20.16	20.06		
Channel 1716.7								
Frequency (MHz)								
1.4	QPSK	1	0	22.96	22.88	22.91	24	0
1.4	QPSK	1	3	22.93	22.88	22.73		
1.4	QPSK	1	6	22.75	22.96	22.73		
1.4	QPSK	3	0	22.98	22.94	22.88		
1.4	QPSK	3	3	22.93	22.87	22.73	24	0
1.4	QPSK	3	3	22.84	22.94	22.74		
1.4	QPSK	6	0	22.87	22.98	22.87		
1.4	HQAM	1	0	22.90	22.88	22.84		
1.4	HQAM	1	3	22.76	22.91	22.73	24	0
1.4	HQAM	1	6	22.83	22.92	22.78		
1.4	HQAM	3	0	22.78	22.92	22.83		
1.4	HQAM	3	3	22.74	22.88	22.68	24	0
1.4	HQAM	6	0	22.86	22.87	22.68		
1.4	HQAM	1	0	22.86	22.82	22.77	24	0
1.4	HQAM	1	3	22.78	22.92	22.69		
1.4	HQAM	3	0	22.78	22.78	22.89		
1.4	HQAM	3	1	22.78	22.77	22.77	24	0
1.4	HQAM	6	0	21.72	21.81	21.82	23	1
1.4	SSBQAM	1	0	20.08	20.16	20.18		
1.4	SSBQAM	1	3	20.03	20.11	20.01	21	3
1.4	SSBQAM	1	6	20.07	20.06	19.99		
1.4	SSBQAM	3	0	20.18	20.01	19.94		
1.4	SSBQAM	3	3	20.18	20.09	20.04	21	3
1.4	SSBQAM	3	3	20.08	20.12	20.09		
1.4	SSBQAM	6	0	19.98	20.15	19.97	21	3

### Band 66\_Ant 1

Band (MHz)	Modulation	RB Size	RB Offset	Power (W)	Power (W)	Power (W)	Time-up (dBm)	MFR (dB)
Channel	1	2	3	15002	15			





Band 48_Ant 4										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)				5530	5530	5515	5660			
20	QPSK	1	0	18.85	18.79	18.79	18.94	20	0	
20	QPSK	1	49	18.92	18.86	18.86	19.08			
20	QPSK	1	99	18.93	18.81	18.86	19.02			
20	QPSK	50	0	18.93	18.81	18.97	18.93			
20	QPSK	50	24	18.73	18.74	18.66	18.79	20	0	
20	QPSK	50	50	18.89	18.79	18.72	18.81			
20	QPSK	100	0	18.78	18.75	18.73	19.01			
20	16QAM	1	0	18.88	18.76	18.91	19.05			
20	16QAM	1	49	18.87	18.73	18.80	18.80			
20	16QAM	1	99	18.73	18.74	18.67	18.84			
20	16QAM	50	0	18.93	18.79	19.01	18.98			
20	16QAM	50	24	18.81	18.69	18.73	18.86			
20	16QAM	50	50	18.80	18.69	18.71	18.88			
20	16QAM	100	0	18.96	18.73	19.00	18.98			
20	64QAM	1	0	18.92	18.79	18.84	18.79			
20	64QAM	1	49	18.84	18.68	18.77	18.93	20	0	
20	64QAM	1	99	18.93	18.85	18.92	19.02			
20	64QAM	50	0	18.80	18.67	18.85	18.79			
20	64QAM	50	24	18.83	18.76	18.78	18.87			
20	64QAM	50	50	18.94	18.74	19.00	18.96			
20	64QAM	100	0	18.88	18.78	18.83	18.90			
20	256QAM	1	0	18.82	18.69	18.73	18.92			
20	256QAM	1	49	18.93	18.77	18.97	18.94	20	0	
20	256QAM	1	99	18.81	18.77	18.78	18.83			
20	256QAM	50	0	18.70	18.76	18.67	18.89			
20	256QAM	50	24	18.72	18.76	18.67	18.80			
20	256QAM	50	50	18.92	18.78	18.96	18.97			
20	256QAM	100	0	18.83	18.74	18.82	18.86			
Channel										
Frequency (MHz)				5531.5	55820	56160	56665	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	18.81	18.78	18.72	18.81	20	0	
15	QPSK	1	37	18.90	18.75	18.98	19.02			
15	QPSK	1	74	18.79	18.66	18.81	18.78			
15	QPSK	36	0	18.58	18.63	18.51	18.74			
15	QPSK	36	20	18.78	18.73	18.88	18.98			
15	QPSK	36	39	18.80	18.76	18.62	18.68			
15	QPSK	75	0	18.63	18.64	18.64	18.94			
15	16QAM	1	0	18.78	18.61	18.87	18.96	20	0	
15	16QAM	1	37	18.79	18.59	18.78	18.75			
15	16QAM	1	74	18.64	18.70	18.60	18.81			
15	16QAM	36	0	18.92	18.69	18.92	18.96			
15	16QAM	36	20	18.77	18.55	18.66	18.78			
15	16QAM	36	39	18.70	18.64	18.69	18.76			
15	16QAM	75	0	18.81	18.67	18.90	18.90			
15	64QAM	1	0	18.79	18.66	18.73	18.75			
15	64QAM	1	37	18.78	18.56	18.76	18.86			
15	64QAM	1	74	18.84	18.82	18.87	18.89			
15	64QAM	36	0	18.79	18.66	18.80	18.65			
15	64QAM	36	20	18.77	18.63	18.77	18.83			
15	64QAM	36	39	18.91	18.60	18.98	18.94			
15	64QAM	75	0	18.79	18.71	18.81	18.68			
15	256QAM	1	0	18.69	18.57	18.66	18.82			
15	256QAM	1	37	18.67	18.73	18.83	18.82			
15	256QAM	1	74	18.76	18.63	18.77	18.72			
15	256QAM	36	0	18.60	18.61	18.64	18.85			
15	256QAM	36	20	18.70	18.75	18.81	19.71			
15	256QAM	36	39	18.65	18.62	18.88	18.92			
15	256QAM	75	0	18.68	18.62	18.78	18.85			
Channel										
Frequency (MHz)				5590	55815	56165	56890	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	0	18.77	18.64	18.67	18.79	20	0	
10	QPSK	1	25	18.90	18.75	18.91	19.03			
10	QPSK	1	49	18.78	18.78	18.76	18.98			
10	QPSK	25	0	18.67	18.64	18.52	18.74			
10	QPSK	25	12	18.85	18.72	18.90	18.95			
10	QPSK	25	25	18.85	18.65	18.66	18.72			
10	QPSK	50	0	18.72	18.69	18.62	18.89			
10	16QAM	1	0	18.81	18.73	18.86	19.00			
10	16QAM	1	25	18.85	18.69	18.73	18.73			
10	16QAM	1	49	18.63	18.59	18.66	18.73			
10	16QAM	25	0	18.82	18.70	18.95	18.90			
10	16QAM	25	12	18.66	18.56	18.65	18.74			
10	16QAM	25	25	18.72	18.60	18.61	18.77			
10	16QAM	50	0	18.86	18.65	18.95	18.96			
10	64QAM	1	0	18.85	18.75	18.80	18.66			
10	64QAM	1	25	18.70	18.59	18.69	18.79			
10	64QAM	1	49	18.98	18.91	18.98	19.96			
10	64QAM	25	0	18.72	18.55	18.73	18.73			
10	64QAM	25	12	18.73	18.65	18.71	18.85			
10	64QAM	25	25	18.92	18.63	18.98	19.94			
10	64QAM	50	0	18.80	18.65	18.68	18.75			
10	256QAM	1	0	18.76	18.59	18.64	18.77			
10	256QAM	1	25	18.80	18.71	18.88	18.93			
10	256QAM	1	49	18.69	18.62	18.71	18.79			
10	256QAM	25	0	18.66	18.63	18.54	18.65			
10	256QAM	25	12	18.59	18.71	18.61	18.65			
10	256QAM	25	25	18.83	18.76	18.91	18.95			
10	256QAM	50	0	18.68	18.63	18.80	18.75			
Channel										
Frequency (MHz)				5526.5	55810	56170	56715	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	18.71	18.66	18.73	18.90	20	0	
5	QPSK	1	12	18.91	18.84	18.88	19.08			
5	QPSK	1	24	18.79	18.78	18.81	18.87			
5	QPSK	12	0	18.63	18.67	18.57	18.75			
5	QPSK	12	7	18.85	18.76	18.96	18.92			
5	QPSK	12	13	18.74	18.71	18.68	18.69			
5	QPSK	25	0	18.70	18.70	18.63	18.97			
5	16QAM	1	0	18.75	18.61	18.84	18.94	20	0	
5	16QAM	1	12	18.85	18.71	18.99	18.74			
5	16QAM	1	24	18.68	18.62	18.56	18.74			
5	16QAM	12	0	18.88	18.75	18.96	18.87			
5	16QAM	12	7	18.74	18.57	18.72	18.82			
5	16QAM	12	13	18.72	18.68	18.57	18.85			
5	16QAM	25	0	18.86	18.67	18.89	18.94			
5	64QAM	1	0	18.84	18.64	18.79	18.65			
5	64QAM	1	12	18.72	18.57	18.76	18.88			
5	64QAM	1	24	18.90	18.82	19.01	19.00			
5	64QAM	12	0	18.66	18.60	18.70	18.67			
5	64QAM	12	7	18.72	18.64	18.67	18.75			
5	64QAM	12	13	18.88	18.73	18.96	18.93			
5	64QAM	25	0	18.85	18.68	18.82	18.73			
5	256QAM	1	0	18.69	18.63	18.71	18.82			
5	256QAM	1	12	18.89	18.63	18.91	19.91			
5	256QAM	1	24	18.67	18.72	18.72	18.68			
5	256QAM	12	0	18.62	18.73	18.92	18.83			
5	256QAM	12	7	18.62	18.65	18.55	18.74			
5	256QAM	12	13	18.82	18.72	18.85	18.94			
5	256QAM	25	0	18.77	18.60	18.80	18.83			

Band 48_Ant 7										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)				5530	5600	5641	5690			
20	QPSK	1	0	21.57	21.56	21.57	21.55	22.5	0	
20	QPSK	1	49	21.57	21.56	21.52	21.63			
20	QPSK	1	99	21.54	21.53	21.53	21.59			
20	QPSK	50	0	21						

Band 48_Ant 8										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640			
Frequency (MHz)				3590	3699	3641	3690			
20	QPSK	1	0	14.64	14.55	14.57	14.71	16.2	0	
20	QPSK	1	49	14.71	14.92	14.74	14.54			
20	QPSK	1	99	14.56	14.59	14.68	14.63			
20	QPSK	50	0	14.69	14.71	14.70	14.78			
20	QPSK	50	24	14.51	14.47	14.49	14.66	16.2	0	
20	QPSK	50	50	14.53	14.58	14.64	14.58			
20	QPSK	100	0	14.55	14.48	14.50	14.66			
20	16QAM	1	0	14.63	14.72	14.69	14.69			
20	16QAM	1	49	14.45	14.55	14.60	14.52	16.2	0	
20	16QAM	1	99	14.52	14.47	14.52	14.65			
20	16QAM	50	0	14.57	14.81	14.65	14.74			
20	16QAM	50	24	14.43	14.56	14.63	14.60			
20	16QAM	50	50	14.56	14.44	14.54	14.60	16.2	0	
20	16QAM	100	0	14.63	14.75	14.62	14.82			
20	64QAM	1	0	14.49	14.45	14.63	14.55			
20	64QAM	1	49	14.58	14.48	14.53	14.62			
20	64QAM	1	99	14.67	14.79	14.73	14.77	16.2	0	
20	64QAM	50	0	14.45	14.45	14.67	14.55			
20	64QAM	50	24	14.61	14.49	14.48	14.64			
20	64QAM	50	50	14.67	14.81	14.66	14.73			
20	64QAM	100	0	14.41	14.54	14.62	14.62	16.2	0	
20	256QAM	1	0	14.58	14.44	14.51	14.66			
20	256QAM	1	49	14.67	14.71	14.70	14.71			
20	256QAM	1	99	14.54	14.53	14.65	14.50			
20	256QAM	50	0	14.56	14.46	14.49	14.61	16.2	0	
20	256QAM	50	24	14.51	14.52	14.53	14.62			
20	256QAM	50	50	14.69	14.69	14.69	14.83			
20	256QAM	100	0	14.47	14.52	14.53	14.59			
Channel				55315	55820	56160	56665			
Frequency (MHz)				3575.5	3608	3642	3692.5			
15	QPSK	1	0	14.63	14.48	14.55	14.56	16.2	0	
15	QPSK	1	37	14.57	14.68	14.71	14.74			
15	QPSK	1	74	14.42	14.49	14.54	14.49			
15	QPSK	36	0	14.41	14.42	14.45	14.63			
15	QPSK	36	20	14.62	14.62	14.64	14.72	16.2	0	
15	QPSK	36	39	14.41	14.50	14.57	14.43			
15	QPSK	75	0	14.43	14.44	14.38	14.55			
15	16QAM	1	0	14.54	14.62	14.55	14.68			
15	16QAM	1	37	14.34	14.54	14.48	14.38	16.2	0	
15	16QAM	1	74	14.49	14.35	14.45	14.63			
15	16QAM	36	0	14.50	14.79	14.64	14.72			
15	16QAM	36	20	14.38	14.49	14.55	14.54			
15	16QAM	36	39	14.54	14.30	14.40	14.50	16.2	0	
15	16QAM	75	0	14.49	14.72	14.50	14.71			
15	64QAM	1	0	14.41	14.42	14.57	14.47			
15	64QAM	1	37	14.47	14.47	14.44	14.59			
15	64QAM	1	74	14.58	14.69	14.72	14.63	16.2	0	
15	64QAM	36	0	14.34	14.36	14.64	14.49			
15	64QAM	36	20	14.54	14.35	14.33	14.49			
15	64QAM	36	39	14.59	14.71	14.52	14.71			
15	64QAM	75	0	14.29	14.43	14.51	14.61	16.2	0	
15	256QAM	1	0	14.52	14.42	14.49	14.60			
15	256QAM	1	37	14.57	14.64	14.67	14.58			
15	256QAM	1	74	14.48	14.40	14.58	14.44			
15	256QAM	36	0	14.44	14.36	14.46	14.35	16.2	0	
15	256QAM	36	20	14.43	14.50	14.44	14.53			
15	256QAM	36	39	14.62	14.57	14.55	14.74			
15	256QAM	75	0	14.43	14.43	14.40	14.57			
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	14.61	14.43	14.49	14.64	16.2	0	
10	QPSK	1	25	14.66	14.67	14.70	14.79			
10	QPSK	1	49	14.49	14.44	14.54	14.55			
10	QPSK	25	0	14.45	14.46	14.38	14.52			
10	QPSK	25	12	14.55	14.65	14.63	14.77	16.2	0	
10	QPSK	25	25	14.43	14.47	14.56	14.57			
10	QPSK	50	0	14.44	14.45	14.49	14.53			
10	16QAM	1	0	14.50	14.60	14.58	14.58			
10	16QAM	1	25	14.30	14.42	14.58	14.40	16.2	0	
10	16QAM	1	49	14.48	14.44	14.40	14.62			
10	16QAM	25	0	14.53	14.79	14.51	14.59			
10	16QAM	25	12	14.28	14.49	14.61	14.57			
10	16QAM	25	25	14.50	14.30	14.43	14.45	16.2	0	
10	16QAM	50	0	14.48	14.71	14.60	14.80			
10	64QAM	1	0	14.38	14.32	14.54	14.46			
10	64QAM	1	25	14.48	14.35	14.47	14.49			
10	64QAM	1	49	14.65	14.74	14.66	14.74	16.2	0	
10	64QAM	25	0	14.44	14.42	14.54	14.41			
10	64QAM	25	12	14.48	14.44	14.37	14.58			
10	64QAM	25	25	14.62	14.73	14.62	14.72			
10	64QAM	50	0	14.27	14.48	14.48	14.52	16.2	0	
10	256QAM	1	0	14.44	14.38	14.40	14.51			
10	256QAM	1	25	14.65	14.59	14.68	14.67			
10	256QAM	1	49	14.41	14.51	14.50	14.40			
10	256QAM	25	0	14.55	14.36	14.47	14.48	16.2	0	
10	256QAM	25	12	14.45	14.41	14.41	14.53			
10	256QAM	25	25	14.68	14.58	14.59	14.69			
10	256QAM	50	0	14.34	14.43	14.42	14.57			
Channel				55265	55810	56170	56715			
Frequency (MHz)				3522.5	3607	3643	3697.5			
5	QPSK	1	0	14.59	14.40	14.55	14.66	16.2	0	
5	QPSK	1	12	14.69	14.80	14.73	14.73			
5	QPSK	1	24	14.53	14.58	14.55	14.51			
5	QPSK	12	0	14.43	14.43	14.35	14.51			
5	QPSK	12	7	14.58	14.65	14.61	14.73	16.2	0	
5	QPSK	12	13	14.44	14.45	14.57	14.54			
5	QPSK	25	0	14.54	14.36	14.38	14.50			
5	16QAM	1	0	14.55	14.59	14.68	14.63			
5	16QAM	1	12	14.35	14.47	14.46	14.42	16.2	0	
5	16QAM	1	24	14.41	14.41	14.39	14.62			
5	16QAM	12	0	14.49	14.74	14.52	14.72			
5	16QAM	12	7	14.36	14.49	14.53	14.59			
5	16QAM	12	13	14.54	14.30	14.50	14.48	16.2	0	
5	16QAM	25	0	14.59	14.66	14.51	14.74			
5	64QAM	1	0	14.44	14.43	14.62	14.40			
5	64QAM	1	12	14.45	14.40	14.52	14.49			
5	64QAM	1	24	14.57	14.75	14.60	14.64	16.2	0	
5	64QAM	12	0	14.38	14.42	14.60	14.52			
5	64QAM	12	7	14.56	14.45	14.34	14.60			
5	64QAM	12	13	14.66	14.74	14.64	14.58			
5	64QAM	25	0	14.29	14.43	14.59	14.57	16.2	0	
5	256QAM	1	0	14.54	14.37	14.39	14.60			
5	256QAM	1	12	14.60	14.58	14.57	14.57			
5	256QAM	1	24	14.48	14.50	14.54	14.47			
5	256QAM	12	0	14.42	14.40	14.41	14.55	16.2	0	
5	256QAM	12	7	14.43	14.44	14.40	14.56			
5	256QAM	12	13	14.59	14.55	14.57	14.69			
5	256QAM	25	0	14.46	14.39	14.41	14.56			



n2_Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	PI2 BPSK	1	1	22.91	23.02	22.89	24.0	0.0		
20	PI2 BPSK	1	53	22.89	22.97	22.92				
20	PI2 BPSK	1	104	22.97	23.01	22.96				
20	PI2 BPSK	50	0	22.80	22.88	22.77	23.5	0.5		
20	PI2 BPSK	50	28	22.85	22.95	22.81	24.0	0.0		
20	PI2 BPSK	50	56	22.97	22.99	22.87	23.5	0.5		
20	PI2 BPSK	100	0	22.86	22.93	22.89	24.0	0.0		
20	QPSK	1	1	22.91	23.05	22.94	24.0	0.0		
20	QPSK	1	53	22.86	23.01	22.90				
20	QPSK	1	104	22.94	22.98	22.88				
20	QPSK	50	0	22.81	22.86	22.84	24.0	0.0		
20	QPSK	50	28	22.85	23.03	22.90	24.0	0.0		
20	QPSK	50	56	22.83	22.94	22.82	24.0	0.0		
20	QPSK	100	0	22.90	23.01	22.90	24.0	0.0		
20	16QAM	1	1	22.87	22.94	22.82	24.0	0.0		
20	64QAM	1	1	22.84	22.91	22.78	24.0	0.0		
20	256QAM	1	1	21.05	21.13	21.03	22.0	2.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	22.81	22.95	22.90	24.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	22.90	22.91	22.82	24.0	0.0		
Channel										
Frequency (MHz)										
5	QPSK	1	1	22.87	22.92	22.91	24.0	0.0		

n2_Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	PI2 BPSK	1	1	15.73	15.80	15.64	17.0	0.0		
20	PI2 BPSK	1	53	15.84	15.94	15.73				
20	PI2 BPSK	1	104	15.84	15.78	15.60				
20	PI2 BPSK	50	0	15.60	15.73	15.74	17.0	0.0		
20	PI2 BPSK	50	28	15.71	15.75	15.73	17.0	0.0		
20	PI2 BPSK	50	56	15.76	15.75	15.65	17.0	0.0		
20	PI2 BPSK	100	0	15.60	15.67	15.75	17.0	0.0		
20	QPSK	1	1	15.67	15.96	15.84	17.0	0.0		
20	QPSK	1	53	15.73	15.78	15.78				
20	QPSK	1	104	15.72	15.81	15.68				
20	QPSK	50	0	15.76	15.81	15.63	17.0	0.0		
20	QPSK	50	28	15.61	15.69	15.60	17.0	0.0		
20	QPSK	50	56	15.68	15.84	15.65	17.0	0.0		
20	QPSK	100	0	15.73	15.78	15.73	17.0	0.0		
20	16QAM	1	1	15.72	15.82	15.85	17.0	0.0		
20	64QAM	1	1	15.68	15.80	15.83	17.0	0.0		
20	256QAM	1	1	15.79	15.79	15.60	17.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	15.71	15.88	15.68	17.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	15.68	15.73	15.73	17.0	0.0		
Channel										
Frequency (MHz)										
5	QPSK	1	1	15.72	15.85	15.74	17.0	0.0		

n25_Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
40	PI2 BPSK	1	1	23.18	23.25	23.14	24.0	0.0		
40	PI2 BPSK	1	108	23.16	23.21	23.08				
40	PI2 BPSK	1	214	23.07	23.12	23.05				
40	PI2 BPSK	108	0	23.13	23.16	23.07	24.0	0.0		
40	PI2 BPSK	108	54	23.13	23.18	23.07	24.0	0.0		
40	PI2 BPSK	108	108	22.99	23.14	23.07	24.0	0.0		
40	PI2 BPSK	216	0	23.10	23.21	23.19	24.0	0.0		
40	QPSK	1	1	23.25	23.26	23.24	24.0	0.0		
40	QPSK	1	108	23.17	23.22	23.09				
40	QPSK	1	214	23.02	23.11	22.98				
40	QPSK	108	0	23.17	23.21	23.12	24.0	0.0		
40	QPSK	108	54	23.20	23.23	23.17	24.0	0.0		
40	QPSK	108	108	23.01	23.16	23.10	24.0	0.0		
40	QPSK	216	0	23.14	23.19	23.11	24.0	0.0		
40	16QAM	1	1	23.12	23.21	23.08	24.0	0.0		
40	64QAM	1	1	22.22	22.28	22.13	23.0	1.0		
40	256QAM	1	1	20.27	20.38	20.24	21.0	3.0		
Channel										
Frequency (MHz)										
35	QPSK	1	1	23.23	23.19	23.13	24.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	18.65	18.65	18.65	24.0	0.0		
Channel										
Frequency (MHz)										
25	QPSK	1	1	23.11	23.16	23.10	24.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	23.16	23.11	23.09	24.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	23.22	23.11	23.14	24.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	23.13	23.14	23.12	24.0	0.0		
Channel										
Frequency (MHz)										
5	QPSK	1	1	23.13	23.16	23.16	24.0	0.0		



n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	18.12	18.13	18.95			
40	PI2 BPSK	1	108	18.90	18.96	18.11	17.0	0.0	
40	PI2 BPSK	1	214	15.89	15.95	15.97			
40	PI2 BPSK	108	0	15.98	16.02	15.98	17.0	0.0	
40	PI2 BPSK	108	54	15.85	16.01	18.00	17.0	0.0	
40	PI2 BPSK	108	108	15.91	16.00	15.96	17.0	0.0	
40	PI2 BPSK	216	0	15.97	16.07	15.98			
40	QPSK	1	1	15.94	16.18	16.08			
40	QPSK	1	108	15.88	16.08	16.01	17.0	0.0	
40	QPSK	1	214	15.89	15.96	15.94			
40	QPSK	108	0	15.98	16.00	15.98	17.0	0.0	
40	QPSK	108	54	15.94	16.10	16.08	17.0	0.0	
40	QPSK	108	108	15.91	16.03	16.02	17.0	0.0	
40	QPSK	216	0	15.98	15.99	15.89			
40	16QAM	1	1	15.97	16.05	16.05	17.0	0.0	
40	64QAM	1	1	15.98	15.98	16.02	17.0	0.0	
40	256QAM	1	1	15.92	16.00	16.03	17.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	15.87	15.96	16.05	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.81	16.09	15.95	17.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.83	16.80	16.03	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.92	16.07	16.09	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.81	16.07	16.05	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.93	16.80	16.40	17.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.87	15.99	16.01	17.0	0.0	

n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	22.83	22.93	22.78			
40	PI2 BPSK	1	108	22.91	22.92	22.86	24.0	0.0	
40	PI2 BPSK	1	214	22.80	22.88	22.95			
40	PI2 BPSK	108	0	22.76	22.88	22.79	24.0	0.0	
40	PI2 BPSK	108	54	22.73	22.86	22.83	24.0	0.0	
40	PI2 BPSK	108	108	22.86	22.87	22.80	24.0	0.0	
40	PI2 BPSK	216	0	22.84	22.92	22.82			
40	QPSK	1	1	23.00	23.01	22.88			
40	QPSK	1	108	22.88	22.97	22.82	24.0	0.0	
40	QPSK	1	214	22.84	22.93	22.78			
40	QPSK	108	0	22.74	22.89	22.82	24.0	0.0	
40	QPSK	108	54	22.83	22.97	22.83	24.0	0.0	
40	QPSK	108	108	22.81	22.94	22.81	24.0	0.0	
40	QPSK	216	0	22.93	22.94	22.89			
40	16QAM	1	1	22.73	22.88	22.84	24.0	0.0	
40	64QAM	1	1	22.79	22.84	22.74	24.0	0.0	
40	256QAM	1	1	20.83	20.87	20.72	22.0	2.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	22.88	22.90	22.83	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.88	22.88	22.80	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.86	22.91	22.75	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.91	22.95	22.77	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.89	22.97	22.86	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.82	22.87	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	22.95	22.92	22.81	24.0	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	17.31	17.33	17.36			
40	PI2 BPSK	1	108	17.17	17.24	17.25	18.5	0.0	
40	PI2 BPSK	1	214	17.22	17.23	17.21			
40	PI2 BPSK	108	0	17.26	17.17	17.22	18.5	0.0	
40	PI2 BPSK	108	54	17.21	17.25	17.17	18.5	0.0	
40	PI2 BPSK	108	108	17.26	17.30	17.29	18.5	0.0	
40	PI2 BPSK	216	0	17.19	17.20	17.19			
40	QPSK	1	1	17.41	17.43	17.39			
40	QPSK	1	108	17.18	17.41	17.35	18.5	0.0	
40	QPSK	1	214	17.18	17.28	17.33			
40	QPSK	108	0	17.16	17.19	17.16	18.5	0.0	
40	QPSK	108	54	17.26	17.34	17.31	18.5	0.0	
40	QPSK	108	108	17.22	17.20	17.24	18.5	0.0	
40	QPSK	216	0	17.17	17.27	17.23			
40	16QAM	1	1	17.25	17.26	17.18	18.5	0.0	
40	64QAM	1	1	17.13	17.22	17.20	18.5	0.0	
40	256QAM	1	1	17.23	17.31	17.24	18.5	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	17.18	17.33	17.23	18.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.22	17.49	17.23	18.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.23	17.23	17.21	18.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.11	17.22	17.22	18.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.19	17.22	17.25	18.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.24	17.27	17.25	18.5	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.13	17.21	17.19	18.5	0.0	



FCC_n41_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				509200	518998	529000				
100	PI2 BPSK	1	1	22.83	22.89	22.52	24.0	0.0		
100	PI2 BPSK	1	137	22.81	22.76	22.46				
100	PI2 BPSK	1	271	22.87	22.77	22.62				
100	PI2 BPSK	135	0	22.81	22.75	22.58				
100	PI2 BPSK	135	69	22.59	22.82	22.58	24.0	0.0		
100	PI2 BPSK	135	138	22.55	22.70	22.54	24.0	0.0		
100	PI2 BPSK	270	0	22.54	22.80	22.62				
100	QPSK	1	1	22.88	22.83	22.55				
100	QPSK	1	137	22.80	22.72	22.57				
100	QPSK	1	271	22.84	22.75	22.64	24.0	0.0		
100	QPSK	135	0	22.36	22.70	22.57				
100	QPSK	135	69	22.55	22.78	22.50				
100	QPSK	135	138	22.60	22.77	22.56				
100	QPSK	270	0	22.57	22.76	22.61	24.0	0.0		
100	16QAM	1	1	22.80	22.75	22.56	24.0	0.0		
100	16QAM	1	1	22.43	22.51	22.34	23.5	0.5		
100	256QAM	1	1	21.18	21.26	21.19	22.5	1.5		
Channel										
Frequency (MHz)				508200	518998	528998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2541	2592.99	2644.98	24.0	0.0		
80	QPSK	1	1	22.57	22.72	22.56	24.0	0.0		
Channel										
Frequency (MHz)				507204	518998	528998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2538.02	2592.99	2644.99	24.0	0.0		
80	QPSK	1	1	22.69	22.72	22.43	24.0	0.0		
Channel										
Frequency (MHz)				505202	518998	531000	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2531.01	2592.99	2655	24.0	0.0		
70	QPSK	1	1	22.83	22.78	22.60	24.0	0.0		
Channel										
Frequency (MHz)				2525	2592.99	2659.98	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2525	2592.99	2659.98	Tune-up limit (dBm)	MPR		
60	QPSK	1	1	22.55	22.81	22.62	24.0	0.0		
Channel										
Frequency (MHz)				504204	518998	529998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2518.02	2592.99	2664.99	24.0	0.0		
50	QPSK	1	1	22.59	22.78	22.52	24.0	0.0		
Channel										
Frequency (MHz)				503202	518998	534000	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2511	2592.99	2674.98	24.0	0.0		
40	QPSK	1	1	22.58	22.69	22.62	24.0	0.0		
Channel										
Frequency (MHz)				502200	518998	534998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2511	2592.99	2674.98	24.0	0.0		
30	QPSK	1	1	22.63	22.68	22.56	24.0	0.0		
Channel										
Frequency (MHz)				501204	518998	535998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2506.02	2592.99	2679.99	24.0	0.0		
20	QPSK	1	1	22.81	22.74	22.55	24.0	0.0		
Channel										
Frequency (MHz)				500200	518998	536998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2503.5	2592.99	2682.48	24.0	0.0		
15	QPSK	1	1	22.56	22.72	22.60	24.0	0.0		
Channel										
Frequency (MHz)				500100	518998	537000	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2501.01	2592.99	2685	24.0	0.0		
10	QPSK	1	1	22.66	22.70	22.53	24.0	0.0		

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				509202	518998	529200				
100	PI2 BPSK	1	1	24.87	24.70	24.44	26.0	0.0		
100	PI2 BPSK	1	137	24.89	24.88	24.54				
100	PI2 BPSK	1	271	24.84	24.87	24.49				
100	PI2 BPSK	135	0	24.13	24.25	24.14				
100	PI2 BPSK	135	69	24.56	24.66	24.50	26.0	0.0		
100	PI2 BPSK	135	138	24.11	24.25	24.08	26.5	0.5		
100	PI2 BPSK	270	0	24.24	24.28	24.08				
100	QPSK	1	1	24.71	24.78	24.52				
100	QPSK	1	137	24.84	24.71	24.61				
100	QPSK	1	271	24.68	24.86	24.56	26.0	0.0		
100	QPSK	135	0	23.87	23.96	23.78				
100	QPSK	135	69	24.55	24.73	24.55				
100	QPSK	135	138	24.05	24.15	23.98				
100	QPSK	270	0	23.68	23.83	23.75	25.0	1.0		
100	16QAM	1	1	23.73	23.93	23.82	26.0	1.0		
100	16QAM	1	1	22.48	22.91	22.34	23.9	2.5		
100	256QAM	1	1	21.18	21.26	21.19	22.5	3.5		
Channel										
Frequency (MHz)				508200	518998	528998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2541	2592.99	2644.98	24.0	0.0		
80	QPSK	1	1	24.59	24.59	24.49	26.0	0.0		
Channel										
Frequency (MHz)				507204	518998	528998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2538.02	2592.99	2649.99	24.0	0.0		
80	QPSK	1	1	24.50	24.70	24.52	26.0	0.0		
Channel										
Frequency (MHz)				505202	518998	531000	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2531.01	2592.99	2655	24.0	0.0		
70	QPSK	1	1	24.62	24.58	24.50	26.0	0.0		
Channel										
Frequency (MHz)				2525	2592.99	2659.98	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2525	2592.99	2659.98	Tune-up limit (dBm)	MPR		
60	QPSK	1	1	24.60	24.62	24.44	26.0	0.0		
Channel										
Frequency (MHz)				504204	518998	529998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2518.02	2592.99	2664.99	24.0	0.0		
50	QPSK	1	1	24.56	24.62	24.44	26.0	0.0		
Channel										
Frequency (MHz)				503202	518998	534000	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2511	2592.99	2674.98	24.0	0.0		
40	QPSK	1	1	24.57	24.70	24.50	26.0	0.0		
Channel										
Frequency (MHz)				502200	518998	534998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2511	2592.99	2674.98	24.0	0.0		
30	QPSK	1	1	24.54	24.63	24.44	26.0	0.0		
Channel										
Frequency (MHz)				501204	518998	535998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2508.02	2592.99	2679.99	24.0	0.0		
20	QPSK	1	1	24.51	24.62	24.42	26.0	0.0		
Channel										
Frequency (MHz)				500200	518998	536998	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2503.5	2592.99	2682.48	24.0	0.0		
15	QPSK	1	1	24.63	24.64	24.54	26.0	0.0		
Channel										
Frequency (MHz)				500100	518998	537000	Tune-up limit (dBm)	MPR		
Frequency (MHz)				2501.01	2592.99	2685	24.0	0.0		
10	QPSK	1	1	24.51	24.58	24.55	26.0	0.0		



### Part27Q\_n77\_Ant 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	16.94				
100	PI2 BPSK	1	121	16.97			18.5	0.0
100	PI2 BPSK	1	271	17.06				
100	PI2 BPSK	135	0	17.07			18.5	0.0
100	PI2 BPSK	135	69	17.09			18.5	0.0
100	PI2 BPSK	135	135	17.07			18.5	0.0
100	PI2 BPSK	270	0	17.11				
100	QPSK	1	1	17.19				
100	QPSK	1	121	17.14			18.5	0.0
100	QPSK	1	271	17.13				
100	QPSK	135	0	17.01			18.5	0.0
100	QPSK	135	69	17.13			18.5	0.0
100	QPSK	135	135	17.06			18.5	0.0
100	QPSK	270	0	17.02				
100	16QAM	1	1	17.03			18.5	0.0
100	16QAM	1	1	17.08			18.5	0.0
100	16QAM	1	1	17.08			18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	63300	63332	63668	Tune-up limit (dBm)	MPR (dB)
				3495	3499.98	3504.99		
				17.02	17.05	16.99	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	63268	63332	63400	Tune-up limit (dBm)	MPR (dB)
				3490.02	3499.98	3510		
				17.00	17.00	17.00	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	63234	63332	63432	Tune-up limit (dBm)	MPR (dB)
				3485.01	3499.98	3514.98		
				16.99	17.03	16.94	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	63200	63332	63568	Tune-up limit (dBm)	MPR (dB)
				3480	3499.98	3519.99		
				17.02	17.04	17.01	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	63168	63332	63500	Tune-up limit (dBm)	MPR (dB)
				3475.02	3499.98	3509		
				16.94	17.05	17.00	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	63134	63332	63532	Tune-up limit (dBm)	MPR (dB)
				3470	3499.98	3514.99		
				17.06	17.03	17.07	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	63100	63332	63568	Tune-up limit (dBm)	MPR (dB)
				3465.01	3499.98	3514.98		
				17.02	17.02	16.95	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	63068	63332	63600	Tune-up limit (dBm)	MPR (dB)
				3460.02	3499.98	3510		
				17.05	17.05	16.94	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	63034	63332	63632	Tune-up limit (dBm)	MPR (dB)
				3455.01	3499.98	3514.98		
				17.02	17.01	16.96	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	63000	63332	63668	Tune-up limit (dBm)	MPR (dB)
				3450.01	3499.98	3514.98		
				17.00	17.05	16.97	18.5	0.0

### Part27Q\_n77\_Ant 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	17.35	17.36	17.41		
100	PI2 BPSK	1	121	17.26	17.36	17.38	18.5	0.0
100	PI2 BPSK	1	271	17.30	17.33	17.38		
100	PI2 BPSK	135	0	17.28	17.34	17.08	18.5	0.0
100	PI2 BPSK	135	69	17.26	17.32	17.08	18.5	0.0
100	PI2 BPSK	135	135	17.34	17.22	17.11	18.5	0.0
100	PI2 BPSK	270	0	17.23	17.32	17.11		
100	QPSK	1	1	17.36	17.43	17.45		
100	QPSK	1	121	17.30	17.31	17.21	18.5	0.0
100	QPSK	1	271	17.24	17.28	17.37		
100	QPSK	135	0	17.27	17.28	17.17	18.5	0.0
100	QPSK	135	69	17.30	17.33	17.21	18.5	0.0
100	QPSK	135	135	17.23	17.31	17.19	18.5	0.0
100	QPSK	270	0	17.25	17.29	17.15		
100	16QAM	1	1	17.33	17.25	17.19	18.5	0.0
100	16QAM	1	1	17.31	17.28	17.07	18.5	0.0
100	16QAM	1	1	17.31	17.28	17.05	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	64668	64600	64632	Tune-up limit (dBm)	MPR (dB)
				3745.02	3840	3934.98		
				17.18	17.24	17.12	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	64634	64600	64666	Tune-up limit (dBm)	MPR (dB)
				3740.01	3840	3934.98		
				17.25	17.18	17.10	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	64600	64600	64600	Tune-up limit (dBm)	MPR (dB)
				3735	3840	3945		
				17.15	17.21	17.06	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	64566	64600	64632	Tune-up limit (dBm)	MPR (dB)
				3730.02	3840	3944.98		
				17.18	17.20	17.11	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	64532	64600	64666	Tune-up limit (dBm)	MPR (dB)
				3725.01	3840	3944.98		
				17.28	17.31	17.17	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	64500	64600	64600	Tune-up limit (dBm)	MPR (dB)
				3720	3840	3940		
				17.29	17.19	17.08	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	64466	64600	64632	Tune-up limit (dBm)	MPR (dB)
				3715.02	3840	3944.98		
				17.26	17.32	17.17	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	64432	64600	64666	Tune-up limit (dBm)	MPR (dB)
				3710.01	3840	3944.98		
				17.21	17.29	17.20	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	64400	64600	64600	Tune-up limit (dBm)	MPR (dB)
				3705.02	3840	3942.48		
				17.21	17.23	17.10	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	64368	64600	64600	Tune-up limit (dBm)	MPR (dB)
				3700	3840	3975		
				17.28	17.30	17.19	18.5	0.0

### Part27Q\_n77\_HPUe\_Ant 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	16.94				
100	PI2 BPSK	1	121	16.97			18.5	0.0
100	PI2 BPSK	1	271	17.06				
100	PI2 BPSK	135	0	17.07			18.5	0.0
100	PI2 BPSK	135	69	17.09			18.5	0.0
100	PI2 BPSK	135	135	17.07			18.5	0.0
100	PI2 BPSK	270	0	17.11				
100	QPSK	1	1	17.19				
100	QPSK	1	121	17.14			18.5	0.0
100	QPSK	1	271	17.13				
100	QPSK	135	0	17.01			18.5	0.0
100	QPSK	135	69	17.13			18.5	0.0
100	QPSK	135	135	17.06			18.5	0.0
100	QPSK	270	0	17.02				
100	16QAM	1	1	17.03			18.5	0.0
100	16QAM	1	1	17.08			18.5	0.0
100	16QAM	1	1	17.08			18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	63268	63332	63400	Tune-up limit (dBm)	MPR (dB)
				3490.02	3499.98	3510		
				17.02	17.05	16.99	18.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	63234	63332	63432	Tune-up limit (dBm)	MPR (dB)
				3485.01	3499.98	3514.98		
				16.99	17.03	16.94	18.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	63200	63332	63568	Tune-up limit (dBm)	MPR (dB)
				3480	3499.98	3519.99		
				17.02	17.04	17.01	18.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	63168	63332	63500	Tune-up limit (dBm)	MPR (dB)
				3475.02	3499.98	3509		
				16.94	17.05	17.00	18.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	63134	63332	63532	Tune-up limit (dBm)	MPR (dB)
				3470	3499.98	3514.99		
				17.06	17.03	17.07	18.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	63100	63332	63568	Tune-up limit (dBm)	MPR (dB)
				3465.01	3499.98	3514.98		
				17.02	17.02	16.95	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	63068	63332	63600	Tune-up limit (dBm)	MPR (dB)
				3460.02	3499.98	3510		
				17.05	17.05	16.94	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	63034	63332	63632	Tune-up limit (dBm)	MPR (dB)
				3455.01	3499.98	3514.98		
				17.02	17.01	16.96	18.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	63000	63332	63668	Tune-up limit (dBm)	MPR (dB)
				3450.01	3499.98	3514.98		
				17.00	17.05	16.97	18.5	0.0



### Part270\_n77 HPUe\_Ant 4

Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel							
Frequency (MHz)							
3750 3840 3930							
PI2 BPSK	1	1	17.35	17.36	17.41	18.5	0.0
PI2 BPSK	1	137	17.26	17.36	17.38		
PI2 BPSK	1	271	17.30	17.33	17.18		
PI2 BPSK	135	0	17.28	17.34	17.08	18.5	0.0
PI2 BPSK	135	69	17.26	17.32	17.08	18.5	0.0
PI2 BPSK	135	135	17.34	17.22	17.11	18.5	0.0
PI2 BPSK	270	0	17.23	17.32	17.11	18.5	0.0
QPSK	1	1	17.25	17.43	17.40		
QPSK	1	137	17.30	17.31	17.21	18.5	0.0
QPSK	1	271	17.24	17.28	17.17		
QPSK	135	0	17.27	17.28	17.17	18.5	0.0
QPSK	135	69	17.25	17.33	17.21	18.5	0.0
QPSK	135	135	17.23	17.31	17.15	18.5	0.0
QPSK	270	0	17.25	17.23	17.15	18.5	0.0
16QAM	1	1	17.33	17.25	17.19	18.5	0.0
16QAM	1	1	17.31	17.29	17.07	18.5	0.0
256QAM	1	1	17.31	17.28	17.16	18.5	0.0
Channel							
Frequency (MHz)							
3745.02 3840 3934.98							
QPSK	1	1	17.43	17.21	17.12	18.5	0.0
Channel							
Frequency (MHz)							
3493.34 356000 362666							
QPSK	1	1	17.40	17.40	17.40	18.5	0.0
Channel							
Frequency (MHz)							
3735 3840 3945							
QPSK	1	1	17.15	17.21	17.06	18.5	0.0
Channel							
Frequency (MHz)							
3700.02 3840 3849.98							
QPSK	1	1	17.18	17.20	17.11	18.5	0.0
Channel							
Frequency (MHz)							
3683.34 356000 363966							
QPSK	1	1	17.28	17.31	17.17	18.5	0.0
Channel							
Frequency (MHz)							
364800 356000 364000							
QPSK	1	1	17.24	17.26	17.09	18.5	0.0
Channel							
Frequency (MHz)							
3720 3840 3960							
QPSK	1	1	17.20	17.19	17.08	18.5	0.0
Channel							
Frequency (MHz)							
367698 356000 364332							
QPSK	1	1	17.25	17.32	17.17	18.5	0.0
Channel							
Frequency (MHz)							
3473.34 356000 364666							
QPSK	1	1	17.01	17.40	3693.99	18.5	0.0
Channel							
Frequency (MHz)							
3471.68 356000 364832							
QPSK	1	1	17.21	17.20	17.20	18.5	0.0
Channel							
Frequency (MHz)							
3707.52 3840 3972.48							
QPSK	1	1	17.21	17.22	17.10	18.5	0.0
Channel							
Frequency (MHz)							
3705 3840 3975							
QPSK	1	1	17.28	17.30	17.19	18.5	0.0

### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	22.95			24.0	0.0
100	PI2 BPSK	1	137	23.17				
100	PI2 BPSK	1	271	23.18				
100	PI2 BPSK	135	0	22.89			24.0	0.0
100	PI2 BPSK	135	69	23.10			24.0	0.0
100	PI2 BPSK	135	135	23.14			24.0	0.0
100	PI2 BPSK	270	0	23.03			24.0	0.0
100	QPSK	1	1	22.30			24.0	0.0
100	QPSK	1	137	23.17				
100	QPSK	1	271	23.12			24.0	0.0
100	QPSK	135	0	22.90			24.0	0.0
100	QPSK	135	69	23.09			24.0	0.0
100	QPSK	135	135	23.02			24.0	0.0
100	QPSK	270	0	22.81			24.0	0.0
100	16QAM	1	1	23.03			24.0	0.0
100	16QAM	1	1	23.11			24.0	0.0
100	256QAM	1	1	22.92			24.0	1.5
Channel								
Frequency (MHz)								
333000 333332 333666								
90	QPSK	1	1	22.02	23.08	23.16	24.0	0.0
Channel								
Frequency (MHz)								
3490.02 3499.98 3510								
80	QPSK	1	1	22.08	23.07	23.12	24.0	0.0
Channel								
Frequency (MHz)								
3485.01 3499.98 3514.98								
70	QPSK	1	1	22.87	23.04	23.15	24.0	0.0
Channel								
Frequency (MHz)								
3480 3499.98 3519.98								
60	QPSK	1	1	22.94	22.94	22.98	24.0	0.0
Channel								
Frequency (MHz)								
331668 333332 335000								
50	QPSK	1	1	23.00	23.01	23.13	24.0	0.0
Channel								
Frequency (MHz)								
331334 333332 335332								
40	QPSK	1	1	22.92	23.03	23.13	24.0	0.0
Channel								
Frequency (MHz)								
331000 333332 335666								
30	QPSK	1	1	22.97	23.07	23.11	24.0	0.0
Channel								
Frequency (MHz)								
330668 333332 336000								
20	QPSK	1	1	22.58	22.99	22.99	24.0	0.0
Channel								
Frequency (MHz)								
3450.01 3499.98 3504.98								
15	QPSK	1	1	22.86	23.07	23.00	24.0	0.0
Channel								
Frequency (MHz)								
3455.01 3499.98 3504.98								
10	QPSK	1	1	22.91	22.94	23.10	24.0	0.0

### Part270\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750 3840 3930								
100	PI2 BPSK	1	1	23.27	23.03	23.10	24.0	0.0
100	PI2 BPSK	1	137	23.21	23.08	23.10		
100	PI2 BPSK	1	271	23.21	23.02	23.05		
100	PI2 BPSK	135	0	23.17	23.06	23.06	24.0	0.0
100	PI2 BPSK	135	69	23.22	22.98	23.07	24.0	0.0
100	PI2 BPSK	135	135	23.20	22.99	23.07	24.0	0.0
100	PI2 BPSK	270	0	23.23	23.03	23.06	24.0	0.0
100	QPSK	1	1	23.28	23.05	23.10		
100	QPSK	1	137	23.20	22.98	23.12	24.0	0.0
100	QPSK	1	271	23.16	23.00	23.05		
100	QPSK	135	0	23.20	23.00	23.04	24.0	0.0
100	QPSK	135	69	23.22	23.04	23.05	24.0	0.0
100	QPSK	135	135	23.21	23.03	23.02	24.0	0.0
100	QPSK	270	0	23.22	22.98	23.13	24.0	0.0
100	16QAM	1	1	23.20	22.98	23.12	24.0	0.0
100	16QAM	1	1	23.06	23.00	23.10	24.0	0.0
100	256QAM	1	1	22.98	22.94	22.02	22.5	1.5
Channel								
Frequency (MHz)								
3745.02 3840 3934.98								
90	QPSK	1	1	23.19	23.04	23.04	24.0	0.0
Channel								
Frequency (MHz)								
3493.34 356000 362666								
80	QPSK	1	1	23.15	22.86	23.10	24.0	0.0
Channel								
Frequency (MHz)								
3735 3840 3945								
70	QPSK	1	1	23.15	23.07	23.01	24.0	0.0
Channel								
Frequency (MHz)								
3730.02 3840 3849.98								
60	QPSK	1	1	23.17	23.05	23.04	24.0	0.0
Channel								
Frequency (MHz)								
3683.34 356000 363966								
50	QPSK	1	1	23.20	23.00	23.14	24.0	0.0
Channel								
Frequency (MHz)								
364800 356000 364000								
40	QPSK	1	1	23.22	23.01	23.05	24.0	0.0
Channel								
Frequency (MHz)								
3720 3840 3960								
30	QPSK	1	1	23.19	22.99	23.05	24.0	0.0
Channel								
Frequency (MHz)								
367698 356000 364332								
20	QPSK	1	1	23.21	23.02	23.14	24.0	0.0
Channel								
Frequency (MHz)								
3473.34 356000 364666								
15	QPSK	1	1	23.22	23.02	23.14	24.0	0.0
Channel								
Frequency (MHz)								
3705 3840 3975								
10	QPSK	1	1	23.14	23.03	23.02	24.0	0.0

### Part27Q\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	PI2 BPSK	1	1	22.95			24.0	0.0
100	PI2 BPSK	1	137	23.17				
100	PI2 BPSK	1	271	23.18				
100	PI2 BPSK	135	0	22.89			24.0	0.0
100	PI2 BPSK	135	69	23.10			24.0	0.0
100	PI2 BPSK	135	135	23.14			24.0	0.0
100	PI2 BPSK	270	0	23.03			24.0	0.0
100	QPSK	1	1	22.30			24.0	0.0
100	QPSK	1	137	23.17				
100	QPSK	1	271	23.12			24.0	0.0
100	QPSK	135	0	22.90			24.0	0.0
100	QPSK	135	69	23.09			24.0	0.0
100	QPSK	135	135	23.02			24.0	0.0
100	QPSK	270	0	22.81			24.0	0.0
100	16QAM	1	1	23.03			24.0	0.0
100	16QAM	1	1	23.11			24.0	0.0
100	256QAM	1	1	22.92			24.0	1.5
Channel								
Frequency (MHz)								
333000 333332 333666								
90	QPSK	1	1	22.02	23.08	23.16	24.0	0.0
Channel								
Frequency (MHz)								
3490.02 3499.98 3510								
80	QPSK	1	1	22.08	23.07	23.12	24.0	0.0
Channel								
Frequency (MHz)								
3485.01 3499.98 3514.98								
70	QPSK	1	1	22.87	23.04	23.15	24.0	0.0
Channel								
Frequency (MHz)								
3480 3499.98 3519.98								
60	QPSK	1	1	22.94	22.94	22.98	24.0	0.0
Channel								
Frequency (MHz)								
331668 333332 335000								
50	QPSK	1	1	23.00	23.01	23.13	24.0	0.0
Channel								
Frequency (MHz)								
331334 333332 335332								
40	QPSK	1	1	22.92	23.03	23.13	24.0	0.0
Channel								
Frequency (MHz)								
331000 333332 335666								
30	QPSK	1	1	22.97	23.07	23.11	24.0	0.0
Channel								
Frequency (MHz)								
330668 333332 336000								
20	QPSK	1	1	22.58	22.99	22.99	24.0	0.0
Channel								
Frequency (MHz)								
3450.01 3499.98 3504.98								
15	QPSK	1	1	22.86	23.07	23.00	24.0	0.0
Channel								
Frequency (MHz)								
3455.01 3499.98 3504.98								
10	QPSK	1	1	22.91	22.94	23.10	24.0	0.0



