



**Full&Default Power Mode**

GSM850 A/G								
Channel	Burst Average Power (dBm)			TxComp	Frame Average Power (dBm)			TxComp
TX Channel	198	199	201	Limit	198	199	201	Limit
Frequency (MHz)	812.2	812.4	812.6	0dB	812.2	812.4	812.6	
DRM 1 Tx side	32.81	32.65	32.97	33.50	23.81	23.65	23.97	24.50
OPRS 1 Tx side	34.56	32.64	32.51	33.50	23.56	23.64	23.51	24.50
OPRS 2 Tx side	29.16	29.66	29.49	30.50	23.16	23.66	23.49	24.50
OPRS 3 Tx side	28.00	28.30	28.15	29.00	22.74	24.10	23.89	24.74
OPRS 4 Tx side	26.50	26.02	25.97	27.00	22.50	22.02	22.07	24.00
EDGE 1 Tx side	25.38	25.72	25.42	26.50	18.38	18.72	18.42	17.50
EDGE 2 Tx side	25.76	23.67	23.72	24.50	17.76	17.67	17.72	18.50
EDGE 3 Tx side	22.14	22.72	22.54	23.50	15.26	15.51	15.26	15.54
EDGE 4 Tx side	20.46	20.65	20.48	21.50	17.46	17.65	17.48	18.50

  

WCDMA A/G				
Channel	4192	4192	4233	Limit
Rx Channel	4207	4460	4466	0dB
Frequency (MHz)	836.4	836.4	846.6	0dB
SCPP Rate 1	AMR 12.7kbit/s	23.52	24.83	25.50
SCPP Rate 6	RVLC 12.7kbit/s	23.02	24.20	24.05
SCPP Rate 6	HS-PA Subclass 1	22.80	23.27	23.15
SCPP Rate 6	HS-PA Subclass 2	22.92	23.11	23.10
SCPP Rate 6	HS-PA Subclass 3	22.34	22.72	22.51
SCPP Rate 6	HS-PA Subclass 4	22.42	22.71	22.62
SCPP Rate 6	DC-HSPA Subclass 1	22.90	23.18	23.08
SCPP Rate 6	DC-HSPA Subclass 2	22.41	22.62	22.51
SCPP Rate 6	DC-HSPA Subclass 3	22.34	22.51	22.62
SCPP Rate 6	DC-HSPA Subclass 4	22.30	22.50	22.46
SCPP Rate 6	HS-PA Subclass 1	22.84	23.11	23.00
SCPP Rate 6	HS-PA Subclass 2	21.81	21.62	20.95
SCPP Rate 6	HS-PA Subclass 3	21.30	22.72	22.51
SCPP Rate 6	HS-PA Subclass 4	20.73	21.08	21.08
SCPP Rate 6	HS-PA Subclass 5	22.89	23.20	23.12



Band 5 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Mid Ch / Freq.	Power High Ch / Freq.	Turn-up time (secs)	MPE (dB)		
Channel										
10	QPSK	1	0	22.60	22.73	22.68				
10	QPSK	1	25	22.64	22.77	22.72			24	0
10	QPSK	1	49	22.50	22.64	22.55				
10	QPSK	25	0	21.69	21.72	21.62				
10	QPSK	25	12	21.44	21.52	21.44				
10	QPSK	25	25	21.53	21.66	21.61			23	1
10	QPSK	50	0	21.61	21.65	21.59				
10	16QAM	1	0	21.59	21.67	21.61				
10	16QAM	1	25	21.41	21.52	21.38			23	1
10	16QAM	1	49	21.54	21.60	21.45				
10	16QAM	25	0	20.47	20.55	20.43				
10	16QAM	25	12	20.35	20.49	20.35			22	2
10	16QAM	25	25	20.50	20.60	20.53				
10	16QAM	50	0	20.54	20.62	20.59				
10	64QAM	1	0	20.51	20.59	20.54				
10	64QAM	1	25	20.45	20.51	20.47			22	2
10	64QAM	1	49	20.56	20.66	20.53				
10	64QAM	25	0	19.47	19.53	19.40				
10	64QAM	25	12	19.52	19.63	19.59			21	3
10	64QAM	25	25	19.44	19.55	19.35				
10	64QAM	50	0	19.50	19.62	19.54				
10	256QAM	1	0	17.46	17.48	17.43				
10	256QAM	1	25	17.44	17.45	17.40			19	5
10	256QAM	1	49	17.40	17.62	17.52				
10	256QAM	25	0	17.40	17.56	17.44				
10	256QAM	25	12	17.50	17.63	17.50			19	5
10	256QAM	25	25	17.50	17.56	17.44				
10	256QAM	50	0	17.41	17.53	17.50				
Channel										
				20625	20625	20625				
Frequency (MHz)										
5	QPSK	1	0	22.54	22.66	22.54				
5	QPSK	1	12	22.39	22.46	22.44			24	0
5	QPSK	1	24	22.45	22.54	22.47				
5	QPSK	12	0	21.60	21.68	21.55				
5	QPSK	12	7	21.35	21.44	21.39				
5	QPSK	12	13	21.45	21.52	21.51			23	1
5	QPSK	25	0	21.60	21.64	21.48				
5	16QAM	1	0	21.53	21.56	21.52				
5	16QAM	1	12	21.31	21.40	21.32			23	1
5	16QAM	1	24	21.41	21.47	21.31				
5	16QAM	12	0	20.43	20.51	20.37				
5	16QAM	12	7	20.25	20.39	20.21			22	2
5	16QAM	12	13	20.44	20.56	20.38				
5	16QAM	25	0	20.48	20.58	20.46				
5	64QAM	1	0	20.38	20.54	20.48				
5	64QAM	1	12	19.36	19.40	19.25			22	2
5	64QAM	1	24	19.41	19.52	19.35				
5	64QAM	12	0	19.38	19.40	19.25				
5	64QAM	12	7	19.39	19.44	19.21			21	3
5	64QAM	12	13	19.39	19.44	19.21				
5	64QAM	25	0	19.38	19.52	19.39				
5	256QAM	1	0	17.36	17.37	17.33				
5	256QAM	1	12	17.40	17.40	17.31			19	5
5	256QAM	1	24	17.45	17.52	17.45				
5	256QAM	12	0	17.35	17.46	17.38				
5	256QAM	12	7	17.44	17.50	17.45			19	5
5	256QAM	12	13	17.45	17.50	17.35				
5	256QAM	25	0	17.44	17.46	17.45				
Channel										
				20615	20625	20635				
Frequency (MHz)										
3	QPSK	1	0	22.63	22.63	22.63				
3	QPSK	1	8	22.42	22.53	22.41			24	0
3	QPSK	1	14	22.38	22.60	22.51				
3	QPSK	8	0	21.66	21.66	21.66				
3	QPSK	8	4	21.38	21.43	21.34				
3	QPSK	8	7	21.40	21.55	21.57			23	1
3	16QAM	1	0	21.49	21.55	21.52				
3	16QAM	1	8	21.34	21.41	21.31			23	1
3	16QAM	1	14	21.42	21.46	21.30				
3	16QAM	8	0	20.41	20.49	20.30				
3	16QAM	8	4	20.21	20.40	20.21			22	2
3	16QAM	8	7	20.30	20.50	20.47				
3	64QAM	1	0	20.48	20.61	20.50				
3	64QAM	1	8	20.47	20.44	20.45			22	2
3	64QAM	1	14	20.33	20.40	20.33				
3	64QAM	8	0	20.43	20.62	20.43				
3	64QAM	8	4	19.35	19.40	19.33				
3	64QAM	8	7	19.38	19.39	19.23			21	3
3	64QAM	15	0	19.37	19.54	19.46				
3	256QAM	1	0	17.38	17.41	17.34				
3	256QAM	1	8	17.37	17.38	17.27			19	5
3	256QAM	1	14	17.40	17.57	17.57				
3	256QAM	8	0	17.39	17.41	17.35				
3	256QAM	8	4	17.39	17.59	17.47			19	5
3	256QAM	8	7	17.40	17.52	17.40				
3	256QAM	15	0	17.47	17.60	17.46				
Channel										
				20607	20628	20643				
Frequency (MHz)										
1.4	QPSK	1	0	22.64	22.70	22.67				
1.4	QPSK	1	3	22.40	22.50	22.49			24	0
1.4	QPSK	1	5	22.35	22.50	22.41				
1.4	QPSK	3	0	22.64	22.67	22.48				
1.4	QPSK	3	1	22.35	22.43	22.39				
1.4	QPSK	3	3	22.41	22.52	22.48			23	1
1.4	16QAM	1	0	21.48	21.56	21.48				
1.4	16QAM	1	3	21.32	21.45	21.29				
1.4	16QAM	1	5	21.48	21.52	21.40				
1.4	16QAM	3	0	21.37	21.47	21.37			23	1
1.4	16QAM	3	1	21.32	21.42	21.20				
1.4	16QAM	3	3	21.35	21.48	21.43				
1.4	16QAM	6	0	20.43	20.56	20.49			22	2
1.4	64QAM	1	0	20.37	20.55	20.45				
1.4	64QAM	1	3	20.40	20.45	20.29				
1.4	64QAM	1	5	20.41	20.61	20.39			22	2
1.4	64QAM	3	0	20.32	20.48	20.32				
1.4	64QAM	3	1	20.48	20.48	20.20				
1.4	64QAM	3	3	20.39	20.40	20.28			21	3
1.4	64QAM	6	0	19.40	19.55	19.46				
1.4	256QAM	1	0	17.40	17.47	17.35				
1.4	256QAM	1	3	17.40	17.40	17.38			19	5
1.4	256QAM	1	5	17.43	17.49	17.38				
1.4	256QAM	3	0	17.35	17.35	17.41				
1.4	256QAM	3	1	17.41	17.52	17.45				
1.4	256QAM	3	3	17.44	17.42	17.33			19	5
1.4	256QAM	6	0	17.54	17.51	17.43				

Band 12 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Mid Ch / Freq.	Power High Ch / Freq.	Turn-up time (secs)	MPE (dB)		
Channel										
10	QPSK	1	0	22.78	22.88	22.85				
10	QPSK	1	25	22.81	22.91	22.81			24	0
10	QPSK	1	49	22.79	22.91	22.87				
10	QPSK	25	0	21.74	21.80	21.82				
10	QPSK	25	12	21.74	21.83	21.85				
10	QPSK	25	25	21.74	21.83	21.74			23	1
10	QPSK	50	0	21.88	21.91	21.86				
10	16QAM	1	0	21.93	21.92	21.90				
10	16QAM	1	25	21.75	21.89	21.75			23	1
10	16QAM	1	49	21.88	21.93	21.83				
10	16QAM	25	0	20.82	20.87	20.81				
10	16QAM	25	12	20.90	20.95	20.87			22	2
10	16QAM	25	25	20.76	20.84	20.71				
10	16QAM	50	0	20.78	20.85	20.78				
10	64QAM	1	0	20.85	20.95					



Band 17 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				700	710	711			
10	QPSK	1	0	22.86	22.86	22.92	24	0	
10	QPSK	1	26	22.77	22.83	22.86			
10	QPSK	1	49	22.75	22.81	22.88			
10	QPSK	25	0	21.82	21.94	21.84			
10	QPSK	25	12	21.78	21.80	21.83			
10	QPSK	25	25	21.71	21.69	21.79	23	1	
10	QPSK	50	0	21.80	21.85	21.77			
10	16QAM	1	0	20.92	20.92	22.04			
10	16QAM	1	26	21.83	21.90	21.90	23	1	
10	16QAM	5	49	21.83	21.91	21.87			
10	16QAM	25	0	20.91	20.95	20.92			
10	16QAM	25	12	20.71	20.82	20.78	22	2	
10	16QAM	25	25	20.79	20.87	20.80			
10	16QAM	50	0	20.81	20.91	20.82			
10	64QAM	1	0	21.00	21.04	21.00			
10	64QAM	1	26	20.89	20.92	20.96	22	2	
10	64QAM	1	49	20.82	20.87	20.79			
10	64QAM	25	0	19.54	19.78	19.65			
10	64QAM	25	12	19.79	19.86	19.73	21	3	
10	64QAM	25	25	19.87	19.71	19.57			
10	64QAM	50	0	19.75	19.89	19.85			
10	256QAM	1	0	17.89	18.01	17.86	19	5	
10	256QAM	1	26	17.85	17.84	17.88			
10	256QAM	1	49	17.71	17.86	17.78			
10	256QAM	25	0	17.81	17.80	17.86			
10	256QAM	25	12	17.74	17.84	17.75	19	5	
10	256QAM	25	25	17.85	17.79	17.75			
10	256QAM	50	0	17.73	17.85	17.85			
Channel									
				706.5	710	713.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.71	22.85	22.83	24	0	
5	QPSK	1	12	22.70	22.71	22.71			
5	QPSK	1	24	22.68	22.78	22.61			
5	QPSK	12	0	21.76	21.90	21.80			
5	QPSK	12	7	21.67	21.79	21.71			
5	QPSK	12	13	21.65	21.75	21.66	23	1	
5	QPSK	25	0	21.67	21.77	21.66			
5	16QAM	1	0	21.98	21.98	21.92			
5	16QAM	1	12	21.89	21.93	21.84	23	1	
5	16QAM	1	24	21.79	21.80	21.75			
5	16QAM	12	0	20.87	20.91	20.77			
5	16QAM	12	7	20.84	20.79	20.64	22	2	
5	16QAM	12	13	20.71	20.76	20.70			
5	16QAM	25	0	20.75	20.78	20.78			
5	64QAM	1	0	20.90	20.95	20.90	22	2	
5	64QAM	1	12	20.80	20.80	20.85			
5	64QAM	1	24	20.88	20.91	20.89			
5	64QAM	12	0	19.53	19.65	19.61			
5	64QAM	12	7	19.63	19.63	19.64			
5	64QAM	12	13	19.60	19.52	19.53	21	3	
5	64QAM	25	0	19.61	19.76	19.77			
5	256QAM	1	0	17.84	17.80	17.78			
5	256QAM	1	12	17.75	17.85	17.75	19	5	
5	256QAM	1	24	17.88	17.76	17.63			
5	256QAM	12	0	17.76	17.71	17.74			
5	256QAM	12	7	17.60	17.75	17.63	19	5	
5	256QAM	12	13	17.67	17.65	17.71			
5	256QAM	25	0	17.72	17.68	17.78			

Band 26 for FCC Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				811.5	811.5	811.5			
15	QPSK	1	0	22.58	22.77	22.67	24	0	
15	QPSK	1	37	22.47	22.57	22.55			
15	QPSK	1	74	22.39	22.63	22.54			
15	QPSK	36	0	21.51	21.63	21.60			
15	QPSK	36	20	21.50	21.58	21.60	23	1	
15	QPSK	36	39	21.40	21.54	21.48			
15	QPSK	75	0	21.59	21.67	21.67			
15	QPSK	1	0	21.72	21.80	21.79			
15	16QAM	1	37	21.56	21.71	21.63	23	1	
15	16QAM	1	74	21.55	21.68	21.63			
15	16QAM	36	0	20.48	20.52	20.48			
15	16QAM	36	20	20.88	20.73	20.52	22	2	
15	16QAM	36	39	20.94	20.67	20.61			
15	16QAM	75	0	20.50	20.58	20.52			
15	64QAM	1	0	20.68	20.72	20.63	22	2	
15	64QAM	1	37	20.55	20.64	20.54			
15	64QAM	1	74	20.65	20.76	20.72			
15	64QAM	36	0	19.54	19.63	19.59			
15	64QAM	36	20	19.52	19.74	19.61	21	3	
15	64QAM	36	39	19.54	19.68	19.54			
15	64QAM	75	0	19.50	19.64	19.51			
15	256QAM	1	0	17.66	17.71	17.68	19	5	
15	256QAM	1	37	17.56	17.61	17.65			
15	256QAM	1	74	17.59	17.67	17.67			
15	256QAM	36	0	17.62	17.65	17.67			
15	256QAM	36	20	17.65	17.72	17.65	19	5	
15	256QAM	36	39	17.52	17.66	17.61			
15	256QAM	75	0	17.61	17.67	17.67			
Channel									
				819	831.5	844	Time-up (min)	MPE (dB)	
10	QPSK	1	0	22.49	22.72	22.60	24	0	
10	QPSK	1	12	22.39	22.44	22.43			
10	QPSK	1	49	22.55	22.61	22.40			
10	QPSK	25	0	21.37	21.54	21.37			
10	QPSK	25	12	21.40	21.48	21.41			
10	QPSK	25	25	21.34	21.48	21.41	23	1	
10	QPSK	50	0	21.54	21.60	21.61			
10	16QAM	1	0	21.61	21.68	21.65			
10	16QAM	1	25	21.52	21.67	21.54	23	1	
10	16QAM	1	49	21.61	21.62	21.60			
10	16QAM	25	0	20.42	20.58	20.38			
10	16QAM	25	12	20.64	20.59	20.49	22	2	
10	16QAM	25	25	20.56	20.58	20.51			
10	16QAM	50	0	20.44	20.53	20.46			
10	64QAM	1	0	20.55	20.60	20.51	22	2	
10	64QAM	1	25	20.51	20.56	20.48			
10	64QAM	1	49	20.57	20.65	20.57			
10	64QAM	25	0	19.39	19.38	19.52			
10	64QAM	25	12	19.45	19.69	19.38			
10	64QAM	25	25	19.53	19.54	19.43	21	3	
10	64QAM	50	0	19.41	19.58	19.40			
10	256QAM	1	0	17.57	17.52	17.55	19	5	
10	256QAM	1	25	17.52	17.55	17.48			
10	256QAM	1	49	17.45	17.63	17.44			
10	256QAM	25	0	17.42	17.52	17.43			
10	256QAM	25	12	17.51	17.67	17.52	19	5	
10	256QAM	25	25	17.43	17.52	17.46			
10	256QAM	50	0	17.53	17.60	17.46			
Channel									
				817.5	831.5	847.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.47	22.54	22.57	24	0	
5	QPSK	1	12	22.36	22.47	22.48			
5	QPSK	1	24	22.55	22.50	22.47			
5	QPSK	12	0	21.37	21.61	21.48			
5	QPSK	12	7	21.40	21.47	21.45			
5	QPSK	12	13	21.28	21.45	21.36	23	1	
5	QPSK	25	0	21.48	21.61	21.44			
5	16QAM	1	0	21.63	21.68	21.58			
5	16QAM	1	12	21.52	21.60	21.52	23	1	
5	16QAM	1	24	21.47	21.56	21.48			
5	16QAM	12	0	20.37	20.53	20.41			
5	16QAM	12	7	20.65	20.67	20.53	22	2	
5	16QAM	12	13	20.56	20.58	20.51			
5	16QAM	25	0	20.46	20.53	20.42			
5	64QAM	1	0	20.59	20.60	20.56	22	2	
5	64QAM	1	12	20.44	20.54	20.46			
5	64QAM	1	24	20.57	20.65	20.65			
5	64QAM	12							



Band 41 Ant0											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41008	41416	41824		
20	QPSK	1	0	22.11	22.24	22.33	22.27	22.21	22.21		
20	QPSK	1	49	22.03	21.97	22.01	21.98	22.00	22.00	23	0
20	QPSK	1	99	22.00	22.00	22.10	22.06	22.06	22.06		
20	QPSK	50	0	21.08	21.11	21.22	21.10	21.22	21.22		
20	QPSK	50	24	21.01	20.97	21.01	20.96	21.02	21.02	22	1
20	QPSK	100	0	20.90	21.00	21.08	20.94	21.00	21.00		
20	QPSK	100	0	20.92	20.99	21.02	21.00	21.04	21.04		
20	HQAM	1	0	21.00	20.99	21.09	21.08	21.04	21.04	22	1
20	HQAM	1	49	20.92	20.96	20.94	20.90	20.91	20.91		
20	HQAM	1	99	20.82	20.78	20.85	20.77	20.80	20.80		
20	HQAM	50	0	19.96	19.97	20.08	19.98	19.91	19.91		
20	HQAM	50	24	20.92	20.90	21.02	20.90	20.94	20.94		
20	HQAM	50	50	19.83	19.89	19.95	19.89	19.80	19.80	21	2
20	HQAM	100	0	20.90	20.94	21.11	20.96	20.99	20.99		
20	HQAM	100	0	20.10	20.13	20.26	20.15	20.14	20.14		
20	HQAM	1	49	20.04	19.99	20.12	20.01	19.95	19.95	21	2
20	HQAM	1	99	20.11	20.06	20.20	20.15	20.10	20.10		
20	HQAM	50	24	18.83	18.86	18.91	18.78	18.81	18.81	20	3
20	HQAM	50	50	18.88	18.90	18.92	18.84	18.84	18.84		
20	HQAM	100	0	18.83	18.81	18.10	18.00	18.02	18.02		
20	ZSFGM	1	0	17.04	17.00	17.10	17.05	17.00	17.00		
20	ZSFGM	1	49	16.91	16.88	16.91	16.81	16.81	16.81	18	5
20	ZSFGM	1	99	17.06	16.99	17.11	16.99	16.88	16.88		
20	ZSFGM	50	0	16.88	16.87	17.00	16.86	16.86	16.86		
20	ZSFGM	50	24	16.80	16.78	16.84	16.81	16.78	16.78	18	5
20	ZSFGM	50	50	16.70	16.77	16.84	16.73	16.75	16.75		
20	ZSFGM	100	0	16.83	16.83	16.94	16.83	16.83	16.83		
Channel											
Frequency (MHz)				39725	40173	40600	41058	41515	41972		
15	QPSK	1	0	22.11	22.24	22.33	22.27	22.21	22.21		
15	QPSK	1	37	21.97	21.91	21.95	21.89	21.84	21.84	23	0
15	QPSK	1	74	21.96	21.94	22.04	22.00	22.09	22.09		
15	QPSK	1	111	21.00	21.09	21.19	21.04	21.16	21.16		
15	QPSK	36	20	20.95	20.91	20.95	20.89	20.96	20.96	22	1
15	QPSK	36	56	20.86	20.87	20.99	20.84	20.88	20.88		
15	QPSK	75	0	20.86	20.90	20.99	20.84	20.88	20.88		
15	HQAM	1	0	20.94	20.93	21.03	21.00	20.98	20.98	22	1
15	HQAM	1	37	20.85	20.86	20.96	20.84	20.88	20.88		
15	HQAM	1	74	20.78	20.73	20.83	20.71	20.74	20.74		
15	HQAM	36	0	19.89	19.81	20.00	19.80	19.85	19.85	21	2
15	HQAM	36	20	19.86	19.84	19.95	19.84	19.84	19.84		
15	HQAM	36	36	19.77	19.82	19.89	19.75	19.83	19.83		
15	HQAM	75	0	19.97	19.98	20.05	19.94	20.00	20.00		
15	HQAM	1	37	20.04	20.13	20.20	20.10	20.07	20.07	21	2
15	HQAM	1	74	19.98	19.93	20.05	19.95	19.89	19.89		
15	HQAM	1	111	20.05	19.99	20.15	20.06	20.04	20.04		
15	HQAM	36	20	18.89	18.87	18.91	18.80	18.86	18.86	20	3
15	HQAM	36	56	18.78	18.80	18.85	18.79	18.75	18.75		
15	HQAM	75	0	18.87	18.95	19.03	18.94	18.98	18.98		
15	ZSFGM	1	0	18.88	18.94	17.04	16.99	18.94	18.94	18	5
15	ZSFGM	1	37	18.89	18.95	18.98	18.88	18.95	18.95		
15	ZSFGM	1	74	18.90	18.92	17.05	16.93	18.92	18.92		
15	ZSFGM	36	0	18.93	18.89	18.94	18.84	18.90	18.90	18	5
15	ZSFGM	36	20	18.84	18.79	18.88	18.82	18.88	18.88		
15	ZSFGM	36	36	18.64	18.71	18.78	18.67	18.68	18.68		
15	ZSFGM	75	0	18.87	18.86	18.96	18.86	18.93	18.93		
Channel											
Frequency (MHz)				39701	40147	40600	41063	41520	41977		
10	QPSK	1	0	22.11	22.28	22.32	22.21	22.22	22.22		
10	QPSK	1	25	21.97	21.91	21.95	21.89	21.84	21.84	24	0
10	QPSK	1	49	21.95	21.94	22.04	22.00	22.09	22.09		
10	QPSK	1	74	21.00	21.09	21.19	21.04	21.16	21.16		
10	QPSK	25	12	20.95	20.90	20.95	20.89	20.96	20.96	22	1
10	QPSK	25	25	20.83	20.87	21.02	20.88	20.96	20.96		
10	QPSK	50	0	20.86	20.90	20.98	20.84	20.88	20.88		
10	HQAM	1	0	20.93	20.93	21.04	21.00	20.98	20.98	22	1
10	HQAM	1	25	20.76	20.80	20.88	20.84	20.75	20.75		
10	HQAM	1	49	20.79	20.73	20.83	20.71	20.74	20.74		
10	HQAM	25	0	19.90	19.81	20.00	19.80	19.85	19.85	21	2
10	HQAM	25	12	19.96	19.93	20.05	19.94	19.88	19.88		
10	HQAM	50	0	19.97	19.98	20.05	19.94	20.00	20.00		
10	HQAM	50	12	19.77	19.79	19.85	19.75	19.83	19.83		
10	HQAM	25	25	18.83	18.84	18.88	18.78	18.78	18.78	20	3
10	HQAM	50	0	18.87	18.85	19.04	18.85	18.96	18.96		
10	ZSFGM	1	0	16.98	16.94	17.05	16.99	16.95	16.95		
10	ZSFGM	1	25	16.95	16.92	16.99	16.85	16.85	16.85	18	5
10	ZSFGM	1	49	16.99	16.99	17.05	16.93	16.93	16.93		
10	ZSFGM	25	0	16.92	16.89	16.95	16.84	16.89	16.89		
10	ZSFGM	25	12	16.74	16.73	16.79	16.75	16.73	16.73	18	5
10	ZSFGM	25	25	16.64	16.70	16.78	16.67	16.65	16.65		
10	ZSFGM	50	0	16.88	16.86	16.88	16.86	16.87	16.87		
Channel											
Frequency (MHz)				39675	40123	40600	41058	41515	41972		
5	QPSK	1	0	22.11	22.28	22.29	22.21	22.21	22.21		
5	QPSK	1	15	21.98	21.91	21.95	21.89	21.84	21.84	23	0
5	QPSK	1	24	21.96	21.94	22.04	22.00	22.09	22.09		
5	QPSK	12	0	21.00	21.09	21.19	21.04	21.16	21.16		
5	QPSK	12	7	20.95	20.90	20.95	20.89	20.96	20.96	22	1
5	QPSK	12	13	20.84	20.88	21.02	20.88	20.96	20.96		
5	QPSK	25	0	20.86	20.89	20.99	20.84	20.88	20.88		
5	HQAM	1	0	20.95	20.93	21.03	21.00	20.98	20.98	22	1
5	HQAM	1	12	20.76	20.80	20.89	20.84	20.75	20.75		
5	HQAM	1	24	20.78	20.73	20.83	20.71	20.73	20.73		
5	HQAM	12	0	19.90	19.81	20.00	19.79	19.85	19.85	21	2
5	HQAM	12	7	19.95	19.94	20.06	19.94	19.99	19.99		
5	HQAM	12	13	19.77	19.83	19.89	19.74	19.83	19.83		
5	HQAM	25	0	19.97	19.98	20.05	19.93	20.00	20.00		
5	HQAM	1	10	20.04	20.13	20.21	20.10	20.08	20.08	21	2
5	HQAM	1	12	19.99	19.99	20.06	19.96	19.89	19.89		
5	HQAM	1	24	20.09	19.99	20.14	20.10	20.04	20.04		
5	HQAM	12	0	18.99	18.91	19.02	18.89	18.97	18.97	20	3
5	HQAM	12	7	18.97	18.95	19.05	18.90	18.95	18.95		
5	HQAM	12	13	18.82	18.83	18.85	18.78	18.78	18.78		
5	HQAM	25	0	18.87	18.96	19.04	18.84	18.96	18.96		
5	ZSFGM	1	0	16.98	16.94	17.04	16.99	16.94	16.94		
5	ZSFGM	1	12	16.88	16.82	16.88	16.85	16.84	16.84	18	5
5	ZSFGM	1	24	16.90	16.90	17.05	16.93	16.93	16.93		



CDMA2000 1X									
Channel	Base Average Power (dBm)			Tx Power Limit (dBm)	Frame Average Power (dBm)			Tx Power Limit (dBm)	
	198	199	201		198	199	201		
TX Channel	198	199	201	Limit	198	199	201	Limit	
Frequency (MHz)	895.2	895.4	895.6	(dBm)	895.2	895.4	895.6	(dBm)	
OPRS-1 Tx side	32.74	32.73	32.63	33.50	23.74	23.78	23.63	24.50	
OPRS-1 Rx side	24.40	24.71	25.00	23.80	23.87	23.71	23.58	24.50	
OPRS-2 Tx side	25.55	25.43	25.41	30.50	23.55	23.43	23.41	24.50	
OPRS-2 Rx side	26.10	26.52	26.15	29.00	23.84	23.77	23.89	24.74	
OPRS-4 Tx side	26.34	26.54	26.50	27.50	23.34	23.54	23.50	24.50	
EDGE-1 Tx side	25.75	25.91	25.84	27.00	18.75	18.91	18.84	18.50	
EDGE-1 Rx side	24.07	24.23	23.50	25.00	18.07	18.23	17.50	18.00	
EDGE-2 Tx side	22.84	22.57	22.74	24.00	18.58	18.71	18.48	19.74	
EDGE-2 Rx side	20.94	20.60	20.81	22.00	17.84	17.60	17.81	19.00	

  

CDMA2000 1X									
Channel	Base Average Power (dBm)			Tx Power Limit (dBm)	Frame Average Power (dBm)			Tx Power Limit (dBm)	
	189.2	189.0	189.8		189.2	189.0	189.8		
TX Channel	189.2 <td>189.0 <td>189.8 <td>Limit</td> <td>189.2 <td>189.0 <td>189.8 <td>Limit</td> <td></td> </td></td></td></td></td>	189.0 <td>189.8 <td>Limit</td> <td>189.2 <td>189.0 <td>189.8 <td>Limit</td> <td></td> </td></td></td></td>	189.8 <td>Limit</td> <td>189.2 <td>189.0 <td>189.8 <td>Limit</td> <td></td> </td></td></td>	Limit	189.2 <td>189.0 <td>189.8 <td>Limit</td> <td></td> </td></td>	189.0 <td>189.8 <td>Limit</td> <td></td> </td>	189.8 <td>Limit</td> <td></td>	Limit	
Frequency (MHz)	189.2 <td>189.0 <td>189.8 <td>(dBm)</td> <td>189.2 <td>189.0 <td>189.8 <td>(dBm)</td> <td></td> </td></td></td></td></td>	189.0 <td>189.8 <td>(dBm)</td> <td>189.2 <td>189.0 <td>189.8 <td>(dBm)</td> <td></td> </td></td></td></td>	189.8 <td>(dBm)</td> <td>189.2 <td>189.0 <td>189.8 <td>(dBm)</td> <td></td> </td></td></td>	(dBm)	189.2 <td>189.0 <td>189.8 <td>(dBm)</td> <td></td> </td></td>	189.0 <td>189.8 <td>(dBm)</td> <td></td> </td>	189.8 <td>(dBm)</td> <td></td>	(dBm)	
OPRS-1 Tx side	20.21	20.45	20.33	30.50	20.21	20.45	20.33	21.00	
OPRS-1 Rx side	20.68	20.96	20.82	27.00	19.88	19.96	19.82	21.00	
OPRS-2 Tx side	24.10	24.32	24.11	26.50	19.84	20.09	19.85	21.24	
OPRS-2 Rx side	21.67	21.57	21.77	23.00	18.87	18.91	18.77	20.50	
EDGE-1 Tx side	19.85	19.96	19.93	20.00	14.85	14.96	14.93	16.00	
EDGE-1 Rx side	22.83	22.27	22.88	23.50	18.83	18.27	18.88	17.50	
EDGE-2 Tx side	18.46	18.70	18.58	20.00	15.46	15.70	15.58	17.00	

  

WCDMA 3.1											
Channel	Base Average Power (dBm)			Tx Power Limit (dBm)	WCDMA IV Adj			WCDMA V Adj			
	1892.4	1890	1897.6		1892.4	1890	1897.6	1892.4	1890	1897.6	
TX Channel	1892.4 <td>1890 <td>1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td></td></td></td>	1890 <td>1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td></td></td>	1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td></td>	Limit	1892.4 <td>1890 <td>1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td>	1890 <td>1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td>	1897.6 <td>Limit</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td>	Limit	1892.4 <td>1890 <td>1897.6 </td></td>	1890 <td>1897.6 </td>	1897.6
Frequency (MHz)	1892.4 <td>1890 <td>1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td></td></td></td>	1890 <td>1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td></td></td>	1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td></td>	(dBm)	1892.4 <td>1890 <td>1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td></td>	1890 <td>1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td></td>	1897.6 <td>(dBm)</td> <td>1892.4 <td>1890 <td>1897.6 </td></td></td>	(dBm)	1892.4 <td>1890 <td>1897.6 </td></td>	1890 <td>1897.6 </td>	1897.6
ISPP-Frame	22.50	22.74	22.84	24.00	22.76	23.10	22.80	24.00	23.78	23.90	23.87
ISPP-Frame	22.64	22.61	22.75	24.00	22.95	23.10	23.00	24.00	23.83	23.91	23.90
ISPP-Frame	22.48	22.62	22.38	23.00	22.57	22.73	22.48	23.00	22.83	22.97	22.76
ISPP-Frame	22.48	22.61	22.45	23.00	22.50	22.77	22.58	23.00	22.82	22.98	22.83
ISPP-Frame	22.01	22.08	21.85	22.50	22.11	22.15	22.03	22.50	22.37	22.48	22.18
ISPP-Frame	22.04	22.08	21.84	22.50	22.12	22.14	22.00	22.50	22.34	22.48	22.18
ISPP-Frame	22.20	22.67	22.49	23.00	22.40	22.77	22.61	23.00	23.10	22.95	22.80
ISPP-Frame	22.50	22.70	22.52	23.00	22.62	22.78	22.60	23.00	22.76	22.84	22.80
ISPP-Frame	21.87	21.85	21.76	22.50	21.97	21.95	21.87	22.50	21.81	22.46	21.78
ISPP-Frame	21.92	21.83	21.89	22.50	22.04	21.95	21.99	22.50	22.27	22.22	22.07
ISPP-Frame	22.48	22.51	22.53	24.00	22.84	22.88	22.81	24.00	22.96	22.76	22.76
ISPP-Frame	20.49	20.47	20.44	22.00	20.59	20.51	20.59	20.99	20.89	20.55	21.00
ISPP-Frame	21.42	21.43	21.44	23.00	21.52	21.53	21.52	23.00	21.78	21.81	21.48
ISPP-Frame	20.44	20.48	20.47	22.00	20.52	20.58	20.56	22.00	20.80	20.72	20.60
ISPP-Frame	22.36	22.65	22.54	24.00	22.61	22.65	22.63	24.00	22.90	22.88	22.70





Band 12 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
704 707.5 711										
10	QPSK	1	0	22.58	22.70	22.82				
10	QPSK	1	25	22.58	22.70	22.82			24	0
10	QPSK	1	49	22.56	22.70	22.87				
10	QPSK	25	0	21.68	21.71	21.64				
10	QPSK	25	12	21.54	21.68	21.58				
10	QPSK	25	25	21.62	21.66	21.62			23	1
10	QPSK	50	0	21.60	21.67	21.63				
10	16QAM	1	0	21.70	21.75	21.64				
10	16QAM	1	25	21.54	21.63	21.51			23	1
10	16QAM	1	49	21.57	21.60	21.63				
10	16QAM	25	0	20.83	20.70	20.86				
10	16QAM	25	12	20.83	20.74	20.83			22	2
10	16QAM	25	25	20.86	20.78	20.72				
10	16QAM	50	0	20.84	20.73	20.89				
10	64QAM	1	0	20.80	20.89	20.83				
10	64QAM	1	25	20.87	20.77	20.84			22	2
10	64QAM	1	49	20.83	20.86	20.84				
10	64QAM	25	0	19.82	19.85	19.84				
10	64QAM	25	12	19.82	19.71	19.89			21	3
10	64QAM	25	25	19.81	19.85	19.85				
10	64QAM	50	0	19.82	19.70	19.82				
10	256QAM	1	0	17.87	17.71	17.88				
10	256QAM	1	25	17.81	17.65	17.86			19	5
10	256QAM	1	49	17.84	17.66	17.82				
10	256QAM	25	0	17.86	17.69	17.84				
10	256QAM	25	12	17.89	17.74	17.82			19	5
10	256QAM	25	25	17.86	17.82	17.86				
10	256QAM	50	0	17.83	17.69	17.82				
Channel										
705.5 707.5 711.5										
5	QPSK	1	0	22.47	22.70	22.49				
5	QPSK	1	12	22.40	22.68	22.41			24	0
5	QPSK	1	24	22.42	22.56	22.44				
5	QPSK	12	0	21.80	21.85	21.80				
5	QPSK	12	7	21.40	21.62	21.62				
5	QPSK	12	13	21.53	21.56	21.49			23	1
5	QPSK	25	0	21.62	21.61	21.61				
5	16QAM	1	0	21.58	21.64	21.57				
5	16QAM	1	12	21.46	21.51	21.39			23	1
5	16QAM	1	24	21.44	21.62	21.59				
5	16QAM	12	0	20.48	20.66	20.52				
5	16QAM	12	7	20.55	20.68	20.49			22	2
5	16QAM	12	13	20.56	20.69	20.64				
5	16QAM	25	0	20.59	20.61	20.59				
5	64QAM	1	0	20.74	20.81	20.78				
5	64QAM	1	12	20.81	20.82	20.81			22	2
5	64QAM	1	24	20.52	20.63	20.60				
5	64QAM	12	0	19.45	19.51	19.50				
5	64QAM	12	7	19.46	19.46	19.46			21	3
5	64QAM	12	13	19.46	19.51	19.41				
5	64QAM	25	0	19.87	19.80	19.49				
5	256QAM	1	0	17.86	17.71	17.86				
5	256QAM	1	12	17.38	17.42	17.47			19	5
5	256QAM	1	24	17.45	17.58	17.56				
5	256QAM	12	0	17.86	17.88	17.49				
5	256QAM	12	7	17.48	17.48	17.48			19	5
5	256QAM	12	13	17.42	17.53	17.49				
5	256QAM	25	0	17.54	17.61	17.60				
Channel										
2305 2305 2305										
3	QPSK	1	0	20.11	20.11	20.11				
3	QPSK	1	8	22.38	22.51	22.46			24	0
3	QPSK	1	14	22.44	22.63	22.52				
3	QPSK	8	0	21.60	21.63	21.60				
3	QPSK	8	4	21.43	21.59	21.49				
3	QPSK	8	7	21.56	21.62	21.50			23	1
3	QPSK	15	0	21.54	21.61	21.51				
3	16QAM	1	0	21.62	21.67	21.54				
3	16QAM	1	8	21.44	21.60	21.38			23	1
3	16QAM	1	14	21.46	21.64	21.60				
3	16QAM	8	0	20.55	20.62	20.60				
3	16QAM	8	4	20.55	20.65	20.58			22	2
3	16QAM	8	7	20.87	20.66	20.82				
3	64QAM	1	0	20.51	20.67	20.59				
3	64QAM	1	8	20.76	20.80	20.77			22	2
3	64QAM	1	14	20.56	20.70	20.54				
3	64QAM	8	0	19.41	19.58	19.47				
3	64QAM	8	4	19.40	19.67	19.51			21	3
3	64QAM	8	7	19.45	19.52	19.45				
3	64QAM	15	0	19.54	19.60	19.50				
3	256QAM	1	0	17.53	17.60	17.55				
3	256QAM	1	8	17.44	17.50	17.50			19	5
3	256QAM	1	14	17.41	17.62	17.58				
3	256QAM	8	0	17.51	17.56	17.52				
3	256QAM	8	4	17.54	17.63	17.47			19	5
3	256QAM	8	7	17.44	17.54	17.47				
3	256QAM	15	0	17.80	17.69	17.67				
Channel										
2305 2305 2305										
1.4	QPSK	1	0	22.52	22.61	22.65				
1.4	QPSK	1	3	22.41	22.53	22.53			24	0
1.4	QPSK	1	5	22.48	22.55	22.59				
1.4	QPSK	3	0	22.64	22.63	22.63				
1.4	QPSK	3	1	22.44	22.59	22.43				
1.4	QPSK	3	3	22.49	22.63	22.59			23	1
1.4	QPSK	8	0	21.87	21.84	21.85				
1.4	16QAM	1	0	21.61	21.63	21.54				
1.4	16QAM	1	3	21.45	21.54	21.39			23	1
1.4	16QAM	1	5	21.47	21.63	21.48				
1.4	16QAM	3	0	21.48	21.55	21.46				
1.4	16QAM	3	1	21.50	21.71	21.54				
1.4	16QAM	3	3	21.56	21.73	21.67				
1.4	64QAM	1	0	20.53	20.65	20.40			22	2
1.4	64QAM	1	3	20.74	20.80	20.74				
1.4	64QAM	1	5	20.94	20.64	20.53				
1.4	64QAM	1	8	20.49	20.60	20.55			22	2
1.4	64QAM	3	0	20.43	20.50	20.40				
1.4	64QAM	3	1	20.52	20.60	20.49				
1.4	64QAM	3	3	20.41	20.47	20.44			21	3
1.4	64QAM	6	0	19.53	19.59	19.50				
1.4	256QAM	1	0	17.46	17.50	17.56				
1.4	256QAM	1	3	17.36	17.50	17.49			19	5
1.4	256QAM	1	5	17.47	17.51	17.57				
1.4	256QAM	3	0	17.50	17.56	17.57				
1.4	256QAM	3	1	17.53	17.70	17.55				
1.4	256QAM	3	3	17.51	17.47	17.45			19	5
1.4	256QAM	6	0	17.53	17.51	17.54				

Band 13 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
782										
10	QPSK	1	0	22.52	22.52	22.52				
10	QPSK	1	25	22.43	22.43	22.43			24	0
10	QPSK	1	49	22.37	22.37	22.37				
10	QPSK	25	0	21.49	21.49	21.49				
10	QPSK	25	12	21.44	21.44	21.44				
10	QPSK	25	25	21.41	21.41	21.41			23	1
10	QPSK	50	0	21.46	21.46	21.46				
10	16QAM	1	0	21.70	21.70	21.70				
10	16QAM	1	25	21.54	21.54	21.54			23	1
10	16QAM	1	49	21.57	21.57	21.57				
10	16QAM	25	0	20.52	20.52	20.52				
10	16QAM	25	12	20.43	20.43	20.43			22	2
10	16QAM	25	25	20.49	20.49	20.49				
10	16QAM	50	0	20.42	20.42	20.42				
10	64QAM	1	0							