**rt27Q\_n77 HPUE\_Ant 7**

RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
	633332				
	3499.98				
1	22.95			24.0	0.0
137	23.13				
271	23.18				
0	22.89			24.0	0.0
69	23.10			24.0	0.0
138	23.14				
0	23.03			24.0	0.0
1	23.20			24.0	0.0
137	23.17				
271	23.12				
0	22.90			24.0	0.0
69	23.09			24.0	0.0
138	23.02				
0	22.81			24.0	0.0
1	23.03			24.0	0.0
1	23.11			24.0	0.0
1	22.92			22.5	1.5
	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
	3495	3499.98	3504.99		
1	23.02	23.03	23.10	24.0	0.0
	632666	633332	634000	Tune-up limit (dBm)	MPR (dB)
	3490.02	3499.98	3510		
1	22.88	23.07	23.12	24.0	0.0
	632334	633332	634332	Tune-up limit (dBm)	MPR (dB)
	3485.01	3499.98	3514.98		
1	22.87	23.04	23.15	24.0	0.0
	632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
	3480	3499.98	3519.99		
1	22.94	22.94	22.98	24.0	0.0
	631666	633332	635000	Tune-up limit (dBm)	MPR (dB)
	3475.02	3499.98	3525		
1	23.00	23.01	23.13	24.0	0.0
	631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
	3470.01	3499.98	3529.99		
1	22.82	23.03	23.13	24.0	0.0
	631000	633332	635666	Tune-up limit (dBm)	MPR (dB)
	3465	3499.98	3534.99		
1	22.97	23.07	23.11	24.0	0.0
	630666	633332	636000	Tune-up limit (dBm)	MPR (dB)
	3460.02	3499.98	3540		
1	22.87	22.87	22.90	24.0	0.0
	630300	633332	636332	Tune-up limit (dBm)	MPR (dB)
	3457.5	3499.98	3542.49		
1	22.85	23.07	23.00	24.0	0.0
	630000	633332	636666	Tune-up limit (dBm)	MPR (dB)
	3455.01	3499.98	3544.98		
1	22.91	22.94	23.10	24.0	0.0

**Part27O\_n77 HPUE\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3765	3840	3930		
100	PI2-BPSK	1	1	23.27	23.03	23.10		
100	PI2-BPSK	1	137	23.21	23.00	23.10	24.0	0.0
100	PI2-BPSK	1	271	23.21	23.02	23.05		
100	PI2-BPSK	135	0	23.17	23.06	23.06	24.0	0.0
100	PI2-BPSK	135	69	23.22	22.98	23.07	24.0	0.0
100	PI2-BPSK	135	138	23.20	22.99	23.07		
100	PI2-BPSK	270	0	23.23	23.03	23.06	24.0	0.0
100	GPSK	1	1	23.28	23.05	23.15		
100	GPSK	1	137	23.26	22.98	23.12	24.0	0.0
100	GPSK	1	271	23.16	23.00	23.05		
100	GPSK	135	0	23.20	23.00	23.04		
100	GPSK	135	69	23.22	23.04	23.05	24.0	0.0
100	GPSK	135	138	23.21	23.03	23.02		
100	GPSK	270	0	23.22	22.98	23.13	24.0	0.0
100	16QAM	1	1	23.20	22.98	23.12	24.0	0.0
100	16QAM	1	1	23.00	23.00	23.10	24.0	0.0
100	16QAM	1	1	23.38	23.24	23.02	22.5	1.5
Channel				649668	650000	652332	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3743.02	3840	3934.98		
80	GPSK	1	1	23.18	23.04	23.04	24.0	0.0
Channel				649334	650000	652666	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3743.01	3840	3939.99		
80	GPSK	1	1	23.19	22.98	23.10	24.0	0.0
Channel				649000	650000	653000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	GPSK	1	1	23.15	23.07	23.01	24.0	0.0
Channel				648666	650000	653332	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3949.98		
60	GPSK	1	1	23.17	23.05	23.04	24.0	0.0
Channel				648334	650000	653666	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3954.99		
60	GPSK	1	1	23.20	23.00	23.14	24.0	0.0
Channel				648000	650000	654000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	GPSK	1	1	23.22	23.01	23.05	24.0	0.0
Channel				647668	650000	654332	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3974.98		
30	GPSK	1	1	23.13	22.99	23.08	24.0	0.0
Channel				647334	650000	654666	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3979.99		
20	GPSK	1	1	23.23	23.02	23.01	24.0	0.0
Channel				647000	650000	655000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.48		
15	GPSK	1	1	23.23	23.02	23.14	24.0	0.0
Channel				646666	650000	655332	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	GPSK	1	1	23.14	23.03	23.02	24.0	0.0





Part27Q_n77_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.88	21.88	21.88	23.0	0.0	
100	PI2 BPSK	1	137	21.90	21.90	21.90			
100	PI2 BPSK	1	271	21.98	21.98	21.98			
100	PI2 BPSK	135	0	21.97	21.97	21.97	23.0	0.0	
100	PI2 BPSK	135	69	22.00	22.00	22.00	23.0	0.0	
100	PI2 BPSK	135	135	22.08	22.08	22.08	23.0	0.0	
100	PI2 BPSK	270	0	22.03	22.03	22.03	23.0	0.0	
100	QPSK	1	1	22.10	22.10	22.10	23.0	0.0	
100	QPSK	1	137	21.98	21.98	21.98			
100	QPSK	1	271	22.00	22.00	22.00			
100	QPSK	135	0	22.00	22.00	22.00	23.0	0.0	
100	QPSK	135	69	22.08	22.08	22.08	23.0	0.0	
100	QPSK	135	135	22.09	22.09	22.09	23.0	0.0	
100	QPSK	270	0	22.08	22.08	22.08	23.0	0.0	
100	16QAM	1	1	21.99	21.99	21.99	23.0	0.0	
100	16QAM	1	1	21.78	21.78	21.78	22.5	0.5	
100	256QAM	1	1	19.83	19.83	19.83	20.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.87	22.05	22.01	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.04	21.97	21.98	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.03	21.84	22.02	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.01	22.07	22.00	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.00	21.93	21.93	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.01	22.04	21.96	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.02	21.96	22.04	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.01	21.97	22.03	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.88	22.05	22.04	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.00	21.94	22.01	23.0	0.0	

Part27Q_n77_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.73	21.85	21.77	23.0	0.0	
100	PI2 BPSK	1	137	21.78	21.86	21.84			
100	PI2 BPSK	1	271	21.77	21.83	21.70			
100	PI2 BPSK	135	0	21.85	21.87	21.85	23.0	0.0	
100	PI2 BPSK	135	69	21.95	21.95	21.93	23.0	0.0	
100	PI2 BPSK	135	135	21.91	22.03	21.90	23.0	0.0	
100	PI2 BPSK	270	0	21.85	22.00	21.88	23.0	0.0	
100	QPSK	1	1	22.05	22.13	22.04	23.0	0.0	
100	QPSK	1	137	21.72	21.86	21.86			
100	QPSK	1	271	21.85	21.92	21.78			
100	QPSK	135	0	21.85	21.92	21.78	23.0	0.0	
100	QPSK	135	69	21.95	22.03	21.91	23.0	0.0	
100	QPSK	135	135	21.92	22.02	21.95	23.0	0.0	
100	QPSK	270	0	21.87	22.02	21.95	23.0	0.0	
100	16QAM	1	1	21.83	21.87	21.72	23.0	0.0	
100	16QAM	1	1	21.16	21.24	21.16	22.5	0.5	
100	256QAM	1	1	19.30	19.34	19.25	20.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.89	21.89	21.80	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.01	21.84	21.89	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.82	21.89	21.84	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.92	21.99	21.76	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.83	21.90	21.81	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.92	22.01	21.89	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.89	21.95	21.89	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.87	21.89	21.85	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.84	21.87	21.80	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.84	21.90	21.87	23.0	0.0	

Part27Q_n77 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.03	24.03	24.03	25.0	0.0	
100	PI2 BPSK	1	137	24.06	24.06	24.06			
100	PI2 BPSK	1	271	24.23	24.23	24.23			
100	PI2 BPSK	135	0	24.05	24.05	24.05	24.5	0.5	
100	PI2 BPSK	135	69	24.01	24.01	24.01	25.0	0.0	
100	PI2 BPSK	135	135	24.03	24.03	24.03	24.5	0.5	
100	PI2 BPSK	270	0	24.02	24.02	24.02	25.0	0.0	
100	QPSK	1	1	24.13	24.13	24.13	25.0	0.0	
100	QPSK	1	137	24.07	24.07	24.07			
100	QPSK	1	271	24.21	24.21	24.21			
100	QPSK	135	0	24.02	24.02	24.02	25.0	0.0	
100	QPSK	135	69	24.06	24.06	24.06	25.0	0.0	
100	QPSK	135	135	24.03	24.03	24.03	24.0	1.0	
100	QPSK	270	0	24.02	24.02	24.02	24.0	1.0	
100	16QAM	1	1	23.22	23.22	23.22	24.0	1.0	
100	16QAM	1	1	23.71	23.71	23.71	22.5	2.5	
100	256QAM	1	1	18.64	18.64	18.64	20.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.03	24.07	23.99	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.02	23.99	24.11	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.12	24.02	24.04	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.08	24.04	23.99	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.06	23.98	24.07	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.99	24.06	24.08	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.10	24.08	24.05	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.05	24.02	24.10	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.03	24.05	24.05	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.11	24.06	23.99	25.0	0.0	



**Part270\_n77 HPUE\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	23.19	23.20	23.19	25.0	0.0
100	PI2 BPSK	1	137	23.20	23.21	23.21		
100	PI2 BPSK	1	271	23.31	23.40	23.32		
100	PI2 BPSK	135	0	23.17	23.22	23.19	24.5	0.5
100	PI2 BPSK	135	69	23.31	23.34	23.22	25.0	0.0
100	PI2 BPSK	135	135	23.20	23.34	23.22	24.5	0.5
100	PI2 BPSK	270	0	23.23	23.38	23.21	25.0	0.0
100	QPSK	1	1	23.25	23.41	23.37		
100	QPSK	1	137	23.22	23.38	23.21		
100	QPSK	1	271	23.34	23.35	23.22	25.0	0.0
100	QPSK	135	0	22.60	22.71	22.70	24.0	1.0
100	QPSK	135	69	23.23	23.33	23.33	25.0	0.0
100	QPSK	135	135	22.72	22.81	22.70	24.0	1.0
100	QPSK	270	0	22.71	22.82	22.70	24.0	1.0
100	16QAM	1	1	22.67	22.71	22.61	24.0	1.0
100	16QAM	1	1	21.86	21.98	21.42	22.5	2.5
100	256QAM	1	1	19.25	19.36	19.27	20.5	4.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	23.25	23.35	23.24	25.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	3740.01	3840	3839.99	25.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.35	23.34	23.27	25.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.02	23.40	23.49.98	25.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	23.25	23.31	23.24	25.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	23.22	23.27	23.24	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.34	23.40	23.23	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.25	23.33	23.30	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.32	23.37	23.25	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.34	23.27	23.25	25.0	0.0

**Part27Q\_n77\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	14.08	14.20	14.20	15.5	0.0
100	PI2 BPSK	1	137	14.20	14.30	14.20		
100	PI2 BPSK	1	271	14.35	14.35	14.35		
100	PI2 BPSK	135	0	14.34	14.34	14.34	15.5	0.0
100	PI2 BPSK	135	69	14.32	14.32	14.32	15.5	0.0
100	PI2 BPSK	135	135	14.28	14.28	14.28	15.5	0.0
100	PI2 BPSK	270	0	14.30	14.30	14.30	15.5	0.0
100	QPSK	1	1	14.27	14.47	14.37	15.5	0.0
100	QPSK	1	137	14.29	14.29	14.29		
100	QPSK	1	271	14.29	14.29	14.29		
100	QPSK	135	0	14.30	14.30	14.30	15.5	0.0
100	QPSK	135	69	14.41	14.41	14.41	15.5	0.0
100	QPSK	135	135	14.27	14.27	14.27	15.5	0.0
100	QPSK	270	0	14.34	14.34	14.34	15.5	0.0
100	16QAM	1	1	14.30	14.30	14.30	15.5	0.0
100	16QAM	1	1	14.28	14.28	14.28	15.5	0.0
100	256QAM	1	1	14.28	14.28	14.28	15.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	14.20	14.22	14.20	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.25	14.25	14.25	15.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	14.20	14.20	14.24	15.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	14.20	14.24	14.20	15.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.23	14.26	14.28	15.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	14.33	14.21	14.31	15.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	14.29	14.21	14.19	15.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	14.19	14.20	14.19	15.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	14.27	14.19	14.31	15.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	14.20	14.22	14.30	15.5	0.0

**Part270\_n77\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	14.12	14.16	14.07	15.5	0.0
100	PI2 BPSK	1	137	13.96	14.19	14.12		
100	PI2 BPSK	1	271	14.06	14.21	14.12		
100	PI2 BPSK	135	0	14.05	14.26	14.17	15.5	0.0
100	PI2 BPSK	135	69	14.08	14.19	14.19	15.5	0.0
100	PI2 BPSK	135	135	13.98	14.20	14.10	15.5	0.0
100	PI2 BPSK	270	0	14.03	14.15	14.07	15.5	0.0
100	QPSK	1	1	14.12	14.23	14.15		
100	QPSK	1	137	13.99	14.18	14.16		
100	QPSK	1	271	14.01	14.16	14.08	15.5	0.0
100	QPSK	135	0	13.95	14.21	14.08	15.5	0.0
100	QPSK	135	69	14.05	14.23	14.20	15.5	0.0
100	QPSK	135	135	13.99	14.15	14.10	15.5	0.0
100	QPSK	270	0	14.08	14.18	14.08	15.5	0.0
100	16QAM	1	1	14.03	14.17	14.12	15.5	0.0
100	16QAM	1	1	14.01	14.22	14.15	15.5	0.0
100	256QAM	1	1	14.03	14.28	14.12	15.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	14.07	14.24	14.09	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.00	14.11	14.06	15.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	13.97	14.13	14.15	15.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	13.92	14.02	13.94.98	15.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.04	14.17	14.16	15.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	13.95	14.15	14.18	15.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	13.94	14.24	14.19	15.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	14.00	14.23	14.09	15.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	14.01	14.20	14.16	15.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	13.97	14.12	14.19	15.5	0.0



### Part27Q\_n77 HPUE\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	14.08			15.5	0.0
100	PI2 BPSK	1	197	14.20				
100	PI2 BPSK	1	271	14.35				
100	PI2 BPSK	135	0	14.34			15.5	0.0
100	PI2 BPSK	135	69	14.32			15.5	0.0
100	PI2 BPSK	135	135	14.28			15.5	0.0
100	PI2 BPSK	270	0	14.33				
100	QPSK	1	1	14.47				
100	QPSK	1	197	14.29			15.5	0.0
100	QPSK	1	271	14.29				
100	QPSK	135	0	14.30				
100	QPSK	135	69	14.41			15.5	0.0
100	QPSK	135	135	14.32			15.5	0.0
100	QPSK	270	0	14.34				
100	QPSK	270	0	14.30				
100	16QAM	1	1	14.20			15.5	0.0
100	16QAM	1	1	14.28			15.5	0.0
100	256QAM	1	1	14.26			15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.23	14.22	14.29	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.25	14.26	14.28	15.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	14.20	14.20	14.24	15.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	14.25	14.24	14.20	15.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.23	14.26	14.28	15.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	14.33	14.21	14.31	15.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	14.29	14.21	14.19	15.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	14.19	14.20	14.19	15.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	14.27	14.19	14.21	15.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	14.20	14.22	14.30	15.5	0.0

### Part27O\_n77 HPUE\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	14.12	14.16	14.07	15.5	0.0
100	PI2 BPSK	1	197	13.99	14.19	14.12		
100	PI2 BPSK	1	271	14.06	14.21	14.12		
100	PI2 BPSK	135	0	14.05	14.26	14.17	15.5	0.0
100	PI2 BPSK	135	69	14.08	14.19	14.19	15.5	0.0
100	PI2 BPSK	135	135	13.98	14.20	14.10	15.5	0.0
100	PI2 BPSK	270	0	14.03	14.15	14.07		
100	QPSK	1	1	14.12	14.29	14.18		
100	QPSK	1	197	13.99	14.18	14.16	15.5	0.0
100	QPSK	1	271	14.01	14.16	14.08		
100	QPSK	135	0	13.95	14.21	14.08		
100	QPSK	135	69	14.05	14.25	14.20	15.5	0.0
100	QPSK	135	135	13.99	14.15	14.10	15.5	0.0
100	QPSK	270	0	14.08	14.15	14.08		
100	16QAM	1	1	14.03	14.17	14.12		
100	16QAM	1	1	14.01	14.26	14.18	15.5	0.0
100	256QAM	1	1	14.03	14.28	14.12	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.07	14.24	14.09	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.07	14.24	14.09	15.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	13.97	14.13	14.15	15.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	14.07	14.22	14.14	15.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.04	14.17	14.16	15.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	13.90	14.15	14.18	15.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	13.94	14.24	14.19	15.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	14.00	14.23	14.09	15.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	14.01	14.20	14.16	15.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	13.97	14.12	14.19	15.5	0.0

### Part27Q\_n78\_Ant 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	15.06			17.5	0.0
100	PI2 BPSK	1	197	15.08				
100	PI2 BPSK	1	271	15.77				
100	PI2 BPSK	135	0	15.80			17.5	0.0
100	PI2 BPSK	135	69	15.79			17.5	0.0
100	PI2 BPSK	135	135	15.70			17.5	0.0
100	PI2 BPSK	270	0	15.71				
100	QPSK	1	1	15.57				
100	QPSK	1	197	15.68			17.5	0.0
100	QPSK	1	271	15.77				
100	QPSK	135	0	15.85				
100	QPSK	135	69	15.86			17.5	0.0
100	QPSK	135	135	15.69			17.5	0.0
100	QPSK	270	0	15.81				
100	16QAM	1	1	15.71				
100	16QAM	1	1	15.78			17.5	0.0
100	256QAM	1	1	15.76			17.5	0.0
100	256QAM	1	1	15.70			17.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.09	15.10	15.21	17.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.71	15.77	15.72	17.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	15.71	15.78	15.80	17.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	15.69	15.78	15.79	17.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	15.67	15.72	15.66	17.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	15.69	15.73	15.75	17.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	15.74	15.79	15.67	17.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	15.73	15.60	15.70	17.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	15.76	15.78	15.71	17.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.79	15.68	15.77	17.5	0.0



Part27Q_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60000									
3750									
100	PI2 BPSK	1	1	18.33			17.5	0.0	
100	PI2 BPSK	1	137	18.33					
100	PI2 BPSK	1	271	18.20					
100	PI2 BPSK	136	0	18.20			17.5	0.0	
100	PI2 BPSK	136	69	18.17			17.5	0.0	
100	PI2 BPSK	136	138	18.17			17.5	0.0	
100	PI2 BPSK	270	0	18.17			17.5	0.0	
100	QPSK	1	1	18.33			17.5	0.0	
100	QPSK	1	137	18.20					
100	QPSK	1	271	18.20					
100	QPSK	136	0	18.17			17.5	0.0	
100	QPSK	136	69	18.33			17.5	0.0	
100	QPSK	136	138	18.21			17.5	0.0	
100	QPSK	270	0	18.20			17.5	0.0	
100	16QAM	1	1	18.22			17.5	0.0	
100	16QAM	1	1	18.12			17.5	0.0	
100	256QAM	1	1	18.12			17.5	0.0	
Channel									
Frequency (MHz)									
649668 650000 650332									
3745.02 3750 3754.98									
90	QPSK	1	1	18.32	18.23	18.24	17.5	0.0	
Channel									
Frequency (MHz)									
649334 650000 650666									
3740.01 3750 3760.99									
80	QPSK	1	1	18.10	18.21	18.19	17.5	0.0	
Channel									
Frequency (MHz)									
649000 650000 651000									
3735 3750 3765									
70	QPSK	1	1	18.12	18.19	18.15	17.5	0.0	
Channel									
Frequency (MHz)									
648702 650000 650700									
3730.02 3750 3769.98									
60	QPSK	1	1	18.20	18.20	18.24	17.5	0.0	
Channel									
Frequency (MHz)									
648334 650000 651000									
3725.01 3750 3774.99									
50	QPSK	1	1	18.12	18.18	18.14	17.5	0.0	
Channel									
Frequency (MHz)									
648000 650000 652000									
3720 3750 3780									
40	QPSK	1	1	18.24	18.23	18.21	17.5	0.0	
Channel									
Frequency (MHz)									
647668 650000 652332									
3715.02 3750 3784.98									
30	QPSK	1	1	18.24	18.21	18.23	17.5	0.0	
Channel									
Frequency (MHz)									
647334 650000 652666									
3710.01 3750 3789.99									
20	QPSK	1	1	18.17	18.02	18.18	17.5	0.0	
Channel									
Frequency (MHz)									
647000 650000 653000									
3705 3750 3795									
15	QPSK	1	1	18.24	18.24	18.12	17.5	0.0	
Channel									
Frequency (MHz)									
646700 650000 653300									
3700 3750 3795									
10	QPSK	1	1	18.20	18.11	18.24	17.5	0.0	

Part27Q_n78 HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
6399.98									
100	PI2 BPSK	1	1	18.96			17.5	0.0	
100	PI2 BPSK	1	137	18.93					
100	PI2 BPSK	1	271	18.77					
100	PI2 BPSK	136	0	18.80			17.5	0.0	
100	PI2 BPSK	136	69	18.79			17.5	0.0	
100	PI2 BPSK	136	138	18.70			17.5	0.0	
100	PI2 BPSK	270	0	18.71			17.5	0.0	
100	QPSK	1	1	18.97			17.5	0.0	
100	QPSK	1	137	18.86					
100	QPSK	1	271	18.77					
100	QPSK	136	0	18.85			17.5	0.0	
100	QPSK	136	69	18.86			17.5	0.0	
100	QPSK	136	138	18.86			17.5	0.0	
100	QPSK	270	0	18.81			17.5	0.0	
100	16QAM	1	1	18.71			17.5	0.0	
100	16QAM	1	1	18.78			17.5	0.0	
100	256QAM	1	1	18.70			17.5	0.0	
Channel									
Frequency (MHz)									
639000 639332 639666									
3495 3499.98 3504.99									
90	QPSK	1	1	18.99	18.93	18.94	17.5	0.0	
Channel									
Frequency (MHz)									
638668 639332 639000									
3490.02 3499.98 3500									
80	QPSK	1	1	18.71	18.77	18.72	17.5	0.0	
Channel									
Frequency (MHz)									
638334 639332 638332									
3485.01 3499.98 3514.98									
70	QPSK	1	1	18.71	18.78	18.80	17.5	0.0	
Channel									
Frequency (MHz)									
638000 639332 638666									
3480 3499.98 3519.99									
60	QPSK	1	1	18.69	18.78	18.79	17.5	0.0	
Channel									
Frequency (MHz)									
637668 639332 638000									
3475.00 3499.98 3505									
50	QPSK	1	1	18.67	18.72	18.66	17.5	0.0	
Channel									
Frequency (MHz)									
637334 639332 638332									
3470.01 3499.98 3524.99									
40	QPSK	1	1	18.69	18.73	18.75	17.5	0.0	
Channel									
Frequency (MHz)									
637000 639332 638666									
3465.01 3499.98 3529.98									
30	QPSK	1	1	18.74	18.79	18.67	17.5	0.0	
Channel									
Frequency (MHz)									
636668 639332 638000									
3460.02 3499.98 3540									
20	QPSK	1	1	18.73	18.69	18.70	17.5	0.0	
Channel									
Frequency (MHz)									
636334 639332 638332									
3455.01 3499.98 3544.98									
15	QPSK	1	1	18.76	18.76	18.71	17.5	0.0	
Channel									
Frequency (MHz)									
636000 639332 638666									
3450.01 3499.98 3549.98									
10	QPSK	1	1	18.79	18.68	18.77	17.5	0.0	



Part270_n78 HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60000									
3750									
100	PI2 BPSK	1	1	18.33			17.5	0.0	
100	PI2 BPSK	1	137	18.33					
100	PI2 BPSK	1	271	18.20					
100	PI2 BPSK	136	0	18.20			17.5	0.0	
100	PI2 BPSK	136	69	18.17			17.5	0.0	
100	PI2 BPSK	136	138	18.17			17.5	0.0	
100	PI2 BPSK	270	0	18.17					
100	QPSK	1	1	18.33			17.5	0.0	
100	QPSK	1	137	18.20					
100	QPSK	1	271	18.20					
100	QPSK	136	0	18.17			17.5	0.0	
100	QPSK	136	69	18.33			17.5	0.0	
100	QPSK	136	138	18.21			17.5	0.0	
100	QPSK	270	0	18.20			17.5	0.0	
100	16QAM	1	1	18.22			17.5	0.0	
100	16QAM	1	1	18.12			17.5	0.0	
100	256QAM	1	1	18.12			17.5	0.0	
Channel									
Frequency (MHz)									
649668 650000 650332									
3745.02 3750 3754.98									
90	QPSK	1	1	18.32	18.23	18.24	17.5	0.0	
Channel									
Frequency (MHz)									
649334 650000 650666									
3740.01 3750 3759.99									
80	QPSK	1	1	18.10	18.21	18.19	17.5	0.0	
Channel									
Frequency (MHz)									
649000 650000 651000									
3735 3750 3765									
70	QPSK	1	1	18.12	18.19	18.15	17.5	0.0	
Channel									
Frequency (MHz)									
648702 650000 650700									
3730.02 3750 3769.98									
60	QPSK	1	1	18.20	18.20	18.24	17.5	0.0	
Channel									
Frequency (MHz)									
648334 650000 651000									
3725.01 3750 3774.99									
50	QPSK	1	1	18.12	18.18	18.14	17.5	0.0	
Channel									
Frequency (MHz)									
648000 650000 652000									
3720 3750 3780									
40	QPSK	1	1	18.24	18.23	18.21	17.5	0.0	
Channel									
Frequency (MHz)									
647668 650000 652332									
3715.02 3750 3784.98									
30	QPSK	1	1	18.24	18.21	18.23	17.5	0.0	
Channel									
Frequency (MHz)									
647334 650000 652666									
3710.01 3750 3789.99									
20	QPSK	1	1	18.17	18.02	18.18	17.5	0.0	
Channel									
Frequency (MHz)									
647000 650000 653000									
3705.02 3750 3795.00									
15	QPSK	1	1	18.24	18.24	18.12	17.5	0.0	
Channel									
Frequency (MHz)									
646700 650000 653300									
3700 3750 3795									
10	QPSK	1	1	18.20	18.11	18.24	17.5	0.0	

Part27Q_n78_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3499.98									
100	PI2 BPSK	1	1	22.78			24.0	0.0	
100	PI2 BPSK	1	137	22.80					
100	PI2 BPSK	1	271	22.84					
100	PI2 BPSK	136	0	22.79			24.0	0.0	
100	PI2 BPSK	136	69	22.90			24.0	0.0	
100	PI2 BPSK	136	138	22.91			24.0	0.0	
100	PI2 BPSK	270	0	22.79					
100	QPSK	1	1	22.93			24.0	0.0	
100	QPSK	1	137	22.88					
100	QPSK	1	271	22.90					
100	QPSK	136	0	22.88			24.0	0.0	
100	QPSK	136	69	22.91			24.0	0.0	
100	QPSK	136	138	22.86			24.0	0.0	
100	QPSK	270	0	22.80			24.0	0.0	
100	16QAM	1	1	22.81			24.0	0.0	
100	16QAM	1	1	22.81			24.0	0.0	
100	256QAM	1	1	22.96			23.5	0.0	
Channel									
Frequency (MHz)									
633000 633332 633666									
3495 3499.98 3504.99									
90	QPSK	1	1	22.85	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
632668 633332 634000									
3490.02 3499.98 3500									
80	QPSK	1	1	22.89	22.80	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
632334 633332 634332									
3485.01 3499.98 3514.88									
70	QPSK	1	1	22.89	22.92	22.86	24.0	0.0	
Channel									
Frequency (MHz)									
632000 633332 634666									
3480 3499.98 3519.99									
60	QPSK	1	1	22.85	22.90	22.79	24.0	0.0	
Channel									
Frequency (MHz)									
631668 633332 635000									
3475.00 3499.98 3525.00									
50	QPSK	1	1	22.88	22.92	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
631334 633332 635332									
3470.01 3499.98 3529.98									
40	QPSK	1	1	22.86	22.78	22.89	24.0	0.0	
Channel									
Frequency (MHz)									
631000 633332 635666									
3465.02 3499.98 3534.99									
30	QPSK	1	1	22.83	22.90	22.91	24.0	0.0	
Channel									
Frequency (MHz)									
630668 633332 636000									
3460.02 3499.98 3540									
20	QPSK	1	1	22.79	22.83	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
630300 633332 636366									
3455.01 3499.98 3545.99									
15	QPSK	1	1	22.82	22.90	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
630000 633332 636700									
3450.01 3499.98 3549.98									
10	QPSK	1	1	22.81	22.85	22.79	24.0	0.0	



Part270_n78_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3750									
100	PI2 BPSK	1	1	23.26					
100	PI2 BPSK	1	137	23.29			24.0	0.0	
100	PI2 BPSK	1	271	23.28					
100	PI2 BPSK	136	0	23.29			24.0	0.0	
100	PI2 BPSK	136	69	23.22			24.0	0.0	
100	PI2 BPSK	136	138	23.25					
100	PI2 BPSK	270	0	23.24			24.0	0.0	
100	QPSK	1	1	23.31					
100	QPSK	1	137	23.27			24.0	0.0	
100	QPSK	1	271	23.20					
100	QPSK	136	0	23.22					
100	QPSK	136	69	23.28			24.0	0.0	
100	QPSK	136	138	23.16					
100	QPSK	270	0	23.25			24.0	0.0	
100	16QAM	1	1	23.16			24.0	0.0	
100	16QAM	1	1	23.24			24.0	0.0	
100	256QAM	1	1	22.92			23.5	0.5	
Channel									
Frequency (MHz)									
649668 650000 650332									
				3749.02	3750	3754.98	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	23.17	23.23	23.29	24.0	0.0	
Channel									
Frequency (MHz)									
649334 650000 650666									
				3740.01	3750	3760.99	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	23.20	23.20	23.19	24.0	0.0	
Channel									
Frequency (MHz)									
649000 650000 651000									
				3735	3750	3765	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	23.16	23.18	23.25	24.0	0.0	
Channel									
Frequency (MHz)									
3750.02 3750 3769.98									
				3750.02	3750	3769.98	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	23.24	23.17	23.24	24.0	0.0	
Channel									
Frequency (MHz)									
648334 650000 651666									
				3723	3750	3766	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	23.30	23.24	23.24	24.0	0.0	
Channel									
Frequency (MHz)									
648000 650000 652000									
				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	23.28	23.25	23.18	24.0	0.0	
Channel									
Frequency (MHz)									
647668 650000 652332									
				3719.02	3750	3764.98	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	23.30	23.16	23.19	24.0	0.0	
Channel									
Frequency (MHz)									
647334 650000 652666									
				3710.01	3750	3769.99	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	23.25	23.27	23.21	24.0	0.0	
Channel									
Frequency (MHz)									
647000 650000 653000									
				3707.52	3750	3762.48	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	23.19	23.19	23.20	24.0	0.0	
Channel									
Frequency (MHz)									
3750 3750 3750									
				3750	3750	3750	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	23.16	23.26	23.16	24.0	0.0	

Part27Q_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3499.98									
100	PI2 BPSK	1	1	22.78					
100	PI2 BPSK	1	137	22.89			24.0	0.0	
100	PI2 BPSK	1	271	22.84					
100	PI2 BPSK	136	0	22.79			24.0	0.0	
100	PI2 BPSK	136	69	22.90			24.0	0.0	
100	PI2 BPSK	136	138	22.91					
100	PI2 BPSK	270	0	22.79			24.0	0.0	
100	QPSK	1	1	22.93					
100	QPSK	1	137	22.86			24.0	0.0	
100	QPSK	1	271	22.90					
100	QPSK	136	0	22.89					
100	QPSK	136	69	22.91			24.0	0.0	
100	QPSK	136	138	22.86					
100	QPSK	270	0	22.80			24.0	0.0	
100	16QAM	1	1	22.81			24.0	0.0	
100	16QAM	1	1	22.81			24.0	0.0	
100	256QAM	1	1	22.56			23.5	0.5	
Channel									
Frequency (MHz)									
633000 633332 633666									
				3495	3499.98	3504.99	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	22.85	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
632668 633332 634000									
				3490.02	3499.98	3500	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	22.89	22.89	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
632334 633332 634332									
				3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	22.89	22.92	22.86	24.0	0.0	
Channel									
Frequency (MHz)									
632000 633332 634666									
				3480	3499.98	3519.99	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	22.85	22.90	22.79	24.0	0.0	
Channel									
Frequency (MHz)									
631668 633332 635000									
				3475.00	3499.98	3505	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	22.88	22.92	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
631334 633332 635332									
				3470.01	3499.98	3509.98	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	22.86	22.78	22.89	24.0	0.0	
Channel									
Frequency (MHz)									
631000 633332 635666									
				3465	3499.98	3514.99	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	22.83	22.90	22.91	24.0	0.0	
Channel									
Frequency (MHz)									
630668 633332 636000									
				3460.02	3499.98	3500	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	22.79	22.83	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
630334 633332 636332									
				3455.01	3499.98	3504.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	22.82	22.90	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
3485.01 3499.98 3504.98									
				3485.01	3499.98	3504.98	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	22.81	22.85	22.79	24.0	0.0	



**Part270\_n78 HPUE\_Ant 7**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	23.26			24.0	0.0
100	PI2 BPSK	1	137	23.29				
100	PI2 BPSK	1	271	23.28				
100	PI2 BPSK	135	0	23.29			24.0	0.0
100	PI2 BPSK	135	69	23.22			24.0	0.0
100	PI2 BPSK	135	135	23.25			24.0	0.0
100	PI2 BPSK	270	0	23.24				
100	QPSK	1	1	23.31				
100	QPSK	1	137	23.27			24.0	0.0
100	QPSK	1	271	23.20				
100	QPSK	135	0	23.22				
100	QPSK	135	69	23.28			24.0	0.0
100	QPSK	135	135	23.16			24.0	0.0
100	QPSK	270	0	23.25				
100	16QAM	1	1	23.16				
100	16QAM	1	1	23.24			24.0	0.0
100	256QAM	1	1	23.30			23.5	0.5
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.17	23.23	23.29	24.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.17	23.23	23.29	24.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.16	23.18	23.26	24.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.02	23.02	23.02	24.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	23.30	23.24	23.24	24.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	23.28	23.25	23.18	24.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.30	23.19	23.16	24.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.23	23.27	23.27	24.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.19	23.19	23.20	24.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.16	23.26	23.18	24.0	0.0

**Part270\_n78\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	21.99			23.0	0.0
100	PI2 BPSK	1	137	22.01				
100	PI2 BPSK	1	271	21.99				
100	PI2 BPSK	135	0	21.99			23.0	0.0
100	PI2 BPSK	135	69	22.01			23.0	0.0
100	PI2 BPSK	135	135	21.92			23.0	0.0
100	PI2 BPSK	270	0	22.02				
100	QPSK	1	1	22.15				
100	QPSK	1	137	21.98			23.0	0.0
100	QPSK	1	271	21.97				
100	QPSK	135	0	21.96				
100	QPSK	135	69	22.08			23.0	0.0
100	QPSK	135	135	22.03			23.0	0.0
100	QPSK	270	0	21.97				
100	16QAM	1	1	21.87				
100	16QAM	1	1	21.96			23.0	0.0
100	256QAM	1	1	21.97			23.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	21.89	21.95	21.93	23.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	21.83	21.84	21.82	23.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.89	21.96	22.00	23.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	21.98	21.98	21.98	23.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	21.93	22.00	21.98	23.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	21.88	21.85	22.02	23.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.88	21.82	21.98	23.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	21.81	22.02	21.83	23.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	21.83	21.83	21.83	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.85	21.84	21.83	23.0	0.0

**Part270\_n78\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	21.91			23.0	0.0
100	PI2 BPSK	1	137	21.93				
100	PI2 BPSK	1	271	21.96				
100	PI2 BPSK	135	0	21.92			23.0	0.0
100	PI2 BPSK	135	69	21.96			23.0	0.0
100	PI2 BPSK	135	135	21.83			23.0	0.0
100	PI2 BPSK	270	0	21.94				
100	QPSK	1	1	22.11				
100	QPSK	1	137	21.97			23.0	0.0
100	QPSK	1	271	21.96				
100	QPSK	135	0	21.89				
100	QPSK	135	69	22.05			23.0	0.0
100	QPSK	135	135	21.95			23.0	0.0
100	QPSK	270	0	21.90				
100	16QAM	1	1	21.86				
100	16QAM	1	1	21.86			23.0	0.0
100	256QAM	1	1	22.00			23.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	21.85	21.95	21.93	23.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	21.85	21.89	22.01	23.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.90	22.03	21.96	23.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	21.91	21.99	21.97	23.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	21.94	21.93	21.94	23.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	21.94	22.01	21.95	23.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.94	21.89	21.93	23.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	21.85	21.93	22.02	23.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	21.87	22.03	21.83	23.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.93	22.04	21.89	23.0	0.0



**Part27Q\_n78 HPUE\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
	Channel				3499.98			
	Frequency (MHz)				23.83			
100	P12 BPSK	1	1		24.01		25.0	0.0
100	P12 BPSK	1	271		23.98		25.0	0.0
100	P12 BPSK	135	0		23.92		25.0	0.0
100	P12 BPSK	135	69		23.97		25.0	0.0
100	P12 BPSK	270	0		23.92		25.0	0.0
100	QPSK	1	1		24.15			
100	QPSK	1	137		24.04		25.0	0.0
100	QPSK	1	271		24.13		25.0	0.0
100	QPSK	135	0		23.88		25.0	0.0
100	QPSK	135	69		23.96		25.0	0.0
100	QPSK	135	135		23.91		25.0	0.0
100	QPSK	270	0		23.91		25.0	0.0
100	16QAM	1	1		23.98		25.0	0.0
100	16QAM	1	1		23.99		25.0	0.0
100	16QAM	1	1		22.96		23.5	1.5
	Channel			639000	633332	639666	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3495	3499.98	3504.99	25.0	0.0
90	QPSK	1	1	23.74	23.80	23.85	25.0	0.0
	Channel			632668	633332	634000	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3490.02	3499.98	3510	25.0	0.0
80	QPSK	1	1	23.72	23.74	23.76	25.0	0.0
	Channel			632334	633332	634332	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3485.01	3499.98	3514.98	25.0	0.0
70	QPSK	1	1	23.74	23.83	23.87	25.0	0.0
	Channel			632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3480	3499.98	3519.99	25.0	0.0
60	QPSK	1	1	23.82	23.83	23.74	25.0	0.0
	Channel			631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3475.02	3499.98	3505	25.0	0.0
50	QPSK	1	1	23.81	23.77	23.76	25.0	0.0
	Channel			631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3470	3499.98	3504.99	25.0	0.0
40	QPSK	1	1	23.77	23.82	23.81	25.0	0.0
	Channel			631000	633332	635666	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3465.01	3499.98	3503.98	25.0	0.0
30	QPSK	1	1	23.68	23.72	23.87	25.0	0.0
	Channel			630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3460.02	3499.98	3500	25.0	0.0
20	QPSK	1	1	23.78	23.83	23.74	25.0	0.0
	Channel			630300	633332	636366	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3457.5	3499.98	3502.49	25.0	0.0
15	QPSK	1	1	23.74	23.73	23.74	25.0	0.0
	Channel			630000	633332	636700	Tune-up limit (dBm)	MPR (dB)
	Frequency (MHz)			3455.01	3499.98	3504.98	25.0	0.0
10	QPSK	1	1	23.80	23.74	23.86	25.0	0.0



**Part270\_n78\_HPUe\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	PI2 BPSK	1	1	23.93			25.0	0.0
100	PI2 BPSK	1	137	24.10				
100	PI2 BPSK	1	271	24.07				
100	PI2 BPSK	135	0	23.95			25.0	0.0
100	PI2 BPSK	135	69	23.94			25.0	0.0
100	PI2 BPSK	135	135	23.95			25.0	0.0
100	PI2 BPSK	270	0	23.97			25.0	0.0
100	QPSK	1	1	24.15			25.0	0.0
100	QPSK	1	137	24.12				
100	QPSK	1	271	24.15				
100	QPSK	135	0	23.95				
100	QPSK	135	69	23.95			25.0	0.0
100	QPSK	135	135	23.95				
100	QPSK	270	0	23.94			25.0	0.0
100	16QAM	1	1	24.01			25.0	0.0
100	16QAM	1	1	24.02			25.0	0.0
100	256QAM	1	1	22.68			23.5	1.5
Channel								
Frequency (MHz)								
649668 650000 650332								
90	QPSK	1	1	23.50	23.70	23.85	25.0	0.0
Channel								
Frequency (MHz)								
3750								
80	QPSK	1	1	23.70	23.69	23.85	25.0	0.0
Channel								
Frequency (MHz)								
3750								
70	QPSK	1	1	23.80	23.74	23.87	25.0	0.0
Channel								
Frequency (MHz)								
3750								
60	QPSK	1	1	23.68	23.78	23.76	25.0	0.0
Channel								
Frequency (MHz)								
648334 650000 651666								
50	QPSK	1	1	23.78	23.71	23.81	25.0	0.0
Channel								
Frequency (MHz)								
648000 650000 652000								
40	QPSK	1	1	23.72	23.83	23.87	25.0	0.0
Channel								
Frequency (MHz)								
647668 650000 652332								
30	QPSK	1	1	23.50	23.70	23.85	25.0	0.0
Channel								
Frequency (MHz)								
647334 650000 652666								
20	QPSK	1	1	23.01	23.70	23.89	25.0	0.0
Channel								
Frequency (MHz)								
647000 650000 653000								
15	QPSK	1	1	23.71	23.69	23.86	25.0	0.0
Channel								
Frequency (MHz)								
3750								
10	QPSK	1	1	23.80	23.70	23.77	25.0	0.0

**Part27Q\_n78\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
633332								
100	PI2 BPSK	1	1	14.71			15.5	0.0
100	PI2 BPSK	1	137	14.66				
100	PI2 BPSK	1	271	14.63				
100	PI2 BPSK	135	0	14.63			15.5	0.0
100	PI2 BPSK	135	69	14.71			15.5	0.0
100	PI2 BPSK	135	135	14.75			15.5	0.0
100	PI2 BPSK	270	0	14.66			15.5	0.0
100	QPSK	1	1	14.78				
100	QPSK	1	137	14.67			15.5	0.0
100	QPSK	1	271	14.68				
100	QPSK	135	0	14.68				
100	QPSK	135	69	14.73			15.5	0.0
100	QPSK	135	135	14.68				
100	QPSK	270	0	14.70			15.5	0.0
100	16QAM	1	1	14.67			15.5	0.0
100	16QAM	1	1	14.65			15.5	0.0
100	256QAM	1	1	14.73			15.5	0.0
Channel								
Frequency (MHz)								
633000 633332 633666								
90	QPSK	1	1	14.49	14.60	14.63	15.5	0.0
Channel								
Frequency (MHz)								
3499.02 3499.98 3510								
80	QPSK	1	1	14.67	14.60	14.60	15.5	0.0
Channel								
Frequency (MHz)								
3486.01 3489.98 3514.98								
70	QPSK	1	1	14.67	14.62	14.67	15.5	0.0
Channel								
Frequency (MHz)								
3480 3489.98 3519.99								
60	QPSK	1	1	14.59	14.56	14.63	15.5	0.0
Channel								
Frequency (MHz)								
631668 633332 635000								
50	QPSK	1	1	14.68	14.63	14.58	15.5	0.0
Channel								
Frequency (MHz)								
631334 633332 635332								
40	QPSK	1	1	14.67	14.69	14.55	15.5	0.0
Channel								
Frequency (MHz)								
631000 633332 635666								
30	QPSK	1	1	14.65	14.67	14.60	15.5	0.0
Channel								
Frequency (MHz)								
630668 633332 636000								
20	QPSK	1	1	14.62	14.60	14.60	15.5	0.0
Channel								
Frequency (MHz)								
3495.01 3499.98 3529.99								
15	QPSK	1	1	14.65	14.67	14.62	15.5	0.0
Channel								
Frequency (MHz)								
3492.01 3499.98 3544.98								
10	QPSK	1	1	14.63	14.60	14.68	15.5	0.0

**Part270\_n78\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	PI2 BPSK	1	1	14.82			15.5	0.0
100	PI2 BPSK	1	137	14.75				
100	PI2 BPSK	1	271	14.78				
100	PI2 BPSK	135	0	14.76			15.5	0.0
100	PI2 BPSK	135	69	14.86			15.5	0.0
100	PI2 BPSK	135	135	14.72			15.5	0.0
100	PI2 BPSK	270	0	14.78			15.5	0.0
100	QPSK	1	1	14.82				
100	QPSK	1	137	14.76			15.5	0.0
100	QPSK	1	271	14.85				
100	QPSK	135	0	14.88				
100	QPSK	135	69	14.78			15.5	0.0
100	QPSK	135	135	14.75				
100	QPSK	270	0	14.71			15.5	0.0
100	16QAM	1	1	14.74			15.5	0.0
100	16QAM	1	1	14.67			15.5	0.0
100	256QAM	1	1	14.71			15.5	0.0
Channel								
Frequency (MHz)								
649668 650000 650332								
90	QPSK	1	1	14.56	14.70	14.63	15.5	0.0
Channel								
Frequency (MHz)								
3750								
80	QPSK	1	1	14.62	14.68	14.70	15.5	0.0
Channel								
Frequency (MHz)								
3735 3750 3765								
70	QPSK	1	1	14.58	14.58	14.66	15.5	0.0
Channel								
Frequency (MHz)								
3730.02 3750 3769.98								
60	QPSK	1	1	14.58	14.60	14.70	15.5	0.0
Channel								
Frequency (MHz)								
648334 650000 651666								
50	QPSK	1	1	14.69	14.60	14.64	15.5	0.0
Channel								
Frequency (MHz)								
648000 650000 652000								
40	QPSK	1	1	14.64	14.65	14.65	15.5	0.0
Channel								
Frequency (MHz)								
647668 650000 652332								
30	QPSK	1	1	14.70	14.66	14.69	15.5	0.0
Channel								
Frequency (MHz)								
647334 650000 652666								
20	QPSK	1	1	14.65	14.61	14.60	15.5	0.0
Channel								
Frequency (MHz)								
647000 650000 653000								
15	QPSK	1	1	14.57	14.57	14.60	15.5	0.0
Channel								
Frequency (MHz)								
3705 3750 3795								
10	QPSK	1	1	14.65	14.60	14.65	15.5	0.0



Part27Q\_n78 HPUE\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				63332				
Frequency (MHz)				3499.98				
100	Pl2 BPSK	1	1	14.71			15.5	0.0
100	Pl2 BPSK	1	127	14.66				
100	Pl2 BPSK	1	271	14.63				
100	Pl2 BPSK	135	0	14.63			15.5	0.0
100	Pl2 BPSK	135	89	14.71			15.5	0.0
100	Pl2 BPSK	135	135	14.76				
100	Pl2 BPSK	270	0	14.66			15.5	0.0
100	QPSK	1	1	14.78				
100	QPSK	1	127	14.67			15.5	0.0
100	QPSK	1	271	14.66				
100	QPSK	135	0	14.68				
100	QPSK	135	89	14.72			15.5	0.0
100	QPSK	135	135	14.68				
100	QPSK	270	0	14.70			15.5	0.0
100	16QAM	1	1	14.67			15.5	0.0
100	16QAM	1	1	14.66			15.5	0.0
100	16QAM	1	1	14.73			15.5	0.0
Channel				63300	63332	63368		
Frequency (MHz)				3495	3499.98	3504.98	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	14.65	14.65	14.63	15.5	0.0
Channel				63268	63332	63400		
Frequency (MHz)				3490.02	3499.98	3510	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	14.67	14.68	14.60	15.5	0.0
Channel				63234	63332	63432		
Frequency (MHz)				3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	14.67	14.62	14.57	15.5	0.0
Channel				63200	63332	63466		
Frequency (MHz)				3480	3499.98	3519.98	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	14.59	14.56	14.63	15.5	0.0
Channel				63168	63332	63500		
Frequency (MHz)				3475.02	3499.98	3505	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	14.68	14.63	14.56	15.5	0.0
Channel				63134	63332	63532		
Frequency (MHz)				3470.01	3499.98	3520.98	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	14.67	14.69	14.55	15.5	0.0
Channel				63100	63332	63566		
Frequency (MHz)				3465	3499.98	3524.97	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	14.65	14.67	14.60	15.5	0.0
Channel				63068	63332	63600		
Frequency (MHz)				3460.02	3499.98	3540	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	14.62	14.62	14.62	15.5	0.0
Channel				63030	63332	63638		
Frequency (MHz)				3457.5	3499.98	3542.49	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	14.60	14.67	14.69	15.5	0.0
Channel				63000	63332	63672		
Frequency (MHz)				3455.01	3499.98	3544.98	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	14.63	14.60	14.68	15.5	0.0



**Part270\_n78 HPUE\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				650000				
100	PI2 BPSK	1	1	14.62	3750			
100	PI2 BPSK	1	197	14.73			15.5	0.0
100	PI2 BPSK	1	271	14.78				
100	PI2 BPSK	135	0	14.76			15.5	0.0
100	PI2 BPSK	135	69	14.66			15.5	0.0
100	PI2 BPSK	135	138	14.72			15.5	0.0
100	PI2 BPSK	270	0	14.78				
100	QPSK	1	1	14.62				
100	QPSK	1	197	14.76			15.5	0.0
100	QPSK	1	271	14.65				
100	QPSK	135	0	14.68			15.5	0.0
100	QPSK	135	69	14.76			15.5	0.0
100	QPSK	135	138	14.75			15.5	0.0
100	QPSK	270	0	14.71			15.5	0.0
100	16QAM	1	1	14.74			15.5	0.0
100	16QAM	1	1	14.67			15.5	0.0
100	16QAM	1	1	14.71			15.5	0.0
Channel								
Frequency (MHz)				650000				
80	QPSK	1	1	14.66	14.70	14.65	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3740.01				
80	QPSK	1	1	14.62	14.68	14.70	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3735				
70	QPSK	1	1	14.58	14.58	14.66	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3730.02				
80	QPSK	1	1	14.58	14.60	14.70	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3724.01				
50	QPSK	1	1	14.69	14.60	14.64	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3720				
40	QPSK	1	1	14.64	14.65	14.65	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				647668				
30	QPSK	1	1	14.70	14.66	14.69	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3710.01				
20	QPSK	1	1	14.65	14.61	14.60	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3707.62				
15	QPSK	1	1	14.67	14.67	14.60	Tune-up limit (dBm)	MPR (dB)
Channel				650000				
Frequency (MHz)				3705				
10	QPSK	1	1	14.65	14.60	14.65	Tune-up limit (dBm)	MPR (dB)



Band 2_Ant 0										
EW (MHz)	Mode	RB (MHz)	RB Offset	Power Low Ch / Freq (MHz)	Power Mid Ch / Freq (MHz)	Power High Ch / Freq (MHz)	Turn-up (dB)	MFR (dB)		
Channel										
Frequency (MHz)										
20	OPRK	1	0	16.18	16.18	16.12	17.4	0		
20	OPRK	1	49	16.18	16.18	16.10				
20	OPRK	1	99	16.18	16.19	16.10				
20	OPRK	50	0	16.17	16.20	16.25				
20	OPRK	50	24	16.20	16.20	16.25				
20	OPRK	50	50	16.21	16.17	16.15				
20	OPRK	100	0	16.22	16.23	16.21				
20	ISQM	1	0	16.22	16.22	16.24				
20	ISQM	1	49	16.22	16.21	16.17	17.4	0		
20	ISQM	1	99	16.22	16.22	16.22				
20	ISQM	50	24	16.20	16.20	16.25				
20	ISQM	50	50	16.23	16.23	16.18	17.4	0		
20	ISQM	100	0	16.21	16.20	16.17				
20	BADM	1	0	16.20	16.24	16.16				
20	BADM	1	49	16.20	16.26	16.18	17.4	0		
20	BADM	1	99	16.20	16.26	16.18				
20	BADM	50	0	16.13	16.30	16.17				
20	BADM	50	24	16.27	16.32	16.21	17.4	0		
20	BADM	50	50	16.28	16.30	16.17				
20	BADM	100	0	16.13	16.36	16.22				
20	SSQM	1	0	16.21	16.22	16.25				
20	SSQM	1	49	16.21	16.22	16.27	17.4	0		
20	SSQM	1	99	16.24	16.31	16.20				
20	SSQM	50	0	16.24	16.30	16.17				
20	SSQM	50	24	16.23	16.27	16.19				
20	SSQM	50	50	16.27	16.28	16.17				
20	SSQM	100	0	16.13	16.32	16.18	17.4	0		
Channel										
Frequency (MHz)										
15	OPRK	1	0	16.07	16.11	16.07	17.4	0		
15	OPRK	1	49	16.07	16.11	16.07				
15	OPRK	1	99	16.06	16.14	16.07				
15	OPRK	36	0	16.09	16.19	16.08	17.4	0		
15	OPRK	36	24	16.11	16.19	16.08				
15	OPRK	36	39	16.02	16.05	16.06				
15	OPRK	75	0	16.16	16.13	16.11				
15	OPRK	75	24	16.16	16.13	16.11	17.4	0		
15	ISQM	1	37	16.11	16.19	16.12	17.4	0		
15	ISQM	1	74	16.05	16.18	16.15				
15	ISQM	36	0	16.09	16.20	16.07				
15	ISQM	36	20	16.10	16.17	16.14				
15	ISQM	36	39	16.07	16.11	16.09	17.4	0		
15	ISQM	75	0	16.11	16.28	16.05				
15	BADM	1	0	16.10	16.16	16.13				
15	BADM	1	37	16.11	16.19	16.08	17.4	0		
15	BADM	1	74	16.05	16.17	16.08				
15	BADM	36	0	16.10	16.16	16.15				
15	BADM	36	20	16.17	16.24	16.17	17.4	0		
15	BADM	36	39	16.05	16.15	16.15				
15	BADM	75	0	16.01	16.16	16.17				
15	SSQM	1	0	16.13	16.21	16.21	17.4	0		
15	SSQM	1	49	16.15	16.22	16.20				
15	SSQM	1	99	16.12	16.26	16.14				
15	SSQM	36	0	16.07	16.25	16.11				
15	SSQM	36	20	16.02	16.16	16.16				
15	SSQM	36	39	16.21	16.21	16.06	17.4	0		
15	SSQM	75	0	16.10	16.15	16.21				
Channel										
Frequency (MHz)										
10	OPRK	1	0	16.04	16.09	16.09	17.4	0		
10	OPRK	1	49	16.04	16.09	16.09				
10	OPRK	1	99	16.07	16.15	16.00				
10	OPRK	25	0	16.06	16.15	16.15				
10	OPRK	25	12	16.05	16.07	16.05				
10	OPRK	25	25	16.05	16.10	16.13	17.4	0		
10	OPRK	50	0	16.20	16.19	16.18				
10	ISQM	1	25	16.09	16.20	16.25	17.4	0		
10	ISQM	1	49	16.11	16.28	16.12				
10	ISQM	25	0	16.03	16.20	16.16				
10	ISQM	25	12	16.09	16.19	16.18				
10	ISQM	25	25	16.09	16.13	16.10	17.4	0		
10	BADM	1	0	16.08	16.13	16.09				
10	BADM	1	25	16.08	16.19	16.05	17.4	0		
10	BADM	1	49	16.18	16.28	16.13				
10	BADM	25	0	16.04	16.27	16.14				
10	BADM	25	12	16.16	16.20	16.12	17.4	0		
10	BADM	25	25	16.21	16.25	16.07				
10	BADM	50	0	16.01	16.21	16.11				
10	SSQM	1	0	16.13	16.16	16.15	17.4	0		
10	SSQM	1	49	16.15	16.20	16.25				
10	SSQM	1	99	16.14	16.23	16.16				
10	SSQM	25	0	16.03	16.27	16.09				
10	SSQM	25	12	16.21	16.22	16.05	17.4	0		
10	SSQM	25	25	16.19	16.17	16.07				
10	SSQM	50	0	16.08	16.16	16.17				
Channel										
Frequency (MHz)										
5	OPRK	1	0	16.10	16.07	16.01	17.4	0		
5	OPRK	1	12	16.10	16.07	16.02				
5	OPRK	1	24	16.09	16.08	16.08				
5	OPRK	12	0	16.05	16.19	16.08	17.4	0		
5	OPRK	12	7	16.02	16.04	16.00				
5	OPRK	12	13	16.05	16.08	16.08				
5	OPRK	25	0	16.12	16.12	16.14				
5	ISQM	1	0	16.10	16.18	16.18				
5	ISQM	1	12	16.08	16.20	16.14	17.4	0		
5	ISQM	1	24	16.11	16.28	16.14				
5	ISQM	12	0	16.13	16.16	16.18	17.4	0		
5	ISQM	12	7	16.11	16.17	16.12				
5	ISQM	12	13	16.11	16.28	16.14				
5	BADM	1	0	16.18	16.15	16.08				
5	BADM	1	12	16.17	16.18	16.13	17.4	0		
5	BADM	1	24	16.14	16.28	16.14				
5	BADM	12	0	16.10	16.22	16.08				
5	BADM	12	7	16.23	16.23	16.18	17.4	0		
5	BADM	12	13	16.23	16.18	16.12				
5	BADM	25	0	16.09	16.14	16.17				
5	BADM	25	7	16.23	16.18	16.12	17.4	0		
5	SSQM	1	0	16.16	16.15	16.13				
5	SSQM	1	12	16.13	16.20	16.22	17.4	0		
5	SSQM	1	24	16.17	16.19	16.09				
5	SSQM	12	0	16.08	16.27	16.10				
5	SSQM	12	7	16.20	16.24	16.04	17.4	0		
5	SSQM	12	13	16.25	16.17	16.13				
5	SSQM	25	0	16.11	16.12	16.18				
Channel										
Frequency (MHz)										
3	OPRK	1	0	16.18	16.15	16.01	17.4	0		
3	OPRK	1	14	16.18	16.15	16.02				
3	OPRK	1	28	16.18	16.15	16.00				
3	OPRK	8	0	16.01	16.20	16.09	17.4	0		
3	OPRK	8	4	16.07	16.24	16.00				
3	OPRK	8	7	16.01	16.09	16.13				
3	OPRK	15	0	16.19	16.12	16.09				
3	ISQM	1	8	16.11	16.15	16.15				
3	ISQM	1	14	16.08	16.21	16.25	17.4	0		
3	ISQM	1	28	16.06	16.20	16.11				
3	ISQM	8	0	16.17	16.16	16.16	17.4	0		
3	ISQM	8	7	16.05	16.14	16.04				
3	ISQM	15	0	16.14	16.25	16.06				
3	BADM	1	0	16.17	16.21	16.04				
3	BADM	1	8	16.11	16.24	16.14	17.4	0		
3	BADM	1	14	16.18	16.28	16.11				
3	BADM	8	0	16.04	16.27	16.08				
3	BADM	8	4	16.25	16.30	16.09	17.4	0		
3	BADM	8	7	16.18	16.21	16.14				
3	BADM	15	0	16.09	16.18	16.18				
3	SSQM	1	0	16.09						





### Band 66\_Ant 0

BW (MHz)	Modulation	RB Size	RB Offset	Power Lvl Ch1 (dBm)	Power Lvl Ch2 (dBm)	Power Lvl Ch3 (dBm)	Tune-up Int (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	17.51	17.40	17.37	18.4	0
20	QPSK	1	43	17.51	17.40	17.37	18.4	0
20	QPSK	1	86	17.36	17.36	17.23	18.4	0
20	QPSK	50	0	17.36	17.36	17.23	18.4	0
20	QPSK	50	24	17.36	17.41	17.23	18.4	0
20	QPSK	50	50	17.36	17.45	17.30	18.4	0
20	QPSK	100	0	17.37	17.36	17.33	18.4	0
20	QPSK	1	0	17.51	17.40	17.37	18.4	0
20	15QAM	1	99	17.32	17.45	17.22	18.4	0
20	15QAM	50	24	17.20	17.47	17.23	18.4	0
20	15QAM	50	24	17.50	17.40	17.31	18.4	0
20	15QAM	50	50	17.38	17.49	17.34	18.4	0
20	15QAM	100	0	17.20	17.45	17.25	18.4	0
20	15QAM	1	0	17.52	17.42	17.31	18.4	0
20	15QAM	1	49	17.37	17.48	17.24	18.4	0
20	15QAM	1	99	17.30	17.40	17.25	18.4	0
20	15QAM	50	0	17.28	17.44	17.34	18.4	0
20	15QAM	50	24	17.24	17.37	17.24	18.4	0
20	15QAM	50	50	17.28	17.40	17.20	18.4	0
20	15QAM	100	0	17.37	17.43	17.27	18.4	0
20	25QAM	1	0	17.53	17.40	17.27	18.4	0
20	25QAM	1	49	17.20	17.42	17.25	18.4	0
20	25QAM	1	99	17.27	17.44	17.28	18.4	0
20	25QAM	50	0	17.29	17.41	17.23	18.4	0
20	25QAM	50	24	17.21	17.50	17.28	18.4	0
20	25QAM	50	50	17.38	17.43	17.23	18.4	0
20	25QAM	100	0	17.40	17.42	17.25	18.4	0
Channel								
Frequency (MHz)								
15	QPSK	1	0	17.42	17.33	17.22	18.4	0
15	QPSK	1	37	17.42	17.33	17.22	18.4	0
15	QPSK	1	74	17.32	17.28	17.18	18.4	0
15	QPSK	36	0	17.36	17.38	17.30	18.4	0
15	QPSK	36	20	17.29	17.38	17.28	18.4	0
15	QPSK	36	36	17.33	17.34	17.20	18.4	0
15	QPSK	75	0	17.24	17.34	17.22	18.4	0
15	15QAM	1	0	17.28	17.43	17.21	18.4	0
15	15QAM	1	37	17.15	17.29	17.21	18.4	0
15	15QAM	1	74	17.24	17.41	17.08	18.4	0
15	15QAM	36	0	17.28	17.43	17.11	18.4	0
15	15QAM	36	20	17.20	17.35	17.22	18.4	0
15	15QAM	36	36	17.30	17.35	17.28	18.4	0
15	15QAM	75	0	17.36	17.38	17.18	18.4	0
15	15QAM	1	0	17.28	17.31	17.20	18.4	0
15	15QAM	1	37	17.27	17.33	17.13	18.4	0
15	15QAM	1	74	17.35	17.40	17.15	18.4	0
15	15QAM	36	0	17.18	17.32	17.23	18.4	0
15	15QAM	36	20	17.19	17.23	17.15	18.4	0
15	15QAM	36	36	17.29	17.33	17.25	18.4	0
15	15QAM	75	0	17.22	17.38	17.17	18.4	0
15	25QAM	1	0	17.22	17.43	17.22	18.4	0
15	25QAM	1	37	17.21	17.37	17.23	18.4	0
15	25QAM	1	74	17.13	17.43	17.17	18.4	0
15	25QAM	36	0	17.14	17.37	17.15	18.4	0
15	25QAM	36	20	17.17	17.29	17.20	18.4	0
15	25QAM	36	36	17.28	17.42	17.11	18.4	0
15	25QAM	75	0	17.24	17.44	17.22	18.4	0
Channel								
Frequency (MHz)								
10	QPSK	1	0	17.38	17.28	17.28	18.4	0
10	QPSK	1	25	17.38	17.28	17.28	18.4	0
10	QPSK	1	49	17.30	17.29	17.13	18.4	0
10	QPSK	25	0	17.30	17.39	17.23	18.4	0
10	QPSK	25	12	17.30	17.38	17.25	18.4	0
10	QPSK	25	25	17.33	17.43	17.19	18.4	0
10	QPSK	50	0	17.22	17.21	17.19	18.4	0
10	15QAM	1	0	17.28	17.45	17.27	18.4	0
10	15QAM	1	25	17.21	17.30	17.21	18.4	0
10	15QAM	1	49	17.28	17.41	17.18	18.4	0
10	15QAM	25	0	17.17	17.43	17.08	18.4	0
10	15QAM	25	12	17.20	17.38	17.24	18.4	0
10	15QAM	25	25	17.33	17.45	17.26	18.4	0
10	15QAM	50	0	17.34	17.45	17.23	18.4	0
10	15QAM	1	0	17.23	17.30	17.17	18.4	0
10	15QAM	1	25	17.35	17.35	17.10	18.4	0
10	15QAM	1	49	17.20	17.47	17.12	18.4	0
10	15QAM	25	0	17.24	17.29	17.24	18.4	0
10	15QAM	25	12	17.28	17.31	17.13	18.4	0
10	15QAM	25	25	17.21	17.31	17.25	18.4	0
10	15QAM	50	0	17.38	17.38	17.12	18.4	0
10	25QAM	1	0	17.21	17.35	17.21	18.4	0
10	25QAM	1	25	17.15	17.28	17.17	18.4	0
10	25QAM	1	49	17.17	17.33	17.17	18.4	0
10	25QAM	25	0	17.28	17.32	17.12	18.4	0
10	25QAM	25	12	17.29	17.29	17.22	18.4	0
10	25QAM	25	25	17.27	17.33	17.20	18.4	0
10	25QAM	50	0	17.22	17.32	17.20	18.4	0
Channel								
Frequency (MHz)								
5	QPSK	1	0	17.37	17.38	17.32	18.4	0
5	QPSK	1	12	17.40	17.41	17.26	18.4	0
5	QPSK	1	24	17.35	17.21	17.15	18.4	0
5	QPSK	12	0	17.33	17.46	17.27	18.4	0
5	QPSK	12	7	17.28	17.31	17.28	18.4	0
5	QPSK	12	13	17.21	17.34	17.20	18.4	0
5	QPSK	25	0	17.29	17.27	17.25	18.4	0
5	15QAM	1	0	17.35	17.39	17.20	18.4	0
5	15QAM	1	12	17.28	17.28	17.20	18.4	0
5	15QAM	1	24	17.20	17.34	17.15	18.4	0
5	15QAM	12	0	17.23	17.48	17.12	18.4	0
5	15QAM	12	7	17.15	17.27	17.18	18.4	0
5	15QAM	12	13	17.35	17.48	17.25	18.4	0
5	15QAM	25	0	17.28	17.32	17.23	18.4	0
5	15QAM	1	0	17.28	17.29	17.16	18.4	0
5	15QAM	1	12	17.23	17.42	17.09	18.4	0
5	15QAM	1	24	17.27	17.30	17.14	18.4	0
5	15QAM	12	0	17.11	17.38	17.30	18.4	0
5	15QAM	12	7	17.23	17.31	17.14	18.4	0
5	15QAM	12	13	17.23	17.38	17.21	18.4	0
5	15QAM	25	0	17.31	17.31	17.20	18.4	0
5	25QAM	1	0	17.21	17.42	17.13	18.4	0
5	25QAM	1	12	17.20	17.41	17.12	18.4	0
5	25QAM	1	24	17.23	17.41	17.18	18.4	0
5	25QAM	12	0	17.25	17.39	17.10	18.4	0
5	25QAM	12	7	17.29	17.38	17.24	18.4	0
5	25QAM	12	13	17.27	17.42	17.18	18.4	0
5	25QAM	25	0	17.27	17.32	17.21	18.4	0
Channel								
Frequency (MHz)								
3	QPSK	1	0	17.48	17.38	17.28	18.4	0
3	QPSK	1	8	17.44	17.51	17.34	18.4	0
3	QPSK	1	14	17.28	17.26	17.19	18.4	0
3	QPSK	8	0	17.35	17.50	17.25	18.4	0
3	QPSK	8	4	17.28	17.51	17.18	18.4	0
3	QPSK	8	7	17.30	17.43	17.21	18.4	0
3	QPSK	15	0	17.21	17.29	17.23	18.4	0
3	15QAM	1	0	17.23	17.48	17.25	18.4	0
3	15QAM	1	8	17.15	17.34	17.20	18.4	0
3	15QAM	1	14	17.28	17.44	17.20	18.4	0
3	15QAM	8	0	17.28	17.47	17.18	18.4	0
3	15QAM	8	4	17.17	17.39	17.23	18.4	0
3	15QAM	8	7	17.35	17.47	17.20	18.4	0
3	15QAM	15	0	17.26	17.34	17.20	18.4	0
3	15QAM	1	0	17.38	17.28	17.19	18.4	0
3	15QAM	1	8	17.27	17.38	17.13	18.4	0
3	15QAM	1	14	17.29	17.40	17.24	18.4	0
3	15QAM	8	0	17.18	17.43	17.20	18.4	0
3	15QAM	8	4	17.30	17.35	17.13	18.4	0
3	15QAM	8	7	17.21	17.41	17.21	18.4	0
3	15QAM	15	0	17.30	17.39	17.13	18.4	0
3	25QAM	1	0	17.23	17.38	17.17	18.4	0
3	25QAM	1	8	17.26	17.41	17.21	18.4	0



### Band 48\_Ant 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				3500	3600	3641	3690		
20	QPSK	1	0	16.89	16.74	16.81	16.78	18.2	0
20	QPSK	1	49	16.98	16.87	16.93	17.04		
20	QPSK	1	99	16.83	16.81	16.90	16.76		
20	QPSK	50	0	16.90	16.84	16.96	16.97		
20	QPSK	50	24	16.87	16.81	16.85	16.82		
20	QPSK	50	50	16.87	16.75	16.84	16.88		
20	QPSK	100	0	16.80	16.83	16.86	16.89		
20	16QAM	1	0	16.90	16.73	16.89	16.88		
20	16QAM	1	49	16.82	16.72	16.81	16.83		
20	16QAM	1	99	16.82	16.85	16.80	16.78		
20	16QAM	50	0	16.86	16.80	16.82	16.85		
20	16QAM	50	24	16.80	16.77	16.81	16.87		
20	16QAM	50	50	16.78	16.78	16.87	16.88		
20	16QAM	100	0	16.77	16.78	16.78	16.77		
20	64QAM	1	0	16.88	16.76	16.80	16.75		
20	64QAM	1	49	16.89	16.77	16.80	16.76		
20	64QAM	1	99	16.78	16.81	16.81	16.78		
20	64QAM	50	0	16.86	16.76	16.80	16.86		
20	64QAM	50	24	16.77	16.84	16.81	16.81		
20	64QAM	50	50	16.85	16.82	16.87	16.88		
20	64QAM	100	0	16.84	16.85	16.83	16.83		
20	256QAM	1	0	16.79	16.77	16.78	16.79		
20	256QAM	1	49	16.90	16.77	16.82	16.84		
20	256QAM	1	99	16.90	16.75	16.80	16.78		
20	256QAM	50	0	16.81	16.79	16.80	16.74		
20	256QAM	50	24	16.86	16.77	16.83	16.76		
20	256QAM	50	50	16.90	16.85	16.83	16.87		
20	256QAM	100	0	16.83	16.85	16.78	16.86		
Channel									
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	16.76	16.61	16.72	16.63	18.2	0
15	QPSK	1	37	16.90	16.66	16.88	17.00		
15	QPSK	1	74	16.76	16.66	16.78	16.67		
15	QPSK	36	0	16.89	16.73	16.85	16.86		
15	QPSK	36	20	16.85	16.72	16.84	16.77		
15	QPSK	36	39	16.85	16.66	16.71	16.73		
15	QPSK	75	0	16.79	16.76	16.72	16.85		
15	16QAM	1	0	16.82	16.65	16.81	16.87		
15	16QAM	1	37	16.71	16.71	16.76	16.78		
15	16QAM	1	74	16.75	16.73	16.73	16.73		
15	16QAM	36	0	16.74	16.76	16.75	16.82		
15	16QAM	36	20	16.71	16.66	16.86	16.80		
15	16QAM	36	39	16.74	16.72	16.74	16.78		
15	16QAM	75	0	16.73	16.67	16.68	16.75		
15	64QAM	1	0	16.80	16.64	16.68	16.64		
15	64QAM	1	37	16.81	16.65	16.69	16.70		
15	64QAM	1	74	16.65	16.60	16.69	16.62		
15	64QAM	36	0	16.75	16.66	16.79	16.80		
15	64QAM	36	20	16.62	16.73	16.66	16.67		
15	64QAM	36	39	16.79	16.69	16.80	16.82		
15	64QAM	75	0	16.79	16.79	16.72	16.81		
15	256QAM	1	0	16.77	16.66	16.72	16.69		
15	256QAM	1	37	16.86	16.65	16.75	16.74		
15	256QAM	1	74	16.88	16.68	16.80	16.70		
15	256QAM	36	0	16.66	16.74	16.66	16.80		
15	256QAM	36	20	16.71	16.73	16.82	16.71		
15	256QAM	36	39	16.89	16.74	16.76	16.87		
15	256QAM	75	0	16.82	16.81	16.74	16.85		
Channel									
Frequency (MHz)				3559	3607.5	3642.5	3695		
10	QPSK	1	0	16.83	16.73	16.68	16.77	18.2	0
10	QPSK	1	25	16.95	16.84	16.79	17.03		
10	QPSK	1	49	16.71	16.78	16.79	16.63		
10	QPSK	25	0	16.85	16.82	16.86	16.96		
10	QPSK	25	12	16.79	16.74	16.83	16.77		
10	QPSK	25	25	16.83	16.71	16.81	16.85		
10	QPSK	50	0	16.69	16.73	16.71	16.74		
10	16QAM	1	0	16.79	16.59	16.75	16.81		
10	16QAM	1	25	16.77	16.65	16.77	16.76		
10	16QAM	1	49	16.77	16.82	16.71	16.66		
10	16QAM	25	0	16.83	16.77	16.69	16.72		
10	16QAM	25	12	16.75	16.74	16.67	16.80		
10	16QAM	25	25	16.67	16.77	16.77	16.73		
10	16QAM	50	0	16.66	16.69	16.75	16.64		
10	64QAM	1	0	16.75	16.66	16.72	16.69		
10	64QAM	1	25	16.86	16.63	16.69	16.70		
10	64QAM	1	49	16.70	16.73	16.82	16.88		
10	64QAM	25	0	16.71	16.68	16.76	16.83		
10	64QAM	25	12	16.62	16.71	16.80	16.78		
10	64QAM	25	25	16.73	16.77	16.74	16.75		
10	64QAM	50	0	16.72	16.74	16.79	16.74		
10	256QAM	1	0	16.73	16.62	16.69	16.66		
10	256QAM	1	25	16.79	16.73	16.72	16.69		
10	256QAM	1	49	16.88	16.68	16.80	16.74		
10	256QAM	25	0	16.74	16.64	16.81	16.63		
10	256QAM	25	12	16.84	16.74	16.88	16.68		
10	256QAM	25	25	16.87	16.82	16.78	16.78		
10	256QAM	50	0	16.77	16.74	16.74	16.72		
Channel									
Frequency (MHz)				3526.5	3607	3643	3697.5		
5	QPSK	1	0	16.84	16.59	16.80	16.64	18.2	0
5	QPSK	1	12	16.97	16.73	16.85	16.99		
5	QPSK	1	24	16.79	16.66	16.85	16.62		
5	QPSK	12	0	16.86	16.74	16.93	16.93		
5	QPSK	12	7	16.81	16.78	16.73	16.71		
5	QPSK	12	13	16.80	16.66	16.77	16.84		
5	QPSK	25	0	16.75	16.79	16.84	16.85		
5	16QAM	1	0	16.82	16.67	16.79	16.73		
5	16QAM	1	12	16.91	16.65	16.94	16.78		
5	16QAM	1	24	16.73	16.81	16.78	16.68		
5	16QAM	12	0	16.81	16.80	16.72	16.77		
5	16QAM	12	7	16.68	16.76	16.89	16.80		
5	16QAM	12	13	16.63	16.67	16.83	16.73		
5	16QAM	25	0	16.72	16.70	16.66	16.70		
5	64QAM	1	0	16.77	16.75	16.65	16.73		
5	64QAM	1	12	16.88	16.73	16.88	16.72		
5	64QAM	1	24	16.75	16.77	16.81	16.75		
5	64QAM	12	0	16.79	16.61	16.78	16.82		
5	64QAM	12	7	16.73	16.73	16.67	16.71		
5	64QAM	12	13	16.71	16.73	16.84	16.86		
5	64QAM	25	0	16.80	16.71	16.78	16.68		
5	256QAM	1	0	16.70	16.71	16.64	16.74		
5	256QAM	1	12	16.75	16.65	16.73	16.83		
5	256QAM	1	24	16.88	16.80	16.75	16.64		
5	256QAM	12	0	16.72	16.85	16.79	16.64		
5	256QAM	12	7	16.75	16.65	16.74	16.75		
5	256QAM	12	13	16.83	16.78	16.82	16.81		
5	256QAM	25	0	16.81	16.72	16.77	16.74		

### Band 48\_Ant 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)	MPR (dB)
Channel									
Frequency (MHz)				5530	5630	5615	5660		
20	QPSK	1	0	16.84	16.50	16.50	16.45	17.7	0
20	QPSK	1	49	16.85	16.53	16.53	16.84		
20	QPSK	1	99	16.49	16.39	16.41	16.45		
20	QPSK	50	0	16.52	16.51	16.40	16.55		
20	QPSK	50	24	16.51	16.41	16.42	16.54		
20	QPSK	50	50	16.43	16.38	16.43	16.49		
20	QPSK	100	0	16.41	16.42	16.40	16.48		
20	16QAM	1	0	16.44	16.52	16.45	16.45		
20	16QAM	1	49	16.43	16.40	16.39	16.48		
20	16QAM	1	99	16.43	16.47	16.45	16.56		
20	16QAM	50	0	16.46	16.39	16.38	16.50		
20	16QAM	50	24	16.45	16.43	16.40	16.53		
20	16QAM	50	50	16.52	16.46	16.38	16.58		
20	16QAM	100	0	16.40	16.38	16.38	16.51		
20	64QAM	1	0	16.46	16.52	16.48	16.47		
20	64QAM	1	49	16.40	16.38	16.38	16.54		
20	64QAM	1	99	16.39	16.36	16.36	16.52		
20	64QAM	50	0	16.50	16.41	16.30	16.46		
20	64QAM	50	24	16.43	16.47	16.44	16.45		
20	64QAM	50	50	16.47	16.39	16.50	16.58		
20	64QAM	100	0	16.50	16.41	16.42	16.56		
20	256QAM	1	0	16.40	16.48	16.41	16.50		
20	256QAM	1	49	16.42	16.44	16.43	16.54		
20	256QAM	1	99	16.44	16.				

Band 48_Ant 8									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				55340	55830	56150	56640		
Frequency (MHz)				3550	3609	3644	3699		
20	QPSK	1	0	16.01	15.91	16.03	16.04	17.7	0
20	QPSK	1	49	16.03	16.11	16.08	16.25		
20	QPSK	1	99	16.02	16.02	16.02	16.01		
20	QPSK	50	0	16.04	16.05	16.04	16.16		
20	QPSK	50	24	16.02	16.01	16.02	16.13	17.7	0
20	QPSK	50	50	15.94	16.04	15.99	16.10		
20	QPSK	100	0	15.92	16.01	16.03	16.04		
20	16QAM	1	0	15.96	15.98	16.05	16.15		
20	16QAM	1	49	16.05	16.11	16.01	16.02	17.7	0
20	16QAM	1	99	15.96	16.10	16.09	16.07		
20	16QAM	50	0	15.93	16.04	16.10	16.10		
20	16QAM	50	24	15.91	15.98	16.00	16.08		
20	16QAM	50	50	15.96	16.11	16.11	16.08	17.7	0
20	16QAM	100	0	16.01	15.99	16.03	16.08		
20	64QAM	1	0	15.92	16.10	15.99	16.06		
20	64QAM	1	49	16.00	16.07	16.10	16.05		
20	64QAM	1	99	16.00	15.99	16.10	16.07	17.7	0
20	64QAM	50	0	15.91	16.00	16.09	16.14		
20	64QAM	50	24	15.95	15.97	16.02	16.05		
20	64QAM	50	50	15.99	16.01	16.02	16.04		
20	64QAM	100	0	16.03	16.09	16.07	16.01	17.7	0
20	256QAM	1	0	15.97	15.98	16.09	16.09		
20	256QAM	1	49	16.02	16.09	16.11	16.04		
20	256QAM	1	99	15.91	15.99	15.99	16.07		
20	256QAM	50	0	16.05	16.07	16.05	16.15	17.7	0
20	256QAM	50	24	15.94	15.97	16.10	16.11		
20	256QAM	50	50	16.02	16.04	15.98	16.07		
20	256QAM	100	0	15.95	16.01	16.02	16.05		
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	15.94	15.77	16.02	15.99	17.7	0
15	QPSK	1	37	16.01	16.08	16.02	16.18		
15	QPSK	1	74	15.96	15.89	15.87	15.96		
15	QPSK	36	0	15.90	15.98	16.02	16.09		
15	QPSK	36	20	15.90	15.90	15.89	16.07	17.7	0
15	QPSK	36	39	15.87	15.95	15.88	16.03		
15	QPSK	75	0	15.82	15.93	15.93	15.95		
15	16QAM	1	0	15.82	15.97	15.92	16.11		
15	16QAM	1	37	15.93	16.04	15.99	15.97	17.7	0
15	16QAM	1	74	15.81	16.06	16.07	16.04		
15	16QAM	36	0	15.80	15.96	15.95	16.03		
15	16QAM	36	20	15.82	15.86	15.95	16.06		
15	16QAM	36	39	15.92	16.03	16.03	15.93	17.7	0
15	16QAM	75	0	15.90	15.98	15.99	16.06		
15	64QAM	1	0	15.86	16.05	15.91	15.99		
15	64QAM	1	37	15.80	15.92	16.05	15.97		
15	64QAM	1	74	15.93	15.97	16.08	16.03	17.7	0
15	64QAM	36	0	15.79	15.98	15.95	16.03		
15	64QAM	36	20	15.88	15.91	15.97	16.02		
15	64QAM	36	39	15.93	15.87	15.92	15.93		
15	64QAM	75	0	15.93	15.98	16.06	15.90	17.7	0
15	256QAM	1	0	15.92	15.94	16.00	16.05		
15	256QAM	1	37	16.00	16.05	15.98	15.99		
15	256QAM	1	74	15.82	15.89	15.85	16.00		
15	256QAM	36	0	16.01	15.96	15.91	16.07	17.7	0
15	256QAM	36	20	15.85	15.87	15.99	16.04		
15	256QAM	36	39	15.86	16.02	15.94	15.96		
15	256QAM	75	0	15.89	15.88	15.90	15.98		
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	15.87	15.81	16.00	15.95	17.7	0
10	QPSK	1	25	16.07	16.13	15.93	16.21		
10	QPSK	1	49	15.94	15.89	15.95	15.92		
10	QPSK	25	0	16.00	16.04	15.91	16.13		
10	QPSK	25	12	15.87	15.95	16.01	16.10	17.7	0
10	QPSK	25	25	15.89	15.94	15.93	16.09		
10	QPSK	50	0	15.78	15.98	15.90	15.97		
10	16QAM	1	0	15.83	15.83	15.98	16.08		
10	16QAM	1	25	15.91	15.97	15.94	15.97	17.7	0
10	16QAM	1	49	15.94	16.04	16.00	15.95		
10	16QAM	25	0	15.88	15.97	16.05	16.07		
10	16QAM	25	12	15.89	15.84	15.86	16.05		
10	16QAM	25	25	15.94	16.08	16.05	15.99	17.7	0
10	16QAM	50	0	15.99	15.89	15.93	16.03		
10	64QAM	1	0	15.91	16.09	15.95	16.04		
10	64QAM	1	25	15.89	15.93	15.98	16.04		
10	64QAM	1	49	15.96	15.95	16.01	16.00	17.7	0
10	64QAM	25	0	15.79	15.98	15.94	16.02		
10	64QAM	25	12	15.92	15.84	15.87	16.03		
10	64QAM	25	25	15.98	15.98	15.90	16.03		
10	64QAM	50	0	16.02	16.03	15.95	16.00	17.7	0
10	256QAM	1	0	15.90	15.97	15.95	15.95		
10	256QAM	1	25	15.96	15.94	16.05	15.90		
10	256QAM	1	49	15.85	15.92	15.90	15.93		
10	256QAM	25	0	15.98	16.01	15.98	16.11	17.7	0
10	256QAM	25	12	15.93	15.90	16.01	16.03		
10	256QAM	25	25	15.88	15.95	15.92	15.94		
10	256QAM	50	0	15.82	15.86	15.98	16.03		
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	15.95	15.79	16.02	15.95	17.7	0
5	QPSK	1	12	16.02	16.04	15.98	16.23		
5	QPSK	1	24	15.90	15.91	15.91	15.87		
5	QPSK	12	0	15.95	15.91	15.95	16.01		
5	QPSK	12	7	15.90	15.92	15.93	16.01	17.7	0
5	QPSK	12	13	15.91	16.02	15.96	16.06		
5	QPSK	25	0	15.87	15.97	15.96	15.89		
5	16QAM	1	0	15.95	15.91	15.96	16.13		
5	16QAM	1	12	16.00	16.04	15.98	15.97	17.7	0
5	16QAM	1	24	15.81	15.95	16.00	16.00		
5	16QAM	12	0	15.81	16.00	15.96	16.07		
5	16QAM	12	7	15.85	15.96	15.93	15.93		
5	16QAM	12	13	15.88	16.09	16.08	16.00	17.7	0
5	16QAM	25	0	15.89	15.94	15.89	16.01		
5	64QAM	1	0	15.91	16.00	15.98	15.98		
5	64QAM	1	12	15.87	15.92	16.00	15.92		
5	64QAM	1	24	15.97	15.87	16.00	15.99	17.7	0
5	64QAM	12	0	15.79	15.98	16.00	16.06		
5	64QAM	12	7	15.94	15.87	15.92	15.93		
5	64QAM	12	13	15.90	15.87	15.90	15.97		
5	64QAM	25	0	15.98	16.08	15.98	15.86	17.7	0
5	256QAM	1	0	15.88	15.87	16.03	16.07		
5	256QAM	1	12	15.88	16.03	16.01	16.01		
5	256QAM	1	24	15.86	15.96	15.97	15.93		
5	256QAM	12	0	15.92	15.94	15.91	16.07	17.7	0
5	256QAM	12	7	15.79	15.86	16.04	16.09		
5	256QAM	12	13	15.89	15.95	15.88	16.05		
5	256QAM	25	0	15.81	15.90	15.93	15.93		





n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	16.79	16.96	16.75	18.0	0.0	
20	PI2 BPSK	1	53	16.74	16.88	16.81			
20	PI2 BPSK	1	104	16.86	16.89	16.92			
20	PI2 BPSK	50	0	16.84	16.93	16.89	18.0	0.0	
20	PI2 BPSK	50	28	16.95	16.93	16.83	18.0	0.0	
20	PI2 BPSK	50	56	16.94	16.94	16.92	18.0	0.0	
20	PI2 BPSK	100	0	16.87	16.95	16.94	18.0	0.0	
20	QPSK	1	1	16.94	17.05	16.91	18.0	0.0	
20	QPSK	1	53	16.89	16.96	16.87			
20	QPSK	1	104	16.83	16.91	16.87			
20	QPSK	50	0	16.88	16.96	16.92	18.0	0.0	
20	QPSK	50	28	16.89	16.96	16.92	18.0	0.0	
20	QPSK	50	56	16.82	16.88	16.86	18.0	0.0	
20	QPSK	100	0	16.90	17.00	16.91	18.0	0.0	
20	16QAM	1	1	16.84	16.96	16.96	18.0	0.0	
20	64QAM	1	1	16.93	16.96	16.85	18.0	0.0	
20	256QAM	1	1	16.67	16.91	16.81	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.88	16.83	16.80	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.85	16.80	16.85	18.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	16.84	16.88	16.79	18.0	0.0	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	17.73	17.67	17.58	19.0	0.0	
20	PI2 BPSK	1	53	17.74	17.79	17.72			
20	PI2 BPSK	1	104	17.64	17.67	17.65			
20	PI2 BPSK	50	0	17.68	17.80	17.56	19.0	0.0	
20	PI2 BPSK	50	28	17.67	17.75	17.65	19.0	0.0	
20	PI2 BPSK	50	56	17.58	17.73	17.62	19.0	0.0	
20	PI2 BPSK	100	0	17.64	17.70	17.54	19.0	0.0	
20	QPSK	1	1	17.77	17.66	17.74	19.0	0.0	
20	QPSK	1	53	17.66	17.69	17.64			
20	QPSK	1	104	17.71	17.75	17.58			
20	QPSK	50	0	17.62	17.69	17.64	19.0	0.0	
20	QPSK	50	28	17.71	17.77	17.70	19.0	0.0	
20	QPSK	50	56	17.67	17.68	17.56	19.0	0.0	
20	QPSK	100	0	17.67	17.73	17.57	19.0	0.0	
20	16QAM	1	1	17.70	17.74	17.62	19.0	0.0	
20	64QAM	1	1	17.66	17.71	17.56	19.0	0.0	
20	256QAM	1	1	17.58	17.67	17.67	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.58	17.64	17.63	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.56	17.72	17.69	19.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	17.62	17.70	17.59	19.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	17.05	17.14	17.05	18.0	0.0	
40	PI2 BPSK	1	108	17.06	17.08	16.97			
40	PI2 BPSK	1	214	16.93	17.07	16.99			
40	PI2 BPSK	108	0	16.98	17.00	17.04	18.0	0.0	
40	PI2 BPSK	108	54	17.00	17.04	16.99	18.0	0.0	
40	PI2 BPSK	108	108	17.04	17.02	16.94	18.0	0.0	
40	PI2 BPSK	216	0	16.98	17.10	16.97	18.0	0.0	
40	QPSK	1	1	17.16	17.21	16.98	18.0	0.0	
40	QPSK	1	108	17.06	16.97	16.90			
40	QPSK	1	214	17.03	17.02	16.95			
40	QPSK	108	0	17.02	17.02	16.92	18.0	0.0	
40	QPSK	108	54	17.05	17.11	16.97	18.0	0.0	
40	QPSK	108	108	17.02	17.09	16.91	18.0	0.0	
40	QPSK	216	0	16.95	17.08	16.96	18.0	0.0	
40	16QAM	1	1	16.97	17.06	16.92	18.0	0.0	
40	64QAM	1	1	17.00	17.02	16.91	18.0	0.0	
40	256QAM	1	1	16.93	17.06	16.93	18.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	16.94	16.97	16.84	18.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.95	16.92	16.90	18.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.88	17.05	16.83	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.95	17.02	16.88	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.95	17.07	16.90	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.88	17.05	16.88	18.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	16.92	17.03	16.91	18.0	0.0	



n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				37500	37500	37500			
40	PI2 BPSK	1	1	18.04	18.09	18.02			
40	PI2 BPSK	1	108	17.97	18.07	18.06	19.0	0.0	
40	PI2 BPSK	1	214	17.84	17.90	17.95			
Channel									
Frequency (MHz)				1870	1882.5	1895			
40	PI2 BPSK	108	0	17.86	18.07	18.03	19.0	0.0	
40	PI2 BPSK	108	54	17.86	18.03	18.03	19.0	0.0	
40	PI2 BPSK	108	108	17.86	18.04	18.06			
40	PI2 BPSK	216	0	17.85	18.08	18.05			
40	QPSK	1	1	18.07	18.15	18.12			
40	QPSK	1	108	17.85	17.97	17.98	19.0	0.0	
40	QPSK	1	214	17.97	18.05	18.05			
40	QPSK	108	0	17.92	18.00	17.98	19.0	0.0	
40	QPSK	108	54	17.95	18.00	18.05			
40	QPSK	108	108	17.95	17.96	18.01	19.0	0.0	
40	QPSK	216	0	17.87	18.02	17.95			
40	16QAM	1	1	17.90	17.99	18.06	19.0	0.0	
40	64QAM	1	1	17.84	18.08	17.97	19.0	0.0	
40	256QAM	1	1	17.96	18.09	18.07	19.0	0.0	
Channel									
Frequency (MHz)				37500	37500	37500			
Frequency (MHz)				1887.5	1882.5	1899.5			
35	QPSK	1	1	17.95	18.01	18.01	19.0	0.0	
Channel									
Frequency (MHz)				37500	37500	38000			
Frequency (MHz)				1895	1882.5	1900			
30	QPSK	1	1	17.82	18.04	17.80	19.0	0.0	
Channel									
Frequency (MHz)				37500	37500	38000			
Frequency (MHz)				1862.5	1882.5	1902.5			
25	QPSK	1	1	17.84	17.99	17.87	19.0	0.0	
Channel									
Frequency (MHz)				37200	37500	38100			
Frequency (MHz)				1887.5	1882.5	1899.5			
20	QPSK	1	1	17.90	18.02	17.92	19.0	0.0	
Channel									
Frequency (MHz)				371500	375000	381500			
Frequency (MHz)				1887.5	1882.5	1899.5			
15	QPSK	1	1	17.90	18.00	17.99	19.0	0.0	
Channel									
Frequency (MHz)				371000	375000	382000			
Frequency (MHz)				1855	1882.5	1910			
10	QPSK	1	1	17.81	18.01	17.87	19.0	0.0	
Channel									
Frequency (MHz)				370500	375000	382500			
Frequency (MHz)				1852.5	1882.5	1912.5			
5	QPSK	1	1	17.86	17.99	17.97	19.0	0.0	

n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				34500	34500	35000			
40	PI2 BPSK	1	1	16.70	16.78	16.75			
40	PI2 BPSK	1	108	16.82	16.87	16.76	18.0	0.0	
40	PI2 BPSK	1	214	16.78	16.85	16.83			
Channel									
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	108	0	16.83	16.96	16.89	18.0	0.0	
40	PI2 BPSK	108	54	16.83	16.85	16.84	18.0	0.0	
40	PI2 BPSK	108	108	16.76	16.94	16.89			
40	PI2 BPSK	216	0	16.85	16.88	16.87			
40	QPSK	1	1	16.93	17.05	16.93			
40	QPSK	1	108	16.87	16.96	16.81	18.0	0.0	
40	QPSK	1	214	16.87	16.85	16.90			
40	QPSK	108	0	16.81	16.85	16.90	19.0	0.0	
40	QPSK	108	54	16.90	16.94	16.91			
40	QPSK	108	108	16.84	16.89	16.89	18.0	0.0	
40	QPSK	216	0	16.76	16.92	16.90			
40	16QAM	1	1	16.90	16.97	16.94	18.0	0.0	
40	64QAM	1	1	16.89	16.85	16.91	18.0	0.0	
40	256QAM	1	1	16.82	16.97	16.94	18.0	0.0	
Channel									
Frequency (MHz)				34500	34500	35200			
Frequency (MHz)				1727.5	1745	1762.5			
35	QPSK	1	1	16.87	16.84	16.87	18.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35300			
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	16.84	16.79	16.85	18.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35300			
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	16.89	16.88	16.88	18.0	0.0	
Channel									
Frequency (MHz)				34400	34900	35400			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	16.81	16.91	16.90	18.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35400			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	16.86	16.93	16.76	18.0	0.0	
Channel									
Frequency (MHz)				34300	34900	35000			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	16.81	16.82	16.80	18.0	0.0	
Channel									
Frequency (MHz)				34200	34900	35000			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	16.84	16.85	16.77	18.0	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				34500	34500	35000			
40	PI2 BPSK	1	1	17.31	17.33	17.36			
40	PI2 BPSK	1	108	17.17	17.24	17.26	18.5	0.0	
40	PI2 BPSK	1	214	17.22	17.23	17.21			
Channel									
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	108	0	17.26	17.17	17.22	18.5	0.0	
40	PI2 BPSK	108	54	17.21	17.25	17.17	18.5	0.0	
40	PI2 BPSK	108	108	17.20	17.30	17.29			
40	PI2 BPSK	216	0	17.19	17.20	17.19			
40	QPSK	1	1	17.41	17.43	17.38			
40	QPSK	1	108	17.18	17.41	17.35	18.5	0.0	
40	QPSK	1	214	17.19	17.28	17.33			
40	QPSK	108	0	17.16	17.18	17.16	18.5	0.0	
40	QPSK	108	54	17.26	17.34	17.31			
40	QPSK	108	108	17.22	17.20	17.24	18.5	0.0	
40	QPSK	216	0	17.17	17.27	17.23			
40	16QAM	1	1	17.25	17.26	17.18	18.5	0.0	
40	64QAM	1	1	17.13	17.22	17.20	18.5	0.0	
40	256QAM	1	1	17.23	17.31	17.24	18.5	0.0	
Channel									
Frequency (MHz)				34500	34500	35200			
Frequency (MHz)				1727.5	1745	1762.5			
35	QPSK	1	1	17.18	17.33	17.23	18.5	0.0	
Channel									
Frequency (MHz)				34500	34900	35300			
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	17.22	17.19	17.23	18.5	0.0	
Channel									
Frequency (MHz)				34500	34900	35300			
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	17.23	17.23	17.21	18.5	0.0	
Channel									
Frequency (MHz)				34400	34900	35400			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	17.11	17.22	17.22	18.5	0.0	
Channel									
Frequency (MHz)				34500	34900	35400			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	17.19	17.22	17.25	18.5	0.0	
Channel									
Frequency (MHz)				34300	34900	35000			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	17.24	17.29	17.25	18.5	0.0	
Channel									
Frequency (MHz)				34200	34900	35000			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	17.13	17.21	17.19	18.5	0.0	



FCC_n41_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	22.07	22.23	21.97			
100	PI2 BPSK	1	137	21.97	22.15	22.07	23.5	0.0	
100	PI2 BPSK	1	271	22.04	22.23	22.09			
100	PI2 BPSK	135	6	22.02	22.20	21.99	23.5	0.0	
100	PI2 BPSK	135	69	21.95	22.26	21.97	23.5	0.0	
100	PI2 BPSK	135	138	21.95	22.26	22.01	23.5	0.0	
100	PI2 BPSK	270	0	22.06	22.17	21.99			
100	QPSK	1	1	22.03	22.27	22.01			
100	QPSK	1	137	22.05	22.20	22.04	23.5	0.0	
100	QPSK	1	271	22.01	22.21	22.01			
100	QPSK	135	0	21.96	22.17	22.04			
100	QPSK	135	69	22.05	22.22	22.01	23.5	0.0	
100	QPSK	135	138	22.01	22.20	21.99			
100	QPSK	270	0	22.00	22.17	22.02	23.5	0.0	
100	16QAM	1	1	22.08	22.25	21.96	23.5	0.0	
100	64QAM	1	1	21.99	22.18	22.03	23.5	0.0	
100	256QAM	1	1	21.18	21.28	21.19	22.5	1.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.02	22.17	22.08	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.03	22.23	21.97	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.98	22.21	22.01	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.02	22.19	22.04	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.99	22.15	22.02	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.07	22.15	21.99	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.06	22.15	21.99	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.03	22.20	21.98	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.07	22.17	21.96	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.97	22.21	22.09	23.5	0.0	

FCC_n41 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	22.07	22.23	21.97			
100	PI2 BPSK	1	137	21.97	22.15	22.07	23.5	0.0	
100	PI2 BPSK	1	271	22.04	22.23	22.09			
100	PI2 BPSK	135	6	22.02	22.20	21.99	23.5	0.0	
100	PI2 BPSK	135	69	21.95	22.26	21.97	23.5	0.0	
100	PI2 BPSK	135	138	21.95	22.26	22.01	23.5	0.0	
100	PI2 BPSK	270	0	22.06	22.17	21.99			
100	QPSK	1	1	22.03	22.27	22.01			
100	QPSK	1	137	22.05	22.20	22.04	23.5	0.0	
100	QPSK	1	271	22.01	22.21	22.01			
100	QPSK	135	0	21.96	22.17	22.04			
100	QPSK	135	69	22.05	22.22	22.01	23.5	0.0	
100	QPSK	135	138	22.01	22.20	21.99			
100	QPSK	270	0	22.00	22.17	22.02	23.5	0.0	
100	16QAM	1	1	22.08	22.25	21.96	23.5	0.0	
100	64QAM	1	1	21.99	22.18	22.03	23.5	0.0	
100	256QAM	1	1	21.18	21.28	21.19	22.5	1.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.02	22.17	22.08	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.03	22.23	21.97	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.98	22.21	22.01	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.02	22.19	22.04	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.99	22.15	22.02	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.07	22.15	22.04	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.06	22.15	21.99	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.03	22.20	21.98	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.07	22.17	21.96	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.97	22.21	22.09	23.5	0.0	



Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	15.89	16.01		17.5	0.0	
100	PI/2 BPSK	1	137	16.01					
100	PI/2 BPSK	1	271	16.04			17.5	0.0	
100	PI/2 BPSK	135	0	16.01					
100	PI/2 BPSK	135	69	16.01			17.5	0.0	
100	PI/2 BPSK	135	138	16.07					
100	PI/2 BPSK	270	0	16.06			17.5	0.0	
100	QPSK	1	1	16.10					
100	QPSK	1	137	16.08			17.5	0.0	
100	QPSK	1	271	16.03					
100	QPSK	135	0	16.04			17.5	0.0	
100	QPSK	135	69	16.13					
100	QPSK	135	138	16.07			17.5	0.0	
100	QPSK	270	0	16.05					
100	16QAM	1	1	16.04			17.5	0.0	
100	64QAM	1	1	16.04					
100	256QAM	1	1	15.99			17.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.07	16.08	16.05	17.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.99	16.11	16.11	17.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.10	16.04	16.12	17.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.05	16.11	16.02	17.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.11	16.12	16.11	17.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.08	16.01	15.98	17.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.00	16.10	16.04	17.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.05	16.01	15.98	17.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.00	16.08	16.09	17.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.11	16.01	15.98	17.5	0.0	
Channel									
Frequency (MHz)									

Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	16.27	16.45	16.33	17.5	0.0	
100	PI/2 BPSK	1	137	16.25	16.44	16.33			
100	PI/2 BPSK	1	271	16.24	16.21	16.16	17.5	0.0	
100	PI/2 BPSK	135	0	16.24	16.32	16.09			
100	PI/2 BPSK	135	69	16.25	16.33	16.08	17.5	0.0	
100	PI/2 BPSK	135	138	16.30	16.27	16.17			
100	PI/2 BPSK	270	0	16.30	16.29	16.09	17.5	0.0	
100	QPSK	1	1	16.45	16.54	16.33			
100	QPSK	1	137	16.32	16.35	16.12	17.5	0.0	
100	QPSK	1	271	16.33	16.35	16.12			
100	QPSK	135	0	16.22	16.26	16.19	17.5	0.0	
100	QPSK	135	69	16.34	16.46	16.23			
100	QPSK	135	138	16.23	16.33	16.16	17.5	0.0	
100	QPSK	270	0	16.34	16.38	16.11			
100	16QAM	1	1	16.24	16.28	16.10	17.5	0.0	
100	64QAM	1	1	16.32	16.33	16.17			
100	256QAM	1	1	16.27	16.33	16.21	17.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.28	16.32	16.11	17.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.20	16.32	16.16	17.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.24	16.44	16.11	17.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.29	16.44	16.20	17.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.20	16.32	16.14	17.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.27	16.43	16.13	17.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.23	16.39	16.13	17.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.20	16.35	16.17	17.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.32	16.44	16.19	17.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.23	16.42	16.15	17.5	0.0	
Channel									
Frequency (MHz)									



Part27Q_n77 HPUE_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	15.89						
100	Pi2 BPSK	1	137	16.01			17.5	0.0		
100	Pi2 BPSK	1	271	16.04						
100	Pi2 BPSK	135	0	16.01			17.5	0.0		
100	Pi2 BPSK	135	69	16.01			17.5	0.0		
100	Pi2 BPSK	135	138	16.07			17.5	0.0		
100	Pi2 BPSK	270	0	16.06						
100	QPSK	1	1	16.16						
100	QPSK	1	137	16.08			17.5	0.0		
100	QPSK	1	271	16.03						
100	QPSK	135	0	16.04			17.5	0.0		
100	QPSK	135	69	16.13						
100	QPSK	135	138	16.07						
100	QPSK	270	0	16.05			17.5	0.0		
100	16QAM	1	1	16.04			17.5	0.0		
100	16QAM	1	1	16.04			17.5	0.0		
100	256QAM	1	1	15.99			17.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	16.07	16.09	16.05	17.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	15.99	16.11	16.11	17.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	16.10	16.04	16.12	17.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	16.05	16.11	16.02	17.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	16.11	16.12	16.11	17.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	16.08	16.01	15.98	17.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	16.00	16.10	16.04	17.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	16.05	16.01	15.98	17.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	16.02	16.06	16.09	17.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	16.11	16.01	15.98	17.5	0.0		

Part27Q_n77 HPUE_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	16.27	16.45	16.33				
100	Pi2 BPSK	1	137	16.25	16.44	16.33	17.5	0.0		
100	Pi2 BPSK	1	271	16.24	16.21	16.16				
100	Pi2 BPSK	135	0	16.24	16.32	16.09	17.5	0.0		
100	Pi2 BPSK	135	69	16.25	16.33	16.08	17.5	0.0		
100	Pi2 BPSK	135	138	16.30	16.27	16.17	17.5	0.0		
100	QPSK	1	1	16.25	16.34	16.33				
100	QPSK	1	137	16.32	16.35	16.12	17.5	0.0		
100	QPSK	1	271	16.33	16.35	16.12				
100	QPSK	135	0	16.22	16.26	16.19	17.5	0.0		
100	QPSK	135	69	16.34	16.46	16.23				
100	QPSK	135	138	16.23	16.33	16.16	17.5	0.0		
100	QPSK	270	0	16.34	16.38	16.11	17.5	0.0		
100	16QAM	1	1	16.24	16.28	16.10	17.5	0.0		
100	16QAM	1	1	16.32	16.33	16.17	17.5	0.0		
100	256QAM	1	1	16.27	16.33	16.21	17.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	16.28	16.32	16.11	17.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	16.20	16.32	16.16	17.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	16.24	16.44	16.11	17.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	16.29	16.44	16.20	17.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	16.20	16.32	16.14	17.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	16.23	16.39	16.13	17.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	16.23	16.39	16.13	17.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	16.20	16.35	16.17	17.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	16.32	16.44	16.19	17.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	16.23	16.42	16.15	17.5	0.0		