Band 25 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Peak Ch./Freq.	Time-up (min)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.03	21.18	21.15				
20	QPSK	1	49	21.03	21.03	21.03	22	0		
20	QPSK	1	99	21.01	21.07	20.96				
20	QPSK	50	0	20.07	20.13	20.05				
20	QPSK	50	24	20.04	20.10	20.03	21	1		
20	QPSK	50	50	20.03	20.12	20.06				
20	QPSK	100	0	18.01	18.02	18.02				
20	QPSK	100	9	20.03	20.10	20.07	21	1		
20	QPSK	1	49	19.95	20.05	19.98				
20	QPSK	1	99	19.98	20.05	19.98				
20	QPSK	50	0	18.04	18.04	18.04	20	2		
20	QPSK	50	24	18.79	18.82	18.84				
20	QPSK	50	50	18.85	18.96	18.86				
20	QPSK	100	0	16.92	16.92	16.92	19	3		
20	QPSK	1	0	19.14	19.18	19.12				
20	QPSK	1	49	18.94	18.94	18.93	20	2		
20	QPSK	1	99	18.97	18.96	18.95				
20	QPSK	50	24	17.80	17.88	17.83				
20	QPSK	50	50	17.83	17.88	17.77	19	3		
20	QPSK	100	0	17.01	17.02	17.01				
20	QPSK	100	9	19.95	19.97	19.94	17	5		
20	QPSK	1	49	15.95	16.03	16.00				
20	QPSK	1	99	15.81	15.96	15.84				
20	QPSK	50	0	15.86	15.87	15.86				
20	QPSK	50	24	15.82	15.87	15.78	17	5		
20	QPSK	50	50	15.77	15.89	15.84				
20	QPSK	100	0	15.00	15.00	15.00				
Channel										
Frequency (MHz)										
19	QPSK	1	0	20.91	21.04	21.09				
19	QPSK	1	39	20.76	20.87	20.81	22	0		
19	QPSK	1	74	20.96	21.04	20.86				
19	QPSK	36	0	19.99	20.00	19.92				
19	QPSK	36	29	19.95	19.99	19.90	21	1		
19	QPSK	36	39	19.94	20.02	19.91				
19	QPSK	75	0	19.84	19.97	19.78				
19	QPSK	75	9	19.88	20.06	19.85	21	1		
19	QPSK	1	37	19.80	19.98	19.85				
19	QPSK	1	74	19.86	19.95	19.85	20	2		
19	QPSK	36	0	18.90	19.01	18.91				
19	QPSK	36	29	18.87	18.82	18.72	20	2		
19	QPSK	36	39	18.86	18.92	18.80				
19	QPSK	75	0	18.80	18.99	18.92				
19	QPSK	1	9	19.09	19.10	19.08	20	2		
19	QPSK	1	39	18.87	18.87	18.87				
19	QPSK	1	74	18.91	19.05	19.05				
19	QPSK	36	0	17.78	17.84	17.80				
19	QPSK	36	29	17.78	17.84	17.78	19	3		
19	QPSK	36	39	17.75	17.74	17.63				
19	QPSK	75	0	17.80	17.88	17.78				
19	QPSK	1	37	15.85	15.95	15.87	17	5		
19	QPSK	1	74	15.87	15.84	15.69				
19	QPSK	36	0	15.85	15.85	15.85				
19	QPSK	36	29	15.71	15.83	15.84	17	5		
19	QPSK	36	39	15.63	15.85	15.79				
19	QPSK	75	0	15.19	15.19	15.19				
Channel										
Frequency (MHz)										
18	QPSK	1	0	20.89	20.98	20.94				
18	QPSK	1	25	20.76	20.86	20.87	22	0		
18	QPSK	1	49	20.93	20.98	20.84				
18	QPSK	12	0	19.97	20.04	19.96				
18	QPSK	12	12	19.90	19.98	19.95	21	1		
18	QPSK	25	0	19.92	20.06	19.97				
18	QPSK	25	9	19.97	20.00	19.97	21	1		
18	QPSK	1	0	19.91	19.98	20.00				
18	QPSK	1	24	19.88	19.91	19.91	21	1		
18	QPSK	1	49	19.86	19.91	19.86				
18	QPSK	25	0	18.86	18.92	18.89				
18	QPSK	25	12	18.76	18.77	18.75	20	2		
18	QPSK	36	0	18.70	18.86	18.78				
18	QPSK	36	29	18.70	18.86	18.78				
18	QPSK	50	0	18.84	18.93	18.89				
18	QPSK	1	0	19.08	19.05	19.08	20	2		
18	QPSK	1	39	18.87	18.87	18.87				
18	QPSK	1	49	18.92	19.01	19.02				
18	QPSK	25	0	17.71	17.92	17.75	19	3		
18	QPSK	25	12	17.72	17.84	17.73				
18	QPSK	25	25	17.70	17.85	17.71				
18	QPSK	50	0	17.87	17.93	17.82				
18	QPSK	50	9	18.91	18.90	18.87	17	5		
18	QPSK	25	12	15.75	15.84	15.73				
18	QPSK	25	25	15.66	15.81	15.73				
18	QPSK	50	0	15.92	15.92	15.92				
Channel										
Frequency (MHz)										
17	QPSK	1	0	20.86	20.94	20.95				
17	QPSK	1	12	20.82	20.91	20.83	22	0		
17	QPSK	1	24	20.91	21.03	20.91				
17	QPSK	12	0	20.80	20.84	20.86				
17	QPSK	12	7	20.95	20.95	20.90	21	1		
17	QPSK	12	13	19.97	20.00	19.99				
17	QPSK	25	0	19.85	19.92	19.83				
17	QPSK	1	0	19.88	20.07	19.93	21	1		
17	QPSK	1	12	19.85	19.98	19.90				
17	QPSK	1	24	19.84	19.96	19.82				
17	QPSK	12	0	18.83	18.93	18.92				
17	QPSK	12	7	18.69	18.78	18.78	20	2		
17	QPSK	12	14	18.72	18.81	18.80				
17	QPSK	25	0	18.82	18.97	18.81				
17	QPSK	1	0	18.02	18.11	18.02	20	2		
17	QPSK	1	12	18.87	18.99	18.98				
17	QPSK	1	24	18.02	18.11	18.05				
17	QPSK	12	0	17.75	17.84	17.73	19	3		
17	QPSK	12	13	17.74	17.72	17.72				
17	QPSK	25	0	17.86	17.94	17.75				
17	QPSK	25	9	19.93	19.97	19.82				
17	QPSK	1	12	15.81	15.91	15.90	17	5		
17	QPSK	1	24	15.71	15.84	15.76				
17	QPSK	12	0	15.76	15.91	15.84				
17	QPSK	12	7	15.78	15.74	15.69	17	5		
17	QPSK	25	0	15.63	15.86	15.81				
17	QPSK	25	9	15.90	16.01	15.96				
Channel										
Frequency (MHz)										
16	QPSK	1	0	20.94	21.12	21.15				
16	QPSK	1	8	20.77	20.89	20.81	22	0		
16	QPSK	1	14	20.97	20.99	20.86				
16	QPSK	3	0	20.01	20.04	20.06				
16	QPSK	3	4	19.95	20.06	19.94	21	1		
16	QPSK	3	7	19.98	20.04	19.93				
16	QPSK	15	0	19.92	19.96	19.95				
16	QPSK	1	0	19.07	20.04	19.98	21	1		
16	QPSK	1	9	19.91	19.93	19.90				
16	QPSK	1	14	19.83	19.97	19.87				
16	QPSK	3	0	18.82	18.91	18.86	20	2		
16	QPSK	3	4	18.72	18.83	18.79				
16	QPSK	3	7	18.90	18.91	18.77				
16	QPSK	15	0	18.88	18.97	18.90				
16	QPSK	1	0	19.01	19.10	18.96	20	2		
16	QPSK	1	4	18.88	18.96	18.88				
16	QPSK	1	14	18.93	19.02	18.91				
16	QPSK	3	0	17.78	17.87	17.83				
16	QPSK	3	4	17.76	17.84	17.72	19	3		
16	QPSK	3	7	17.70	17.79	17.73				
16	QPSK	15	0	17.76	17.86	17.80				





Band 38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)	256	3750	38150	256	3750	38150		
20	QPSK	1	0	21.51	21.60	21.58		
20	QPSK	1	49	21.45	21.57	21.49		23
20	QPSK	1	99	21.39	21.49	21.56		
20	QPSK	50	0	20.53	20.55	20.51		
20	QPSK	50	24	20.54	20.61	20.51		22
20	QPSK	100	0	20.48	20.61	20.47		
20	QPSK	100	49	20.49	20.63	20.50		
20	HQAM	1	0	19.52	19.56	19.49		22
20	HQAM	1	49	19.53	19.55	19.49		
20	HQAM	1	99	19.47	19.50	19.48		
20	HQAM	50	0	19.52	19.56	19.51		
20	HQAM	50	24	19.53	19.56	19.49		
20	HQAM	50	50	19.48	19.54	19.48		21
20	HQAM	100	0	19.47	19.56	19.49		
20	HQAM	100	49	19.49	19.51	19.47		
20	HQAM	100	99	19.57	19.66	19.56		21
20	HQAM	1	99	19.49	19.56	19.50		
20	HQAM	50	24	18.53	18.53	18.52		20
20	HQAM	50	50	18.38	18.52	18.42		
20	HQAM	100	0	18.59	18.60	18.48		
20	HQAM	100	49	18.51	18.56	18.47		
20	HQAM	100	99	18.37	18.46	18.39		18
20	ZSSBAM	1	0	18.46	18.52	18.49		
20	ZSSBAM	1	49	18.46	18.52	18.39		
20	ZSSBAM	1	99	18.46	18.52	18.39		
20	ZSSBAM	50	0	18.46	18.52	18.49		
20	ZSSBAM	50	24	18.54	18.44	18.40		18
20	ZSSBAM	50	50	18.60	18.63	18.61		
20	ZSSBAM	100	0	18.52	18.52	18.52		
Channel								
Frequency (MHz)	256	3750	38150	256	3750	38150	Tune-up Int. (dBm)	MPR (dB)
15	QPSK	1	0	21.57	21.60	21.54		
15	QPSK	1	47	21.36	21.43	21.45		23
15	QPSK	1	74	21.25	21.37	21.33		
15	QPSK	36	0	20.49	20.52	20.42		
15	QPSK	36	20	20.47	20.57	20.42		22
15	QPSK	75	0	20.34	20.39	20.36		
15	HQAM	1	0	20.48	20.59	20.38		
15	HQAM	1	47	20.35	20.42	20.38		22
15	HQAM	1	74	20.39	20.54	20.40		
15	HQAM	36	0	19.48	19.45	19.42		
15	HQAM	36	20	19.20	19.43	19.36		21
15	HQAM	36	59	19.43	19.48	19.42		
15	HQAM	75	0	19.44	19.60	19.35		
15	HQAM	75	0	19.26	19.47	19.35		
15	HQAM	1	47	19.48	19.52	19.44		21
15	HQAM	1	74	19.32	19.43	19.29		
15	HQAM	36	0	18.54	18.47	18.42		
15	HQAM	36	20	18.48	18.51	18.38		20
15	HQAM	36	59	18.46	18.46	18.46		
15	HQAM	75	0	18.35	18.52	18.41		
15	ZSSBAM	1	0	18.47	18.51	18.40		18
15	ZSSBAM	1	47	18.29	18.33	18.29		
15	ZSSBAM	1	74	18.40	18.40	18.30		
15	ZSSBAM	36	0	18.52	18.46	18.38		
15	ZSSBAM	36	20	18.20	18.20	18.20		18
15	ZSSBAM	36	59	18.54	18.54	18.47		
15	ZSSBAM	75	0	18.43	18.57	18.44		
Channel								
Frequency (MHz)	256	3750	38150	256	3750	38150	Tune-up Int. (dBm)	MPR (dB)
10	QPSK	1	0	21.42	21.55	21.46		
10	QPSK	1	25	21.37	21.49	21.37		23
10	QPSK	1	49	21.30	21.36	21.28		
10	QPSK	12	0	20.30	20.36	20.41		
10	QPSK	25	12	20.48	20.51	20.38		22
10	QPSK	25	25	20.39	20.53	20.40		
10	QPSK	50	0	20.42	20.51	20.39		
10	QPSK	50	0	20.47	20.54	20.42		
10	HQAM	1	25	20.33	20.47	20.46		22
10	HQAM	1	49	20.34	20.47	20.33		
10	HQAM	25	0	19.37	19.48	19.46		
10	HQAM	25	12	19.39	19.41	19.31		21
10	HQAM	25	26	19.39	19.43	19.31		
10	HQAM	50	0	19.54	19.50	19.34		
10	HQAM	1	0	19.44	19.56	19.44		
10	HQAM	1	25	19.44	19.53	19.41		21
10	HQAM	1	49	19.33	19.46	19.31		
10	HQAM	25	0	18.35	18.53	18.48		
10	HQAM	25	12	18.46	18.52	18.40		20
10	HQAM	25	25	18.33	18.47	18.32		
10	HQAM	50	0	18.62	18.52	18.44		
10	ZSSBAM	1	0	18.46	18.40	18.34		
10	ZSSBAM	1	25	18.36	18.40	18.19		18
10	ZSSBAM	1	49	18.20	18.26	18.20		
10	ZSSBAM	25	0	18.52	18.50	18.40		
10	ZSSBAM	25	12	18.29	18.29	18.20		18
10	ZSSBAM	25	25	18.50	18.45	18.30		
10	ZSSBAM	50	0	18.41	18.56	18.44		
Channel								
Frequency (MHz)	256	3750	38150	256	3750	38150	Tune-up Int. (dBm)	MPR (dB)
5	QPSK	1	0	21.42	21.55	21.46		
5	QPSK	1	24	21.31	21.44	21.25		23
5	QPSK	12	0	20.40	20.50	20.38		
5	QPSK	12	7	20.42	20.54	20.38		
5	QPSK	12	13	20.47	20.42	20.46		22
5	QPSK	25	0	20.44	20.56	20.36		
5	HQAM	1	0	20.49	20.55	20.44		
5	HQAM	1	12	20.29	20.40	20.38		22
5	HQAM	1	24	20.23	20.52	20.39		
5	HQAM	12	0	19.47	19.52	19.36		
5	HQAM	12	7	19.23	19.38	19.32		21
5	HQAM	12	31	19.41	19.43	19.44		
5	HQAM	25	0	19.82	19.54	19.38		
5	HQAM	1	0	19.44	19.46	19.39		
5	HQAM	1	12	19.47	19.50	19.33		21
5	HQAM	1	24	19.29	19.50	19.30		
5	HQAM	12	0	18.44	18.46	18.40		
5	HQAM	12	7	18.54	18.51	18.40		20
5	HQAM	12	13	18.26	18.49	18.37		
5	HQAM	25	0	18.47	18.48	18.42		
5	ZSSBAM	1	0	18.39	18.40	18.38		
5	ZSSBAM	1	12	18.24	18.32	18.28		18
5	ZSSBAM	1	24	18.28	18.43	18.28		
5	ZSSBAM	12	0	18.25	18.26	18.27		18
5	ZSSBAM	12	31	18.54	18.54	18.39		
5	ZSSBAM	25	0	18.38	18.50	18.46		

Band 38 HPUE Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)	256	3750	38150	256	3750	38150		
20	QPSK	1	0	23.47	23.39	23.41		
20	QPSK	1	49	23.38	23.49	23.46		24.5
20	QPSK	1	99	23.35	23.45	23.37		
20	QPSK	50	0	23.37	23.64	23.51		
20	QPSK	50	24	23.46	23.59	23.56		24.5
20	QPSK	100	0	23.46	23.55	23.48		
20	QPSK	100	49	23.52	23.62	23.59		
20	HQAM	1	0	23.56	23.61	23.57		24.5
20	HQAM	1	49	23.50	23.61	23.48		
20	HQAM	1	99	23.58	23.57	23.56		
20	HQAM	50	0	23.53	23.58	23.44		
20	HQAM	50	24	23.49	23.51	23.39		
20	HQAM	50	50	22.60	22.67	22.59		24
20	HQAM	100	0	22.57	22.65	22.52		
20	HQAM	100	49	22.70	22.82	22.73		
20	HQAM	100	99	22.89	22.74	22.59		24
20	HQAM	1	99	22.63	22.68	22.65		
20	HQAM	50	0	22.50	22.58	22.53		
20	HQAM	50	24	22.49	22.62	22.53		
20	HQAM	50	50	22.50	22.54	22.41		23
20	HQAM	100	0	21.55	21.60	21.53		
20	ZSSBAM	1	0	18.62	18.71	18.60		
20	ZSSBAM	1	49	18.32	18.62	18.52		21
20	ZSSBAM	1	99	18.63	18.67	18.56		
20	ZSSBAM	50	0	18.53	18.66	18.60		
20	ZSSBAM	50	24	18.49	18.55	18.45		21
20	ZSSBAM	50	50	18.61	18.64	18.54		
20	ZSSBAM	100	0	18.48	18.48	18.48		
Channel								
Frequency (MHz)	256	3750	38150	256	3750	38150	Tune-up Int. (dBm)	MPR (dB)
15	QPSK	1	0	23.35	23.39	23.23		
15	QPSK	1	37	23.25	23.39	23.38		24.5
15	QPSK	1	74	23.30	23.36	23.30		
15	QPSK	36	0	23.44	23.49	23.47		
15	QPSK	36	20	23.35	23.49	23.48		24.5
15	QPSK	75	0	23.49	23.52	23.48		
15	HQAM	1	0	23.61	23.60	23.62		24.5
15	HQAM	1	37	23.38	23.55	23.42		
15	HQAM	1	74	23.43	23.58	23.52		
15	HQAM	36	0	22.40	22.47	22.38		
15	HQAM	36	20	22.42	22.45	22.28		24
15	HQAM	36	59	22.48	22.54	22.53		
15	HQAM	75	0	22.45	22.51	22.43		
15	HQAM	75	0	22.62	22.78	22.66		
15	HQAM	1	37	22.84	22.88	22.51		24
15	HQAM	1	74	22.98	22.94	22.56		
15	HQAM	36	0	22.43	22.54	22.39		
15	HQAM	36	20	22.37	22.56	22.43		23
15	HQAM	36	59	22.40	22.48	22.46		
15	HQAM	75	0	21.41	21.55	21.41		
15	ZSSBAM	1	0	18.5				



Band 41 Ant1													
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (min)	MPR (dB)		
Channel													
Frequency (MHz)				39790	40198	40600	41006	41400	41800				
20	QPSK	1	0	21.44	21.64	21.93	21.54	21.53	21.53	23	0		
20	QPSK	1	40	21.39	21.48	21.58	21.49	21.49	21.47				
20	QPSK	1	80	21.51	21.51	21.61	21.58	21.58	21.53			24.5	0
20	QPSK	50	0	20.51	20.64	20.58	20.50	20.48	20.48				
20	QPSK	50	24	20.36	20.45	20.37	20.45	20.38	20.38	22	1		
20	QPSK	50	48	20.39	20.45	20.54	20.52	20.52	20.47				
20	QPSK	100	0	20.41	20.53	20.50	20.52	20.44	20.44				
20	HQAM	1	0	20.46	20.56	20.61	20.46	20.49	20.49	22	1		
20	HQAM	1	40	20.38	20.37	20.51	20.52	20.52	20.47			24.5	0
20	HQAM	1	80	20.38	20.48	20.58	20.49	20.43	20.43				
20	HQAM	50	24	19.33	19.42	19.39	19.46	19.44	19.44				
20	HQAM	50	48	19.22	19.40	19.46	19.34	19.24	19.24				
20	HQAM	50	50	19.38	19.44	19.52	19.48	19.40	19.40	21	2		
20	HQAM	100	0	19.44	19.44	19.55	19.51	19.44	19.44				
20	HQAM	1	0	19.55	19.54	19.74	19.57	19.55	19.55				
20	HQAM	1	40	19.47	19.52	19.63	19.49	19.43	19.43	21	2		
20	HQAM	1	80	19.52	19.52	19.60	19.57	19.52	19.52				
20	HQAM	50	0	18.35	18.48	18.52	18.39	18.33	18.33				
20	HQAM	50	24	18.20	18.35	18.40	18.28	18.24	18.24	20	3		
20	HQAM	50	50	18.24	18.34	18.48	18.37	18.26	18.26				
20	HQAM	100	0	18.39	18.50	18.61	18.63	18.47	18.47				
20	ZSFGM	1	0	18.46	18.54	18.67	18.58	18.51	18.51				
20	ZSFGM	1	40	18.52	18.56	18.71	18.59	18.56	18.56	18	5		
20	ZSFGM	1	80	18.48	18.48	18.52	18.48	18.47	18.47				
20	ZSFGM	50	0	18.32	18.32	18.44	18.47	18.38	18.38				
20	ZSFGM	50	24	18.36	18.45	18.54	18.48	18.40	18.40				
20	ZSFGM	50	50	18.49	18.57	18.66	18.61	18.54	18.54	18	5		
20	ZSFGM	100	0	18.48	18.67	18.78	18.68	18.59	18.59				
Channel													
Frequency (MHz)				39725	40173	40600	41068	41515	41962				
15	QPSK	1	0	23.03	23.19	23.03	23.14	23.03	23.03	23	0		
15	QPSK	1	37	23.38	23.34	23.46	23.44	23.38	23.29			25	0
15	QPSK	1	74	23.40	23.41	23.60	23.48	23.41	23.31				
15	QPSK	36	0	20.44	20.60	20.60	20.50	20.44	20.44				
15	QPSK	36	20	20.27	20.39	20.52	20.35	20.26	20.26	22	1		
15	QPSK	36	40	20.27	20.44	20.48	20.46	20.34	20.34				
15	HQAM	1	0	20.38	20.44	20.56	20.33	20.44	20.44				
15	HQAM	1	40	20.38	20.45	20.45	20.35	20.32	20.32	22	1		
15	HQAM	1	74	20.27	20.38	20.45	20.37	20.37	20.37				
15	HQAM	36	0	19.20	19.39	19.48	19.37	19.41	19.41				
15	HQAM	36	20	18.48	18.31	18.31	18.25	18.25	18.25	21	2		
15	HQAM	36	36	18.33	18.39	18.47	18.37	18.31	18.31				
15	HQAM	75	0	19.20	19.37	19.45	19.47	19.20	19.20				
15	HQAM	1	0	19.45	19.53	19.71	19.61	19.49	19.49	1			
15	HQAM	1	37	19.38	19.43	19.58	19.44	19.37	19.37	21	2		
15	HQAM	1	74	19.46	19.54	19.59	19.52	19.36	19.36				
15	HQAM	36	0	18.30	18.30	18.42	18.30	18.10	18.10	20	3		
15	HQAM	36	20	18.05	18.31	18.38	18.29	18.19	18.19				
15	HQAM	36	36	18.08	18.28	18.34	18.24	18.20	18.20				
15	HQAM	75	0	18.24	18.44	18.48	18.45	18.43	18.43				
15	ZSFGM	1	0	18.40	18.42	18.59	18.49	18.44	18.44	18	5		
15	ZSFGM	1	40	18.41	18.46	18.54	18.45	18.40	18.40				
15	ZSFGM	1	74	18.34	18.42	18.58	18.34	18.42	18.42				
15	ZSFGM	36	0	18.20	18.36	18.53	18.40	18.22	18.22				
15	ZSFGM	36	20	18.02	18.31	18.44	18.41	18.20	18.20	18	5		
15	ZSFGM	36	36	18.34	18.49	18.55	18.52	18.48	18.48				
15	ZSFGM	75	0	18.36	18.58	18.58	18.50	18.50	18.50				
Channel													
Frequency (MHz)				39701	40147	40600	41100	41540	41980				
10	QPSK	1	0	21.40	21.68	21.67	21.47	21.44	21.44	23.00	0		
10	QPSK	1	25	21.32	21.43	21.47	21.44	21.41	21.41				
10	QPSK	1	49	21.47	21.46	21.50	21.49	21.44	21.44				
10	QPSK	12	0	20.44	20.50	20.58	20.45	20.44	20.44				
10	QPSK	25	12	20.22	20.38	20.42	20.30	20.26	20.26	22	1		
10	QPSK	25	25	20.23	20.26	20.45	20.39	20.19	20.19				
10	QPSK	50	0	20.20	20.42	20.48	20.42	20.42	20.42				
10	HQAM	1	0	20.34	20.41	20.54	20.35	20.48	20.48	22	1		
10	HQAM	1	25	20.30	20.30	20.38	20.31	20.22	20.22				
10	HQAM	1	49	20.27	20.31	20.44	20.36	20.34	20.34				
10	HQAM	25	0	19.29	19.38	19.45	19.33	19.34	19.34				
10	HQAM	25	12	19.16	19.26	19.31	19.26	19.11	19.11	21	2		
10	HQAM	25	25	19.35	19.35	19.47	19.43	19.32	19.32				
10	HQAM	50	0	19.40	19.37	19.55	19.37	19.32	19.32				
10	HQAM	1	0	19.60	19.58	19.65	19.63	19.41	19.41				
10	HQAM	1	25	19.44	19.44	19.50	19.38	19.31	19.31	21	2		
10	HQAM	1	49	19.42	19.47	19.55	19.49	19.47	19.47				
10	HQAM	25	0	18.26	18.36	18.43	18.29	18.24	18.24	20	3		
10	HQAM	25	12	18.13	18.31	18.31	18.24	18.14	18.14				
10	HQAM	25	25	18.16	18.30	18.44	18.28	18.22	18.22				
10	HQAM	50	0	18.30	18.45	18.57	18.46	18.37	18.37				
10	ZSFGM	1	0	18.39	18.40	18.56	18.62	18.43	18.43				
10	ZSFGM	1	25	18.47	18.50	18.64	18.52	18.51	18.51	18	5		
10	ZSFGM	1	49	18.38	18.34	18.48	18.36	18.40	18.40				
10	ZSFGM	25	0	18.25	18.44	18.52	18.38	18.21	18.21				
10	ZSFGM	25	12	18.21	18.39	18.42	18.37	18.20	18.20				
10	ZSFGM	25	25	18.35	18.42	18.57	18.52	18.48	18.48	18	5		
10	ZSFGM	50	0	18.33	18.58	18.63	18.61	18.42	18.42				
Channel													
Frequency (MHz)				3494.5	3545.8	3593	3646.30	3697.5	3750				
5	QPSK	1	0	21.38	21.55	21.55	21.48	21.39	21.39	23.00	0		
5	QPSK	1	16	21.29	21.34	21.44	21.39	21.33	21.33				
5	QPSK	1	24	21.36	21.40	21.50	21.51	21.47	21.47				
5	QPSK	12	0	20.27	20.61	20.61	20.42	20.26	20.26				
5	QPSK	12	7	20.23	20.36	20.51	20.40	20.23	20.23	22	1		
5	QPSK	12	13	20.25	20.27	20.42	20.46	20.27	20.27				
5	QPSK	25	0	20.27	20.59	20.59	20.44	20.27	20.27				
5	HQAM	1	0	20.41	20.48	20.54	20.38	20.38	20.38				
5	HQAM	1	12	20.35	20.22	20.38	20.42	20.22	20.22	22	1		
5	HQAM	1	24	20.26	20.32	20.43	20.36	20.26	20.26				
5	HQAM	12	0	19.27	19.29	19.42	19.32	19.31	19.31				
5	HQAM	12	7	19.16	19.33	19.38	19.30	19.18	19.18	21	2		
5	HQAM	12	13	19.33	19.33	19.44	19.44	19.30	19.30				
5	HQAM	25	0	19.38	19.32	19.51	19.43	19.30	19.30				
5	HQAM	1	0	19.53	19.54	19.66	19.56	19.50	19.50	21	2		
5	HQAM	1	12	19.39	19.38	19.57	19.36	19.36	19.36				
5	HQAM	1	24	19.38	19.46	19.55	19.50	19.36	19.36				
5	HQAM	12	0	18.29	18.39	18.41	18.27	18.23	18.23	20	3		
5	HQAM	12	7	18.17	18.23	18.36	18.19	18.12	18.12				
5	HQAM	12	13	18.15	18.31	18.41	18.32	18.22	18.22				
5	HQAM	25	0	18.30	18.47	18.55	18.50	18.38	18.38				
5	ZSFGM	1	0	18.38	18.41	18.56	18.55	18.45	18.45				
5	ZSFGM	1	12	18.50	18.56	18.63	18.55	18.49	18.49	18			



GSM1900 AVG									
Power/Avg	Band Average Power (dBm)			Tune-up	Frame Average Power (dBm)			Tune-up	
Tx Channel	812	861	810	Limit	812	861	810	Limit	
Received (dBm)	180.2	180.1	180.8	(dBm)	180.2	180.0	180.8	(dBm)	
OMA 1 Tx Watt	29.31	29.34	29.40	30.00	29.31	29.34	29.40	31.00	
OPNS 1 Tx Watt	29.34	29.47	29.43	30.00	29.34	29.47	29.43	31.00	
OPNS 2 Tx Watt	29.06	29.84	29.72	27.00	29.06	29.84	29.72	27.00	
OPNS 3 Tx Watt	24.42	24.20	24.48	25.00	24.78	24.09	24.24	25.00	
OPNS 4 Tx Watt	21.84	21.00	21.86	23.00	18.64	18.00	18.06	20.00	
EDGE 1 Tx Watt	23.82	23.87	23.88	25.00	14.82	14.87	14.88	16.00	
EDGE 2 Tx Watt	22.70	22.70	22.73	23.00	14.70	14.70	14.73	17.00	
EDGE 3 Tx Watt	20.00	20.00	20.00	22.00	18.64	18.72	18.69	17.34	
EDGE 4 Tx Watt	18.75	18.83	18.81	20.00	12.75	12.83	12.81	17.00	
WCDMA AVG									
Band	WCDMA II AVG			Tune-up	WCDMA IV AVG			Tune-up	
Tx Channel	5862	5900	5938	Limit	5812	5853	5813	Limit	
Received (dBm)	89.2	89.0	89.8	(dBm)	89.2	89.0	89.8	(dBm)	
SOPF Rate 0	23.49	23.54	23.50	25.00	23.18	23.53	23.41	25.00	
SOPF Rate 50	23.45	23.62	23.55	25.00	23.37	23.52	23.46	25.00	
SOPF Rate 1	23.25	23.42	23.36	24.00	23.02	23.31	23.24	24.00	
SOPF Rate 2	23.18	23.40	23.32	24.00	23.30	23.49	23.39	24.00	
SOPF Rate 3	22.75	22.21	22.72	23.00	22.62	22.71	22.62	23.00	
SOPF Rate 4	22.71	22.70	22.74	23.00	22.83	22.68	22.83	23.00	
SOPF Rate 5	22.60	22.21	22.34	24.00	22.09	22.04	22.14	24.00	
SOPF Rate 6	23.15	23.35	23.34	24.00	23.17	23.34	23.17	24.00	
SOPF Rate 7	22.75	22.76	22.74	23.00	22.85	22.83	22.86	23.00	
SOPF Rate 8	22.77	22.81	22.77	23.00	22.81	23.12	22.97	23.00	
SOPF Rate 9	23.32	23.31	23.36	25.00	23.02	23.11	23.26	25.00	
SOPF Rate 10	21.20	21.20	21.41	23.00	21.64	21.62	21.44	23.00	
SOPF Rate 11	22.50	22.53	22.54	24.00	22.02	22.05	22.21	24.00	
SOPF Rate 12	21.31	21.23	21.35	23.00	21.05	21.01	21.15	23.00	
SOPF Rate 13	23.32	23.35	23.36	25.00	23.08	23.12	23.31	25.00	



Band 2 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
1860 1860 1960										
20	QPSK	1	0	22.58	22.70	22.65				
20	QPSK	1	49	22.48	22.60	22.55	24	0		
20	QPSK	1	99	22.50	22.64	22.57				
20	QPSK	50	0	21.61	21.70	21.62				
20	QPSK	50	24	21.58	21.71	21.64				
20	QPSK	50	50	21.47	21.62	21.50			23	1
20	QPSK	100	0	21.52	21.67	21.59				
20	16QAM	50	0	21.70	21.79	21.76				
20	16QAM	1	49	21.62	21.76	21.71	23	1		
20	16QAM	1	99	21.77	21.82	21.78				
20	16QAM	50	0	20.51	20.59	20.59				
20	16QAM	50	24	20.58	20.67	20.55			22	2
20	16QAM	50	50	20.57	20.72	20.68				
20	16QAM	100	0	20.56	20.69	20.62				
20	16QAM	1	0	20.59	20.74	20.67				
20	16QAM	1	49	20.77	20.90	20.89	22	2		
20	16QAM	50	0	20.61	20.83	20.83				
20	16QAM	50	24	20.58	20.85	20.89				
20	16QAM	50	50	20.57	20.93	20.92			21	3
20	16QAM	100	0	20.63	20.93	20.92				
20	16QAM	1	49	20.78	21.05	21.01				
20	16QAM	1	99	21.01	21.17	21.16				
20	16QAM	50	0	19.53	19.85	19.88				
20	16QAM	50	24	19.59	19.95	19.92				
20	16QAM	50	50	19.54	19.93	19.92				
20	16QAM	100	0	19.63	19.93	19.92				
20	16QAM	1	49	19.76	19.97	19.98				
20	16QAM	1	99	19.91	20.07	20.06				
20	16QAM	50	0	17.85	17.97	17.87				
20	16QAM	50	24	17.84	17.97	17.85				
20	16QAM	50	50	17.84	17.97	17.85				
20	16QAM	100	0	17.56	17.69	17.61				
Channel										
1867.5 1860 1925.5										
15	QPSK	1	0	22.44	22.46	22.41				
15	QPSK	1	37	22.41	22.47	22.47	24	0		
15	QPSK	1	74	22.47	22.57	22.43				
15	QPSK	36	0	21.53	21.67	21.51				
15	QPSK	36	24	21.57	21.66	21.62				
15	QPSK	36	39	21.35	21.58	21.43			23	1
15	QPSK	75	0	21.49	21.68	21.60				
15	16QAM	36	0	21.61	21.68	21.60				
15	16QAM	1	37	21.59	21.62	21.51	23	1		
15	16QAM	1	74	21.62	21.77	21.66				
15	16QAM	36	0	20.38	20.37	20.38				
15	16QAM	36	24	20.39	20.52	20.59			22	2
15	16QAM	36	39	20.38	20.58	20.53				
15	16QAM	75	0	20.52	20.58	20.53				
15	16QAM	1	0	20.46	20.60	20.60				
15	16QAM	1	37	20.61	20.74	20.74	22	2		
15	16QAM	1	74	20.50	20.65	20.59				
15	16QAM	36	0	19.48	19.61	19.51				
15	16QAM	36	24	19.48	19.68	19.63				
15	16QAM	36	39	19.49	19.85	19.51				
15	16QAM	75	0	19.39	19.59	19.47				
15	16QAM	1	0	17.86	17.95	17.86				
15	16QAM	1	37	17.69	17.77	17.72				
15	16QAM	1	74	17.60	17.68	17.58				
15	16QAM	36	0	17.51	17.68	17.60				
15	16QAM	36	24	17.54	17.61	17.46				
15	16QAM	36	39	17.52	17.66	17.55				
15	16QAM	75	0	17.48	17.62	17.43				
Channel										
1869 1860 1915										
10	QPSK	1	0	22.07	22.17	22.17				
10	QPSK	1	25	22.07	22.22	22.45	24	0		
10	QPSK	1	49	22.41	22.53	22.53				
10	QPSK	25	0	21.56	21.66	21.62				
10	QPSK	25	12	21.56	21.57	21.54				
10	QPSK	25	25	21.36	21.47	21.40				
10	16QAM	25	0	21.67	21.76	21.74				
10	16QAM	1	24	21.53	21.64	21.61	23	1		
10	16QAM	1	49	21.68	21.84	21.84				
10	16QAM	25	0	20.37	20.57	20.39				
10	16QAM	25	12	20.43	20.62	20.59				
10	16QAM	25	25	20.50	20.69	20.67				
10	16QAM	50	0	20.55	20.57	20.59				
10	16QAM	1	0	20.51	20.62	20.53				
10	16QAM	1	24	20.72	20.87	20.88	22	2		
10	16QAM	1	49	20.48	20.64	20.57				
10	16QAM	25	0	19.46	19.54	19.50				
10	16QAM	25	12	19.56	19.70	19.65				
10	16QAM	25	25	19.53	19.70	19.56				
10	16QAM	50	0	19.49	19.54	19.52				
10	16QAM	1	0	17.58	17.69	17.61				
10	16QAM	1	24	17.69	17.81	17.86				
10	16QAM	1	49	17.60	17.70	17.54				
10	16QAM	25	0	17.46	17.51	17.42				
10	16QAM	25	12	17.45	17.50	17.37				
10	16QAM	25	25	17.52	17.66	17.55				
10	16QAM	50	0	17.43	17.48	17.38				
Channel										
1862.5 1860 1917.5										
5	QPSK	1	0	22.40	22.43	22.43				
5	QPSK	1	12	22.42	22.52	22.49	24	0		
5	QPSK	1	24	22.42	22.52	22.54				
5	QPSK	12	0	21.67	21.80	21.67				
5	QPSK	12	7	21.56	21.57	21.52				
5	QPSK	12	13	21.39	21.50	21.44				
5	QPSK	25	0	21.43	21.56	21.46				
5	16QAM	1	0	21.62	21.65	21.54				
5	16QAM	1	12	21.58	21.62	21.66	23	1		
5	16QAM	1	24	21.65	21.73	21.68				
5	16QAM	12	0	20.41	20.52	20.38				
5	16QAM	12	7	20.47	20.60	20.46				
5	16QAM	12	13	20.46	20.68	20.56				
5	16QAM	25	0	20.59	20.56	20.58				
5	16QAM	1	0	20.46	20.66	20.52				
5	16QAM	1	12	20.64	20.71	20.66	22	2		
5	16QAM	1	24	20.51	20.58	20.54				
5	16QAM	12	0	19.39	19.83	19.55				
5	16QAM	12	7	19.45	19.95	19.63				
5	16QAM	12	13	19.50	19.83	19.59				
5	16QAM	25	0	19.49	19.87	19.59				
5	16QAM	1	0	17.47	17.59	17.47				
5	16QAM	1	12	17.68	17.77	17.71				
5	16QAM	1	24	17.56	17.66	17.43				
5	16QAM	12	0	17.49	17.58	17.43				
5	16QAM	12	7	17.50	17.68	17.54				
5	16QAM	12	13	17.52	17.69	17.47				
5	16QAM	25	0	17.49	17.50	17.45				
Channel										
1861.5 1860 1918.5										
3	QPSK	1	0	22.54	22.67	22.55				
3	QPSK	1	8	22.42	22.67	22.44	24	0		
3	QPSK	1	14	22.47	22.61	22.46				
3	QPSK	8	0	21.51	21.66	21.51				
3	QPSK	8	4	21.52	21.61	21.68				
3	QPSK	8	7	21.40	21.53	21.44				
3	QPSK	15	0	21.39	21.63	21.47				
3	16QAM	1	0	21.62	21.72	21.62				
3	16QAM	1	8	21.54	21.64	21.61	23	1		
3	16QAM	1	14	21.67	21.78	21.72				
3	16QAM	8	0	20.41	20.53	20.43				
3	16QAM	8	4	20.43	20.58	20.51				
3	16QAM	8	7	20.47	20.63	20.57				



Band 25 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up (dB)	MPR (dB)	
Channel									
	Frequency (MHz)			1860	1880	1900			
20	QPSK	1	0	22.56	22.72	22.83	24	0	
20	QPSK	1	49	21.44	21.60	21.70			
20	QPSK	1	99	22.56	22.80	22.87			
20	QPSK	50	0	21.68	21.75	21.76	23	1	
20	QPSK	50	24	21.87	21.84	21.83			
20	QPSK	50	50	21.83	21.71	21.83			
20	QPSK	100	0	21.50	21.63	21.56			
20	16QAM	1	0	21.62	21.70	21.70	23	1	
20	16QAM	1	49	21.56	21.70	21.85			
20	16QAM	1	99	21.55	21.64	21.57			
20	16QAM	50	0	20.92	20.99	20.95			
20	16QAM	50	24	20.80	20.83	20.80	22	2	
20	16QAM	50	50	20.87	20.71	20.86			
20	16QAM	100	0	20.99	20.96	20.94			
20	64QAM	1	0	20.85	20.70	20.83			
20	64QAM	1	49	20.63	20.77	20.73	22	2	
20	64QAM	1	99	20.57	20.65	20.64			
20	64QAM	50	0	19.53	19.63	19.51			
20	64QAM	50	24	19.59	19.56	19.56			
20	64QAM	50	50	19.51	19.54	19.65	21	3	
20	64QAM	100	0	19.57	19.65	19.61			
20	256QAM	1	0	17.54	17.77	17.66			
20	256QAM	1	49	17.58	17.52	17.53	19	5	
20	256QAM	1	99	17.65	17.74	17.67			
20	256QAM	50	0	17.56	17.56	17.56			
20	256QAM	50	24	17.56	17.68	17.58	19	5	
20	256QAM	50	50	17.67	17.73	17.64			
20	256QAM	100	0	17.65	17.67	17.67			
Channel									
	Frequency (MHz)			1875	1880	1907.5	Turn-up (dB)	MPR (dB)	
15	QPSK	1	0	22.43	22.62	22.58	24	0	
15	QPSK	1	37	22.45	22.60	22.48			
15	QPSK	1	74	22.47	22.50	22.34			
15	QPSK	36	0	21.83	21.87	21.86	23	1	
15	QPSK	36	20	21.42	21.66	21.41			
15	QPSK	36	39	21.51	21.59	21.60			
15	16QAM	1	0	21.48	21.60	21.61	23	1	
15	16QAM	1	37	21.46	21.65	21.59			
15	16QAM	1	74	21.44	21.53	21.56			
15	16QAM	36	0	20.94	20.82	20.80	22	2	
15	16QAM	36	20	20.48	20.57	20.39			
15	16QAM	36	39	20.53	20.56	20.54			
15	16QAM	75	0	20.48	20.55	20.57			
15	64QAM	1	0	20.57	20.57	20.58	22	2	
15	64QAM	1	37	20.60	20.65	20.64			
15	64QAM	1	74	20.47	20.52	20.40			
15	64QAM	36	0	19.46	19.53	19.43	21	3	
15	64QAM	36	20	19.50	19.48	19.48			
15	64QAM	36	39	19.55	19.52	19.52			
15	64QAM	75	0	19.54	19.58	19.57			
15	256QAM	1	0	17.53	17.58	17.54			
15	256QAM	1	37	17.49	17.54	17.41	19	5	
15	256QAM	1	74	17.83	17.66	17.63			
15	256QAM	36	0	17.50	17.52	17.48			
15	256QAM	36	20	17.47	17.53	17.48	19	5	
15	256QAM	36	39	17.57	17.59	17.59			
15	256QAM	75	0	17.41	17.46	17.45			
Channel									
	Frequency (MHz)			1890	1894	1910	Turn-up (dB)	MPR (dB)	
10	QPSK	1	0	22.50	22.62	22.50	24	0	
10	QPSK	1	25	22.42	22.57	22.50			
10	QPSK	1	49	22.38	22.51	22.34			
10	QPSK	25	0	21.86	21.87	21.88	23	1	
10	QPSK	25	12	21.42	21.58	21.44			
10	QPSK	25	25	21.59	21.66	21.60			
10	16QAM	1	0	21.58	21.60	21.62	23	1	
10	16QAM	1	25	21.47	21.65	21.51			
10	16QAM	1	49	21.50	21.63	21.63			
10	16QAM	25	0	20.48	20.57	20.39	22	2	
10	16QAM	25	12	20.54	20.58	20.38			
10	16QAM	25	25	20.56	20.56	20.44			
10	16QAM	50	0	20.50	20.54	20.58			
10	64QAM	1	0	20.58	20.63	20.62	22	2	
10	64QAM	1	25	20.54	20.58	20.68			
10	64QAM	1	49	20.52	20.40	20.48			
10	64QAM	25	0	19.45	19.58	19.48	21	3	
10	64QAM	25	12	19.55	19.52	19.47			
10	64QAM	25	25	19.54	19.63	19.55			
10	64QAM	50	0	19.51	19.56	19.46			
10	256QAM	1	0	17.50	17.52	17.48			
10	256QAM	1	25	17.48	17.48	17.41	19	5	
10	256QAM	1	49	17.56	17.62	17.62			
10	256QAM	25	0	17.49	17.59	17.50	19	5	
10	256QAM	25	12	17.54	17.60	17.59			
10	256QAM	25	25	17.64	17.60	17.59			
10	256QAM	50	0	17.58	17.62	17.51			
Channel									
	Frequency (MHz)			1895	1898	1915	Turn-up (dB)	MPR (dB)	
10	QPSK	1	0	22.52	22.62	22.52	24	0	
10	QPSK	1	25	22.46	22.62	22.44			
10	QPSK	1	49	22.38	22.51	22.34			
10	QPSK	25	0	21.86	21.87	21.88	23	1	
10	QPSK	25	12	21.42	21.58	21.44			
10	QPSK	25	25	21.59	21.66	21.60			
10	16QAM	1	0	21.58	21.60	21.62	23	1	
10	16QAM	1	25	21.47	21.65	21.51			
10	16QAM	1	49	21.50	21.63	21.63			
10	16QAM	25	0	20.48	20.57	20.39	22	2	
10	16QAM	25	12	20.54	20.58	20.38			
10	16QAM	25	25	20.56	20.56	20.44			
10	16QAM	50	0	20.50	20.54	20.58			
10	64QAM	1	0	20.58	20.63	20.62	22	2	
10	64QAM	1	25	20.54	20.58	20.68			
10	64QAM	1	49	20.52	20.40	20.48			
10	64QAM	25	0	19.45	19.58	19.48	21	3	
10	64QAM	25	12	19.55	19.52	19.47			
10	64QAM	25	25	19.54	19.63	19.55			
10	64QAM	50	0	19.51	19.56	19.46			
10	256QAM	1	0	17.50	17.52	17.48			
10	256QAM	1	25	17.48	17.48	17.41	19	5	
10	256QAM	1	49	17.56	17.62	17.62			
10	256QAM	25	0	17.49	17.59	17.50	19	5	
10	256QAM	25	12	17.54	17.60	17.59			
10	256QAM	25	25	17.64	17.60	17.59			
10	256QAM	50	0	17.58	17.62	17.51			
Channel									
	Frequency (MHz)			1902	1898	1915	Turn-up (dB)	MPR (dB)	
5	QPSK	1	0	22.47	22.55	22.47	24	0	
5	QPSK	1	12	22.46	22.55	22.44			
5	QPSK	1	24	22.37	22.55	22.38			
5	QPSK	12	0	21.54	21.71	21.63	23	1	
5	QPSK	12	7	21.44	21.60	21.37			
5	QPSK	12	13	21.47	21.62	21.59			
5	QPSK	25	0	21.46	21.53	21.47	23	1	
5	16QAM	1	0	21.50	21.68	21.59	23	1	
5	16QAM	1	12	21.45	21.59	21.59			
5	16QAM	1	24	21.49	21.48	21.48			
5	16QAM	12	0	20.57	20.59	20.53	22	2	
5	16QAM	12	7	20.53	20.53	20.39			
5	16QAM	12	13	20.56	20.50	20.45			
5	16QAM	25	0	20.48	20.56	20.58			
5	64QAM	1	0	20.54	20.57	20.50	22	2	
5	64QAM	1	12	20.56	20.70	20.68			
5	64QAM	1	24	20.46	20.47	20.47			
5	64QAM	12	0	19.39	19.53	19.41	21	3	
5	64QAM	12	7	19.54	19.58	19.48			
5	64QAM	12	13	19.57	19.68	19.62			
5	64QAM	25	0	19.52	19.56	19.56			
5	256QAM	1	0	17.5					



Band 38 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				3760	3800	3850			
Frequency (MHz)				2476	2516	2556			
20	QPSK	1	0	22.72	22.00	22.84			
20	QPSK	1	49	22.71	22.84	22.80			24
20	QPSK	99	0	22.83	22.71	22.71			
20	QPSK	50	0	21.92	21.90	21.93			
20	QPSK	50	24	21.84	21.89	21.79			23
20	QPSK	100	0	21.82	21.82	21.82			
20	QPSK	100	0	21.81	21.92	21.85			
20	16QAM	1	0	21.76	21.85	21.78			23
20	16QAM	1	49	21.86	21.74	21.60			
20	16QAM	1	99	21.74	21.81	21.73			
20	16QAM	50	0	20.81	20.88	20.80			
20	16QAM	50	24	20.71	20.80	20.70			
20	16QAM	50	50	20.83	20.75	20.71			22
20	16QAM	100	0	20.87	20.85	20.84			
20	16QAM	100	0	20.85	20.95	20.85			
20	16QAM	1	49	20.78	20.91	20.83			22
20	16QAM	1	99	20.74	20.84	20.74			
20	16QAM	50	0	19.78	19.86	19.72			
20	16QAM	50	24	19.76	19.81	19.77			
20	16QAM	50	50	19.83	19.78	19.69			21
20	16QAM	100	0	19.82	19.96	19.89			
20	256QAM	1	0	17.84	17.94	17.82			
20	256QAM	1	49	17.79	17.88	17.85			19
20	256QAM	1	99	17.89	17.82	17.84			
20	256QAM	50	0	17.79	17.88	17.78			
20	256QAM	50	24	17.85	17.83	17.74			19
20	256QAM	50	50	17.82	17.78	17.67			
20	256QAM	100	0	17.85	17.85	17.85			
Channel				37625	38000	38175			
Frequency (MHz)				2577.5	2576.5	2612.5			
15	QPSK	1	0	22.62	22.73	22.73			
15	QPSK	1	37	22.66	22.73	22.68			24
15	QPSK	1	74	22.83	22.83	22.64			
15	QPSK	36	0	21.79	21.89	21.84			
15	QPSK	36	20	21.75	21.78	21.76			23
15	QPSK	36	39	21.76	21.82	21.70			
15	QPSK	75	0	21.76	21.82	21.70			
15	16QAM	1	0	21.87	21.73	21.65			23
15	16QAM	1	37	21.85	21.81	21.67			
15	16QAM	1	74	21.80	21.70	21.70			
15	16QAM	36	0	20.72	20.73	20.67			
15	16QAM	36	20	20.82	20.88	20.69			22
15	16QAM	36	39	20.78	20.84	20.73			
15	16QAM	75	0	20.85	20.79	20.69			22
15	16QAM	75	0	20.81	20.88	20.69			
15	16QAM	36	0	19.87	19.71	19.62			21
15	16QAM	36	20	19.89	19.74	19.64			
15	16QAM	36	39	19.82	19.88	19.68			
15	16QAM	75	0	19.71	19.89	19.75			
15	256QAM	1	0	17.78	17.82	17.78			19
15	256QAM	1	37	17.85	17.84	17.75			
15	256QAM	1	74	17.81	17.82	17.80			
15	256QAM	36	0	17.85	17.81	17.68			19
15	256QAM	36	20	17.75	17.78	17.63			
15	256QAM	36	39	17.48	17.68	17.63			
15	256QAM	75	0	17.70	17.60	17.62			
Channel				37625	38000	38175			
Frequency (MHz)				2577.5	2596	2615			
10	QPSK	1	0	22.78	22.78	22.73			
10	QPSK	1	25	22.81	22.79	22.73			24
10	QPSK	1	49	22.81	22.82	22.65			
10	QPSK	12	0	21.74	21.86	21.81			
10	QPSK	25	12	21.79	21.79	21.69			23
10	QPSK	25	25	21.82	21.82	21.75			
10	QPSK	1	0	21.70	21.70	21.67			
10	16QAM	1	0	21.70	21.70	21.68			23
10	16QAM	1	25	21.88	21.88	21.86			
10	16QAM	1	49	21.84	21.87	21.84			
10	16QAM	25	0	20.70	20.77	20.71			
10	16QAM	25	12	20.86	20.84	20.68			22
10	16QAM	25	25	20.85	20.83	20.63			
10	16QAM	50	0	20.79	20.84	20.73			
10	16QAM	50	0	20.78	20.88	20.79			
10	16QAM	1	0	20.79	20.84	20.73			22
10	16QAM	1	25	20.71	20.85	20.62			
10	16QAM	25	0	19.74	19.82	19.60			
10	16QAM	25	12	19.84	19.70	19.68			21
10	16QAM	25	25	19.58	19.65	19.58			
10	16QAM	50	0	19.76	19.87	19.81			
10	256QAM	1	0	17.74	17.83	17.68			
10	256QAM	1	25	17.88	17.79	17.76			19
10	256QAM	1	49	17.81	17.88	17.75			
10	256QAM	25	0	17.88	17.74	17.59			
10	256QAM	25	12	17.73	17.66	17.64			19
10	256QAM	25	25	17.50	17.71	17.53			
10	256QAM	50	0	17.76	17.78	17.78			
Channel				37625	38000	38175			
Frequency (MHz)				2577.5	2596	2617.5			
5	QPSK	1	0	22.83	22.75	22.74			
5	QPSK	1	12	22.88	22.70	22.68			24
5	QPSK	1	24	22.56	22.69	22.58			
5	QPSK	12	0	21.88	21.89	21.86			
5	QPSK	12	7	21.71	21.77	21.75			23
5	QPSK	12	13	21.79	21.79	21.71			
5	QPSK	25	0	21.74	21.87	21.72			
5	16QAM	1	0	21.72	21.89	21.71			
5	16QAM	1	12	21.82	21.81	21.82			23
5	16QAM	1	24	21.80	21.74	21.68			
5	16QAM	12	0	20.72	20.81	20.69			
5	16QAM	12	7	20.74	20.67	20.56			22
5	16QAM	12	13	20.48	20.87	20.62			
5	16QAM	25	0	20.85	20.82	20.74			
5	16QAM	1	0	20.82	20.91	20.80			22
5	16QAM	1	12	20.73	20.85	20.77			
5	16QAM	1	24	20.86	20.77	20.68			
5	16QAM	12	0	19.85	19.72	19.68			21
5	16QAM	12	7	19.72	19.76	19.65			
5	16QAM	25	0	19.73	19.83	19.88			
5	256QAM	1	0	17.72	17.87	17.74			
5	256QAM	1	12	17.87	17.84	17.75			19
5	256QAM	1	24	17.82	17.78	17.77			
5	256QAM	12	0	17.73	17.75	17.68			
5	256QAM	12	7	17.77	17.76	17.69			19
5	256QAM	12	13	17.49	17.65	17.58			
5	256QAM	25	0	17.72	17.83	17.66			

Band 38 HPUE Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				37950	38000	38150			
Frequency (MHz)				2476	2495	2490			
20	QPSK	1	0	24.76	24.95	24.90			
20	QPSK	1	49	24.71	24.79	24.87			25.5
20	QPSK	1	99	24.80	24.79	24.87			
20	QPSK	50	0	24.85	24.90	24.79			
20	QPSK	50	24	24.81	24.89	24.76			25.5
20	QPSK	100	0	24.80	24.82	24.77			
20	QPSK	100	0	24.84	24.94	24.90			
20	16QAM	1	0	24.72	24.82	24.71			25.5
20	16QAM	1	49	24.82	24.74	24.67			
20	16QAM	1	99	24.55	24.84	24.55			
20	16QAM	50	0	23.76	23.91	23.84			25
20	16QAM	50	24	23.70	23.84	23.71			
20	16QAM	50	50	23.86	23.77	23.68			25
20	16QAM	100	0	23.82	24.09	23.82			
20	16QAM	100	0	24.05	24.10	24.04			
20	16QAM	1	49	23.86	23.88	23.90			25
20	16QAM	1	99	23.83	24.03	23.90			
20	16QAM	50	0	22.88	22.92	22.88			
20	16QAM	50	24	22.73	22.85	22.81			24
20	16QAM	50	50	22.77	22.81	22.71			
20	16QAM	100	0	22.88	22.88	22.93			
20	256QAM	1	0	20.84	21.01	20.90			22
20	256QAM	1	49	20.87	20.96	20.86			
20	256QAM	1	99	20.76	20.84	20.70			22
20	256QAM	50	0	20.80	20.89	20.76			
20	256QAM	50	24	20.72	20.79	20.64			22
20	256QAM	50	50	20.73	20.87	20.78			
20	256QAM	100	0	20.80	20.86	20.86			
Channel				37925	38000	38175			
Frequency (MHz)				2477.5	2496	2472.5			
15	QPSK	1	0	24.83	24.93	24.83			
15	QPSK	1	37	24.81	24.78	24.87			25.5
15	QPSK	1	74	24.83	24.86	24.60			
15	QPSK	36	0	24.73	24.87	24.68			
15	QPSK	36	20	24.71	24.85	24.66			25.5
15	QPSK	36	39	24.78	24.80	24.83			
15	QPSK	75	0	24.78	24.80	24.83			
15	16QAM	1	0	24.83	24.90	24.84			25.5
15	16QAM	1	37	24.73	24.89</				



Band 41 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power Low Mid Ch / Freq	Power High Mid Ch / Freq	Tune-up Int (dB)	MPE (dB)
Channel										
Frequency (MHz)										
39750 40186 40602 41018 41434										
20	QPSK	1	0	22.71	22.82	22.93	22.82	22.93	24.00	0
20	QPSK	1	49	22.65	22.73	22.79	22.75	22.72	24.00	0
20	QPSK	1	99	22.76	22.79	22.80	22.71	22.76	24.00	0
20	QPSK	50	0	21.79	21.80	21.85	21.85	21.80	24.00	0
20	QPSK	50	24	21.79	21.72	21.85	21.78	21.75	24.00	0
20	QPSK	50	49	21.80	21.83	21.88	21.88	21.83	24.00	0
20	QPSK	100	0	21.82	21.86	21.90	21.79	21.84	24.00	0
20	QPSK	100	1	21.81	21.83	21.88	21.81	21.79	24.00	0
20	QPSK	100	49	21.71	21.72	21.81	21.86	21.86	24.00	0
20	HQAM	1	0	21.86	21.92	21.70	21.69	21.83	24.00	0
20	HQAM	1	49	20.79	20.80	20.84	20.89	20.92	24.00	0
20	HQAM	50	0	20.77	20.78	20.80	20.78	20.71	24.00	0
20	HQAM	50	24	20.77	20.82	20.80	20.83	20.84	24.00	0
20	HQAM	100	0	20.82	20.81	20.82	20.78	20.82	24.00	0
20	HQAM	100	1	20.82	20.81	20.82	20.78	20.82	24.00	0
20	HQAM	1	49	20.79	20.80	20.81	20.88	20.77	24.00	0
20	HQAM	1	99	20.76	20.81	20.80	20.72	20.71	24.00	0
20	HQAM	50	0	19.73	19.70	19.84	19.70	19.78	24.00	0
20	HQAM	50	24	19.68	19.73	19.77	19.85	19.84	24.00	0
20	HQAM	50	49	19.70	19.71	19.70	19.72	19.70	24.00	0
20	HQAM	100	0	19.79	19.79	19.82	19.81	19.79	24.00	0
20	HQAM	100	1	17.77	17.84	17.86	17.82	17.84	24.00	0
20	HQAM	1	49	17.71	17.81	17.82	17.72	17.78	24.00	0
20	HQAM	1	99	17.65	17.70	17.78	17.67	17.65	24.00	0
20	HQAM	50	0	17.63	17.68	17.68	17.66	17.66	24.00	0
20	HQAM	50	24	17.68	17.70	17.74	17.68	17.61	24.00	0
20	HQAM	50	49	17.68	17.65	17.80	17.73	17.71	24.00	0
20	HQAM	100	0	17.80	17.80	17.80	17.80	17.80	24.00	0
20	HQAM	100	0	39.725	40.173	40.620	41.068	41.515	24.00	0
Channel										
Frequency (MHz)										
2401.3 2441.3 2481.3 2521.3 2561.3										
10	QPSK	1	0	22.71	22.82	22.93	22.82	22.93	24.00	0
10	QPSK	1	37	22.82	22.89	22.89	22.83	22.87	24.00	0
10	QPSK	1	74	22.71	22.67	22.72	22.84	22.74	24.00	0
10	QPSK	38	0	21.72	21.87	21.80	21.71	21.75	24.00	0
10	QPSK	38	20	21.69	21.57	21.78	21.64	21.71	24.00	0
10	QPSK	38	39	21.68	21.63	21.69	21.68	21.68	24.00	0
10	QPSK	75	0	21.67	21.82	21.78	21.67	21.77	24.00	0
10	HQAM	1	0	21.71	21.76	21.80	21.78	21.80	24.00	0
10	HQAM	1	37	21.81	21.80	21.80	21.80	21.80	24.00	0
10	HQAM	1	74	21.55	21.59	21.67	21.64	21.57	24.00	0
10	HQAM	38	0	20.72	20.72	20.80	20.74	20.77	24.00	0
10	HQAM	38	20	20.84	20.84	20.84	20.84	20.84	24.00	0
10	HQAM	38	39	20.68	20.69	20.78	20.73	20.78	24.00	0
10	HQAM	75	0	20.78	20.82	20.85	20.78	20.84	24.00	0
10	HQAM	1	0	20.71	20.72	20.80	20.75	20.80	24.00	0
10	HQAM	1	37	20.76	20.78	20.83	20.78	20.87	24.00	0
10	HQAM	1	74	20.73	20.76	20.77	20.87	20.87	24.00	0
10	HQAM	38	0	19.84	19.88	19.77	19.85	19.74	24.00	0
10	HQAM	38	20	19.54	19.69	19.71	19.58	19.52	24.00	0
10	HQAM	38	39	19.58	19.58	19.58	19.58	19.58	24.00	0
10	HQAM	75	0	19.75	19.74	19.85	19.78	19.68	24.00	0
10	HQAM	1	0	17.64	17.73	17.75	17.76	17.71	24.00	0
10	HQAM	1	37	17.60	17.67	17.68	17.64	17.63	24.00	0
10	HQAM	1	74	17.50	17.60	17.72	17.63	17.58	24.00	0
10	HQAM	38	0	17.73	17.68	17.73	17.75	17.63	24.00	0
10	HQAM	38	20	17.83	17.81	17.68	17.60	17.52	24.00	0
10	HQAM	38	39	17.57	17.61	17.66	17.61	17.64	24.00	0
10	HQAM	75	0	17.88	17.82	17.85	17.72	17.84	24.00	0
10	HQAM	75	0	40.186	40.633	41.080	41.527	41.974	24.00	0
Channel										
Frequency (MHz)										
2401.3 2441.3 2481.3 2521.3 2561.3										
10	QPSK	1	0	22.81	22.82	22.83	22.80	22.80	24.00	0
10	QPSK	1	25	22.58	22.61	22.72	22.60	22.60	24.00	0
10	QPSK	1	49	22.70	22.83	22.78	22.62	22.74	24.00	0
10	QPSK	1	99	22.86	22.78	22.80	22.72	22.75	24.00	0
10	QPSK	25	12	21.74	21.68	21.73	21.71	21.72	24.00	0
10	QPSK	25	25	21.73	21.78	21.81	21.74	21.75	24.00	0
10	QPSK	50	0	21.79	21.74	21.79	21.78	21.74	24.00	0
10	QPSK	50	12	21.87	21.74	21.77	21.68	21.72	24.00	0
10	HQAM	1	0	21.84	21.84	21.84	21.84	21.84	24.00	0
10	HQAM	1	25	21.68	21.65	21.76	21.80	21.66	24.00	0
10	HQAM	1	49	21.61	21.61	21.61	21.63	21.60	24.00	0
10	HQAM	25	0	20.70	20.70	20.82	20.85	20.74	24.00	0
10	HQAM	25	12	20.64	20.68	20.80	20.80	20.66	24.00	0
10	HQAM	25	25	20.70	20.75	20.81	20.80	20.70	24.00	0
10	HQAM	50	0	20.76	20.85	20.80	20.81	20.71	24.00	0
10	HQAM	50	12	20.70	20.73	20.80	20.80	20.70	24.00	0
10	HQAM	50	25	20.70	20.75	20.81	20.80	20.70	24.00	0
10	HQAM	1	0	20.73	20.74	20.78	20.77	20.79	24.00	0
10	HQAM	1	49	20.70	20.68	20.70	20.87	20.57	24.00	0
10	HQAM	25	0	19.58	19.59	19.70	19.63	19.63	24.00	0
10	HQAM	25	12	19.61	19.68	19.64	19.53	19.59	24.00	0
10	HQAM	25	25	19.58	19.67	19.75	19.63	19.66	24.00	0
10	HQAM	50	0	19.76	19.84	19.80	19.69	19.67	24.00	0
10	HQAM	50	12	17.73	17.71	17.77	17.77	17.73	24.00	0
10	HQAM	1	0	17.58	17.61	17.76	17.60	17.71	24.00	0
10	HQAM	1	49	17.58	17.67	17.68	17.58	17.58	24.00	0
10	HQAM	25	0	17.73	17.64	17.63	17.77	17.63	24.00	0
10	HQAM	25	12	17.86	17.83	17.68	17.63	17.52	24.00	0
10	HQAM	25	25	17.61	17.54	17.73	17.61	17.63	24.00	0
10	HQAM	50	0	17.81	17.75	17.81	17.75	17.79	24.00	0
10	HQAM	50	0	41.983	42.430	42.877	43.324	43.771	24.00	0
Channel										
Frequency (MHz)										
2486.5 2546.5 2606.5 2666.5 2726.5										
5	QPSK	1	0	22.65	22.75	22.84	22.84	22.78	24.00	0
5	QPSK	1	12	22.51	22.63	22.67	22.67	22.57	24.00	0
5	QPSK	1	24	22.83	22.58	22.78	22.58	22.86	24.00	0
5	QPSK	12	0	21.60	21.68	21.80	21.73	21.76	24.00	0
5	QPSK	12	7	21.71	21.68	21.79	21.69	21.64	24.00	0
5	QPSK	12	13	21.68	21.79	21.80	21.73	21.79	24.00	0
5	QPSK	25	0	21.76	21.72	21.79	21.72	21.74	24.00	0
5	QPSK	25	0	21.69	21.79	21.78	21.78	21.68	24.00	0
5	HQAM	1	12	21.61	21.66	21.75	21.62	21.61	24.00	0
5	HQAM	1	24	21.86	21.68	21.68	21.66	21.87	24.00	0
5	HQAM	12	0	20.67	20.70	20.88	20.74	20.76	24.00	0
5	HQAM	12	7	20.64	20.60	20.70	20.68	20.63	24.00	0
5	HQAM	12	13	20.70	20.70	20.75	20.72	20.70	24.00	0
5	HQAM	25	0	20.75	20.67	20.78	20.69	20.65	24.00	0
5	HQAM	25	0	20.79	20.73	20.85	20.84	20.71	24.00	0
5	HQAM	1	12	20.71	20.74	20.87	20.79	20.66	24.00	0
5	HQAM	1	24	20.71	20.67	20.80	20.63	20.66	24.00	0
5	HQAM	12	0	19.63	19.68	19.78	19.60	19.71	24.00	0
5	HQAM	12	7	19.53	19.67	19.65	19.55	19.56	24.00	0
5	HQAM	12	13	19.60	19.63	19.67	19.68	19.56	24.00	0
5	HQAM	25	0	19.74	19.78	19.83	19.69	19.80	24.00	0
5	HQAM	25	0	17.68	17.72	17.84	17.75	17.70	24.00	0
5	HQAM	12	12	17.62	17.66	17.69	17.68	17.67	24.00	0
5	HQAM	12	24	17.57	17.60	17.73	17.62	17.58	24.00	0
5	HQAM	12	7	17.59	17.66	17.70	17.62	17.61	24.00	0
5	HQAM	12	13	17.57	17.57	17.68	17.61	17.65	24.00	0
5	HQAM	25	0	17.80	17.77	17.81	17.74	17.75	24.00	0

Band 41 HPUE Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power Low Mid Ch / Freq	Power High Mid Ch / Freq	Tune-up Int (dB)	MPE (dB)
Channel										
Frequency (MHz)										
39750 40186 40602 41018 41434										
20	QPSK	1	0	24.81	24.81	24.90	24.83	24.84	25.5	0
20	QPSK	1	49	24						



Band 42 FCC Part27Q Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Med Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
42190									
42990									
42990									
20	QPSK	1	0	20.91	21.13	21.50	21.5	0	
20	QPSK	1	49	20.36	21.11	21.04	21.5	0	
20	QPSK	1	99	20.95	21.05	20.91	21.5	0	
20	QPSK	50	0	19.09	19.15	19.07	20.5	1	
20	QPSK	50	24	19.03	19.07	18.96	20.5	1	
20	QPSK	50	50	19.03	19.03	18.91	20.5	1	
20	QPSK	100	0	19.01	19.02	18.97	20.5	1	
20	16QAM	1	0	19.99	20.05	19.95	20.5	1	
20	16QAM	1	49	19.94	19.97	19.84	20.5	1	
20	16QAM	1	99	20.04	20.10	19.98	20.5	1	
20	16QAM	50	0	17.92	18.01	17.90	19.5	2	
20	16QAM	50	24	18.11	18.13	18.07	19.5	2	
20	16QAM	50	50	17.95	18.02	17.87	19.5	2	
20	64QAM	100	0	18.02	18.06	18.00	19.5	2	
20	64QAM	1	49	18.87	19.11	18.99	19.5	2	
20	64QAM	1	99	19.03	19.07	18.98	19.5	2	
20	64QAM	50	0	17.00	17.06	17.02	18.5	3	
20	64QAM	50	24	16.84	16.97	16.86	18.5	3	
20	64QAM	50	50	17.01	17.10	17.05	18.5	3	
20	64QAM	100	0	16.97	17.02	16.88	18.5	3	
20	256QAM	1	0	18.55	19.70	19.57	20.5	1	
20	256QAM	1	49	19.41	19.52	19.46	20.5	1	
20	256QAM	1	99	19.51	19.63	19.60	20.5	1	
20	256QAM	50	0	18.77	19.07	18.97	20.5	1	
20	256QAM	50	24	19.56	19.58	19.61	20.5	1	
20	256QAM	50	50	19.81	19.76	19.68	20.5	1	
20	256QAM	100	0	19.82	19.78	19.84	20.5	1	
Channel									
42165									
42990									
43015									
43015									
15	QPSK	1	0	20.52	21.13	21.00	21.5	0	
15	QPSK	1	37	20.82	21.04	20.88	21.5	0	
15	QPSK	1	74	20.91	20.96	20.83	21.5	0	
15	QPSK	36	0	19.05	19.01	18.91	20.5	1	
15	QPSK	36	20	18.92	18.97	18.89	20.5	1	
15	QPSK	36	39	18.85	18.91	18.82	20.5	1	
15	QPSK	75	0	18.87	19.02	18.86	20.5	1	
15	16QAM	1	0	19.87	19.95	19.85	20.5	1	
15	16QAM	1	37	19.73	19.86	19.77	20.5	1	
15	16QAM	1	74	19.96	20.02	19.85	20.5	1	
15	16QAM	36	0	17.87	18.01	17.84	19.5	2	
15	16QAM	36	20	18.05	18.04	17.87	19.5	2	
15	16QAM	36	39	17.82	17.88	17.73	19.5	2	
15	16QAM	75	0	17.92	17.97	17.86	19.5	2	
15	64QAM	1	0	19.07	19.07	18.93	19.5	2	
15	64QAM	1	37	18.86	18.99	18.89	19.5	2	
15	64QAM	1	74	18.96	19.00	18.86	19.5	2	
15	64QAM	36	0	16.86	16.94	16.87	18.5	3	
15	64QAM	36	20	16.89	16.93	16.78	18.5	3	
15	64QAM	36	39	16.86	16.92	16.79	18.5	3	
15	64QAM	75	0	16.96	16.99	16.82	18.5	3	
15	256QAM	1	0	19.46	19.67	19.52	20.5	1	
15	256QAM	1	37	19.35	19.48	19.40	20.5	1	
15	256QAM	1	74	19.42	19.57	19.48	20.5	1	
15	256QAM	36	0	18.61	18.73	18.54	20.5	1	
15	256QAM	36	20	18.51	18.59	18.50	20.5	1	
15	256QAM	36	39	18.50	18.68	18.59	20.5	1	
15	256QAM	75	0	18.58	18.86	18.61	20.5	1	
Channel									
42165									
42990									
43040									
43040									
10	QPSK	1	0	20.68	21.00	21.00	21.5	0	
10	QPSK	1	25	20.86	20.97	20.86	21.5	0	
10	QPSK	1	49	20.83	20.99	20.83	21.5	0	
10	QPSK	12	0	18.96	18.95	18.84	20.5	1	
10	QPSK	25	12	18.96	18.97	18.87	20.5	1	
10	QPSK	25	25	18.83	18.92	18.79	20.5	1	
10	QPSK	1	0	19.94	19.91	19.82	20.5	1	
10	16QAM	1	0	19.91	20.00	19.88	20.5	1	
10	16QAM	1	25	19.78	19.84	19.77	20.5	1	
10	16QAM	1	49	19.97	20.06	19.86	20.5	1	
10	16QAM	25	0	17.86	18.00	17.80	19.5	2	
10	16QAM	25	12	17.86	18.00	17.80	19.5	2	
10	16QAM	25	25	17.85	17.97	17.75	19.5	2	
10	16QAM	50	0	17.86	17.98	18.01	19.5	2	
10	64QAM	1	0	19.03	19.11	18.94	19.5	2	
10	64QAM	1	25	18.78	18.84	18.77	19.5	2	
10	64QAM	1	49	19.97	20.06	19.86	19.5	2	
10	64QAM	25	0	17.85	18.00	17.80	19.5	2	
10	64QAM	25	12	16.75	16.86	16.72	18.5	3	
10	64QAM	25	25	16.84	17.00	17.02	18.5	3	
10	64QAM	50	0	16.90	16.90	16.77	18.5	3	
10	256QAM	1	0	19.52	19.69	19.42	20.5	1	
10	256QAM	1	25	19.24	19.46	19.30	20.5	1	
10	256QAM	1	49	19.45	19.54	19.54	20.5	1	
10	256QAM	25	0	18.53	18.67	18.59	20.5	1	
10	256QAM	25	12	19.47	19.54	19.54	20.5	1	
10	256QAM	25	25	19.48	19.55	19.55	20.5	1	
10	256QAM	50	0	19.54	19.67	19.69	20.5	1	
Channel									
42165									
42990									
43075									
43075									
5	QPSK	1	0	20.86	21.12	21.05	21.5	0	
5	QPSK	1	12	20.00	21.05	20.99	21.5	0	
5	QPSK	1	24	20.88	20.96	20.85	21.5	0	
5	QPSK	12	0	18.03	18.09	18.00	20.5	1	
5	QPSK	12	7	18.97	19.01	18.90	20.5	1	
5	QPSK	12	13	18.85	18.98	18.83	20.5	1	
5	QPSK	1	0	19.96	19.95	19.89	20.5	1	
5	16QAM	1	0	19.94	20.00	19.89	20.5	1	
5	16QAM	1	12	19.78	19.90	19.77	20.5	1	
5	16QAM	1	24	19.95	20.05	19.91	20.5	1	
5	16QAM	12	0	17.88	18.01	17.87	19.5	2	
5	16QAM	12	7	18.05	18.08	18.00	19.5	2	
5	16QAM	12	13	17.88	17.97	17.82	19.5	2	
5	64QAM	1	0	17.87	18.00	17.87	19.5	2	
5	64QAM	1	12	18.07	18.11	18.03	19.5	2	
5	64QAM	1	12	18.92	19.05	18.94	19.5	2	
5	64QAM	1	24	18.96	19.02	18.92	19.5	2	
5	64QAM	12	0	16.84	17.07	16.86	18.5	3	
5	64QAM	12	7	16.77	16.91	16.80	18.5	3	
5	64QAM	12	13	16.86	17.03	17.01	18.5	3	
5	256QAM	1	0	19.50	19.66	19.42	20.5	1	
5	256QAM	1	12	19.26	19.49	19.41	20.5	1	
5	256QAM	1	24	19.45	19.57	19.54	20.5	1	
5	256QAM	12	0	18.84	18.92	18.81	20.5	1	
5	256QAM	12	7	19.51	19.62	19.54	20.5	1	
5	256QAM	12	13	19.54	19.63	19.61	20.5	1	
5	256QAM	25	0	19.56	19.69	19.67	20.5	1	

Band 42 FCC Part96 Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Med Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
43190									
43340									
43490									
20	QPSK	1	0	20.81	21.09	21.00	21.5	0	
20	QPSK	1	49	20.88	21.02	20.93	21.5	0	
20	QPSK	1	99	20.85	20.99	20.80	21.5	0	
20	QPSK	50	0	18.90	19.05	18.98	20.5	1	
20	QPSK	50	24	18.84	18.97	18.86	20.5	1	
20	QPSK	50	50	18.84	18.94	18.78	20.5	1	
20	QPSK	100	0	18.90	19.05	18.87	20.5	1	
20	16QAM	1	0	19.89	19.95	19.84	20.5	1	
20	16QAM	1	49	19.75	19.87	19.75	20.5	1	
20	16QAM	1	99	19.94	20.00	19.85	20.5	1	
20	16QAM	50	0	17.82	17.98	17.82	19.5	2	
20	16QAM	50</							





Band 43 for FCC use Ant3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
43690	44090	44490								
20	QPSK	1	0	20.36	21.00	20.72	21.5	0		
20	QPSK	1	49	20.71	20.80	20.74	21.5	0		
20	QPSK	1	99	20.80	20.86	20.77	21.5	0		
20	QPSK	50	0	18.86	18.93	18.78	20.5	1		
20	QPSK	50	24	18.81	18.84	18.74	20.5	1		
20	QPSK	100	0	18.70	18.77	18.62	20.5	1		
20	QPSK	100	0	18.74	18.84	18.78	20.5	1		
20	16QAM	1	0	18.84	18.87	18.72	20.5	1		
20	16QAM	1	49	19.79	19.77	19.62	20.5	1		
20	16QAM	1	99	19.75	19.83	19.78	20.5	1		
20	16QAM	50	0	17.86	17.90	17.84	19.5	2		
20	16QAM	50	24	17.84	17.81	17.81	19.5	2		
20	16QAM	50	50	17.87	17.78	17.83	19.5	2		
20	64QAM	1	0	17.74	17.87	17.77	18.5	3		
20	64QAM	1	49	18.83	18.92	18.83	19.5	2		
20	64QAM	1	99	18.82	18.96	18.82	19.5	2		
20	64QAM	50	0	16.82	16.95	16.83	18.5	3		
20	64QAM	50	24	16.91	16.82	16.87	18.5	3		
20	64QAM	50	50	16.85	16.85	16.81	18.5	3		
20	256QAM	1	0	19.45	19.58	19.45	20.5	1		
20	256QAM	1	49	19.45	19.47	19.49	20.5	1		
20	256QAM	1	99	19.46	19.48	19.51	20.5	1		
20	256QAM	50	0	18.59	18.64	18.62	20.5	1		
20	256QAM	50	24	18.59	18.50	18.59	20.5	1		
20	256QAM	50	50	18.50	18.60	18.52	20.5	1		
20	256QAM	100	0	18.43	18.43	18.38	20.5	1		
Channel										
Frequency (MHz)										
43695	44095	44515								
15	QPSK	1	0	20.73	20.97	20.65	21.5	0		
15	QPSK	1	37	20.88	20.70	20.63	21.5	0		
15	QPSK	1	74	20.71	20.71	20.68	21.5	0		
15	QPSK	36	0	18.79	18.82	18.68	20.5	1		
15	QPSK	36	20	18.73	18.75	18.59	20.5	1		
15	QPSK	75	0	18.59	18.61	18.74	20.5	1		
15	QPSK	75	0	18.71	18.79	18.74	20.5	1		
15	16QAM	1	0	19.77	19.77	19.64	20.5	1		
15	16QAM	1	37	19.86	19.74	19.70	20.5	1		
15	16QAM	1	74	19.88	19.71	19.70	20.5	1		
15	16QAM	36	0	17.74	17.78	17.72	19.5	2		
15	16QAM	36	20	17.74	17.70	17.70	19.5	2		
15	16QAM	36	39	17.81	17.75	17.79	19.5	2		
15	16QAM	75	0	17.60	17.76	17.75	19.5	2		
15	64QAM	1	0	19.79	19.81	19.81	19.5	2		
15	64QAM	1	37	18.89	18.79	18.72	19.5	2		
15	64QAM	1	74	18.89	18.75	18.74	19.5	2		
15	64QAM	36	0	16.79	16.85	16.79	18.5	3		
15	64QAM	36	20	16.89	16.78	16.73	18.5	3		
15	64QAM	36	39	16.83	16.73	16.73	18.5	3		
15	64QAM	75	0	16.58	16.79	16.65	18.5	3		
15	256QAM	1	0	19.38	19.48	19.37	20.5	1		
15	256QAM	1	37	19.41	19.35	19.35	20.5	1		
15	256QAM	1	74	19.31	19.41	19.48	20.5	1		
15	256QAM	36	0	18.44	18.57	18.49	20.5	1		
15	256QAM	36	20	18.53	18.46	18.47	20.5	1		
15	256QAM	36	39	18.44	18.46	18.45	20.5	1		
15	256QAM	75	0	18.42	18.46	18.42	20.5	1		
Channel										
Frequency (MHz)										
44095	44500	44975								
10	QPSK	1	0	20.73	20.60	20.60	21.5	0		
10	QPSK	1	25	20.58	20.77	20.59	21.5	0		
10	QPSK	1	49	20.68	20.78	20.72	21.5	0		
10	QPSK	12	0	18.75	18.86	18.86	20.5	1		
10	QPSK	25	12	18.74	18.73	18.65	20.5	1		
10	QPSK	25	25	18.56	18.73	18.65	20.5	1		
10	QPSK	50	0	18.84	18.77	18.63	20.5	1		
10	16QAM	1	0	19.78	19.83	19.67	20.5	1		
10	16QAM	1	25	19.89	19.83	19.68	20.5	1		
10	16QAM	1	49	19.89	19.80	19.65	20.5	1		
10	16QAM	25	0	17.74	17.77	17.70	19.5	2		
10	16QAM	25	12	17.76	17.74	17.70	19.5	2		
10	16QAM	25	25	17.81	17.72	17.74	19.5	2		
10	16QAM	50	0	17.83	17.77	17.62	19.5	2		
10	64QAM	1	0	19.86	19.85	19.83	19.5	2		
10	64QAM	1	25	18.70	18.81	18.70	19.5	2		
10	64QAM	1	49	18.70	18.81	18.70	19.5	2		
10	64QAM	25	0	16.74	16.89	16.81	18.5	3		
10	64QAM	25	12	16.87	16.77	16.78	18.5	3		
10	64QAM	25	25	16.75	16.71	16.70	18.5	3		
10	64QAM	50	0	16.57	16.67	16.60	18.5	3		
10	256QAM	1	0	19.32	19.41	19.43	20.5	1		
10	256QAM	1	25	19.43	19.41	19.45	20.5	1		
10	256QAM	1	49	19.40	19.36	19.46	20.5	1		
10	256QAM	25	0	18.39	18.52	18.37	20.5	1		
10	256QAM	25	12	18.47	18.46	18.54	20.5	1		
10	256QAM	25	25	18.40	18.53	18.40	20.5	1		
10	256QAM	50	0	18.34	18.45	18.32	20.5	1		
Channel										
Frequency (MHz)										
44500	44975	45450								
5	QPSK	1	0	20.79	20.96	20.72	21.5	0		
5	QPSK	1	12	20.66	20.74	20.68	21.5	0		
5	QPSK	1	24	20.74	20.85	20.79	21.5	0		
5	QPSK	12	0	18.79	18.87	18.71	20.5	1		
5	QPSK	12	7	18.75	18.79	18.68	20.5	1		
5	QPSK	12	13	18.84	18.76	18.69	20.5	1		
5	QPSK	25	0	18.69	18.79	18.71	20.5	1		
5	16QAM	1	0	19.78	19.81	19.66	20.5	1		
5	16QAM	1	12	19.74	19.71	19.76	20.5	1		
5	16QAM	1	24	19.60	19.78	19.73	20.5	1		
5	16QAM	12	0	17.81	17.84	17.78	19.5	2		
5	16QAM	12	7	17.78	17.75	17.76	19.5	2		
5	16QAM	12	13	17.80	17.71	17.77	19.5	2		
5	64QAM	1	0	18.82	18.80	18.86	19.5	2		
5	64QAM	1	12	18.76	18.87	18.76	19.5	2		
5	64QAM	1	24	18.76	18.82	18.76	19.5	2		
5	64QAM	12	0	16.75	16.86	16.86	18.5	3		
5	64QAM	12	0	16.85	16.75	16.81	18.5	3		
5	64QAM	12	13	16.79	16.80	16.74	18.5	3		
5	64QAM	25	0	16.84	16.76	16.87	18.5	3		
5	256QAM	1	0	19.40	19.52	19.38	20.5	1		
5	256QAM	1	12	19.41	19.42	19.43	20.5	1		
5	256QAM	1	24	19.41	19.43	19.45	20.5	1		
5	256QAM	12	0	18.43	18.58	18.48	20.5	1		
5	256QAM	12	7	18.52	18.55	18.53	20.5	1		
5	256QAM	12	13	18.45	18.55	18.47	20.5	1		
5	256QAM	25	0	18.43	18.46	18.34	20.5	1		

Band 48_FCC Ant3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
56590	56890	56190								
20	QPSK	1	0	20.46	20.60	20.43	21.5	0		
20	QPSK	1	49	20.41	20.56	20.43	21.5	0		
20	QPSK	1	99	20.48	20.51	20.40	21.5	0		
20	QPSK	50	0	19.14	19.10	19.16	20.5	1		
20	QPSK	50	24	19.08	19.12	19.03	20.5	1		
20	QPSK	100	0	19.11	19.11	19.03	20.5	1		
20	QPSK	100	0	19.12	19.15	19.01	20.5	1		
20	16QAM	1	0	19.21	19.96	19.92	20.5	1		
20	16QAM	1	49	19.24	19.94	19.95	20.5	1		
20	16QAM	1	99	19.21	19.92	19.92	20.5	1		
20	16QAM	50	0	17.86	18.07	17.93	19.5	2		
20	16QAM	50	24	17.80	17.98	17.88	19.5	2		
20	16QAM	50	50	17.80	17.83	17.95	19.5	2		
20	64QAM	1	0	18.20	18.27	18.11	19.5	2		
20	64QAM	1	49	18.21	18.02	18.02	19.5	2		
20	64QAM	1	99	18.89	18.87	18.90	19.5	2		
20	64QAM	50	0	16.93	16.96	16.92	18.5	3		
20	64QAM	50	24	16.95	17.05	16.93	18.5	3		
20	64QAM	50	50	17.01	17.00	17.03	18.5	3		
20	256QAM	1	0	19.67	19.72	19.69	20.5	1		
20	256QAM	1	49	19.61	19.58	19.60	20.5	1		
20	256QAM	1	99	19.67	19.67	19.68	20.5	1		
20	256QAM	50	0	18.67	18.74	18.67	20.5	1		
20	256QAM	50	24	18.60	18.63	18.67	20.5	1		
20	256QAM	50	50	18.65	18.68	18.66	20.5	1		
20	256QAM	100	0	18.68	1					