Part27Q_n77_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	15.81						
100	Pi2 BPSK	1	137	15.46			17.0	0.0		
100	Pi2 BPSK	1	271	15.48						
100	Pi2 BPSK	135	0	15.40			17.0	0.0		
100	Pi2 BPSK	135	69	15.47			17.0	0.0		
100	Pi2 BPSK	135	138	15.40			17.0	0.0		
100	Pi2 BPSK	270	0	15.43			17.0	0.0		
100	QPSK	1	1	15.89						
100	QPSK	1	137	15.41			17.0	0.0		
100	QPSK	1	271	15.47						
100	QPSK	135	0	15.48			17.0	0.0		
100	QPSK	135	69	15.66			17.0	0.0		
100	QPSK	135	138	15.38			17.0	0.0		
100	QPSK	270	0	15.59			17.0	0.0		
100	16QAM	1	1	15.40			17.0	0.0		
100	16QAM	1	1	15.40			17.0	0.0		
100	256QAM	1	1	15.46			17.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	15.57	15.51	15.60	17.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	15.60	15.63	15.52	17.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	15.60	15.53	15.63	17.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	15.63	15.59	15.59	17.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	15.52	15.54	15.63	17.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	15.51	15.57	15.62	17.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	15.65	15.55	15.62	17.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	15.54	15.55	15.53	17.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	15.38	15.60	15.59	17.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	15.55	15.51	15.51	17.0	0.0		



Part270_n77_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	16.16	16.02	15.96			
100	PI2 BPSK	1	137	16.20	16.09	16.00	17.0	0.0	
100	PI2 BPSK	1	271	16.20	16.07	15.90			
100	PI2 BPSK	135	0	16.21	16.03	15.85	17.0	0.0	
100	PI2 BPSK	135	69	16.26	16.02	15.92	17.0	0.0	
100	PI2 BPSK	135	138	16.18	16.07	15.88			
100	PI2 BPSK	270	0	16.17	15.97	15.81	17.0	0.0	
100	QPSK	1	1	16.31	16.25	16.00			
100	QPSK	1	137	16.16	16.13	16.00	17.0	0.0	
100	QPSK	1	271	16.13	16.16	15.97			
100	QPSK	135	0	16.18	16.17	15.99			
100	QPSK	135	69	16.21	16.16	16.01	17.0	0.0	
100	QPSK	135	138	16.12	16.12	15.98			
100	QPSK	270	0	16.19	16.17	15.92	17.0	0.0	
100	16QAM	1	1	16.28	16.11	15.95	17.0	0.0	
100	16QAM	1	1	16.29	16.04	15.93	17.0	0.0	
100	256QAM	1	1	16.27	16.14	15.91	17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.17	16.13	15.97	17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.13	16.12	15.88	17.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.13	16.06	15.89	17.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.13	16.06	15.98	17.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.07	16.07	15.87	17.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.15	16.03	15.93	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.15	16.07	15.90	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.05	16.05	15.91	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.12	16.04	15.89	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.14	16.08	15.85	17.0	0.0	

Part270_n77 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1		15.81				
100	PI2 BPSK	1	137		15.46		17.0	0.0	
100	PI2 BPSK	1	271		16.48				
100	PI2 BPSK	135	0		15.40		17.0	0.0	
100	PI2 BPSK	135	69		15.47		17.0	0.0	
100	PI2 BPSK	135	138		15.40				
100	PI2 BPSK	270	0		15.43		17.0	0.0	
100	QPSK	1	1		15.80				
100	QPSK	1	137		15.41		17.0	0.0	
100	QPSK	1	271		15.47				
100	QPSK	135	0		15.48				
100	QPSK	135	69		15.06		17.0	0.0	
100	QPSK	135	138		15.38				
100	QPSK	270	0		15.59		17.0	0.0	
100	16QAM	1	1		15.40		17.0	0.0	
100	16QAM	1	1		15.40		17.0	0.0	
100	256QAM	1	1		15.46		17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.17	15.11	15.03	17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.80	15.63	15.52	17.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.60	15.53	15.43	17.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.63	15.59	15.59	17.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.12	15.14	15.03	17.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.51	15.57	15.62	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.85	15.55	15.62	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.24	15.55	15.53	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.08	16.00	15.98	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.55	15.51	15.51	17.0	0.0	

Part270_n77 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	16.16	16.02	15.96			
100	PI2 BPSK	1	137	16.20	16.09	16.00	17.0	0.0	
100	PI2 BPSK	1	271	16.20	16.07	15.90			
100	PI2 BPSK	135	0	16.21	16.03	15.85	17.0	0.0	
100	PI2 BPSK	135	69	16.26	16.02	15.92	17.0	0.0	
100	PI2 BPSK	135	138	16.18	16.07	15.88			
100	PI2 BPSK	270	0	16.17	15.97	15.81	17.0	0.0	
100	QPSK	1	1	16.31	16.25	16.00			
100	QPSK	1	137	16.16	16.13	16.00	17.0	0.0	
100	QPSK	1	271	16.13	16.16	15.97			
100	QPSK	135	0	16.18	16.17	15.99			
100	QPSK	135	69	16.21	16.16	16.01	17.0	0.0	
100	QPSK	135	138	16.12	16.12	15.98			
100	QPSK	270	0	16.19	16.17	15.92	17.0	0.0	
100	16QAM	1	1	16.28	16.11	15.95	17.0	0.0	
100	16QAM	1	1	16.29	16.04	15.93	17.0	0.0	
100	256QAM	1	1	16.27	16.14	15.91	17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.17	16.13	15.97	17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.13	16.12	15.88	17.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.13	16.06	15.89	17.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.13	16.06	15.98	17.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.07	16.07	15.87	17.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.15	16.03	15.93	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.15	16.07	15.90	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.05	16.05	15.91	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.12	16.04	15.89	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.14	16.08	15.85	17.0	0.0	



**Part27Q\_n77\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	1138				
100	Pi2 BPSK	1	137	1135			12.5	0.0
100	Pi2 BPSK	1	271	1131				
100	Pi2 BPSK	135	0	1131			12.5	0.0
100	Pi2 BPSK	135	69	1128			12.5	0.0
100	Pi2 BPSK	135	138	1138				
100	Pi2 BPSK	270	0	1133			12.5	0.0
100	QPSK	1	1	1152				
100	QPSK	1	137	1138			12.5	0.0
100	QPSK	1	271	1130				
100	QPSK	135	0	1138				
100	QPSK	135	69	1144			12.5	0.0
100	QPSK	135	138	1138				
100	QPSK	270	0	1133			12.5	0.0
100	16QAM	1	1	1128			12.5	0.0
100	16QAM	1	1	1131			12.5	0.0
100	256QAM	1	1	1132			12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1121	1123	1124	12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1126	1133	1141	12.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	1138	1140	1135	12.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	1137	1134	1132	12.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	1129	1128	1129	12.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	1141	1142	1134	12.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	1141	1135	1130	12.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	1134	1133	1132	12.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	1141	1125	1140	12.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	1131	1143	1135	12.5	0.0

**Part27Q\_n77\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	1054	1065	1060		
100	Pi2 BPSK	1	137	1076	1079	1089	12.5	0.0
100	Pi2 BPSK	1	271	1086	1077	1077		
100	Pi2 BPSK	135	0	1071	1078	1076	12.5	0.0
100	Pi2 BPSK	135	69	1076	1084	1078	12.5	0.0
100	Pi2 BPSK	135	138	1073	1083	1073		
100	Pi2 BPSK	270	0	1078	1085	1078	12.5	0.0
100	QPSK	1	1	1078	1083	1075		
100	QPSK	1	137	1072	1078	1088	12.5	0.0
100	QPSK	1	271	1075	1087	1089		
100	QPSK	135	0	1087	1078	1088		
100	QPSK	135	69	1077	1085	1074	12.5	0.0
100	QPSK	135	138	1073	1083	1087		
100	QPSK	270	0	1077	1082	1080	12.5	0.0
100	16QAM	1	1	1087	1086	1088	12.5	0.0
100	16QAM	1	1	1072	1085	1075	12.5	0.0
100	256QAM	1	1	1080	1082	1070	12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1017	1075	1072	12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1084	1073	1083	12.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	1074	1078	1073	12.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	1071	1082	1072	12.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	1068	1074	1083	12.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	1078	1075	1087	12.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	1087	1076	1087	12.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	1075	1082	1070	12.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	1078	1070	1071	12.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	1070	1076	1085	12.5	0.0

**Part27Q\_n77 HPUE\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1		1138			
100	Pi2 BPSK	1	137		1135		12.5	0.0
100	Pi2 BPSK	1	271		1131			
100	Pi2 BPSK	135	0		1131		12.5	0.0
100	Pi2 BPSK	135	69		1128		12.5	0.0
100	Pi2 BPSK	135	138		1138			
100	Pi2 BPSK	270	0		1133		12.5	0.0
100	QPSK	1	1		1152			
100	QPSK	1	137		1138		12.5	0.0
100	QPSK	1	271		1130			
100	QPSK	135	0		1138			
100	QPSK	135	69		1144		12.5	0.0
100	QPSK	135	138		1138			
100	QPSK	270	0		1133		12.5	0.0
100	16QAM	1	1		1128		12.5	0.0
100	16QAM	1	1		1131		12.5	0.0
100	256QAM	1	1		1132		12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1131	1130	1134	12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1136	1133	1141	12.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	1138	1140	1135	12.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	1137	1134	1132	12.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	1129	1128	1129	12.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	1141	1142	1134	12.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	1141	1135	1130	12.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	1134	1133	1132	12.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	1141	1125	1140	12.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	1131	1143	1135	12.5	0.0



Part270_n77 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	10.54	10.65	10.80			
100	PI2 BPSK	1	137	10.76	10.79	10.89	12.5	0.0	
100	PI2 BPSK	1	271	10.86	10.77	10.77			
100	PI2 BPSK	135	0	10.71	10.78	10.76	12.5	0.0	
100	PI2 BPSK	135	69	10.76	10.84	10.78	12.5	0.0	
100	PI2 BPSK	135	138	10.73	10.83	10.73			
100	PI2 BPSK	270	0	10.78	10.85	10.78	12.5	0.0	
100	QPSK	1	1	10.75	10.83	10.79			
100	QPSK	1	137	10.72	10.78	10.88	12.5	0.0	
100	QPSK	1	271	10.75	10.87	10.89			
100	QPSK	135	0	10.67	10.76	10.88			
100	QPSK	135	69	10.77	10.85	10.74	12.5	0.0	
100	QPSK	135	138	10.73	10.83	10.87			
100	QPSK	270	0	10.77	10.82	10.80	12.5	0.0	
100	16QAM	1	1	10.67	10.86	10.88	12.5	0.0	
100	16QAM	1	1	10.72	10.85	10.75	12.5	0.0	
100	256QAM	1	1	10.80	10.82	10.70	12.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	10.67	10.75	10.72	12.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	10.64	10.73	10.63	12.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	10.74	10.79	10.73	12.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	10.71	10.82	10.72	12.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	10.62	10.74	10.63	12.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	10.76	10.75	10.67	12.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	10.67	10.76	10.67	12.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	10.75	10.82	10.70	12.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	10.76	10.70	10.71	12.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	10.70	10.79	10.65	12.5	0.0	

Part270_n77_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	13.80					
100	PI2 BPSK	1	137		13.84		15.0	0.0	
100	PI2 BPSK	1	271		13.84				
100	PI2 BPSK	135	0	13.83			15.0	0.0	
100	PI2 BPSK	135	69	13.80			15.0	0.0	
100	PI2 BPSK	135	138	13.76					
100	PI2 BPSK	270	0	13.83			15.0	0.0	
100	QPSK	1	1	13.79					
100	QPSK	1	137	13.90			15.0	0.0	
100	QPSK	1	271	13.78					
100	QPSK	135	0	13.74			15.0	0.0	
100	QPSK	135	69	13.86					
100	QPSK	135	138	13.85					
100	QPSK	270	0	13.85			15.0	0.0	
100	16QAM	1	1	13.83			15.0	0.0	
100	16QAM	1	1	13.82			15.0	0.0	
100	256QAM	1	1	13.82			15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.77	13.74	13.74	15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.73	13.79	13.74	15.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	13.70	13.71	13.75	15.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	13.70	13.82	13.77	15.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	13.79	13.81	13.79	15.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	13.80	13.78	13.84	15.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	13.70	13.83	13.76	15.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	13.75	13.75	13.77	15.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	13.77	13.79	13.80	15.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	13.74	13.74	13.80	15.0	0.0	

Part270_n77_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	13.48	13.59	13.54			
100	PI2 BPSK	1	137	13.46	13.70	13.61	15.0	0.0	
100	PI2 BPSK	1	271	13.57	13.66	13.68			
100	PI2 BPSK	135	0	13.27	13.66	13.70	15.0	0.0	
100	PI2 BPSK	135	69	13.53	13.65	13.64	15.0	0.0	
100	PI2 BPSK	135	138	13.45	13.65	13.59			
100	PI2 BPSK	270	0	13.57	13.70	13.69	15.0	0.0	
100	QPSK	1	1	13.65	13.64	13.75			
100	QPSK	1	137	13.47	13.76	13.58	15.0	0.0	
100	QPSK	1	271	13.51	13.71	13.70			
100	QPSK	135	0	13.53	13.64	13.59			
100	QPSK	135	69	13.74	13.76	13.72	15.0	0.0	
100	QPSK	135	138	13.49	13.77	13.64			
100	QPSK	270	0	13.50	13.74	13.65	15.0	0.0	
100	16QAM	1	1	13.56	13.66	13.56	15.0	0.0	
100	16QAM	1	1	13.54	13.66	13.66	15.0	0.0	
100	256QAM	1	1	13.59	13.68	13.57	15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.40	13.63	13.65	15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.52	13.70	13.68	15.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	13.48	13.67	13.67	15.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	13.40	13.69	13.69	15.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	13.43	13.64	13.60	15.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	13.40	13.77	13.55	15.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	13.49	13.67	13.61	15.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	13.43	13.79	13.50	15.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	13.48	13.74	13.50	15.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	13.42	13.70	13.64	15.0	0.0	





Part27Q_n77 HPUE_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	13.80						
100	Pi2 BPSK	1	137	13.84			15.0	0.0		
100	Pi2 BPSK	1	271	13.84						
100	Pi2 BPSK	135	0	13.83			15.0	0.0		
100	Pi2 BPSK	135	69	13.80			15.0	0.0		
100	Pi2 BPSK	135	138	13.76			15.0	0.0		
100	Pi2 BPSK	270	0	13.83						
100	QPSK	1	1	13.79						
100	QPSK	1	137	13.80			15.0	0.0		
100	QPSK	1	271	13.78						
100	QPSK	135	0	13.74			15.0	0.0		
100	QPSK	135	69	13.86			15.0	0.0		
100	QPSK	135	138	13.85			15.0	0.0		
100	QPSK	270	0	13.85			15.0	0.0		
100	16QAM	1	1	13.83			15.0	0.0		
100	64QAM	1	1	13.82			15.0	0.0		
100	256QAM	1	1	13.82			15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	13.77	13.74	13.74	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	13.72	13.73	13.74	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	13.70	13.71	13.75	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	13.70	13.71	13.75	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	13.48	13.67	13.67	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		

Part27Q_n77 HPUE_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	13.48	13.59	13.54				
100	Pi2 BPSK	1	137	13.46	13.70	13.61	15.0	0.0		
100	Pi2 BPSK	1	271	13.57	13.66	13.68				
100	Pi2 BPSK	135	0	13.57	13.66	13.70	15.0	0.0		
100	Pi2 BPSK	135	69	13.53	13.65	13.64	15.0	0.0		
100	Pi2 BPSK	135	138	13.45	13.65	13.59	15.0	0.0		
100	Pi2 BPSK	270	0	13.57	13.70	13.69				
100	QPSK	1	1	13.55	13.64	13.71				
100	QPSK	1	137	13.47	13.76	13.58	15.0	0.0		
100	QPSK	1	271	13.51	13.71	13.70				
100	QPSK	135	0	13.53	13.64	13.59				
100	QPSK	135	69	13.54	13.70	13.65	15.0	0.0		
100	QPSK	135	138	13.49	13.77	13.58	15.0	0.0		
100	QPSK	270	0	13.50	13.74	13.65	15.0	0.0		
100	16QAM	1	1	13.56	13.66	13.58	15.0	0.0		
100	64QAM	1	1	13.54	13.66	13.66	15.0	0.0		
100	256QAM	1	1	13.59	13.68	13.57	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	13.49	13.58	13.55	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	13.52	13.70	13.68	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	13.48	13.67	13.67	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	13.48	13.67	13.67	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	13.40	13.64	13.64	15.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	13.42	13.70	13.64	15.0	0.0		

Part27Q_n78_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	14.54						
100	Pi2 BPSK	1	137	14.51			16.0	0.0		
100	Pi2 BPSK	1	271	14.53						
100	Pi2 BPSK	135	0	14.28			16.0	0.0		
100	Pi2 BPSK	135	69	14.35			16.0	0.0		
100	Pi2 BPSK	135	138	14.39			16.0	0.0		
100	Pi2 BPSK	270	0	14.24			16.0	0.0		
100	QPSK	1	1	14.01						
100	QPSK	1	137	14.28			16.0	0.0		
100	QPSK	1	271	14.37						
100	QPSK	135	0	14.26			16.0	0.0		
100	QPSK	135	69	14.42			16.0	0.0		
100	QPSK	135	138	14.33			16.0	0.0		
100	QPSK	270	0	14.40			16.0	0.0		
100	16QAM	1	1	14.34			16.0	0.0		
100	64QAM	1	1	14.38			16.0	0.0		
100	256QAM	1	1	14.26			16.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.41	14.53	14.56	16.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.37	14.43	14.43	16.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.33	14.41	14.43	16.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.33	14.41	14.43	16.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.40	14.42	14.39	16.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.40	14.42	14.39	16.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.40	14.57	14.51	16.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.33	14.34	14.37	16.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.33	14.34	14.32	16.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.33	14.34	14.32	16.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.36	14.34	14.32	16.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.40	14.40	14.37	16.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.43	14.41	14.42	16.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.38	14.35	14.33	16.0	0.0		



**Part270\_n78\_Ant 4**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	14.82				
100	Pi2 BPSK	1	137	14.93			16.0	0.0
100	Pi2 BPSK	1	271	14.75				
100	Pi2 BPSK	135	0	14.68			16.0	0.0
100	Pi2 BPSK	135	69	14.65			16.0	0.0
100	Pi2 BPSK	135	138	14.67				
100	Pi2 BPSK	270	0	14.72			16.0	0.0
100	QPSK	1	1	14.98				
100	QPSK	1	137	14.64			16.0	0.0
100	QPSK	1	271	14.68				
100	QPSK	135	0	14.63			16.0	0.0
100	QPSK	135	69	14.63				
100	QPSK	135	138	14.71			16.0	0.0
100	QPSK	270	0	14.71			16.0	0.0
100	16QAM	1	1	14.63			16.0	0.0
100	16QAM	1	1	14.62			16.0	0.0
100	256QAM	1	1	14.74			16.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	14.82	14.72	14.79	16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.76	14.70	14.77	16.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	14.77	14.76	14.68	16.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	14.82	14.81	14.80	16.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.74	14.40	14.79	16.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	14.81	14.72	14.74	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	14.70	14.72	14.68	16.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	14.80	14.75	14.74	16.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	14.70	14.69	14.62	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	14.76	14.79	14.68	16.0	0.0

**Part27Q\_n78 HPUE\_Ant 4**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	14.54				
100	Pi2 BPSK	1	137	14.51			16.0	0.0
100	Pi2 BPSK	1	271	14.33				
100	Pi2 BPSK	135	0	14.28			16.0	0.0
100	Pi2 BPSK	135	69	14.35			16.0	0.0
100	Pi2 BPSK	135	138	14.39				
100	Pi2 BPSK	270	0	14.34			16.0	0.0
100	QPSK	1	1	14.81				
100	QPSK	1	137	14.28			16.0	0.0
100	QPSK	1	271	14.37				
100	QPSK	135	0	14.28			16.0	0.0
100	QPSK	135	69	14.66				
100	QPSK	135	138	14.33			16.0	0.0
100	QPSK	270	0	14.40			16.0	0.0
100	16QAM	1	1	14.34			16.0	0.0
100	16QAM	1	1	14.36			16.0	0.0
100	256QAM	1	1	14.26			16.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	14.41	14.33	14.36	16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.37	14.43	14.40	16.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	14.33	14.41	14.34	16.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	14.40	14.42	14.39	16.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.40	14.37	14.31	16.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	14.33	14.34	14.37	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	14.36	14.34	14.32	16.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	14.40	14.40	14.37	16.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	14.43	14.41	14.42	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	14.38	14.35	14.33	16.0	0.0

**Part270\_n78 HPUE\_Ant 4**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	14.82				
100	Pi2 BPSK	1	137	14.93			16.0	0.0
100	Pi2 BPSK	1	271	14.76				
100	Pi2 BPSK	135	0	14.68			16.0	0.0
100	Pi2 BPSK	135	69	14.65			16.0	0.0
100	Pi2 BPSK	135	138	14.67				
100	Pi2 BPSK	270	0	14.72			16.0	0.0
100	QPSK	1	1	14.98				
100	QPSK	1	137	14.64			16.0	0.0
100	QPSK	1	271	14.68				
100	QPSK	135	0	14.63			16.0	0.0
100	QPSK	135	69	14.63				
100	QPSK	135	138	14.71			16.0	0.0
100	QPSK	270	0	14.71			16.0	0.0
100	16QAM	1	1	14.61			16.0	0.0
100	16QAM	1	1	14.62			16.0	0.0
100	256QAM	1	1	14.74			16.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	14.82	14.72	14.79	16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	14.76	14.70	14.77	16.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	14.77	14.76	14.68	16.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	14.82	14.81	14.80	16.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	14.74	14.40	14.79	16.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	14.81	14.72	14.74	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	14.70	14.72	14.68	16.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	14.80	14.75	14.74	16.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	14.70	14.69	14.62	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	14.76	14.78	14.68	16.0	0.0



Part27Q_n78_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	15.71						
100	Pi2 BPSK	1	137	15.89			17.0	0.0		
100	Pi2 BPSK	1	271	15.90						
100	Pi2 BPSK	135	0	15.95			17.0	0.0		
100	Pi2 BPSK	135	69	15.81			17.0	0.0		
100	Pi2 BPSK	135	138	15.87						
100	Pi2 BPSK	270	0	15.89			17.0	0.0		
100	QPSK	1	1	15.84						
100	QPSK	1	137	15.85			17.0	0.0		
100	QPSK	1	271	15.89						
100	QPSK	135	0	15.93						
100	QPSK	135	69	15.96			17.0	0.0		
100	QPSK	135	138	15.94						
100	QPSK	270	0	15.96			17.0	0.0		
100	16QAM	1	1	15.83			17.0	0.0		
100	64QAM	1	1	15.91			17.0	0.0		
100	256QAM	1	1	15.84			17.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	15.81	15.90	15.92	17.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	15.86	15.89	15.82	17.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	15.82	15.83	15.89	17.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	15.82	15.82	15.92	17.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	15.82	15.93	15.87	17.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	15.93	15.90	15.82	17.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	15.93	15.92	15.90	17.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	15.85	15.92	15.85	17.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	15.82	15.83	15.84	17.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	15.84	15.83	15.83	17.0	0.0		

Part27Q_n78_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	16.16						
100	Pi2 BPSK	1	137	16.13			17.0	0.0		
100	Pi2 BPSK	1	271	16.09						
100	Pi2 BPSK	135	0	16.11			17.0	0.0		
100	Pi2 BPSK	135	69	16.14			17.0	0.0		
100	Pi2 BPSK	135	138	16.15						
100	Pi2 BPSK	270	0	16.07			17.0	0.0		
100	QPSK	1	1	16.21						
100	QPSK	1	137	16.09			17.0	0.0		
100	QPSK	1	271	16.12						
100	QPSK	135	0	16.15						
100	QPSK	135	69	16.17			17.0	0.0		
100	QPSK	135	138	16.07						
100	QPSK	270	0	16.11			17.0	0.0		
100	16QAM	1	1	16.10			17.0	0.0		
100	64QAM	1	1	16.11			17.0	0.0		
100	256QAM	1	1	16.08			17.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	16.02	16.02	16.12	17.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	16.07	16.16	16.11	17.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	16.15	16.14	16.10	17.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	16.13	16.11	16.15	17.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	16.10	16.14	16.15	17.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	16.16	16.08	16.09	17.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	16.08	16.09	16.04	17.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	16.07	16.11	16.12	17.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	16.08	16.07	16.16	17.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	16.06	16.06	16.02	17.0	0.0		

Part27Q_n78 HPUE_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	15.71						
100	Pi2 BPSK	1	137	15.89			17.0	0.0		
100	Pi2 BPSK	1	271	15.90						
100	Pi2 BPSK	135	0	15.95			17.0	0.0		
100	Pi2 BPSK	135	69	15.81			17.0	0.0		
100	Pi2 BPSK	135	138	15.87						
100	Pi2 BPSK	270	0	15.89			17.0	0.0		
100	QPSK	1	1	15.84						
100	QPSK	1	137	15.85			17.0	0.0		
100	QPSK	1	271	15.89						
100	QPSK	135	0	15.93						
100	QPSK	135	69	15.96			17.0	0.0		
100	QPSK	135	138	15.94						
100	QPSK	270	0	15.96			17.0	0.0		
100	16QAM	1	1	15.83			17.0	0.0		
100	64QAM	1	1	15.91			17.0	0.0		
100	256QAM	1	1	15.84			17.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	15.81	15.90	15.82	17.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	15.86	15.89	15.82	17.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	15.82	15.83	15.89	17.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	15.82	15.82	15.92	17.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	15.82	15.93	15.87	17.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	15.93	15.90	15.82	17.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	15.93	15.92	15.90	17.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	15.85	15.92	15.85	17.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	15.82	15.83	15.84	17.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	15.84	15.83	15.83	17.0	0.0		



Part270_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	16.16	16.13		17.0	0.0	
100	Pl2 BPSK	1	137	16.09	16.07				
100	Pl2 BPSK	1	271	16.11	16.07		17.0	0.0	
100	Pl2 BPSK	135	69	16.14	16.07		17.0	0.0	
100	Pl2 BPSK	135	138	16.15	16.07		17.0	0.0	
100	Pl2 BPSK	270	0	16.07	16.07				
100	QPSK	1	1	16.21	16.18		17.0	0.0	
100	QPSK	1	137	16.09	16.07				
100	QPSK	1	271	16.12	16.12				
100	QPSK	135	69	16.15	16.15		17.0	0.0	
100	QPSK	135	138	16.17	16.17		17.0	0.0	
100	QPSK	135	138	16.07	16.07				
100	QPSK	270	0	16.11	16.11		17.0	0.0	
100	16QAM	1	1	16.10	16.10		17.0	0.0	
100	16QAM	1	1	16.11	16.11		17.0	0.0	
100	256QAM	1	1	16.09	16.09		17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	649668	650000	650332	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3745.02	3750	3754.98	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	649334	650000	650666	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3740.01	3750	3759.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.07	16.16	16.11	17.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.15	16.14	16.10	17.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	649668	650000	651332	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3725.02	3750	3769.98	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.13	16.11	16.15	17.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	648334	650000	651666	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	3720.01	3750	3774.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.10	16.14	16.15	17.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	649000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	3720	3750	3780	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.08	16.09	16.04	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	647334	650000	652666	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.07	16.11	16.12	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	647168	650000	652832	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.05	16.07	16.18	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	646200	650000	653200	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	3705	3750	3795	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.06	16.06	16.02	17.0	0.0	

Part270_n78_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	11.34					
100	Pl2 BPSK	1	137	11.40					
100	Pl2 BPSK	1	271	11.47			12.5	0.0	
100	Pl2 BPSK	135	69	11.45			12.5	0.0	
100	Pl2 BPSK	135	138	11.36			12.5	0.0	
100	Pl2 BPSK	270	0	11.40			12.5	0.0	
100	QPSK	1	1	11.50			12.5	0.0	
100	QPSK	1	137	11.38					
100	QPSK	1	271	11.43					
100	QPSK	135	69	11.34			12.5	0.0	
100	QPSK	135	138	11.46					
100	QPSK	270	0	11.43			12.5	0.0	
100	QPSK	1	1	11.55			12.5	0.0	
100	QPSK	1	137	11.38					
100	QPSK	1	271	11.43					
100	QPSK	135	69	11.34			12.5	0.0	
100	QPSK	135	138	11.43					
100	QPSK	270	0	11.38			12.5	0.0	
100	16QAM	1	1	11.38			12.5	0.0	
100	16QAM	1	1	11.47			12.5	0.0	
100	256QAM	1	1	11.41			12.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	633000	633332	633668	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3465	3469.98	3504.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	11.38	11.38	11.42	12.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632668	633332	635000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3460.02	3469.98	3514.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	11.29	11.34	11.37	12.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632000	633332	634668	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3460	3469.98	3519.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	11.38	11.31	11.35	12.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	631668	633332	635000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3475.02	3469.98	3525	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	11.38	11.41	11.37	12.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631334	633332	635332	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	3470.01	3469.98	3529.98	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	11.31	11.29	11.37	12.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631000	633332	635668	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	3465	3469.98	3534.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	11.40	11.34	11.38	12.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	630668	633332	636000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	3460.02	3469.98	3540	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	11.31	11.39	11.31	12.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630500	633332	636168	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	3467.5	3469.98	3542.48	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	11.37	11.42	11.40	12.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630334	633332	636332	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	3455.01	3469.98	3544.98	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	11.35	11.28	11.30	12.5	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	11.45					
100	Pl2 BPSK	1	137	11.57			12.5	0.0	
100	Pl2 BPSK	1	271	11.53			12.5	0.0	
100	Pl2 BPSK	135	69	11.46			12.5	0.0	
100	Pl2 BPSK	135	138	11.56			12.5	0.0	
100	Pl2 BPSK	270	0	11.43			12.5	0.0	
100	QPSK	1	1	11.61			12.5	0.0	
100	QPSK	1	137	11.52					
100	QPSK	1	271	11.45					
100	QPSK	135	69	11.46			12.5	0.0	
100	QPSK	135	138	11.55			12.5	0.0	
100	QPSK	270	0	11.50			12.5	0.0	
100	16QAM	1	1	11.46			12.5	0.0	
100	16QAM	1	1	11.47			12.5	0.0	
100	256QAM	1	1	11.52			12.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	649668	650000	650332	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3743.02	3750	3754.98	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	649334	650000	650666	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3740.01	375				



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**Part27Q\_n78 HPUE\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	1134				
100	Pi2 BPSK	1	137	1140			12.5	0.0
100	Pi2 BPSK	1	271	1147				
100	Pi2 BPSK	135	0	1145			12.5	0.0
100	Pi2 BPSK	135	69	1136			12.5	0.0
100	Pi2 BPSK	135	138	1140				
100	Pi2 BPSK	270	0	1146			12.5	0.0
100	QPSK	1	1	1155				
100	QPSK	1	137	1139			12.5	0.0
100	QPSK	1	271	1143				
100	QPSK	135	0	1134				
100	QPSK	135	69	1143			12.5	0.0
100	QPSK	135	138	1136				
100	QPSK	270	0	1138			12.5	0.0
100	HQAM	1	1	1138			12.5	0.0
100	HQAM	1	1	1147			12.5	0.0
100	250QAM	1	1	1141			12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1129	1159	1142	12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1142	1134	1140	12.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	1129	1134	1137	12.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	1138	1131	1135	12.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	1152	1141	1137	12.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	1131	1129	1137	12.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	1140	1134	1138	12.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	1131	1135	1131	12.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	1137	1142	1140	12.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	1135	1128	1130	12.5	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	1145				
100	Pi2 BPSK	1	137	1157			12.5	0.0
100	Pi2 BPSK	1	271	1153				
100	Pi2 BPSK	135	0	1146			12.5	0.0
100	Pi2 BPSK	135	69	1156			12.5	0.0
100	Pi2 BPSK	135	138	1143				
100	Pi2 BPSK	270	0	1150			12.5	0.0
100	QPSK	1	1	1161				
100	QPSK	1	137	1152			12.5	0.0
100	QPSK	1	271	1145				
100	QPSK	135	0	1146				
100	QPSK	135	69	1155			12.5	0.0
100	QPSK	135	138	1154				
100	QPSK	270	0	1150			12.5	0.0
100	HQAM	1	1	1146			12.5	0.0
100	HQAM	1	1	1147			12.5	0.0
100	250QAM	1	1	1152			12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1148	1147	1150	12.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1148	1148	1144	12.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	1144	1142	1145	12.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	1143	1153	1144	12.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	1151	1151	1140	12.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	1140	1150	1150	12.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	1154	1142	1144	12.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	1147	1146	1148	12.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	1145	1144	1154	12.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	1140	1140	1147	12.5	0.0

**Part27Q\_n78\_Ant 8**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	1416				
100	Pi2 BPSK	1	137	1417			15.0	0.0
100	Pi2 BPSK	1	271	1420				
100	Pi2 BPSK	135	0	1422			15.0	0.0
100	Pi2 BPSK	135	69	1424			15.0	0.0
100	Pi2 BPSK	135	138	1414				
100	Pi2 BPSK	270	0	1416			15.0	0.0
100	QPSK	1	1	1427				
100	QPSK	1	137	1422			15.0	0.0
100	QPSK	1	271	1422				
100	QPSK	135	0	1419				
100	QPSK	135	69	1425			15.0	0.0
100	QPSK	135	138	1414				
100	QPSK	270	0	1419			15.0	0.0
100	HQAM	1	1	1418			15.0	0.0
100	HQAM	1	1	1425			15.0	0.0
100	250QAM	1	1	1421			15.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	1408	1415	1414	15.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	1410	1410	1409	15.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	1407	1407	1406	15.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	1406	1407	1413	15.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	1408	1416	1417	15.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	1414	1416	1405	15.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	1408	1407	1409	15.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	1409	1404	1404	15.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	1414	1416	1410	15.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	1412	1411	1411	15.0	0.0



Part270_n78_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	14.17						
100	Pl2 BPSK	1	137	14.22			15.0	0.0		
100	Pl2 BPSK	1	271	14.28						
100	Pl2 BPSK	135	0	14.14			15.0	0.0		
100	Pl2 BPSK	135	69	14.24						
100	Pl2 BPSK	135	138	14.25						
100	Pl2 BPSK	270	0	14.21			15.0	0.0		
100	QPSK	1	1	14.29						
100	QPSK	1	137	14.14			15.0	0.0		
100	QPSK	1	271	14.23						
100	QPSK	135	0	14.19						
100	QPSK	135	69	14.25						
100	QPSK	135	138	14.24						
100	QPSK	270	0	14.20			15.0	0.0		
100	16QAM	1	1	14.18			15.0	0.0		
100	16QAM	1	1	14.15			15.0	0.0		
100	256QAM	1	1	14.20			15.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	14.22	14.11	14.21	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.25	14.22	14.19	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.17	14.21	14.20	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.19	14.24	14.11	15.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.18	14.24	14.17	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.19	14.12	14.22	15.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.21	14.20	14.24	15.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.15	14.23	14.11	15.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.25	14.14	14.22	15.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.22	14.17	14.11	15.0	0.0		

Part27Q_n78 HPUE_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	14.16						
100	Pl2 BPSK	1	137	14.17			15.0	0.0		
100	Pl2 BPSK	1	271	14.20						
100	Pl2 BPSK	135	0	14.22			15.0	0.0		
100	Pl2 BPSK	135	69	14.24						
100	Pl2 BPSK	135	138	14.14						
100	Pl2 BPSK	270	0	14.16			15.0	0.0		
100	QPSK	1	1	14.27						
100	QPSK	1	137	14.22			15.0	0.0		
100	QPSK	1	271	14.22						
100	QPSK	135	0	14.19						
100	QPSK	135	69	14.25						
100	QPSK	135	138	14.14						
100	QPSK	270	0	14.19			15.0	0.0		
100	16QAM	1	1	14.18			15.0	0.0		
100	16QAM	1	1	14.25			15.0	0.0		
100	256QAM	1	1	14.21			15.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	14.08	14.15	14.18	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.10	14.10	14.09	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.07	14.07	14.06	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.06	14.07	14.13	15.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.08	14.16	14.05	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.14	14.16	14.15	15.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.08	14.07	14.09	15.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.09	14.04	14.04	15.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.14	14.16	14.10	15.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.12	14.11	14.11	15.0	0.0		

Part270_n78 HPUE_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pl2 BPSK	1	1	14.17						
100	Pl2 BPSK	1	137	14.22			15.0	0.0		
100	Pl2 BPSK	1	271	14.28						
100	Pl2 BPSK	135	0	14.14			15.0	0.0		
100	Pl2 BPSK	135	69	14.24						
100	Pl2 BPSK	135	138	14.25						
100	Pl2 BPSK	270	0	14.21			15.0	0.0		
100	QPSK	1	1	14.29						
100	QPSK	1	137	14.14			15.0	0.0		
100	QPSK	1	271	14.23						
100	QPSK	135	0	14.19						
100	QPSK	135	69	14.25						
100	QPSK	135	138	14.24						
100	QPSK	270	0	14.20			15.0	0.0		
100	16QAM	1	1	14.18			15.0	0.0		
100	16QAM	1	1	14.15			15.0	0.0		
100	256QAM	1	1	14.20			15.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	14.24	14.11	14.21	15.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.25	14.22	14.19	15.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.17	14.21	14.20	15.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.19	14.24	14.11	15.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.18	14.24	14.17	15.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.19	14.12	14.22	15.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.21	14.20	14.24	15.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.15	14.23	14.11	15.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.25	14.14	14.22	15.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.22	14.17	14.11	15.0	0.0		



Band 2\_Ant 0

Table with columns: BW [MHz], Modulation, RB [kHz], RB Offset, Power [dBm], Power [dBm], Power [dBm], Power [dBm], Turn-up [dB], MPR [dB]. Rows include Channel, Frequency (MHz), and various modulation types like QPSK, 16QAM, 64QAM, 256QAM, 1024QAM.

Reduced Power Mode for Other PA DS16

Band 2\_Ant 1

Table with columns: BW [MHz], Modulation, RB [kHz], RB Offset, Power [dBm], Power [dBm], Power [dBm], Power [dBm], Turn-up [dB], MPR [dB]. Rows include Channel, Frequency (MHz), and various modulation types like QPSK, 16QAM, 64QAM, 256QAM, 1024QAM.

Band 4\_Ant 0

Table with columns: BW [MHz], Modulation, RB [kHz], RB Offset, Power [dBm], Power [dBm], Power [dBm], Power [dBm], Turn-up [dB], MPR [dB]. Rows include Channel, Frequency (MHz), and various modulation types like QPSK, 16QAM, 64QAM, 256QAM, 1024QAM.



Band 4\_Ant 1

Table with columns: EUTRA, Modulation, RB, RB Offset, Power, Power, Power, Power, Turn-up, MPR, Channel, Frequency (MHz), and various numerical values for different antenna configurations.

Band 25\_Ant 0

Table with columns: EUTRA, Modulation, RB, RB Offset, Power, Power, Power, Power, Turn-up, MPR, Channel, Frequency (MHz), and various numerical values for different antenna configurations.

Band 25\_Ant 1

Table with columns: EUTRA, Modulation, RB, RB Offset, Power, Power, Power, Power, Turn-up, MPR, Channel, Frequency (MHz), and various numerical values for different antenna configurations.





Band 66_Ant 0										
BW (MHz)	Modulation	RB (kHz)	RB Offset	Power Channe	Power Max/Ch/7 Freq	Power Max/Ch/7 Freq	Power Max/Ch/7 Freq	Tune-up (dB)	MFR (dB)	
Channel	Frequency (MHz)									
20	QPSK	1	0	1720	1745	1770				
20	QPSK	1	0	2108	2097	2094				
20	QPSK	1	0	2111	2111	2111				21.9
20	QPSK	1	0	2091	2100	2094				
20	QPSK	50	0	2101	2105	2105				
20	QPSK	50	0	2094	2099	2094				21.9
20	QPSK	50	0	2098	2101	2098				
20	QPSK	100	0	2092	2101	2094				
20	QPSK	1	0	2094	2093	2096				
20	16QAM	1	0	2099	2107	2094				21.9
20	16QAM	1	0	2096	2087	2072				
20	16QAM	50	0	2100	2097	2090				
20	16QAM	50	0	2092	2096	2090				21.9
20	16QAM	50	0	2092	2094	2092				
20	16QAM	100	0	2087	2090	2087				
20	64QAM	1	0	2105	2098	2085				21.9
20	64QAM	1	0	2119	2100	2092				
20	64QAM	1	0	2097	2090	2077				
20	64QAM	50	0	2088	2094	2091				
20	64QAM	50	0	2089	2088	2077				21.9
20	64QAM	50	0	2073	2087	2094				
20	64QAM	100	0	2081	2089	2081				
20	256QAM	1	0	2023	2024	2020				20.9
20	256QAM	1	0	2018	2018	2010				
20	256QAM	1	0	2017	2015	2007				
20	256QAM	50	0	2019	2013	2006				
20	256QAM	50	0	2021	2014	2006				20.9
20	256QAM	50	0	2015	2019	2014				
20	256QAM	100	0	2004	2018	2007				
15	QPSK	1	0	1717.5	1745	1772.5				
15	QPSK	1	0	2100	2088	2082				21.9
15	QPSK	1	0	2107	2107	2107				
15	QPSK	1	0	2085	2088	2074				
15	QPSK	36	0	2098	2103	2092				21.9
15	QPSK	36	0	2092	2098	2088				
15	QPSK	36	0	2092	2098	2085				
15	QPSK	75	0	2086	2090	2087				
15	16QAM	1	0	2100	2097	2094				21.9
15	16QAM	1	0	2098	2101	2094				
15	16QAM	1	0	2082	2087	2089				21.9
15	16QAM	50	0	2091	2090	2083				
15	16QAM	50	0	2096	2097	2074				
15	16QAM	50	0	2090	2093	2089				21.9
15	16QAM	100	0	2088	2091	2088				
15	64QAM	1	0	2103	2099	2086				21.9
15	64QAM	1	0	2101	2094	2086				
15	64QAM	1	0	2085	2090	2077				
15	64QAM	36	0	2095	2102	2090				21.9
15	64QAM	36	0	2096	2088	2078				
15	64QAM	36	0	2092	2096	2088				
15	64QAM	75	0	2084	2091	2082				
15	256QAM	1	0	2012	2021	2019				20.9
15	256QAM	1	0	2004	2015	2005				
15	256QAM	1	0	2011	2009	1995				
15	256QAM	50	0	2016	2010	1999				20.9
15	256QAM	50	0	2015	2016	2000				
15	256QAM	75	0	2001	2013	1997				
10	QPSK	1	0	1715	1745	1775				
10	QPSK	1	0	2097	2085	2085				21.9
10	QPSK	1	0	2098	2100	2097				
10	QPSK	1	0	2098	2088	2069				
10	QPSK	25	0	2092	2098	2083				21.9
10	QPSK	25	0	2092	2098	2077				
10	QPSK	25	0	2076	2091	2083				
10	QPSK	60	0	2087	2087	2082				21.9
10	16QAM	1	0	2094	2093	2083				
10	16QAM	1	0	2100	2104	2093				21.9
10	16QAM	1	0	2076	2091	2081				
10	16QAM	25	0	2094	2093	2081				
10	16QAM	25	0	2094	2093	2072				21.9
10	16QAM	25	0	2079	2084	2088				
10	16QAM	50	0	2090	2092	2083				
10	64QAM	1	0	2103	2094	2086				21.9
10	64QAM	1	0	2106	2099	2093				
10	64QAM	1	0	2092	2093	2085				
10	64QAM	25	0	2089	2097	2087				21.9
10	64QAM	25	0	2098	2087	2071				
10	64QAM	25	0	2090	2088	2068				
10	64QAM	50	0	2081	2100	2085				
10	256QAM	1	0	2022	2014	2014				20.9
10	256QAM	1	0	2012	2010	1999				
10	256QAM	1	0	2016	2014	2003				
10	256QAM	25	0	2015	2003	1995				20.9
10	256QAM	25	0	2010	1999	1997				
10	256QAM	25	0	2010	2008	2006				
10	256QAM	50	0	1993	2004	1998				
5	QPSK	1	0	1712.5	1745	1777.5				
5	QPSK	1	0	2094	2082	2082				21.9
5	QPSK	1	0	2098	2100	2097				
5	QPSK	1	0	2098	2088	2072				
5	QPSK	12	0	2100	2098	2090				21.9
5	QPSK	12	0	2096	2097	2076				
5	QPSK	12	0	2076	2096	2074				
5	QPSK	25	0	2081	2090	2086				21.9
5	16QAM	1	0	2096	2097	2088				
5	16QAM	1	0	2102	2099	2088				21.9
5	16QAM	1	0	2082	2094	2083				
5	16QAM	12	0	2093	2089	2076				21.9
5	16QAM	12	0	2077	2094	2085				
5	16QAM	15	0	2086	2093	2088				
5	64QAM	1	0	2098	2093	2079				21.9
5	64QAM	1	0	2102	2095	2087				
5	64QAM	1	0	2094	2097	2076				
5	64QAM	12	0	2097	2097	2085				21.9
5	64QAM	12	0	2090	2087	2073				
5	64QAM	15	0	2087	2088	2068				
5	64QAM	25	0	2089	2090	2083				
5	256QAM	1	0	2022	2021	2008				20.9
5	256QAM	1	0	2014	2013	1993				
5	256QAM	1	0	2016	2013	1997				
5	256QAM	12	0	2007	2005	1992				20.9
5	256QAM	12	0	2011	1998	1995				
5	256QAM	12	0	2002	2003	2004				
5	256QAM	25	0	2006	2014	2004				
3	QPSK	1	0	1711.5	1745	1778.5				
3	QPSK	1	0	2093	2083	2089				21.9
3	QPSK	1	0	2098	2100	2097				
3	QPSK	1	0	2094	2087	2081				
3	QPSK	8	0	2088	2093	2081				21.9
3	QPSK	8	0	2086	2084	2071				
3	QPSK	8	0	2071	2094	2072				
3	QPSK	15	0	2091	2087	2083				21.9
3	16QAM	1	0	2100	2091	2083				
3	16QAM	1	0	2099	2099	2089				21.9
3	16QAM	1	0	2082	2093	2086				
3	16QAM	8	0	2096	2086	2071				21.9
3	16QAM	8	0	2078	2100	2088				
3	16QAM	15	0	2087	2080	2069				
3	64QAM	1	0	2109	2096	2087				21.9
3	64QAM	1	0	2097	2098	2081				
3	64QAM	8	0	2089	2082	2084				
3	64QAM	8	0	2090	2085	2082				21.9
3	64QAM	8	0	2071	2094	2077				
3	64QAM	15	0	2086	2088	2080				
3	256QAM	1	0	2017	2016	2007				20.9
3	256QAM	1	0	2015	2012	1990				
3	256QAM	1	0	2016	2007	2002				
3	256QAM	8	0	2015	2010	2005				20.9
3	256QAM	8	0	2015	1998	1993				
3	256QAM	8	0	2003	2005	2008				
3	256QAM	15	0	2002	2008	2000				
1.4	QPSK	1	0	1710.7	1745	1779.3				
1.4	QPSK	1	0	2096	2093	2080				21.9
1.4	QPSK	1	0	2098	2100	2097				
1.4	QPSK	1	0	2098	2088	2070				
1.4	QPSK	3	0	2092	2096	2080				21.9
1.4	QPSK	3	0	2094	2093	2080				
1.4	QPSK	3	0	2079	2095	2070				
1.4	QPSK	6	0	2086	2086	2080				21.9
1.4	16QAM	1	0	2096	2086	2084				
1.4	16QAM	1	0	2107	2096	2082				21.9
1.4	16QAM	1	0	2082	2102	2081				
1.4	16QAM	3	0	2088	2089	2076				
1.4	16QAM	3	0	2078	2095	2084				21.9
1.4	16QAM	3	0	2081	2082	2069				
1.4	16QAM	1	0	2098						



### Band 48\_Ant 4

BW [MHz]	Modulation	RB Size	RB Offset	Power				Tune-up limit [dBm]	MPR [dB]
				Low Ch. / Freq.	Low Middle Ch. / Freq.	High Middle Ch. / Freq.	High Ch. / Freq.		
Channel								Tune-up limit [dBm]	MPR [dB]
Frequency (MHz)									
20	QPSK	1	0	18.85	18.79	18.79	18.84	20	0
20	QPSK	1	49	19.02	18.87	19.03	19.08		
20	QPSK	1	99	18.93	18.81	18.86	18.92		
20	QPSK	50	0	18.93	18.81	18.83	18.93		
20	QPSK	50	24	18.73	18.74	18.66	18.79		
20	QPSK	50	50	18.89	18.79	18.72	18.81		
20	QPSK	100	0	18.78	18.75	18.73	19.01		
20	16QAM	1	0	18.88	18.76	18.91	19.05		
20	16QAM	1	49	18.87	18.73	18.80	18.80		
20	16QAM	1	99	18.73	18.74	18.67	18.84		
20	16QAM	50	0	18.93	18.79	19.01	18.98		
20	16QAM	50	24	18.81	18.89	18.73	18.86		
20	16QAM	50	50	18.80	18.69	18.71	18.88		
20	16QAM	100	0	18.96	18.73	19.00	18.98		
20	64QAM	1	0	18.92	18.79	18.84	18.79		
20	64QAM	1	49	18.84	18.68	18.77	18.93		
20	64QAM	1	99	18.99	18.85	19.02	19.02		
20	64QAM	50	0	18.80	18.67	18.85	18.79		
20	64QAM	50	24	18.83	18.76	18.78	18.87		
20	64QAM	50	50	18.94	18.74	19.00	18.86		
20	64QAM	100	0	18.88	18.73	18.83	18.80		
20	256QAM	1	0	18.82	18.69	18.73	18.92		
20	256QAM	1	49	18.93	18.77	18.97	18.94		
20	256QAM	1	99	18.81	18.77	18.78	18.83		
20	256QAM	50	0	18.70	18.76	18.67	18.89		
20	256QAM	50	24	18.72	18.76	18.67	18.80		
20	256QAM	50	50	18.92	18.78	18.96	18.97		
20	256QAM	100	0	18.93	18.74	18.82	18.88		

### Band 48\_Ant 7

BW [MHz]	Modulation	RB Size	RB Offset	Power				Tune-up limit [dBm]	MPR [dB]
				Low Ch. / Freq.	Low Middle Ch. / Freq.	High Middle Ch. / Freq.	High Ch. / Freq.		
Channel								Tune-up limit [dBm]	MPR [dB]
Frequency (MHz)									
20	QPSK	1	0	21.57	21.51	21.57	21.58	22.5	0
20	QPSK	1	49	21.57	21.56	21.62	21.63		
20	QPSK	1	99	21.54	21.53	21.53	21.59		
20	QPSK	50	0	21.53	21.38	21.33	21.37		
20	QPSK	50	24	20.57	21.03	21.00	21.06		
20	QPSK	50	50	20.95	20.98	20.92	21.02		
20	QPSK	100	0	20.97	20.95	21.00	21.05		
20	16QAM	1	0	20.94	20.95	20.99	21.01		
20	16QAM	1	49	21.00	20.95	20.94	21.03		
20	16QAM	1	99	20.96	20.98	20.99	21.01		
20	16QAM	50	0	19.50	19.49	19.51	19.57		
20	16QAM	50	24	19.67	19.66	19.67	19.73		
20	16QAM	50	50	19.50	19.47	19.52	19.53		
20	16QAM	100	0	19.53	19.52	19.50	19.55		
20	64QAM	1	0	19.61	19.63	19.68	19.71		
20	64QAM	1	49	19.64	19.57	19.56	19.65		
20	64QAM	1	99	19.49	19.58	19.56	19.59		
20	64QAM	50	0	18.83	18.64	18.70	18.71		
20	64QAM	50	24	18.59	18.58	18.55	18.65		
20	64QAM	50	50	18.60	18.63	18.56	18.66		
20	64QAM	100	0	18.68	18.73	18.68	18.77		
20	256QAM	1	0	17.13	17.07	17.10	17.14		
20	256QAM	1	49	17.13	17.06	17.11	17.16		
20	256QAM	1	99	17.29	17.27	17.23	17.30		
20	256QAM	50	0	16.99	16.99	17.06	17.07		
20	256QAM	50	24	17.14	17.12	17.21	17.22		
20	256QAM	50	50	17.02	17.04	17.05	17.09		
20	256QAM	100	0	17.03	16.98	16.98	17.09		