Band 41 Ant4											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39750	40195	40640	41085	41530	41975		
20	QPSK	1	0	18.52	19.13	19.74	20.35	20.96	21.57	20	0
20	QPSK	1	40	18.89	19.06	19.13	18.98	19.07	19.16	20	0
20	QPSK	1	80	18.87	19.09	19.01	18.96	18.98	19.02	20	0
20	QPSK	50	0	17.97	18.30	18.38	18.02	18.10	18.20	19	1
20	QPSK	50	24	17.96	17.97	18.06	17.99	17.94	17.94	19	1
20	QPSK	50	48	18.02	18.06	18.10	17.98	18.05	18.05	19	1
20	QPSK	100	0	17.84	18.01	18.09	17.94	17.94	17.94	18	2
20	HSQAM	1	0	17.94	18.08	18.18	18.12	18.06	18.06	19	1
20	HSQAM	1	40	17.92	17.95	17.98	17.98	17.94	17.94	19	1
20	HSQAM	1	80	17.92	17.96	18.10	17.98	18.03	18.03	19	1
20	HSQAM	50	0	18.95	18.95	17.07	18.98	18.98	18.98	18	2
20	HSQAM	50	24	18.24	18.84	19.95	18.84	18.88	18.88	18	2
20	HSQAM	50	50	18.70	18.78	18.89	18.78	18.80	18.80	18	2
20	HSQAM	100	0	18.91	17.97	17.12	17.87	17.87	17.87	18	2
20	HSQAM	100	0	18.58	17.05	17.19	17.15	17.05	17.05	18	2
20	HSQAM	1	40	18.83	18.88	18.84	18.87	18.85	18.85	18	2
20	HSQAM	1	80	18.81	18.96	17.02	18.93	18.93	18.93	17	3
20	HSQAM	50	24	15.71	15.85	15.92	15.83	15.84	15.84	17	3
20	HSQAM	50	50	15.82	15.89	16.03	15.98	15.98	15.98	17	3
20	HSQAM	100	0	15.88	16.06	16.11	16.00	15.99	15.99	17	3
20	256QAM	1	0	13.77	13.84	13.88	13.87	13.86	13.86	15	5
20	256QAM	1	40	13.83	14.01	14.01	14.01	14.02	14.02	15	5
20	256QAM	1	80	13.88	13.96	14.02	13.94	13.89	13.89	15	5
20	256QAM	50	0	13.82	13.96	13.96	13.84	13.82	13.82	15	5
20	256QAM	50	24	13.73	13.92	13.95	13.80	13.82	13.82	15	5
20	256QAM	50	50	13.79	13.95	14.00	13.92	13.81	13.81	15	5
20	256QAM	100	0	13.82	14.04	14.04	13.92	13.81	13.81	15	5
Channel											
Frequency (MHz)				39725	40173	40620	41068	41515	41963		
15	QPSK	1	0	20.03	20.48	20.93	21.37	21.82	22.27	20	0
15	QPSK	1	37	18.77	18.98	19.08	18.91	18.88	18.88	20	0
15	QPSK	1	74	18.81	18.78	18.96	18.98	18.84	18.84	20	0
15	QPSK	36	0	17.83	17.86	18.00	17.86	18.05	18.05	19	1
15	QPSK	36	20	17.78	17.90	17.93	17.84	17.80	17.80	19	1
15	QPSK	36	40	17.81	17.86	17.92	17.86	17.86	17.86	19	1
15	QPSK	75	0	17.70	17.97	17.98	17.85	17.83	17.83	19	1
15	HSQAM	1	0	17.89	18.03	18.14	17.99	17.97	17.97	19	1
15	HSQAM	1	37	17.89	17.99	17.99	17.86	17.86	17.86	19	1
15	HSQAM	1	74	17.85	17.90	18.03	17.94	17.92	17.92	19	1
15	HSQAM	36	0	18.73	18.83	17.92	18.95	18.95	18.95	18	2
15	HSQAM	36	20	18.85	18.82	18.78	18.82	18.78	18.78	18	2
15	HSQAM	36	39	18.58	18.64	18.80	18.72	18.68	18.68	18	2
15	HSQAM	75	0	18.78	17.92	17.99	18.95	18.93	18.93	18	2
15	HSQAM	1	37	18.68	18.78	18.84	18.79	18.75	18.75	18	2
15	HSQAM	1	74	18.77	18.91	18.97	18.90	18.90	18.90	18	2
15	HSQAM	36	20	18.81	18.85	18.91	18.88	18.85	18.85	17	3
15	HSQAM	36	39	18.59	18.63	18.80	18.71	18.68	18.68	17	3
15	HSQAM	75	0	15.51	15.97	16.00	15.90	15.89	15.89	15	5
15	256QAM	1	0	13.73	13.77	13.87	13.78	13.80	13.80	15	5
15	256QAM	1	37	13.82	14.02	14.02	13.97	13.97	13.97	15	5
15	256QAM	1	74	13.77	13.85	13.90	13.88	13.88	13.88	15	5
15	256QAM	36	0	13.77	13.98	14.01	13.91	13.97	13.97	15	5
15	256QAM	36	20	13.80	13.85	13.88	13.89	13.88	13.88	15	5
15	256QAM	36	39	13.72	13.82	13.85	13.79	13.85	13.85	15	5
15	256QAM	75	0	13.79	13.90	14.00	13.93	13.97	13.97	15	5
Channel											
Frequency (MHz)				2501	2547	2593	2639	2685	2731		
10	QPSK	1	0	18.83	19.06	19.12	18.80	18.84	18.84	20	0
10	QPSK	1	25	18.79	18.92	19.02	18.94	19.03	19.03	20	0
10	QPSK	1	49	18.78	18.84	18.90	18.90	18.80	18.80	20	0
10	QPSK	12	0	17.88	17.96	18.00	17.88	17.96	17.96	19	1
10	QPSK	25	12	17.75	17.88	17.97	17.93	17.86	17.86	19	1
10	QPSK	25	25	17.87	18.02	17.98	17.88	17.82	17.82	19	1
10	QPSK	1	0	17.70	17.92	17.94	18.04	18.04	18.04	19	1
10	HSQAM	1	0	17.88	17.88	18.09	17.87	17.88	17.88	19	1
10	HSQAM	1	25	17.72	17.81	17.89	17.86	17.82	17.82	19	1
10	HSQAM	1	49	17.84	17.91	17.97	17.92	17.86	17.86	19	1
10	HSQAM	25	0	18.81	18.82	17.91	18.85	18.85	18.85	18	2
10	HSQAM	25	12	18.84	18.78	18.86	18.86	18.78	18.78	18	2
10	HSQAM	25	25	18.83	18.83	18.84	18.87	18.80	18.80	18	2
10	HSQAM	50	0	18.80	18.83	17.81	17.83	18.79	18.79	18	2
10	HSQAM	50	12	18.81	18.96	17.90	17.96	18.85	18.85	18	2
10	HSQAM	50	25	18.70	18.83	18.89	18.80	18.78	18.78	18	2
10	HSQAM	1	49	18.87	18.87	17.90	18.80	18.87	18.87	17	3
10	HSQAM	25	0	15.85	15.83	16.00	15.84	15.88	15.88	17	3
10	HSQAM	25	12	15.87	15.74	15.80	15.70	15.79	15.79	17	3
10	HSQAM	25	25	15.79	15.75	15.85	15.79	15.86	15.86	17	3
10	HSQAM	50	0	15.88	15.85	16.03	15.92	15.89	15.89	17	3
10	256QAM	1	0	13.72	13.71	13.87	13.72	13.82	13.82	15	5
10	256QAM	1	25	13.80	14.04	14.10	13.90	13.91	13.91	15	5
10	256QAM	1	49	13.82	13.91	13.91	13.81	13.82	13.82	15	5
10	256QAM	25	0	13.73	13.93	13.93	13.81	13.82	13.82	15	5
10	256QAM	25	12	13.83	13.98	14.04	13.79	13.88	13.88	15	5
10	256QAM	25	25	13.72	13.82	13.91	13.79	13.78	13.78	15	5
10	256QAM	50	0	13.83	13.95	14.06	13.99	14.04	14.04	15	5
Channel											
Frequency (MHz)				2648.5	2645.8	2693	2648.30	2687.5	2735		
5	QPSK	1	0	18.85	18.90	19.21	18.95	19.18	19.18	20	0
5	QPSK	1	18	18.83	18.93	19.00	18.95	18.90	18.90	20	0
5	QPSK	1	24	18.78	18.79	18.93	18.88	18.84	18.84	20	0
5	QPSK	12	0	17.86	17.96	18.04	17.97	18.02	18.02	19	1
5	QPSK	12	7	17.85	17.85	18.01	17.93	17.84	17.84	19	1
5	QPSK	12	13	17.90	17.80	17.96	17.86	17.83	17.83	19	1
5	QPSK	25	0	17.74	17.90	17.96	17.86	17.84	17.84	19	1
5	HSQAM	1	0	17.87	17.99	18.05	18.05	17.94	17.94	19	1
5	HSQAM	1	12	17.89	17.84	17.97	17.90	17.87	17.87	19	1
5	HSQAM	1	24	17.82	17.96	17.87	17.86	17.88	17.88	19	1
5	HSQAM	12	0	18.74	18.89	18.97	18.91	18.88	18.88	18	2
5	HSQAM	12	7	18.62	18.74	18.88	18.79	18.80	18.80	18	2
5	HSQAM	12	13	18.60	18.71	18.81	18.69	18.73	18.73	18	2
5	HSQAM	25	0	18.87	17.00	17.07	17.02	18.08	18.08	18	2
5	HSQAM	1	0	18.90	18.98	17.99	17.97	18.94	18.94	18	2
5	HSQAM	1	12	18.71	18.74	18.95	18.82	18.72	18.72	18	2
5	HSQAM	1	24	18.77	18.87	18.96	18.88	18.91	18.91	18	2
5	HSQAM	12	0	15.77	15.83	16.00	15.89	15.92	15.92	17	3
5	HSQAM	12	0	15.83	15.79	15.82	15.70	15.72	15.72	17	3
5	HSQAM	12	13	15.77	15.85	15.99	15.80	15.89	15.89	17	3
5	HSQAM	25	0	15.82	15.99	16.03	15.86	15.88	15.88	17	3
5	256QAM	1	0	13.72	13.80	13.84	13.76	13.83	13.83	15	5
5	256QAM	1	12	13.83	13.95	14.04	13.89	13.98	13.98	15	5
5	256QAM	1	24	13.84	13.84	13.97	13.90	13.80	13.80	15	5
5	256QAM	12	0	13.72	13.89	14.04	13.82	13.87	13.87	15	5
5	256QAM	12	7	13.87	13.82	13.81	13.77	13.77	13.77	15	5
5	256QAM	12	13	13.88	13.82	13.96	13.86	13.85	13.85	15	5
5	256QAM	25	0	13.87	13.91	14.00	13.92	14.00	14.00	15	5

Band 41 HPUE Ant4										
RW (MHz)	Modulation	RB Size								



Band 42 FCC Part27Q Ant8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)		
Channel				42190	42690	42990				
Frequency (MHz)										
20	QPSK	1	0	19.24	19.01	19.41				
20	QPSK	1	49	19.46	19.49	19.43	20	0		
20	QPSK	1	99	19.42	19.55	19.52				
20	QPSK	50	0	18.53	18.51	18.51				
20	QPSK	50	24	18.40	18.63	18.41	19	1		
20	QPSK	50	50	18.38	18.41	18.43				
20	QPSK	100	0	18.42	18.50	18.47				
20	16QAM	1	0	18.41	18.46	18.32				
20	16QAM	1	49	18.39	18.41	18.40	19	1		
20	16QAM	1	99	18.41	18.32	18.40				
20	16QAM	50	0	17.41	17.51	17.36				
20	16QAM	50	24	17.47	17.49	17.39				
20	16QAM	50	50	17.46	17.46	17.48	18	2		
20	16QAM	100	0	17.46	17.52	17.37				
20	16QAM	1	0	17.41	17.52	17.37				
20	16QAM	1	49	17.39	17.48	17.43	18	2		
20	16QAM	1	99	17.37	17.44	17.42				
20	16QAM	50	0	16.40	16.52	16.40				
20	16QAM	50	24	16.50	16.38	16.43	17	3		
20	16QAM	50	50	16.44	16.49	16.42				
20	16QAM	100	0	16.40	16.41	16.37				
20	256QAM	1	0	18.11	18.13	18.00				
20	256QAM	1	49	18.09	18.07	18.10	19	1		
20	256QAM	1	99	18.03	18.03	18.02				
20	256QAM	50	0	18.07	18.09	18.11				
20	256QAM	50	24	18.13	18.07	18.14	19	1		
20	256QAM	50	50	18.17	18.09	18.09				
20	256QAM	100	0	18.12	18.12	18.09				
Channel				43165	43665	43915				
Frequency (MHz)				34273	35070	34245				
15	QPSK	1	0	19.13	19.13	19.21				
15	QPSK	1	37	19.36	19.39	19.40	20	0		
15	QPSK	1	74	19.37	19.42	19.49				
15	QPSK	36	0	18.49	18.50	18.47				
15	QPSK	36	20	18.33	18.46	18.36	19	1		
15	QPSK	36	39	18.36	18.40	18.38				
15	QPSK	75	0	18.27	18.36	18.42				
15	16QAM	1	0	18.31	18.40	18.29				
15	16QAM	1	37	18.31	18.27	18.27	19	1		
15	16QAM	1	74	18.27	18.29	18.30				
15	16QAM	36	0	17.28	17.45	17.33				
15	16QAM	36	20	17.35	17.49	17.27	18	2		
15	16QAM	36	39	17.33	17.42	17.35				
15	16QAM	75	0	17.33	17.44	17.29				
15	16QAM	1	0	17.26	17.49	17.28				
15	16QAM	1	37	17.35	17.44	17.34	18	2		
15	16QAM	1	74	17.34	17.33	17.26				
15	16QAM	36	0	16.36	16.43	16.45				
15	16QAM	36	20	16.39	16.29	16.29	17	3		
15	16QAM	36	39	16.34	16.36	16.29				
15	16QAM	75	0	16.20	16.44	16.25				
15	256QAM	1	0	18.07	18.01	17.99				
15	256QAM	1	37	18.03	18.05	18.00	19	1		
15	256QAM	1	74	17.92	18.00	17.97				
15	256QAM	36	0	17.97	18.17	18.07				
15	256QAM	36	20	18.04	18.02	18.00	19	1		
15	256QAM	36	39	18.04	18.00	18.04				
15	256QAM	75	0	18.03	18.10	18.00				
Channel				43165	43665	43915				
Frequency (MHz)				34655	35000	34645				
10	QPSK	1	0	19.40	19.40	19.37				
10	QPSK	1	25	19.42	19.44	19.32	20	0		
10	QPSK	1	49	19.29	19.46	19.43				
10	QPSK	12	0	18.40	18.58	18.43				
10	QPSK	25	12	18.31	18.42	18.32	19	1		
10	QPSK	25	25	18.29	18.46	18.34				
10	QPSK	1	0	18.32	18.39	18.29				
10	16QAM	1	0	18.30	18.39	18.21				
10	16QAM	1	25	18.29	18.28	18.28	19	1		
10	16QAM	1	49	18.28	18.28	18.32				
10	16QAM	25	0	17.33	17.44	17.24				
10	16QAM	25	12	17.36	17.31	17.28	18	2		
10	16QAM	25	25	17.30	17.36	17.24				
10	16QAM	1	0	17.33	17.38	17.28				
10	16QAM	1	25	17.28	17.34	17.38	18	2		
10	16QAM	1	49	17.26	17.39	17.27				
10	16QAM	25	0	16.30	16.46	16.40				
10	16QAM	25	12	16.43	16.33	16.37	17	3		
10	16QAM	25	25	16.38	16.28	16.28				
10	16QAM	50	0	16.34	16.45	16.25				
10	256QAM	1	0	18.08	18.02	17.94				
10	256QAM	1	25	18.00	17.98	18.06	19	1		
10	256QAM	1	49	17.95	17.96	17.98				
10	256QAM	25	0	17.86	18.12	17.97				
10	256QAM	25	12	18.03	17.96	18.03	19	1		
10	256QAM	25	25	18.04	18.02	17.94				
10	256QAM	50	0	18.08	18.09	18.06				
Channel				43165	43665	43915				
Frequency (MHz)				34655	35000	34645				
5	QPSK	1	0	19.18	19.24	19.26				
5	QPSK	1	12	19.40	19.42	19.37	20	0		
5	QPSK	1	24	19.36	19.50	19.45				
5	QPSK	12	0	18.48	18.58	18.46				
5	QPSK	12	7	18.34	18.48	18.38	19	1		
5	QPSK	12	13	18.31	18.45	18.37				
5	QPSK	25	0	18.36	18.44	18.41				
5	16QAM	1	0	18.35	18.39	18.27				
5	16QAM	1	12	18.33	18.38	18.35	19	1		
5	16QAM	1	24	18.36	18.25	18.35				
5	16QAM	12	0	17.35	17.45	17.29				
5	16QAM	12	7	17.41	17.34	17.33	18	2		
5	16QAM	12	13	17.34	17.40	17.41				
5	16QAM	25	0	17.41	17.45	17.32				
5	16QAM	1	0	17.39	17.48	17.32				
5	16QAM	1	12	17.33	17.41	17.38	18	2		
5	16QAM	1	24	17.30	17.38	17.37				
5	16QAM	12	0	16.33	16.46	16.43				
5	16QAM	12	7	16.44	16.32	16.37	17	3		
5	16QAM	12	13	16.38	16.34	16.35				
5	16QAM	25	0	16.35	16.45	16.30				
5	256QAM	1	0	18.08	18.08	17.95				
5	256QAM	1	12	18.02	18.00	18.04	19	1		
5	256QAM	1	24	17.98	17.98	17.98				
5	256QAM	12	0	18.01	18.14	18.05				
5	256QAM	12	7	18.07	18.00	18.00	19	1		
5	256QAM	12	13	18.12	18.03	18.03				
5	256QAM	25	0	18.05	18.17	18.00				

Band 42 FCC Part96 Ant8										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)		
Channel				43190	43340	43490				
Frequency (MHz)										
20	QPSK	1	0	19.44	19.31	19.32				
20	QPSK	1	49	19.38	19.39	19.34	20	0		
20	QPSK	1	99	19.32	19.49	19.42				
20	QPSK	50	0	18.43	18.51	18.41				
20	QPSK	50	24	18.39	18.43	18.31	19	1		
20	QPSK	50	50	18.32	18.41	18.33				
20	QPSK	100	0	18.32	18.40	18.38				
20	16QAM	1	0	18.32	18.36	18.22				
20	16QAM	1	49	18.29	18.31	18.31	19	1		
20	16QAM	1	99	18.31	18.23	18.30				
20	16QAM	50	0	17.31	17.41	17.28				
20	16QAM	50	24	17.30	17.33	17.29				
20	16QAM	50	50	17.31	17.36	17.38	18	2		
20	16QAM	100	0	17.29	17.42	17.27				
20	16QAM	1	0	17.31	17.42	17.27				
20	16QAM	1	49	17.29	17.38	17.33	18	2		
20	16QAM	1	99	17.27	17.33	17.32				
20	16QAM	50	0	16.29	16.41	16.39				
20	16QAM	50	24	16.40	16.28	16.33	17	3		
20	16QAM	50	50	16.35	16.31	16.32				
20	16QAM	100	0	16.30	16.42	16.27				
20	256QAM	1	0	18.00	18.03	17.90				
20	256QAM	1	49	17.99	17.97	18.00	19	1		
20	256QAM	1	99	17.99	17.93	17.92				
20	256QAM	50	0	17.97	17.93	17.92				
20	256QAM	50	24	18.03	17.97	18.04	19	1		
20	256QAM	50	50	18.07	17.98	17.99				
20	256QAM	100	0	18.02	18.13	18.05				
Channel				43190	43340	43490				
Frequency (MHz)				35275	35375	35275				
15										



Band 43 for FCC use Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Med Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel				43690	44090	44490			
Frequency (MHz)									
20	QPSK	1	0	19.94	19.93	19.93			
20	QPSK	1	49	19.48	19.58	19.54			20
20	QPSK	1	99	19.44	19.53	19.42			
20	QPSK	50	0	18.26	18.32	18.22			
20	QPSK	50	24	18.14	18.24	18.18			19
20	QPSK	100	0	18.16	18.26	18.18			
20	QPSK	100	0	18.11	18.22	18.21			
20	16QAM	1	0	18.18	18.30	18.23			19
20	16QAM	1	49	18.23	18.31	18.27			
20	16QAM	1	99	18.19	18.18	18.18			
20	16QAM	50	0	17.23	17.35	17.26			
20	16QAM	50	24	17.31	17.20	17.25			18
20	16QAM	50	50	17.33	17.31	17.25			
20	16QAM	100	0	17.22	17.26	17.19			
20	16QAM	100	0	17.21	17.35	17.25			
20	16QAM	1	49	17.26	17.31	17.25			18
20	16QAM	1	99	17.24	17.30	17.30			
20	16QAM	50	0	16.30	16.34	16.31			
20	16QAM	50	24	16.29	16.20	16.29			17
20	16QAM	50	50	16.27	16.20	16.25			
20	16QAM	100	0	16.16	16.25	16.13			
20	256QAM	1	0	18.13	18.27	18.15			
20	256QAM	1	49	18.14	18.22	18.23			19
20	256QAM	1	99	18.22	18.21	18.14			
20	256QAM	50	0	18.27	18.25	18.27			
20	256QAM	50	24	18.24	18.21	18.30			19
20	256QAM	50	50	18.21	18.23	18.25			
20	256QAM	100	0	18.14	18.18	18.18			
Channel									
Frequency (MHz)				43695	44090	44515			
15	QPSK	1	0	19.13	19.13	19.23			
15	QPSK	1	37	19.42	19.80	19.47			20
15	QPSK	1	74	19.38	19.86	19.36			
15	QPSK	36	0	18.20	18.25	18.16			
15	QPSK	36	20	18.08	18.17	18.13			19
15	QPSK	36	39	18.10	18.26	18.15			
15	QPSK	75	0	18.04	18.17	18.16			
15	16QAM	1	0	18.12	18.24	18.17			19
15	16QAM	1	37	18.16	18.11	18.16			
15	16QAM	1	74	18.13	18.13	18.11			
15	16QAM	36	0	17.18	17.30	17.19			
15	16QAM	36	20	17.25	17.14	17.20			18
15	16QAM	36	39	17.28	17.26	17.20			
15	16QAM	75	0	17.14	17.20	17.12			
15	16QAM	75	0	17.16	17.20	17.15			
15	16QAM	1	37	17.19	17.25	17.18			18
15	16QAM	1	74	17.19	17.23	17.24			
15	16QAM	36	0	16.24	16.28	16.25			
15	16QAM	36	20	16.23	16.14	16.23			17
15	16QAM	36	39	16.22	16.22	16.22			
15	16QAM	75	0	16.10	16.19	16.05			
15	256QAM	1	0	18.07	18.22	18.09			19
15	256QAM	1	37	18.08	18.15	18.15			
15	256QAM	1	74	18.18	18.14	18.08			
15	256QAM	36	0	18.21	18.27	18.21			19
15	256QAM	36	20	18.19	18.15	18.25			
15	256QAM	36	39	18.16	18.17	18.20			
15	256QAM	75	0	18.08	18.16	18.11			
Channel									
Frequency (MHz)				44095	44500	44925			
10	QPSK	1	0	19.07	19.07	19.12			
10	QPSK	1	25	19.43	19.49	19.49			20
10	QPSK	1	49	19.39	19.46	19.38			
10	QPSK	12	0	18.10	18.26	18.16			
10	QPSK	25	12	18.08	18.19	18.11			19
10	QPSK	25	25	18.11	18.20	18.12			
10	QPSK	1	0	18.06	18.16	18.16			
10	16QAM	1	0	18.12	18.23	18.17			19
10	16QAM	1	25	18.17	18.19	18.16			
10	16QAM	1	49	18.13	18.12	18.12			
10	16QAM	25	0	17.16	17.29	17.21			
10	16QAM	25	12	17.26	17.14	17.20			18
10	16QAM	25	25	17.26	17.25	17.19			
10	16QAM	50	0	17.14	17.19	17.11			
10	16QAM	1	0	17.16	17.20	17.14			
10	16QAM	1	25	17.21	17.24	17.19			18
10	16QAM	1	49	17.18	17.25	17.24			
10	16QAM	25	0	16.23	16.28	16.25			
10	16QAM	25	12	16.22	16.14	16.22			17
10	16QAM	25	25	16.21	16.14	16.18			
10	16QAM	50	0	16.11	16.20	16.06			
10	256QAM	1	0	18.07	18.21	18.09			19
10	256QAM	1	25	18.08	18.17	18.17			
10	256QAM	1	49	18.15	18.14	18.09			
10	256QAM	25	0	18.22	18.26	18.21			19
10	256QAM	25	12	18.19	18.14	18.25			
10	256QAM	25	25	18.16	18.17	18.19			
10	256QAM	50	0	18.08	18.19	18.13			
Channel									
Frequency (MHz)				3693.5	3693.5	3697.5			
5	QPSK	1	0	19.88	19.80	19.54			20
5	QPSK	1	12	19.42	19.50	19.47			
5	QPSK	1	24	19.37	19.45	19.36			
5	QPSK	12	0	18.20	18.26	18.16			19
5	QPSK	12	7	18.08	18.18	18.11			
5	QPSK	12	13	18.10	18.20	18.13			
5	QPSK	25	0	18.06	18.16	18.16			
5	16QAM	1	0	18.12	18.23	18.17			19
5	16QAM	1	12	18.18	18.16	18.17			
5	16QAM	1	24	18.13	18.15	18.11			
5	16QAM	12	0	17.17	17.29	17.21			
5	16QAM	12	7	17.26	17.14	17.19			18
5	16QAM	12	13	17.27	17.25	17.19			
5	16QAM	25	0	17.13	17.20	17.13			
5	16QAM	1	0	17.19	17.29	17.13			18
5	16QAM	1	12	17.21	17.25	17.20			
5	16QAM	1	24	17.17	17.24	17.20			
5	16QAM	12	0	16.25	16.28	16.24			
5	16QAM	12	7	16.23	16.14	16.23			17
5	16QAM	12	13	16.20	16.16	16.18			
5	16QAM	25	0	16.11	16.16	16.08			
5	256QAM	1	0	18.07	18.22	18.09			19
5	256QAM	1	12	18.07	18.16	18.17			
5	256QAM	1	24	18.15	18.16	18.09			
5	256QAM	12	0	18.21	18.28	18.21			19
5	256QAM	12	7	18.18	18.15	18.24			
5	256QAM	12	13	18.16	18.18	18.19			19
5	256QAM	25	0	18.08	18.19	18.12			

Band 48_FCC Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Med Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel				56590	56890	56190	56640		
Frequency (MHz)									
20	QPSK	1	0	19.10	19.09	19.11			
20	QPSK	1	49	19.08	19.25	19.16			20
20	QPSK	1	99	19.21	19.09	19.11			
20	QPSK	50	0	18.54	18.62	18.49			
20	QPSK	50	24	18.41	18.58	18.43			19
20	QPSK	100	0	18.35	18.35	18.47			
20	QPSK	100	0	18.47	18.37	18.49			
20	16QAM	1	0	18.53	18.87	18.58			19
20	16QAM	1	49	18.52	18.81	18.56			
20	16QAM	1	99	18.59	18.81	18.59			
20	16QAM	50	0	17.34	17.49	17.38			
20	16QAM	50	24	17.36	17.35	17.43			18
20	16QAM	50	50	17.41	17.47	17.35			
20	16QAM	100	0	17.46	17.59	17.47			
20	16QAM	100	0	17.57	17.65	17.59			
20	16QAM	1	49	17.60	17.62	17.63			18
20	16QAM	1	99	17.48	17.56	17.54			
20	16QAM	50	0	16.38	16.45	16.35			
20	16QAM	50	24	16.31	16.33	16.38			17
20	16QAM	50	50	16.35	16.37	16.37			
20	16QAM	100	0	16.50	16.50	16.50			
20	256QAM	1	0	18.20	18.41	18.38			
20	256QAM	1	49	18.21	18.32	18.31			19
20	256QAM	1	99	18.30	18.34	18.38			
20	256QAM	50	0	18.21	18.47	18.41			
20	256QAM	50	24	18.33	18.37	18.34			19
20	256QAM	50	50	18.38	18.39	18.44			
20	256QAM	100	0	18.44	18.54	18.50			
Channel									
Frequency (MHz)				5621.5	5694	5616.5	5666.5		
15	QPSK	1	0	19.03	19.03	19.15			
15	QPSK	1	37	19.02	19.18	19.10			20
15	QPSK	1	74	19.10	19.11	19.06			
15	QPSK	36	0	18.40	18.56	18.42			
15	QPSK	36	20	18.35	18.52	18.37			19
15	QPSK	36	39	18.34	18.41	18.40			
15	QPSK	75	0	18.42	18.61	18.43			
15	16QAM	1	0	18.47	18.61	18.52			19
15	16QAM	1	37	18.47	18.56	18.56			
15	16QAM	1	74	18.50	18.54	18.54			



Reduced Power Mode for DS12 Standalone

CDMA2000 1X		Total Average Power (dBm)			Transmit Average Power (dBm)		
		198	189	201	198	189	201
	Frequency (MHz)	815.2	816.4	817.6	815.2	816.4	817.6
DRM 1 Tx site		32.61	32.65	32.57	33.59	33.61	33.57
DRM 2 Tx site		32.68	32.84	32.91	33.59	33.64	33.57
DRM 3 Tx site		32.18	32.08	32.40	33.50	33.18	33.58
DRM 4 Tx site		32.00	32.86	32.15	33.00	33.74	32.89
DRM 5 Tx site		32.69	32.02	32.97	32.99	33.02	32.97
EDGE 1 Tx site		22.36	22.72	22.42	26.50	18.38	18.42
EDGE 2 Tx site		22.70	22.87	22.72	24.00	17.76	17.72
EDGE 3 Tx site		22.54	22.77	22.54	23.50	18.28	18.51
EDGE 4 Tx site		22.46	20.60	20.48	21.00	17.46	17.48
EDGE 5 Tx site							
EDGE 1 Tx site		WCDMA V-Avg			Transmit Average Power (dBm)		
		4132	4161	4233	4132	4161	4233
	Frequency (MHz)	8367	8407	8458	8367	8407	8458
SOPP Rail 0	AMR 12 20kps	23.88	24.13	23.95	25.00		
SOPP Rail 0	RM-C 15 20kps	23.92	24.22	24.02	25.00		
SOPP Rail 0	HS-PA Subclass 1	22.92	23.11	23.19	24.00		
SOPP Rail 0	HS-PA Subclass 2	22.94	22.75	23.51	23.50		
SOPP Rail 0	HS-PA Subclass 4	22.42	22.71	22.62	23.50		
SOPP Rail 0	DC-HSPA Subclass 1	22.56	22.38	23.58	24.00		
SOPP Rail 0	DC-HSPA Subclass 2	22.81	23.07	23.07	24.00		
SOPP Rail 0	DC-HSPA Subclass 3	22.94	22.61	22.82	23.50		
SOPP Rail 0	DC-HSPA Subclass 4	22.92	22.59	22.46	23.50		
SOPP Rail 0	HS-PA Subclass 1	22.84	23.11	23.00	24.00		
SOPP Rail 0	HS-PA Subclass 2	21.01	21.22	21.06	22.00		
SOPP Rail 0	HS-PA Subclass 3	21.92	22.17	22.01	23.00		
SOPP Rail 0	HS-PA Subclass 4	20.72	21.08	21.08	22.00		
SOPP Rail 0	HS-PA Subclass 2	21.92	23.01	23.12	24.00		



GSM900 AET									
TX Channel	Base Average Power (dBm)			Turnup Limit	Fringe Average Power (dBm)			Turnup Limit	
	84.2	84.4	84.8		84.2	84.4	84.8		
Freqency (MHz)	82.4	82.8	83.2	83.2	83.4	83.8	84.2	84.2	84.6
OPRS 1 Tx Watt	32.87	32.71	32.66	33.00	33.07	33.21	33.00	33.00	33.00
OPRS 2 Tx Watt	29.90	29.41	29.41	30.00	29.96	29.46	29.41	29.40	29.40
OPRS 3 Tx Watt	28.30	28.55	28.35	29.00	29.84	29.97	29.85	29.71	29.71
OPRS 4 Tx Watt	28.34	28.54	28.50	27.00	28.34	28.54	28.50	28.50	28.50
EDGE 1 Tx Watt	25.76	25.61	25.84	27.00	18.76	18.61	18.84	18.00	18.00
EDGE 2 Tx Watt	24.07	24.21	23.98	25.00	18.07	18.21	17.98	19.50	19.50
EDGE 3 Tx Watt	22.94	22.97	23.74	24.00	18.56	18.71	18.48	19.74	19.74
EDGE 4 Tx Watt	20.84	20.60	20.81	22.00	17.84	17.69	17.81	19.00	19.00
GSM1900 AET									
TX Channel	Base Average Power (dBm)			Turnup Limit	Fringe Average Power (dBm)			Turnup Limit	
	81.2	86.1	81.0		81.2	86.1	81.0		
Freqency (MHz)	182.2	182.6	182.8	182.8	182.2	182.6	182.8	182.8	182.8
OPRS 1 Tx Watt	25.35	26.54	25.51	28.00	17.95	17.64	17.51	19.00	19.00
OPRS 2 Tx Watt	26.60	26.62	26.55	28.00	17.80	17.62	17.55	19.00	19.00
OPRS 3 Tx Watt	23.84	23.85	23.97	26.00	17.84	17.85	17.97	19.00	19.00
OPRS 4 Tx Watt	21.92	22.01	21.93	23.30	17.89	17.97	17.87	19.04	19.04
OPRS 5 Tx Watt	24.96	24.97	24.96	22.00	17.96	17.97	17.96	18.00	18.00
EDGE 1 Tx Watt	24.11	24.57	23.04	25.00	15.11	15.57	14.94	18.00	18.00
EDGE 2 Tx Watt	22.47	22.73	22.34	23.00	16.47	16.73	16.34	17.00	17.00
EDGE 3 Tx Watt	21.32	21.57	21.20	22.00	17.06	17.31	16.94	17.74	17.74
EDGE 4 Tx Watt	19.18	18.40	19.33	20.00	16.18	16.41	16.33	17.00	17.00
WCDMA E Aet									
TX Channel	WCDMA E Aet			Turnup Limit	WCDMA V Aet			Turnup Limit	
	9302	9600	9308		1312	1410	1513		
Freqency (MHz)	9602	9600	9308	9307	1608	1708	9307	4407	4508
ISPP Pwr 50	15.81	15.07	15.08	17.20	16.83	17.05	16.88	18.00	23.83
ISPP Pwr 1	15.01	15.40	15.19	16.20	15.77	16.17	16.01	17.00	22.83
ISPP Pwr 2	15.08	15.32	15.24	16.20	15.83	16.03	15.71	17.00	22.82
ISPP Pwr 3	14.70	14.79	14.80	16.20	15.22	15.65	15.48	16.00	22.87
ISPP Pwr 4	14.14	14.71	14.83	16.20	15.93	16.04	15.61	16.00	22.84
ISPP Pwr 5	15.10	15.19	15.19	16.20	15.82	16.04	15.96	17.00	23.10
ISPP Pwr 6	15.02	15.21	15.22	16.20	15.79	15.86	15.83	17.00	22.78
ISPP Pwr 7	14.61	14.70	14.63	16.20	15.24	15.46	15.38	16.00	22.41
ISPP Pwr 8	14.66	14.66	14.67	16.20	15.37	15.42	15.29	16.00	22.27
ISPP Pwr 9	15.04	15.20	15.01	16.20	15.76	16.00	15.83	17.00	22.86
ISPP Pwr 10	13.04	13.00	13.08	14.20	13.79	14.09	13.74	15.00	20.79
ISPP Pwr 11	13.84	13.80	13.70	15.20	14.83	14.84	14.86	16.00	21.79
ISPP Pwr 12	12.88	12.80	12.88	14.20	13.81	13.59	13.98	15.00	20.80
ISPP Pwr 13	13.03	13.00	13.01	16.20	15.80	16.00	15.96	17.00	22.90

WCDMA V Aet									
TX Channel	WCDMA V Aet			Turnup Limit	WCDMA Y Aet			Turnup Limit	
	4152	4182	4233		4327	4407	4508		
Freqency (MHz)	1820.4	1890	1807.6	1718.4	1721.6	1752.8	180.4	186.4	186.6
ISPP Pwr 50	15.81	15.07	15.08	17.20	16.83	17.05	16.88	18.00	23.83
ISPP Pwr 1	15.01	15.40	15.19	16.20	15.77	16.17	16.01	17.00	22.83
ISPP Pwr 2	15.08	15.32	15.24	16.20	15.83	16.03	15.71	17.00	22.82
ISPP Pwr 3	14.70	14.79	14.80	16.20	15.22	15.65	15.48	16.00	22.87
ISPP Pwr 4	14.14	14.71	14.83	16.20	15.93	16.04	15.61	16.00	22.84
ISPP Pwr 5	15.10	15.19	15.19	16.20	15.82	16.04	15.96	17.00	23.10
ISPP Pwr 6	15.02	15.21	15.22	16.20	15.79	15.86	15.83	17.00	22.78
ISPP Pwr 7	14.61	14.70	14.63	16.20	15.24	15.46	15.38	16.00	22.41
ISPP Pwr 8	14.66	14.66	14.67	16.20	15.37	15.42	15.29	16.00	22.27
ISPP Pwr 9	15.04	15.20	15.01	16.20	15.76	16.00	15.83	17.00	22.86
ISPP Pwr 10	13.04	13.00	13.08	14.20	13.79	14.09	13.74	15.00	20.79
ISPP Pwr 11	13.84	13.80	13.70	15.20	14.83	14.84	14.86	16.00	21.79
ISPP Pwr 12	12.88	12.80	12.88	14.20	13.81	13.59	13.98	15.00	20.80
ISPP Pwr 13	13.03	13.00	13.01	16.20	15.80	16.00	15.96	17.00	22.90



GSM1900 A/G							
GSM1900 A/G	Rx Channel Power (dBm)			Tune-up	Tx Channel Power (dBm)		
	1800.2	1800	1800.8	1800.2	1800	1800.8	1800.2
TX Channel	1800.2	1800	1800.8	1800.2	1800	1800.8	1800.2
Frequency (MHz)	1800.2	1800	1800.8	1800.2	1800	1800.8	1800.2
EDGE 1 Tx Power	29.31	29.24	29.40	30.00	29.31	29.24	29.40
EDGE 2 Tx Power	29.34	29.47	29.43	30.00	29.34	29.47	29.43
EDGE 3 Tx Power	29.66	29.84	29.72	30.00	29.66	29.84	29.72
EDGE 4 Tx Power	29.42	29.25	29.48	30.00	29.42	29.25	29.48
EDGE 5 Tx Power	21.84	21.00	21.88	23.00	21.84	21.00	21.88
EDGE 6 Tx Power	23.82	23.87	23.88	25.00	23.82	23.87	23.88
EDGE 7 Tx Power	22.10	22.10	22.13	23.00	22.10	22.10	22.13
EDGE 8 Tx Power	20.90	20.00	20.95	22.00	20.90	20.00	20.95
EDGE 9 Tx Power	18.75	18.81	18.81	20.00	18.75	18.81	18.81

  

WCDMA I A/G							
WCDMA I A/G	Rx Channel Power (dBm)			Tune-up	Tx Channel Power (dBm)		
	5862	5900	6038	5862	5900	6038	5862
TX Channel	5862	5900	6038	5862	5900	6038	5862
Frequency (MHz)	5862	5900	6038	5862	5900	6038	5862
SCPP Rate 0	23.85	23.03	23.86	25.00	23.81	24.05	23.90
SCPP Rate 1	23.85	24.00	23.86	25.00	23.82	24.12	24.06
SCPP Rate 2	22.97	22.70	22.70	24.00	23.00	23.12	23.00
SCPP Rate 3	22.95	22.88	22.79	24.00	23.09	23.09	23.81
SCPP Rate 4	22.41	22.44	22.22	23.00	22.49	22.09	22.33
SCPP Rate 5	22.30	22.30	22.17	23.00	22.89	22.82	22.40
SCPP Rate 6	22.50	22.80	22.84	24.00	22.50	22.94	22.50
SCPP Rate 7	22.75	22.61	22.74	24.00	22.97	22.60	22.73
SCPP Rate 8	22.44	22.20	22.21	23.00	22.49	22.58	22.49
SCPP Rate 9	22.37	22.25	22.12	23.00	22.42	22.36	22.12
SCPP Rate 10	22.96	22.88	22.78	24.00	22.85	22.88	22.75
SCPP Rate 11	20.77	20.84	20.90	22.00	20.86	21.03	20.70
SCPP Rate 12	21.74	21.91	21.83	23.00	21.92	22.00	21.74
SCPP Rate 13	21.80	21.81	21.80	22.00	21.80	21.80	21.81
SCPP Rate 14	22.09	22.50	22.78	24.00	22.03	23.03	22.83

  

WCDMA IV A/G							
WCDMA IV A/G	Rx Channel Power (dBm)			Tune-up	Tx Channel Power (dBm)		
	1312	1483	1513	1312	1483	1513	1312
TX Channel	1312	1483	1513	1312	1483	1513	1312
Frequency (MHz)	1312	1483	1513	1312	1483	1513	1312
SCPP Rate 0	23.85	23.03	23.86	25.00	23.81	24.05	23.90
SCPP Rate 1	23.85	24.00	23.86	25.00	23.82	24.12	24.06
SCPP Rate 2	22.97	22.70	22.70	24.00	23.00	23.12	23.00
SCPP Rate 3	22.95	22.88	22.79	24.00	23.09	23.09	23.81
SCPP Rate 4	22.41	22.44	22.22	23.00	22.49	22.09	22.33
SCPP Rate 5	22.30	22.30	22.17	23.00	22.89	22.82	22.40
SCPP Rate 6	22.50	22.80	22.84	24.00	22.50	22.94	22.50
SCPP Rate 7	22.75	22.61	22.74	24.00	22.97	22.60	22.73
SCPP Rate 8	22.44	22.20	22.21	23.00	22.49	22.58	22.49
SCPP Rate 9	22.37	22.25	22.12	23.00	22.42	22.36	22.12
SCPP Rate 10	22.96	22.88	22.78	24.00	22.85	22.88	22.75
SCPP Rate 11	20.77	20.84	20.90	22.00	20.86	21.03	20.70
SCPP Rate 12	21.74	21.91	21.83	23.00	21.92	22.00	21.74
SCPP Rate 13	21.80	21.81	21.80	22.00	21.80	21.80	21.81
SCPP Rate 14	22.09	22.50	22.78	24.00	22.03	23.03	22.83