### Band 48\_Ant 10

BW [MHz]	Modulation	RB Size	RB Offset	Power				Tune-up limit [dBm]	MPR [dB]
				Low Ch. / Freq.	Low Middle Ch. / Freq.	High Middle Ch. / Freq.	High Ch. / Freq.		
Channel								Tune-up limit [dBm]	MPR [dB]
Frequency (MHz)									
20	QPSK	1	0	17.79	17.81	17.79	17.90	19	0
20	QPSK	1	49	17.93	17.94	18.01	18.04		
20	QPSK	1	99	17.73	17.74	17.78	17.85		
20	QPSK	50	0	17.67	17.70	17.69	17.93		
20	QPSK	50	24	17.72	17.66	17.78	17.72		
20	QPSK	50	50	17.65	17.69	17.72	17.71		
20	QPSK	100	0	17.71	17.79	17.66	17.80		
20	16QAM	1	0	17.82	17.91	17.92	17.90		
20	16QAM	1	49	17.68	17.72	17.69	17.80		
20	16QAM	1	99	17.72	17.69	17.78	17.69		
20	16QAM	50	0	17.81	17.85	17.90	17.89		
20	16QAM	50	24	17.71	17.60	17.74	17.78		
20	16QAM	50	50	17.73	17.75	17.76	17.74		
20	16QAM	100	0	17.91	17.93	17.86	17.96		
20	64QAM	1	0	17.71	17.72	17.77	17.84		
20	64QAM	1	49	17.71	17.77	17.76	17.77		
20	64QAM	1	99	17.92	17.88	17.86	18.01		
20	64QAM	50	0	17.69	17.65	17.70	17.84		
20	64QAM	50	24	17.64	17.71	17.77	17.81		
20	64QAM	50	50	17.78	17.88	17.97	17.99		
20	64QAM	100	0	17.70	17.70	17.65	17.84		
20	256QAM	1	0	17.64	17.70	17.71	17.70		
20	256QAM	1	49	17.90	17.85	18.00	18.02		
20	256QAM	1	99	17.64	17.70	17.64	17.72		
20	256QAM	50	0	17.74	17.66	17.72	17.76		
20	256QAM	50	24	17.73	17.78	17.71	17.77		
20	256QAM	50	50	17.90	17.92	17.90	17.89		
20	256QAM	100	0	17.72	17.63	17.65	17.84		

Band 48_Ant 8										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56190	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	19.99	19.94	19.92	19.99			
20	QPSK	1	49	20.02	20.13	20.08	20.20	21.7	0	
20	QPSK	1	99	20.01	20.08	20.01	20.09			
20	QPSK	50	0	19.97	20.07	20.07	20.10			
20	QPSK	50	24	19.92	19.87	19.81	19.98	21.7	0	
20	QPSK	50	50	19.96	20.03	19.94	20.06			
20	QPSK	100	0	19.95	19.89	19.89	20.04			
20	16QAM	1	0	19.88	19.98	20.00	20.11			
20	16QAM	1	49	19.86	20.03	19.87	20.07	21.7	0	
20	16QAM	1	99	19.90	19.91	19.77	19.88			
20	16QAM	50	0	19.91	20.10	20.02	20.19			
20	16QAM	50	24	19.87	20.03	19.94	19.99	21.7	0	
20	16QAM	50	50	19.84	19.90	19.82	19.98			
20	16QAM	100	0	19.89	20.08	20.02	20.18			
20	64QAM	1	0	19.85	19.90	19.83	19.90			
20	64QAM	1	49	19.97	20.11	20.06	20.11	21.7	0	
20	64QAM	1	99	19.93	19.94	19.99	20.07			
20	64QAM	50	0	19.25	19.32	19.30	19.40			
20	64QAM	50	24	19.46	19.49	19.41	19.52	21.2	0.5	
20	64QAM	50	50	19.42	19.35	19.35	19.45			
20	64QAM	100	0	19.39	19.44	19.45	19.54			
20	256QAM	1	0	17.55	17.46	17.47	17.58			
20	256QAM	1	49	17.47	17.46	17.46	17.61	19.2	2.5	
20	256QAM	1	99	17.58	17.53	17.50	17.67			
20	256QAM	50	0	17.39	17.37	17.34	17.48			
20	256QAM	50	24	17.50	17.50	17.46	17.59	19.2	2.5	
20	256QAM	50	50	17.38	17.46	17.39	17.52			
20	256QAM	100	0	17.40	17.37	17.38	17.50			
Channel				55315	55820	56160	56665	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	19.96	19.93	19.82	19.94			
15	QPSK	1	37	19.91	20.03	20.00	20.05	21.7	0	
15	QPSK	1	74	19.89	19.93	19.88	20.06			
15	QPSK	36	0	19.87	20.03	20.03	19.98			
15	QPSK	36	20	19.81	19.72	19.79	19.95	21.7	0	
15	QPSK	36	39	19.92	19.88	19.80	20.04			
15	QPSK	75	0	19.92	19.79	19.79	19.94			
15	16QAM	1	0	19.78	19.85	19.87	19.96			
15	16QAM	1	37	19.80	19.94	19.77	19.92	21.7	0	
15	16QAM	1	74	19.79	19.88	19.70	19.74			
15	16QAM	36	0	19.84	19.97	20.00	20.13			
15	16QAM	36	20	19.76	19.95	19.82	19.89	21.7	0	
15	16QAM	36	39	19.73	19.78	19.81	19.91			
15	16QAM	75	0	19.86	19.98	19.91	20.11			
15	64QAM	1	0	19.72	19.82	19.78	19.76			
15	64QAM	1	37	19.95	20.02	20.01	19.97	21.7	0	
15	64QAM	1	74	19.90	19.82	19.88	20.00			
15	64QAM	36	0	19.23	19.21	19.25	19.20			
15	64QAM	36	20	19.39	19.37	19.37	19.36	21.2	0.5	
15	64QAM	36	39	19.25	19.26	19.31	19.30			
15	64QAM	75	0	19.40	19.40	19.36	19.42			
15	256QAM	1	0	17.42	17.45	17.39	17.44			
15	256QAM	1	37	17.44	17.40	17.37	17.45	19.2	2.5	
15	256QAM	1	74	17.42	17.48	17.40	17.48			
15	256QAM	36	0	17.33	17.30	17.33	17.27			
15	256QAM	36	20	17.37	17.42	17.36	17.38	19.2	2.5	
15	256QAM	36	39	17.34	17.31	17.32	17.34			
15	256QAM	75	0	17.33	17.36	17.31	17.29			
Channel				55290	55815	56165	56690	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	19.97	19.79	19.82	19.95			
10	QPSK	1	25	19.90	19.99	19.97	20.15	21.7	0	
10	QPSK	1	49	19.95	19.97	19.87	20.02			
10	QPSK	25	0	19.95	20.04	20.04	20.06			
10	QPSK	25	12	19.89	19.73	19.75	19.94	21.7	0	
10	QPSK	25	25	19.92	19.90	19.79	19.95			
10	QPSK	50	0	19.92	19.74	19.88	19.99			
10	16QAM	1	0	19.87	19.88	19.88	20.00			
10	16QAM	1	25	19.73	20.02	19.77	20.04	21.7	0	
10	16QAM	1	49	19.78	19.90	19.79	19.85			
10	16QAM	25	0	19.87	20.05	19.98	20.16			
10	16QAM	25	12	19.82	19.91	19.81	19.85	21.7	0	
10	16QAM	25	25	19.82	19.88	19.79	19.95			
10	16QAM	50	0	19.79	20.04	19.95	20.11			
10	64QAM	1	0	19.83	19.83	19.79	19.79			
10	64QAM	1	25	19.87	20.00	19.96	19.97	21.7	0	
10	64QAM	1	49	19.86	19.84	19.97	19.99			
10	64QAM	25	0	19.21	19.23	19.29	19.25			
10	64QAM	25	12	19.39	19.35	19.37	19.35	21.2	0.5	
10	64QAM	25	25	19.33	19.26	19.29	19.30			
10	64QAM	50	0	19.44	19.44	19.41	19.38			
10	256QAM	1	0	17.43	17.46	17.40	17.41			
10	256QAM	1	25	17.37	17.41	17.39	17.37	19.2	2.5	
10	256QAM	1	49	17.41	17.42	17.44	17.40			
10	256QAM	25	0	17.30	17.33	17.28	17.24			
10	256QAM	25	12	17.45	17.42	17.45	17.45	19.2	2.5	
10	256QAM	25	25	17.31	17.37	17.37	17.33			
10	256QAM	50	0	17.30	17.32	17.32	17.36			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	19.92	19.86	19.81	19.90			
5	QPSK	1	12	19.98	19.98	20.02	20.14	21.7	0	
5	QPSK	1	24	19.93	20.01	19.94	20.00			
5	QPSK	12	0	19.93	19.99	19.93	20.09			
5	QPSK	12	7	19.78	19.74	19.77	19.91	21.7	0	
5	QPSK	12	13	19.95	19.95	19.81	19.93			
5	QPSK	25	0	19.91	19.79	19.74	19.99			
5	16QAM	1	0	19.81	19.93	19.92	19.97			
5	16QAM	1	12	19.76	19.93	19.81	20.06	21.7	0	
5	16QAM	1	24	19.82	19.80	19.74	19.76			
5	16QAM	12	0	19.89	20.02	19.88	20.14			
5	16QAM	12	7	19.77	19.92	19.81	19.93	21.7	0	
5	16QAM	12	13	19.83	19.85	19.70	19.86			
5	16QAM	25	0	19.74	20.04	19.99	20.12			
5	64QAM	1	0	19.82	19.76	19.78	19.81			
5	64QAM	1	12	19.91	19.99	19.93	19.97	21.7	0	
5	64QAM	1	24	19.85	19.89	19.86	20.03			
5	64QAM	12	0	19.27	19.29	19.26	19.29			
5	64QAM	12	7	19.40	19.39	19.39	19.33	21.2	0.5	
5	64QAM	12	13	19.32	19.32	19.27	19.29			
5	64QAM	25	0	19.44	19.44	19.41	19.44			
5	256QAM	1	0	17.41	17.41	17.38	17.38			
5	256QAM	1	12	17.45	17.44	17.37	17.37	19.2	2.5	
5	256QAM	1	24	17.42	17.43	17.45	17.47			
5	256QAM	12	0	17.24	17.27	17.25	17.27			
5	256QAM	12	7	17.44	17.44	17.37	17.37	19.2	2.5	
5	256QAM	12	13	17.29	17.37	17.37	17.33			
5	256QAM	25	0	17.28	17.36	17.37	17.35			



n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	18.81	18.92	18.78			
20	PI2 BPSK	1	53	18.82	19.00	18.79			
20	PI2 BPSK	1	104	18.90	18.98	18.76	20.0	0.0	
Channel									
Frequency (MHz)									
20	PI2 BPSK	50	0	18.91	18.92	18.75	20.0	0.0	
20	PI2 BPSK	50	28	18.83	19.03	18.83	20.0	0.0	
20	PI2 BPSK	50	56	18.81	18.99	18.83	20.0	0.0	
20	PI2 BPSK	100	0	18.90	19.01	18.83	20.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.92	19.04	18.89			
20	QPSK	1	53	18.78	18.99	18.78	20.0	0.0	
20	QPSK	1	104	18.78	19.03	18.86	20.0	0.0	
20	QPSK	50	0	18.90	19.01	18.85	20.0	0.0	
20	QPSK	50	28	18.85	19.01	18.86	20.0	0.0	
20	QPSK	50	56	18.83	18.90	18.81	20.0	0.0	
20	QPSK	100	0	18.78	18.92	18.83	20.0	0.0	
20	16QAM	1	1	18.81	18.96	18.84	20.0	0.0	
20	64QAM	1	1	18.81	18.96	18.80	20.0	0.0	
20	256QAM	1	1	18.78	19.00	18.76	20.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.78	18.99	18.86	20.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.87	18.97	18.83	20.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	18.91	18.96	18.76	20.0	0.0	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	20.72	20.94	20.83			
20	PI2 BPSK	1	53	20.72	20.89	20.78			
20	PI2 BPSK	1	104	20.76	20.85	20.83	22.0	0.0	
Channel									
Frequency (MHz)									
20	PI2 BPSK	50	0	20.66	20.82	20.76	22.0	0.0	
20	PI2 BPSK	50	28	20.73	20.87	20.85	22.0	0.0	
20	PI2 BPSK	50	56	20.67	20.85	20.85	22.0	0.0	
20	PI2 BPSK	100	0	20.72	20.83	20.84	22.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.81	20.95	20.91			
20	QPSK	1	53	20.75	20.81	20.84	22.0	0.0	
20	QPSK	1	104	20.69	20.82	20.86	22.0	0.0	
20	QPSK	50	0	20.76	20.89	20.80	22.0	0.0	
20	QPSK	50	28	20.83	20.94	20.87	22.0	0.0	
20	QPSK	50	56	20.68	20.89	20.81	22.0	0.0	
20	QPSK	100	0	20.68	20.81	20.77	22.0	0.0	
20	16QAM	1	1	20.72	20.88	20.76	22.0	0.0	
20	64QAM	1	1	20.74	20.81	20.85	22.0	0.0	
20	256QAM	1	1	19.37	19.42	19.27	20.5	1.5	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.80	20.89	20.90	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.85	18.90	18.85	22.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	20.70	20.94	20.90	22.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	19.11	19.22	19.14			
40	PI2 BPSK	1	108	19.09	19.25	19.12			
40	PI2 BPSK	1	214	19.14	19.24	19.09	20.0	0.0	
Channel									
Frequency (MHz)									
40	PI2 BPSK	108	0	19.05	19.15	19.12	20.0	0.0	
40	PI2 BPSK	108	54	19.12	19.14	19.16	20.0	0.0	
40	PI2 BPSK	108	108	19.14	19.20	19.20	20.0	0.0	
40	PI2 BPSK	216	0	19.18	19.18	19.12	20.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.18	19.27	19.22			
40	QPSK	1	108	19.07	19.20	19.08	20.0	0.0	
40	QPSK	1	214	19.11	19.18	19.11	20.0	0.0	
40	QPSK	108	0	19.16	19.17	19.17	20.0	0.0	
40	QPSK	108	54	19.17	19.22	19.18	20.0	0.0	
40	QPSK	108	108	19.07	19.15	19.15	20.0	0.0	
40	QPSK	216	0	19.13	19.20	19.18	20.0	0.0	
40	16QAM	1	1	19.13	19.14	19.15	20.0	0.0	
40	64QAM	1	1	19.10	19.26	19.16	20.0	0.0	
40	256QAM	1	1	19.07	19.20	19.07	20.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	19.03	19.19	19.14	20.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.00	19.25	19.00	20.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.10	19.19	19.18	20.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.15	19.16	19.10	20.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.13	19.17	19.15	20.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.10	19.17	19.15	20.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	19.12	19.25	19.13	20.0	0.0	



n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				37500	37500	37500			
40	PI2 BPSK	1	1	21.05	21.24	21.10			
40	PI2 BPSK	1	108	21.03	21.28	20.97	22.0	0.0	
40	PI2 BPSK	1	214	21.05	21.29	21.02	22.0	0.0	
40	PI2 BPSK	108	0	20.98	21.18	21.05	22.0	0.0	
40	PI2 BPSK	108	54	20.97	21.18	21.07	22.0	0.0	
40	PI2 BPSK	108	108	21.06	21.19	21.04	22.0	0.0	
40	PI2 BPSK	216	0	21.10	21.18	20.97	22.0	0.0	
40	QPSK	1	1	21.11	21.32	21.11			
40	QPSK	1	108	21.02	21.21	21.10	22.0	0.0	
40	QPSK	1	214	21.03	21.21	21.08	22.0	0.0	
40	QPSK	108	0	21.03	21.20	21.01	22.0	0.0	
40	QPSK	108	54	21.05	21.30	21.05	22.0	0.0	
40	QPSK	108	108	21.06	21.29	20.98	22.0	0.0	
40	QPSK	216	0	21.10	21.25	21.08	22.0	0.0	
40	16QAM	1	1	21.07	21.31	21.05	22.0	0.0	
40	16QAM	1	1	20.92	20.94	20.89	21.5	0.5	
40	256QAM	1	1	18.88	18.93	18.86	19.5	2.5	
Channel				37500	37500	37500			
Frequency (MHz)				187.5	188.5	189.5	Tune-up limit (dBm)	MPR (dB)	
35	QPSK	1	1	20.95	21.31	21.06	22.0	0.0	
Channel				37500	37500	38000			
Frequency (MHz)				1865	1882.5	1900	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	21.00	21.20	21.01	22.0	0.0	
Channel				37500	37500	38000			
Frequency (MHz)				1862.5	1882.5	1902.5	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	21.04	21.20	21.01	22.0	0.0	
Channel				37200	37500	38100			
Frequency (MHz)				1877.5	1882.5	1899.5	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	20.97	21.31	21.01	22.0	0.0	
Channel				371500	375000	381500			
Frequency (MHz)				1887.5	1882.5	1899.5	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	21.02	21.23	21.09	22.0	0.0	
Channel				371000	375000	382000			
Frequency (MHz)				1855	1882.5	1910	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	21.00	21.20	21.00	22.0	0.0	
Channel				370500	375000	382500			
Frequency (MHz)				1852.5	1882.5	1912.5	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	1	21.06	21.28	20.99	22.0	0.0	

n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				34500	34500	35000			
40	PI2 BPSK	1	1	20.32	20.42	20.32			
40	PI2 BPSK	1	108	20.32	20.53	20.39	21.5	0.0	
40	PI2 BPSK	1	214	20.30	20.49	20.27	21.5	0.0	
40	PI2 BPSK	108	0	20.31	20.47	20.28	21.5	0.0	
40	PI2 BPSK	108	54	20.40	20.43	20.25	21.5	0.0	
40	PI2 BPSK	108	108	20.30	20.42	20.33	21.5	0.0	
40	PI2 BPSK	216	0	20.37	20.49	20.37	21.5	0.0	
40	QPSK	1	1	20.41	20.56	20.40			
40	QPSK	1	108	20.31	20.52	20.39	21.5	0.0	
40	QPSK	1	214	20.30	20.50	20.32	21.5	0.0	
40	QPSK	108	0	20.30	20.51	20.29	21.5	0.0	
40	QPSK	108	54	20.32	20.52	20.35	21.5	0.0	
40	QPSK	108	108	20.27	20.41	20.25	21.5	0.0	
40	QPSK	216	0	20.28	20.47	20.32	21.5	0.0	
40	16QAM	1	1	20.36	20.46	20.25	21.5	0.0	
40	16QAM	1	1	20.27	20.50	20.28	21.5	0.0	
40	256QAM	1	1	20.38	20.41	20.29	21.5	0.0	
Channel				34500	34500	35200			
Frequency (MHz)				1727.5	1745	1762.5	Tune-up limit (dBm)	MPR (dB)	
35	QPSK	1	1	20.38	20.42	20.39	21.5	0.0	
Channel				34500	34800	35300			
Frequency (MHz)				1725	1745	1765	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	20.40	20.44	20.38	21.5	0.0	
Channel				34500	34900	35300			
Frequency (MHz)				1722.5	1745	1767.5	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	20.38	20.51	20.32	21.5	0.0	
Channel				34800	34900	35000			
Frequency (MHz)				1720	1745	1770	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	20.36	20.51	20.34	21.5	0.0	
Channel				34500	34900	35400			
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	20.28	20.49	20.25	21.5	0.0	
Channel				34300	34900	35000			
Frequency (MHz)				1715	1745	1775	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	20.37	20.52	20.33	21.5	0.0	
Channel				34500	35000	35500			
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	1	20.26	20.42	20.36	21.5	0.0	

n66_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				34500	34500	35000			
40	PI2 BPSK	1	1	19.73	19.87	19.80			
40	PI2 BPSK	1	108	19.76	19.86	19.76	21.0	0.0	
40	PI2 BPSK	1	214	19.80	19.86	19.81	21.0	0.0	
40	PI2 BPSK	108	0	19.87	19.93	19.83	21.0	0.0	
40	PI2 BPSK	108	54	19.70	19.92	19.79	21.0	0.0	
40	PI2 BPSK	108	108	19.76	19.84	19.78	21.0	0.0	
40	PI2 BPSK	216	0	19.78	19.92	19.87	21.0	0.0	
40	QPSK	1	1	19.81	19.97	19.91			
40	QPSK	1	108	19.87	19.94	19.78	21.0	0.0	
40	QPSK	1	214	19.78	19.91	19.84	21.0	0.0	
40	QPSK	108	0	19.86	19.97	19.85	21.0	0.0	
40	QPSK	108	54	19.77	19.91	19.86	21.0	0.0	
40	QPSK	108	108	19.74	19.82	19.80	21.0	0.0	
40	QPSK	216	0	19.87	19.85	19.75	21.0	0.0	
40	16QAM	1	1	19.87	19.90	19.80	21.0	0.0	
40	16QAM	1	1	19.78	19.90	19.86	21.0	0.0	
40	256QAM	1	1	19.72	19.88	19.88	21.0	0.0	
Channel				34500	34900	35200			
Frequency (MHz)				1727.5	1745	1762.5	Tune-up limit (dBm)	MPR (dB)	
35	QPSK	1	1	19.80	19.88	19.77	21.0	0.0	
Channel				34500	34800	35300			
Frequency (MHz)				1725	1745	1765	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	19.89	19.99	19.85	21.0	0.0	
Channel				34500	34900	35300			
Frequency (MHz)				1722.5	1745	1767.5	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	19.71	19.84	19.86	21.0	0.0	
Channel				34800	34900	35000			
Frequency (MHz)				1720	1745	1770	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	19.78	19.85	19.78	21.0	0.0	
Channel				34500	34900	35400			
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	19.70	19.94	19.86	21.0	0.0	
Channel				34300	34900	35000			
Frequency (MHz)				1715	1745	1775	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	19.68	19.96	19.88	21.0	0.0	
Channel				34500	35000	35500			
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	1	19.75	19.93	19.89	21.0	0.0	



FCC_n41_Ant 10								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	22.53	22.69	22.85		
100	PI2 BPSK	1	137	22.61	22.76	22.85	24.0	0.0
100	PI2 BPSK	1	271	22.67	22.77	22.82		
100	PI2 BPSK	135	0	22.61	22.75	22.58	24.0	0.0
100	PI2 BPSK	135	69	22.59	22.82	22.58	24.0	0.0
100	PI2 BPSK	135	138	22.55	22.70	22.84		
100	PI2 BPSK	270	0	22.64	22.80	22.62	24.0	0.0
100	QPSK	1	1	22.63	22.83	22.55		
100	QPSK	1	137	22.60	22.72	22.57	24.0	0.0
100	QPSK	1	271	22.64	22.75	22.64		
100	QPSK	135	0	22.55	22.70	22.57		
100	QPSK	135	69	22.62	22.79	22.66	24.0	0.0
100	QPSK	135	138	22.60	22.77	22.55		
100	QPSK	270	0	22.57	22.75	22.61	24.0	0.0
100	16QAM	1	1	22.60	22.75	22.56	24.0	0.0
100	64QAM	1	1	22.43	22.51	22.34	23.5	2.5
100	256QAM	1	1	21.18	21.28	21.19	22.5	1.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	22.57	22.72	22.56	24.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	22.60	22.72	22.63	24.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	22.53	22.78	22.60	24.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	22.55	22.81	22.62	24.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	22.59	22.70	22.52	24.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	22.58	22.69	22.62	24.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	22.65	22.68	22.56	24.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	22.61	22.74	22.65	24.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	22.58	22.72	22.60	24.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	22.66	22.70	22.53	24.0	0.0

FCC_n41_HPUE_Ant 10								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	24.57	24.70	24.44		
100	PI2 BPSK	1	137	24.59	24.58	24.54	26.0	0.0
100	PI2 BPSK	1	271	24.64	24.67	24.49		
100	PI2 BPSK	135	0	24.13	24.25	24.14	25.5	0.5
100	PI2 BPSK	135	69	24.56	24.60	24.50	26.0	0.0
100	PI2 BPSK	135	138	24.11	24.25	24.06		
100	PI2 BPSK	270	0	24.24	24.28	24.06	25.5	0.5
100	QPSK	1	1	24.71	24.78	24.52		
100	QPSK	1	137	24.64	24.71	24.61	26.0	0.0
100	QPSK	1	271	24.68	24.66	24.56		
100	QPSK	135	0	23.87	23.95	23.79		
100	QPSK	135	69	24.20	24.73	24.27	26.0	0.0
100	QPSK	135	138	24.06	24.15	23.99		
100	QPSK	270	0	23.68	23.83	23.75	25.0	1.0
100	16QAM	1	1	23.73	23.93	23.62	25.0	1.0
100	64QAM	1	1	22.43	22.51	22.34	23.5	2.5
100	256QAM	1	1	21.18	21.28	21.19	22.5	1.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	24.41	24.59	24.44	26.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	24.55	24.70	24.62	26.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	24.62	24.58	24.50	26.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	24.60	24.62	24.44	26.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	24.55	24.62	24.44	26.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	24.57	24.70	24.50	26.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	24.54	24.65	24.44	26.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	24.57	24.62	24.52	26.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	24.60	24.64	24.54	26.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.51	24.58	24.55	26.0	0.0



Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	16.94			18.5	0.0	
100	Pi2 BPSK	1	137	16.97					
100	Pi2 BPSK	1	271	17.06					
100	Pi2 BPSK	135	0	17.07			18.5	0.0	
100	Pi2 BPSK	135	69	17.09			18.5	0.0	
100	Pi2 BPSK	135	138	17.07			18.5	0.0	
100	Pi2 BPSK	270	0	17.11					
100	QPSK	1	1	17.19					
100	QPSK	1	137	17.11			18.5	0.0	
100	QPSK	1	271	17.13					
100	QPSK	135	0	17.01					
100	QPSK	135	69	17.13			18.5	0.0	
100	QPSK	135	138	17.05					
100	QPSK	270	0	17.09					
100	HQAM	1	1	17.03			18.5	0.0	
100	HQAM	1	1	17.03			18.5	0.0	
100	25QAM	1	1	17.08			18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.00	17.05	16.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.02	17.04	17.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.99	17.03	16.94	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.02	17.04	17.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.02	17.03	17.03	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.06	17.03	17.07	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.02	17.02	16.95	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.05	17.05	16.94	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.05	17.01	16.96	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.00	17.05	16.97	Tune-up limit (dBm)	MPR (dB)	

Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	17.35	17.36	17.41	18.5	0.0	
100	Pi2 BPSK	1	137	17.25	17.39	17.38			
100	Pi2 BPSK	1	271	17.30	17.33	17.18			
100	Pi2 BPSK	135	0	17.28	17.34	17.08	18.5	0.0	
100	Pi2 BPSK	135	69	17.26	17.32	17.08	18.5	0.0	
100	Pi2 BPSK	135	138	17.34	17.22	17.11	18.5	0.0	
100	Pi2 BPSK	270	0	17.23	17.32	17.11			
100	QPSK	1	1	17.38	17.43	17.40			
100	QPSK	1	137	17.30	17.31	17.21	18.5	0.0	
100	QPSK	1	271	17.24	17.28	17.17			
100	QPSK	135	0	17.27	17.28	17.17			
100	QPSK	135	69	17.10	17.33	17.21	18.5	0.0	
100	QPSK	135	138	17.23	17.31	17.19			
100	QPSK	270	0	17.25	17.25	17.15			
100	HQAM	1	1	17.33	17.25	17.19	18.5	0.0	
100	HQAM	1	1	17.31	17.26	17.07	18.5	0.0	
100	25QAM	1	1	17.31	17.28	17.16	18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.18	17.21	17.12	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.25	17.18	17.10	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.15	17.21	17.06	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.18	17.20	17.11	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.22	17.31	17.17	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.29	17.19	17.08	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.26	17.32	17.17	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.21	17.30	17.20	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.21	17.23	17.10	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.28	17.30	17.19	Tune-up limit (dBm)	MPR (dB)	

Part27Q_n77 HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	16.94			18.5	0.0	
100	Pi2 BPSK	1	137	16.97					
100	Pi2 BPSK	1	271	17.06					
100	Pi2 BPSK	135	0	17.07			18.5	0.0	
100	Pi2 BPSK	135	69	17.09			18.5	0.0	
100	Pi2 BPSK	135	138	17.07			18.5	0.0	
100	Pi2 BPSK	270	0	17.11					
100	QPSK	1	1	17.19					
100	QPSK	1	137	17.11			18.5	0.0	
100	QPSK	1	271	17.13					
100	QPSK	135	0	17.01					
100	QPSK	135	69	17.13			18.5	0.0	
100	QPSK	135	138	17.05					
100	QPSK	270	0	17.09					
100	HQAM	1	1	17.03			18.5	0.0	
100	HQAM	1	1	17.03			18.5	0.0	
100	25QAM	1	1	17.08			18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.00	17.05	16.99	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.02	17.04	17.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.99	17.03	16.94	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.02	17.04	17.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.02	17.03	17.03	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.06	17.03	17.07	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.02	17.02	16.95	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.05	17.05	16.94	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.05	17.01	16.96	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.00	17.05	16.97	Tune-up limit (dBm)	MPR (dB)	



Part270_n77 HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	17.35	17.36	17.41			
100	Pl2 BPSK	1	137	17.25	17.39	17.38	18.5	0.0	
100	Pl2 BPSK	1	271	17.30	17.33	17.18			
100	Pl2 BPSK	135	0	17.29	17.34	17.08	18.5	0.0	
100	Pl2 BPSK	135	69	17.26	17.32	17.08	18.5	0.0	
100	Pl2 BPSK	135	138	17.34	17.22	17.11			
100	Pl2 BPSK	270	0	17.23	17.32	17.11	18.5	0.0	
100	QPSK	1	1	17.35	17.63	17.00			
100	QPSK	1	137	17.30	17.31	17.21	18.5	0.0	
100	QPSK	1	271	17.24	17.28	17.17			
100	QPSK	135	0	17.27	17.28	17.17			
100	QPSK	135	69	17.30	17.33	17.21	18.5	0.0	
100	QPSK	135	138	17.23	17.31	17.19			
100	QPSK	270	0	17.28	17.29	17.15	18.5	0.0	
100	16QAM	1	1	17.33	17.25	17.19	18.5	0.0	
100	16QAM	1	1	17.31	17.29	17.07	18.5	0.0	
100	256QAM	1	1	17.31	17.28	17.16	18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.43	17.42	17.42	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	17.43	17.42	17.42	18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.25	17.18	17.10	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	17.25	17.18	17.10	18.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.15	17.21	17.06	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	17.15	17.21	17.06	18.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.18	17.20	17.11	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	17.18	17.20	17.11	18.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.23	17.21	17.17	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	17.23	17.21	17.17	18.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.29	17.19	17.08	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	17.29	17.19	17.08	18.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.26	17.32	17.17	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	17.26	17.32	17.17	18.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.21	17.20	17.20	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	17.21	17.20	17.20	18.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.21	17.23	17.10	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	17.21	17.23	17.10	18.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.28	17.30	17.19	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	17.28	17.30	17.19	18.5	0.0	

Part270_n77_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	21.36	21.36	21.36			
100	Pl2 BPSK	1	137	20.99	20.99	20.99	22.5	0.0	
100	Pl2 BPSK	1	271	21.02	21.02	21.02			
100	Pl2 BPSK	135	0	20.94	20.94	20.94	22.5	0.0	
100	Pl2 BPSK	135	69	20.95	20.95	20.95	22.5	0.0	
100	Pl2 BPSK	135	138	20.89	20.89	20.89	22.5	0.0	
100	Pl2 BPSK	270	0	20.93	20.93	20.93	22.5	0.0	
100	QPSK	1	1	21.38	21.38	21.38			
100	QPSK	1	137	20.92	20.92	20.92	22.5	0.0	
100	QPSK	1	271	20.98	20.98	20.98			
100	QPSK	135	0	21.03	21.03	21.03	22.5	0.0	
100	QPSK	135	69	21.00	21.00	21.00	22.5	0.0	
100	QPSK	135	138	20.87	20.87	20.87	22.5	0.0	
100	QPSK	270	0	21.11	21.11	21.11	22.5	0.0	
100	16QAM	1	1	20.87	20.87	20.87	22.5	0.0	
100	16QAM	1	1	21.00	21.00	21.00	22.5	0.0	
100	256QAM	1	1	21.00	21.00	21.00	22.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.30	21.29	21.34	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	21.30	21.29	21.34	22.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.32	21.31	21.33	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	21.32	21.31	21.33	22.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.29	21.28	21.27	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	21.29	21.28	21.27	22.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.36	21.31	21.28	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	21.36	21.31	21.28	22.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.29	21.30	21.32	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	21.29	21.30	21.32	22.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.27	21.33	21.27	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	21.27	21.33	21.27	22.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.34	21.32	21.33	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	21.34	21.32	21.33	22.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.30	21.32	21.29	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	21.30	21.32	21.29	22.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.34	21.32	21.27	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	21.34	21.32	21.27	22.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.30	21.31	21.35	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	21.30	21.31	21.35	22.5	0.0	

Part270_n77_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	21.61	21.47	21.42			
100	Pl2 BPSK	1	137	21.75	21.63	21.56	22.5	0.0	
100	Pl2 BPSK	1	271	21.65	21.57	21.42			
100	Pl2 BPSK	135	0	21.68	21.49	21.37	22.5	0.0	
100	Pl2 BPSK	135	69	21.68	21.49	21.44	22.5	0.0	
100	Pl2 BPSK	135	138	21.84	21.53	21.38	22.5	0.0	
100	Pl2 BPSK	270	0	21.64	21.48	21.30	22.5	0.0	
100	QPSK	1	1	21.71	21.76	21.54			
100	QPSK	1	137	21.64	21.59	21.46	22.5	0.0	
100	QPSK	1	271	21.59	21.67	21.43			
100	QPSK	135	0	21.67	21.71	21.48	22.5	0.0	
100	QPSK	135	69	21.71	21.75	21.51	22.5	0.0	
100	QPSK	135	138	21.65	21.63	21.40	22.5	0.0	
100	QPSK	270	0	21.88	21.68	21.39	22.5	0.0	
100	16QAM	1	1	21.89	21.65	21.35	22.5	0.0	
100	16QAM	1	1	21.68	21.56	21.47	22.5	0.0	
100	256QAM	1	1	21.70	21.62	21.31	22.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.64	21.67	21.43	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	21.64	21.67	21.43	22.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.69	21.65	21.51	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	21.69	21.65	21.51	22.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.62	21.72	21.50	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	21.62	21.72	21.50	22.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.63	21.71	21.51	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	21.63	21.71	21.51	22.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.65	21.70	21.50	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	21.65	21.70	21.50	22.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.60	21.71	21.47	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	21.60	21.71	21.47	22.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.63	21.68	21.49	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	21.63	21.68	21.49	22.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.66	21.66	21.51	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	21.66	21.66	21.51	22.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.68	21.73	21.49	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	21.68	21.73	21.49	22.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.65	21.74	21.51	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	21.65	21.74	21.51	22.5	0.0	





Part27Q_n77 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	2136					
100	PI2 BPSK	1	137	2099			22.5	0.0	
100	PI2 BPSK	1	271	2162					
100	PI2 BPSK	135	0	2094			22.5	0.0	
100	PI2 BPSK	135	69	2095			22.5	0.0	
100	PI2 BPSK	135	138	2089					
100	PI2 BPSK	270	0	2083			22.5	0.0	
100	QPSK	1	1	2138					
100	QPSK	1	137	2092			22.5	0.0	
100	QPSK	1	271	2098					
100	QPSK	135	0	2163					
100	QPSK	135	69	2120			22.5	0.0	
100	QPSK	135	138	2087					
100	QPSK	270	0	2111			22.5	0.0	
100	16QAM	1	1	2087			22.5	0.0	
100	16QAM	1	1	2103			22.5	0.0	
100	256QAM	1	1	2100			22.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3495	3499.98	3504.99	Tune-up limit (dBm)	MPR (dB)	
				2120	2129	2124		22.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	3496.02	3499.98	3510	Tune-up limit (dBm)	MPR (dB)	
				2132	2131	2133		22.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	2129	2135	2127	Tune-up limit (dBm)	MPR (dB)	
				632000	633332	634000		MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)	
				2136	2131	2128		22.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dBm)	MPR (dB)	
				631668	633332	635000		MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2127	2133	2127	Tune-up limit (dBm)	MPR (dB)	
				3475.02	3499.98	3525		0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2134	2132	2133	Tune-up limit (dBm)	MPR (dB)	
				630968	633332	636000		MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	3455.01	3499.98	3534.99	Tune-up limit (dBm)	MPR (dB)	
				630500	633332	636166		MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2124	2132	2127	Tune-up limit (dBm)	MPR (dB)	
				3455.01	3499.98	3544.98		0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2150	2131	2135	Tune-up limit (dBm)	MPR (dB)	

Part27Q_n77 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	2181	2147	2142			
100	PI2 BPSK	1	137	2175	2163	2156	22.5	0.0	
100	PI2 BPSK	1	271	2185	2157	2142			
100	PI2 BPSK	135	0	2188	2149	2137	22.5	0.0	
100	PI2 BPSK	135	69	2188	2149	2144	22.5	0.0	
100	PI2 BPSK	135	138	2184	2153	2138			
100	PI2 BPSK	270	0	2184	2148	2130	22.5	0.0	
100	QPSK	1	1	2171	2176	2154			
100	QPSK	1	137	2184	2159	2146	22.5	0.0	
100	QPSK	1	271	2189	2167	2143			
100	QPSK	135	0	2187	2171	2148			
100	QPSK	135	69	2171	2175	2151	22.5	0.0	
100	QPSK	135	138	2185	2163	2140			
100	QPSK	270	0	2188	2168	2139	22.5	0.0	
100	16QAM	1	1	2189	2185	2135	22.5	0.0	
100	16QAM	1	1	2188	2156	2147	22.5	0.0	
100	256QAM	1	1	2170	2162	2131	22.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3745.02	3740	3744.98	Tune-up limit (dBm)	MPR (dB)	
				2184	2187	2148		22.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	3740.01	3740	3749.98	Tune-up limit (dBm)	MPR (dB)	
				2189	2188	2151		22.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	2182	2172	2150	Tune-up limit (dBm)	MPR (dB)	
				648000	650000	653332		MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)	
				2183	2171	2151		22.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dBm)	MPR (dB)	
				648334	650000	656866		MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2180	2171	2147	Tune-up limit (dBm)	MPR (dB)	
				647868	650000	656332		MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2183	2168	2149	Tune-up limit (dBm)	MPR (dB)	
				647334	650000	656866		MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	3455.01	3499.98	3534.99	Tune-up limit (dBm)	MPR (dB)	
				2186	2168	2151		22.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	2188	2173	2149	Tune-up limit (dBm)	MPR (dB)	
				647168	650000	654832		MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2165	2174	2151	Tune-up limit (dBm)	MPR (dB)	

Part27Q_n77_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	1493					
100	PI2 BPSK	1	137	1486			16.0	0.0	
100	PI2 BPSK	1	271	1484					
100	PI2 BPSK	135	0	1477			16.0	0.0	
100	PI2 BPSK	135	69	1483			16.0	0.0	
100	PI2 BPSK	135	138	1488					
100	PI2 BPSK	270	0	1478			16.0	0.0	
100	QPSK	1	1	1503					
100	QPSK	1	137	1484			16.0	0.0	
100	QPSK	1	271	1478					
100	QPSK	135	0	1489					
100	QPSK	135	69	1485			16.0	0.0	
100	QPSK	135	138	1493					
100	QPSK	270	0	1487			16.0	0.0	
100	16QAM	1	1	1472			16.0	0.0	
100	16QAM	1	1	1476			16.0	0.0	
100	256QAM	1	1	1482			16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	3495	3499.98	3504.99	Tune-up limit (dBm)	MPR (dB)	
				1499	1493	1500		16.0	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	3490.02	3499.98	3510	Tune-up limit (dBm)	MPR (dB)	
				1483	1499	1498		16.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	1482	1496	1496	Tune-up limit (dBm)	MPR (dB)	
				632000	633332	634966		MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3485.01	3499.98	3514.98	Tune-up limit (dBm)	MPR (dB)	
				1499	1500	1501		16.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	3470.01	3499.98	3529.98	Tune-up limit (dBm)	MPR (dB)	
				632332	633332	634332		MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	1500	1497	1499	Tune-up limit (dBm)	MPR (dB)	
				631000	633332	635966		MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	1494	1495	1498	Tune-up limit (dBm)	MPR (dB)	
				630668	633332	636000		MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	3455.01	3499.98	3544.98	Tune-up limit (dBm)	MPR (dB)	
				1493	1497	1499		16.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	1500	1500	1498	Tune-up limit (dBm)	MPR (dB)	
				630500	633332	636166		MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	1486	1492	1497	Tune-up limit (dBm)	MPR (dB)	



Part270_n77_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3750									
100	Pi2 BPSK	1	1	14.06	14.12	14.03			
100	Pi2 BPSK	1	137	14.27	14.32	14.24			
100	Pi2 BPSK	1	271	14.12	14.22	14.29	16.0	0.0	
100	Pi2 BPSK	135	0	14.26	14.28	14.34	16.0	0.0	
100	Pi2 BPSK	135	69	14.22	14.32	14.31	16.0	0.0	
100	Pi2 BPSK	135	138	14.26	14.29	14.22	16.0	0.0	
100	Pi2 BPSK	270	0	14.23	14.35	14.25	16.0	0.0	
100	QPSK	1	1	14.30	14.38	14.25			
100	QPSK	1	137	14.19	14.25	14.08	16.0	0.0	
100	QPSK	1	271	14.28	14.28	14.15			
100	QPSK	135	0	14.18	14.32	14.18	16.0	0.0	
100	QPSK	135	69	14.27	14.35	14.18			
100	QPSK	135	138	14.18	14.32	14.07	16.0	0.0	
100	QPSK	270	0	14.32	14.33	14.31	16.0	0.0	
100	16QAM	1	1	14.20	14.29	14.19	16.0	0.0	
100	16QAM	1	1	14.22	14.32	14.30	16.0	0.0	
100	256QAM	1	1	14.25	14.28	14.10	16.0	0.0	
Channel									
Frequency (MHz)									
649668									
90	QPSK	1	1	14.20	14.27	14.19	16.0	0.0	
Channel									
Frequency (MHz)									
3740.01									
80	QPSK	1	1	14.21	14.29	14.15	16.0	0.0	
Channel									
Frequency (MHz)									
3735									
70	QPSK	1	1	14.19	14.30	14.14	16.0	0.0	
Channel									
Frequency (MHz)									
649668									
60	QPSK	1	1	14.20	14.27	14.16	16.0	0.0	
Channel									
Frequency (MHz)									
648334									
50	QPSK	1	1	14.23	14.35	14.23	16.0	0.0	
Channel									
Frequency (MHz)									
3720									
40	QPSK	1	1	14.23	14.28	14.23	16.0	0.0	
Channel									
Frequency (MHz)									
647334									
30	QPSK	1	1	14.28	14.30	14.16	16.0	0.0	
Channel									
Frequency (MHz)									
647334									
20	QPSK	1	1	14.35	14.29	14.17	16.0	0.0	
Channel									
Frequency (MHz)									
3707.52									
15	QPSK	1	1	14.21	14.32	14.21	16.0	0.0	
Channel									
Frequency (MHz)									
3705									
10	QPSK	1	1	14.20	14.32	14.15	16.0	0.0	

Part270_n77 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
5499.98									
100	Pi2 BPSK	1	1	14.93					
100	Pi2 BPSK	1	137	14.86			16.0	0.0	
100	Pi2 BPSK	1	271	14.84					
100	Pi2 BPSK	135	0	14.77			16.0	0.0	
100	Pi2 BPSK	135	69	14.83			16.0	0.0	
100	Pi2 BPSK	135	138	14.88			16.0	0.0	
100	Pi2 BPSK	270	0	14.79			16.0	0.0	
100	QPSK	1	1	15.03					
100	QPSK	1	137	14.84			16.0	0.0	
100	QPSK	1	271	14.78					
100	QPSK	135	0	14.89			16.0	0.0	
100	QPSK	135	69	14.95			16.0	0.0	
100	QPSK	135	138	14.93			16.0	0.0	
100	QPSK	270	0	14.87			16.0	0.0	
100	16QAM	1	1	14.73			16.0	0.0	
100	16QAM	1	1	14.76			16.0	0.0	
100	256QAM	1	1	14.82			16.0	0.0	
Channel									
Frequency (MHz)									
633000									
90	QPSK	1	1	14.99	14.93	15.00	16.0	0.0	
Channel									
Frequency (MHz)									
632668									
80	QPSK	1	1	14.93	14.99	14.88	16.0	0.0	
Channel									
Frequency (MHz)									
3485.01									
70	QPSK	1	1	14.92	14.96	14.96	16.0	0.0	
Channel									
Frequency (MHz)									
632000									
60	QPSK	1	1	14.99	15.00	15.01	16.0	0.0	
Channel									
Frequency (MHz)									
631668									
50	QPSK	1	1	14.94	14.99	14.94	16.0	0.0	
Channel									
Frequency (MHz)									
631334									
40	QPSK	1	1	15.00	14.97	14.99	16.0	0.0	
Channel									
Frequency (MHz)									
3470.01									
30	QPSK	1	1	14.94	14.95	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
630668									
20	QPSK	1	1	14.93	14.97	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
630300									
15	QPSK	1	1	15.00	15.00	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
3455.01									
10	QPSK	1	1	14.96	14.92	14.97	16.0	0.0	

Part270_n77 HPUE_Ant 10									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
3750									
100	Pi2 BPSK	1	1	14.06	14.12	14.03			
100	Pi2 BPSK	1	137	14.27	14.32	14.24	16.0	0.0	
100	Pi2 BPSK	1	271	14.12	14.22	14.29	16.0	0.0	
100	Pi2 BPSK	135	0	14.26	14.28	14.34	16.0	0.0	
100	Pi2 BPSK	135	69	14.22	14.32	14.31	16.0	0.0	
100	Pi2 BPSK	135	138	14.26	14.29	14.22	16.0	0.0	
100	Pi2 BPSK	270	0	14.23	14.35	14.25	16.0	0.0	
100	QPSK	1	1	14.30	14.38	14.25			
100	QPSK	1	137	14.19	14.25	14.08	16.0	0.0	
100	QPSK	1	271	14.28	14.28	14.15			
100	QPSK	135	0	14.18	14.32	14.18	16.0	0.0	
100	QPSK	135	69	14.27	14.35	14.18			
100	QPSK	135	138	14.18	14.32	14.07	16.0	0.0	
100	QPSK	270	0	14.32	14.33	14.31	16.0	0.0	
100	16QAM	1	1	14.20	14.29	14.19	16.0	0.0	
100	16QAM	1	1	14.22	14.32	14.30	16.0	0.0	
100	256QAM	1	1	14.25	14.28	14.10	16.0	0.0	
Channel									
Frequency (MHz)									
649668									
90	QPSK	1	1	14.20	14.27	14.19	16.0	0.0	
Channel									
Frequency (MHz)									
3740.01									
80	QPSK	1	1	14.21	14.29	14.15	16.0	0.0	
Channel									
Frequency (MHz)									
3735									
70	QPSK	1	1	14.19	14.30	14.14	16.0	0.0	
Channel									
Frequency (MHz)									
649668									
60	QPSK	1	1	14.20	14.27	14.16	16.0	0.0	
Channel									
Frequency (MHz)									
648334									
50	QPSK	1	1	14.23	14.35	14.23	16.0	0.0	
Channel									
Frequency (MHz)									
3720									
40	QPSK	1	1	14.23	14.28	14.23	16.0	0.0	
Channel									
Frequency (MHz)									
647334									
30	QPSK	1	1	14.28	14.30	14.16	16.0	0.0	
Channel									
Frequency (MHz)									
647334									
20	QPSK	1	1	14.35	14.29	14.17	16.0	0.0	
Channel									
Frequency (MHz)									
3707.52									
15	QPSK	1	1	14.21	14.32	14.21	16.0	0.0	
Channel									
Frequency (MHz)									
3705									
10	QPSK	1	1	14.20	14.32	14.15	16.0	0.0	



Part27Q_n77_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	18.09						
100	Pi2 BPSK	1	137	18.28			19.5	0.0		
100	Pi2 BPSK	1	271	18.22						
100	Pi2 BPSK	135	0	18.23			19.5	0.0		
100	Pi2 BPSK	135	69	18.31			19.5	0.0		
100	Pi2 BPSK	135	138	18.21						
100	Pi2 BPSK	270	0	18.28			19.5	0.0		
100	QPSK	1	1	18.32						
100	QPSK	1	137	18.24			19.5	0.0		
100	QPSK	1	271	18.31						
100	QPSK	135	0	18.29						
100	QPSK	135	69	18.30			19.5	0.0		
100	QPSK	135	138	18.27						
100	QPSK	270	0	18.27			19.5	0.0		
100	16QAM	1	1	18.29			19.5	0.0		
100	16QAM	1	1	18.29			19.5	0.0		
100	256QAM	1	1	18.27			19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	18.25	18.29	18.24	19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	18.26	18.28	18.28	19.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	18.26	18.25	18.27	19.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	18.23	18.21	18.28	19.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	18.30	18.21	18.25	19.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	18.23	18.22	18.21	19.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	18.27	18.21	18.26	19.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	18.25	18.28	18.27	19.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	18.22	18.23	18.29	19.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	18.27	18.30	18.24	19.5	0.0		

Part27Q_n77_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	17.96	18.08	17.95				
100	Pi2 BPSK	1	137	17.96	18.23	18.10	19.5	0.0		
100	Pi2 BPSK	1	271	18.11	18.21	18.17				
100	Pi2 BPSK	135	0	18.11	18.20	18.25	19.5	0.0		
100	Pi2 BPSK	135	69	18.04	18.10	18.07	19.5	0.0		
100	Pi2 BPSK	135	138	17.98	18.16	18.01				
100	Pi2 BPSK	270	0	18.06	18.25	18.17	19.5	0.0		
100	QPSK	1	1	18.18	18.30	18.25				
100	QPSK	1	137	17.97	18.22	18.09	19.5	0.0		
100	QPSK	1	271	18.02	18.16	18.21				
100	QPSK	135	0	18.06	18.14	18.05				
100	QPSK	135	69	18.06	18.26	18.24	19.5	0.0		
100	QPSK	135	138	17.96	18.25	18.13				
100	QPSK	270	0	17.95	18.21	18.20	19.5	0.0		
100	16QAM	1	1	18.08	18.16	18.16	19.5	0.0		
100	16QAM	1	1	18.07	18.16	18.07	19.5	0.0		
100	256QAM	1	1	18.13	18.23	17.97	19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	18.16	18.24	18.19	19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	18.14	18.25	18.16	19.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	18.12	18.27	18.15	19.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	18.16	18.21	18.19	19.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	18.14	18.28	18.22	19.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	18.16	18.21	18.20	19.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	18.14	18.19	18.16	19.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	18.18	18.23	18.23	19.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	18.16	18.20	18.15	19.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	18.10	18.19	18.22	19.5	0.0		

Part27Q_n77 HPUE_Ant 8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	18.09						
100	Pi2 BPSK	1	137	18.28			19.5	0.0		
100	Pi2 BPSK	1	271	18.22						
100	Pi2 BPSK	135	0	18.23			19.5	0.0		
100	Pi2 BPSK	135	69	18.31			19.5	0.0		
100	Pi2 BPSK	135	138	18.21						
100	Pi2 BPSK	270	0	18.28			19.5	0.0		
100	QPSK	1	1	18.32						
100	QPSK	1	137	18.24			19.5	0.0		
100	QPSK	1	271	18.31						
100	QPSK	135	0	18.29						
100	QPSK	135	69	18.30			19.5	0.0		
100	QPSK	135	138	18.27						
100	QPSK	270	0	18.27			19.5	0.0		
100	16QAM	1	1	18.29			19.5	0.0		
100	16QAM	1	1	18.29			19.5	0.0		
100	256QAM	1	1	18.27			19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	18.25	18.29	18.24	19.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	18.26	18.28	18.28	19.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	18.26	18.25	18.27	19.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	18.23	18.21	18.28	19.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	18.30	18.21	18.25	19.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	18.23	18.22	18.21	19.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	18.27	18.21	18.26	19.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	18.25	18.28	18.27	19.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	18.22	18.23	18.29	19.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	18.27	18.30	18.24	19.5	0.0		



### Part270\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	17.96	18.08	17.95		
100	PI2 BPSK	1	137	17.96	18.23	18.10	19.5	0.0
100	PI2 BPSK	1	271	18.11	18.21	18.17		
100	PI2 BPSK	135	0	18.11	18.20	18.25	19.5	0.0
100	PI2 BPSK	135	69	18.04	18.10	18.07	19.5	0.0
100	PI2 BPSK	135	138	17.98	18.16	18.01		
100	PI2 BPSK	270	0	18.06	18.25	18.17	19.5	0.0
100	QPSK	1	1	18.13	18.20	18.25		
100	QPSK	1	137	17.97	18.22	18.09	19.5	0.0
100	QPSK	1	271	18.02	18.16	18.21		
100	QPSK	135	0	18.06	18.14	18.05		
100	QPSK	135	69	18.00	18.20	18.04	19.5	0.0
100	QPSK	135	138	17.98	18.25	18.13		
100	QPSK	270	0	17.95	18.21	18.20	19.5	0.0
100	16QAM	1	1	18.08	18.16	18.18	19.5	0.0
100	16QAM	1	1	18.07	18.16	18.07	19.5	0.0
100	256QAM	1	1	18.13	18.23	17.97	19.5	0.0
Channel								
Frequency (MHz)								
64968				65000	65000	65032	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	17.42	17.52	17.42	19.5	0.0
Channel								
Frequency (MHz)								
64934				65000	65066	65066	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	17.40	17.50	17.40	19.5	0.0
Channel								
Frequency (MHz)								
64968				65000	65032	65032	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	18.14	18.27	18.15	19.5	0.0
Channel								
Frequency (MHz)								
64968				65000	65032	65032	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	18.16	18.21	18.19	19.5	0.0
Channel								
Frequency (MHz)								
64834				65000	65066	65066	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	17.25	17.35	17.25	19.5	0.0
Channel								
Frequency (MHz)								
64900				65000	65000	65000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	18.16	18.21	18.19	19.5	0.0
Channel								
Frequency (MHz)								
64968				65000	65032	65032	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	18.14	18.19	18.16	19.5	0.0
Channel								
Frequency (MHz)								
64734				65000	65066	65066	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	18.03	18.23	18.23	19.5	0.0
Channel								
Frequency (MHz)								
64768				65000	65432	65432	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	17.97	18.20	18.15	19.5	0.0
Channel								
Frequency (MHz)								
64700				65000	65000	65000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	18.10	18.19	18.22	19.5	0.0

### Part270\_n78\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1		17.06			
100	PI2 BPSK	1	137		17.00			
100	PI2 BPSK	1	271		16.92		18.5	0.0
100	PI2 BPSK	135	0		16.75		18.5	0.0
100	PI2 BPSK	135	69		16.87		18.5	0.0
100	PI2 BPSK	135	138		16.93			
100	PI2 BPSK	270	0		16.80		18.5	0.0
100	QPSK	1	1		17.06			
100	QPSK	1	137		16.77		18.5	0.0
100	QPSK	1	271		16.83			
100	QPSK	135	0		16.74			
100	QPSK	135	69		16.96		18.5	0.0
100	QPSK	135	138		16.87			
100	QPSK	270	0		16.90		18.5	0.0
100	16QAM	1	1		16.88		18.5	0.0
100	16QAM	1	1		16.95		18.5	0.0
100	256QAM	1	1		16.71		18.5	0.0
Channel								
Frequency (MHz)								
63000				63332	63366	63366	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	17.06	16.99	17.05	18.5	0.0
Channel								
Frequency (MHz)								
63068				63332	63500	63500	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	17.08	17.03	17.06	18.5	0.0
Channel								
Frequency (MHz)								
63000				63332	63466	63466	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	17.06	16.99	16.98	18.5	0.0
Channel								
Frequency (MHz)								
63000				63332	63666	63666	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	17.05	17.07	17.06	18.5	0.0
Channel								
Frequency (MHz)								
63168				63332	63500	63500	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	17.02	16.99	17.02	18.5	0.0
Channel								
Frequency (MHz)								
63134				63332	63532	63532	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	17.00	17.03	17.00	18.5	0.0
Channel								
Frequency (MHz)								
63100				63332	63566	63566	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	17.00	17.04	17.00	18.5	0.0
Channel								
Frequency (MHz)								
63000				63332	63666	63666	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	17.03	17.04	16.98	18.5	0.0
Channel								
Frequency (MHz)								
63050				63332	63616	63616	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	17.02	16.99	17.00	18.5	0.0
Channel								
Frequency (MHz)								
63016				63332	63532	63532	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	17.03	17.07	17.05	18.5	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1		17.34			
100	PI2 BPSK	1	137		17.43		18.5	0.0
100	PI2 BPSK	1	271		17.24			
100	PI2 BPSK	135	0		17.20		18.5	0.0
100	PI2 BPSK	135	69		17.20		18.5	0.0
100	PI2 BPSK	135	138		17.15			
100	PI2 BPSK	270	0		17.21		18.5	0.0
100	QPSK	1	1		17.47			
100	QPSK	1	137		17.12		18.5	0.0
100	QPSK	1	271		17.16			
100	QPSK	135	0		17.89			
100	QPSK	135	69		17.38		18.5	0.0
100	QPSK	135	138		17.16			
100	QPSK	270	0		17.20		18.5	0.0
100	16QAM	1	1		17.16		18.5	0.0
100	16QAM	1	1		17.14		18.5	0.0
100	256QAM	1	1		17.26		18.5	0.0
Channel								
Frequency (MHz)								
64868				65000	65032	65032	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	17.39	17.33	17.45	18.5	0.0
Channel								
Frequency (MHz)								
64834				65000	65066	65066	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	17.45	17.50	17.43	18.5	0.0
Channel								
Frequency (MHz)								
64868				65000	65132	65132	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	17.37	17.36	17.38	18.5	0.0
Channel								
Frequency (MHz)								
64868				65000	65266	65266	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	17.41	17.41	17.41	18.5	0.0
Channel								
Frequency (MHz)								
64834				65000	65166	65166	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	17.40	17.41	17.39	18.5	0.0
Channel								
Frequency (MHz)								
64800				65000	65200	65200	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	17.39	17.45	17.42	18.5	0.0
Channel								
Frequency (MHz)								
64768				65000	65232	65232	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	17.36	17.43	17.43	18.5	0.0
Channel								
Frequency (MHz)								
64734				65000	65266	65266	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	17.45	17.37	17.36	18.5	0.0
Channel								
Frequency (MHz)								
64768				65000	65232	65232	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	17.38	17.38	17.37	18.5	0.0
Channel								
Frequency (MHz)								
64700				65000	65200	65200	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	17.43	17.43	17.38	18.5	0.0



Part27Q_n78 HPUE_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	17.06	17.06		18.5	0.0		
100	Pi2 BPSK	1	137	17.00	17.00					
100	Pi2 BPSK	1	271	16.82	16.82					
100	Pi2 BPSK	135	0	16.75	16.75		18.5	0.0		
100	Pi2 BPSK	135	69	16.87	16.87		18.5	0.0		
100	Pi2 BPSK	135	138	16.93	16.93					
100	Pi2 BPSK	270	0	16.80	16.80		18.5	0.0		
100	QPSK	1	1	17.09	17.09					
100	QPSK	1	137	16.77	16.77		18.5	0.0		
100	QPSK	1	271	16.83	16.83					
100	QPSK	135	0	16.74	16.74					
100	QPSK	135	69	16.96	16.96		18.5	0.0		
100	QPSK	135	138	16.87	16.87					
100	QPSK	270	0	16.90	16.90		18.5	0.0		
100	16QAM	1	1	16.88	16.88		18.5	0.0		
100	64QAM	1	1	16.85	16.85		18.5	0.0		
100	256QAM	1	1	16.71	16.71		18.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	17.05	16.99	17.05	18.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	17.06	17.03	17.08	18.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	17.06	16.99	16.98	18.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	17.05	17.07	17.06	18.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	17.03	17.07	17.03	18.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	17.00	17.03	17.00	18.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	17.00	17.04	17.00	18.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	17.03	17.04	16.98	18.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	17.02	16.99	17.00	18.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	17.03	17.07	17.05	18.5	0.0		

Part27Q_n78 HPUE_Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	17.34	17.34		18.5	0.0		
100	Pi2 BPSK	1	137	17.43	17.43					
100	Pi2 BPSK	1	271	17.24	17.24					
100	Pi2 BPSK	135	0	17.20	17.20		18.5	0.0		
100	Pi2 BPSK	135	69	17.20	17.20		18.5	0.0		
100	Pi2 BPSK	135	138	17.15	17.15					
100	Pi2 BPSK	270	0	17.21	17.21		18.5	0.0		
100	QPSK	1	1	17.37	17.37					
100	QPSK	1	137	17.12	17.12		18.5	0.0		
100	QPSK	1	271	17.16	17.16					
100	QPSK	135	0	17.09	17.09					
100	QPSK	135	69	17.36	17.36		18.5	0.0		
100	QPSK	135	138	17.16	17.16					
100	QPSK	270	0	17.20	17.20		18.5	0.0		
100	16QAM	1	1	17.16	17.16		18.5	0.0		
100	64QAM	1	1	17.14	17.14		18.5	0.0		
100	256QAM	1	1	17.26	17.26		18.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	17.29	17.38	17.45	18.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	17.45	17.45	17.43	18.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	17.37	17.36	17.38	18.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	17.41	17.41	17.37	18.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	17.40	17.41	17.39	18.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	17.39	17.45	17.42	18.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	17.36	17.43	17.43	18.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	17.45	17.37	17.36	18.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	17.38	17.38	17.37	18.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	17.43	17.43	17.38	18.5	0.0		

Part27Q_n78_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	19.75	19.75		21.0	0.0		
100	Pi2 BPSK	1	137	19.86	19.86					
100	Pi2 BPSK	1	271	19.89	19.89					
100	Pi2 BPSK	135	0	19.97	19.97		21.0	0.0		
100	Pi2 BPSK	135	69	19.79	19.79		21.0	0.0		
100	Pi2 BPSK	135	138	19.90	19.90					
100	Pi2 BPSK	270	0	19.91	19.91		21.0	0.0		
100	QPSK	1	1	20.09	20.09					
100	QPSK	1	137	19.80	19.80		21.0	0.0		
100	QPSK	1	271	19.84	19.84					
100	QPSK	135	0	19.93	19.93					
100	QPSK	135	69	20.00	20.00		21.0	0.0		
100	QPSK	135	138	19.93	19.93					
100	QPSK	270	0	19.91	19.91		21.0	0.0		
100	16QAM	1	1	19.89	19.89		21.0	0.0		
100	64QAM	1	1	19.90	19.90		21.0	0.0		
100	256QAM	1	1	19.79	19.79		21.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.01	20.05	20.05	21.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.04	20.02	20.04	21.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.05	19.98	20.00	21.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.05	20.07	19.98	21.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.06	20.04	20.01	21.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	19.99	20.03	20.03	21.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.06	20.03	20.07	21.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	19.99	20.06	20.03	21.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	20.04	20.07	20.04	21.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	19.99	20.06	20.02	21.0	0.0		



Part270_n78_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	20.17					
100	PI2 BPSK	1	137	20.17			21.0	0.0	
100	PI2 BPSK	1	271	20.07					
100	PI2 BPSK	135	0	20.06			21.0	0.0	
100	PI2 BPSK	135	69	20.13			21.0	0.0	
100	PI2 BPSK	135	138	20.16					
100	PI2 BPSK	270	0	20.07			21.0	0.0	
100	QPSK	1	1	20.23					
100	QPSK	1	137	20.13			21.0	0.0	
100	QPSK	1	271	20.15					
100	QPSK	135	0	20.17					
100	QPSK	135	69	20.20			21.0	0.0	
100	QPSK	135	138	20.10					
100	QPSK	270	0	20.12			21.0	0.0	
100	16QAM	1	1	20.08			21.0	0.0	
100	16QAM	1	1	20.10			21.0	0.0	
100	256QAM	1	1	20.14			21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.14	20.13	20.14	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.13	20.12	20.13	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.16	20.18	20.17	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.18	20.21	20.19	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.18	20.12	20.19	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.12	20.21	20.15	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.16	20.21	20.17	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.21	20.12	20.17	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.13	20.16	20.20	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.18	20.20	20.21	21.0	0.0	

Part27Q_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.75					
100	PI2 BPSK	1	137	19.86			21.0	0.0	
100	PI2 BPSK	1	271	19.89					
100	PI2 BPSK	135	0	19.97			21.0	0.0	
100	PI2 BPSK	135	69	19.79			21.0	0.0	
100	PI2 BPSK	135	138	19.90					
100	PI2 BPSK	270	0	19.91			21.0	0.0	
100	QPSK	1	1	20.09					
100	QPSK	1	137	19.80			21.0	0.0	
100	QPSK	1	271	19.84					
100	QPSK	135	0	19.93			21.0	0.0	
100	QPSK	135	69	20.00					
100	QPSK	135	138	19.93					
100	QPSK	270	0	19.91			21.0	0.0	
100	16QAM	1	1	19.89			21.0	0.0	
100	16QAM	1	1	19.90			21.0	0.0	
100	256QAM	1	1	19.79			21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.04	20.05	20.05	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.04	20.02	20.04	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.05	19.98	20.00	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.05	20.07	19.98	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.05	20.04	20.01	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.99	20.03	20.03	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.06	20.03	20.07	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.99	20.06	20.03	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.04	20.07	20.04	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.99	20.06	20.02	21.0	0.0	

Part270_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	20.17					
100	PI2 BPSK	1	137	20.17			21.0	0.0	
100	PI2 BPSK	1	271	20.07					
100	PI2 BPSK	135	0	20.06			21.0	0.0	
100	PI2 BPSK	135	69	20.13			21.0	0.0	
100	PI2 BPSK	135	138	20.16					
100	PI2 BPSK	270	0	20.07			21.0	0.0	
100	QPSK	1	1	20.23					
100	QPSK	1	137	20.13			21.0	0.0	
100	QPSK	1	271	20.15					
100	QPSK	135	0	20.17					
100	QPSK	135	69	20.20			21.0	0.0	
100	QPSK	135	138	20.10					
100	QPSK	270	0	20.12			21.0	0.0	
100	16QAM	1	1	20.08			21.0	0.0	
100	16QAM	1	1	20.10			21.0	0.0	
100	256QAM	1	1	20.14			21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.14	20.13	20.14	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.13	20.12	20.13	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.16	20.18	20.17	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.18	20.21	20.19	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.18	20.12	20.19	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.12	20.21	20.15	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.16	20.21	20.17	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.21	20.12	20.17	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.13	20.16	20.20	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.18	20.20	20.21	21.0	0.0	



### Part27Q\_n78\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	14.87				
100	Pi2 BPSK	1	137	14.88			16.0	0.0
100	Pi2 BPSK	1	271	15.00				
100	Pi2 BPSK	135	0	14.97			16.0	0.0
100	Pi2 BPSK	135	69	14.89			16.0	0.0
100	Pi2 BPSK	135	138	14.94			16.0	0.0
100	Pi2 BPSK	270	0	14.91			16.0	0.0
100	QPSK	1	1	15.10				
100	QPSK	1	137	14.84			16.0	0.0
100	QPSK	1	271	14.94				
100	QPSK	135	0	14.81			16.0	0.0
100	QPSK	135	69	14.88			16.0	0.0
100	QPSK	135	138	14.82			16.0	0.0
100	QPSK	270	0	14.91			16.0	0.0
100	16QAM	1	1	14.84			16.0	0.0
100	16QAM	1	1	14.93			16.0	0.0
100	256QAM	1	1	14.92			16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.02	15.03	15.02	16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.00	15.03	15.04	16.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	15.07	15.02	15.04	16.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	15.05	15.04	15.07	16.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	15.02	15.02	14.99	16.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	15.02	15.02	14.99	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	15.06	15.00	15.04	16.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	15.07	15.03	14.99	16.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	15.01	15.04	15.07	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.06	14.99	15.00	16.0	0.0

### Part27Q\_n78\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	14.98				
100	Pi2 BPSK	1	137	15.07			16.0	0.0
100	Pi2 BPSK	1	271	15.00				
100	Pi2 BPSK	135	0	14.97			16.0	0.0
100	Pi2 BPSK	135	69	15.02			16.0	0.0
100	Pi2 BPSK	135	138	14.97			16.0	0.0
100	Pi2 BPSK	270	0	15.01			16.0	0.0
100	QPSK	1	1	15.13				
100	QPSK	1	137	15.05			16.0	0.0
100	QPSK	1	271	14.98				
100	QPSK	135	0	14.97			16.0	0.0
100	QPSK	135	69	15.10			16.0	0.0
100	QPSK	135	138	15.09			16.0	0.0
100	QPSK	270	0	14.98			16.0	0.0
100	16QAM	1	1	14.97			16.0	0.0
100	16QAM	1	1	14.93			16.0	0.0
100	256QAM	1	1	14.97			16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.05	15.06	15.05	16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.04	15.07	15.05	16.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	15.04	15.11	15.11	16.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	15.04	15.07	15.08	16.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	15.03	15.10	15.05	16.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	15.04	15.07	15.11	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	15.10	15.03	15.04	16.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	15.07	15.08	15.04	16.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	15.02	15.08	15.07	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.06	15.02	15.11	16.0	0.0

### Part27Q\_n78 HPUE\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	14.87				
100	Pi2 BPSK	1	137	14.88			16.0	0.0
100	Pi2 BPSK	1	271	15.00				
100	Pi2 BPSK	135	0	14.97			16.0	0.0
100	Pi2 BPSK	135	69	14.89			16.0	0.0
100	Pi2 BPSK	135	138	14.94			16.0	0.0
100	Pi2 BPSK	270	0	14.91			16.0	0.0
100	QPSK	1	1	15.10				
100	QPSK	1	137	14.84			16.0	0.0
100	QPSK	1	271	14.94				
100	QPSK	135	0	14.81			16.0	0.0
100	QPSK	135	69	15.08			16.0	0.0
100	QPSK	135	138	14.82			16.0	0.0
100	QPSK	270	0	14.91			16.0	0.0
100	16QAM	1	1	14.84			16.0	0.0
100	16QAM	1	1	14.93			16.0	0.0
100	256QAM	1	1	14.92			16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.02	15.03	15.02	16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	15.00	15.03	15.04	16.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	15.07	15.02	15.04	16.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	15.05	15.04	15.07	16.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	15.02	15.01	15.02	16.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	15.02	15.02	14.99	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	15.06	15.00	15.04	16.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	15.07	15.03	14.99	16.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	15.01	15.04	15.07	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	15.06	14.99	15.00	16.0	0.0



### Part270\_n78 HPUe\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	14.98	15.07	15.16	16.0	0.0
100	Pi2 BPSK	1	137	15.00	15.13	15.26	16.0	0.0
100	Pi2 BPSK	1	271	14.97	15.06	15.15	16.0	0.0
100	Pi2 BPSK	135	69	15.02	15.11	15.20	16.0	0.0
100	Pi2 BPSK	135	138	14.97	15.06	15.15	16.0	0.0
100	Pi2 BPSK	270	0	15.01	15.10	15.19	16.0	0.0
100	QPSK	1	1	15.13	15.22	15.31	16.0	0.0
100	QPSK	1	137	15.05	15.14	15.23	16.0	0.0
100	QPSK	1	271	14.98	15.07	15.16	16.0	0.0
100	QPSK	135	69	14.97	15.06	15.15	16.0	0.0
100	QPSK	135	138	15.02	15.11	15.20	16.0	0.0
100	QPSK	270	0	15.09	15.18	15.27	16.0	0.0
100	QPSK	270	0	14.98	15.07	15.16	16.0	0.0
100	16QAM	1	1	14.97	15.06	15.15	16.0	0.0
100	16QAM	1	1	14.93	15.02	15.11	16.0	0.0
100	256QAM	1	1	14.97	15.06	15.15	16.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	649668	650000	650332	Tune-up limit (dBm)	MPR (dB)
				3745.02	3750	3754.98	16.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	649334	650000	650666	Tune-up limit (dBm)	MPR (dB)
				3740.01	3750	3759.99	16.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	648998	650000	651332	Tune-up limit (dBm)	MPR (dB)
				3735	3750	3765	16.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	648668	650000	651666	Tune-up limit (dBm)	MPR (dB)
				3730.02	3750	3769.98	16.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	648334	650000	652000	Tune-up limit (dBm)	MPR (dB)
				3725.01	3750	3774.99	16.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	647998	650000	652332	Tune-up limit (dBm)	MPR (dB)
				3720	3750	3780	16.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	647668	650000	652666	Tune-up limit (dBm)	MPR (dB)
				3715.02	3750	3784.98	16.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	647334	650000	653000	Tune-up limit (dBm)	MPR (dB)
				3710.01	3750	3789.99	16.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	647000	650000	653332	Tune-up limit (dBm)	MPR (dB)
				3707.52	3750	3792.48	16.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	646668	650000	653666	Tune-up limit (dBm)	MPR (dB)
				3705	3750	3795	16.0	0.0

### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	18.67	18.72	18.77	19.5	0.0
100	Pi2 BPSK	1	137	18.62	18.73	18.84	19.5	0.0
100	Pi2 BPSK	1	271	18.73	18.82	18.91	19.5	0.0
100	Pi2 BPSK	135	69	18.69	18.76	18.83	19.5	0.0
100	Pi2 BPSK	135	138	18.70	18.77	18.84	19.5	0.0
100	Pi2 BPSK	270	0	18.69	18.76	18.83	19.5	0.0
100	QPSK	1	1	18.81	18.88	18.95	19.5	0.0
100	QPSK	1	137	18.70	18.77	18.84	19.5	0.0
100	QPSK	1	271	18.72	18.79	18.86	19.5	0.0
100	QPSK	135	69	18.66	18.73	18.80	19.5	0.0
100	QPSK	135	138	18.75	18.82	18.89	19.5	0.0
100	QPSK	270	0	18.69	18.76	18.83	19.5	0.0
100	QPSK	270	0	18.69	18.76	18.83	19.5	0.0
100	16QAM	1	1	18.76	18.79	18.82	19.5	0.0
100	16QAM	1	1	18.76	18.79	18.82	19.5	0.0
100	256QAM	1	1	18.66	18.66	18.66	19.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
				3495	3499.98	3504.98	19.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	632668	633332	634000	Tune-up limit (dBm)	MPR (dB)
				3490.01	3499.98	3500	19.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	632334	633332	634000	Tune-up limit (dBm)	MPR (dB)
				3485.01	3499.98	3514.98	19.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
				3480	3499.98	3519.98	19.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
				3475.02	3499.98	3524.98	19.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
				3470.01	3499.98	3529.98	19.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	631000	633332	635666	Tune-up limit (dBm)	MPR (dB)
				3465	3499.98	3534.98	19.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
				3460.02	3499.98	3539.98	19.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	630334	633332	636332	Tune-up limit (dBm)	MPR (dB)
				3455.01	3499.98	3544.98	19.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	630000	633332	636666	Tune-up limit (dBm)	MPR (dB)
				3450	3499.98	3549.98	19.5	0.0

### Part270\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1	18.71	18.76	18.81	19.5	0.0
100	Pi2 BPSK	1	137	18.77	18.82	18.87	19.5	0.0
100	Pi2 BPSK	1	271	18.78	18.83	18.88	19.5	0.0
100	Pi2 BPSK	135	69	18.69	18.74	18.79	19.5	0.0
100	Pi2 BPSK	135	138	18.75	18.80	18.85	19.5	0.0
100	Pi2 BPSK	270	0	18.76	18.81	18.86	19.5	0.0
100	QPSK	1	1	18.83	18.88	18.93	19.5	0.0
100	QPSK	1	137	18.72	18.77	18.82	19.5	0.0
100	QPSK	1	271	18.75	18.80	18.85	19.5	0.0
100	QPSK	135	69	18.70	18.75	18.80	19.5	0.0
100	QPSK	135	138	18.76	18.81	18.86	19.5	0.0
100	QPSK	270	0	18.76	18.81	18.86	19.5	0.0
100	QPSK	270	0	18.67	18.72	18.77	19.5	0.0
100	16QAM	1	1	18.76	18.79	18.82	19.5	0.0
100	16QAM	1	1	18.62	18.62	18.62	19.5	0.0
100	256QAM	1	1	18.71	18.71	18.71	19.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	648668	650000	650332	Tune-up limit (dBm)	MPR (dB)
				3745.02	3750	3754.98	19.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	648334	650000	650666	Tune-up limit (dBm)	MPR (dB)
				3740.01	3750	3759.99	19.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	648000	650000	651000	Tune-up limit (dBm)	MPR (dB)
				3735	3750	3765	19.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	647668	650000	651332	Tune-up limit (dBm)	MPR (dB)
				3730.02	3750	3769.98	19.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	647334	650000	652000	Tune-up limit (dBm)	MPR (dB)
				3725.01	3750	3774.99	19.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	647000	650000	652332	Tune-up limit (dBm)	MPR (dB)
				3720	3750	3780	19.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	646668	650000	652666	Tune-up limit (dBm)	MPR (dB)
				3715.02	3750	3784.98	19.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	646334	650000	653000	Tune-up limit (dBm)	MPR (dB)
				3710.01	3750	3789.99	19.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	646000	650000	653332	Tune-up limit (dBm)	MPR (dB)
				3707.52	3750	3792.48	19.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	645668	650000	653666	Tune-up limit (dBm)	MPR (dB)
				3705	3750	3795	19.5	0.0





Part27Q_n78 HPUE_Ant 8							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)				63332		3599.98	
100	PI2 BPSK	1	1	18.67	18.62		
100	PI2 BPSK	1	137	18.62	18.73		
100	PI2 BPSK	1	271	18.73	18.89		
100	PI2 BPSK	135	0	18.89	18.70		19.5 0.0
100	PI2 BPSK	135	69	18.70	18.69		19.5 0.0
100	PI2 BPSK	135	138	18.69	18.85		19.5 0.0
100	PI2 BPSK	270	0	18.85	18.70		19.5 0.0
100	QPSK	1	1	18.81	18.70		19.5 0.0
100	QPSK	1	137	18.70	18.72		19.5 0.0
100	QPSK	1	271	18.72	18.86		19.5 0.0
100	QPSK	135	0	18.86	18.76		19.5 0.0
100	QPSK	135	69	18.76	18.81		19.5 0.0
100	QPSK	135	138	18.81	18.89		19.5 0.0
100	QPSK	270	0	18.89	18.76		19.5 0.0
100	16QAM	1	1	18.88	18.76		19.5 0.0
100	64QAM	1	1	18.78	18.78		19.5 0.0
100	256QAM	1	1	18.68	18.70		19.5 0.0
Channel							
Frequency (MHz)				63300		63366	
Frequency (MHz)				3495		3499.98	
90	QPSK	1	1	18.74	18.70	18.72	19.5 0.0
Channel							
Frequency (MHz)				63268		63332	
Frequency (MHz)				3490.02		3499.98	
80	QPSK	1	1	18.74	18.79	18.73	19.5 0.0
Channel							
Frequency (MHz)				63254		63332	
Frequency (MHz)				3485.01		3499.98	
70	QPSK	1	1	18.71	18.76	18.70	19.5 0.0
Channel							
Frequency (MHz)				63200		63332	
Frequency (MHz)				3480		3499.98	
60	QPSK	1	1	18.76	18.71	18.71	19.5 0.0
Channel							
Frequency (MHz)				63168		63332	
Frequency (MHz)				3475.02		3499.98	
50	QPSK	1	1	18.70	18.71	18.79	19.5 0.0
Channel							
Frequency (MHz)				63134		63332	
Frequency (MHz)				3470.01		3499.98	
40	QPSK	1	1	18.74	18.70	18.77	19.5 0.0
Channel							
Frequency (MHz)				63100		63332	
Frequency (MHz)				3465.02		3499.98	
30	QPSK	1	1	18.74	18.79	18.79	19.5 0.0
Channel							
Frequency (MHz)				63068		63332	
Frequency (MHz)				3460.02		3499.98	
20	QPSK	1	1	18.71	18.78	18.77	19.5 0.0
Channel							
Frequency (MHz)				63030		63332	
Frequency (MHz)				3457.5		3499.98	
15	QPSK	1	1	18.78	18.77	18.70	19.5 0.0
Channel							
Frequency (MHz)				63034		63332	
Frequency (MHz)				3455.01		3499.98	
10	QPSK	1	1	18.75	18.73	18.75	19.5 0.0

Part27Q_n78 HPUE_Ant 8							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)				65000		3750	
100	PI2 BPSK	1	1	18.71	18.77		
100	PI2 BPSK	1	137	18.77	18.75		
100	PI2 BPSK	1	271	18.75	18.89		
100	PI2 BPSK	135	0	18.89	18.76		19.5 0.0
100	PI2 BPSK	135	69	18.76	18.75		19.5 0.0
100	PI2 BPSK	135	138	18.75	18.76		19.5 0.0
100	PI2 BPSK	270	0	18.76	18.76		19.5 0.0
100	QPSK	1	1	18.80	18.80		19.5 0.0
100	QPSK	1	137	18.82	18.75		19.5 0.0
100	QPSK	1	271	18.75	18.70		19.5 0.0
100	QPSK	135	0	18.70	18.70		19.5 0.0
100	QPSK	135	69	18.76	18.77		19.5 0.0
100	QPSK	135	138	18.77	18.87		19.5 0.0
100	QPSK	270	0	18.87	18.70		19.5 0.0
100	16QAM	1	1	18.70	18.70		19.5 0.0
100	64QAM	1	1	18.62	18.70		19.5 0.0
100	256QAM	1	1	18.71	18.70		19.5 0.0
Channel							
Frequency (MHz)				64968		65032	
Frequency (MHz)				3745.02		3750	
90	QPSK	1	1	18.69	18.72	18.76	19.5 0.0
Channel							
Frequency (MHz)				64934		65000	
Frequency (MHz)				3740.01		3750	
80	QPSK	1	1	18.78	18.72	18.69	19.5 0.0
Channel							
Frequency (MHz)				64900		65000	
Frequency (MHz)				3735		3750	
70	QPSK	1	1	18.70	18.75	18.77	19.5 0.0
Channel							
Frequency (MHz)				64868		65000	
Frequency (MHz)				3730.02		3750	
60	QPSK	1	1	18.77	18.72	18.76	19.5 0.0
Channel							
Frequency (MHz)				64834		65000	
Frequency (MHz)				3725.01		3750	
50	QPSK	1	1	18.69	18.72	18.78	19.5 0.0
Channel							
Frequency (MHz)				64800		65000	
Frequency (MHz)				3720		3750	
40	QPSK	1	1	18.76	18.78	18.78	19.5 0.0
Channel							
Frequency (MHz)				64768		65000	
Frequency (MHz)				3715.02		3750	
30	QPSK	1	1	18.69	18.76	18.75	19.5 0.0
Channel							
Frequency (MHz)				64734		65000	
Frequency (MHz)				3710.01		3750	
20	QPSK	1	1	18.69	18.76	18.73	19.5 0.0
Channel							
Frequency (MHz)				64700		65000	
Frequency (MHz)				3707.52		3750	
15	QPSK	1	1	18.75	18.71	18.71	19.5 0.0
Channel							
Frequency (MHz)				64668		65000	
Frequency (MHz)				3705		3750	
10	QPSK	1	1	18.70	18.75	18.69	19.5 0.0





Band 4_Ant 1											
BW (MHz)	Modulation	RB Size	RB Offset	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)
		Channel	20000	20100	20200	20300	20400	20500	20600	20700	20800
20	QPSK	1	0	15.14	15.34	15.21				16.5	0
20	QPSK	1	49	15.07	15.20	15.22					
20	QPSK	1	99	15.07	15.20	15.22					
20	QPSK	50	0	15.20	15.40	15.30				16.5	0
20	QPSK	50	24	15.20	15.40	15.30					
20	QPSK	50	50	15.15	15.15	15.27					
20	QPSK	100	0	15.23	15.41	15.39					
20	HQAM	1	49	15.10	15.20	15.25				16.5	0
20	HQAM	1	99	15.08	15.41	15.32					
20	HQAM	50	24	15.08	15.34	15.37				16.5	0
20	HQAM	50	50	15.24	15.22	15.32					
20	HQAM	1	0	15.15	15.32	15.34				16.5	0
20	HQAM	1	49	15.08	15.33	15.30					
20	HQAM	1	99	15.05	15.26	15.41					
20	HQAM	50	24	15.17	15.30	15.31				16.5	0
20	HQAM	50	50	15.24	15.20	15.38					
20	256QAM	1	0	15.13	15.20	15.44				16.5	0
20	256QAM	1	49	15.14	15.20	15.25					
20	256QAM	1	99	15.18	15.34	15.40					
20	256QAM	50	0	15.13	15.35	15.28				16.5	0
20	256QAM	50	24	15.12	15.24	15.38					
20	256QAM	50	50	15.21	15.38	15.44					
20	256QAM	100	0	15.20	15.32	15.33					
	Frequency (MHz)			1737.5	1732.5	1747.5				Time-upt (dBm)	MPE (dB)
15	QPSK	1	0	15.09	15.25	15.12				16.5	0
15	QPSK	1	49	15.11	15.21	15.28					
15	QPSK	1	99	15.03	15.09	15.11					
15	QPSK	36	0	15.18	15.34	15.30				16.4	0
15	QPSK	36	24	15.20	15.24	15.28					
15	QPSK	36	39	15.12	15.11	15.21				16.4	0
15	QPSK	75	0	15.12	15.37	15.27					
15	HQAM	1	49	15.01	15.24	15.28				16.5	0
15	HQAM	1	37	15.01	15.24	15.18					
15	HQAM	1	74	14.98	15.30	15.23				16.4	0
15	HQAM	36	0	15.14	15.20	15.25					
15	HQAM	36	20	15.00	15.20	15.30				16.4	0
15	HQAM	36	39	15.20	15.18	15.23					
15	HQAM	75	0	15.02	15.23	15.44				16.5	0
15	HQAM	1	0	15.05	15.22	15.29					
15	HQAM	1	37	14.95	15.28	15.28				16.4	0
15	HQAM	1	74	14.85	15.15	15.37					
15	HQAM	36	0	15.11	15.20	15.24				16.4	0
15	HQAM	36	20	14.95	15.28	15.30					
15	HQAM	36	39	15.20	15.27	15.37				16.5	0
15	256QAM	1	0	15.02	15.20	15.38					
15	256QAM	1	37	15.02	15.27	15.20				16.5	0
15	256QAM	1	74	15.12	15.28	15.38					
15	256QAM	36	0	15.04	15.30	15.18				16.5	0
15	256QAM	36	20	15.00	15.27	15.30					
15	256QAM	36	39	15.19	15.29	15.40					
15	256QAM	75	0	15.14	15.27	15.31				16.5	0
	Frequency (MHz)			1715	1732.5	1750				Time-upt (dBm)	MPE (dB)
10	QPSK	1	0	15.08	15.24	15.14				16.5	0
10	QPSK	1	49	15.11	15.21	15.28					
10	QPSK	1	99	15.03	15.08	15.15					
10	QPSK	25	0	15.13	15.32	15.28				16.4	0
10	QPSK	25	12	15.07	15.22	15.28					
10	QPSK	25	25	15.03	15.17	15.22				16.4	0
10	QPSK	50	0	15.18	15.38	15.36					
10	HQAM	1	49	15.01	15.19	15.23				16.5	0
10	HQAM	1	25	15.00	15.19	15.14					
10	HQAM	1	49	15.08	15.38	15.27				16.4	0
10	HQAM	36	0	15.14	15.24	15.29					
10	HQAM	36	12	15.01	15.25	15.35				16.5	0
10	HQAM	36	25	15.15	15.15	15.24					
10	HQAM	50	0	15.12	15.37	15.27				16.4	0
10	HQAM	1	0	15.13	15.20	15.22					
10	HQAM	1	49	14.98	15.22	15.18				16.4	0
10	HQAM	25	0	15.07	15.25	15.22					
10	HQAM	25	12	14.98	15.22	15.33				16.4	0
10	HQAM	25	25	15.02	15.27	15.35					
10	HQAM	50	0	15.18	15.17	15.32				16.4	0
10	256QAM	1	0	15.00	15.17	15.35					
10	256QAM	1	25	15.12	15.12	15.37				16.5	0
10	256QAM	1	49	15.10	15.31	15.38					
10	256QAM	25	0	15.10	15.25	15.22				16.5	0
10	256QAM	25	12	15.00	15.12	15.24					
10	256QAM	25	25	15.18	15.23	15.38				16.5	0
10	256QAM	50	0	15.05	15.22	15.24					
	Frequency (MHz)			1712.5	1732.5	1752.5				Time-upt (dBm)	MPE (dB)
5	QPSK	1	0	15.03	15.30	15.18				16.5	0
5	QPSK	1	12	15.03	15.31	15.40					
5	QPSK	1	24	15.02	15.16	15.11					
5	QPSK	12	0	15.22	15.38	15.35				16.4	0
5	QPSK	12	7	15.08	15.24	15.21					
5	QPSK	12	13	15.04	15.09	15.16				16.4	0
5	QPSK	25	0	15.15	15.35	15.31					
5	HQAM	1	0	15.11	15.28	15.32				16.5	0
5	HQAM	1	12	15.01	15.18	15.21					
5	HQAM	1	24	15.01	15.31	15.26				16.4	0
5	HQAM	12	0	15.13	15.25	15.28					
5	HQAM	12	7	15.08	15.23	15.31				16.4	0
5	HQAM	12	13	15.20	15.14	15.27					
5	HQAM	25	0	15.04	15.15	15.24				16.5	0
5	HQAM	1	0	15.10	15.23	15.30					
5	HQAM	1	12	14.96	15.23	15.19				16.4	0
5	HQAM	24	0	15.04	15.20	15.23					
5	HQAM	12	0	15.08	15.30	15.25				16.4	0
5	HQAM	12	7	15.02	15.25	15.33					
5	HQAM	12	13	15.12	15.32	15.37				16.4	0
5	HQAM	25	0	15.10	15.12	15.32					
5	256QAM	1	0	15.02	15.28	15.37				16.4	0
5	256QAM	1	12	15.12	15.12	15.37					
5	256QAM	1	24	15.11	15.31	15.38				16.5	0
5	256QAM	12	0	15.06	15.28	15.18				16.5	0
5	256QAM	12	7	15.02	15.12	15.24					
5	256QAM	12	13	15.12	15.24	15.37				16.5	0
5	256QAM	25	0	15.12	15.22	15.31					
	Frequency (MHz)			1711.5	1732.5	1754.3				Time-upt (dBm)	MPE (dB)
1.4	QPSK	1	0	15.07	15.30	15.13				16.5	0
1.4	QPSK	1	4	15.07	15.31	15.28					
1.4	QPSK	1	8	15.08	15.15	15.13				16.4	0
1.4	QPSK	3	0	15.18	15.40	15.38					
1.4	QPSK	3	4	15.08	15.23	15.28				16.4	0
1.4	QPSK	3	7	15.00	15.17	15.15					
1.4	QPSK	15	0	15.13	15.31	15.31				16.4	0
1.4	HQAM	1	4	15.03	15.23	15.23					
1.4	HQAM	1	8	15.05	15.21	15.21				16.5	0
1.4	HQAM	1	14	14.98	15.38	15.29					
1.4	HQAM	8	0	15.02	15.28	15.28				16.5	0
1.4											





**Band 48\_Ant 4**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel: 55340, 55830, 56150, 56640								
Frequency (MHz)								
20	QPSK	1	0	13.89	13.84	13.82	13.94	
20	QPSK	1	49	13.99	13.85	13.99	14.07	15
20	QPSK	1	99	13.93	13.85	13.91	13.97	
20	QPSK	50	0	13.99	13.78	13.99	14.00	
20	QPSK	50	24	13.73	13.72	13.70	13.77	15
20	QPSK	50	50	13.85	13.77	13.68	13.76	
20	QPSK	100	0	13.74	13.80	13.71	14.05	
20	16QAM	1	0	13.92	13.74	13.92	14.02	
20	16QAM	1	49	13.88	13.72	13.85	13.80	15
20	16QAM	1	99	13.74	13.75	13.70	13.81	
20	16QAM	50	0	13.88	13.75	14.02	13.97	
20	16QAM	50	24	13.82	13.67	13.74	13.89	15
20	16QAM	50	50	13.76	13.72	13.66	13.85	
20	16QAM	100	0	13.96	13.68	13.99	14.01	
20	64QAM	1	0	13.87	13.77	13.82	13.80	
20	64QAM	1	49	13.80	13.71	13.79	13.94	15
20	64QAM	1	99	13.95	13.88	13.99	14.06	
20	64QAM	50	0	13.84	13.71	13.86	13.81	
20	64QAM	50	24	13.87	13.72	13.82	13.85	15
20	64QAM	50	50	13.92	13.75	13.97	13.97	
20	64QAM	100	0	13.88	13.76	13.81	13.77	
20	256QAM	1	0	13.81	13.64	13.70	13.93	
20	256QAM	1	49	13.97	13.76	13.93	13.92	15
20	256QAM	1	99	13.80	13.80	13.73	13.82	
20	256QAM	50	0	13.70	13.78	13.72	13.85	
20	256QAM	50	24	13.74	13.77	13.69	13.82	15
20	256QAM	50	50	13.94	13.78	14.01	14.02	
20	256QAM	100	0	13.79	13.75	13.80	13.83	
Channel: 55315, 55820, 56160, 56665								
Frequency (MHz)								
15	QPSK	1	0	13.80	13.73	13.71	13.85	
15	QPSK	1	37	13.97	13.74	13.97	13.96	15
15	QPSK	1	74	13.82	13.73	13.88	13.86	
15	QPSK	36	0	13.89	13.71	13.87	13.94	
15	QPSK	36	20	13.61	13.71	13.63	13.66	15
15	QPSK	36	39	13.79	13.65	13.65	13.71	
15	QPSK	75	0	13.69	13.68	13.63	14.03	
15	16QAM	1	0	13.85	13.69	13.87	14.00	
15	16QAM	1	37	13.80	13.60	13.74	13.76	15
15	16QAM	1	74	13.72	13.73	13.65	13.79	
15	16QAM	36	0	13.81	13.73	13.92	13.90	
15	16QAM	36	20	13.77	13.56	13.64	13.81	15
15	16QAM	36	39	13.72	13.69	13.54	13.76	
15	16QAM	75	0	13.92	13.57	13.95	13.99	
15	64QAM	1	0	13.76	13.75	13.75	13.75	
15	64QAM	1	37	13.76	13.66	13.77	13.83	15
15	64QAM	1	74	13.93	13.77	13.96	13.96	
15	64QAM	36	0	13.77	13.61	13.78	13.79	
15	64QAM	36	20	13.85	13.63	13.77	13.78	15
15	64QAM	36	39	13.81	13.66	13.94	13.90	
15	64QAM	75	0	13.81	13.65	13.74	13.71	
15	256QAM	1	0	13.77	13.62	13.63	13.81	
15	256QAM	1	37	13.95	13.67	13.82	13.80	15
15	256QAM	1	74	13.76	13.68	13.65	13.74	
15	256QAM	36	0	13.59	13.67	13.67	13.73	
15	256QAM	36	20	13.62	13.69	13.61	13.80	15
15	256QAM	36	39	13.87	13.76	13.95	13.95	
15	256QAM	75	0	13.74	13.66	13.77	13.71	
Channel: 55290, 55815, 56165, 56690								
Frequency (MHz)								
10	QPSK	1	0	13.85	13.76	13.72	13.92	
10	QPSK	1	25	13.88	13.74	13.88	14.05	15
10	QPSK	1	49	13.91	13.78	13.82	13.89	
10	QPSK	25	0	13.84	13.67	13.92	14.04	
10	QPSK	25	12	13.63	13.64	13.62	13.66	15
10	QPSK	25	25	13.83	13.73	13.57	13.66	
10	QPSK	50	0	13.69	13.74	13.67	13.94	
10	16QAM	1	0	13.85	13.62	13.92	14.00	15
10	16QAM	1	25	13.79	13.67	13.92	13.75	
10	16QAM	1	49	13.69	13.66	13.59	13.70	
10	16QAM	25	0	13.76	13.71	13.97	13.95	
10	16QAM	25	12	13.70	13.59	13.62	13.79	15
10	16QAM	25	25	13.74	13.62	13.63	13.74	
10	16QAM	50	0	13.85	13.68	13.89	13.97	
10	64QAM	1	0	13.84	13.69	13.74	13.68	
10	64QAM	1	25	13.78	13.60	13.70	13.82	15
10	64QAM	1	49	13.83	13.79	13.91	13.96	
10	64QAM	25	0	13.78	13.61	13.81	13.78	
10	64QAM	25	12	13.75	13.66	13.70	13.78	15
10	64QAM	25	25	13.80	13.70	13.87	13.92	
10	64QAM	50	0	13.78	13.67	13.71	13.66	
10	256QAM	1	0	13.74	13.53	13.58	13.83	
10	256QAM	1	25	13.89	13.72	13.90	13.82	15
10	256QAM	1	49	13.78	13.74	13.67	13.78	
10	256QAM	25	0	13.65	13.71	13.61	13.76	
10	256QAM	25	12	13.71	13.73	13.65	13.76	15
10	256QAM	25	25	13.88	13.76	13.92	13.92	
10	256QAM	50	0	13.73	13.73	13.76	13.74	
Channel: 55265, 55810, 56170, 56715								
Frequency (MHz)								
5	QPSK	1	0	13.85	13.80	13.71	13.89	
5	QPSK	1	12	13.97	13.83	13.87	13.99	15
5	QPSK	1	24	13.87	13.78	13.88	13.86	
5	QPSK	12	0	13.94	13.70	13.85	13.97	
5	QPSK	12	7	13.70	13.62	13.59	13.71	15
5	QPSK	12	13	13.79	13.75	13.64	13.66	
5	QPSK	25	0	13.66	13.73	13.69	14.01	
5	16QAM	1	0	13.88	13.68	13.87	13.95	
5	16QAM	1	12	13.77	13.69	13.83	13.71	15
5	16QAM	1	24	13.65	13.63	13.63	13.72	
5	16QAM	12	0	13.80	13.72	13.99	13.92	
5	16QAM	12	7	13.79	13.60	13.71	13.82	15
5	16QAM	12	13	13.73	13.67	13.60	13.78	
5	16QAM	25	0	13.87	13.66	13.90	13.99	
5	64QAM	1	0	13.79	13.68	13.78	13.76	
5	64QAM	1	12	13.74	13.67	13.78	13.84	15
5	64QAM	1	24	13.85	13.86	13.89	14.01	
5	64QAM	12	0	13.82	13.60	13.80	13.72	
5	64QAM	12	7	13.83	13.62	13.78	13.82	15
5	64QAM	12	13	13.89	13.71	13.94	13.85	
5	64QAM	25	0	13.82	13.68	13.96	13.65	
5	256QAM	1	0	13.79	13.59	13.62	13.86	
5	256QAM	1	12	13.92	13.67	13.86	13.80	15
5	256QAM	1	24	13.73	13.69	13.71	13.72	
5	256QAM	12	0	13.67	13.67	13.65	13.78	
5	256QAM	12	7	13.66	13.67	13.58	13.70	15
5	256QAM	12	13	13.88	13.73	13.92	13.98	
5	256QAM	25	0	13.69	13.64	13.68	13.81	

**Band 48\_Ant 7**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel: 55340, 55830, 56150, 56640								
Frequency (MHz)								
20	QPSK	1	0	15.09	15.03	15.03	14.94	
20	QPSK	1	49	15.10	15.04	15.04	15.18	16.2
20	QPSK	1	99	15.01	14.92	14.95	14.96	
20	QPSK	50	0	15.03	15.01	14.99	15.03	
20	QPSK	50	24	15.03	14.89	14.91	15.09	16.2
20	QPSK	50	50	14.90	14.88	14.91	15.03	
20	QPSK	100	0	14.87	14.93	14.91	15.00	
20	16QAM	1	0	14.93	15.06	14.99	14.90	
20	16QAM	1	49	14.93	14.93	14.88	15.00	16.2
20	16QAM	1	99	14.89	14.96	14.90	15.06	
20	16QAM	50	0	14.91	14.85	14.87	15.00	
20	16QAM	50	24	14.93	14.88	14.91	15.01	16.2
20	16QAM	50	50	15.02	14.93	14.92	15.10	
20	16QAM	100	0	14.86	14.83	14.93	15.01	
20	64QAM	1	0	14.98	15.06	14.94	14.93	
20	64QAM	1	49	14.85	14.87	14.88	15.04	16.2
20	64QAM	1	99	14.92	14.85	14.90	15.01	
20	64QAM	50	0	14.95	14.88	14.90	14.91	
20	64QAM	50	24	14.92	14.95	14.97	14.90	16.2
20	64QAM	50	50	15.02	14.91	14.95	15.12	
20	64QAM	100	0	15.04	14.93	14.87	15.01	
20	256QAM	1	0	14.92	15.03	14.92	14.95	
20	256QAM	1	49	14.87	14.89	14.92	15.03	16.2
20	256QAM	1	99	14.94	14.89	14.95	15.12	
20	256QAM	50	0	14.88	14.95	14.93	14.94	
20	256QAM	50	24	14.96	14.97	14.90	14.94	16.2
20	256QAM	50	50	14.96	14.89	15.03	14.97	
20	256QAM	100	0	14.92	14.87	14.97	15.00	
Channel: 55315, 55820, 56160, 56665								
Frequency (MHz)								
15	QPSK	1	0	15.06	14.92	14.97	14.84	
15	QPSK	1	37	15.02	14.93	14.97	15.12	16.2
15	QPSK	1	74	14.94	14.86	14.91	14.84	
15	QPSK	36	0	14.97	14.94	14.95	15.03	
15	QPSK	36	20	15.00	14.80	14.88	15.00	16.2
15	QPSK	36	39	14.83	14.80	14.84	14.98	
15	QPSK	75	0	14.78	14.82	14.88	14.83	
15	16QAM	1	0	14.85	14.95	14.89	14.83	
15	16QAM	1	37	14.82	14.87	14.78	14.95	16.2
15	16QAM	1	74	14.85	14.86			