Band 5 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Mid Ch / Freq.	Power High Ch / Freq.	Turn-up time (secs)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.60	22.73	22.68				
10	QPSK	1	25	22.64	22.77	22.71			24	0
10	QPSK	1	49	22.50	22.64	22.55				
10	QPSK	25	0	21.69	21.72	21.62				
10	QPSK	25	12	21.44	21.52	21.44				
10	QPSK	25	25	21.53	21.66	21.61			23	1
10	QPSK	50	0	21.61	21.65	21.59				
10	16QAM	1	0	21.59	21.67	21.61				
10	16QAM	1	25	21.41	21.52	21.38			23	1
10	16QAM	1	49	21.54	21.60	21.45				
10	16QAM	25	0	20.47	20.55	20.43				
10	16QAM	25	12	20.35	20.49	20.35			22	2
10	16QAM	25	25	20.50	20.60	20.53				
10	16QAM	50	0	20.54	20.59	20.59				
10	64QAM	1	0	20.51	20.59	20.54				
10	64QAM	1	25	20.45	20.51	20.47			22	2
10	64QAM	1	49	20.56	20.66	20.53				
10	64QAM	25	0	19.47	19.53	19.40				
10	64QAM	25	12	19.52	19.63	19.59			21	3
10	64QAM	25	25	19.44	19.55	19.35				
10	64QAM	50	0	19.50	19.62	19.54				
10	256QAM	1	0	17.46	17.56	17.43				
10	256QAM	1	25	17.44	17.45	17.40			19	5
10	256QAM	1	49	17.40	17.62	17.52				
10	256QAM	25	0	17.40	17.56	17.44				
10	256QAM	25	12	17.50	17.63	17.50			19	5
10	256QAM	25	25	17.50	17.56	17.44				
10	256QAM	50	0	17.41	17.57	17.48				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.54	22.66	22.54				
5	QPSK	1	12	22.39	22.46	22.44			24	0
5	QPSK	1	24	22.45	22.54	22.47				
5	QPSK	12	0	21.60	21.68	21.55				
5	QPSK	12	7	21.35	21.44	21.39				
5	QPSK	12	13	21.45	21.52	21.51			23	1
5	QPSK	25	0	21.60	21.64	21.48				
5	16QAM	1	0	21.53	21.56	21.52				
5	16QAM	1	12	21.31	21.40	21.32			23	1
5	16QAM	1	24	21.41	21.47	21.31				
5	16QAM	12	0	20.43	20.51	20.37				
5	16QAM	12	7	20.25	20.39	20.21			22	2
5	16QAM	12	13	20.44	20.56	20.38				
5	16QAM	25	0	20.48	20.58	20.46				
5	64QAM	1	0	20.38	20.54	20.48				
5	64QAM	1	12	19.36	19.40	19.25			22	2
5	64QAM	1	24	19.41	19.52	19.35				
5	64QAM	12	0	19.38	19.40	19.25			21	3
5	64QAM	12	7	19.39	19.44	19.21				
5	64QAM	12	13	19.39	19.44	19.21				
5	64QAM	25	0	19.38	19.52	19.39				
5	256QAM	1	0	17.36	17.50	17.38				
5	256QAM	1	12	17.40	17.47	17.31			19	5
5	256QAM	1	24	17.45	17.52	17.45				
5	256QAM	12	0	17.35	17.46	17.38				
5	256QAM	12	7	17.44	17.50	17.45			19	5
5	256QAM	12	13	17.45	17.50	17.35				
5	256QAM	25	0	17.44	17.46	17.46				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.63	22.63	22.63				
3	QPSK	1	8	22.42	22.53	22.41			24	0
3	QPSK	1	14	22.38	22.60	22.51				
3	QPSK	8	0	21.66	21.66	21.66				
3	QPSK	8	4	21.38	21.43	21.34				
3	QPSK	8	7	21.40	21.55	21.57			23	1
3	16QAM	1	0	21.49	21.55	21.52				
3	16QAM	1	8	21.34	21.41	21.31			23	1
3	16QAM	1	14	21.42	21.46	21.30				
3	16QAM	8	0	20.41	20.49	20.30				
3	16QAM	8	4	20.21	20.40	20.21			22	2
3	16QAM	8	7	20.30	20.50	20.47				
3	64QAM	1	0	20.48	20.61	20.50				
3	64QAM	1	8	20.47	20.44	20.45			22	2
3	64QAM	1	14	20.33	20.40	20.33				
3	64QAM	8	0	20.43	20.62	20.43				
3	64QAM	8	4	19.35	19.40	19.33			21	3
3	64QAM	8	7	19.38	19.39	19.23				
3	64QAM	15	0	19.37	19.54	19.46				
3	256QAM	1	0	17.38	17.41	17.34				
3	256QAM	1	8	17.37	17.38	17.27			19	5
3	256QAM	1	14	17.40	17.57	17.57				
3	256QAM	8	0	17.39	17.41	17.35				
3	256QAM	8	4	17.39	17.59	17.47			19	5
3	256QAM	8	7	17.40	17.52	17.40				
3	256QAM	15	0	17.47	17.60	17.46				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.63	22.63	22.63				
1.4	QPSK	1	3	22.40	22.50	22.49			24	0
1.4	QPSK	1	5	22.35	22.50	22.41				
1.4	QPSK	3	0	22.54	22.67	22.48				
1.4	QPSK	3	1	22.35	22.43	22.39				
1.4	QPSK	3	3	22.41	22.52	22.48			23	1
1.4	16QAM	1	0	21.48	21.56	21.48				
1.4	16QAM	1	3	21.32	21.45	21.29				
1.4	16QAM	1	5	21.48	21.52	21.40				
1.4	16QAM	3	0	21.37	21.47	21.37			23	1
1.4	16QAM	3	1	21.32	21.42	21.20				
1.4	16QAM	3	3	21.35	21.48	21.43				
1.4	64QAM	1	0	20.43	20.56	20.49			22	2
1.4	64QAM	1	3	20.37	20.55	20.45				
1.4	64QAM	1	5	20.40	20.45	20.29				
1.4	64QAM	3	0	20.41	20.61	20.39			22	2
1.4	64QAM	3	3	20.39	20.40	20.28				
1.4	64QAM	6	0	19.40	19.55	19.46			21	3
1.4	64QAM	6	3	19.40	17.47	17.35				
1.4	256QAM	1	0	17.40	17.40	17.36				
1.4	256QAM	1	3	17.40	17.40	17.36			19	5
1.4	256QAM	3	0	17.43	17.49	17.38				
1.4	256QAM	3	3	17.36	17.36	17.41				
1.4	256QAM	3	1	17.41	17.52	17.45				
1.4	256QAM	3	3	17.44	17.42	17.43			19	5
1.4	256QAM	6	0	17.54	17.51	17.43				

Band 12 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Mid Ch / Freq.	Power High Ch / Freq.	Turn-up time (secs)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.78	22.88	22.85				
10	QPSK	1	25	22.81	22.91	22.81			24	0
10	QPSK	1	49	22.79	22.91	22.87				
10	QPSK	25	0	21.74	21.80	21.82				
10	QPSK	25	12	21.74	21.83	21.65				
10	QPSK	25	25	21.74	21.83	21.74			23	1
10	QPSK	50	0	21.88	21.91	21.86				
10	16QAM	1	0	21.93	21.92	21.90				
10	16QAM	1	25	21.75	21.89	21.75			23	1
10	16QAM	1	49	21.88	21.93	21.83				
10	16QAM	25	0	20.82	20.87	20.81				
10	16QAM	25	12	20.90	20.95	20.87			22	2
10	16QAM	25	25	20.76	20.84	20.71				
10	16QAM	50	0	20.78	20.85	20.78				
10	64QAM	1	0	20.85	20.95	20.82				
10	64QAM	1	25	20.76	20.80	20.85			22	2
10	64QAM	1	49	20.72	20.82	20.77				
10	64QAM	25	0	19.81	19.85	19.81				





Band 17 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				700	710	711			
10	QPSK	1	0	22.86	22.86	22.92	24	0	
10	QPSK	1	26	22.77	22.83	22.86			
10	QPSK	1	49	22.75	22.81	22.88			
10	QPSK	25	0	21.82	21.84	21.84			
10	QPSK	25	12	21.78	21.80	21.83			
10	QPSK	25	25	21.71	21.79	21.79	23	1	
10	QPSK	50	0	21.80	21.85	21.77			
10	16QAM	1	0	20.92	20.92	22.04			
10	16QAM	1	26	21.83	21.90	21.90	23	1	
10	16QAM	5	49	21.83	21.91	21.87			
10	16QAM	25	0	20.91	20.95	20.92			
10	16QAM	25	12	20.71	20.82	20.78	22	2	
10	16QAM	25	25	20.79	20.87	20.80			
10	16QAM	50	0	20.81	20.91	20.82			
10	64QAM	1	0	21.00	21.04	21.00			
10	64QAM	1	26	20.89	20.92	20.96	22	2	
10	64QAM	1	49	20.82	20.87	20.79			
10	64QAM	25	0	19.54	19.78	19.65			
10	64QAM	25	12	19.79	19.86	19.73	21	3	
10	64QAM	25	25	19.87	19.71	19.57			
10	64QAM	50	0	19.75	19.89	19.85			
10	256QAM	1	0	17.89	18.01	17.86	19	5	
10	256QAM	1	26	17.85	17.84	17.88			
10	256QAM	1	49	17.71	17.86	17.78			
10	256QAM	25	0	17.81	17.80	17.86			
10	256QAM	25	12	17.74	17.84	17.75	19	5	
10	256QAM	25	25	17.85	17.79	17.75			
10	256QAM	50	0	17.79	17.85	17.85			
Channel									
				706.5	710	713.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.71	22.85	22.83	24	0	
5	QPSK	1	12	22.70	22.71	22.71			
5	QPSK	1	24	22.68	22.78	22.61			
5	QPSK	12	0	21.76	21.90	21.80			
5	QPSK	12	7	21.67	21.79	21.71	23	1	
5	QPSK	12	13	21.65	21.75	21.66			
5	QPSK	25	0	21.67	21.77	21.66			
5	16QAM	1	0	21.98	21.98	21.92	23	1	
5	16QAM	1	12	21.89	21.93	21.84			
5	16QAM	1	24	21.79	21.80	21.75			
5	16QAM	12	0	20.87	20.91	20.77	22	2	
5	16QAM	12	7	20.84	20.79	20.64			
5	16QAM	12	13	20.71	20.76	20.70			
5	16QAM	25	0	20.75	20.78	20.78			
5	64QAM	1	0	20.90	20.95	20.90	22	2	
5	64QAM	1	12	20.80	20.80	20.85			
5	64QAM	1	24	20.88	20.91	20.89			
5	64QAM	12	0	19.53	19.65	19.61			
5	64QAM	12	7	19.63	19.63	19.64	21	3	
5	64QAM	12	13	19.60	19.52	19.53			
5	64QAM	25	0	19.61	19.76	19.77			
5	256QAM	1	0	17.84	17.80	17.78	19	5	
5	256QAM	1	12	17.75	17.85	17.75			
5	256QAM	1	24	17.88	17.76	17.63			
5	256QAM	12	0	17.76	17.71	17.74			
5	256QAM	12	7	17.60	17.75	17.63	19	5	
5	256QAM	12	13	17.67	17.65	17.71			
5	256QAM	25	0	17.72	17.68	17.78			

Band 26 for FCC Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				811.5	811.5	811.5			
15	QPSK	1	0	22.58	22.77	22.67	24	0	
15	QPSK	1	37	22.47	22.57	22.55			
15	QPSK	1	74	22.39	22.63	22.54			
15	QPSK	36	0	21.51	21.63	21.60			
15	QPSK	36	20	21.50	21.58	21.60	23	1	
15	QPSK	36	39	21.40	21.54	21.48			
15	QPSK	75	0	21.59	21.67	21.67			
15	QPSK	1	0	21.72	21.80	21.79	23	1	
15	16QAM	1	37	21.56	21.71	21.63			
15	16QAM	1	74	21.55	21.68	21.63			
15	16QAM	36	0	20.48	20.52	20.48			
15	16QAM	36	20	20.88	20.73	20.52	22	2	
15	16QAM	36	39	20.94	20.67	20.61			
15	16QAM	75	0	20.50	20.58	20.52			
15	64QAM	1	0	20.68	20.72	20.63	22	2	
15	64QAM	1	37	20.55	20.64	20.54			
15	64QAM	1	74	20.65	20.76	20.72			
15	64QAM	36	0	19.54	19.63	19.59			
15	64QAM	36	20	19.52	19.74	19.61	21	3	
15	64QAM	36	39	19.54	19.68	19.54			
15	64QAM	75	0	19.50	19.64	19.51			
15	256QAM	1	0	17.66	17.71	17.68	19	5	
15	256QAM	1	37	17.56	17.61	17.65			
15	256QAM	1	74	17.59	17.67	17.67			
15	256QAM	36	0	17.62	17.65	17.67			
15	256QAM	36	20	17.65	17.72	17.65	19	5	
15	256QAM	36	39	17.52	17.66	17.61			
15	256QAM	75	0	17.65	17.65	17.67			
Channel									
				819	831.5	844	Time-up (min)	MPE (dB)	
10	QPSK	1	0	22.49	22.72	22.60	24	0	
10	QPSK	1	12	22.39	22.44	22.43			
10	QPSK	1	49	22.55	22.61	22.40			
10	QPSK	25	0	21.37	21.54	21.37			
10	QPSK	25	12	21.40	21.48	21.41	23	1	
10	QPSK	25	25	21.34	21.48	21.41			
10	QPSK	50	0	21.54	21.58	21.61			
10	16QAM	1	0	21.61	21.68	21.65	23	1	
10	16QAM	1	25	21.52	21.67	21.54			
10	16QAM	1	49	21.61	21.62	21.60			
10	16QAM	25	0	20.42	20.58	20.38	22	2	
10	16QAM	25	12	20.64	20.59	20.49			
10	16QAM	25	25	20.56	20.58	20.51			
10	16QAM	50	0	20.44	20.53	20.46			
10	64QAM	1	0	20.55	20.60	20.51	22	2	
10	64QAM	1	25	20.51	20.56	20.48			
10	64QAM	1	49	20.57	20.65	20.57			
10	64QAM	25	0	19.39	19.38	19.52			
10	64QAM	25	12	19.45	19.69	19.38	21	3	
10	64QAM	25	25	19.53	19.54	19.43			
10	64QAM	50	0	19.41	19.58	19.40			
10	256QAM	1	0	17.57	17.52	17.55	19	5	
10	256QAM	1	25	17.52	17.55	17.48			
10	256QAM	1	49	17.45	17.63	17.44			
10	256QAM	25	0	17.42	17.52	17.43			
10	256QAM	25	12	17.51	17.67	17.52	19	5	
10	256QAM	25	25	17.43	17.52	17.46			
10	256QAM	50	0	17.53	17.60	17.46			
Channel									
				817.5	831.5	847.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.47	22.54	22.57	24	0	
5	QPSK	1	12	22.36	22.47	22.48			
5	QPSK	1	24	22.55	22.50	22.47			
5	QPSK	12	0	21.37	21.61	21.48	23	1	
5	QPSK	12	7	21.40	21.47	21.45			
5	QPSK	12	13	21.28	21.45	21.36			
5	QPSK	25	0	21.48	21.61	21.44			
5	16QAM	1	0	21.63	21.68	21.58	23	1	
5	16QAM	1	12	21.52	21.60	21.52			
5	16QAM	1	24	21.47	21.56	21.48			
5	16QAM	12	0	20.37	20.53	20.41	22	2	
5	16QAM	12	7	20.65	20.67	20.53			
5	16QAM	12	13	20.56	20.58	20.51			
5	16QAM	25	0	20.46	20.53	20.42			
5	64QAM	1	0	20.59	20.60	20.56	22	2	
5	64QAM	1	12	20.44	20.54	20.46			
5	64QAM	1	24	20.57	20.65	20.65			
5	64QAM	12							



Band 2 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power (W)	Power (W)	Power (W)	Power (W)	Time-up (min)	MPR (dB)	MPR (dB)
Channel	Ch. Freq.	Ch. Freq.	Ch. Freq.	Ch. Freq.	Ch. Freq.	Ch. Freq.	Ch. Freq.			
20	QPSK	1	0	17.21	17.20	17.16				
20	QPSK	1	49	17.17	17.18	17.18	18.4	0		
20	QPSK	1	99	17.05	17.14	17.03				
20	QPSK	50	0	17.23	17.20	17.12				
20	QPSK	50	24	17.13	17.20	17.14				
20	QPSK	50	50	17.10	17.20	17.11				
20	QPSK	100	0	17.05	17.15	17.03				
20	QPSK	100	24	17.05	17.14	17.04				
20	QPSK	100	49	17.05	17.18	17.06				
20	QPSK	150	0	17.11	17.20	17.13				
20	QPSK	150	24	17.02	17.12	16.99	18.4	0		
20	QPSK	150	50	17.10	17.20	17.11				
20	QPSK	150	75	17.04	17.20	17.11				
20	QPSK	150	100	17.07	17.12	17.01				
20	QPSK	150	125	17.05	17.15	17.05	18.4	0		
20	QPSK	150	150	17.07	17.14	17.01				
20	QPSK	200	0	17.07	17.20	17.10				
20	QPSK	200	24	17.07	17.15	17.05				
20	QPSK	200	49	16.99	16.99	16.96				
20	QPSK	200	75	16.99	16.99	16.96				
20	QPSK	200	100	16.99	16.99	16.96				
20	QPSK	200	125	16.99	16.99	16.96				
20	QPSK	200	150	16.99	16.99	16.96				
20	QPSK	250	0	16.97	16.99	16.93	17.1	1.4		
20	QPSK	250	24	16.97	16.99	16.93				
20	QPSK	250	49	16.97	16.99	16.93				
20	QPSK	250	75	16.97	16.99	16.93				
20	QPSK	250	100	16.97	16.99	16.93				
20	QPSK	250	125	16.97	16.99	16.93				
20	QPSK	250	150	16.97	16.99	16.93				
20	QPSK	300	0	16.93	16.99	16.93	17.1	1.4		
20	QPSK	300	24	16.93	16.99	16.93				
20	QPSK	300	49	16.93	16.99	16.93				
20	QPSK	300	75	16.93	16.99	16.93				
20	QPSK	300	100	16.93	16.99	16.93				
20	QPSK	300	125	16.93	16.99	16.93				
20	QPSK	300	150	16.93	16.99	16.93				
20	QPSK	350	0	16.89	16.99	16.89	17.1	1.4		
20	QPSK	350	24	16.89	16.99	16.89				
20	QPSK	350	49	16.89	16.99	16.89				
20	QPSK	350	75	16.89	16.99	16.89				
20	QPSK	350	100	16.89	16.99	16.89				
20	QPSK	350	125	16.89	16.99	16.89				
20	QPSK	350	150	16.89	16.99	16.89				
20	QPSK	400	0	16.85	16.99	16.85	17.1	1.4		
20	QPSK	400	24	16.85	16.99	16.85				
20	QPSK	400	49	16.85	16.99	16.85				
20	QPSK	400	75	16.85	16.99	16.85				
20	QPSK	400	100	16.85	16.99	16.85				
20	QPSK	400	125	16.85	16.99	16.85				
20	QPSK	400	150	16.85	16.99	16.85				
20	QPSK	450	0	16.81	16.99	16.81	17.1	1.4		
20	QPSK	450	24	16.81	16.99	16.81				
20	QPSK	450	49	16.81	16.99	16.81				
20	QPSK	450	75	16.81	16.99	16.81				
20	QPSK	450	100	16.81	16.99	16.81				
20	QPSK	450	125	16.81	16.99	16.81				
20	QPSK	450	150	16.81	16.99	16.81				
20	QPSK	500	0	16.77	16.99	16.77	17.1	1.4		
20	QPSK	500	24	16.77	16.99	16.77				
20	QPSK	500	49	16.77	16.99	16.77				
20	QPSK	500	75	16.77	16.99	16.77				
20	QPSK	500	100	16.77	16.99	16.77				
20	QPSK	500	125	16.77	16.99	16.77				
20	QPSK	500	150	16.77	16.99	16.77				
20	QPSK	550	0	16.73	16.99	16.73	17.1	1.4		
20	QPSK	550	24	16.73	16.99	16.73				
20	QPSK	550	49	16.73	16.99	16.73				
20	QPSK	550	75	16.73	16.99	16.73				
20	QPSK	550	100	16.73	16.99	16.73				
20	QPSK	550	125	16.73	16.99	16.73				
20	QPSK	550	150	16.73	16.99	16.73				
20	QPSK	600	0	16.69	16.99	16.69	17.1	1.4		
20	QPSK	600	24	16.69	16.99	16.69				
20	QPSK	600	49	16.69	16.99	16.69				
20	QPSK	600	75	16.69	16.99	16.69				
20	QPSK	600	100	16.69	16.99	16.69				
20	QPSK	600	125	16.69	16.99	16.69				
20	QPSK	600	150	16.69	16.99	16.69				
20	QPSK	650	0	16.65	16.99	16.65	17.1	1.4		
20	QPSK	650	24	16.65	16.99	16.65				
20	QPSK	650	49	16.65	16.99	16.65				
20	QPSK	650	75	16.65	16.99	16.65				
20	QPSK	650	100	16.65	16.99	16.65				
20	QPSK	650	125	16.65	16.99	16.65				
20	QPSK	650	150	16.65	16.99	16.65				
20	QPSK	700	0	16.61	16.99	16.61	17.1	1.4		
20	QPSK	700	24	16.61	16.99	16.61				
20	QPSK	700	49	16.61	16.99	16.61				
20	QPSK	700	75	16.61	16.99	16.61				
20	QPSK	700	100	16.61	16.99	16.61				
20	QPSK	700	125	16.61	16.99	16.61				
20	QPSK	700	150	16.61	16.99	16.61				
20	QPSK	750	0	16.57	16.99	16.57	17.1	1.4		
20	QPSK	750	24	16.57	16.99	16.57				
20	QPSK	750	49	16.57	16.99	16.57				
20	QPSK	750	75	16.57	16.99	16.57				
20	QPSK	750	100	16.57	16.99	16.57				
20	QPSK	750	125	16.57	16.99	16.57				
20	QPSK	750	150	16.57	16.99	16.57				
20	QPSK	800	0	16.53	16.99	16.53	17.1	1.4		
20	QPSK	800	24	16.53	16.99	16.53				
20	QPSK	800	49	16.53	16.99	16.53				
20	QPSK	800	75	16.53	16.99	16.53				
20	QPSK	800	100	16.53	16.99	16.53				
20	QPSK	800	125	16.53	16.99	16.53				
20	QPSK	800	150	16.53	16.99	16.53				
20	QPSK	850	0	16.49	16.99	16.49	17.1	1.4		
20	QPSK	850	24	16.49	16.99	16.49				
20	QPSK	850	49	16.49	16.99	16.49				
20	QPSK	850	75	16.49	16.99	16.49				
20	QPSK	850	100	16.49	16.99	16.49				
20	QPSK	850	125	16.49	16.99	16.49				
20	QPSK	850	150	16.49	16.99	16.49				
20	QPSK	900	0	16.45	16.99	16.45	17.1	1.4		
20	QPSK	900	24	16.45	16.99	16.45				
20	QPSK	900	49	16.45	16.99	16.45				
20	QPSK	900	75	16.45	16.99	16.45				
20	QPSK	900	100	16.45	16.99	16.45				
20	QPSK	900	125	16.45	16.99	16.45				
20	QPSK	900	150	16.45	16.99	16.45				
20	QPSK	950	0	16.41	16.99	16.41	17.1	1.4		
20	QPSK	950	24	16.41	16.99	16.41				
20	QPSK	950	49	16.41	16.99	16.41				
20	QPSK	950	75	16.41	16.99	16.41				
20	QPSK	950	100	16.41	16.99	16.41				
20	QPSK	950	125	16.41	16.99					



Band 12 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
704 707.5 711										
10	QPSK	1	0	22.58	22.70	22.82			24	0
10	QPSK	1	25	22.56	22.70	22.87				
10	QPSK	1	49	22.56	22.70	22.87				
10	QPSK	25	0	21.68	21.71	21.64				
10	QPSK	25	12	21.54	21.68	21.62			23	1
10	QPSK	25	25	21.62	21.66	21.62				
10	QPSK	50	0	21.60	21.67	21.63				
10	16QAM	1	0	21.70	21.75	21.64				
10	16QAM	1	25	21.54	21.63	21.51			23	1
10	16QAM	1	49	21.57	21.60	21.63				
10	16QAM	25	0	20.83	20.70	20.86				
10	16QAM	25	12	20.83	20.74	20.83			22	2
10	16QAM	25	25	20.86	20.78	20.72				
10	16QAM	50	0	20.84	20.73	20.89				
10	64QAM	1	0	20.80	20.89	20.83				
10	64QAM	1	25	20.87	20.77	20.84			22	2
10	64QAM	1	49	20.83	20.86	20.84				
10	64QAM	25	0	19.82	19.85	19.84				
10	64QAM	25	12	19.82	19.71	19.89			21	3
10	64QAM	25	25	19.81	19.85	19.85				
10	64QAM	50	0	19.82	19.70	19.82				
10	256QAM	1	0	17.87	17.71	17.88				
10	256QAM	1	25	17.81	17.65	17.86			19	5
10	256QAM	1	49	17.84	17.66	17.82				
10	256QAM	25	0	17.86	17.69	17.84				
10	256QAM	25	12	17.89	17.74	17.82			19	5
10	256QAM	25	25	17.86	17.82	17.86				
10	256QAM	50	0	17.83	17.69	17.82				
Channel										
705.5 707.5 711.5										
5	QPSK	1	0	22.47	22.70	22.49				
5	QPSK	1	12	22.40	22.68	22.41			24	0
5	QPSK	1	24	22.42	22.56	22.44				
5	QPSK	12	0	21.80	21.83	21.80				
5	QPSK	12	7	21.40	21.62	21.62			23	1
5	QPSK	12	13	21.53	21.56	21.49				
5	QPSK	25	0	21.82	21.81	21.81				
5	16QAM	1	0	21.58	21.64	21.57				
5	16QAM	1	12	21.46	21.51	21.39			23	1
5	16QAM	1	24	21.44	21.62	21.59				
5	16QAM	12	0	20.48	20.66	20.52				
5	16QAM	12	7	20.55	20.69	20.49			22	2
5	16QAM	12	13	20.56	20.69	20.64				
5	16QAM	25	0	20.59	20.61	20.59				
5	64QAM	1	0	20.74	20.81	20.76				
5	64QAM	1	12	20.81	20.85	20.85			22	2
5	64QAM	1	24	20.52	20.63	20.60				
5	64QAM	12	0	19.45	19.51	19.50				
5	64QAM	12	7	19.46	19.48	19.48			21	3
5	64QAM	12	13	19.48	19.51	19.41				
5	64QAM	25	0	19.87	19.80	19.49				
5	256QAM	1	0	17.83	17.69	17.85				
5	256QAM	1	12	17.38	17.42	17.47			19	5
5	256QAM	1	24	17.45	17.58	17.56				
5	256QAM	12	0	17.86	17.88	17.49				
5	256QAM	12	7	17.48	17.48	17.48			19	5
5	256QAM	12	13	17.42	17.53	17.49				
5	256QAM	25	0	17.84	17.67	17.80				
Channel										
2305 2305 2305										
3	QPSK	1	0	20.81	20.81	20.81				
3	QPSK	1	8	22.38	22.51	22.46			24	0
3	QPSK	1	14	22.44	22.63	22.52				
3	QPSK	8	0	21.80	21.83	21.80				
3	QPSK	8	4	21.43	21.59	21.49			23	1
3	QPSK	8	7	21.56	21.62	21.50				
3	16QAM	1	0	21.56	21.62	21.51				
3	16QAM	1	8	21.62	21.67	21.54			23	1
3	16QAM	1	14	21.44	21.60	21.38				
3	16QAM	8	0	20.55	20.66	20.58				
3	16QAM	8	4	20.55	20.66	20.56			22	2
3	16QAM	8	7	20.87	20.66	20.82				
3	64QAM	1	0	20.51	20.67	20.59				
3	64QAM	1	8	20.76	20.80	20.77			22	2
3	64QAM	1	14	20.54	20.64	20.55				
3	64QAM	8	0	19.41	19.58	19.47				
3	64QAM	8	4	19.40	19.47	19.51			21	3
3	64QAM	8	7	19.45	19.52	19.45				
3	64QAM	15	0	19.54	19.60	19.50				
3	256QAM	1	0	17.53	17.60	17.55				
3	256QAM	1	8	17.44	17.50	17.50			19	5
3	256QAM	1	14	17.41	17.62	17.58				
3	256QAM	8	0	17.51	17.56	17.52				
3	256QAM	8	4	17.54	17.63	17.47			19	5
3	256QAM	8	7	17.44	17.54	17.47				
3	256QAM	15	0	17.80	17.69	17.67				
Channel										
2305.7 2305.8 2305.9										
1.4	QPSK	1	0	22.52	22.61	22.65				
1.4	QPSK	1	3	22.41	22.53	22.53			24	0
1.4	QPSK	1	5	22.48	22.55	22.59				
1.4	QPSK	3	0	22.54	22.53	22.52				
1.4	QPSK	3	1	22.44	22.59	22.43				
1.4	QPSK	3	3	22.49	22.63	22.59			23	1
1.4	QPSK	8	0	21.87	21.84	21.85				
1.4	16QAM	1	0	21.61	21.63	21.54				
1.4	16QAM	1	3	21.45	21.54	21.39			23	1
1.4	16QAM	1	5	21.47	21.63	21.48				
1.4	16QAM	3	0	21.48	21.56	21.46				
1.4	16QAM	3	1	21.53	21.71	21.54				
1.4	16QAM	3	3	21.56	21.73	21.67				
1.4	64QAM	1	0	20.53	20.66	20.40			22	2
1.4	64QAM	1	3	20.74	20.80	20.74				
1.4	64QAM	1	5	20.94	20.64	20.53				
1.4	64QAM	3	0	20.43	20.50	20.40			22	2
1.4	64QAM	3	1	20.52	20.60	20.49				
1.4	64QAM	3	3	20.41	20.47	20.44				
1.4	64QAM	6	0	19.53	19.59	19.50			21	3
1.4	256QAM	1	0	17.46	17.50	17.56				
1.4	256QAM	1	3	17.36	17.50	17.49				
1.4	256QAM	1	5	17.47	17.51	17.57			19	5
1.4	256QAM	3	0	17.50	17.56	17.57				
1.4	256QAM	3	1	17.53	17.70	17.55				
1.4	256QAM	3	3	17.51	17.47	17.45			19	5
1.4	256QAM	6	0	17.53	17.51	17.54				

Band 13 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
782										
10	QPSK	1	0	22.52	22.52	22.52			24	0
10	QPSK	1	25	22.43	22.43	22.43				
10	QPSK	1	49	22.37	22.37	22.37				
10	QPSK	25	0	21.49	21.49	21.49			23	1
10	QPSK	25	12	21.44	21.44	21.44				
10	QPSK	25	25	21.41	21.41	21.41				
10	QPSK	50	0	21.46	21.46	21.46				
10	16QAM	1	0	21.70	21.70	21.70			23	1
10	16QAM	1	25	21.54	21.54	21.54				
10	16QAM	1	49	21.57	21.57	21.57				
10	16QAM	25	0	20.32	20.32	20.32				
10	16QAM	25	12	20.43	20.43	20.43			22	2
10	16QAM	25	25	20.49	20.49	20.49				
10	16QAM	50	0	20.42	20.42	20.42				
10	64QAM	1	0	20.86	20.86	20.86				
10	64QAM	1	25	20.54	20.54	20.54			22	2
10	64QAM									



Band 25 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Peak Ch./Freq.	Time-up (min)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	17.19	17.23	17.22				
20	QPSK	1	49	17.16	17.21	17.20	18.4	0		
20	QPSK	1	99	17.05	17.01	16.97				
20	QPSK	50	0	17.11	17.13	17.16				
20	QPSK	50	24	17.11	17.07	17.09	18.4	0		
20	QPSK	50	50	17.07	17.04	17.05				
20	QPSK	100	0	17.01	17.12	16.99				
20	16QAM	1	0	17.19	17.16	17.17	17.4	1		
20	16QAM	1	49	16.99	17.19	17.20				
20	16QAM	1	99	17.05	17.15	17.13				
20	16QAM	50	0	17.12	17.16	17.02				
20	16QAM	50	24	17.13	17.12	17.09	18.4	0		
20	16QAM	50	50	17.13	17.11	17.03				
20	16QAM	100	0	17.07	17.11	17.03				
20	16QAM	100	24	17.03	17.15	17.15	18.4	0		
20	16QAM	100	49	17.03	17.06	17.02				
20	16QAM	50	0	17.03	17.06	17.02				
20	16QAM	50	24	17.05	17.13	17.06	18.4	0		
20	16QAM	50	50	17.04	17.03	17.05				
20	16QAM	100	0	17.08	17.01	16.97				
20	16QAM	100	24	16.96	17.05	17.05	17.4	1		
20	16QAM	100	49	15.83	15.97	15.88				
20	256QAM	1	0	15.85	15.79	15.89	17	1.4		
20	256QAM	1	49	15.85	15.85	15.87				
20	256QAM	50	24	15.73	15.81	15.89	17	1.4		
20	256QAM	50	50	15.59	15.85	15.77				
20	256QAM	100	0	15.52	15.83	15.80				
Channel										
Frequency (MHz)										
15	QPSK	1	0	16.73	17.12	16.92				
15	QPSK	1	37	17.17	17.16	17.16	18.4	0		
15	QPSK	1	74	16.81	17.05	16.86				
15	QPSK	36	0	17.00	17.09	17.05				
15	QPSK	36	29	16.96	16.99	16.93	18.4	0		
15	QPSK	36	39	17.03	16.94	17.01				
15	QPSK	75	0	16.95	17.09	17.05				
15	16QAM	1	0	16.96	17.06	17.05	17.4	1		
15	16QAM	1	37	16.84	16.99	16.94				
15	16QAM	1	74	16.83	16.93	16.85				
15	16QAM	36	29	17.00	17.04	16.98	18.4	0		
15	16QAM	36	39	16.95	17.09	16.99				
15	16QAM	75	0	16.94	17.00	16.99				
15	16QAM	100	0	16.77	17.02	16.79				
15	16QAM	100	37	16.95	17.09	16.99	18.4	0		
15	16QAM	100	74	15.93	16.97	16.92				
15	16QAM	36	0	16.96	17.11	16.95				
15	16QAM	36	29	16.92	17.08	16.98	18.4	0		
15	16QAM	36	39	15.95	16.97	16.85				
15	16QAM	75	0	16.93	16.84	16.95				
15	256QAM	1	0	15.83	15.93	15.85				
15	256QAM	1	37	15.80	15.80	15.80	17	1.4		
15	256QAM	1	74	15.86	15.72	15.65				
15	256QAM	50	24	15.82	15.85	15.83				
15	256QAM	50	24	15.57	15.87	15.80	17	1.4		
15	256QAM	36	39	15.84	15.75	15.64				
15	256QAM	75	0	15.82	15.83	15.83				
Channel										
Frequency (MHz)										
10	QPSK	1	0	16.70	16.99	16.84				
10	QPSK	1	25	16.92	17.17	17.07	18.4	0		
10	QPSK	1	49	16.92	16.93	16.87				
10	QPSK	12	0	17.02	17.02	17.02				
10	QPSK	12	13	16.93	16.86	16.87	18.4	0		
10	QPSK	25	12	17.02	16.99	16.80				
10	QPSK	25	25	16.94	17.07	16.95				
10	16QAM	1	0	17.02	17.02	17.02	17.4	1		
10	16QAM	1	24	16.80	17.07	16.93				
10	16QAM	1	49	16.83	16.93	16.85				
10	16QAM	12	0	17.05	17.13	16.94	18.4	0		
10	16QAM	12	13	16.96	17.14	17.05				
10	16QAM	25	12	16.92	16.99	16.80				
10	16QAM	25	25	16.96	17.08	17.04				
10	16QAM	50	0	16.80	17.01	16.91	18.4	0		
10	16QAM	50	24	16.83	16.93	16.85				
10	16QAM	50	49	16.83	17.01	16.80				
10	16QAM	25	0	17.01	16.93	16.99	18.4	0		
10	16QAM	25	12	17.02	16.99	16.80				
10	16QAM	25	25	16.97	17.15	16.95				
10	16QAM	50	0	16.92	17.03	16.96				
10	256QAM	1	0	15.75	15.85	15.85				
10	256QAM	1	24	15.76	15.92	15.73	17	1.4		
10	256QAM	1	49	15.81	15.88	15.89				
10	256QAM	12	0	15.88	15.84	15.84				
10	256QAM	12	13	15.87	15.74	15.80	17	1.4		
10	256QAM	25	25	15.81	15.72	15.70				
10	256QAM	50	0	15.87	15.85	15.81				
Channel										
Frequency (MHz)										
5	QPSK	1	0	16.74	16.99	16.86				
5	QPSK	1	12	16.94	17.05	16.96	18.4	0		
5	QPSK	1	24	16.98	16.97	16.85				
5	QPSK	12	0	17.02	17.02	17.02				
5	QPSK	12	7	16.85	17.04	16.93	18.4	0		
5	QPSK	12	13	16.93	16.86	16.87				
5	16QAM	1	0	17.06	17.06	17.06	17.4	1		
5	16QAM	1	12	16.90	16.99	16.95				
5	16QAM	1	24	17.11	17.14	17.08	18.4	0		
5	16QAM	12	0	17.05	17.02	16.96				
5	16QAM	12	7	17.09	17.12	16.99				
5	16QAM	12	13	17.05	17.04	16.88	18.4	0		
5	16QAM	25	0	17.01	16.98	16.83				
5	16QAM	25	12	17.02	16.94	16.80				
5	16QAM	50	0	16.88	16.89	16.81	18.4	0		
5	16QAM	50	12	17.05	17.09	16.92				
5	16QAM	50	24	17.02	16.94	16.80				
5	16QAM	12	0	16.90	16.97	17.00	18.4	0		
5	16QAM	12	7	16.84	17.08	16.95				
5	16QAM	12	13	16.97	17.11	16.96				
5	16QAM	25	0	16.79	16.95	16.99				
5	16QAM	25	12	16.97	16.94	16.85				
5	256QAM	1	0	15.77	15.87	15.81	17	1.4		
5	256QAM	1	24	15.81	15.88	15.85				
5	256QAM	12	0	15.89	15.83	15.88				
5	256QAM	12	7	15.70	15.89	15.85	17	1.4		
5	256QAM	12	13	15.49	15.81	15.74				
5	256QAM	25	0	15.85	15.85	15.86				
Channel										
Frequency (MHz)										
3	QPSK	1	0	16.94	17.16	17.11				
3	QPSK	1	8	17.02	17.16	17.01	18.4	0		
3	QPSK	1	14	17.02	17.02	16.94				
3	QPSK	8	0	17.15	17.09	17.09				
3	QPSK	8	4	17.08	16.89	16.82	18.4	0		
3	QPSK	8	7	16.94	16.90	16.90				
3	16QAM	1	0	16.98	16.98	16.98	17.4	1		
3	16QAM	1	8	16.83	16.92	16.94				
3	16QAM	1	14	16.98	17.16	17.08	18.4	0		
3	16QAM	8	0	17.07	17.03	16.94				
3	16QAM	8	4	17.01	17.04	16.89				
3	16QAM	8	7	16.92	17.05	16.98	18.4	0		
3	16QAM	15	0	16.92	17.19	17.02				
3	16QAM	15	8	16.81	17.00	16.91	18.4	0		
3	16QAM	15	14	16.94	17.09	16.93				
3	16QAM	1	0	16.93	16.92	16.84				
3										



Band 38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				256	256	256		
20	QPSK	1	0	17.82	17.82	17.82	18.9	0
20	QPSK	1	49	17.88	17.82	17.79		
20	QPSK	1	98	17.91	17.91	17.91		
20	QPSK	50	0	17.89	17.82	17.74	18.9	0
20	QPSK	50	24	17.86	17.86	17.74		
20	QPSK	50	49	17.89	17.82	17.82		
20	QPSK	100	0	17.90	17.84	17.88		
20	HQAM	1	0	17.82	18.03	18.91	18.9	0
20	HQAM	1	49	17.89	17.82	17.82		
20	HQAM	1	99	17.88	17.82	17.82		
20	HQAM	50	0	17.80	18.04	18.91	18.9	0
20	HQAM	50	24	17.82	17.82	17.81		
20	HQAM	50	50	17.88	18.00	17.88		
20	HQAM	100	0	17.79	17.91	17.87		
20	HQAM	100	0	17.80	17.82	17.72	18.9	0
20	HQAM	1	49	17.89	17.80	17.77		
20	HQAM	1	99	17.83	17.82	17.81		
20	HQAM	50	0	17.88	17.81	17.74	18	0.9
20	HQAM	50	24	17.83	17.82	17.82		
20	HQAM	50	50	17.84	18.00	17.89		
20	HQAM	100	0	17.83	17.81	17.84		
20	ZSSBAM	1	0	18.09	18.73	18.70	16	2.9
20	ZSSBAM	1	49	18.02	18.00	18.00		
20	ZSSBAM	1	99	18.09	18.72	18.69		
20	ZSSBAM	50	0	18.01	18.01	18.01	16	2.9
20	ZSSBAM	50	24	18.08	18.01	18.01		
20	ZSSBAM	50	50	18.05	18.00	18.73		
20	ZSSBAM	100	0	18.08	18.00	18.73		
Channel				37850	38000	38175		
Frequency (MHz)				257.5	257.5	261.5		
15	QPSK	1	0	17.84	17.84	17.82	18.9	0
15	QPSK	1	37	17.84	17.78	17.72		
15	QPSK	1	74	17.88	17.83	17.88		
15	QPSK	36	0	17.82	17.82	17.86	18.9	0
15	QPSK	36	20	17.87	17.83	17.71		
15	QPSK	36	37	17.88	17.88	17.81		
15	QPSK	75	0	17.77	17.89	17.74	18.9	0
15	HQAM	1	0	17.78	17.89	17.88	18.9	0
15	HQAM	1	37	17.78	17.82	17.80		
15	HQAM	1	74	17.77	17.88	17.80		
15	HQAM	36	0	17.78	17.87	17.86	18.9	0
15	HQAM	36	20	17.78	17.81	17.82		
15	HQAM	36	37	17.83	17.81	17.77		
15	HQAM	75	0	17.70	17.85	17.74	18.9	0
15	HQAM	1	0	17.79	17.82	17.82		
15	HQAM	1	37	17.88	17.83	17.84		
15	HQAM	1	74	17.70	17.85	17.71		
15	HQAM	36	0	17.82	17.77	17.80	18	0.9
15	HQAM	36	20	17.76	17.89	17.71		
15	HQAM	36	37	17.88	17.88	17.77		
15	HQAM	75	0	17.80	17.82	17.82		
15	ZSSBAM	1	0	18.05	18.08	18.07	16	2.9
15	ZSSBAM	1	37	18.00	18.00	18.00		
15	ZSSBAM	1	74	18.05	18.08	18.04		
15	ZSSBAM	36	0	18.05	18.00	18.09	16	2.9
15	ZSSBAM	36	20	18.04	18.05	18.01		
15	ZSSBAM	36	37	18.00	18.04	18.01		
15	ZSSBAM	75	0	18.00	18.04	18.00		
Channel				37850	38000	38175		
Frequency (MHz)				257.5	257.5	261.5		
10	QPSK	1	0	17.87	17.87	17.87	18.9	0
10	QPSK	1	25	17.81	17.85	17.71		
10	QPSK	1	49	17.87	17.82	17.88		
10	QPSK	12	0	17.80	17.80	17.88	18.9	0
10	QPSK	25	12	17.80	17.84	17.88		
10	QPSK	25	25	17.72	17.91	17.89		
10	QPSK	50	0	17.83	17.83	17.79	18.9	0
10	HQAM	1	0	17.86	17.88	17.79		
10	HQAM	1	25	17.75	17.87	17.81	18.9	0
10	HQAM	1	49	17.81	17.87	17.81		
10	HQAM	25	0	17.82	17.91	17.82		
10	HQAM	25	12	17.71	17.78	17.70	18.9	0
10	HQAM	25	25	17.80	17.85	17.81		
10	HQAM	50	0	17.73	17.79	17.80		
10	HQAM	1	0	17.87	17.87	17.87	18.9	0
10	HQAM	1	25	17.69	17.80	17.74		
10	HQAM	1	49	17.70	17.82	17.88		
10	HQAM	25	0	17.74	17.77	17.84	18	0.9
10	HQAM	25	12	17.79	17.80	17.89		
10	HQAM	25	25	17.80	17.83	17.80		
10	HQAM	50	0	17.73	17.82	17.82		
10	ZSSBAM	1	0	18.71	18.68	18.53	16	2.9
10	ZSSBAM	1	25	18.64	18.58	18.40		
10	ZSSBAM	1	49	18.65	18.69	18.55		
10	ZSSBAM	25	0	18.60	18.60	18.57	16	2.9
10	ZSSBAM	25	12	18.64	18.60	18.54		
10	ZSSBAM	25	25	18.54	18.58	18.57		
10	ZSSBAM	50	0	18.64	18.63	18.66		
Channel				37875	38000	38175		
Frequency (MHz)				257.5	2566	2617.5		
5	QPSK	1	0	17.83	18.01	17.86	18.9	0
5	QPSK	1	24	17.74	17.89	17.74		
5	QPSK	12	0	17.82	17.91	17.82	18.9	0
5	QPSK	12	7	17.88	17.77	17.88		
5	QPSK	12	13	17.77	17.82	17.89		
5	QPSK	25	0	17.88	17.88	17.75	18.9	0
5	HQAM	1	0	17.86	17.97	17.87		
5	HQAM	1	12	17.79	17.88	17.80	18.9	0
5	HQAM	1	24	17.78	17.86	17.89		
5	HQAM	12	0	17.82	17.82	17.84	18.9	0
5	HQAM	12	7	17.88	17.78	17.78		
5	HQAM	12	13	17.84	17.88	17.77		
5	HQAM	25	0	17.79	17.88	17.80	18.9	0
5	HQAM	1	0	17.71	17.78	17.87		
5	HQAM	1	12	17.76	17.79	17.84	18.9	0
5	HQAM	1	24	17.78	17.86	17.79		
5	HQAM	12	0	17.81	17.86	17.86	18	0.9
5	HQAM	12	7	17.70	17.85	17.75		
5	HQAM	12	13	17.80	17.82	17.80		
5	HQAM	25	0	17.78	17.86	17.83		
5	ZSSBAM	1	0	18.53	18.61	18.51	16	2.9
5	ZSSBAM	1	12	18.58	18.57	18.47		
5	ZSSBAM	1	24	18.61	18.60	18.43		
5	ZSSBAM	12	0	18.51	18.60	18.66	16	2.9
5	ZSSBAM	12	7	18.47	18.46	18.47		
5	ZSSBAM	12	13	18.60	18.70	18.58		
5	ZSSBAM	25	0	18.61	18.70	18.58		