## Band 48\_Ant 8

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	14.96	14.91	15.07	15.00		
20	QPSK	1	49	15.06	15.18	15.13	15.29	16.7	0
20	QPSK	1	99	15.00	15.06	15.06	15.03		
20	QPSK	50	0	15.08	15.02	15.05	15.20		
20	QPSK	50	24	15.05	15.00	15.00	15.15	16.7	0
20	QPSK	50	50	14.90	15.00	14.94	15.15		
20	QPSK	100	0	14.96	15.06	15.06	15.07		
20	16QAM	1	0	15.01	15.00	15.05	15.13		
20	16QAM	1	49	15.04	15.14	14.99	15.01	16.7	0
20	16QAM	1	99	14.94	15.13	15.08	15.08		
20	16QAM	50	0	14.88	15.08	15.14	15.14		
20	16QAM	50	24	14.87	14.96	15.00	15.12		
20	16QAM	50	50	14.97	15.07	15.08	15.13	16.7	0
20	16QAM	100	0	14.99	14.97	15.06	15.03		
20	64QAM	1	0	14.92	15.07	15.03	15.07		
20	64QAM	1	49	14.98	15.09	15.08	15.02	16.7	0
20	64QAM	1	99	14.96	15.01	15.14	15.04		
20	64QAM	50	0	14.89	14.98	15.14	15.11		
20	64QAM	50	24	14.96	15.02	15.01	15.07	16.7	0
20	64QAM	50	50	14.98	15.05	14.98	15.00		
20	64QAM	100	0	15.01	15.10	15.05	15.02		
20	256QAM	1	0	15.01	15.00	15.07	15.14		
20	256QAM	1	49	15.00	15.14	15.11	15.04	16.7	0
20	256QAM	1	99	14.92	15.04	15.03	15.03		
20	256QAM	50	0	15.08	15.05	15.07	15.16		
20	256QAM	50	24	14.93	15.00	15.09	15.13	16.7	0
20	256QAM	50	50	15.01	15.00	14.96	15.10		
20	256QAM	100	0	14.93	15.05	15.05	15.06		
Channel				55315	55820	56160	56655	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	14.94	14.88	14.95	14.97		
15	QPSK	1	37	15.02	15.09	15.08	15.18	16.7	0
15	QPSK	1	74	14.90	14.99	15.02	14.93		
15	QPSK	36	0	15.06	15.00	14.95	15.12		
15	QPSK	36	20	15.02	14.94	14.94	15.04	16.7	0
15	QPSK	36	39	14.78	14.83	14.86	15.10		
15	QPSK	75	0	14.91	15.00	14.95	15.02		
15	16QAM	1	0	14.99	14.89	14.93	15.07		
15	16QAM	1	37	14.94	15.08	14.87	14.93	16.7	0
15	16QAM	1	74	14.89	15.11	15.06	15.01		
15	16QAM	36	0	14.77	15.04	15.02	15.11		
15	16QAM	36	20	14.80	14.92	14.88	15.00	16.7	0
15	16QAM	36	39	14.93	15.01	15.03	15.06		
15	16QAM	75	0	14.94	14.86	14.96	14.93		
15	64QAM	1	0	14.86	14.96	14.99	14.96		
15	64QAM	1	37	14.92	14.99	14.96	14.98	16.7	0
15	64QAM	1	74	14.88	14.89	15.04	14.94		
15	64QAM	36	0	14.82	14.90	15.06	15.05		
15	64QAM	36	20	14.92	14.90	14.93	14.95	16.7	0
15	64QAM	36	39	14.92	14.97	14.95	14.98		
15	64QAM	75	0	14.95	14.99	14.98	14.95		
15	256QAM	1	0	14.91	14.92	14.97	15.06		
15	256QAM	1	37	14.96	15.12	15.09	15.00	16.7	0
15	256QAM	1	74	14.88	14.94	14.96	14.92		
15	256QAM	36	0	14.96	14.97	15.00	15.09		
15	256QAM	36	20	14.82	14.92	15.01	15.06	16.7	0
15	256QAM	36	39	14.97	14.95	14.86	14.99		
15	256QAM	75	0	14.85	14.96	14.98	15.04		
Channel				55290	55815	56165	56690	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	14.86	14.85	15.05	14.98		
10	QPSK	1	25	14.99	15.09	15.06	15.23	16.7	0
10	QPSK	1	49	14.92	15.01	14.95	14.94		
10	QPSK	25	0	15.07	14.90	15.00	15.13		
10	QPSK	25	12	15.03	14.93	14.92	15.09	16.7	0
10	QPSK	25	25	14.84	14.98	14.87	15.05		
10	QPSK	50	0	14.87	14.96	15.01	14.97		
10	16QAM	1	0	14.89	14.92	15.00	15.04		
10	16QAM	1	25	14.99	15.05	14.94	14.94	16.7	0
10	16QAM	1	49	14.83	15.08	14.96	15.03		
10	16QAM	25	0	14.82	15.01	15.11	15.05		
10	16QAM	25	12	14.85	14.84	14.93	15.00	16.7	0
10	16QAM	25	25	14.92	14.95	14.96	15.01		
10	16QAM	50	0	14.97	14.93	14.95	14.95		
10	64QAM	1	0	14.86	14.97	14.93	15.00		
10	64QAM	1	25	14.89	15.02	15.00	14.99	16.7	0
10	64QAM	1	49	14.89	14.89	15.12	14.94		
10	64QAM	25	0	14.78	14.94	15.03	15.06		
10	64QAM	25	12	14.87	14.95	14.97	14.96	16.7	0
10	64QAM	25	25	14.89	14.97	14.91	14.98		
10	64QAM	50	0	14.92	15.08	15.01	14.95		
10	256QAM	1	0	14.98	14.98	14.98	15.07		
10	256QAM	1	25	14.93	15.09	15.02	14.95	16.7	0
10	256QAM	1	49	14.88	14.93	14.93	15.01		
10	256QAM	25	0	14.96	14.95	14.99	15.12		
10	256QAM	25	12	14.91	14.95	14.99	15.09	16.7	0
10	256QAM	25	25	14.99	14.93	14.87	15.06		
10	256QAM	50	0	14.90	15.01	14.99	15.00		
Channel				55265	55810	56170	56715	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	14.92	14.81	15.01	14.91		
5	QPSK	1	12	14.98	15.13	15.06	15.27	16.7	0
5	QPSK	1	24	14.95	14.96	14.99	14.96		
5	QPSK	12	0	15.04	14.94	14.99	15.11		
5	QPSK	12	7	15.02	14.90	14.89	15.06	16.7	0
5	QPSK	12	13	14.82	14.91	14.83	15.09		
5	QPSK	25	0	14.89	14.96	15.03	15.03		
5	16QAM	1	0	14.91	14.94	15.00	15.04		
5	16QAM	1	12	14.98	15.05	14.92	14.92	16.7	0
5	16QAM	1	24	14.87	15.03	14.97	14.97		
5	16QAM	12	0	14.82	14.99	15.12	15.12		
5	16QAM	12	7	14.77	14.92	14.90	15.07	16.7	0
5	16QAM	12	13	14.94	14.95	15.02	15.10		
5	16QAM	25	0	14.95	14.86	15.01	14.93		
5	64QAM	1	0	14.84	14.97	14.91	14.99		
5	64QAM	1	12	14.87	15.04	15.06	14.90	16.7	0
5	64QAM	1	24	14.84	14.98	15.11	14.97		
5	64QAM	12	0	14.87	14.95	15.10	15.02		
5	64QAM	12	7	14.85	14.93	14.91	15.04	16.7	0
5	64QAM	12	13	14.90	14.99	14.95	14.96		
5	64QAM	25	0	14.98	15.01	15.03	14.96		
5	256QAM	1	0	14.94	14.92	14.97	15.12		
5	256QAM	1	12	14.90	15.06	15.09	14.95	16.7	0
5	256QAM	1	24	14.81	14.98	14.98	14.93		
5	256QAM	12	0	15.06	14.97	15.05	15.05		
5	256QAM	12	7	14.88	14.97	15.07	15.11	16.7	0
5	256QAM	12	13	14.97	14.88	14.88	15.05		
5	256QAM	25	0	14.87	15.02	14.98	14.98		



n2_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	14.78	14.91	14.76	16.0	0.0	
20	PI2 BPSK	1	53	14.89	14.85	14.73			
20	PI2 BPSK	1	104	14.81	14.93	15.01			
20	PI2 BPSK	50	0	14.87	14.90	14.97	16.0	0.0	
20	PI2 BPSK	50	28	14.97	14.92	14.86	16.0	0.0	
20	PI2 BPSK	50	56	14.96	14.94	14.83	16.0	0.0	
20	PI2 BPSK	100	0	14.84	14.97	14.93	16.0	0.0	
20	QPSK	1	1	14.95	15.06	14.99	16.0	0.0	
20	QPSK	1	53	14.84	14.99	14.77			
20	QPSK	1	104	14.85	14.89	14.96			
20	QPSK	50	0	14.89	14.85	14.76	16.0	0.0	
20	QPSK	50	28	14.92	15.02	14.93	16.0	0.0	
20	QPSK	50	56	14.83	14.93	14.91	16.0	0.0	
20	QPSK	100	0	14.95	15.01	14.92	16.0	0.0	
20	16QAM	1	1	14.85	14.96	14.96	16.0	0.0	
20	64QAM	1	1	14.96	15.01	14.77	16.0	0.0	
20	256QAM	1	1	14.88	14.87	14.86	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.90	14.97	14.88	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.65	18.80	18.65	16.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	14.84	14.97	14.88	16.0	0.0	

n2_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	PI2 BPSK	1	1	15.73	15.80	15.64	17.0	0.0	
20	PI2 BPSK	1	53	15.84	15.84	15.73			
20	PI2 BPSK	1	104	15.64	15.78	15.80			
20	PI2 BPSK	50	0	15.60	15.73	15.74	17.0	0.0	
20	PI2 BPSK	50	28	15.71	15.75	15.73	17.0	0.0	
20	PI2 BPSK	50	56	15.76	15.75	15.69	17.0	0.0	
20	PI2 BPSK	100	0	15.80	15.97	15.75	17.0	0.0	
20	QPSK	1	1	15.87	15.96	15.84	17.0	0.0	
20	QPSK	1	53	15.73	15.75	15.75			
20	QPSK	1	104	15.72	15.81	15.86			
20	QPSK	50	0	15.76	15.81	15.83	17.0	0.0	
20	QPSK	50	28	15.81	15.89	15.80	17.0	0.0	
20	QPSK	50	56	15.68	15.84	15.85	17.0	0.0	
20	QPSK	100	0	15.73	15.78	15.73	17.0	0.0	
20	16QAM	1	1	15.72	15.82	15.85	17.0	0.0	
20	64QAM	1	1	15.68	15.80	15.83	17.0	0.0	
20	256QAM	1	1	15.79	15.79	15.80	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.71	15.88	15.68	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.65	18.80	18.65	17.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.72	15.85	15.74	17.0	0.0	

n25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	15.08	15.15	15.04	16.0	0.0	
40	PI2 BPSK	1	108	15.06	15.08	14.97			
40	PI2 BPSK	1	214	14.97	15.07	15.01			
40	PI2 BPSK	108	0	15.03	14.98	15.02	16.0	0.0	
40	PI2 BPSK	108	54	15.03	15.02	14.89	16.0	0.0	
40	PI2 BPSK	108	108	15.06	15.02	14.93	16.0	0.0	
40	PI2 BPSK	216	0	14.95	15.10	14.93	16.0	0.0	
40	QPSK	1	1	15.17	15.22	15.08	16.0	0.0	
40	QPSK	1	108	15.06	14.99	14.87			
40	QPSK	1	214	15.06	14.98	14.96			
40	QPSK	108	0	15.03	15.04	14.99	16.0	0.0	
40	QPSK	108	54	15.08	15.15	15.00	16.0	0.0	
40	QPSK	108	108	15.00	15.11	14.82	16.0	0.0	
40	QPSK	216	0	14.94	15.11	14.88	16.0	0.0	
40	16QAM	1	1	14.98	15.08	14.97	16.0	0.0	
40	64QAM	1	1	15.00	15.00	14.88	16.0	0.0	
40	256QAM	1	1	14.97	15.03	15.01	16.0	0.0	
Channel									
Frequency (MHz)									
35	QPSK	1	1	15.12	15.12	14.97	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.65	18.82.5	18.65	16.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.12	15.16	15.02	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.11	15.12	15.03	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.12	15.15	15.05	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.12	15.14	15.04	16.0	0.0	
Channel									
Frequency (MHz)									
5	QPSK	1	1	15.06	15.17	14.98	16.0	0.0	



n25_Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				37500	37650	37800			
40	Pi2 BPSK	1	1	16.12	16.13	15.95			
40	Pi2 BPSK	1	108	16.00	16.06	16.11	17.0	0.0	
40	Pi2 BPSK	1	214	15.89	15.98	15.97			
40	Pi2 BPSK	108	0	15.88	16.02	15.98	17.0	0.0	
40	Pi2 BPSK	108	54	15.85	16.01	16.00	17.0	0.0	
40	Pi2 BPSK	108	108	15.91	16.00	15.98	17.0	0.0	
40	Pi2 BPSK	216	0	15.97	16.07	15.95			
40	QPSK	1	1	15.54	16.18	16.08			
40	QPSK	1	108	15.88	16.08	16.01	17.0	0.0	
40	QPSK	1	214	15.89	15.98	15.94			
40	QPSK	108	0	15.88	16.00	15.94	17.0	0.0	
40	QPSK	108	54	15.54	16.10	16.00	17.0	0.0	
40	QPSK	108	108	15.91	16.03	16.02	17.0	0.0	
40	QPSK	216	0	15.88	15.98	15.89			
40	16QAM	1	1	15.97	16.05	16.05	17.0	0.0	
40	64QAM	1	1	15.98	15.98	16.02	17.0	0.0	
40	256QAM	1	1	15.92	16.00	16.03	17.0	0.0	
Channel									
Frequency (MHz)				37500	37650	37800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1687.5	1682.5	1689.5			
35	QPSK	1	1	15.87	15.96	16.05	17.0	0.0	
Channel									
Frequency (MHz)				37500	37650	38000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1685	1682.5	1700			
30	QPSK	1	1	15.81	16.00	15.85	17.0	0.0	
Channel									
Frequency (MHz)				37500	37650	38050	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1682.5	1682.5	1692.5			
25	QPSK	1	1	15.93	16.00	16.03	17.0	0.0	
Channel									
Frequency (MHz)				37200	37650	38100	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1687.5	1682.5	1699.5			
20	QPSK	1	1	15.92	16.07	15.99	17.0	0.0	
Channel									
Frequency (MHz)				37150	37650	38150	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1687.5	1682.5	1699.5			
15	QPSK	1	1	15.81	16.07	16.06	17.0	0.0	
Channel									
Frequency (MHz)				37100	37650	38200	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1685	1682.5	1910			
10	QPSK	1	1	15.82	16.00	15.89	17.0	0.0	
Channel									
Frequency (MHz)				37050	37650	38250	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1682.5	1682.5	1912.5			
5	QPSK	1	1	15.87	15.99	16.01	17.0	0.0	

n66_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				34900	34900	35000			
40	Pi2 BPSK	1	1	15.75	15.75	15.80			
40	Pi2 BPSK	1	108	15.77	15.87	15.75	17.0	0.0	
40	Pi2 BPSK	1	214	15.80	16.00	15.99			
40	Pi2 BPSK	108	0	15.78	15.94	15.99	17.0	0.0	
40	Pi2 BPSK	108	54	15.78	15.85	15.75	17.0	0.0	
40	Pi2 BPSK	108	108	15.70	15.94	15.84	17.0	0.0	
40	Pi2 BPSK	216	0	15.90	15.89	15.93			
40	QPSK	1	1	15.95	16.10	15.93			
40	QPSK	1	108	15.90	16.01	15.86	17.0	0.0	
40	QPSK	1	214	15.91	15.83	15.88			
40	QPSK	108	0	15.77	15.94	15.87	17.0	0.0	
40	QPSK	108	54	15.94	16.05	16.01	17.0	0.0	
40	QPSK	108	108	15.89	15.84	15.86	17.0	0.0	
40	QPSK	216	0	15.81	15.93	15.91			
40	16QAM	1	1	15.78	15.89	15.93	17.0	0.0	
40	64QAM	1	1	15.91	15.86	15.95	17.0	0.0	
40	256QAM	1	1	15.83	16.00	15.85	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35200	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1727.5	1745	1822.5			
35	QPSK	1	1	15.92	16.08	15.84	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	15.89	16.04	15.89	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35350	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	15.93	16.01	15.87	17.0	0.0	
Channel									
Frequency (MHz)				34400	34900	35400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	15.85	16.02	15.86	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35450	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	15.93	16.02	15.88	17.0	0.0	
Channel									
Frequency (MHz)				34300	34900	35500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	15.94	16.00	15.82	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35550	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	15.87	16.06	15.89	17.0	0.0	

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				1730	1745	1760			
40	Pi2 BPSK	1	1	15.80	15.82	15.86			
40	Pi2 BPSK	1	108	15.87	15.76	15.81	17.0	0.0	
40	Pi2 BPSK	1	214	15.88	15.89	15.91			
40	Pi2 BPSK	108	0	15.76	15.71	15.67	17.0	0.0	
40	Pi2 BPSK	108	54	15.70	15.71	15.58	17.0	0.0	
40	Pi2 BPSK	108	108	15.73	15.81	15.79	17.0	0.0	
40	Pi2 BPSK	216	0	15.89	15.73	15.94			
40	QPSK	1	1	15.90	15.94	15.89			
40	QPSK	1	108	15.85	15.90	15.86	17.0	0.0	
40	QPSK	1	214	15.74	15.82	15.74			
40	QPSK	108	0	15.66	15.63	15.67	17.0	0.0	
40	QPSK	108	54	15.77	15.82	15.81	17.0	0.0	
40	QPSK	108	108	15.68	15.73	15.78	17.0	0.0	
40	QPSK	216	0	15.69	15.77	15.73			
40	16QAM	1	1	15.74	15.76	15.59	17.0	0.0	
40	64QAM	1	1	15.58	15.69	15.67	17.0	0.0	
40	256QAM	1	1	15.71	15.76	15.82	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35200	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1727.5	1745	1822.5			
35	QPSK	1	1	15.80	15.84	15.85	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1755			
30	QPSK	1	1	15.86	15.91	15.83	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35350	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	15.87	15.90	15.86	17.0	0.0	
Channel									
Frequency (MHz)				34400	34900	35400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	15.87	15.86	15.80	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35450	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	15.85	15.83	15.85	17.0	0.0	
Channel									
Frequency (MHz)				34300	34900	35500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	15.81	15.83	15.88	17.0	0.0	
Channel									
Frequency (MHz)				34500	34900	35550	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	15.81	15.92	15.82	17.0	0.0	





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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	20.58	20.64	20.56				
100	PI2 BPSK	1	137	20.60	20.71	20.57	22.0	0.0	0.16	
100	PI2 BPSK	1	271	20.69	20.66	20.55				
100	PI2 BPSK	135	9	20.61	20.74	20.59	22.0	0.0	0.18	
100	PI2 BPSK	135	69	20.64	20.66	20.49	22.0	0.0	0.17	
100	PI2 BPSK	135	138	20.57	20.69	20.57				
100	PI2 BPSK	270	0	20.67	20.67	20.48	22.0	0.0	0.21	
100	QPSK	1	1	20.73	20.78	20.52				
100	QPSK	1	137	20.59	20.65	20.56	22.0	0.0	0.30	
100	QPSK	1	271	20.59	20.64	20.48				
100	QPSK	135	0	20.70	20.75	20.51				
100	QPSK	135	69	20.71	20.75	20.55	22.0	0.0	0.27	
100	QPSK	135	138	20.70	20.66	20.48				
100	QPSK	270	0	20.60	20.73	20.50	22.0	0.0	0.23	
100	16QAM	1	1	20.69	20.69	20.61	22.0	0.0	0.08	
100	16QAM	1	1	20.70	20.76	20.49	22.0	0.0	0.27	
100	256QAM	1	1	20.70	20.72	20.60	22.0	0.0	0.12	
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.65	20.77	20.43	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
80	QPSK	1	1	20.65	20.77	20.43	22.0	0.0	0.29	
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.65	20.63	20.48	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
80	QPSK	1	1	20.65	20.63	20.48	22.0	0.0	0.17	
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.67	20.76	20.53	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
70	QPSK	1	1	20.67	20.76	20.53	22.0	0.0	0.23	
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.64	20.64	20.58	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
60	QPSK	1	1	20.64	20.64	20.58	22.0	0.0	0.06	
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.58	20.77	20.61	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
50	QPSK	1	1	20.58	20.77	20.61	22.0	0.0	0.19	
Channel										
Frequency (MHz)										
40	QPSK	1	1	20.59	20.73	20.61	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
40	QPSK	1	1	20.59	20.73	20.61	22.0	0.0	0.14	
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.59	20.66	20.55	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
30	QPSK	1	1	20.59	20.66	20.55	22.0	0.0	0.11	
Channel										
Frequency (MHz)										
20	QPSK	1	1	20.58	20.64	20.55	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
20	QPSK	1	1	20.58	20.64	20.55	22.0	0.0	0.09	
Channel										
Frequency (MHz)										
15	QPSK	1	1	20.60	20.66	20.59	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
15	QPSK	1	1	20.60	20.66	20.59	22.0	0.0	0.07	
Channel										
Frequency (MHz)										
10	QPSK	1	1	20.70	20.64	20.51	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
10	QPSK	1	1	20.70	20.64	20.51	22.0	0.0	0.19	

FCC_n41 HPUE_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	20.58	20.64	20.56				
100	PI2 BPSK	1	137	20.60	20.71	20.57	22.0	0.0	0.16	
100	PI2 BPSK	1	271	20.69	20.66	20.55				
100	PI2 BPSK	135	9	20.61	20.74	20.59	22.0	0.0	0.18	
100	PI2 BPSK	135	69	20.64	20.66	20.49	22.0	0.0	0.17	
100	PI2 BPSK	135	138	20.57	20.69	20.57				
100	PI2 BPSK	270	0	20.67	20.67	20.48	22.0	0.0	0.21	
100	QPSK	1	1	20.73	20.78	20.52				
100	QPSK	1	137	20.59	20.65	20.56	22.0	0.0	0.30	
100	QPSK	1	271	20.59	20.64	20.48				
100	QPSK	135	0	20.70	20.75	20.51				
100	QPSK	135	69	20.71	20.75	20.55	22.0	0.0	0.27	
100	QPSK	135	138	20.70	20.66	20.48				
100	QPSK	270	0	20.60	20.73	20.50	22.0	0.0	0.23	
100	16QAM	1	1	20.69	20.69	20.61	22.0	0.0	0.08	
100	16QAM	1	1	20.70	20.76	20.49	22.0	0.0	0.27	
100	256QAM	1	1	20.70	20.72	20.60	22.0	0.0	0.12	
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.65	20.77	20.43	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
80	QPSK	1	1	20.65	20.77	20.43	22.0	0.0	0.29	
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.65	20.63	20.48	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
80	QPSK	1	1	20.65	20.63	20.48	22.0	0.0	0.17	
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.67	20.76	20.53	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
70	QPSK	1	1	20.67	20.76	20.53	22.0	0.0	0.23	
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.64	20.64	20.58	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
60	QPSK	1	1	20.64	20.64	20.58	22.0	0.0	0.06	
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.58	20.77	20.61	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
50	QPSK	1	1	20.58	20.77	20.61	22.0	0.0	0.19	
Channel										
Frequency (MHz)										
40	QPSK	1	1	20.59	20.73	20.61	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
40	QPSK	1	1	20.59	20.73	20.61	22.0	0.0	0.14	
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.59	20.66	20.55	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
30	QPSK	1	1	20.59	20.66	20.55	22.0	0.0	0.11	
Channel										
Frequency (MHz)										
20	QPSK	1	1	20.58	20.64	20.55	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
20	QPSK	1	1	20.58	20.64	20.55	22.0	0.0	0.09	
Channel										
Frequency (MHz)										
15	QPSK	1	1	20.60	20.66	20.59	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
15	QPSK	1	1	20.60	20.66	20.59	22.0	0.0	0.07	
Channel										
Frequency (MHz)										
10	QPSK	1	1	20.70	20.64	20.51	Tune-up limit (dBm)	MFR (dB)	Ch Delta >0.5	
10	QPSK	1	1	20.70	20.64	20.51	22.0	0.0	0.19	



Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi/2 BPSK	1	1	13.47					
100	Pi/2 BPSK	1	137	13.47			15.0	0.0	
100	Pi/2 BPSK	1	271	13.69			15.0	0.0	
100	Pi/2 BPSK	135	0	13.60			15.0	0.0	
100	Pi/2 BPSK	135	69	13.05			15.0	0.0	
100	Pi/2 BPSK	135	138	13.56			15.0	0.0	
100	Pi/2 BPSK	270	0	13.60			15.0	0.0	
100	QPSK	1	1	13.70			15.0	0.0	
100	QPSK	1	137	13.04			15.0	0.0	
100	QPSK	1	271	13.61			15.0	0.0	
100	QPSK	135	0	13.48			15.0	0.0	
100	QPSK	135	69	13.01			15.0	0.0	
100	QPSK	135	138	13.57			15.0	0.0	
100	QPSK	270	0	13.55			15.0	0.0	
100	16QAM	1	1	13.56			15.0	0.0	
100	64QAM	1	1	13.48			15.0	0.0	
100	256QAM	1	1	13.53			15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.64	13.69	13.62	15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.65	13.68	13.61	15.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	13.65	13.61	13.62	15.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	13.61	13.63	13.59	15.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	13.64	13.60	13.63	15.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	13.67	13.67	13.60	15.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	13.63	13.65	13.67	15.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	13.63	13.63	13.62	15.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	13.63	13.61	13.68	15.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	13.63	13.62	13.68	15.0	0.0	

Part27Q_n77_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi/2 BPSK	1	1	13.80	13.85	13.85			
100	Pi/2 BPSK	1	137	13.78	13.86	13.88	15.0	0.0	
100	Pi/2 BPSK	1	271	13.85	13.87	13.77	15.0	0.0	
100	Pi/2 BPSK	135	0	13.79	13.81	13.85	15.0	0.0	
100	Pi/2 BPSK	135	69	13.73	13.86	13.50	15.0	0.0	
100	Pi/2 BPSK	135	138	13.82	13.72	13.83	15.0	0.0	
100	Pi/2 BPSK	270	0	13.75	13.78	13.83	15.0	0.0	
100	QPSK	1	1	13.88	13.89	13.87	15.0	0.0	
100	QPSK	1	137	13.83	13.78	13.70	15.0	0.0	
100	QPSK	1	271	13.78	13.83	13.88	15.0	0.0	
100	QPSK	135	0	13.74	13.74	13.73	15.0	0.0	
100	QPSK	135	69	13.76	13.86	13.78	15.0	0.0	
100	QPSK	135	138	13.75	13.77	13.84	15.0	0.0	
100	QPSK	270	0	13.75	13.83	13.59	15.0	0.0	
100	16QAM	1	1	13.87	13.71	13.70	15.0	0.0	
100	64QAM	1	1	13.82	13.81	13.51	15.0	0.0	
100	256QAM	1	1	13.78	13.75	13.81	15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.78	13.81	13.84	15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.78	13.87	13.76	15.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	13.80	13.80	13.83	15.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	13.77	13.80	13.83	15.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	13.83	13.79	13.82	15.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	13.78	13.80	13.79	15.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	13.76	13.81	13.79	15.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	13.80	13.87	13.83	15.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	13.83	13.82	13.78	15.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	13.80	13.79	13.83	15.0	0.0	

Part27Q_n77 HPUE_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi/2 BPSK	1	1	13.47					
100	Pi/2 BPSK	1	137	13.47			15.0	0.0	
100	Pi/2 BPSK	1	271	13.59			15.0	0.0	
100	Pi/2 BPSK	135	0	13.60			15.0	0.0	
100	Pi/2 BPSK	135	69	13.05			15.0	0.0	
100	Pi/2 BPSK	135	138	13.56			15.0	0.0	
100	Pi/2 BPSK	270	0	13.60			15.0	0.0	
100	QPSK	1	1	13.70			15.0	0.0	
100	QPSK	1	137	13.04			15.0	0.0	
100	QPSK	1	271	13.61			15.0	0.0	
100	QPSK	135	0	13.48			15.0	0.0	
100	QPSK	135	69	13.01			15.0	0.0	
100	QPSK	135	138	13.57			15.0	0.0	
100	QPSK	270	0	13.55			15.0	0.0	
100	16QAM	1	1	13.56			15.0	0.0	
100	64QAM	1	1	13.48			15.0	0.0	
100	256QAM	1	1	13.53			15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.64	13.68	13.62	15.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	13.65	13.66	13.61	15.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	13.65	13.61	13.62	15.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	13.61	13.63	13.59	15.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	13.64	13.60	13.63	15.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	13.67	13.67	13.60	15.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	13.63	13.65	13.67	15.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	13.63	13.63	13.62	15.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	13.63	13.61	13.68	15.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	13.63	13.62	13.68	15.0	0.0	



### Part270\_n77 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	Pl2 BPSK	1	1	13.80	13.85	13.85		
100	Pl2 BPSK	1	137	13.78	13.86	13.88		
100	Pl2 BPSK	1	271	13.85	13.87	13.77	15.0	0.0
100	Pl2 BPSK	135	0	13.79	13.81	13.85	15.0	0.0
100	Pl2 BPSK	135	69	13.73	13.86	13.50	15.0	0.0
100	Pl2 BPSK	135	138	13.82	13.72	13.83		
100	Pl2 BPSK	270	0	13.75	13.78	13.83	15.0	0.0
100	QPSK	1	1	13.55	13.89	13.07		
100	QPSK	1	137	13.83	13.78	13.70	15.0	0.0
100	QPSK	1	271	13.76	13.83	13.88		
100	QPSK	135	0	13.74	13.74	13.73		
100	QPSK	135	69	13.77	13.88	13.76	15.0	0.0
100	QPSK	135	138	13.75	13.77	13.84		
100	QPSK	270	0	13.75	13.83	13.59	15.0	0.0
100	16QAM	1	1	13.87	13.71	13.70	15.0	0.0
100	16QAM	1	1	13.82	13.81	13.51	15.0	0.0
100	256QAM	1	1	13.78	13.75	13.81	15.0	0.0
Channel								
Frequency (MHz)								
649668								
80	QPSK	1	1	13.73	13.81	13.74	15.0	0.0
Channel								
Frequency (MHz)								
649234								
80	QPSK	1	1	13.76	13.87	13.78	15.0	0.0
Channel								
Frequency (MHz)								
3755								
70	QPSK	1	1	13.80	13.80	13.83	15.0	0.0
Channel								
Frequency (MHz)								
649668								
60	QPSK	1	1	13.77	13.80	13.83	15.0	0.0
Channel								
Frequency (MHz)								
648334								
50	QPSK	1	1	13.72	13.80	13.90	15.0	0.0
Channel								
Frequency (MHz)								
649234								
40	QPSK	1	1	13.78	13.80	13.79	15.0	0.0
Channel								
Frequency (MHz)								
647168								
30	QPSK	1	1	13.76	13.81	13.79	15.0	0.0
Channel								
Frequency (MHz)								
647234								
20	QPSK	1	1	13.80	13.87	13.83	15.0	0.0
Channel								
Frequency (MHz)								
647168								
15	QPSK	1	1	13.83	13.82	13.78	15.0	0.0
Channel								
Frequency (MHz)								
3705								
10	QPSK	1	1	13.80	13.79	13.83	15.0	0.0

### Part270\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3499.98								
100	Pl2 BPSK	1	1			14.28		
100	Pl2 BPSK	1	137			13.91		
100	Pl2 BPSK	1	271			13.59	15.5	0.0
100	Pl2 BPSK	135	0			13.92	15.5	0.0
100	Pl2 BPSK	135	69			14.00	15.5	0.0
100	Pl2 BPSK	135	138			13.85		
100	Pl2 BPSK	270	0			13.95	15.5	0.0
100	QPSK	1	1			14.30		
100	QPSK	1	137			13.96	15.5	0.0
100	QPSK	1	271			14.00		
100	QPSK	135	0			13.98		
100	QPSK	135	69			14.12	15.5	0.0
100	QPSK	135	138			13.93		
100	QPSK	270	0			14.11	15.5	0.0
100	16QAM	1	1			13.88	15.5	0.0
100	16QAM	1	1			13.96	15.5	0.0
100	256QAM	1	1			13.96	15.5	0.0
Channel								
Frequency (MHz)								
633000								
80	QPSK	1	1	14.19	14.24	14.24	15.5	0.0
Channel								
Frequency (MHz)								
632668								
80	QPSK	1	1	14.22	14.28	14.26	15.5	0.0
Channel								
Frequency (MHz)								
3485.01								
70	QPSK	1	1	14.24	14.22	14.24	15.5	0.0
Channel								
Frequency (MHz)								
632000								
60	QPSK	1	1	14.26	14.28	14.24	15.5	0.0
Channel								
Frequency (MHz)								
631668								
50	QPSK	1	1	14.20	14.24	14.27	15.5	0.0
Channel								
Frequency (MHz)								
3470.01								
40	QPSK	1	1	14.21	14.22	14.25	15.5	0.0
Channel								
Frequency (MHz)								
631000								
30	QPSK	1	1	14.21	14.21	14.27	15.5	0.0
Channel								
Frequency (MHz)								
630668								
20	QPSK	1	1	14.27	14.19	14.24	15.5	0.0
Channel								
Frequency (MHz)								
630500								
15	QPSK	1	1	14.21	14.27	14.19	15.5	0.0
Channel								
Frequency (MHz)								
3455.01								
10	QPSK	1	1	14.19	14.21	14.24	15.5	0.0

### Part270\_n77\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
3750								
100	Pl2 BPSK	1	1	14.66	14.51	14.53		
100	Pl2 BPSK	1	137	14.74	14.54	14.54	15.5	0.0
100	Pl2 BPSK	1	271	14.68	14.52	14.47		
100	Pl2 BPSK	135	0	14.66	14.50	14.26	15.5	0.0
100	Pl2 BPSK	135	69	14.69	14.48	14.37	15.5	0.0
100	Pl2 BPSK	135	138	14.72	14.54	14.30		
100	Pl2 BPSK	270	0	14.70	14.49	14.27	15.5	0.0
100	QPSK	1	1	14.65	14.76	14.55		
100	QPSK	1	137	14.66	14.65	14.43	15.5	0.0
100	QPSK	1	271	14.61	14.62	14.41		
100	QPSK	135	0	14.65	14.73	14.57		
100	QPSK	135	69	14.66	14.76	14.56	15.5	0.0
100	QPSK	135	138	14.61	14.63	14.56		
100	QPSK	270	0	14.68	14.72	14.37	15.5	0.0
100	16QAM	1	1	14.73	14.57	14.52	15.5	0.0
100	16QAM	1	1	14.73	14.57	14.50	15.5	0.0
100	256QAM	1	1	14.71	14.63	14.37	15.5	0.0
Channel								
Frequency (MHz)								
649668								
80	QPSK	1	1	14.63	14.70	14.54	15.5	0.0
Channel								
Frequency (MHz)								
649234								
80	QPSK	1	1	14.60	14.72	14.60	15.5	0.0
Channel								
Frequency (MHz)								
3755								
70	QPSK	1	1	14.62	14.69	14.57	15.5	0.0
Channel								
Frequency (MHz)								
649668								
60	QPSK	1	1	14.64	14.65	14.63	15.5	0.0
Channel								
Frequency (MHz)								
648334								
50	QPSK	1	1	14.57	14.66	14.57	15.5	0.0
Channel								
Frequency (MHz)								
649234								
40	QPSK	1	1	14.66	14.71	14.54	15.5	0.0
Channel								
Frequency (MHz)								
647168								
30	QPSK	1	1	14.60	14.69	14.61	15.5	0.0
Channel								
Frequency (MHz)								
647234								
20	QPSK	1	1	14.57	14.68	14.61	15.5	0.0
Channel								
Frequency (MHz)								
647168								
15	QPSK	1	1	14.66	14.72	14.47	15.5	0.0
Channel								
Frequency (MHz)								
3705								
10	QPSK	1	1	14.63	14.68	14.62	15.5	0.0



Part27Q_n77 HPUE_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	14.28						
100	Pi2 BPSK	1	137	13.91			15.5	0.0		
100	Pi2 BPSK	1	271	13.99						
100	Pi2 BPSK	135	0	13.92			15.5	0.0		
100	Pi2 BPSK	135	69	14.00			15.5	0.0		
100	Pi2 BPSK	135	138	13.85			15.5	0.0		
100	Pi2 BPSK	270	0	13.85						
100	QPSK	1	1	14.30						
100	QPSK	1	137	13.96			15.5	0.0		
100	QPSK	1	271	14.00						
100	QPSK	135	0	13.88						
100	QPSK	135	69	14.12			15.5	0.0		
100	QPSK	135	138	13.93						
100	QPSK	270	0	14.11			15.5	0.0		
100	16QAM	1	1	13.88			15.5	0.0		
100	64QAM	1	1	13.96			15.5	0.0		
100	256QAM	1	1	13.96			15.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.19	14.24	14.24	15.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.22	14.28	14.28	15.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.24	14.22	14.24	15.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.26	14.29	14.24	15.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.20	14.24	14.27	15.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.25	14.22	14.25	15.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.21	14.21	14.27	15.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.27	14.19	14.24	15.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.21	14.27	14.19	15.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.19	14.21	14.24	15.5	0.0		

Part27Q_n77 HPUE_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	14.86	14.51	14.53				
100	Pi2 BPSK	1	137	14.74	14.54	14.54	15.5	0.0		
100	Pi2 BPSK	1	271	14.68	14.52	14.47				
100	Pi2 BPSK	135	0	14.86	14.50	14.26	15.5	0.0		
100	Pi2 BPSK	135	69	14.89	14.48	14.37	15.5	0.0		
100	Pi2 BPSK	135	138	14.72	14.54	14.30				
100	Pi2 BPSK	270	0	14.70	14.49	14.27	15.5	0.0		
100	QPSK	1	1	14.68	14.70	14.55				
100	QPSK	1	137	14.86	14.65	14.43	15.5	0.0		
100	QPSK	1	271	14.81	14.82	14.41				
100	QPSK	135	0	14.85	14.73	14.57				
100	QPSK	135	69	14.76	14.75	14.63	15.5	0.0		
100	QPSK	135	138	14.81	14.63	14.56				
100	QPSK	270	0	14.88	14.72	14.37	15.5	0.0		
100	16QAM	1	1	14.73	14.57	14.53	15.5	0.0		
100	64QAM	1	1	14.73	14.57	14.50	15.5	0.0		
100	256QAM	1	1	14.71	14.63	14.37	15.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.13	14.70	14.58	15.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	14.80	14.72	14.60	15.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	14.62	14.69	14.57	15.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	14.84	14.65	14.63	15.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	14.57	14.56	14.57	15.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	14.68	14.71	14.54	15.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	14.80	14.69	14.61	15.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	14.57	14.58	14.61	15.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	14.68	14.72	14.57	15.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	14.63	14.68	14.62	15.5	0.0		

Part27Q_n77_Ant 10										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	Pi2 BPSK	1	1	10.40						
100	Pi2 BPSK	1	137	10.38			11.5	0.0		
100	Pi2 BPSK	1	271	10.26						
100	Pi2 BPSK	135	0	10.34			11.5	0.0		
100	Pi2 BPSK	135	69	10.30			11.5	0.0		
100	Pi2 BPSK	135	138	10.38			11.5	0.0		
100	Pi2 BPSK	270	0	10.36						
100	QPSK	1	1	10.69						
100	QPSK	1	137	10.38			11.5	0.0		
100	QPSK	1	271	10.25						
100	QPSK	135	0	10.37						
100	QPSK	135	69	10.47			11.5	0.0		
100	QPSK	135	138	10.37						
100	QPSK	270	0	10.30			11.5	0.0		
100	16QAM	1	1	10.27			11.5	0.0		
100	64QAM	1	1	10.26			11.5	0.0		
100	256QAM	1	1	10.28			11.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	10.43	10.47	10.38	11.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	10.44	10.39	10.47	11.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	10.39	10.46	10.43	11.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	10.42	10.42	10.46	11.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	10.42	10.39	10.46	11.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	10.40	10.47	10.46	11.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	10.40	10.38	10.40	11.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	10.44	10.38	10.41	11.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	10.41	10.39	10.42	11.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	10.45	10.42	10.47	11.5	0.0		



Part270\_n77\_Ant 10

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Contains multiple rows for different modulation schemes like Pi2 BPSK, QPSK, 16QAM, and 256QAM across various frequencies.

Part27Q\_n77 HPUE\_Ant 10

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Contains multiple rows for different modulation schemes like Pi2 BPSK, QPSK, 16QAM, and 256QAM across various frequencies.

Part270\_n77 HPUE\_Ant 10

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Contains multiple rows for different modulation schemes like Pi2 BPSK, QPSK, 16QAM, and 256QAM across various frequencies.



### Part27Q\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	12.12				
100	PI2 BPSK	1	137	12.22			13.5	0.0
100	PI2 BPSK	1	271	12.16				
100	PI2 BPSK	135	0	12.23			13.5	0.0
100	PI2 BPSK	135	69	12.20			13.5	0.0
100	PI2 BPSK	135	138	12.25			13.5	0.0
100	PI2 BPSK	270	0	12.19			13.5	0.0
100	QPSK	1	1	12.20				
100	QPSK	1	137	12.20			13.5	0.0
100	QPSK	1	271	12.19				
100	QPSK	135	0	12.22			13.5	0.0
100	QPSK	135	69	12.24			13.5	0.0
100	QPSK	135	138	12.17			13.5	0.0
100	QPSK	270	0	12.17			13.5	0.0
100	16QAM	1	1	12.17			13.5	0.0
100	16QAM	1	1	12.21			13.5	0.0
100	256QAM	1	1	12.23			13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	12.21	12.19	12.21	13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	12.21	12.19	12.21	13.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	12.19	12.20	12.22	13.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	12.16	12.19	12.24	13.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	12.22	12.18	12.24	13.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	12.23	12.21	12.24	13.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	12.22	12.18	12.22	13.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	12.15	12.23	12.24	13.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	12.23	12.16	12.21	13.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	12.21	12.19	12.18	13.5	0.0

### Part27Q\_n77\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	12.00	12.11	12.12		
100	PI2 BPSK	1	137	12.01	12.25	12.11	13.5	0.0
100	PI2 BPSK	1	271	12.08	12.16	12.21		
100	PI2 BPSK	135	0	12.09	12.20	12.28	13.5	0.0
100	PI2 BPSK	135	69	12.01	12.19	12.15	13.5	0.0
100	PI2 BPSK	135	138	11.97	12.14	12.16	13.5	0.0
100	PI2 BPSK	270	0	12.12	12.21	12.15	13.5	0.0
100	QPSK	1	1	12.00	12.33	12.30		
100	QPSK	1	137	11.83	12.28	12.11	13.5	0.0
100	QPSK	1	271	12.05	12.21	12.15		
100	QPSK	135	0	12.00	12.19	12.20	13.5	0.0
100	QPSK	135	69	12.05	12.28	12.12	13.5	0.0
100	QPSK	135	138	11.96	12.17	12.01	13.5	0.0
100	QPSK	270	0	12.01	12.24	12.14	13.5	0.0
100	16QAM	1	1	12.06	12.12	11.98	13.5	0.0
100	16QAM	1	1	12.04	12.21	12.17	13.5	0.0
100	256QAM	1	1	12.04	12.13	12.01	13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	12.16	12.27	12.22	13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	12.09	12.24	12.21	13.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	12.11	12.26	12.24	13.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	12.18	12.24	12.21	13.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	12.13	12.30	12.22	13.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	12.18	12.23	12.22	13.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	12.09	12.23	12.24	13.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	12.15	12.26	12.23	13.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	12.18	12.26	12.20	13.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	12.11	12.21	12.19	13.5	0.0

### Part27Q\_n77 HPUE\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	12.12				
100	PI2 BPSK	1	137	12.22			13.5	0.0
100	PI2 BPSK	1	271	12.16				
100	PI2 BPSK	135	0	12.23			13.5	0.0
100	PI2 BPSK	135	69	12.20			13.5	0.0
100	PI2 BPSK	135	138	12.25			13.5	0.0
100	PI2 BPSK	270	0	12.19			13.5	0.0
100	QPSK	1	1	12.20				
100	QPSK	1	137	12.20			13.5	0.0
100	QPSK	1	271	12.19				
100	QPSK	135	0	12.22			13.5	0.0
100	QPSK	135	69	12.24			13.5	0.0
100	QPSK	135	138	12.17			13.5	0.0
100	QPSK	270	0	12.17			13.5	0.0
100	16QAM	1	1	12.17			13.5	0.0
100	16QAM	1	1	12.21			13.5	0.0
100	256QAM	1	1	12.23			13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	12.21	12.18	12.21	13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	12.21	12.24	12.16	13.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	12.19	12.20	12.22	13.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	12.16	12.19	12.24	13.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	12.22	12.16	12.24	13.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	12.23	12.21	12.24	13.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	12.22	12.18	12.22	13.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	12.19	12.23	12.24	13.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	12.23	12.16	12.21	13.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	12.21	12.19	12.18	13.5	0.0



Part270_n77 HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	12.00	12.11	12.12			
100	Pi2 BPSK	1	137	12.01	12.25	12.11	13.5	0.0	
100	Pi2 BPSK	1	271	12.08	12.16	12.21			
100	Pi2 BPSK	135	0	12.09	12.20	12.28	13.5	0.0	
100	Pi2 BPSK	135	69	12.01	12.19	12.15	13.5	0.0	
100	Pi2 BPSK	135	138	11.97	12.14	12.18			
100	Pi2 BPSK	270	0	12.12	12.21	12.15	13.5	0.0	
100	QPSK	1	1	12.20	12.22	12.20			
100	QPSK	1	137	11.93	12.29	12.11	13.5	0.0	
100	QPSK	1	271	12.05	12.21	12.15			
100	QPSK	135	0	12.00	12.19	12.20			
100	QPSK	135	69	12.07	12.23	12.17	13.5	0.0	
100	QPSK	135	138	11.98	12.27	12.01			
100	QPSK	270	0	12.01	12.24	12.14	13.5	0.0	
100	16QAM	1	1	12.06	12.12	11.98	13.5	0.0	
100	16QAM	1	1	12.04	12.21	12.17	13.5	0.0	
100	256QAM	1	1	12.04	12.13	12.01	13.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	12.15	12.27	12.22	13.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	12.09	12.24	12.21	13.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	12.11	12.26	12.24	13.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	12.18	12.24	12.21	13.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	12.13	12.20	12.22	13.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	12.18	12.23	12.22	13.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	12.09	12.23	12.24	13.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	12.15	12.25	12.23	13.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	12.16	12.23	12.20	13.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	12.11	12.21	12.19	13.5	0.0	

Part27Q_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1			11.56			
100	Pi2 BPSK	1	137			11.48	13.0	0.0	
100	Pi2 BPSK	1	271			11.31			
100	Pi2 BPSK	135	0			11.30	13.0	0.0	
100	Pi2 BPSK	135	69			11.30	13.0	0.0	
100	Pi2 BPSK	135	138			11.43			
100	Pi2 BPSK	270	0			11.30	13.0	0.0	
100	QPSK	1	1			11.37			
100	QPSK	1	137			11.32	13.0	0.0	
100	QPSK	1	271			11.32			
100	QPSK	135	0			11.31			
100	QPSK	135	69			11.41	13.0	0.0	
100	QPSK	135	138			11.28			
100	QPSK	270	0			11.35	13.0	0.0	
100	16QAM	1	1			11.33	13.0	0.0	
100	16QAM	1	1			11.36	13.0	0.0	
100	256QAM	1	1			11.27	13.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	11.50	11.52	11.53	13.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	11.48	11.55	11.47	13.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	11.50	11.46	11.49	13.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	11.53	11.51	11.50	13.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	11.49	11.52	11.51	13.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	11.51	11.55	11.54	13.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	11.51	11.55	11.54	13.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	11.55	11.53	11.53	13.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	11.48	11.46	11.49	13.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	11.50	11.53	11.54	13.0	0.0	

Part270_n78_Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1			11.78			
100	Pi2 BPSK	1	137			11.92	13.0	0.0	
100	Pi2 BPSK	1	271			11.74			
100	Pi2 BPSK	135	0			11.65	13.0	0.0	
100	Pi2 BPSK	135	69			11.63	13.0	0.0	
100	Pi2 BPSK	135	138			11.72			
100	Pi2 BPSK	270	0			11.70	13.0	0.0	
100	QPSK	1	1			11.64			
100	QPSK	1	137			11.61	13.0	0.0	
100	QPSK	1	271			11.66			
100	QPSK	135	0			11.66			
100	QPSK	135	69			11.54	13.0	0.0	
100	QPSK	135	138			11.66			
100	QPSK	270	0			11.72	13.0	0.0	
100	16QAM	1	1			11.66	13.0	0.0	
100	16QAM	1	1			11.66	13.0	0.0	
100	256QAM	1	1			11.78	13.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	11.97	11.53	11.97	13.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	11.97	11.91	11.96	13.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	11.91	11.96	11.92	13.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	11.93	11.90	11.92	13.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	11.98	11.90	11.96	13.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	11.98	11.90	11.96	13.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	11.98	11.96	11.92	13.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	11.94	11.97	11.93	13.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	11.94	11.93	11.92	13.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	11.91	11.96	11.96	13.0	0.0	



### Part27Q\_n78 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1		1136			
100	Pi2 BPSK	1	137		1148			
100	Pi2 BPSK	1	271		1131		13.0	0.0
100	Pi2 BPSK	135	0		1130		13.0	0.0
100	Pi2 BPSK	135	69		1130		13.0	0.0
100	Pi2 BPSK	135	138		1143			
100	Pi2 BPSK	270	0		1130		13.0	0.0
100	QPSK	1	1		1137			
100	QPSK	1	137		1132		13.0	0.0
100	QPSK	1	271		1132			
100	QPSK	135	0		1131			
100	QPSK	135	69		1131		13.0	0.0
100	QPSK	135	138		1128			
100	QPSK	270	0		1135		13.0	0.0
100	RCQAM	1	1		1133		13.0	0.0
100	RCQAM	1	1		1138		13.0	0.0
100	256QAM	1	1		1127		13.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	63000	63332	63666		
				3495	3499.98	3504.99		
				1150	1152	1153	13.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	63068	63332	63600		
				3490.02	3499.98	3510		
				1148	1155	1147	13.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	63000	63332	63666		
				3485.01	3499.98	3514.98		
				1150	1146	1149	13.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	63168	63332	63500		
				3479.02	3499.98	3525		
				1149	1152	1151	13.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	63134	63332	63532		
				3470.01	3499.98	3529.98		
				1148	1150	1154	13.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	63100	63332	63566		
				3465.02	3499.98	3534.99		
				1151	1155	1154	13.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	63068	63332	63600		
				3460.02	3499.98	3540		
				1155	1153	1153	13.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	63000	63332	63666		
				3457.5	3499.98	3542.49		
				1145	1146	1149	13.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	63034	63332	63632		
				3455.01	3499.98	3544.98		
				1150	1153	1154	13.0	0.0

### Part27Q\_n78 HPUE\_Ant 4

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1		1178			
100	Pi2 BPSK	1	137		1192			
100	Pi2 BPSK	1	271		1174		13.0	0.0
100	Pi2 BPSK	135	0		1185		13.0	0.0
100	Pi2 BPSK	135	69		1183		13.0	0.0
100	Pi2 BPSK	135	138		1172			
100	Pi2 BPSK	270	0		1170		13.0	0.0
100	QPSK	1	1		1201			
100	QPSK	1	137		1181		13.0	0.0
100	QPSK	1	271		1186			
100	QPSK	135	0		1188			
100	QPSK	135	69		1194		13.0	0.0
100	QPSK	135	138		1166			
100	QPSK	270	0		1172		13.0	0.0
100	RCQAM	1	1		1186		13.0	0.0
100	RCQAM	1	1		1186		13.0	0.0
100	256QAM	1	1		1176		13.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	64868	65000	65032		
				3745.02	3750	3744.98		
				1197	1193	1197	13.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	64834	65000	65066		
				3740.01	3750	3759.99		
				1197	1191	1196	13.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	64800	65000	65100		
				3735	3750	3765		
				1191	1196	1192	13.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	64868	65000	65132		
				3730.02	3750	3769.98		
				1193	1190	1192	13.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	64834	65000	65166		
				3725.01	3750	3774.99		
				1195	1190	1194	13.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	64800	65000	65200		
				3720	3750	3760		
				1198	1190	1196	13.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	64768	65000	65232		
				3715.02	3750	3764.98		
				1198	1196	1192	13.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	64734	65000	65266		
				3710.01	3750	3769.98		
				1194	1197	1193	13.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	64768	65000	65332		
				3707.52	3750	3762.48		
				1194	1193	1193	13.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	64800	65000	65300		
				3705	3750	3765		
				1191	1196	1196	13.0	0.0

### Part27Q\_n78\_Ant 7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	Pi2 BPSK	1	1		1428			
100	Pi2 BPSK	1	137		1444			
100	Pi2 BPSK	1	271		1440		15.5	0.0
100	Pi2 BPSK	135	0		1445		15.5	0.0
100	Pi2 BPSK	135	69		1427		15.5	0.0
100	Pi2 BPSK	135	138		1442			
100	Pi2 BPSK	270	0		1444		15.5	0.0
100	QPSK	1	1		1458			
100	QPSK	1	137		1437		15.5	0.0
100	QPSK	1	271		1439			
100	QPSK	135	0		1444			
100	QPSK	135	69		1450		15.5	0.0
100	QPSK	135	138		1442			
100	QPSK	270	0		1436		15.5	0.0
100	RCQAM	1	1		1446		15.5	0.0
100	RCQAM	1	1		1445		15.5	0.0
100	256QAM	1	1		1432		15.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	63068	63332	63400		
				3490.02	3499.98	3510		
				1450	1452	1450	15.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	63000	63332	63466		
				3485.01	3499.98	3514.98		
				1450	1449	1454	15.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	63000	63332	63466		
				3480.02	3499.98	3519.99		
				1447	1453	1450	15.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	63168	63332	63432		
				3470.01	3499.98	3529.98		
				1449	1452	1450	15.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	63134	63332	63500		
				3470.01	3499.98	3529.98		
				1452	1453	1450	15.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	63100	63332	63566		
				3465.02	3499.98	3534.99		
				1453	1456	1451	15.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	63068	63332	63600		
				3460.02	3499.98	3540		
				1450	1453	1450	15.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	63000	63332	63666		
				3455.01	3499.98	3544.98		
				1454	1451	1447	15.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	63000	63332	63666		
				3457.5	3499.98	3542.49		
				1454	1447	1447	15.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	63034	63332	63632		
				3455.01	3499.98	3544.98		
				1451	1451	1456	15.5	0.0