Band 38 HPUE Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)
Channel				37860	38000	38150		
Frequency (MHz)				2566	2566	2616		
20	QPSK	1	0	18.22	18.16	18.20	20.5	0
20	QPSK	1	49	18.24	18.35	18.24		
20	QPSK	1	99	18.20	18.40	18.20		
20	QPSK	50	0	18.20	18.22	18.30	20.5	0
20	QPSK	50	24	18.22	18.28	18.17		
20	QPSK	50	49	18.20	18.28	18.23		
20	QPSK	100	0	18.25	18.37	18.22		
20	HQAM	1	0	18.38	18.43	18.37	20.5	0
20	HQAM	1	49	18.27	18.31	18.34		
20	HQAM	1	99	18.22	18.34	18.23		
20	HQAM	50	0	18.28	18.37	18.32	20.5	0
20	HQAM	50	24	18.13	18.26	18.27		
20	HQAM	50	50	18.28	18.30	18.19		
20	HQAM	100	0	18.27	18.36	18.32		
20	HQAM	100	0	18.32	18.37	18.24	20.5	0
20	HQAM	1	49	18.14	18.32	18.15		
20	HQAM	1	99	18.25	18.40	18.20		
20	HQAM	50	0	18.23	18.37	18.25	20.5	0
20	HQAM	50	24	18.19	18.29	18.12		
20	HQAM	50	50	18.32	18.35	18.25		
20	HQAM	100	0	18.28	18.43	18.39	20.5	0
20	ZSSBAM	1	0	18.13	18.27	18.20	20.5	0
20	ZSSBAM	1	49	18.22	18.30	18.25		
20	ZSSBAM	1	99	18.28	18.38	18.28		
20	ZSSBAM	50	0	18.24	18.38	18.28	20.5	0
20	ZSSBAM	50	24	18.41	18.43	18.34		
20	ZSSBAM	50	50	18.15	18.29	18.14		
20	ZSSBAM	100	0	18.14	18.30	18.24		
Channel				37825	38000	38175		
Frequency (MHz)				257.5	257.5	261.5		
15	QPSK	1	0	18.17	18.18	18.27	20.5	0
15	QPSK	1	37	18.12	18.26	18.13		
15	QPSK	1	74	18.19	18.36	18.28		
15	QPSK	36	0	18.27	18.29	18.25	20.5	0
15	QPSK	36	20	18.14	18.20	18.06		
15	QPSK	36	37	18.12	18.18	18.13	20.5	0
15	QPSK	75	0	18.15	18.28	18.10		
15	HQAM	1	0	18.24	18.38	18.26	20.5	0
15	HQAM	1	37	18.15	18.24	18.21		
15	HQAM	1	74	18.11	18.22	18.14		
15	HQAM	36	0	18.22	18.27	18.21	20.5	0
15	HQAM	36	20	18.00	18.17	18.20		
15	HQAM	36	37	18.21	18.24	18.11		
15	HQAM	75	0	18.10	18.14	18.06	20.5	0
15	HQAM	1	0	18.18	18.28	18.13		
15	HQAM	1	37	18.08	18.22	18.06		



Band 41 Ant1											
RW (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 Hgh Ch / Freq	Power High Hgh Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41406			
20	QPSK	1	0	18.05	18.03	18.04	18.03	18.04		18.0	0
20	QPSK	1	49	17.98	18.05	18.14	17.98	18.02		18.0	0
20	QPSK	1	99	17.98	18.06	18.10	17.98	18.07		18.0	0
20	QPSK	50	0	17.94	17.97	18.12	18.03	18.02		18.0	0
20	QPSK	50	24	17.89	17.88	18.02	17.94	17.86		18.0	0
20	QPSK	50	49	17.85	17.95	18.05	18.00	18.03		18.0	0
20	QPSK	100	0	17.91	17.90	18.05	17.87	17.90		18.0	0
20	HQAM	1	0	17.89	17.93	17.98	17.89	17.83		18.0	0
20	HQAM	1	49	17.89	17.93	17.98	17.89	17.83		18.0	0
20	HQAM	1	99	17.99	17.94	18.05	17.92	18.00		18.0	0
20	HQAM	50	0	18.04	18.04	18.06	18.03	17.96		18.0	0
20	HQAM	50	24	17.92	17.93	18.04	17.87	17.88		18.0	0
20	HQAM	50	49	17.90	18.00	18.07	18.01	17.93		18.0	0
20	HQAM	100	0	17.97	17.92	18.05	17.87	17.90		18.0	0
20	HQAM	100	0	17.85	17.85	17.99	17.84	17.87		18.0	0
20	HQAM	1	49	18.06	18.01	18.13	18.06	18.02		18.0	0
20	HQAM	1	99	17.93	17.96	18.11	18.07	18.03		18.0	0
20	HQAM	50	24	17.93	17.95	18.11	17.98	17.99		18.0	0
20	HQAM	50	50	17.99	17.97	18.14	17.96	18.04		18.0	0
20	HQAM	100	0	17.88	17.83	18.02	17.89	17.84		18.0	0
20	25QAM	1	0	18.46	18.54	18.67	18.58	18.51		18	0.9
20	25QAM	1	49	18.52	18.59	18.71	18.60	18.52		18	0.9
20	25QAM	1	99	18.48	18.48	18.62	18.48	18.47		18	0.9
20	25QAM	50	0	18.35	18.35	18.57	18.47	18.40		18	0.9
20	25QAM	50	24	18.36	18.45	18.54	18.48	18.40		18	0.9
20	25QAM	50	49	18.40	18.57	18.66	18.51	18.54		18	0.9
20	25QAM	100	0	18.48	18.47	18.69	18.58	18.50		18	0.9
Channel											
15	QPSK	1	0	17.75	18.173	18.602	18.088	18.515		18.0	0
15	QPSK	1	0	20.01	20.43	20.93	20.474	20.925		18.0	0
15	QPSK	1	37	17.89	17.94	18.06	17.91	17.88		19	0
15	QPSK	1	74	17.87	17.98	18.00	17.82	18.04		19	0
15	QPSK	36	0	17.84	17.91	17.88	17.85	17.85		19	0
15	QPSK	36	20	17.77	17.79	17.93	17.80	17.72		18.0	0
15	QPSK	36	20	17.88	17.87	17.99	17.88	17.88		18.0	0
15	QPSK	75	0	17.85	17.87	17.95	17.82	17.78		18.0	0
15	HQAM	1	0	17.81	17.80	17.87	17.72	17.76		18.0	0
15	HQAM	1	49	17.89	17.91	17.95	17.84	17.80		18.0	0
15	HQAM	1	74	17.88	17.84	17.91	17.79	17.87		18.0	0
15	HQAM	36	0	17.97	17.96	18.00	18.00	17.89		18.0	0
15	HQAM	36	20	17.83	17.86	17.90	17.86	17.86		18.0	0
15	HQAM	36	39	17.84	17.91	17.93	17.86	17.87		18.0	0
15	HQAM	75	0	17.87	17.78	18.08	17.96	17.83		18.0	0
15	HQAM	1	37	17.89	17.79	17.87	17.77	17.80		18.0	0
15	HQAM	1	74	17.84	17.87	18.04	17.87	18.00		18.0	0
15	HQAM	36	0	17.83	18.03	18.02	17.83	17.85		18.0	0
15	HQAM	36	20	17.85	17.85	17.97	17.85	17.88		18.0	0
15	HQAM	36	39	17.89	17.91	17.98	17.88	17.88		18.0	0
15	HQAM	75	0	17.74	17.82	17.98	17.75	17.87		18.0	0
15	25QAM	1	0	18.40	18.42	18.59	18.49	18.44		18	0.9
15	25QAM	1	49	18.41	18.46	18.54	18.41	18.42		18	0.9
15	25QAM	1	74	18.34	18.42	18.58	18.34	18.42		18	0.9
15	25QAM	36	0	18.20	18.36	18.53	18.40	18.22		18	0.9
15	25QAM	36	20	18.22	18.31	18.44	18.41	18.44		18	0.9
15	25QAM	36	39	18.34	18.49	18.55	18.52	18.45		18	0.9
15	25QAM	75	0	18.36	18.58	18.58	18.36	18.50		18	0.9
Channel											
10	QPSK	1	0	17.68	17.99	18.04	17.68	17.81		18.0	0
10	QPSK	1	25	17.84	17.92	18.01	17.88	17.96		18.0	0
10	QPSK	1	49	17.92	17.96	18.01	17.79	18.00		18.0	0
10	QPSK	1	74	17.85	17.91	18.05	17.85	17.95		18.0	0
10	QPSK	25	12	17.75	17.80	17.91	17.81	17.81		18.0	0
10	QPSK	25	25	17.93	17.95	18.03	17.91	17.89		18.0	0
10	QPSK	50	0	17.76	17.87	17.99	17.73	17.77		18.0	0
10	HQAM	1	0	17.79	17.86	17.89	17.75	17.72		18.0	0
10	HQAM	1	25	17.90	17.80	18.03	17.90	18.00		18.0	0
10	HQAM	1	49	17.89	17.90	17.96	17.80	17.87		18.0	0
10	HQAM	25	0	17.93	17.95	17.97	17.90	17.86		18.0	0
10	HQAM	25	12	17.87	17.83	17.84	17.73	17.81		18.0	0
10	HQAM	25	25	17.75	17.84	18.01	17.75	17.80		18.0	0
10	HQAM	50	0	17.90	17.87	17.85	17.97	17.82		18.0	0
10	HQAM	1	0	17.78	17.76	17.85	17.70	17.81		18.0	0
10	HQAM	1	25	17.92	17.97	18.06	17.91	17.88		18.0	0
10	HQAM	1	49	17.81	17.93	18.04	18.03	18.00		18.0	0
10	HQAM	25	0	17.92	18.01	18.01	17.74	17.80		18.0	0
10	HQAM	25	12	17.89	17.85	17.88	17.90	17.82		18.0	0
10	HQAM	25	25	17.86	17.88	18.10	17.82	17.95		18.0	0
10	HQAM	50	0	17.82	17.88	17.88	17.81	17.83		18.0	0
10	25QAM	1	0	18.39	18.40	18.56	18.22	18.43		18	0.9
10	25QAM	1	25	18.47	18.50	18.64	18.52	18.51		18	0.9
10	25QAM	1	49	18.38	18.38	18.48	18.36	18.30		18	0.9
10	25QAM	25	0	18.25	18.44	18.52	18.38	18.21		18	0.9
10	25QAM	25	12	18.33	18.39	18.42	18.37	18.30		18	0.9
10	25QAM	25	25	18.35	18.42	18.57	18.52	18.45		18	0.9
10	25QAM	50	0	18.33	18.58	18.63	18.61	18.42		18	0.9
Channel											
5	QPSK	1	0	17.61	18.01	18.03	17.68	17.83		18.0	0
5	QPSK	1	12	17.85	17.91	18.01	17.88	17.89		18.0	0
5	QPSK	1	24	17.90	17.98	17.99	17.84	17.88		18.0	0
5	QPSK	12	0	17.82	17.87	18.00	17.86	17.90		18.0	0
5	QPSK	12	7	17.84	17.81	17.90	17.80	17.75		18.0	0
5	QPSK	12	13	17.97	17.87	17.96	17.87	17.85		18.0	0
5	QPSK	25	0	17.81	17.77	17.91	17.74	17.79		18.0	0
5	HQAM	1	0	17.84	17.85	17.86	17.89	17.76		18.0	0
5	HQAM	1	12	17.82	17.89	18.03	17.87	17.82		18.0	0
5	HQAM	1	24	17.84	17.83	17.93	17.86	17.85		18.0	0
5	HQAM	12	7	17.86	17.87	18.01	17.73	17.83		18.0	0
5	HQAM	12	13	17.85	17.87	17.94	17.90	17.80		18.0	0
5	HQAM	25	0	17.90	17.85	18.04	18.03	17.88		18.0	0
5	HQAM	1	0	17.80	17.80	17.86	17.74	17.81		18.0	0
5	HQAM	1	12	18.03	17.96	18.00	17.92	17.86		18.0	0
5	HQAM	1	24	17.78	17.93	17.98	17.98	17.96		18.0	0
5	HQAM	12	0	17.98	17.99	17.98	17.85	18.00		18.0	0
5	HQAM	12	7	17.79	17.90	17.99	17.80	17.85		18.0	0
5	HQAM	12	13	17.95	17.90	18.07	17.82	17.91		18.0	0
5	HQAM	25	0	17.93	17.90	17.95	17.83	17.84		18.0	0
5	25QAM	1	0	18.30	18.41	18.56	18.35	18.45		18	0.9
5	25QAM	1	12	18.50	18.56	18.63	18.55	18.49		18	0.9
5	25QAM	1	24	18.44	18.35	18.48	18.41	18.43		18	0.9
5	25QAM	12	0	18.24	18.44	18.46	18.42	18.22		18	0.9
5	25QAM	12	7	18.27	18.37	18.45	18.41	18.27		18	0.9
5	25QAM	12	13	18.42	18.53	18.62	18.55	18.47		18	0.9
5	25QAM	25	0	18.40	18.62	18.62	18.55	18.50		18	0.9

Band 41 HPUE Ant1											
RW (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 Hgh Ch / Freq	Power High Hgh Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41406			
20	QPSK	1	0	18.42	18.31	18.31	18.31	18.26		20.5	0
20	QPSK	1	49	18.27	18.23	18.30	18.20	18.34		20.5	0
20	QPSK	1	99	18.28	18.26	18.31	18.21	18.27		20.5	0
20	QPSK	50	0	18.40	18.45	18.48	18.36	18.38		20.5	0
20	QPSK	50	24	18.24	18.25</						



Band 2 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./F.Freq.	Power High Ch./F.Freq.	Power High Ch./F.Freq.	Turn-up time (sec)	MFR (dB)		
Channel										
1860 1860 1960										
20	QPSK	1	0	22.58	22.70	22.65				
20	QPSK	1	49	22.48	22.60	22.55	24	0		
20	QPSK	1	99	22.50	22.64	22.57				
20	QPSK	50	0	21.61	21.70	21.62				
20	QPSK	50	24	21.58	21.71	21.64				
20	QPSK	50	50	21.47	21.62	21.50			23	1
20	QPSK	100	0	21.52	21.57	21.55				
20	16QAM	50	0	21.70	21.79	21.75				
20	16QAM	1	49	21.62	21.76	21.71	23	1		
20	16QAM	1	99	21.77	21.82	21.78				
20	16QAM	50	0	20.51	20.59	20.59				
20	16QAM	50	24	20.58	20.67	20.55			22	2
20	16QAM	50	50	20.57	20.72	20.68				
20	16QAM	100	0	20.56	20.69	20.62				
20	16QAM	1	0	20.59	20.74	20.67				
20	16QAM	1	49	20.77	20.90	20.89	22	2		
20	16QAM	50	0	20.61	20.83	20.83				
20	16QAM	50	24	20.58	20.89	20.89				
20	16QAM	50	50	20.59	20.93	20.92				
20	16QAM	100	0	20.63	20.93	20.92			21	3
20	16QAM	1	0	20.63	20.93	20.92				
20	16QAM	1	49	20.71	21.02	21.02				
20	16QAM	50	0	19.53	19.85	19.82				
20	16QAM	50	24	19.59	19.95	19.92				
20	16QAM	50	50	19.64	19.93	19.92				
20	16QAM	100	0	19.63	19.93	19.92				
20	16QAM	1	0	17.61	17.73	17.69				
20	16QAM	1	49	17.76	17.85	17.76	19	5		
20	16QAM	50	0	17.56	17.75	17.67				
20	16QAM	50	24	17.54	17.61	17.46				
20	16QAM	50	50	17.65	17.71	17.61				
20	16QAM	100	0	17.56	17.69	17.61				
Channel										
1817.5 1860 1922.5										
15	QPSK	1	0	22.44	22.46	22.41				
15	QPSK	1	37	22.41	22.47	22.47	24	0		
15	QPSK	1	74	22.47	22.57	22.43				
15	QPSK	36	0	21.53	21.67	21.51				
15	QPSK	36	25	21.57	21.66	21.62				
15	QPSK	36	39	21.35	21.58	21.43			23	1
15	QPSK	75	0	21.49	21.68	21.62				
15	16QAM	36	0	21.61	21.68	21.60				
15	16QAM	1	37	21.59	21.62	21.51	23	1		
15	16QAM	1	74	21.62	21.77	21.66				
15	16QAM	36	0	20.38	20.37	20.38				
15	16QAM	36	25	20.39	20.52	20.59			22	2
15	16QAM	36	39	20.52	20.58	20.53				
15	16QAM	75	0	20.52	20.58	20.53				
15	16QAM	1	0	20.46	20.60	20.60				
15	16QAM	1	37	20.61	20.74	20.74	22	2		
15	16QAM	1	74	20.50	20.65	20.59				
15	16QAM	36	0	19.48	19.61	19.51				
15	16QAM	36	25	19.48	19.68	19.62				
15	16QAM	36	39	19.49	19.57	19.51				
15	16QAM	75	0	19.39	19.59	19.47			21	3
15	16QAM	1	0	17.46	17.55	17.43				
15	16QAM	1	37	17.69	17.70	17.72				
15	16QAM	1	74	17.60	17.68	17.58				
15	16QAM	36	0	17.51	17.68	17.62				
15	16QAM	36	25	17.59	17.50	17.42				
15	16QAM	36	39	17.52	17.66	17.55				
15	16QAM	75	0	17.46	17.63	17.43				
Channel										
1860 1860 1915										
10	QPSK	1	0	22.37	22.37	22.37				
10	QPSK	1	25	22.37	22.52	22.45	24	0		
10	QPSK	1	49	22.41	22.53	22.53				
10	QPSK	36	0	21.56	21.66	21.62				
10	QPSK	36	25	21.56	21.57	21.54				
10	QPSK	36	39	21.36	21.47	21.40				
10	16QAM	36	0	21.61	21.68	21.64				
10	16QAM	1	0	21.62	21.67	21.52				
10	16QAM	1	26	21.53	21.64	21.61	23	1		
10	16QAM	1	49	21.68	21.84	21.84				
10	16QAM	25	0	20.37	20.57	20.39				
10	16QAM	25	12	20.43	20.62	20.60				
10	16QAM	25	26	20.50	20.63	20.67			22	2
10	16QAM	50	0	20.55	20.57	20.59				
10	16QAM	1	0	20.51	20.62	20.53				
10	16QAM	1	26	20.72	20.88	20.88	22	2		
10	16QAM	1	49	20.48	20.64	20.57				
10	16QAM	25	0	19.46	19.54	19.50				
10	16QAM	25	12	19.56	19.68	19.68				
10	16QAM	25	26	19.53	19.70	19.56				
10	16QAM	50	0	19.49	19.54	19.52				
10	16QAM	50	12	19.58	19.69	19.69				
10	16QAM	50	26	19.49	19.59	19.51				
10	16QAM	100	0	17.46	17.55	17.43				
10	16QAM	1	26	17.69	17.67	17.66				
10	16QAM	1	49	17.60	17.70	17.54				
10	16QAM	25	0	17.46	17.51	17.42				
10	16QAM	25	12	17.45	17.50	17.37				
10	16QAM	25	26	17.52	17.66	17.55				
10	16QAM	50	0	17.43	17.48	17.38				
Channel										
1825 1860 1917.5										
5	QPSK	1	0	22.40	22.43	22.43				
5	QPSK	1	12	22.42	22.52	22.49	24	0		
5	QPSK	1	24	22.42	22.52	22.54				
5	QPSK	12	0	21.67	21.80	21.67				
5	QPSK	12	7	21.56	21.57	21.52				
5	QPSK	12	13	21.39	21.50	21.44				
5	QPSK	25	0	21.43	21.56	21.46				
5	16QAM	1	0	21.62	21.65	21.54				
5	16QAM	1	12	21.58	21.62	21.66	23	1		
5	16QAM	1	24	21.65	21.73	21.68				
5	16QAM	12	0	20.41	20.52	20.38				
5	16QAM	12	7	20.47	20.60	20.46				
5	16QAM	12	13	20.46	20.68	20.58				
5	16QAM	25	0	20.59	20.56	20.58				
5	16QAM	1	0	20.46	20.66	20.52				
5	16QAM	1	12	20.64	20.71	20.66	22	2		
5	16QAM	1	24	20.51	20.58	20.54				
5	16QAM	12	0	19.39	19.83	19.55				
5	16QAM	12	7	19.45	19.95	19.63				
5	16QAM	12	13	19.50	19.63	19.59				
5	16QAM	25	0	19.49	19.97	19.59				
5	16QAM	1	0	17.47	17.59	17.47				
5	16QAM	1	12	17.68	17.77	17.71				
5	16QAM	1	24	17.56	17.66	17.63				
5	16QAM	12	0	17.49	17.56	17.43				
5	16QAM	12	7	17.50	17.68	17.54				
5	16QAM	12	13	17.52	17.69	17.61				
5	16QAM	25	0	17.49	17.50	17.45				
Channel										
1861.5 1860 1918.5										
3	QPSK	1	0	22.54	22.67	22.55				
3	QPSK	1	8	22.42	22.67	22.44	24	0		
3	QPSK	1	14	22.47	22.61	22.46				
3	QPSK	8	0	21.51	21.66	21.51				
3	QPSK	8	4	21.52	21.61	21.68				
3	QPSK	8	7	21.40	21.53	21.44				
3	QPSK	15	0	21.39	21.63	21.47				
3	16QAM	1	0	21.62	21.72	21.62				
3	16QAM	1	8	21.54	21.64	21.61	23	1		
3	16QAM	1	14	21.67	21.					





Band 25 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Turn-up time (min)	MPE (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.56	22.72	22.83	24	0	
20	QPSK	1	49	22.54	22.68	22.83			
20	QPSK	1	99	22.52	22.60	22.47			
20	QPSK	50	0	21.68	21.75	21.70	23	1	
20	QPSK	50	24	21.87	21.84	21.83			
20	QPSK	50	50	21.83	21.71	21.83			
20	QPSK	100	0	21.50	21.63	21.56			
20	16QAM	100	0	21.62	21.70	21.70			
20	16QAM	1	49	21.56	21.70	21.85	23	1	
20	16QAM	1	99	21.55	21.64	21.57			
20	16QAM	50	0	20.92	20.99	20.95			
20	16QAM	50	24	20.80	20.83	20.50			
20	16QAM	50	50	20.87	20.71	20.58			
20	16QAM	100	0	20.99	20.90	20.94			
20	64QAM	1	0	20.85	20.70	20.63			
20	64QAM	1	49	20.63	20.77	20.73	22	2	
20	64QAM	1	99	20.57	20.65	20.54			
20	64QAM	50	0	19.53	19.63	19.51			
20	64QAM	50	24	19.59	19.50	19.56			
20	64QAM	50	50	19.51	19.54	19.65			
20	64QAM	100	0	19.57	19.65	19.61	21	3	
20	256QAM	1	49	17.58	17.77	17.66			
20	256QAM	1	99	17.65	17.74	17.67	19	5	
20	256QAM	50	24	17.56	17.66	17.58			
20	256QAM	50	50	17.67	17.73	17.64	19	5	
20	256QAM	100	0	17.65	17.67	17.67			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.43	22.62	22.58	24	0	
15	QPSK	1	37	22.45	22.60	22.48			
15	QPSK	1	74	22.47	22.50	22.34			
15	QPSK	36	0	21.83	21.87	21.86	23	1	
15	QPSK	36	18	21.42	21.46	21.41			
15	QPSK	36	36	21.51	21.59	21.60			
15	16QAM	1	0	21.43	21.50	21.46			
15	16QAM	1	37	21.48	21.60	21.61	23	1	
15	16QAM	1	74	21.44	21.53	21.50			
15	16QAM	36	0	20.94	20.92	20.80			
15	16QAM	36	18	20.48	20.57	20.39			
15	16QAM	36	36	20.53	20.56	20.44			
15	16QAM	75	0	20.46	20.55	20.57			
15	64QAM	1	0	20.57	20.57	20.58	22	2	
15	64QAM	1	37	20.60	20.65	20.64			
15	64QAM	1	74	20.47	20.52	20.40			
15	64QAM	36	0	19.46	19.53	19.43			
15	64QAM	36	18	19.50	19.48	19.45			
15	64QAM	36	36	19.55	19.52	19.52	21	3	
15	64QAM	75	0	19.54	19.58	19.57			
15	256QAM	1	37	17.53	17.58	17.54			
15	256QAM	1	74	17.49	17.54	17.41	19	5	
15	256QAM	1	111	17.83	17.66	17.63			
15	256QAM	36	0	17.50	17.52	17.46			
15	256QAM	36	18	17.47	17.53	17.48	19	5	
15	256QAM	36	36	17.57	17.59	17.59			
15	256QAM	75	0	17.41	17.46	17.45			
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.50	22.62	22.50	24	0	
10	QPSK	1	25	22.42	22.57	22.50			
10	QPSK	1	49	22.38	22.51	22.34			
10	QPSK	25	0	21.82	21.86	21.82	23	1	
10	QPSK	25	12	21.42	21.58	21.44			
10	QPSK	25	25	21.59	21.66	21.60			
10	16QAM	1	0	21.58	21.60	21.62			
10	16QAM	1	25	21.47	21.65	21.51	23	1	
10	16QAM	1	49	21.50	21.63	21.63			
10	16QAM	25	0	20.48	20.57	20.39			
10	16QAM	25	12	20.54	20.58	20.38			
10	16QAM	25	25	20.56	20.56	20.44			
10	16QAM	50	0	20.50	20.54	20.58			
10	64QAM	1	0	20.58	20.63	20.52	22	2	
10	64QAM	1	25	20.54	20.58	20.68			
10	64QAM	1	49	20.52	20.40	20.46			
10	64QAM	25	0	19.45	19.58	19.48			
10	64QAM	25	12	19.55	19.52	19.47			
10	64QAM	25	25	19.54	19.63	19.55	21	3	
10	64QAM	50	0	19.51	19.56	19.46			
10	256QAM	1	25	17.50	17.52	17.48			
10	256QAM	1	49	17.48	17.48	17.41	19	5	
10	256QAM	1	74	17.56	17.62	17.52			
10	256QAM	25	12	17.49	17.59	17.50			
10	256QAM	25	25	17.64	17.60	17.59	19	5	
10	256QAM	50	0	17.58	17.62	17.51			
Channel									
Frequency (MHz)									
5	QPSK	1	0	22.47	22.55	22.44	24	0	
5	QPSK	1	12	22.46	22.52	22.44			
5	QPSK	1	24	22.37	22.55	22.38			
5	QPSK	12	0	21.54	21.71	21.63	23	1	
5	QPSK	12	7	21.44	21.60	21.37			
5	QPSK	12	13	21.27	21.62	21.59			
5	QPSK	25	0	21.46	21.53	21.47			
5	16QAM	1	0	21.50	21.68	21.59	23	1	
5	16QAM	1	12	21.45	21.59	21.59			
5	16QAM	1	24	21.49	21.48	21.48			
5	16QAM	12	0	20.57	20.59	20.53			
5	16QAM	12	7	20.53	20.53	20.39			
5	16QAM	12	13	20.56	20.50	20.45			
5	16QAM	25	0	20.48	20.56	20.58			
5	64QAM	1	0	20.54	20.57	20.50	22	2	
5	64QAM	1	12	20.56	20.70	20.68			
5	64QAM	1	24	20.46	20.47	20.47			
5	64QAM	12	0	19.39	19.53	19.41			
5	64QAM	12	7	19.54	19.48	19.48			
5	64QAM	12	13	19.57	19.68	19.62	21	3	
5	64QAM	25	0	19.52	19.50	19.56			
5	256QAM	1	1	17.53	17.67	17.58			
5	256QAM	1	12	17.54	17.50	17.39	19	5	
5	256QAM	1	24	17.60	17.70	17.62			
5	256QAM	12	0	17.46	17.53	17.43			
5	256QAM	12	7	17.41	17.62	17.48	19	5	
5	256QAM	12	13	17.58	17.65	17.59			
5	256QAM	25	0	17.63	17.58	17.53			
Channel									
Frequency (MHz)									
3	QPSK	1	0	22.51	22.60	22.53	24	0	
3	QPSK	1	8	22.42	22.59	22.49			
3	QPSK	1	14	22.39	22.47	22.43			
3	QPSK	8	0	21.68	21.63	21.67	23	1	
3	QPSK	8	4	21.52	21.61	21.36			
3	QPSK	8	7	21.58	21.66	21.58			
3	QPSK	15	0	21.46	21.65	21.68			
3	16QAM	1	0	21.49	21.69	21.62	23	1	
3	16QAM	1	8	21.45	21.62	21.67			
3	16QAM	1	15	21.42	21.62	21.63			
3	16QAM	8	0	20.51	20.63	20.55			
3	16QAM	8	4	20.50	20.56	20.42			
3	16QAM	15	0	20.53	20.56	20.49			
3	64QAM	1	0	20.55	20.64	20.57	22	2	
3	64QAM	1	8	20.51	20.64	20.51			
3	64QAM	1	15	20.50	20.57	20.59			
3	64QAM	8	0	19.47	19.60	19.42			
3	64QAM	8	7	19.47	19.70	19.56	21	3	
3	64QAM	15	0	19.42	19.67	19.57			
3	64QAM	8	4	19.47	19.61	19.51			
3	256QAM	1	0	17.52	17.68	17.48			
3	256QAM	1	8	17.53	17.53	17.49	19	5	
3	256QAM	1	15	17.60	17.65	17.60			
3	256QAM	8	0	17.52	17.51	17.40			
3	256QAM	8	4	17.51	17.59	17.53			
3	256QAM	8	7	17.61	17.66	17.61	19	5	
3	256QAM	15	0	17.59	17.62	17.47			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	22					





Band 41 Ant0												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Power High High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel												
Frequency (MHz)				39790	40198	40600	41006	41406	41806	42206		
20	QPSK	1	0	22.11	22.24	22.30	22.27	22.21	22.28	22.30		
20	QPSK	1	49	22.03	21.97	22.01	21.98	22.00	22.00	22.00	23	0
20	QPSK	1	89	22.00	22.00	22.10	22.06	22.05	22.05	22.05		
20	QPSK	50	0	21.00	21.11	21.22	21.10	21.22	21.10	21.22		
20	QPSK	50	24	21.01	20.97	21.01	20.96	21.02	20.96	21.02	22	1
20	QPSK	100	0	20.00	21.00	21.00	20.00	21.00	21.00	21.00		
20	QPSK	100	0	20.02	20.99	21.02	20.98	21.00	20.98	21.00		
20	HQAM	1	0	21.00	20.99	21.00	21.00	21.04	21.00	21.04		
20	HQAM	1	49	20.92	20.96	20.94	20.90	20.91	20.94	20.91	22	1
20	HQAM	1	89	20.82	20.79	20.85	20.77	20.80	20.79	20.80		
20	HQAM	50	0	19.96	19.97	20.00	19.96	19.91	19.97	19.91		
20	HQAM	50	24	20.02	20.00	20.02	20.00	20.04	20.00	20.04		
20	HQAM	50	50	19.93	19.89	19.95	19.89	19.80	19.90	19.80	21	2
20	HQAM	100	0	20.00	20.04	20.11	20.00	20.09	20.00	20.09		
20	HQAM	100	0	20.10	20.13	20.26	20.15	20.14	20.13	20.14		
20	HQAM	1	49	20.04	19.99	20.12	20.01	19.95	20.01	19.95	21	2
20	HQAM	1	89	20.11	20.05	20.00	20.15	20.10	20.05	20.10		
20	HQAM	50	0	18.95	18.94	18.97	18.96	18.93	18.93	18.93		
20	HQAM	50	24	18.93	18.86	18.91	18.76	18.81	18.81	18.81	20	3
20	HQAM	50	50	18.98	18.90	18.92	18.84	18.84	18.84	18.84		
20	HQAM	100	0	18.03	18.01	18.10	18.00	18.02	18.00	18.02		
20	ZSFGM	1	0	17.04	17.00	17.10	17.05	17.00	17.00	17.00		
20	ZSFGM	1	49	16.91	16.88	16.91	16.91	16.91	16.91	16.91	18	5
20	ZSFGM	1	89	17.00	16.99	17.00	16.99	16.99	16.99	16.99		
20	ZSFGM	1	127	17.06	16.99	17.11	16.99	16.98	16.98	16.98		
20	ZSFGM	50	0	16.98	16.98	17.00	16.98	16.98	16.98	16.98		
20	ZSFGM	50	24	16.80	16.75	16.84	16.81	16.78	16.78	16.78	18	5
20	ZSFGM	50	50	16.70	16.77	16.84	16.73	16.75	16.75	16.75		
20	ZSFGM	100	0	16.83	16.80	16.84	16.80	16.80	16.80	16.80		
Channel												
Frequency (MHz)				39725	40173	40600	41058	41515	41972	42429		
15	QPSK	1	0	22.11	22.24	22.30	22.27	22.21	22.28	22.30		
15	QPSK	1	37	21.97	21.91	21.95	21.89	21.94	21.94	21.94	23	0
15	QPSK	1	74	21.96	21.94	22.04	22.00	22.09	22.09	22.09		
15	QPSK	1	111	21.00	21.09	21.19	21.04	21.16	21.04	21.16		
15	QPSK	36	20	20.95	20.91	20.95	20.89	20.96	20.96	20.96	22	1
15	QPSK	36	56	20.86	20.80	20.89	20.84	20.88	20.88	20.88		
15	QPSK	75	0	20.86	20.80	20.89	20.84	20.88	20.88	20.88		
15	HQAM	1	0	20.94	20.93	21.03	21.00	20.98	20.98	20.98		
15	HQAM	1	37	20.85	20.86	20.96	20.94	20.96	20.96	20.96	22	1
15	HQAM	1	74	20.78	20.73	20.83	20.71	20.74	20.74	20.74		
15	HQAM	36	0	19.89	19.81	20.00	19.80	19.85	19.85	19.85		
15	HQAM	36	20	19.86	19.84	19.95	19.84	19.87	19.87	19.87	21	2
15	HQAM	36	39	19.77	19.82	19.89	19.75	19.83	19.83	19.83		
15	HQAM	75	0	19.97	19.98	20.05	19.94	20.00	20.00	20.00		
15	HQAM	1	37	20.04	20.13	20.20	20.10	20.07	20.10	20.07		
15	HQAM	1	74	19.98	19.93	20.05	19.95	19.99	19.99	19.99	21	2
15	HQAM	1	111	20.05	19.99	20.15	20.06	20.04	20.04	20.04		
15	HQAM	36	20	18.89	18.87	18.91	18.80	18.86	18.86	18.86	20	3
15	HQAM	36	39	18.80	18.85	18.95	18.79	18.75	18.75	18.75		
15	HQAM	75	0	18.97	18.95	19.03	18.94	18.99	18.99	18.99		
15	ZSFGM	1	0	18.98	18.94	19.04	18.99	18.94	18.94	18.94	18	5
15	ZSFGM	1	37	18.94	18.92	18.98	18.95	18.95	18.95	18.95		
15	ZSFGM	1	74	18.90	18.92	19.00	18.93	18.92	18.92	18.92		
15	ZSFGM	36	0	18.93	18.89	18.94	18.84	18.90	18.90	18.90	18	5
15	ZSFGM	36	20	18.94	18.92	18.98	18.75	18.80	18.80	18.80		
15	ZSFGM	36	39	18.64	18.71	18.78	18.67	18.68	18.68	18.68		
15	ZSFGM	75	0	18.97	18.96	18.98	18.96	18.96	18.96	18.96		
Channel												
Frequency (MHz)				39701	40147	40600	41063	41520	41977	42434		
10	QPSK	1	0	22.11	22.28	22.30	22.21	22.21	22.21	22.21		
10	QPSK	1	25	21.97	21.91	21.95	21.89	21.94	21.94	21.94	23.00	0
10	QPSK	1	49	21.95	21.94	22.04	22.00	22.09	22.09	22.09		
10	QPSK	1	74	21.00	21.09	21.19	21.04	21.16	21.04	21.16		
10	QPSK	35	12	20.95	20.90	20.95	20.89	20.96	20.96	20.96	22	1
10	QPSK	35	25	20.83	20.87	21.02	20.88	20.96	20.96	20.96		
10	QPSK	70	0	20.86	20.80	20.88	20.84	20.88	20.88	20.88		
10	HQAM	1	0	20.93	20.93	21.04	21.00	20.98	20.98	20.98	22	1
10	HQAM	1	25	20.76	20.80	20.88	20.84	20.75	20.75	20.75		
10	HQAM	1	49	20.79	20.73	20.83	20.71	20.74	20.74	20.74		
10	HQAM	35	0	19.95	19.93	20.05	19.94	19.98	19.98	19.98	21	2
10	HQAM	35	12	19.77	19.83	19.89	19.75	19.83	19.83	19.83		
10	HQAM	70	0	19.97	19.98	20.05	19.94	20.00	20.00	20.00		
10	HQAM	1	49	20.05	20.13	20.20	20.10	20.07	20.10	20.07		
10	HQAM	1	25	19.98	19.93	20.05	19.95	19.99	19.99	19.99	21	2
10	HQAM	1	74	19.90	19.81	20.00	19.79	19.85	19.85	19.85		
10	HQAM	12	7	19.95	19.94	20.06	19.94	19.99	19.99	19.99	21	2
10	HQAM	12	13	19.77	19.83	19.80	19.74	19.83	19.83	19.83		
10	HQAM	25	0	19.97	19.98	20.05	19.93	20.00	20.00	20.00		
10	HQAM	1	0	20.04	20.13	20.21	20.10	20.08	20.10	20.08		
10	HQAM	1	12	19.90	19.90	20.06	19.95	19.80	19.80	19.80	21	2
10	HQAM	1	24	20.00	19.99	20.14	20.10	20.04	20.04	20.04		
10	HQAM	12	0	18.99	18.91	19.02	18.89	18.97	18.97	18.97	20	3
10	HQAM	12	13	18.92	18.83	18.85	18.78	18.78	18.78	18.78		
10	HQAM	25	0	18.97	18.96	19.04	18.94	18.98	18.98	18.98		
10	ZSFGM	1	0	18.98	18.94	19.04	18.99	18.94	18.94	18.94	18	5
10	ZSFGM	1	12	18.96	18.92	18.98	18.85	18.84	18.84	18.84		
10	ZSFGM	1	24	18.90	18.90	19.05	18.93	18.93	18.93	18.93		
10	ZSFGM	12	0	18.92	18.89	18.94	18.85	18.90	18.90	18.90		
10	ZSFGM	12	7	18.74	18.73	18.78	18.75	18.72	18.72	18.72	18	5
10	ZSFGM	12	13	18.64	18.71	18.78	18.67	18.70	18.70	18.70		
10	ZSFGM	25	0	18.97	18.96	19.06	18.98	18.99	18.99	18.99		

Band 41 HPUE Ant0												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Power High High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel												
Frequency (MHz)				39790	40198	40600	41006	41406	41806	42206		
20	QPSK	1	0	24.16	24.21	24.30	24.23	24.28	24.28	24.28		
20	QPSK	1	49	24.11	24.21	24.21	24.25	24.10				



Band 38 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				37950	38050	38150			
20	QPSK	1	0	22.72	22.92	23.12			
20	QPSK	1	49	22.71	22.84	22.80		24	0
20	QPSK	1	99	22.68	22.71	22.71			
20	QPSK	50	0	21.82	21.95	21.91			
20	QPSK	50	24	21.84	21.69	21.79		23	1
20	QPSK	100	0	21.81	21.85	21.85			
20	HQAM	1	0	21.76	21.85	21.78			
20	HQAM	1	49	21.66	21.74	21.60		23	1
20	HQAM	1	99	21.74	21.81	21.73			
20	HQAM	50	0	20.81	20.85	20.80			
20	HQAM	50	24	20.97	20.79	20.79		22	2
20	HQAM	100	0	20.89	20.95	20.94			
20	HQAM	1	0	20.85	20.95	20.85			
20	HQAM	1	49	20.78	20.91	20.83		22	2
20	HQAM	1	99	20.74	20.84	20.74			
20	HQAM	50	0	19.75	19.85	19.72			
20	HQAM	50	24	19.76	19.81	19.77		21	3
20	HQAM	100	0	19.68	19.70	19.69			
20	HQAM	100	0	19.62	19.66	19.60			
20	256QAM	1	0	17.84	17.94	17.82			
20	256QAM	1	49	17.79	17.80	17.85		19	5
20	256QAM	1	99	17.89	17.92	17.84			
20	256QAM	50	0	17.81	17.86	17.79			
20	256QAM	50	24	17.80	17.83	17.74		19	5
20	256QAM	50	50	17.82	17.78	17.87			
20	256QAM	100	0	17.85	17.82	17.85			
Channel									
Frequency (MHz)				37850	38050	38175			
15	QPSK	1	0	22.72	22.71	22.74			
15	QPSK	1	37	22.68	22.73	22.68		24	0
15	QPSK	1	74	22.63	22.63	22.64			
15	QPSK	36	0	21.79	21.80	21.84			
15	QPSK	36	20	21.75	21.78	21.78		23	1
15	QPSK	36	39	21.78	21.80	21.69			
15	QPSK	75	0	21.76	21.82	21.70			
15	HQAM	1	0	21.67	21.73	21.65			
15	HQAM	1	37	21.65	21.66	21.67		23	1
15	HQAM	1	74	21.60	21.70	21.70			
15	HQAM	36	0	20.72	20.73	20.67			
15	HQAM	36	20	20.62	20.65	20.59		22	2
15	HQAM	36	39	20.54	20.70	20.56			
15	HQAM	75	0	20.81	20.85	20.69			
15	HQAM	1	0	20.78	20.80	20.73		22	2
15	HQAM	1	37	20.68	20.79	20.69			
15	HQAM	1	74	20.63	20.74	20.61			
15	HQAM	36	0	19.67	19.71	19.62		21	3
15	HQAM	36	20	19.69	19.74	19.64			
15	HQAM	36	39	19.68	19.65	19.62			
15	HQAM	75	0	19.71	19.82	19.72			
15	256QAM	1	0	17.76	17.82	17.78		19	5
15	256QAM	1	37	17.85	17.84	17.82			
15	256QAM	1	74	17.81	17.82	17.80			
15	256QAM	36	0	17.65	17.81	17.68		19	5
15	256QAM	36	20	17.75	17.80	17.63			
15	256QAM	36	39	17.48	17.68	17.63			
15	256QAM	75	0	17.70	17.86	17.67			
Channel									
Frequency (MHz)				37850	38050	38175			
10	QPSK	1	0	22.62	22.74	22.74			
10	QPSK	1	25	22.61	22.79	22.73		24	0
10	QPSK	1	49	22.61	22.62	22.65			
10	QPSK	12	0	21.24	21.60	21.61			
10	QPSK	25	12	21.79	21.78	21.69		23	1
10	QPSK	25	25	21.62	21.62	21.76			
10	QPSK	50	0	21.13	21.60	21.60			
10	HQAM	1	0	21.70	21.70	21.65			
10	HQAM	1	25	21.68	21.66	21.66		23	1
10	HQAM	1	49	21.64	21.67	21.64			
10	HQAM	25	0	20.70	20.77	20.71			
10	HQAM	25	12	20.68	20.74	20.65		22	2
10	HQAM	25	25	20.56	20.74	20.61			
10	HQAM	50	0	20.76	20.88	20.79			
10	HQAM	1	0	20.79	20.84	20.75		22	2
10	HQAM	1	25	20.71	20.85	20.77			
10	HQAM	1	49	20.66	20.80	20.62		22	2
10	HQAM	25	0	19.74	19.82	19.60			
10	HQAM	25	12	19.64	19.70	19.68		21	3
10	HQAM	25	25	19.62	19.65	19.58			
10	HQAM	50	0	19.76	19.87	19.81			
10	256QAM	1	0	17.74	17.80	17.68			
10	256QAM	1	25	17.68	17.76	17.76		19	5
10	256QAM	1	49	17.81	17.86	17.75			
10	256QAM	25	0	17.68	17.74	17.69			
10	256QAM	25	12	17.73	17.66	17.64		19	5
10	256QAM	25	25	17.50	17.71	17.63			
10	256QAM	50	0	17.76	17.78	17.78			
Channel									
Frequency (MHz)				37850	38050	38175			
5	QPSK	1	0	22.63	22.75	22.74			
5	QPSK	1	12	22.58	22.70	22.68		24	0
5	QPSK	1	24	22.58	22.69	22.58			
5	QPSK	12	0	21.46	21.82	21.85			
5	QPSK	12	7	21.11	21.77	21.75		23	1
5	QPSK	12	13	21.79	21.79	21.71			
5	QPSK	25	0	21.24	21.60	21.72			
5	HQAM	1	0	21.72	21.80	21.71			
5	HQAM	1	12	21.62	21.81	21.62		23	1
5	HQAM	1	24	21.60	21.70	21.68			
5	HQAM	12	0	20.72	20.81	20.69			
5	HQAM	12	7	20.74	20.67	20.56		22	2
5	HQAM	12	13	20.68	20.61	20.62			
5	HQAM	25	0	20.86	20.92	20.74			
5	HQAM	1	0	20.82	20.91	20.80		22	2
5	HQAM	1	12	20.73	20.86	20.77			
5	HQAM	1	24	20.66	20.77	20.68			
5	HQAM	12	0	19.68	19.74	19.69			
5	HQAM	12	7	19.72	19.74	19.66		21	3
5	HQAM	12	13	19.68	19.69	19.64			
5	HQAM	25	0	19.71	19.83	19.66			
5	256QAM	1	0	17.72	17.87	17.74			
5	256QAM	1	12	17.67	17.84	17.75		19	5
5	256QAM	1	24	17.62	17.70	17.77			
5	256QAM	12	0	17.73	17.78	17.65			
5	256QAM	12	7	17.77	17.76	17.69		19	5
5	256QAM	12	13	17.69	17.62	17.58			
5	256QAM	25	0	17.72	17.63	17.66			