Part270_n78_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.66	14.66	14.66			
100	PI2 BPSK	1	137	14.60	14.60	14.60	15.5	0.0	
100	PI2 BPSK	1	271	14.61	14.61	14.61			
100	PI2 BPSK	135	0	14.58	14.58	14.58	15.5	0.0	
100	PI2 BPSK	135	69	14.62	14.62	14.62	15.5	0.0	
100	PI2 BPSK	135	138	14.64	14.64	14.64	15.5	0.0	
100	PI2 BPSK	270	0	14.59	14.59	14.59	15.5	0.0	
100	QPSK	1	1	14.07	14.07	14.07			
100	QPSK	1	137	14.59	14.59	14.59	15.5	0.0	
100	QPSK	1	271	14.58	14.58	14.58			
100	QPSK	135	0	14.61	14.61	14.61	15.5	0.0	
100	QPSK	135	69	14.65	14.65	14.65	15.5	0.0	
100	QPSK	135	138	14.64	14.64	14.64	15.5	0.0	
100	QPSK	270	0	14.58	14.58	14.58	15.5	0.0	
100	16QAM	1	1	14.62	14.62	14.62	15.5	0.0	
100	256QAM	1	1	14.64	14.64	14.64	15.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.52	14.51	14.52	15.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.58	14.64	14.60	15.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.64	14.64	14.64	15.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.57	14.61	14.61	15.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.60	14.64	14.61	15.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.57	14.57	14.64	15.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.64	14.65	14.63	15.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.57	14.62	14.61	15.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.61	14.63	14.63	15.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.61	14.59	14.63	15.5	0.0	

Part27Q_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.26	14.26	14.26			
100	PI2 BPSK	1	137	14.44	14.44	14.44	15.5	0.0	
100	PI2 BPSK	1	271	14.40	14.40	14.40			
100	PI2 BPSK	135	0	14.45	14.45	14.45	15.5	0.0	
100	PI2 BPSK	135	69	14.27	14.27	14.27	15.5	0.0	
100	PI2 BPSK	135	138	14.42	14.42	14.42	15.5	0.0	
100	PI2 BPSK	270	0	14.44	14.44	14.44	15.5	0.0	
100	QPSK	1	1	14.58	14.58	14.58			
100	QPSK	1	137	14.37	14.37	14.37	15.5	0.0	
100	QPSK	1	271	14.39	14.39	14.39			
100	QPSK	135	0	14.44	14.44	14.44	15.5	0.0	
100	QPSK	135	69	14.50	14.50	14.50	15.5	0.0	
100	QPSK	135	138	14.42	14.42	14.42	15.5	0.0	
100	QPSK	270	0	14.36	14.36	14.36	15.5	0.0	
100	16QAM	1	1	14.46	14.46	14.46	15.5	0.0	
100	256QAM	1	1	14.32	14.32	14.32	15.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.56	14.52	14.56	15.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.50	14.54	14.48	15.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.47	14.49	14.55	15.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.49	14.52	14.50	15.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.52	14.53	14.55	15.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.53	14.56	14.51	15.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.50	14.53	14.50	15.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.54	14.51	14.47	15.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.55	14.47	14.47	15.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.51	14.51	14.56	15.5	0.0	

Part270_n78 HPUE_Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.66	14.66	14.66			
100	PI2 BPSK	1	137	14.60	14.60	14.60	15.5	0.0	
100	PI2 BPSK	1	271	14.61	14.61	14.61			
100	PI2 BPSK	135	0	14.58	14.58	14.58	15.5	0.0	
100	PI2 BPSK	135	69	14.62	14.62	14.62	15.5	0.0	
100	PI2 BPSK	135	138	14.64	14.64	14.64	15.5	0.0	
100	PI2 BPSK	270	0	14.59	14.59	14.59	15.5	0.0	
100	QPSK	1	1	14.07	14.07	14.07			
100	QPSK	1	137	14.59	14.59	14.59	15.5	0.0	
100	QPSK	1	271	14.58	14.58	14.58			
100	QPSK	135	0	14.61	14.61	14.61	15.5	0.0	
100	QPSK	135	69	14.65	14.65	14.65	15.5	0.0	
100	QPSK	135	138	14.64	14.64	14.64	15.5	0.0	
100	QPSK	270	0	14.58	14.58	14.58	15.5	0.0	
100	16QAM	1	1	14.62	14.62	14.62	15.5	0.0	
100	256QAM	1	1	14.64	14.64	14.64	15.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.58	14.61	14.62	15.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.58	14.64	14.60	15.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.64	14.64	14.64	15.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.57	14.61	14.61	15.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.60	14.64	14.61	15.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.57	14.57	14.64	15.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.64	14.65	14.63	15.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.57	14.62	14.61	15.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.61	14.65	14.60	15.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.61	14.59	14.63	15.5	0.0	



**Part27Q\_n78\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3499.98				
100	Pi2 BPSK	1	1	10.36			11.5	0.0
100	Pi2 BPSK	1	137	10.35				
100	Pi2 BPSK	1	271	10.45				
100	Pi2 BPSK	135	0	10.48				
100	Pi2 BPSK	135	69	10.35			11.5	0.0
100	Pi2 BPSK	135	138	10.37			11.5	0.0
100	Pi2 BPSK	270	0	10.51				
100	QPSK	1	1	10.37				
100	QPSK	1	137	10.42				
100	QPSK	1	271	10.39			11.5	0.0
100	QPSK	135	0	10.35				
100	QPSK	135	69	10.42				
100	QPSK	135	138	10.37				
100	QPSK	270	0	10.39			11.5	0.0
100	16QAM	1	1	10.33			11.5	0.0
100	64QAM	1	1	10.51				
100	256QAM	1	1	10.42			11.5	0.0
Channel								
Frequency (MHz)				6330.00				
90	QPSK	1	1	3495	3499.98	3504.99	11.5	0.0
Frequency (MHz)				3499.98				
Channel								
Frequency (MHz)				6300.00				
80	QPSK	1	1	10.51	10.53	10.49	11.5	0.0
Frequency (MHz)				3495.01				
Channel								
Frequency (MHz)				6300.00				
70	QPSK	1	1	10.52	10.50	10.55	11.5	0.0
Frequency (MHz)				3485.01				
Channel								
Frequency (MHz)				6300.00				
60	QPSK	1	1	10.48	10.48	10.50	11.5	0.0
Frequency (MHz)				3485.01				
Channel								
Frequency (MHz)				6300.00				
50	QPSK	1	1	10.51	10.52	10.49	11.5	0.0
Frequency (MHz)				3475.02				
Channel								
Frequency (MHz)				6300.00				
40	QPSK	1	1	10.49	10.47	10.52	11.5	0.0
Frequency (MHz)				3470.01				
Channel								
Frequency (MHz)				6300.00				
30	QPSK	1	1	10.55	10.52	10.51	11.5	0.0
Frequency (MHz)				3465.01				
Channel								
Frequency (MHz)				6300.00				
20	QPSK	1	1	10.47	10.49	10.49	11.5	0.0
Frequency (MHz)				3460.02				
Channel								
Frequency (MHz)				6300.00				
15	QPSK	1	1	10.51	10.53	10.48	11.5	0.0
Frequency (MHz)				3455.01				
Channel								
Frequency (MHz)				6300.00				
10	QPSK	1	1	10.51	10.50	10.55	11.5	0.0
Frequency (MHz)				3450.01				

**Part27Q\_n78\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3950				
100	Pi2 BPSK	1	1	10.49			11.5	0.0
100	Pi2 BPSK	1	137	10.48				
100	Pi2 BPSK	1	271	10.51				
100	Pi2 BPSK	135	0	10.44				
100	Pi2 BPSK	135	69	10.53			11.5	0.0
100	Pi2 BPSK	135	138	10.47			11.5	0.0
100	Pi2 BPSK	270	0	10.50				
100	QPSK	1	1	10.57				
100	QPSK	1	137	10.51				
100	QPSK	1	271	10.43			11.5	0.0
100	QPSK	135	0	10.51				
100	QPSK	135	69	10.53				
100	QPSK	135	138	10.50				
100	QPSK	270	0	10.54			11.5	0.0
100	16QAM	1	1	10.49			11.5	0.0
100	64QAM	1	1	10.47				
100	256QAM	1	1	10.51			11.5	0.0
Channel								
Frequency (MHz)				6500.00				
90	QPSK	1	1	3745.02	3750	3744.98	11.5	0.0
Frequency (MHz)				3749.98				
Channel								
Frequency (MHz)				6500.00				
80	QPSK	1	1	10.54	10.49	10.47	11.5	0.0
Frequency (MHz)				3745.01				
Channel								
Frequency (MHz)				6500.00				
70	QPSK	1	1	10.55	10.52	10.53	11.5	0.0
Frequency (MHz)				3735				
Channel								
Frequency (MHz)				6500.00				
60	QPSK	1	1	10.47	10.52	10.55	11.5	0.0
Frequency (MHz)				3725.01				
Channel								
Frequency (MHz)				6500.00				
50	QPSK	1	1	10.46	10.46	10.55	11.5	0.0
Frequency (MHz)				3720				
Channel								
Frequency (MHz)				6500.00				
40	QPSK	1	1	10.55	10.53	10.49	11.5	0.0
Frequency (MHz)				3715.02				
Channel								
Frequency (MHz)				6500.00				
30	QPSK	1	1	10.47	10.47	10.46	11.5	0.0
Frequency (MHz)				3710.01				
Channel								
Frequency (MHz)				6500.00				
20	QPSK	1	1	10.54	10.54	10.48	11.5	0.0
Frequency (MHz)				3705				
Channel								
Frequency (MHz)				6500.00				
15	QPSK	1	1	10.54	10.47	10.49	11.5	0.0
Frequency (MHz)				3700				
Channel								
Frequency (MHz)				6500.00				
10	QPSK	1	1	10.54	10.51	10.52	11.5	0.0
Frequency (MHz)				3695				

**Part27Q\_n78 HPUE\_Ant 10**

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3499.98				
100	Pi2 BPSK	1	1	10.36			11.5	0.0
100	Pi2 BPSK	1	137	10.35				
100	Pi2 BPSK	1	271	10.46				
100	Pi2 BPSK	135	0	10.46				
100	Pi2 BPSK	135	69	10.35			11.5	0.0
100	Pi2 BPSK	135	138	10.37			11.5	0.0
100	Pi2 BPSK	270	0	10.51				
100	QPSK	1	1	10.37				
100	QPSK	1	137	10.42				
100	QPSK	1	271	10.39			11.5	0.0
100	QPSK	135	0	10.35				
100	QPSK	135	69	10.42				
100	QPSK	135	138	10.37				
100	QPSK	270	0	10.39			11.5	0.0
100	16QAM	1	1	10.33			11.5	0.0
100	64QAM	1	1	10.51				
100	256QAM	1	1	10.42			11.5	0.0
Channel								
Frequency (MHz)				6330.00				
90	QPSK	1	1	3495	3499.98	3504.99	11.5	0.0
Frequency (MHz)				3499.98				
Channel								
Frequency (MHz)				6300.00				
80	QPSK	1	1	10.51	10.49	10.48	11.5	0.0
Frequency (MHz)				3485.01				
Channel								
Frequency (MHz)				6300.00				
70	QPSK	1	1	10.52	10.50	10.55	11.5	0.0
Frequency (MHz)				3480.02				
Channel								
Frequency (MHz)				6300.00				
60	QPSK	1	1	10.48	10.48	10.50	11.5	0.0
Frequency (MHz)				3475.02				
Channel								
Frequency (MHz)				6300.00				
50	QPSK	1	1	10.51	10.52	10.49	11.5	0.0
Frequency (MHz)				3470.01				
Channel								
Frequency (MHz)				6300.00				
40	QPSK	1	1	10.49	10.47	10.52	11.5	0.0
Frequency (MHz)				3465.01				
Channel								
Frequency (MHz)				6300.00				
30	QPSK	1	1	10.55	10.52	10.51	11.5	0.0
Frequency (MHz)				3460.02				
Channel								
Frequency (MHz)				6300.00				
20	QPSK	1	1	10.47	10.49	10.49	11.5	0.0
Frequency (MHz)				3455.01				
Channel								
Frequency (MHz)				6300.00				
15	QPSK	1	1	10.51	10.53	10.46	11.5	0.0
Frequency (MHz)				3450.01				
Channel								
Frequency (MHz)				6300.00				
10	QPSK	1	1	10.51	10.55	10.55	11.5	0.0
Frequency (MHz)				3445.01				



### Part270\_n78 HPUe\_Ant 10

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	10.49				
100	PI2 BPSK	1	137	10.48			11.5	0.0
100	PI2 BPSK	1	271	10.51				
100	PI2 BPSK	135	0	10.44			11.5	0.0
100	PI2 BPSK	135	69	10.53			11.5	0.0
100	PI2 BPSK	135	138	10.47				
100	PI2 BPSK	270	0	10.50			11.5	0.0
100	QPSK	1	1	10.57				
100	QPSK	1	137	10.51			11.5	0.0
100	QPSK	1	271	10.43				
100	QPSK	135	0	10.51				
100	QPSK	135	69	10.53			11.5	0.0
100	QPSK	135	138	10.50				
100	QPSK	270	0	10.54			11.5	0.0
100	16QAM	1	1	10.49			11.5	0.0
100	16QAM	1	1	10.47			11.5	0.0
100	256QAM	1	1	10.51			11.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	649668	650000	650332	Tune-up limit (dBm)	MPR (dB)
				3745.02	3750	3754.98		
80	QPSK	1	1	10.52	10.53	10.49	11.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	649334	650000	650666	Tune-up limit (dBm)	MPR (dB)
				3740.01	3750	3759.99		
80	QPSK	1	1	10.54	10.49	10.47	11.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	649300	650000	651000	Tune-up limit (dBm)	MPR (dB)
				3735	3750	3765		
70	QPSK	1	1	10.55	10.52	10.53	11.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	648968	650000	651332	Tune-up limit (dBm)	MPR (dB)
				3732.02	3750	3768.98		
60	QPSK	1	1	10.47	10.52	10.55	11.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	648334	650000	651666	Tune-up limit (dBm)	MPR (dB)
				3729.01	3750	3774.99		
50	QPSK	1	1	10.48	10.48	10.55	11.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
				3720	3750	3780		
40	QPSK	1	1	10.55	10.53	10.49	11.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	647668	650000	652332	Tune-up limit (dBm)	MPR (dB)
				3715.02	3750	3784.98		
30	QPSK	1	1	10.47	10.47	10.46	11.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	647334	650000	652666	Tune-up limit (dBm)	MPR (dB)
				3710.01	3750	3789.99		
20	QPSK	1	1	10.54	10.54	10.46	11.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	647168	650000	652832	Tune-up limit (dBm)	MPR (dB)
				3707.52	3750	3792.48		
15	QPSK	1	1	10.54	10.47	10.49	11.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
				3705	3750	3795		
10	QPSK	1	1	10.54	10.51	10.52	11.5	0.0

### Part27Q\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1		12.81			
100	PI2 BPSK	1	137		12.68		13.5	0.0
100	PI2 BPSK	1	271		12.69			
100	PI2 BPSK	135	0		12.76		13.5	0.0
100	PI2 BPSK	135	69		12.73		13.5	0.0
100	PI2 BPSK	135	138		12.64			
100	PI2 BPSK	270	0		12.62		13.5	0.0
100	QPSK	1	1		12.70			
100	QPSK	1	137		12.75		13.5	0.0
100	QPSK	1	271		12.74			
100	QPSK	135	0		12.73			
100	QPSK	135	69		12.76		13.5	0.0
100	QPSK	135	138		12.68			
100	QPSK	270	0		12.74		13.5	0.0
100	16QAM	1	1		12.73		13.5	0.0
100	16QAM	1	1		12.75		13.5	0.0
100	256QAM	1	1		12.76		13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	633000	633332	633666	Tune-up limit (dBm)	MPR (dB)
				3495	3499.98	3504.99		
80	QPSK	1	1	12.73	12.71	12.73	13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	632668	633332	634000	Tune-up limit (dBm)	MPR (dB)
				3490.02	3499.98	3500		
80	QPSK	1	1	12.72	12.74	12.70	13.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	632334	633332	634000	Tune-up limit (dBm)	MPR (dB)
				3485.01	3499.98	3514.98		
70	QPSK	1	1	12.74	12.73	12.76	13.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	632000	633332	634666	Tune-up limit (dBm)	MPR (dB)
				3480	3499.98	3519.98		
60	QPSK	1	1	12.70	12.73	12.74	13.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	631668	633332	635000	Tune-up limit (dBm)	MPR (dB)
				3475.02	3499.98	3525		
50	QPSK	1	1	12.73	12.75	12.72	13.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	631334	633332	635332	Tune-up limit (dBm)	MPR (dB)
				3470.01	3499.98	3529.98		
40	QPSK	1	1	12.69	12.74	12.77	13.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	631000	633332	635666	Tune-up limit (dBm)	MPR (dB)
				3465	3499.98	3534.98		
30	QPSK	1	1	12.71	12.75	12.68	13.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	630668	633332	636000	Tune-up limit (dBm)	MPR (dB)
				3460.02	3499.98	3540		
20	QPSK	1	1	12.71	12.77	12.77	13.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	630300	633332	636166	Tune-up limit (dBm)	MPR (dB)
				3457.5	3499.98	3542.48		
15	QPSK	1	1	12.69	12.77	12.71	13.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	630000	633332	636332	Tune-up limit (dBm)	MPR (dB)
				3455.01	3499.98	3544.98		
10	QPSK	1	1	12.74	12.76	12.68	13.5	0.0

### Part270\_n78\_Ant 8

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1		12.62			
100	PI2 BPSK	1	137		12.72		13.5	0.0
100	PI2 BPSK	1	271		12.70			
100	PI2 BPSK	135	0		12.80		13.5	0.0
100	PI2 BPSK	135	69		12.72		13.5	0.0
100	PI2 BPSK	135	138		12.70			
100	PI2 BPSK	270	0		12.72		13.5	0.0
100	QPSK	1	1		12.80			
100	QPSK	1	137		12.59		13.5	0.0
100	QPSK	1	271		12.71			
100	QPSK	135	0		12.85			
100	QPSK	135	69		12.70		13.5	0.0
100	QPSK	135	138		12.75			
100	QPSK	270	0		12.69		13.5	0.0
100	16QAM	1	1		12.83		13.5	0.0
100	16QAM	1	1		12.68		13.5	0.0
100	256QAM	1	1		12.87		13.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	648668	650000	650332	Tune-up limit (dBm)	MPR (dB)
				3743.02	3750	3754.98		
90	QPSK	1	1	12.77	12.72	12.71	13.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	648334	650000	650666	Tune-up limit (dBm)	MPR (dB)
				3740.01	3750	3759.99		
80	QPSK	1	1	12.73	12.76	12.78	13.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	648000	650000	651000	Tune-up limit (dBm)	MPR (dB)
				3735	3750	3765		
70	QPSK	1	1	12.77	12.69	12.73	13.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	647668	650000	651332	Tune-up limit (dBm)	MPR (dB)
				3730.02	3750	3768.98		
60	QPSK	1	1	12.71	12.74	12.78	13.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	648000	650000	651666	Tune-up limit (dBm)	MPR (dB)
				3725.01	3750	3774.99		
50	QPSK	1	1	12.70	12.71	12.71	13.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	647668	650000	652000	Tune-up limit (dBm)	MPR (dB)
				3720	3750	3780		
40	QPSK	1	1	12.78	12.69	12.76	13.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	647334	650000	652332	Tune-up limit (dBm)	MPR (dB)
				3715.02	3750	3784.98		
30	QPSK	1	1	12.74	12.75	12.70	13.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	647000	650000	652666	Tune-up limit (dBm)	MPR (dB)
				3710.01	3750	3789.99		
20	QPSK	1	1	12.76	12.71	12.78	13.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	647168	650000	652832	Tune-up limit (dBm)	MPR (dB)
				3707.52	3750	3792.48		
15	QPSK	1	1	12.77	12.69	12.71	13.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
				3705	3750	3795		
10	QPSK	1	1	12.77	12.76	12.73	13.5	0.0



Part27Q_n78 HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi/2 BPSK	1	1		63332				
100	Pi/2 BPSK	1	137		1288		13.5	0.0	
100	Pi/2 BPSK	1	271		1289				
100	Pi/2 BPSK	135	0		1276		13.5	0.0	
100	Pi/2 BPSK	135	69		1273		13.5	0.0	
100	Pi/2 BPSK	135	138		1284		13.5	0.0	
100	Pi/2 BPSK	270	0		1282				
100	QPSK	1	1		1270				
100	QPSK	1	137		1275		13.5	0.0	
100	QPSK	1	271		1274				
100	QPSK	135	0		1273		13.5	0.0	
100	QPSK	135	69		1276				
100	QPSK	135	138		1288		13.5	0.0	
100	QPSK	270	0		1274		13.5	0.0	
100	16QAM	1	1		1273		13.5	0.0	
100	64QAM	1	1		1275		13.5	0.0	
100	256QAM	1	1		1276		13.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	63332	63366	Tune-up limit (dBm)	MPR (dB)	
				3495	3498.98	3502.99		13.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	63268	63332	63400	Tune-up limit (dBm)	MPR (dB)	
				3493.02	3498.98	3510		13.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	63234	63332	63432	Tune-up limit (dBm)	MPR (dB)	
				3489.01	3498.98	3514.98		13.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	63200	63332	63468	Tune-up limit (dBm)	MPR (dB)	
				3485.02	3498.98	3518.98		13.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	63166	63332	63500	Tune-up limit (dBm)	MPR (dB)	
				3479.02	3498.98	3525		13.5	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	63134	63332	63532	Tune-up limit (dBm)	MPR (dB)	
				3476.01	3498.98	3529.98		13.5	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	63100	63332	63566	Tune-up limit (dBm)	MPR (dB)	
				3473.02	3498.98	3534.98		13.5	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	63066	63332	63600	Tune-up limit (dBm)	MPR (dB)	
				3469.01	3498.98	3540		13.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	63034	63332	63634	Tune-up limit (dBm)	MPR (dB)	
				3465.01	3498.98	3544.98		13.5	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	63000	63332	63668	Tune-up limit (dBm)	MPR (dB)	
				3462.02	3498.98	3549.98		13.5	0.0

Part27O_n78 HPUE_Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi/2 BPSK	1	1		65000				
100	Pi/2 BPSK	1	137		1272		13.5	0.0	
100	Pi/2 BPSK	1	271		1270				
100	Pi/2 BPSK	135	0		1280		13.5	0.0	
100	Pi/2 BPSK	135	69		1272		13.5	0.0	
100	Pi/2 BPSK	135	138		1270		13.5	0.0	
100	Pi/2 BPSK	270	0		1272				
100	QPSK	1	1		1260				
100	QPSK	1	137		1258		13.5	0.0	
100	QPSK	1	271		1271				
100	QPSK	135	0		1286		13.5	0.0	
100	QPSK	135	69		1276				
100	QPSK	135	138		1275		13.5	0.0	
100	QPSK	270	0		1288		13.5	0.0	
100	16QAM	1	1		1273		13.5	0.0	
100	64QAM	1	1		1275		13.5	0.0	
100	256QAM	1	1		1276		13.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	64968	65000	65032	Tune-up limit (dBm)	MPR (dB)	
				3742.02	3750	3754.98		13.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	64934	65000	65066	Tune-up limit (dBm)	MPR (dB)	
				3740.01	3750	3759.98		13.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	64900	65000	65100	Tune-up limit (dBm)	MPR (dB)	
				3735	3750	3765		13.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	64866	65000	65132	Tune-up limit (dBm)	MPR (dB)	
				3730.02	3750	3769.98		13.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	64834	65000	65166	Tune-up limit (dBm)	MPR (dB)	
				3725.01	3750	3774.98		13.5	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	64800	65000	65200	Tune-up limit (dBm)	MPR (dB)	
				3720	3750	3780		13.5	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	64768	65000	65232	Tune-up limit (dBm)	MPR (dB)	
				3715.02	3750	3784.98		13.5	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	64734	65000	65266	Tune-up limit (dBm)	MPR (dB)	
				3710.01	3750	3789.98		13.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	64700	65000	65282	Tune-up limit (dBm)	MPR (dB)	
				3707.52	3750	3792.48		13.5	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	64668	65000	65310	Tune-up limit (dBm)	MPR (dB)	
				3705	3750	3795		13.5	0.0



CA_48_Ant 0											
PCC Channel	SCC Channel	Modulation	PCC			Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Time (s) Power (dBm)	
			RB Size	RB offset	RB index						
10560	10564	QPSK	1	0	0	0	1	0	Full Power	22.44	24.00
10575	10576	QPSK	1	0	0	0	1	0	Full Power	22.56	24.00
10590	10591	QPSK	1	0	0	0	1	0	Full Power	22.68	24.00
10605	10606	QPSK	1	0	0	0	1	0	OSB 2	22.44	24.00
10620	10621	QPSK	1	0	0	0	1	0	OSB 2	22.56	24.00
10635	10636	QPSK	1	0	0	0	1	0	OSB 2	22.68	24.00
10650	10651	QPSK	1	0	0	0	1	0	OSB 3	22.44	24.00
10665	10666	QPSK	1	0	0	0	1	0	OSB 3	22.56	24.00
10680	10681	QPSK	1	0	0	0	1	0	OSB 3	22.68	24.00
10695	10696	QPSK	1	0	0	0	1	0	OSB 4	22.44	24.00
10710	10711	QPSK	1	0	0	0	1	0	OSB 4	22.56	24.00
10725	10726	QPSK	1	0	0	0	1	0	OSB 4	22.68	24.00
10740	10741	QPSK	1	0	0	0	1	0	OSB 5	22.44	24.00
10755	10756	QPSK	1	0	0	0	1	0	OSB 5	22.56	24.00
10770	10771	QPSK	1	0	0	0	1	0	OSB 5	22.68	24.00
10785	10786	QPSK	1	0	0	0	1	0	OSB 6	22.44	24.00
10800	10801	QPSK	1	0	0	0	1	0	OSB 6	22.56	24.00
10815	10816	QPSK	1	0	0	0	1	0	OSB 6	22.68	24.00
10830	10831	QPSK	1	0	0	0	1	0	OSB 7	22.44	24.00
10845	10846	QPSK	1	0	0	0	1	0	OSB 7	22.56	24.00
10860	10861	QPSK	1	0	0	0	1	0	OSB 7	22.68	24.00

UL CA Power											
CA_48_Ant 1											
PCC Channel	SCC Channel	Modulation	PCC			Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Time (s) Power (dBm)	
			RB Size	RB offset	RB index						
10600	10604	QPSK	1	0	0	0	1	0	Full Power	22.45	24.00
10615	10616	QPSK	1	0	0	0	1	0	Full Power	22.57	24.00
10630	10631	QPSK	1	0	0	0	1	0	Full Power	22.68	24.00
10645	10646	QPSK	1	0	0	0	1	0	OSB 2	18.68	20.80
10660	10661	QPSK	1	0	0	0	1	0	OSB 2	19.70	20.80
10675	10676	QPSK	1	0	0	0	1	0	OSB 2	19.68	20.80
10690	10691	QPSK	1	0	0	0	1	0	OSB 3	22.45	24.00
10705	10706	QPSK	1	0	0	0	1	0	OSB 3	22.57	24.00
10720	10721	QPSK	1	0	0	0	1	0	OSB 3	22.68	24.00
10735	10736	QPSK	1	0	0	0	1	0	OSB 4	22.45	24.00
10750	10751	QPSK	1	0	0	0	1	0	OSB 4	22.57	24.00
10765	10766	QPSK	1	0	0	0	1	0	OSB 4	22.68	24.00
10780	10781	QPSK	1	0	0	0	1	0	OSB 5	22.45	24.00
10795	10796	QPSK	1	0	0	0	1	0	OSB 5	22.57	24.00
10810	10811	QPSK	1	0	0	0	1	0	OSB 5	22.68	24.00
10825	10826	QPSK	1	0	0	0	1	0	OSB 6	22.45	24.00
10840	10841	QPSK	1	0	0	0	1	0	OSB 6	22.57	24.00
10855	10856	QPSK	1	0	0	0	1	0	OSB 6	22.68	24.00
10870	10871	QPSK	1	0	0	0	1	0	OSB 7	21.13	22.40
10885	10886	QPSK	1	0	0	0	1	0	OSB 7	21.18	22.40
10900	10901	QPSK	1	0	0	0	1	0	OSB 7	21.15	22.40

CA_48_Ant 0											
PCC Channel	SCC Channel	Modulation	PCC			Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Time (s) Power (dBm)	
			RB Size	RB offset	RB index						
113047	113140	QPSK	1	0	0	0	1	0	Full Power	22.68	24.00
113102	113415	QPSK	1	0	0	0	1	0	Full Power	22.92	24.00
113157	113728	QPSK	1	0	0	0	1	0	Full Power	22.74	24.00
113212	113140	QPSK	1	0	0	0	1	0	OSB 2	22.68	24.00
113267	113415	QPSK	1	0	0	0	1	0	OSB 2	22.92	24.00
113322	113728	QPSK	1	0	0	0	1	0	OSB 2	22.74	24.00
113377	113140	QPSK	1	0	0	0	1	0	OSB 3	17.19	18.40
113432	113415	QPSK	1	0	0	0	1	0	OSB 3	18.20	19.40
113487	113728	QPSK	1	0	0	0	1	0	OSB 3	17.19	18.40
113542	113140	QPSK	1	0	0	0	1	0	OSB 4	22.68	24.00
113597	113415	QPSK	1	0	0	0	1	0	OSB 4	22.92	24.00
113652	113728	QPSK	1	0	0	0	1	0	OSB 4	22.74	24.00
113707	113140	QPSK	1	0	0	0	1	0	OSB 5	21.12	21.80
113762	113415	QPSK	1	0	0	0	1	0	OSB 5	21.12	21.80
113817	113728	QPSK	1	0	0	0	1	0	OSB 5	21.12	21.80
113872	113140	QPSK	1	0	0	0	1	0	OSB 6	18.43	18.80
113927	113415	QPSK	1	0	0	0	1	0	OSB 6	18.78	18.80
114007	113728	QPSK	1	0	0	0	1	0	OSB 6	18.72	18.80



CA_64G_Ant 1												
PCC Channel	SCC Channel	Modulation	PCC			SCC			Power Reduction	Measured Power (dBm)	Time (s)	Power (dBm)
			RB Size	RB offset	RB Size	RB offset	Total RB Size	Target MPR Level (dB)				
133001	133141	QPSK	1	0	0	0	1	0	Full Power	22.55	24.00	
133002	133141	QPSK	1	0	0	0	1	0	Full Power	22.78	24.00	
133003	133141	QPSK	1	0	0	0	1	0	Full Power	22.61	24.00	
133004	133141	QPSK	1	0	0	0	1	0	OS1.2	16.84	18.10	
133005	133141	QPSK	1	0	0	0	1	0	OS1.2	16.90	18.10	
133006	133141	QPSK	1	0	0	0	1	0	OS1.2	16.95	18.10	
133007	133141	QPSK	1	0	0	0	1	0	OS1.3	16.81	18.00	
133008	133141	QPSK	1	0	0	0	1	0	OS1.3	16.75	18.00	
133009	133201	QPSK	1	0	0	0	1	0	OS1.3	16.55	18.00	
133010	133201	QPSK	1	0	0	0	1	0	OS1.4	22.55	24.00	
133011	133201	QPSK	1	0	0	0	1	0	OS1.4	22.78	24.00	
133012	133201	QPSK	1	0	0	0	1	0	OS1.4	22.61	24.00	
133013	133201	QPSK	1	0	0	0	1	0	OS1.4	22.72	24.00	
133014	133201	QPSK	1	0	0	0	1	0	OS1.4	22.78	24.00	
133015	133201	QPSK	1	0	0	0	1	0	OS1.2	22.89	24.00	
133016	133201	QPSK	1	0	0	0	1	0	OS1.2	22.77	24.00	
133017	133201	QPSK	1	0	0	0	1	0	OS1.3	17.26	18.40	
133018	133201	QPSK	1	0	0	0	1	0	OS1.3	17.26	18.40	
133019	133201	QPSK	1	0	0	0	1	0	OS1.3	17.22	18.40	
133020	133201	QPSK	1	0	0	0	1	0	OS1.4	22.78	24.00	
133021	133201	QPSK	1	0	0	0	1	0	OS1.4	22.65	24.00	
133022	133201	QPSK	1	0	0	0	1	0	OS1.4	22.77	24.00	
133023	133201	QPSK	1	0	0	0	1	0	OS1.4	21.17	21.80	
133024	133201	QPSK	1	0	0	0	1	0	OS1.6	21.26	21.80	
133025	133201	QPSK	1	0	0	0	1	0	OS1.6	21.15	21.80	
133026	133201	QPSK	1	0	0	0	1	0	OS1.7	16.72	18.00	
133027	133201	QPSK	1	0	0	0	1	0	OS1.7	16.80	18.00	
133028	133201	QPSK	1	0	0	0	1	0	OS1.7	16.81	18.00	

CA_66C_Ant 0												
PCC Channel	SCC Channel	Modulation	PCC			SCC			Power Reduction	Measured Power (dBm)	Time (s)	Power (dBm)
			RB Size	RB offset	RB Size	RB offset	Total RB Size	Target MPR Level (dB)				
133029	133261	QPSK	1	0	0	0	1	0	Full Power	22.75	24.00	
133030	133261	QPSK	1	0	0	0	1	0	Full Power	22.89	24.00	
133031	133261	QPSK	1	0	0	0	1	0	Full Power	22.72	24.00	
133032	133261	QPSK	1	0	0	0	1	0	OS1.2	16.76	18.00	
133033	133261	QPSK	1	0	0	0	1	0	OS1.2	16.85	18.10	
133034	133261	QPSK	1	0	0	0	1	0	OS1.2	16.97	18.10	
133035	133261	QPSK	1	0	0	0	1	0	OS1.3	16.70	18.00	
133036	133261	QPSK	1	0	0	0	1	0	OS1.3	16.75	18.00	
133037	133261	QPSK	1	0	0	0	1	0	OS1.3	16.55	18.00	
133038	133261	QPSK	1	0	0	0	1	0	OS1.4	22.78	24.00	
133039	133261	QPSK	1	0	0	0	1	0	OS1.4	22.65	24.00	
133040	133261	QPSK	1	0	0	0	1	0	OS1.4	22.77	24.00	
133041	133261	QPSK	1	0	0	0	1	0	OS1.4	21.17	21.80	
133042	133261	QPSK	1	0	0	0	1	0	OS1.6	21.26	21.80	
133043	133261	QPSK	1	0	0	0	1	0	OS1.6	21.15	21.80	
133044	133261	QPSK	1	0	0	0	1	0	OS1.7	16.72	18.00	
133045	133261	QPSK	1	0	0	0	1	0	OS1.7	16.80	18.00	
133046	133261	QPSK	1	0	0	0	1	0	OS1.7	16.81	18.00	

CA_64C_Ant 1												
PCC Channel	SCC Channel	Modulation	PCC			SCC			Power Reduction	Measured Power (dBm)	Time (s)	Power (dBm)
			RB Size	RB offset	RB Size	RB offset	Total RB Size	Target MPR Level (dB)				
133047	133321	QPSK	1	0	0	0	1	0	Full Power	22.75	24.00	
133048	133321	QPSK	1	0	0	0	1	0	Full Power	22.81	24.00	
133049	133321	QPSK	1	0	0	0	1	0	Full Power	22.72	24.00	
133050	133321	QPSK	1	0	0	0	1	0	OS1.2	16.86	18.10	
133051	133321	QPSK	1	0	0	0	1	0	OS1.2	16.90	18.10	
133052	133321	QPSK	1	0	0	0	1	0	OS1.2	16.97	18.10	
133053	133321	QPSK	1	0	0	0	1	0	OS1.3	16.70	18.00	
133054	133321	QPSK	1	0	0	0	1	0	OS1.3	16.75	18.00	
133055	133321	QPSK	1	0	0	0	1	0	OS1.3	16.55	18.00	
133056	133321	QPSK	1	0	0	0	1	0	OS1.4	22.78	24.00	
133057	133321	QPSK	1	0	0	0	1	0	OS1.4	22.65	24.00	
133058	133321	QPSK	1	0	0	0	1	0	OS1.4	22.77	24.00	
133059	133321	QPSK	1	0	0	0	1	0	OS1.4	21.17	21.80	
133060	133321	QPSK	1	0	0	0	1	0	OS1.6	21.26	21.80	
133061	133321	QPSK	1	0	0	0	1	0	OS1.6	21.15	21.80	
133062	133321	QPSK	1	0	0	0	1	0	OS1.7	16.72	18.00	
133063	133321	QPSK	1	0	0	0	1	0	OS1.7	16.80	18.00	
133064	133321	QPSK	1	0	0	0	1	0	OS1.7	16.81	18.00	





CA 41C Ant 6 PCS										
PCF Channel	SCC Channel	Modulation	PCC				Power Reduction	Measured Power (dBm)	Time to Power (dBm)	
			RB Size	RB offset	RB Size	RB offset				
30750	30644	QPSK	1	0	0	0	Full Power	23.20	24.00	
41051	41033	QPSK	1	0	0	0	Full Power	23.43	24.00	
41051	41033	QPSK	1	0	0	0	Full Power	23.65	24.00	
41051	41033	QPSK	1	0	0	0	Full Power	23.86	24.00	
41460	41392	QPSK	1	0	0	0	Full Power	23.77	24.00	
30750	30644	QPSK	1	0	0	0	OSD	22.42	23.50	
40164	40083	QPSK	1	0	0	0	OSD 2	22.51	23.50	
41051	41033	QPSK	1	0	0	0	OSD 2	22.85	23.50	
41051	41033	QPSK	1	0	0	0	OSD 2	22.56	23.50	
41460	41392	QPSK	1	0	0	0	OSD 2	22.55	23.50	
30750	30644	QPSK	1	0	0	0	OSD 3	22.42	23.50	
40164	40083	QPSK	1	0	0	0	OSD 3	22.51	23.50	
41051	41033	QPSK	1	0	0	0	OSD 3	22.85	23.50	
41051	41033	QPSK	1	0	0	0	OSD 3	22.59	23.50	
41460	41392	QPSK	1	0	0	0	OSD 3	22.55	23.50	
30750	30644	QPSK	1	0	0	0	OSD 4	23.20	24.00	
40164	40083	QPSK	1	0	0	0	OSD 4	23.43	24.00	
41051	41033	QPSK	1	0	0	0	OSD 4	23.65	24.00	
41051	41033	QPSK	1	0	0	0	OSD 4	23.86	24.00	
41460	41392	QPSK	1	0	0	0	OSD 4	23.77	24.00	
30750	30644	QPSK	1	0	0	0	OSD 5	21.78	22.50	
40164	40083	QPSK	1	0	0	0	OSD 5	21.87	22.50	
41051	41033	QPSK	1	0	0	0	OSD 5	22.19	22.50	
41051	41033	QPSK	1	0	0	0	OSD 5	21.78	22.50	
41460	41392	QPSK	1	0	0	0	OSD 5	21.85	22.50	
30750	30644	QPSK	1	0	0	0	OSD 6	21.56	22.50	
40164	40083	QPSK	1	0	0	0	OSD 6	21.65	22.50	
41051	41033	QPSK	1	0	0	0	OSD 6	21.97	22.50	
41051	41033	QPSK	1	0	0	0	OSD 6	21.56	22.50	
41460	41392	QPSK	1	0	0	0	OSD 6	21.63	22.50	
30750	30644	QPSK	1	0	0	0	OSD 7	17.27	18.50	
40164	40083	QPSK	1	0	0	0	OSD 7	17.05	18.50	
41051	41033	QPSK	1	0	0	0	OSD 7	17.99	18.50	
41051	41033	QPSK	1	0	0	0	OSD 7	17.04	18.50	
41460	41392	QPSK	1	0	0	0	OSD 7	17.36	18.50	

CA 41C Ant 9 PCS										
PCF Channel	SCC Channel	Modulation	PCC				Power Reduction	Measured Power (dBm)	Time to Power (dBm)	
			RB Size	RB offset	RB Size	RB offset				
30750	30644	QPSK	1	0	0	0	Full Power	25.58	27.00	
41051	41033	QPSK	1	0	0	0	Full Power	25.62	27.00	
41051	41033	QPSK	1	0	0	0	Full Power	25.78	27.00	
41051	41033	QPSK	1	0	0	0	Full Power	25.80	27.00	
41460	41392	QPSK	1	0	0	0	Full Power	25.81	27.00	
30750	30644	QPSK	1	0	0	0	OSD 2	25.58	27.00	
40164	40083	QPSK	1	0	0	0	OSD 2	25.62	27.00	
41051	41033	QPSK	1	0	0	0	OSD 2	25.78	27.00	
41051	41033	QPSK	1	0	0	0	OSD 2	25.80	27.00	
41460	41392	QPSK	1	0	0	0	OSD 2	25.81	27.00	
30750	30644	QPSK	1	0	0	0	OSD 3	25.47	27.00	
40164	40083	QPSK	1	0	0	0	OSD 3	25.67	27.00	
41051	41033	QPSK	1	0	0	0	OSD 3	25.87	27.00	
41051	41033	QPSK	1	0	0	0	OSD 3	25.70	27.00	
41460	41392	QPSK	1	0	0	0	OSD 3	25.74	27.00	
30750	30644	QPSK	1	0	0	0	OSD 4	24.38	25.60	
40164	40083	QPSK	1	0	0	0	OSD 4	24.58	25.60	
41051	41033	QPSK	1	0	0	0	OSD 4	24.78	25.60	
41051	41033	QPSK	1	0	0	0	OSD 4	24.38	25.60	
41460	41392	QPSK	1	0	0	0	OSD 4	24.42	25.60	
30750	30644	QPSK	1	0	0	0	OSD 5	21.71	22.50	
40164	40083	QPSK	1	0	0	0	OSD 5	21.81	22.50	
41051	41033	QPSK	1	0	0	0	OSD 5	22.13	22.50	
41051	41033	QPSK	1	0	0	0	OSD 5	21.71	22.50	
41460	41392	QPSK	1	0	0	0	OSD 5	21.75	22.50	
30750	30644	QPSK	1	0	0	0	OSD 6	18.59	19.50	
40164	40083	QPSK	1	0	0	0	OSD 6	18.55	19.50	
41051	41033	QPSK	1	0	0	0	OSD 6	18.51	19.50	
41051	41033	QPSK	1	0	0	0	OSD 6	18.51	19.50	
41460	41392	QPSK	1	0	0	0	OSD 6	18.59	19.50	

CA 41C Ant 1 PCS										
PCF Channel	SCC Channel	Modulation	PCC				Power Reduction	Measured Power (dBm)	Time to Power (dBm)	
			RB Size	RB offset	RB Size	RB offset				
30750	30644	QPSK	1	0	0	0	Full Power	25.51	27.00	
41051	41033	QPSK	1	0	0	0	Full Power	25.53	27.00	
41051	41033	QPSK	1	0	0	0	Full Power	25.73	27.00	
41051	41033	QPSK	1	0	0	0	Full Power	25.82	27.00	
41460	41392	QPSK	1	0	0	0	Full Power	25.76	27.00	
30750	30644	QPSK	1	0	0	0	OSD 2	25.51	27.00	
40164	40083	QPSK	1	0	0	0	OSD 2	25.53	27.00	
41051	41033	QPSK	1	0	0	0	OSD 2	25.73	27.00	
41051	41033	QPSK	1	0	0	0	OSD 2	25.82	27.00	
41460	41392	QPSK	1	0	0	0	OSD 2	25.76	27.00	
30750	30644	QPSK	1	0	0	0	OSD 3	25.51	27.00	
40164	40083	QPSK	1	0	0	0	OSD 3	25.53	27.00	
41051	41033	QPSK	1	0	0	0	OSD 3	25.73	27.00	
41051	41033	QPSK	1	0	0	0	OSD 3	25.82	27.00	
41460	41392	QPSK	1	0	0	0	OSD 3	25.76	27.00	
30750	30644	QPSK	1	0	0	0	OSD 4	24.38	25.60	
40164	40083	QPSK	1	0	0	0	OSD 4	24.58	25.60	
41051	41033	QPSK	1	0	0	0	OSD 4	24.78	25.60	
41051	41033	QPSK	1	0	0	0	OSD 4	24.38	25.60	
41460	41392	QPSK	1	0	0	0	OSD 4	24.42	25.60	
30750	30644	QPSK	1	0	0	0	OSD 5	21.71	22.50	
40164	40083	QPSK	1	0	0	0	OSD 5	21.81	22.50	
41051	41033	QPSK	1	0	0	0	OSD 5	22.13	22.50	
41051	41033	QPSK	1	0	0	0	OSD 5	21.71	22.50	
41460	41392	QPSK	1	0	0	0	OSD 5	21.75	22.50	
30750	30644	QPSK	1	0	0	0	OSD 6	18.59	19.50	
40164	40083	QPSK	1	0	0	0	OSD 6	18.55	19.50	
41051	41033	QPSK	1	0	0	0	OSD 6	18.51	19.50	
41051	41033	QPSK	1	0	0	0	OSD 6	18.51	19.50	
41460	41392	QPSK	1	0	0	0	OSD 6	18.59	19.50	





CA_41C_Ant 5 PCS											
PCC Channel	SCC Channel	Modulation	PCC				Power Reduction	Measured Power (dBm)	Time (s)	Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
30750	36648	QPSK	1	0	0	0	1	0	Full Power	25.18	25.00
40180	40038	QPSK	1	0	0	0	1	0	Full Power	25.43	25.00
41050	41050	QPSK	1	0	0	0	1	0	Full Power	25.05	25.00
41050	41263	QPSK	1	0	0	0	1	0	Full Power	25.33	25.00
41460	41262	QPSK	1	0	0	0	1	0	Full Power	25.17	25.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 2	25.18	25.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 2	25.43	25.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 2	25.05	25.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 2	25.33	25.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 2	25.17	25.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 3	25.18	25.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 3	25.43	25.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 3	25.05	25.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 3	25.33	25.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 3	25.17	25.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 4	25.18	25.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 4	25.43	25.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 4	25.05	25.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 4	25.33	25.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 4	25.17	25.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 5	25.18	25.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 5	25.43	25.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 5	25.05	25.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 5	25.33	25.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 5	25.17	25.00

CA_41C_Ant 6 PCS											
PCC Channel	SCC Channel	Modulation	PCC				Power Reduction	Measured Power (dBm)	Time (s)	Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
30750	36648	QPSK	1	0	0	0	1	0	Full Power	24.38	26.00
40180	40038	QPSK	1	0	0	0	1	0	Full Power	24.53	26.00
41050	41050	QPSK	1	0	0	0	1	0	Full Power	24.06	26.00
41050	41263	QPSK	1	0	0	0	1	0	Full Power	24.47	26.00
41460	41262	QPSK	1	0	0	0	1	0	Full Power	24.81	26.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 2	24.54	25.10
46180	40038	QPSK	1	0	0	0	1	0	OSD 2	24.82	25.10
41050	41050	QPSK	1	0	0	0	1	0	OSD 2	24.07	25.10
41050	41263	QPSK	1	0	0	0	1	0	OSD 2	24.21	25.10
41460	41262	QPSK	1	0	0	0	1	0	OSD 2	24.54	25.10
38750	36648	QPSK	1	0	0	0	1	0	OSD 3	24.52	25.10
46180	40038	QPSK	1	0	0	0	1	0	OSD 3	24.82	25.10
41050	41050	QPSK	1	0	0	0	1	0	OSD 3	24.07	25.10
41050	41263	QPSK	1	0	0	0	1	0	OSD 3	24.22	25.10
41460	41262	QPSK	1	0	0	0	1	0	OSD 3	24.54	25.10
38750	36648	QPSK	1	0	0	0	1	0	OSD 4	24.38	26.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 4	24.53	26.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 4	24.06	26.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 4	24.47	26.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 4	24.81	26.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 5	24.39	25.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 5	24.54	25.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 5	24.07	25.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 5	24.22	25.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 5	24.54	25.00

CA_41C For PCC_Ant 4											
PCC Channel	SCC Channel	Modulation	PCC				Power Reduction	Measured Power (dBm)	Time (s)	Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
30750	36648	QPSK	1	0	0	0	1	0	Full Power	23.22	26.00
40180	40038	QPSK	1	0	0	0	1	0	Full Power	23.25	26.00
41050	41050	QPSK	1	0	0	0	1	0	Full Power	23.27	26.00
41050	41263	QPSK	1	0	0	0	1	0	Full Power	23.16	26.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 2	18.24	26.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 2	18.26	26.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 2	18.28	26.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 2	18.23	25.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 2	18.51	26.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 2	18.50	26.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 3	17.92	26.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 3	18.26	26.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 3	18.25	26.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 3	18.54	26.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 3	18.54	26.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 4	18.24	26.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 4	18.25	26.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 4	18.25	26.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 4	18.54	26.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 4	18.54	26.00
38750	36648	QPSK	1	0	0	0	1	0	OSD 5	18.24	26.00
46180	40038	QPSK	1	0	0	0	1	0	OSD 5	18.25	26.00
41050	41050	QPSK	1	0	0	0	1	0	OSD 5	18.25	26.00
41050	41263	QPSK	1	0	0	0	1	0	OSD 5	18.54	26.00
41460	41262	QPSK	1	0	0	0	1	0	OSD 5	18.54	26.00





DL CA Power

3CC

Table with columns: Config, CA Configuration (BCS), LTE Band, BW (MHz), UL Freq (MHz), PCC, UL Channel, Mod, UL RB, UL RB Offset, SCC1, DL Freq (MHz), DL Channel, LTE Band, BW (MHz), UL Freq (MHz), DL Channel, Power (W/CA Tx Power (dBm), W/CA Tx Power (dBm)).

3CC

Table with columns: Config, CA Configuration (BCS), LTE Band, BW (MHz), UL Freq (MHz), PCC, UL Channel, Mod, UL RB, UL RB Offset, SCC1, DL Freq (MHz), DL Channel, LTE Band, BW (MHz), UL Freq (MHz), DL Channel, Power (W/CA Tx Power (dBm), W/CA Tx Power (dBm)).

4CC

Table with columns: Config, CA Configuration (BCS), LTE Band, BW (MHz), UL Freq (MHz), PCC, UL Channel, Mod, UL RB, UL RB Offset, SCC1, DL Freq (MHz), DL Channel, SCC2, DL Freq (MHz), DL Channel, SCC3, DL Freq (MHz), DL Channel, Power (W/CA Tx Power (dBm), W/CA Tx Power (dBm)).





				Ant 3					
				Average power (dBm)					
Level 10 Full Power	Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
				Tune-up		Tune-up		Tune-up	
BR / EDR		CH 00	2402	17.00	18.50	14.50	16.00	14.50	16.00
		CH 39	2441	17.00	18.50	15.40	16.00	15.40	16.00
		CH 78	2480	16.80	18.50	14.30	16.00	14.30	16.00

				Ant 3					
				Average power (dBm)					
Level 9 Standalone& Simultaneous	Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
				Tune-up		Tune-up		Tune-up	
BR / EDR		CH 00	2402	11.30	12.50	8.50	10.00	8.50	10.00
		CH 39	2441	11.50	12.50	9.10	10.00	9.10	10.00
		CH 78	2480	9.50	11.00	6.60	8.50	6.60	8.50

				Ant 3	
				Average power (dBm)	
LE	Mode	Channel	Frequency (MHz)	GFSK	
				Tune-up	Limit
		CH 00	2402	7.50	8.00
		CH 19	2440	7.90	8.00
		CH 39	2480	6.10	8.00

				Ant 3			
				Average power (dBm)			
LE	Mode	Channel	Frequency (MHz)	1Mbps		2Mbps	
				Tune-up		Tune-up	
		CH 00	2402	7.50	8.00	7.40	8.00
		CH 19	2440	7.90	8.00	7.80	8.00
		CH 39	2480	6.10	8.00	6.00	8.00

				Ant 5					
				Average power (dBm)					
Level 10 Full Power	Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
				Tune-up		Tune-up		Tune-up	
BR / EDR		CH 00	2402	17.40	18.50	15.00	16.50	15.00	16.50
		CH 39	2441	18.10	19.50	15.70	16.50	15.70	16.50
		CH 78	2480	16.80	18.50	14.70	16.50	14.70	16.50

				Ant 5					
				Average power (dBm)					
Level 9 Standalone& Simultaneous	Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
				Tune-up		Tune-up		Tune-up	
BR / EDR		CH 00	2402	13.00	14.50	10.70	12.50	10.70	12.50
		CH 39	2441	14.00	14.50	11.60	12.50	11.60	12.50
		CH 78	2480	11.80	13.00	9.10	11.00	9.10	11.00

				Ant 5	
				Average power (dBm)	
LE	Mode	Channel	Frequency (MHz)	GFSK	
				Tune-up	Limit
		CH 00	2402	9.20	11.00
		CH 19	2440	10.10	11.00
		CH 39	2480	7.00	9.00

				Ant 5			
				Average power (dBm)			
LE	Mode	Channel	Frequency (MHz)	1Mbps		2Mbps	
				Tune-up		Tune-up	
		CH 00	2402	9.00	11.00	8.90	10.50
		CH 19	2440	10.10	11.00	10.00	10.50
		CH 39	2480	7.50	9.00	6.90	8.50