Band 38 HPUE Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				37950	38050	38150			
20	QPSK	1	0	24.75	24.65	24.60			
20	QPSK	1	49	24.71	24.79	24.67		25.5	0
20	QPSK	1	99	24.59	24.76	24.67			
20	QPSK	50	0	24.85	24.90	24.79			
20	QPSK	50	24	24.81	24.89	24.76		25.5	0
20	QPSK	100	0	24.83	24.83	24.72			
20	QPSK	100	0	24.84	24.84	24.90			
20	HQAM	1	0	24.72	24.82	24.71			
20	HQAM	1	49	24.62	24.74	24.67		25.5	0
20	HQAM	1	99	24.55	24.84	24.55			
20	HQAM	50	0	23.76	23.91	23.84			
20	HQAM	50	24	23.73	23.84	23.71		25	0.5
20	HQAM	50	50	23.66	23.77	23.68			
20	HQAM	100	0	23.62	24.06	23.62			
20	HQAM	1	0	23.05	23.10	23.04			
20	HQAM	1	49	23.86	23.98	23.95		25	0.5
20	HQAM	1	99	23.90	24.03	23.90			
20	HQAM	50	0	22.88	22.92	22.88			
20	HQAM	50	24	22.73	22.85	22.81		24	1.5
20	HQAM	50	50	22.77	22.81	22.71			
20	HQAM	100	0	22.88	22.98	22.83			



Band 41 Ant2										
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Power High High Ch / Freq	Turn-up (dBm)	MFR (dB)
Channel										
Frequency (MHz)				39790	40198	40600	41006	41490		
20	QPSK	1	0	22.61	22.83	22.93	22.93	22.82	24	0
20	QPSK	1	40	22.65	22.73	22.79	22.75	22.72		
20	QPSK	1	80	22.78	22.79	22.84	22.71	22.78		
20	QPSK	50	0	21.79	21.90	21.94	21.85	21.80		
20	QPSK	50	24	21.79	21.72	21.85	21.78	21.75	23	1
20	QPSK	50	48	21.80	21.82	21.81	21.78	21.75		
20	QPSK	100	0	21.82	21.86	21.90	21.79	21.84		
20	HQAM	1	0	21.81	21.83	21.88	21.81	21.79	23	1
20	HQAM	1	40	21.71	21.72	21.81	21.76	21.68		
20	HQAM	1	80	21.86	21.82	21.75	21.89	21.83		
20	HQAM	50	0	20.79	20.89	20.94	20.89	20.82		
20	HQAM	50	24	20.77	20.99	20.93	20.76	20.71	22	2
20	HQAM	50	48	20.77	20.80	20.88	20.83	20.84		
20	HQAM	100	0	20.87	20.78	20.85	20.84	20.79		
20	HQAM	1	0	20.82	20.81	20.93	20.78	20.82		
20	HQAM	1	40	20.79	20.80	20.81	20.88	20.77	22	2
20	HQAM	1	80	20.78	20.83	20.84	20.72	20.71		
20	HQAM	50	24	19.73	19.70	19.84	19.70	19.78	21	3
20	HQAM	50	48	19.86	19.73	19.77	19.85	19.84		
20	HQAM	100	0	19.70	19.71	19.79	19.74	19.70		
20	HQAM	1	0	19.79	19.78	19.92	19.81	19.79		
20	HQAM	1	40	17.77	17.84	17.90	17.82	17.84		
20	HQAM	1	80	17.71	17.71	17.83	17.72	17.75	19	5
20	HQAM	1	160	17.66	17.70	17.78	17.67	17.66		
20	HQAM	50	0	17.68	17.69	17.86	17.66	17.78		
20	HQAM	50	24	17.69	17.70	17.74	17.66	17.61	19	5
20	HQAM	50	48	17.68	17.68	17.80	17.73	17.71		
20	HQAM	100	0	17.68	17.69	17.86	17.66	17.78		
Channel										
Frequency (MHz)				39745	40173	40600	41068	41515		
15	QPSK	1	0	22.61	22.74	22.93	23.73	23.92	24	0
15	QPSK	1	37	22.52	22.68	22.86	22.83	22.87		
15	QPSK	1	74	22.71	22.87	22.72	22.94	22.74		
15	QPSK	36	0	21.72	21.87	21.86	21.71	21.75	23	1
15	QPSK	36	20	21.69	21.57	21.78	21.64	21.70		
15	QPSK	36	40	21.68	21.73	21.87	21.66	21.72		
15	QPSK	75	0	21.67	21.80	21.76	21.67	21.77		
15	HQAM	1	0	21.71	21.78	21.82	21.78	21.86	23	1
15	HQAM	1	37	21.61	21.66	21.80	21.64	21.67		
15	HQAM	1	74	21.55	21.58	21.87	21.84	21.57		
15	HQAM	36	0	20.72	20.72	20.90	20.74	20.77	22	2
15	HQAM	36	20	20.64	20.54	20.85	20.65	20.68		
15	HQAM	36	40	20.68	20.69	20.75	20.73	20.78		
15	HQAM	75	0	20.78	20.82	20.80	20.76	20.84		
15	HQAM	1	0	20.71	20.72	20.89	20.75	20.88	21	3
15	HQAM	1	37	20.78	20.78	20.83	20.78	20.87		
15	HQAM	1	74	20.73	20.76	20.77	20.87	20.87		
15	HQAM	36	0	19.84	19.88	19.97	19.85	19.74	19	5
15	HQAM	36	20	19.54	19.69	19.71	19.56	19.52		
15	HQAM	36	40	19.68	19.68	19.88	19.68	19.78		
15	HQAM	75	0	19.75	19.74	19.85	19.70	19.83		
15	HQAM	1	0	17.64	17.73	17.75	17.78	17.71	19	5
15	HQAM	1	37	17.69	17.68	17.82	17.68	17.82		
15	HQAM	1	74	17.60	17.60	17.72	17.63	17.59		
15	HQAM	36	0	17.73	17.68	17.73	17.75	17.63	19	5
15	HQAM	36	20	17.63	17.61	17.68	17.60	17.62		
15	HQAM	36	40	17.67	17.61	17.86	17.61	17.84		
15	HQAM	75	0	17.62	17.60	17.86	17.62	17.84		
Channel										
Frequency (MHz)				39701	40147	40600	41068	41515		
10	QPSK	1	0	22.67	22.78	22.93	22.80	22.82	24	0
10	QPSK	1	25	22.59	22.61	22.72	22.80	22.80		
10	QPSK	1	49	22.70	22.83	22.78	22.82	22.74		
10	QPSK	36	0	21.75	21.79	21.84	21.73	21.75	23	1
10	QPSK	36	12	21.74	21.58	21.73	21.71	21.72		
10	QPSK	25	25	21.73	21.79	21.81	21.74	21.75		
10	QPSK	1	0	21.70	21.74	21.79	21.74	21.74	23	1
10	HQAM	1	0	21.67	21.74	21.77	21.68	21.72		
10	HQAM	1	25	21.68	21.66	21.76	21.68	21.66		
10	HQAM	1	49	21.61	21.61	21.63	21.63	21.60	22	2
10	HQAM	25	0	20.70	20.70	20.82	20.85	20.74		
10	HQAM	1	0	20.71	20.72	20.80	20.71	20.70		
10	HQAM	1	25	20.68	20.56	20.75	20.66	20.58		
10	HQAM	1	49	20.70	20.73	20.81	20.81	20.71	22	2
10	HQAM	25	0	20.71	20.72	20.80	20.71	20.70		
10	HQAM	1	0	20.73	20.74	20.78	20.77	20.69	22	2
10	HQAM	1	49	20.70	20.68	20.70	20.67	20.57		
10	HQAM	25	0	19.80	19.80	19.78	19.83	19.83	21	3
10	HQAM	25	12	19.61	19.68	19.64	19.53	19.59		
10	HQAM	25	25	19.56	19.57	19.75	19.63	19.66		
10	HQAM	50	0	19.78	19.64	19.84	19.69	19.67		
10	HQAM	1	0	17.73	17.71	17.77	17.77	17.73	19	5
10	HQAM	1	25	17.66	17.61	17.70	17.60	17.71		
10	HQAM	1	49	17.58	17.58	17.64	17.59	17.58		
10	HQAM	25	0	17.73	17.64	17.83	17.77	17.63	19	5
10	HQAM	25	12	17.68	17.68	17.68	17.54	17.63		
10	HQAM	25	25	17.61	17.54	17.73	17.61	17.53		
10	HQAM	50	0	17.61	17.75	17.81	17.75	17.79		
Channel										
Frequency (MHz)				39615	39645	39900	40000	40075		
5	QPSK	1	0	22.65	22.75	22.84	22.84	22.78	24	0
5	QPSK	1	15	22.61	22.63	22.67	22.67	22.67		
5	QPSK	1	24	22.63	22.58	22.78	22.58	22.56		
5	QPSK	12	0	21.66	21.63	21.80	21.73	21.76	23	1
5	QPSK	12	7	21.71	21.68	21.79	21.69	21.64		
5	QPSK	12	13	21.66	21.79	21.80	21.73	21.70		
5	QPSK	25	0	21.79	21.72	21.79	21.73	21.74	23	1
5	HQAM	1	0	21.69	21.79	21.75	21.78	21.68		
5	HQAM	1	12	21.61	21.68	21.75	21.62	21.61		
5	HQAM	1	24	21.66	21.68	21.80	21.66	21.67	22	2
5	HQAM	12	0	20.67	20.70	20.88	20.74	20.78		
5	HQAM	12	7	20.64	20.60	20.70	20.68	20.63		
5	HQAM	12	13	20.70	20.70	20.76	20.74	20.70		
5	HQAM	25	0	20.75	20.67	20.76	20.69	20.68		
5	HQAM	1	0	20.79	20.73	20.89	20.84	20.71	22	2
5	HQAM	1	12	20.71	20.74	20.87	20.79	20.66		
5	HQAM	1	24	20.71	20.67	20.80	20.63	20.66		
5	HQAM	12	0	19.63	19.69	19.78	19.66	19.71	21	3
5	HQAM	12	7	19.53	19.67	19.66	19.55	19.58		
5	HQAM	12	13	19.60	19.63	19.67	19.66	19.58		
5	HQAM	25	0	19.74	19.76	19.83	19.69	19.80		
5	HQAM	1	0	17.68	17.72	17.84	17.75	17.70	19	5
5	HQAM	1	12	17.62	17.56	17.69	17.68	17.67		
5	HQAM	1	24	17.67	17.60	17.73	17.62	17.68		
5	HQAM	12	0	17.78	17.70	17.76	17.68	17.71		
5	HQAM	12	7	17.59	17.58	17.70	17.62	17.61	19	5
5	HQAM	12	13	17.67	17.67	17.68	17.61	17.65		
5	HQAM	25	0	17.60	17.77	17.91	17.74	17.75		

Band 41 HPUE Ant2										
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Power High High Ch / Freq	Turn-up (dBm)	MFR (dB)
Channel										
Frequency (MHz)				39790	40198	40600	41066	41490		
20	QPSK	1	0	24.81	24.81	24.93	24.83	24.83	26.5	0
20	QPSK	1	40	24.72	24.80	24.82	24.72	24.69		
20	QPSK	1	80	24.70	24.78	24.80	24.80	24.72		
20	QPSK	50	0	24.84	24.85	25.04	24.87	24.80		
20	QPSK	50	24	24.76	24.83	24.86	24.76	24.73	26.5	0
20	QPSK	50	48	24.82	24.81	24.83	24.82	24.82		
20	QPSK	100	0	24.83	24.80	24.91	24.80	24.86		
20	HQAM	1	0	24.88	24.85	24.92	24.84	24.78	26.5	0
20	HQAM	1	40	24.88	24.89	24.78	24.86	24.86		
20	HQAM	1	80	24.82	24.85	24.89	24.82	24.87		
20	HQAM	50	0	23.77	23.81	23.90	23.86	23.76		
20	HQAM	50	24	23.79	23.78	23.83	23.73	23.75	25	0.5
20	HQAM	50	48	23.66	23.72	23.76				



Band 42 FCC Part27Q Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)				42190	42990	43990		
20	QPSK	1	0	20.91	21.01	21.10	21.5	0
20	QPSK	1	49	20.96	21.11	21.04		
20	QPSK	1	99	20.98	21.00	20.97		
20	QPSK	50	0	19.09	19.15	19.07		
20	QPSK	50	24	19.03	19.07	18.96	20.5	1
20	QPSK	100	0	18.01	18.02	18.07		
20	HQAM	1	0	19.89	19.95	19.95		
20	HQAM	1	49	19.84	19.97	19.84	20.5	1
20	HQAM	1	99	20.04	20.10	19.98		
20	HQAM	50	0	17.82	18.01	17.87		
20	HQAM	50	24	18.11	18.13	18.07	19.5	2
20	HQAM	100	0	16.81	16.96	16.83		
20	HQAM	1	0	19.13	19.15	19.09		
20	HQAM	1	49	18.87	18.11	18.89	19.5	2
20	HQAM	1	99	19.03	19.07	18.96		
20	HQAM	50	0	17.00	17.05	17.02		
20	HQAM	50	24	16.84	16.97	16.86	18.5	3
20	HQAM	100	0	16.97	17.02	16.88		
20	256QAM	1	0	19.85	19.70	19.87		
20	256QAM	1	49	19.81	19.83	19.84	20.5	1
20	256QAM	1	99	19.51	19.43	19.69		
20	256QAM	50	0	19.77	19.67	19.67		
20	256QAM	50	24	19.56	19.48	19.61	20.5	1
20	256QAM	100	0	18.81	18.70	18.68		
20	256QAM	100	0	18.82	18.78	18.74		
Channel								
Frequency (MHz)				42195	42995	43995		
15	QPSK	1	0	20.92	21.03	21.01	21.5	0
15	QPSK	1	37	20.82	21.04	20.98		
15	QPSK	1	74	20.91	20.96	20.81		
15	QPSK	36	0	18.95	18.91	18.92		
15	QPSK	36	20	18.92	18.87	18.89	20.5	1
15	HQAM	1	0	19.87	19.92	19.86		
15	HQAM	1	37	19.73	19.95	19.85	20.5	1
15	HQAM	1	74	19.96	20.02	19.85		
15	HQAM	36	0	17.87	18.01	17.84		
15	HQAM	36	20	18.25	18.24	18.22	19.5	2
15	HQAM	36	39	17.82	17.88	17.73		
15	HQAM	75	0	17.82	17.87	17.88		
15	HQAM	1	0	19.07	19.09	19.09	19.5	2
15	HQAM	1	37	18.98	19.09	18.89		
15	HQAM	1	74	18.96	19.05	18.98		
15	HQAM	36	0	16.88	16.84	16.87	18.5	3
15	HQAM	36	20	16.89	16.83	16.78		
15	HQAM	36	39	17.00	17.00	16.95		
15	HQAM	75	0	16.95	16.93	16.92		
15	256QAM	1	0	19.46	19.67	19.52	20.5	1
15	256QAM	1	37	19.35	19.45	19.62		
15	256QAM	1	74	19.42	19.57	19.48		
15	256QAM	36	0	19.61	19.73	19.54	20.5	1
15	256QAM	36	20	19.51	19.59	19.59		
15	256QAM	36	39	19.59	19.68	19.59		
15	256QAM	75	0	19.54	19.62	19.63		
Channel								
Frequency (MHz)				42198	42998	43998		
10	QPSK	1	0	20.88	21.01	21.01	21.5	0
10	QPSK	1	25	20.86	20.97	20.96		
10	QPSK	1	49	20.83	20.99	20.83		
10	QPSK	25	0	18.86	18.92	18.86		
10	QPSK	25	12	18.86	18.87	18.87	20.5	1
10	QPSK	25	25	18.83	18.82	18.79		
10	HQAM	1	0	19.84	19.91	19.82		
10	HQAM	1	25	19.78	19.84	19.77	20.5	1
10	HQAM	1	49	19.97	20.00	19.86		
10	HQAM	25	0	17.88	18.00	17.86		
10	HQAM	25	12	17.88	18.00	18.04		
10	HQAM	25	25	17.82	17.87	17.75	19.5	2
10	HQAM	50	0	18.03	18.11	18.04		
10	HQAM	1	0	19.03	19.11	19.04	19.5	2
10	HQAM	1	25	18.92	19.05	18.87		
10	HQAM	1	49	19.02	19.05	18.91		
10	HQAM	25	0	16.88	17.00	16.82	18.5	3
10	HQAM	25	12	16.75	16.88	16.72		
10	HQAM	25	25	16.84	17.00	17.02		
10	HQAM	50	0	16.90	16.90	16.77		
10	256QAM	1	0	19.52	19.59	19.42	20.5	1
10	256QAM	1	25	19.45	19.46	19.39		
10	256QAM	1	49	19.65	19.65	19.54		
10	256QAM	25	0	19.58	19.67	19.48	20.5	1
10	256QAM	25	12	19.47	19.56	19.54		
10	256QAM	25	25	19.45	19.55	19.55		
10	256QAM	50	0	19.54	19.67	19.69		
Channel								
Frequency (MHz)				3453.5	3503	3547.5		
5	QPSK	1	0	20.86	21.02	21.05	21.5	0
5	QPSK	1	12	20.90	21.00	20.99		
5	QPSK	1	24	20.98	20.99	20.85		
5	QPSK	12	0	19.89	19.89	19.89		
5	QPSK	12	7	19.87	19.91	19.80	20.5	1
5	QPSK	12	13	19.85	19.89	19.83		
5	HQAM	1	0	19.94	20.00	19.89		
5	HQAM	1	12	19.78	19.90	19.77	20.5	1
5	HQAM	1	24	19.88	20.00	19.91		
5	HQAM	12	0	17.86	18.01	17.87		
5	HQAM	12	7	18.05	18.06	18.00	19.5	2
5	HQAM	12	13	17.88	17.97	17.82		
5	HQAM	25	0	17.87	18.00	17.97		
5	HQAM	1	0	19.02	19.11	19.03		
5	HQAM	1	12	18.92	19.00	18.94	19.5	2
5	HQAM	1	24	18.96	19.02	18.92		
5	HQAM	12	0	16.84	17.01	16.86	18.5	3
5	HQAM	12	7	16.77	16.91	16.86		
5	HQAM	12	13	16.96	17.03	17.01		
5	HQAM	25	0	16.92	16.98	16.82		
5	256QAM	1	0	19.49	19.54	19.51	20.5	1
5	256QAM	1	12	19.38	19.46	19.41		
5	256QAM	1	24	19.65	19.67	19.54		
5	256QAM	12	0	19.61	19.62	19.54	20.5	1
5	256QAM	12	7	19.54	19.62	19.61		
5	256QAM	12	13	19.54	19.60	19.67		
5	256QAM	25	0	19.58	19.60	19.67		

Band 42 FCC Part96 Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)				43190	43440	43490		
20	QPSK	1	0	20.77	21.01	21.00	21.5	0
20	QPSK	1	49	20.88	21.01	20.99		
20	QPSK	1	99	20.88	20.94	20.71		
20	QPSK	50	0	18.90	19.10	18.94		
20	QPSK	50	24	18.96	18.97	18.83	20.5	1
20	QPSK	100	0	18.78	18.84	18.82		
20	QPSK	100	0	18.89	18.92	18.85		
20	HQAM	1	0	19.87	19.94	19.88		
20	HQAM	1	49	19.74	19.88	19.79	20.5	1
20	HQAM	1	99	19.95	20.01	19.92		
20	HQAM	50	0	17.81	17.99	17.85		
20	HQAM	50	24	18.03	18.05	17.92	19.5	2
20	HQAM	100	0	17.89	17.92	17.77		
20	HQAM	1	0	19.07	19.07	19.04		
20	HQAM	1	49	18.80	19.04	18.85	19.5	2
20	HQAM	1	99	19.02	19.08	18.88		
20	HQAM	50	0	16.91	16.97	16.96		
20	HQAM	50	24	16.77	16.88	16.72	18.5	3
20	HQAM	100	0	16.86	16.91	16.79		
20	256QAM	1	0	19.47	19.65	19.46	20.5	1
20	256QAM	1	49	19.34	19.43	19.40		
20	256QAM	1	99	19.42	19.53	19.52		
20	256QAM	50	0	19.47	19.60	19.51	20.5	1
20	256QAM	50	24	19.50	19.48	19.46		
Channel								
Frequency (MHz)				43195	43440	43515		
15	QPSK	1	0	20.78	20.73	20.73	21.5	0
15	QPSK	1	37	20.72	20.80	20.88		
15	QPSK	1	74	20.82	20.86	20.71		
15	QPSK	36	0	18.84	18.90	18.85		
15	QPSK	36	20	18.81	18.84	18.80	20.5	1
15	HQAM	1	0	19.78	19.84	19.81		
15	HQAM	1	37	19.63	19.76	19.69	20.5	1
15	HQAM	1	74	19.84	19.96	19.72		



Band 43 for FCC use Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	20.86	20.86	20.77	21.5	0
20	QPSK	1	49	20.71	20.80	20.74		
20	QPSK	1	99	20.56	20.65	20.57		
20	QPSK	50	0	18.86	18.86	18.78	20.5	1
20	QPSK	50	24	18.81	18.84	18.74		
20	QPSK	50	49	18.76	18.79	18.69		
20	QPSK	100	0	18.75	18.84	18.76		
20	HQAM	1	0	19.84	19.87	19.72	20.5	1
20	HQAM	1	49	19.79	19.77	19.82		
20	HQAM	1	99	19.75	19.83	19.78		
20	HQAM	50	0	17.86	17.86	17.84	19.5	2
20	HQAM	50	24	17.84	17.81	17.83		
20	HQAM	50	50	17.87	17.79	17.83		
20	HQAM	100	0	17.74	17.87	17.77		
20	HQAM	100	0	18.83	18.83	18.83	19.5	2
20	HQAM	100	24	18.82	18.85	18.82		
20	HQAM	100	49	18.82	18.85	18.83		
20	HQAM	50	24	18.81	18.82	18.87	18.5	3
20	HQAM	50	50	18.85	18.85	18.81		
20	HQAM	100	0	18.69	18.82	18.74		
20	ZSSBAM	1	0	19.45	19.45	19.45	20.5	1
20	ZSSBAM	1	49	19.46	19.47	19.46		
20	ZSSBAM	1	99	19.46	19.49	19.51		
20	ZSSBAM	50	0	19.67	19.67	19.62	20.5	1
20	ZSSBAM	50	24	19.59	19.63	19.59		
20	ZSSBAM	50	50	19.55	19.60	19.52		
20	ZSSBAM	100	0	19.39	19.39	19.39		
Channel								
Frequency (MHz)								
15	QPSK	1	0	20.73	20.91	20.66	21.5	0
15	QPSK	1	37	20.88	20.70	20.83		
15	QPSK	1	74	20.71	20.71	20.88		
15	QPSK	36	0	18.79	18.82	18.68	20.5	1
15	QPSK	36	20	18.73	18.79	18.59		
15	QPSK	36	39	18.67	18.74	18.59		
15	QPSK	75	0	18.71	18.78	18.74		
15	HQAM	1	0	19.77	19.77	19.64	20.5	1
15	HQAM	1	37	19.88	19.82	19.74		
15	HQAM	1	74	19.65	19.71	19.70		
15	HQAM	36	0	17.74	17.78	17.72	19.5	2
15	HQAM	36	20	17.73	17.74	17.73		
15	HQAM	36	39	17.81	17.75	17.79		
15	HQAM	75	0	17.60	17.76	17.75	19.5	2
15	HQAM	75	0	18.79	18.81	18.71		
15	HQAM	1	37	18.89	18.79	18.72	18.5	2
15	HQAM	1	74	18.80	18.75	18.74		
15	HQAM	36	20	18.73	18.82	18.79	18.5	3
15	HQAM	36	39	18.89	18.79	18.73		
15	HQAM	75	0	18.55	18.70	18.65		
15	ZSSBAM	1	0	19.38	19.48	19.37	20.5	1
15	ZSSBAM	1	37	19.41	19.35	19.38		
15	ZSSBAM	1	74	19.31	19.41	19.48		
15	ZSSBAM	36	0	19.44	19.57	19.49	20.5	1
15	ZSSBAM	36	20	19.53	19.49	19.47		
15	ZSSBAM	36	39	19.44	19.46	19.45		
15	ZSSBAM	75	0	19.42	19.40	19.34		
Channel								
Frequency (MHz)								
10	QPSK	1	0	20.73	20.90	20.66	21.5	0
10	QPSK	1	25	20.58	20.77	20.59		
10	QPSK	1	49	20.88	20.78	20.72		
10	QPSK	12	0	18.78	18.79	18.72	20.5	1
10	QPSK	25	12	18.74	18.73	18.65		
10	QPSK	25	25	18.66	18.73	18.65		
10	QPSK	50	0	18.64	18.77	18.62	19.5	2
10	HQAM	1	0	19.78	19.83	19.68	20.5	1
10	HQAM	1	25	19.89	19.83	19.88		
10	HQAM	1	49	19.69	19.80	19.65		
10	HQAM	25	0	17.74	17.77	17.70	19.5	2
10	HQAM	25	12	17.78	17.86	17.75		
10	HQAM	25	25	17.81	17.75	17.74		
10	HQAM	50	0	17.63	17.77	17.62	19.5	2
10	HQAM	50	0	18.80	18.83	18.68	18.5	3
10	HQAM	1	49	18.70	18.81	18.70		
10	HQAM	25	0	18.74	18.80	18.61		
10	HQAM	25	12	18.87	18.77	18.78	18.5	3
10	HQAM	25	25	18.75	18.71	18.70		
10	HQAM	50	0	18.67	18.87	18.69		
10	ZSSBAM	1	0	19.32	19.51	19.43	20.5	1
10	ZSSBAM	1	25	19.43	19.41	19.46		
10	ZSSBAM	1	49	19.40	19.35	19.46		
10	ZSSBAM	25	0	19.39	19.52	19.37	20.5	1
10	ZSSBAM	25	12	19.47	19.40	19.54		
10	ZSSBAM	25	25	19.40	19.53	19.40		
10	ZSSBAM	50	0	19.34	19.45	19.32		
Channel								
Frequency (MHz)								
5	QPSK	1	0	20.75	20.92	20.72	21.5	0
5	QPSK	1	12	20.55	20.74	20.58		
5	QPSK	1	24	20.74	20.80	20.70		
5	QPSK	12	0	18.78	18.80	18.71	20.5	1
5	QPSK	12	7	18.75	18.79	18.68		
5	QPSK	12	13	18.64	18.70	18.69		
5	HQAM	1	0	19.79	19.81	19.66	20.5	1
5	HQAM	1	12	19.74	19.71	19.78		
5	HQAM	1	24	19.89	19.78	19.73		
5	HQAM	12	0	17.81	17.84	17.78	19.5	2
5	HQAM	12	7	17.78	17.76	17.78		
5	HQAM	12	13	17.80	17.71	17.77		
5	HQAM	25	0	17.67	17.81	17.71	19.5	2
5	HQAM	1	0	18.82	18.80	18.80	18.5	2
5	HQAM	1	12	18.78	18.87	18.78		
5	HQAM	1	24	18.78	18.82	18.78		
5	HQAM	12	0	18.65	18.86	18.81	18.5	3
5	HQAM	12	7	18.85	18.75	18.81		
5	HQAM	12	13	18.79	18.80	18.74		
5	HQAM	25	0	18.84	18.78	18.82		
5	ZSSBAM	1	0	19.40	19.52	19.38	20.5	1
5	ZSSBAM	1	12	19.41	19.42	19.43		
5	ZSSBAM	1	24	19.41	19.43	19.45		
5	ZSSBAM	12	0	19.43	19.58	19.46	20.5	1
5	ZSSBAM	12	7	19.52	19.55	19.53		
5	ZSSBAM	12	13	19.45	19.52	19.47		
5	ZSSBAM	25	0	19.43	19.46	19.34		

Band 48_FCC Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	20.48	20.47	20.53	21.5	0
20	QPSK	1	49	20.41	20.56	20.43		
20	QPSK	1	99	20.48	20.51	20.48		
20	QPSK	50	0	19.14	19.19	19.16	20.5	1
20	QPSK	50	24	19.08	19.12	19.03		
20	QPSK	50	49	19.11	19.18	19.10		
20	QPSK	100	0	19.12	19.15	19.01	19.5	2
20	HQAM	1	0	19.91	19.96	19.92	20.5	1
20	HQAM	1	49	19.84	19.84	19.85		
20	HQAM	1	99	19.81	19.82	19.82		
20	HQAM	50	0	17.95	17.97	17.93	19.5	2
20	HQAM	50	24	17.95	17.99	17.96		
20	HQAM	50	50	17.99	17.93	17.95		
20	HQAM	100	0	18.42	18.41	18.41	19.5	2
20	HQAM	100	0	18.91	19.02	18.92		
20	HQAM	100	24	18.89	18.97	18.95	19.5	2
20	HQAM	100	49	18.93	18.86	18.92		
20	HQAM	50	24	18.95	17.05	18.93	18.5	3
20	HQAM	50	50	17.01	17.00	17.03		
20	HQAM	100	0	17.92	17.18	17.13	17.01	
20	ZSSBAM	1	0	19.67	19.72	19.60	20.5	1
20	ZSSBAM	1	49	19.61	19.68	19.62		
20	ZSSBAM	1	99	19.67	19.68	19.49		
20	ZSSBAM	50	0	19.67	19.74	19.67	20.5	1
20	ZSSBAM	50	24	19.60	19.63	19.67		
20	ZSSBAM	50	50	19.65	19.68	19.47		
20	ZSSBAM	100	0	19.59	19.59	19.56		
Channel								
Frequency (MHz)								
15	QPSK	1	0	20.13	20.49	20.41	21.5	0
15	QPSK	1	37	20.37	20.82	20.38		
15	QPSK	1	74	20.40	20.39	20.36	20.21	
15	QPSK	36	0	19.02	19.08	19.03	20.5	1
15	QPSK	36	20	18.99	19.00	18.91		
15	QPSK							



Band 41 Ant4											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up Unit (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41406			
20	QPSK	1	0	18.52	19.13	19.52	19.52	19.51			
20	QPSK	1	49	18.89	19.06	19.13	18.98	19.07	19.5	0	
20	QPSK	1	89	18.87	19.09	19.01	18.96	18.88			
20	QPSK	50	0	17.97	18.10	18.10	18.02	18.10			
20	QPSK	50	24	17.96	17.97	18.06	17.99	17.94	19	0.5	
20	QPSK	50	49	18.06	18.06	18.06	18.06	18.06			
20	QPSK	100	0	17.84	18.01	18.09	17.94	17.94			
20	HQAM	1	0	17.94	18.08	18.18	18.12	18.06	19	0.5	
20	HQAM	1	49	17.92	17.95	17.98	17.94	17.94			
20	HQAM	1	99	17.92	17.96	18.10	17.98	18.03			
20	HQAM	50	0	18.05	18.05	18.05	18.05	18.05			
20	HQAM	50	24	18.24	18.84	19.95	18.84	18.89	18	1.5	
20	HQAM	50	50	18.70	18.78	18.89	18.78	18.80			
20	HQAM	100	0	18.91	17.97	17.12	17.87	17.82			
20	HQAM	100	0	18.58	17.25	17.19	17.15	17.25			
20	HQAM	100	49	18.83	18.88	18.84	18.87	18.85	18	1.5	
20	HQAM	100	49	18.81	18.96	17.02	18.93	18.99			
20	HQAM	50	24	15.71	15.85	15.92	15.83	15.84	17	2.5	
20	HQAM	50	50	15.92	15.99	16.03	15.98	15.99			
20	HQAM	100	0	15.88	16.06	16.11	16.00	15.99			
20	ZSFGM	1	0	13.77	13.84	13.88	13.87	13.86	15	4.5	
20	ZSFGM	1	49	13.93	14.01	14.01	14.01	14.02			
20	ZSFGM	1	99	13.88	13.96	14.02	13.94	13.89			
20	ZSFGM	50	0	13.82	13.86	13.86	13.84	13.89			
20	ZSFGM	50	24	13.73	13.92	13.95	13.80	13.82	15	4.5	
20	ZSFGM	50	50	13.79	13.95	14.00	13.92	13.81			
20	ZSFGM	100	0	13.92	14.04	14.04	14.04	14.04			
Channel											
Frequency (MHz)				39725	40173	40600	41006	41515	Turn-up Unit (dBm)	MFR (dB)	
15	QPSK	1	0	20.03	20.48	20.93	20.74	20.24			
15	QPSK	1	37	18.77	18.98	19.08	18.91	18.88	20	0	
15	QPSK	1	74	18.81	18.78	18.96	18.96	18.84			
15	QPSK	1	49	17.83	17.86	18.00	18.05	18.05			
15	QPSK	36	20	17.78	17.90	17.93	17.84	17.80	19	0.5	
15	QPSK	36	49	17.81	17.84	17.96	17.96	17.84			
15	QPSK	75	0	17.70	17.97	17.98	17.85	17.83			
15	HQAM	1	0	17.89	18.03	18.14	17.99	17.97	19	0.5	
15	HQAM	1	37	17.89	17.98	18.00	17.98	17.84			
15	HQAM	1	74	17.85	17.90	18.03	17.94	17.92			
15	HQAM	36	0	18.73	18.83	17.92	18.95	18.85	18	1.5	
15	HQAM	36	20	18.85	18.92	18.98	18.98	18.78			
15	HQAM	36	39	18.58	18.64	18.80	18.72	18.68			
15	HQAM	75	0	18.78	17.02	17.09	18.95	18.93	18	1.5	
15	HQAM	75	0	18.92	18.91	17.96	17.11	18.95			
15	HQAM	1	37	18.68	18.78	18.84	18.79	18.78			
15	HQAM	1	74	18.77	18.91	18.97	18.90	18.95			
15	HQAM	36	0	18.81	18.85	18.91	18.88	18.85	17	2.5	
15	HQAM	36	20	18.59	18.78	18.80	18.71	18.74			
15	HQAM	36	39	18.88	18.88	18.88	18.88	18.88			
15	HQAM	75	0	15.51	15.97	16.00	15.90	15.89			
15	ZSFGM	1	0	13.73	13.77	13.87	13.78	13.80	15	4.5	
15	ZSFGM	1	49	13.89	14.02	14.02	14.02	14.04			
15	ZSFGM	1	99	13.77	13.85	13.90	13.88	13.88			
15	ZSFGM	36	0	13.77	13.98	14.01	13.91	13.97	15	4.5	
15	ZSFGM	36	20	13.92	13.80	13.88	13.89	13.87			
15	ZSFGM	36	39	13.72	13.82	13.85	13.79	13.85			
15	ZSFGM	75	0	13.79	13.90	14.00	13.87	13.87			
Channel											
Frequency (MHz)				2501	2547	2593	2639	2685	Turn-up Unit (dBm)	MFR (dB)	
10	QPSK	1	0	18.83	19.06	19.14	18.90	18.74	19	0.5	
10	QPSK	1	25	18.79	18.92	19.02	18.94	19.03			
10	QPSK	1	49	18.78	18.84	18.90	18.90	18.80			
10	QPSK	1	74	17.88	17.96	18.00	18.00	18.00			
10	QPSK	25	12	17.75	17.88	17.97	17.93	17.86	19	0.5	
10	QPSK	25	25	17.87	18.02	17.98	17.88	17.92			
10	QPSK	1	0	17.70	17.92	17.94	17.84	17.84			
10	HQAM	1	0	17.88	17.88	18.09	17.87	17.88	19	0.5	
10	HQAM	1	25	17.72	17.81	17.89	17.88	17.82			
10	HQAM	1	49	17.84	17.91	17.97	17.92	17.95			
10	HQAM	25	0	18.71	18.82	17.91	18.85	18.85	18	1.5	
10	HQAM	25	12	18.84	18.78	18.86	18.79	18.79			
10	HQAM	25	25	18.83	18.83	18.84	18.87	18.70			
10	HQAM	50	0	18.80	18.83	17.81	17.83	18.79	18	1.5	
10	HQAM	50	0	18.85	18.83	18.80	18.80	18.78			
10	HQAM	1	49	18.87	18.87	17.90	18.80	18.87			
10	HQAM	25	0	18.85	18.83	18.80	18.80	18.88			
10	HQAM	25	12	18.67	18.74	18.80	18.70	18.79	17	2.5	
10	HQAM	25	25	18.79	18.78	18.95	18.79	18.86			
10	HQAM	50	0	18.88	18.95	19.03	18.92	18.89			
10	ZSFGM	1	0	13.72	13.71	13.87	13.72	13.82			
10	ZSFGM	1	25	13.80	14.04	14.10	13.90	13.91	15	4.5	
10	ZSFGM	1	49	13.82	13.91	13.91	13.91	13.91			
10	ZSFGM	25	0	13.73	13.93	13.93	13.81	13.82			
10	ZSFGM	25	12	13.83	13.98	14.04	13.74	13.88			
10	ZSFGM	25	25	13.72	13.82	13.91	13.78	13.78	15	4.5	
10	ZSFGM	50	0	13.83	13.95	14.06	13.99	14.04			
Channel											
Frequency (MHz)				2498.5	2545.5	2593	2640.5	2687.5	Turn-up Unit (dBm)	MFR (dB)	
5	QPSK	1	0	18.85	18.99	19.21	18.95	18.18	19	0	
5	QPSK	1	18	18.83	18.93	19.00	18.95	18.99			
5	QPSK	1	24	18.78	18.79	18.83	18.88	18.84			
5	QPSK	12	0	17.86	17.96	18.04	17.97	18.00	19	0.5	
5	QPSK	12	7	17.85	17.85	18.01	17.93	17.84			
5	QPSK	12	13	17.90	17.80	17.96	17.86	17.93			
5	QPSK	25	0	17.74	17.90	17.96	17.86	17.84			
5	HQAM	1	0	17.87	17.99	18.05	18.05	17.94	19	0.5	
5	HQAM	1	12	17.89	17.84	17.97	17.90	17.87			
5	HQAM	1	24	17.82	17.96	17.87	17.86	17.88			
5	HQAM	12	7	18.62	18.74	18.88	18.79	18.80	18	1.5	
5	HQAM	12	13	18.60	18.71	18.81	18.69	18.73			
5	HQAM	25	0	18.87	17.00	17.07	17.02	18.88			
5	HQAM	1	0	18.90	18.98	17.99	17.97	18.94	18	1.5	
5	HQAM	1	12	18.71	18.74	18.85	18.82	18.72			
5	HQAM	1	24	18.77	18.87	18.96	18.88	18.91			
5	HQAM	12	0	18.77	18.82	18.80	18.89	18.92			
5	HQAM	12	0	18.83	18.78	18.82	18.78	18.72	17	2.5	
5	HQAM	12	13	18.77	18.88	18.99	18.80	18.89			
5	HQAM	25	0	18.92	18.99	19.03	18.98	18.88			
5	ZSFGM	1	0	13.72	13.80	13.84	13.78	13.83			
5	ZSFGM	1	12	13.83	13.95	14.04	13.89	13.98	15	4.5	
5	ZSFGM	1	24	13.84	13.84	13.97	13.90	13.80			
5	ZSFGM	12	0	13.72	13.89	14.04	13.82	13.87			
5	ZSFGM	12	7	13.87	13.82	13.81	13.77	13.77	15	4.5	
5	ZSFGM	12	13	13.88	13.82	13.96	13.86	13.85			
5	ZSFGM	25	0	13.87	13.91	14.00	13.92	14.00			

Band 41 HPUE Ant4										
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq</			



Band 42 FCC Part27Q Ant8							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm) MPR (dB)
Channel							
Frequency (MHz)				3416	3500	3584	
20	QPSK	1	0	19.24	19.61	19.41	20 0
20	QPSK	1	49	19.46	19.49	19.43	
20	QPSK	1	99	19.62	19.62	19.52	
20	QPSK	50	0	18.53	19.67	18.51	
20	QPSK	50	24	18.40	18.53	18.41	19 1
20	QPSK	100	0	18.42	18.50	18.47	
20	HQAM	1	0	18.41	18.46	18.32	19 1
20	HQAM	1	49	18.59	18.41	18.40	
20	HQAM	1	99	18.41	18.32	18.40	
20	HQAM	50	0	17.41	17.51	17.38	18 2
20	HQAM	50	24	17.47	17.40	17.38	
20	HQAM	50	50	17.40	17.40	17.48	
20	HQAM	100	0	17.48	17.50	17.37	
20	HQAM	100	0	17.41	17.52	17.37	
20	HQAM	1	49	17.59	17.48	17.43	18 2
20	HQAM	1	99	17.37	17.48	17.42	
20	HQAM	50	0	16.40	16.52	16.40	
20	HQAM	50	24	16.50	16.38	16.43	17 3
20	HQAM	50	50	16.44	16.40	16.42	
20	HQAM	100	0	16.40	16.51	16.37	
20	HQAM	100	0	16.11	16.13	16.00	
20	HQAM	1	49	16.09	16.02	16.00	19 1
20	HQAM	1	99	16.03	16.00	16.02	
20	HQAM	50	0	15.07	15.07	15.11	
20	HQAM	50	24	15.13	15.07	15.14	19 1
20	HQAM	50	50	15.17	15.09	15.09	
20	HQAM	100	0	15.12	15.15	15.09	
Channel							
Frequency (MHz)				42166	42560	43015	
15	QPSK	1	0	19.13	19.13	19.10	20 0
15	QPSK	1	37	19.36	19.39	19.40	
15	QPSK	1	74	19.57	19.47	19.49	
15	QPSK	36	0	18.69	18.60	18.47	19 1
15	QPSK	36	20	18.33	18.46	18.36	
15	QPSK	36	39	18.44	18.38	18.42	
15	QPSK	75	0	18.27	18.38	18.42	
15	HQAM	1	0	18.31	18.40	18.29	19 1
15	HQAM	1	37	18.31	18.30	18.30	
15	HQAM	1	74	18.27	18.20	18.30	
15	HQAM	36	0	17.28	17.45	17.33	18 2
15	HQAM	36	20	17.28	17.33	17.27	
15	HQAM	36	39	17.33	17.42	17.35	
15	HQAM	75	0	17.33	17.44	17.29	18 2
15	HQAM	75	0	17.28	17.42	17.28	
15	HQAM	1	37	17.38	17.44	17.34	
15	HQAM	1	74	17.34	17.35	17.38	
15	HQAM	36	0	16.36	16.42	16.45	17 3
15	HQAM	36	20	16.39	16.29	16.29	
15	HQAM	36	39	16.39	16.38	16.38	
15	HQAM	75	0	16.20	16.44	16.25	
15	HQAM	1	0	16.07	16.01	17.08	19 1
15	HQAM	1	37	16.03	17.05	16.03	
15	HQAM	1	74	17.02	16.00	17.07	
15	HQAM	36	0	17.07	16.17	16.07	19 1
15	HQAM	36	20	16.04	16.00	16.04	
15	HQAM	36	39	16.04	16.00	16.04	
15	HQAM	75	0	16.16	16.10	16.09	
Channel							
Frequency (MHz)				3415	3500	3545	
10	QPSK	1	0	19.42	19.44	19.37	20 0
10	QPSK	1	25	19.42	19.44	19.32	
10	QPSK	1	49	19.29	19.40	19.43	
10	QPSK	12	0	18.48	18.48	18.42	19 1
10	QPSK	25	12	18.31	18.42	18.32	
10	QPSK	25	25	18.29	18.46	18.34	
10	QPSK	50	0	18.32	18.30	18.30	
10	HQAM	1	0	18.30	18.39	18.21	19 1
10	HQAM	1	25	18.29	18.26	18.28	
10	HQAM	1	49	18.29	18.29	18.32	
10	HQAM	25	0	17.33	17.44	17.34	18 2
10	HQAM	25	12	17.28	17.30	17.28	
10	HQAM	25	25	17.30	17.35	17.41	
10	HQAM	50	0	17.41	17.39	17.22	18 2
10	HQAM	1	0	17.33	17.38	17.26	
10	HQAM	1	25	17.28	17.34	17.30	18 2
10	HQAM	1	49	17.26	17.29	17.27	
10	HQAM	25	0	16.30	16.40	16.40	17 3
10	HQAM	25	12	16.43	16.33	16.37	
10	HQAM	25	25	16.36	16.26	16.28	
10	HQAM	50	0	16.34	16.45	16.25	
10	HQAM	1	0	16.08	16.02	17.04	19 1
10	HQAM	1	25	16.00	17.06	16.06	
10	HQAM	1	49	17.05	17.06	17.08	
10	HQAM	25	0	17.06	16.12	17.07	19 1
10	HQAM	25	12	16.03	17.09	16.09	
10	HQAM	25	25	16.04	16.02	17.04	
10	HQAM	50	0	16.08	16.05	16.05	
Channel							
Frequency (MHz)				3433.5	3500	3547.5	
5	QPSK	1	0	19.18	19.54	19.36	20 0
5	QPSK	1	12	19.40	19.42	19.37	
5	QPSK	1	24	19.36	19.50	19.45	
5	QPSK	12	0	18.46	18.46	18.46	19 1
5	QPSK	12	7	18.34	18.48	18.38	
5	QPSK	12	13	18.31	18.42	18.37	
5	QPSK	25	0	18.28	18.44	18.41	
5	QPSK	25	12	18.35	18.39	18.27	
5	HQAM	1	12	18.33	18.38	18.35	19 1
5	HQAM	1	24	18.28	18.25	18.25	
5	HQAM	12	0	17.35	17.45	17.29	18 2
5	HQAM	12	7	17.41	17.34	17.33	
5	HQAM	12	13	17.34	17.40	17.41	
5	HQAM	25	0	17.41	17.40	17.32	
5	HQAM	1	0	17.35	17.45	17.32	18 2
5	HQAM	1	12	17.33	17.41	17.38	
5	HQAM	1	24	17.30	17.38	17.37	
5	HQAM	12	0	16.30	16.40	16.43	17 3
5	HQAM	12	7	16.44	16.32	16.37	
5	HQAM	12	13	16.38	16.34	16.35	
5	HQAM	25	0	16.36	16.45	16.30	
5	HQAM	1	0	16.06	16.00	17.05	19 1
5	HQAM	1	12	16.02	16.00	16.04	
5	HQAM	1	24	17.06	17.06	17.06	
5	HQAM	12	0	16.01	16.14	16.05	19 1
5	HQAM	12	7	16.07	16.00	16.09	
5	HQAM	12	13	16.12	16.00	16.09	
5	HQAM	25	0	16.05	16.17	16.09	

Band 42 FCC Part96 Ant8							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm) MPR (dB)
Channel							
Frequency (MHz)				43190	43340	43490	
20	QPSK	1	0	18.13	18.13	18.23	20 0
20	QPSK	1	49	18.40	18.38	18.31	
20	QPSK	1	99	18.31	18.34	18.28	
20	QPSK	50	0	18.45	18.54	18.42	
20	QPSK	50	24	18.35	18.46	18.33	19 1
20	QPSK	100	0	18.32	18.37	18.28	
20	QPSK	100	0	18.28	18.40	18.28	
20	HQAM	1	0	18.30	18.40	18.20	19 1
20	HQAM	1	49	18.30	18.33	18.34	
20	HQAM	1	99	18.26	18.18	18.30	
20	HQAM	50	0	17.34	17.41	17.23	18 2
20	HQAM	50	24	17.59	17.31	17.27	
20	HQAM	50	50	17.29	17.34	17.40	
20	HQAM	100	0	17.27	17.45	17.29	
20	HQAM	100	0	17.31	17.46	17.25	
20	HQAM	1	49	17.26	17.42	17.36	18 2
20	HQAM	1	99	17.31	17.36	17.33	
20	HQAM	50	0	16.32	16.43	16.35	
20	HQAM	50	24	16.37	16.30	16.38	17 3
20	HQAM	50	50	16.38	16.25	16.20	
20	HQAM	100	0	16.30	16.41	16.29	
20	HQAM	1	0	16.05	16.03	17.06	19 1
20	HQAM	1	49	16.01	17.07	17.06	
20	HQAM	1	99	17.05	17.02	17.00	
20	HQAM	50	0	17.05	16.11	16.06	19 1
20	HQAM	50	24	16.01	17.05	16.09	
20	HQAM	50	50	16.07	16.03	16.02	
20	HQAM	100	0	16.03	16.16	16.09	
Channel							
Frequency (MHz)				43168	43340	43515	
15	QPSK	1	0	19.13	19.13	19.10	20 0
15	QPSK	1	37	19.27	19.34	19.28	
15	QPSK	1	74	19.28	19.34	19.37	
15	QPSK	36	0	18.35	18.42	18.26	19 1
15	QPSK	36	20	18.24	18.33	18.24	
15	QPSK	36	39	18.29	18.38	18.32	
15	QPSK	75	0	18.19	18.23	18.36	
15	HQAM	1	0	18.19	18.33	18.21	19 1
15	HQAM	1	37	18.16	18.17	18.23	
15	HQAM	1	74	18.20	18.17		



Band 43 for FCC Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
20	QPSK	1	0	19.64	19.66	19.69			
20	QPSK	1	49	19.49	19.50	19.54			20
20	QPSK	1	99	19.34	19.35	19.42			
20	QPSK	50	0	18.20	18.22	18.22			
20	QPSK	50	24	18.14	18.24	18.18			19
20	QPSK	50	49	18.08	18.22	18.18			
20	QPSK	100	0	18.11	18.23	18.21			
20	QPSK	1	0	18.18	18.20	18.23			
20	HQAM	1	49	18.33	18.33	18.32			19
20	HQAM	1	99	18.19	18.19	18.18			
20	HQAM	50	0	17.33	17.35	17.28			
20	HQAM	50	24	17.31	17.35	17.25			18
20	HQAM	50	49	17.33	17.31	17.25			
20	HQAM	100	0	17.27	17.28	17.27			
20	HQAM	1	49	17.27	17.25	17.20			
20	HQAM	1	99	17.26	17.31	17.25			18
20	HQAM	1	99	17.28	17.30	17.30			
20	HQAM	50	0	16.30	16.34	16.31			
20	HQAM	50	24	16.29	16.30	16.29			17
20	HQAM	50	49	16.27	16.20	16.22			
20	HQAM	100	0	16.16	16.26	16.13			
20	ZSSBAM	1	0	18.13	18.27	18.15			
20	ZSSBAM	1	49	18.24	18.22	18.23			19
20	ZSSBAM	1	99	18.22	18.21	18.14			
20	ZSSBAM	50	0	18.07	18.20	18.27			
20	ZSSBAM	50	24	18.24	18.21	18.20			19
20	ZSSBAM	50	49	18.21	18.23	18.25			
20	ZSSBAM	100	0	18.14	18.21	18.20			
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
15	QPSK	1	0	19.33	19.40	19.33			
15	QPSK	1	37	19.42	19.50	19.47			20
15	QPSK	1	74	19.38	19.46	19.36			
15	QPSK	36	0	18.20	18.20	18.16			
15	QPSK	36	20	18.08	18.17	18.13			19
15	QPSK	36	36	18.09	18.16	18.17			
15	QPSK	75	0	18.04	18.17	18.16			
15	HQAM	1	0	18.12	18.24	18.17			
15	HQAM	1	37	18.26	18.26	18.25			19
15	HQAM	1	74	18.13	18.13	18.11			
15	HQAM	36	0	17.18	17.20	17.19			
15	HQAM	36	20	17.22	17.24	17.20			18
15	HQAM	36	36	17.28	17.28	17.26			
15	HQAM	75	0	17.14	17.20	17.12			
15	HQAM	1	0	17.16	17.20	17.15			
15	HQAM	1	37	17.19	17.20	17.18			18
15	HQAM	1	74	17.19	17.20	17.24			
15	HQAM	36	0	16.24	16.26	16.25			
15	HQAM	36	20	16.23	16.14	16.23			17
15	HQAM	36	36	16.25	16.25	16.22			
15	HQAM	75	0	16.10	16.15	16.05			
15	ZSSBAM	1	0	18.07	18.22	18.09			19
15	ZSSBAM	1	37	18.08	18.15	18.17			
15	ZSSBAM	1	74	18.10	18.14	18.08			
15	ZSSBAM	36	0	18.21	18.27	18.21			19
15	ZSSBAM	36	20	18.19	18.20	18.25			
15	ZSSBAM	36	36	18.18	18.17	18.20			
15	ZSSBAM	75	0	18.04	18.10	18.13			
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
10	QPSK	1	0	19.37	19.40	19.40			
10	QPSK	1	25	19.43	19.49	19.49			20
10	QPSK	1	49	19.39	19.46	19.38			
10	QPSK	25	0	18.08	18.20	18.16			
10	QPSK	25	12	18.08	18.18	18.11			19
10	QPSK	25	25	18.11	18.20	18.12			
10	QPSK	50	0	18.08	18.10	18.08			
10	HQAM	1	0	18.12	18.23	18.17			
10	HQAM	1	25	18.17	18.18	18.19			19
10	HQAM	1	49	18.13	18.17	18.12			
10	HQAM	25	0	17.18	17.20	17.21			
10	HQAM	25	12	17.26	17.26	17.25			18
10	HQAM	25	25	17.26	17.25	17.25			
10	HQAM	50	0	17.14	17.19	17.11			
10	HQAM	1	0	17.16	17.20	17.14			
10	HQAM	1	25	17.21	17.24	17.19			18
10	HQAM	1	49	17.18	17.25	17.24			
10	HQAM	25	0	16.23	16.20	16.25			
10	HQAM	25	12	16.22	16.14	16.22			17
10	HQAM	25	25	16.21	16.14	16.18			
10	HQAM	50	0	16.11	16.20	16.09			
10	ZSSBAM	1	0	18.07	18.21	18.09			19
10	ZSSBAM	1	25	18.06	18.11	18.17			
10	ZSSBAM	1	49	18.10	18.16	18.09			
10	ZSSBAM	25	0	18.22	18.20	18.21			19
10	ZSSBAM	25	12	18.19	18.14	18.20			
10	ZSSBAM	25	25	18.15	18.17	18.19			
10	ZSSBAM	50	0	18.08	18.10	18.13			
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
5	QPSK	1	0	19.58	19.60	19.54			
5	QPSK	1	12	19.62	19.60	19.67			20
5	QPSK	1	24	19.37	19.45	19.36			
5	QPSK	12	0	18.20	18.20	18.11			
5	QPSK	12	7	18.08	18.18	18.11			19
5	QPSK	12	13	18.10	18.20	18.13			
5	QPSK	25	0	18.08	18.10	18.09			
5	HQAM	1	0	18.12	18.23	18.17			
5	HQAM	1	12	18.18	18.18	18.17			19
5	HQAM	1	24	18.13	18.12	18.11			
5	HQAM	12	0	17.17	17.20	17.21			
5	HQAM	12	7	17.25	17.14	17.19			18
5	HQAM	12	13	17.27	17.25	17.19			
5	HQAM	25	0	17.13	17.20	17.13			
5	HQAM	1	0	17.15	17.20	17.13			
5	HQAM	1	12	17.21	17.20	17.20			18
5	HQAM	1	24	17.17	17.24	17.23			
5	HQAM	12	0	16.25	16.26	16.25			
5	HQAM	12	7	16.25	16.14	16.21			17
5	HQAM	12	13	16.20	16.10	16.18			
5	HQAM	25	0	16.11	16.10	16.06			
5	ZSSBAM	1	0	18.07	18.22	18.09			19
5	ZSSBAM	1	12	18.07	18.10	18.17			
5	ZSSBAM	1	24	18.10	18.10	18.09			
5	ZSSBAM	12	0	18.21	18.20	18.21			19
5	ZSSBAM	12	7	18.18	18.15	18.24			
5	ZSSBAM	12	13	18.16	18.10	18.18			19
5	ZSSBAM	25	0	18.08	18.10	18.12			

Band 48_FCC Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)
Channel									
Frequency (MHz)				56340	56360	56360	56360		
20	QPSK	1	0	19.10	19.12	19.11			
20	QPSK	1	49	19.08	19.25	19.16			20
20	QPSK	1	99	19.21	19.05	19.11			
20	QPSK	50	0	18.54	18.02	18.49			
20	QPSK	50	24	18.41	18.58	18.43			19
20	QPSK	50	49	18.36	18.08	18.46			
20	QPSK	100	0	18.47	18.27	18.49			
20	16QAM	1	0	18.53	18.07	18.58			19
20	16QAM	1	49	18.52	18.01	18.55			
20	16QAM	1	99	18.55	18.01	18.59			
20	16QAM	50	0	17.34	17.46	17.35			
20	16QAM	50	24	17.34	17.35	17.35			18
20	16QAM	50	49	17.41	17.47	17.35			
20	16QAM	100	0	17.45	17.56	17.45			
20	16QAM	1	49	17.27	17.66	17.59			
20	16QAM	1	99	17.60	17.62	17.53			18
20	16QAM	1	99	17.62	17.55	17.54			
20	16QAM	50	0	16.36	16.46	16.35			
20	16QAM	50	24	16.31	16.33	16.38			17
20	16QAM	50	49	16.35	16.37	16.27			
20	16QAM	100	0	16.50	16.59	16.59			
20	ZSSBAM	1	0	18.32	18.41	18.36			
20	ZSSBAM	1	49	18.23	18.37	18.31			19
20	ZSSBAM	1	99	18.30	18.34	18.31			
20	ZSSBAM	50	0	18.37	18.47	18.47			
20	ZSSBAM	50	24	18.33	18.37	18.34			19
20	ZSSBAM	50	49	18.38	18.39	18.44			
20	ZSSBAM	100	0	18.44	18.40	18.35			
Channel									
Frequency (MHz)				56340	56360	56360	56360		
15	QPSK	1	0	19.03	19.28	19.15			
15	QPSK	1	37	19.02	19.18	19.10			20
15	QPSK	1	74	19.16	19.11	19.06			
15	QPSK	36	0	18.43	18.56	18.42			
15	QPSK	36	20	18.35	18.52	18.37			19
15	QPSK	36	36	18.39	18.48	18.47			
15	QPSK	75	0	18.42	18.51	18.43			
15	16QAM	1	0	18.47	18.01	18.52			19
15	16QAM	1	37	18.47	18.06	18.49			
15	16QAM	1	74	18.50	18.54	18.54			
15	16QAM	36	0	17.27	17.43				





Reduced Power Mode for DS12 Simultaneous

GERAN/G-EDGE		SAR Average Power (dBm)			Frame Average Power (dBm)		
TX Channel	19B	19V	20T	19B	19V	20T	Time-up Limit (min)
Frequency (MHz)	89.2	89.4	89.6	89.2	89.4	89.6	24.50
GSM 1 Tx rate	32.61	32.65	32.67	33.50	33.61	33.57	24.50
GPRS 1 Tx rate	32.56	32.64	32.51	33.50	33.58	33.54	24.50
GPRS 2 Tx rate	28.18	29.08	29.49	30.50	29.18	29.68	24.50
GPRS 3 Tx rate	23.03	25.26	25.18	26.5	23.74	24.16	24.50
GPRS 4 Tx rate	23.09	26.00	25.97	27.00	23.09	23.97	24.00
EDGE 1 Tx rate	23.36	25.72	25.42	26.50	18.36	18.72	17.50
EDGE 2 Tx rate	23.76	23.97	23.72	24.00	17.76	17.97	18.50
EDGE 3 Tx rate	22.54	22.27	22.54	23.50	18.28	18.51	18.24
EDGE 4 Tx rate	22.46	20.00	20.46	21.50	17.46	17.46	18.50

WCDMA 3.9MHz		WCDMA 5.0MHz			
TX Channel	4152	4162	4233	Time-up Limit	
TX Channel	4357	4407	4458	(min)	
Frequency (MHz)	826.4	836.4	846.4		
SCPP Rate 9	23.59	24.73	23.59	25.00	
SCPP Rate 9	RNC 12, 20App	23.92	24.02	24.02	25.00
SCPP Rate 8	HSPA Subclass-1	22.60	23.07	23.15	24.00
SCPP Rate 8	HSPA Subclass-2	22.92	23.11	23.19	24.00
SCPP Rate 8	HSPA Subclass-3	22.34	22.75	22.51	23.50
SCPP Rate 8	HSPA Subclass-4	22.42	22.71	22.62	23.00
SCPP Rate 8	DG-HSPA Subclass-1	22.50	23.18	23.08	24.00
SCPP Rate 8	DG-HSPA Subclass-2	22.64	24.0	23.69	24.0
SCPP Rate 8	DG-HSPA Subclass-3	22.34	22.61	22.62	23.50
SCPP Rate 8	DG-HSPA Subclass-4	22.30	22.60	22.46	23.50
SCPP Rate 8	HSPA Subclass-5	22.94	23.11	23.00	24.00
SCPP Rate 8	HSPA Subclass-6	21.01	21.27	20.95	22.00
SCPP Rate 8	HSPA Subclass-7	21.92	22.71	22.61	23.00
SCPP Rate 8	HSPA Subclass-8	20.73	21.08	21.08	22.00
SCPP Rate 8	HSPA Subclass-9	22.89	23.03	23.12	24.00



CDMA2000 1X											
	Base Average Power (dBm)			Tx Power	Frame Average Power (dBm)			Tx Power			
TX Channel	198	199	201	Limit	198	199	201	Limit			
Frequency (MHz)	891.2	891.4	891.6	(dBm)	891.2	891.4	891.6	(dBm)			
CDMA 1 Tx Power	32.74	32.73	32.63	33.15	23.74	23.78	23.63	24.15			
OPRS 1 Tx Power	24.67	24.71	24.55	25.10	16.67	16.71	16.55	17.00			
OPRS 2 Tx Power	25.55	25.43	25.41	26.10	17.55	17.43	17.41	18.10			
OPRS 3 Tx Power	27.81	28.52	28.15	28.40	19.81	20.52	19.77	20.00			
OPRS 4 Tx Power	26.34	26.54	26.50	27.10	18.34	18.54	18.50	19.10			
EDGE 1 Tx Power	25.75	25.91	25.84	27.00	16.75	16.91	16.84	18.00			
EDGE 2 Tx Power	24.07	24.23	24.15	25.00	15.07	15.23	15.15	16.00			
EDGE 3 Tx Power	22.84	22.57	22.74	24.00	13.84	13.57	13.74	15.00			
EDGE 4 Tx Power	20.94	20.69	20.81	22.00	11.94	11.69	11.81	13.00			
CDMA2000 1X Rev. A											
	Base Average Power (dBm)			Tx Power	Frame Average Power (dBm)			Tx Power			
TX Channel	1891.2	1891	1891.8	Limit	1891.2	1891	1891.8	Limit			
Frequency (MHz)	1891.2	1891	1891.8	(dBm)	1891.2	1891	1891.8	(dBm)			
CDMA 1 Tx Power	25.76	25.87	25.79	27.00	16.76	16.87	16.79	18.00			
OPRS 1 Tx Power	25.73	25.56	25.85	27.00	16.73	16.56	16.85	18.00			
OPRS 2 Tx Power	22.24	22.46	22.29	24.00	13.24	13.46	13.29	15.00			
OPRS 3 Tx Power	21.07	21.08	21.17	22.00	12.07	12.08	12.17	13.00			
OPRS 4 Tx Power	19.23	19.25	19.28	21.00	10.23	10.25	10.28	12.00			
EDGE 1 Tx Power	22.56	22.61	22.61	25.00	13.56	13.61	13.61	16.00			
EDGE 2 Tx Power	22.80	22.19	22.52	23.50	13.80	13.19	13.52	17.50			
EDGE 3 Tx Power	20.76	21.02	20.97	22.00	11.76	12.02	11.97	13.00			
EDGE 4 Tx Power	18.43	18.71	18.54	20.00	9.43	9.71	9.54	11.00			
WCDMA Rev. A											
	Base Average Power (dBm)			Tx Power	Frame Average Power (dBm)			Tx Power			
TX Channel	9582	9600	9598	Limit	1412	1413	1513	Limit			
Frequency (MHz)	1852.4	1860	1867.6	(dBm)	1712.4	1712.6	1720.6	(dBm)	181.4	181.4	181.6
CDMA 1 Tx Power	14.81	15.07	14.72	16.20	15.87	15.96	15.80	17.00	21.78	21.90	21.87
OPRS 1 Tx Power	15.00	15.01	15.76	16.20	15.95	15.95	16.70	17.00	21.83	21.83	22.50
OPRS 2 Tx Power	13.90	14.16	14.00	15.20	14.87	15.16	15.17	16.00	22.83	22.97	22.76
OPRS 3 Tx Power	13.90	14.13	14.04	15.20	14.82	15.00	15.00	16.00	22.82	22.98	22.83
OPRS 4 Tx Power	13.49	13.67	13.55	14.20	14.41	14.71	14.53	15.50	22.37	22.48	22.18
OPRS 5 Tx Power	13.56	13.48	13.42	14.20	14.40	14.36	14.54	15.50	22.54	22.46	22.16
OPRS 6 Tx Power	13.94	14.04	14.04	15.20	14.88	15.03	14.96	16.00	23.10	22.95	22.80
OPRS 7 Tx Power	13.84	14.14	14.05	15.20	14.83	14.80	14.93	16.00	22.76	22.84	22.80
OPRS 8 Tx Power	13.35	13.56	13.50	14.20	14.36	14.52	14.52	15.50	22.41	22.46	22.16
OPRS 9 Tx Power	13.40	13.51	13.36	14.20	14.28	14.54	14.39	15.50	22.27	22.22	22.07
OPRS 10 Tx Power	12.88	14.08	13.92	15.20	13.90	15.08	13.91	16.00	22.96	22.76	22.56
OPRS 11 Tx Power	11.89	12.21	11.88	13.20	13.21	13.19	13.25	14.00	20.79	20.89	20.55
OPRS 12 Tx Power	12.66	13.08	12.81	14.20	13.44	14.15	13.68	15.00	21.78	21.87	21.48
OPRS 13 Tx Power	11.73	11.99	11.89	13.20	13.05	13.08	13.05	14.00	20.80	20.72	20.60
OPRS 14 Tx Power	13.85	14.08	14.03	15.20	13.01	13.02	13.09	16.00	22.90	22.88	22.70



GSM1900 AVG									
Tx Channel	Best Average Power (dBm)			Tx Power (dBm)	Frame Average Power (dBm)			Tx Power (dBm)	
	812	861	810		Limit	812	861		810
Poweroff (MHz)	180.2	180.1	180.8		180.2	180.1	180.8		
GSM 1 Tx slot	20.31	20.34	20.40	30.00	20.31	20.34	20.40	21.00	
OPRS 1 Tx slot	20.34	20.47	20.43	30.00	20.34	20.47	20.43	21.00	
OPRS 2 Tx slot	20.46	20.84	20.72	27.00	19.68	19.84	19.72	21.00	
OPRS 3 Tx slot	24.42	24.40	24.48	25.00	20.18	20.09	20.22	21.24	
OPRS 4 Tx slot	21.84	21.80	21.80	33.00	18.64	18.00	18.00	20.00	
EDGE 1 Tx slot	23.82	23.87	23.88	25.00	14.82	14.87	14.88	16.00	
EDGE 2 Tx slot	20.10	20.10	20.13	23.00	16.10	16.16	16.13	17.00	
EDGE 3 Tx slot	20.00	20.00	20.05	22.00	15.84	16.12	16.00	17.14	
EDGE 4 Tx slot	18.75	18.80	18.81	20.00	15.75	15.81	15.81	17.00	
WCDMA 19.2G									
Tx Channel	WCDMA 19.2G			Tx Power (dBm)	WCDMA 19.2G			Tx Power (dBm)	
	882	960	968		Limit	882	960		968
Poweroff (MHz)	112.8	117.0	110.8		112.8	117.0	110.8		
ISPP Rel 99	23.80	23.80	23.86	25.00	23.81	24.00	23.90	25.00	
ISPP Rel 99	23.88	24.00	23.98	25.00	23.92	24.10	24.08	25.00	
ISPP Rel 99	22.87	22.90	22.70	24.00	23.00	23.00	23.00	24.00	
ISPP Rel 99	22.80	22.80	22.78	24.00	23.00	23.00	23.01	24.00	
ISPP Rel 99	22.41	22.41	22.42	24.00	22.48	22.40	22.38	24.00	
ISPP Rel 99	22.30	22.30	22.17	23.00	22.80	22.80	22.40	23.00	
ISPP Rel 99	22.08	22.88	22.84	24.00	23.20	23.84	22.90	24.00	
ISPP Rel 99	22.75	22.81	22.74	24.00	22.97	22.98	22.73	24.00	
ISPP Rel 99	22.44	22.50	22.21	23.00	22.82	22.58	22.29	23.00	
ISPP Rel 99	22.37	22.20	22.10	23.00	22.42	22.28	22.10	23.00	
ISPP Rel 99	22.86	22.88	22.78	24.00	22.95	22.86	22.75	24.00	
ISPP Rel 99	20.77	20.94	20.80	22.00	20.80	21.00	20.70	22.00	
ISPP Rel 99	21.74	21.71	21.83	23.00	21.80	22.00	21.74	23.00	
ISPP Rel 99	20.88	20.81	20.80	22.00	20.80	20.86	20.81	22.00	
ISPP Rel 99	22.80	22.80	22.78	24.00	22.80	22.80	22.80	24.00	



Band 5 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (dB)	MPE (dB)		
Channel										
10	QPSK	1	0	22.60	22.73	22.68				
10	QPSK	1	25	22.64	22.77	22.72			24	0
10	QPSK	1	49	22.50	22.64	22.55				
10	QPSK	25	0	21.69	21.72	21.62				
10	QPSK	25	12	21.44	21.52	21.44				
10	QPSK	25	25	21.53	21.66	21.61			23	1
10	QPSK	50	0	21.61	21.65	21.59				
10	16QAM	1	0	21.59	21.67	21.61				
10	16QAM	1	25	21.41	21.52	21.38			23	1
10	16QAM	1	49	21.54	21.60	21.45				
10	16QAM	25	0	20.47	20.55	20.43				
10	16QAM	25	12	20.35	20.49	20.35			22	2
10	16QAM	25	25	20.50	20.60	20.53				
10	16QAM	50	0	20.54	20.59	20.59				
10	64QAM	1	0	20.51	20.59	20.54				
10	64QAM	1	25	20.45	20.51	20.47			22	2
10	64QAM	1	49	20.56	20.66	20.53				
10	64QAM	25	0	19.47	19.53	19.40				
10	64QAM	25	12	19.52	19.63	19.59			21	3
10	64QAM	25	25	19.44	19.55	19.35				
10	64QAM	50	0	19.50	19.62	19.54				
10	256QAM	1	0	17.46	17.48	17.43			19	5
10	256QAM	1	25	17.44	17.45	17.40				
10	256QAM	1	49	17.40	17.62	17.52				
10	256QAM	25	0	17.46	17.56	17.44			19	5
10	256QAM	25	12	17.50	17.63	17.50				
10	256QAM	25	25	17.50	17.56	17.44				
10	256QAM	50	0	17.41	17.51	17.41				
Channel										
				20625	20625	20625	Turn-up time (dB)	MPE (dB)		
5	QPSK	1	0	22.54	22.66	22.54				
5	QPSK	1	12	22.39	22.46	22.44			24	0
5	QPSK	1	24	22.45	22.54	22.47				
5	QPSK	12	0	21.60	21.68	21.55				
5	QPSK	12	7	21.35	21.44	21.39			23	1
5	QPSK	12	13	21.45	21.52	21.51				
5	QPSK	25	0	21.60	21.64	21.48				
5	16QAM	1	0	21.53	21.56	21.52				
5	16QAM	1	12	21.31	21.40	21.32			23	1
5	16QAM	1	24	21.41	21.47	21.31				
5	16QAM	12	0	20.43	20.51	20.37				
5	16QAM	12	7	20.25	20.39	20.21			22	2
5	16QAM	12	13	20.44	20.54	20.38				
5	16QAM	25	0	20.48	20.58	20.46				
5	64QAM	1	0	20.38	20.54	20.48			22	2
5	64QAM	1	12	19.38	19.40	19.25				
5	64QAM	1	24	19.41	19.52	19.35				
5	64QAM	12	0	19.38	19.40	19.25			21	3
5	64QAM	12	13	19.39	19.44	19.21				
5	64QAM	25	0	19.38	19.52	19.39				
5	256QAM	1	0	17.38	17.40	17.38			19	5
5	256QAM	1	12	17.40	17.40	17.31				
5	256QAM	1	24	17.45	17.52	17.45				
5	256QAM	12	0	17.45	17.56	17.48			19	5
5	256QAM	12	7	17.44	17.50	17.35				
5	256QAM	12	13	17.45	17.50	17.35				
5	256QAM	25	0	17.44	17.46	17.45				
Channel										
				20615	20625	20635	Turn-up time (dB)	MPE (dB)		
3	QPSK	1	0	22.63	22.63	22.63				
3	QPSK	1	8	22.42	22.53	22.41			24	0
3	QPSK	1	14	22.38	22.60	22.51				
3	QPSK	8	0	21.66	21.66	21.66				
3	QPSK	8	4	21.39	21.43	21.34			23	1
3	QPSK	8	7	21.40	21.55	21.57				
3	16QAM	1	0	21.49	21.55	21.52				
3	16QAM	1	8	21.34	21.41	21.31			23	1
3	16QAM	1	14	21.42	21.42	21.30				
3	16QAM	8	0	20.41	20.49	20.30				
3	16QAM	8	4	20.21	20.40	20.21			22	2
3	16QAM	8	7	20.30	20.50	20.47				
3	64QAM	1	0	20.48	20.61	20.50				
3	64QAM	1	8	20.47	20.44	20.45			22	2
3	64QAM	1	14	20.33	20.40	20.33				
3	64QAM	8	0	20.43	20.62	20.43				
3	64QAM	8	4	19.35	19.40	19.33			21	3
3	64QAM	8	7	19.38	19.39	19.23				
3	64QAM	15	0	19.37	19.54	19.46				
3	256QAM	1	0	17.38	17.41	17.34			19	5
3	256QAM	1	14	17.37	17.38	17.27				
3	256QAM	1	14	17.40	17.57	17.57				
3	256QAM	8	0	17.39	17.41	17.35			19	5
3	256QAM	8	4	17.39	17.59	17.47				
3	256QAM	8	7	17.40	17.52	17.40				
3	256QAM	15	0	17.47	17.60	17.46				
Channel										
				20607	20628	20643	Turn-up time (dB)	MPE (dB)		
1.4	QPSK	1	0	22.54	22.70	22.57				
1.4	QPSK	1	3	22.40	22.50	22.49			24	0
1.4	QPSK	1	5	22.35	22.50	22.41				
1.4	QPSK	3	0	22.54	22.67	22.48				
1.4	QPSK	3	1	22.35	22.43	22.39				
1.4	QPSK	3	3	22.41	22.52	22.48			23	1
1.4	16QAM	1	0	21.48	21.56	21.48				
1.4	16QAM	1	3	21.32	21.45	21.29			23	1
1.4	16QAM	1	5	21.48	21.52	21.40				
1.4	16QAM	3	0	21.37	21.47	21.37				
1.4	16QAM	3	1	21.32	21.42	21.20				
1.4	16QAM	3	3	21.35	21.48	21.43				
1.4	16QAM	6	0	20.43	20.56	20.49			22	2
1.4	16QAM	6	3	20.37	20.55	20.45				
1.4	16QAM	6	5	20.40	20.45	20.29				
1.4	64QAM	1	0	20.41	20.61	20.39			22	2
1.4	64QAM	3	0	20.32	20.48	20.32				
1.4	64QAM	3	1	20.48	20.48	20.20				
1.4	64QAM	3	3	20.39	20.40	20.28			21	3
1.4	64QAM	6	0	19.40	19.55	19.46				
1.4	256QAM	1	0	17.40	17.47	17.35			19	5
1.4	256QAM	1	3	17.40	17.40	17.38				
1.4	256QAM	3	0	17.43	17.49	17.38			19	5
1.4	256QAM	3	3	17.26	17.26	17.21				
1.4	256QAM	3	1	17.41	17.52	17.45				
1.4	256QAM	3	3	17.44	17.42	17.33			19	5
1.4	256QAM	6	0	17.54	17.51	17.43				

Band 12 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (dB)	MPE (dB)		
Channel										
10	QPSK	1	0	22.78	22.88	22.85				
10	QPSK	1	25	22.81	22.91	22.81			24	0
10	QPSK	1	49	22.79	22.91	22.87				
10	QPSK	25	0	21.74	21.80	21.82				
10	QPSK	25	12	21.74	21.83	21.85			23	1
10	QPSK	25	25	21.74	21.83	21.74				
10	QPSK	50	0	21.88	21.91	21.86				
10	16QAM	1	0	21.93	21.92	21.90				
10	16QAM	1	25	21.75	21.89	21.75			23	1
10	16QAM	1	49	21.88	21.93	21.83				
10	16QAM	25	0	20.82	20.87	20.81				
10	16QAM	25	12	20.90	20.95	20.87			22	2
10	16QAM	25	25	20.76	20.84	20.71				
10	16QAM	50	0	20.78	20.85	20.78				
10	64QAM	1	0	20.85	20.95	20.82				
10	64QAM	1	25	20.76	20.80	20.85			22	



Band 17 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				700	710	711			
10	QPSK	1	0	22.86	22.60	22.92	24	0	
10	QPSK	1	26	22.77	22.63	22.86			
10	QPSK	1	49	22.75	22.61	22.88			
10	QPSK	25	0	21.82	21.64	21.84			
10	QPSK	25	12	21.78	21.60	21.83			
10	QPSK	25	25	21.71	21.69	21.79	23	1	
10	QPSK	50	0	21.80	21.66	21.77			
10	16QAM	1	0	20.92	20.92	20.94			
10	16QAM	1	26	21.83	21.90	21.90	23	1	
10	16QAM	5	49	21.83	21.91	21.87			
10	16QAM	25	0	20.91	20.95	20.92			
10	16QAM	25	12	20.71	20.52	20.78	22	2	
10	16QAM	25	25	20.79	20.67	20.80			
10	16QAM	50	0	20.81	20.91	20.82			
10	64QAM	1	0	21.00	21.04	21.00			
10	64QAM	1	26	20.89	20.92	20.96	22	2	
10	64QAM	1	49	20.82	20.87	20.79			
10	64QAM	25	0	19.54	19.78	19.65			
10	64QAM	25	12	19.79	19.86	19.73	21	3	
10	64QAM	25	25	19.87	19.71	19.57			
10	64QAM	50	0	19.75	19.89	19.85			
10	256QAM	1	0	17.89	18.01	17.86	19	5	
10	256QAM	1	26	17.85	17.84	17.88			
10	256QAM	1	49	17.71	17.86	17.78			
10	256QAM	25	0	17.81	17.80	17.86			
10	256QAM	25	12	17.74	17.84	17.75	19	5	
10	256QAM	25	25	17.85	17.79	17.75			
10	256QAM	50	0	17.79	17.85	17.85			
Channel									
				706.5	710	713.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.71	22.85	22.83	24	0	
5	QPSK	1	12	22.70	22.71	22.71			
5	QPSK	1	24	22.68	22.78	22.61			
5	QPSK	12	0	21.76	21.90	21.80			
5	QPSK	12	7	21.67	21.79	21.71			
5	QPSK	12	13	21.65	21.78	21.66	23	1	
5	QPSK	25	0	21.67	21.77	21.66			
5	16QAM	1	0	21.98	21.98	21.92			
5	16QAM	1	12	21.89	21.93	21.84	23	1	
5	16QAM	1	24	21.79	21.80	21.75			
5	16QAM	12	0	20.87	20.91	20.77			
5	16QAM	12	7	20.84	20.79	20.64	22	2	
5	16QAM	12	13	20.71	20.76	20.70			
5	16QAM	25	0	20.75	20.78	20.78			
5	64QAM	1	0	20.90	20.85	20.90	22	2	
5	64QAM	1	12	20.80	20.80	20.85			
5	64QAM	1	24	20.88	20.91	20.89			
5	64QAM	12	0	19.53	19.65	19.61			
5	64QAM	12	7	19.63	19.63	19.64			
5	64QAM	12	13	19.60	19.52	19.53	21	3	
5	64QAM	25	0	19.61	19.76	19.77			
5	256QAM	1	0	17.84	17.80	17.78			
5	256QAM	1	12	17.75	17.85	17.75	19	5	
5	256QAM	1	24	17.88	17.76	17.63			
5	256QAM	12	0	17.78	17.71	17.74			
5	256QAM	12	7	17.60	17.75	17.63	19	5	
5	256QAM	12	13	17.67	17.65	17.71			
5	256QAM	25	0	17.72	17.68	17.78			

Band 26 for FCC Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				811.5	811.5	811.5			
15	QPSK	1	0	22.58	22.77	22.67	24	0	
15	QPSK	1	37	22.47	22.57	22.55			
15	QPSK	1	74	22.39	22.63	22.54			
15	QPSK	36	0	21.51	21.63	21.60			
15	QPSK	36	20	21.50	21.58	21.60	23	1	
15	QPSK	36	39	21.40	21.54	21.48			
15	QPSK	75	0	21.59	21.67	21.67			
15	QPSK	1	0	21.72	21.80	21.79			
15	16QAM	1	37	21.56	21.71	21.63	23	1	
15	16QAM	1	74	21.55	21.68	21.63			
15	16QAM	36	0	20.48	20.52	20.48			
15	16QAM	36	20	20.88	20.73	20.52	22	2	
15	16QAM	36	39	20.94	20.67	20.61			
15	16QAM	75	0	20.50	20.58	20.52			
15	64QAM	1	0	20.68	20.72	20.63	22	2	
15	64QAM	1	37	20.55	20.94	20.84			
15	64QAM	1	74	20.65	20.78	20.72			
15	64QAM	36	0	19.54	19.63	19.59			
15	64QAM	36	20	19.52	19.74	19.61	21	3	
15	64QAM	36	39	19.54	19.68	19.54			
15	64QAM	75	0	19.50	19.64	19.51			
15	256QAM	1	0	17.66	17.71	17.68	19	5	
15	256QAM	1	37	17.56	17.61	17.55			
15	256QAM	1	74	17.59	17.67	17.67			
15	256QAM	36	0	17.62	17.65	17.67			
15	256QAM	36	20	17.65	17.72	17.65	19	5	
15	256QAM	36	39	17.52	17.66	17.61			
15	256QAM	75	0	17.65	17.65	17.67			
Channel									
				819	831.5	844	Time-up (min)	MPE (dB)	
10	QPSK	1	0	22.49	22.72	22.60	24	0	
10	QPSK	1	12	22.39	22.44	22.43			
10	QPSK	1	49	22.55	22.61	22.40			
10	QPSK	25	0	21.37	21.54	21.37			
10	QPSK	25	12	21.40	21.48	21.41			
10	QPSK	25	25	21.34	21.48	21.41	23	1	
10	QPSK	50	0	21.54	21.58	21.51			
10	16QAM	1	0	21.61	21.68	21.65			
10	16QAM	1	25	21.52	21.67	21.54	23	1	
10	16QAM	1	49	21.61	21.62	21.60			
10	16QAM	25	0	20.42	20.58	20.38			
10	16QAM	25	12	20.64	20.59	20.49	22	2	
10	16QAM	25	25	20.56	20.58	20.51			
10	16QAM	50	0	20.44	20.53	20.46			
10	64QAM	1	0	20.55	20.60	20.51	22	2	
10	64QAM	1	25	20.51	20.56	20.48			
10	64QAM	1	49	20.57	20.65	20.57			
10	64QAM	25	0	19.39	19.38	19.52			
10	64QAM	25	12	19.45	19.69	19.38			
10	64QAM	25	25	19.53	19.54	19.43	21	3	
10	64QAM	50	0	19.41	19.58	19.40			
10	256QAM	1	0	17.57	17.52	17.55	19	5	
10	256QAM	1	25	17.52	17.55	17.48			
10	256QAM	1	49	17.45	17.63	17.44			
10	256QAM	25	0	17.42	17.52	17.43			
10	256QAM	25	12	17.51	17.67	17.52	19	5	
10	256QAM	25	25	17.43	17.52	17.46			
10	256QAM	50	0	17.53	17.60	17.46			
Channel									
				817.5	831.5	847.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.47	22.54	22.57	24	0	
5	QPSK	1	12	22.36	22.47	22.48			
5	QPSK	1	24	22.55	22.50	22.47			
5	QPSK	12	0	21.37	21.61	21.48			
5	QPSK	12	7	21.40	21.47	21.45			
5	QPSK	12	13	21.28	21.45	21.36	23	1	
5	QPSK	25	0	21.48	21.61	21.44			
5	16QAM	1	0	21.63	21.68	21.58			
5	16QAM	1	12	21.52	21.60	21.52	23	1	
5	16QAM	1	24	21.47	21.56	21.48			
5	16QAM	12	0	20.37	20.53	20.41			
5	16QAM	12	7	20.65	20.67	20.53	22	2	
5	16QAM	12	13	20.56	20.58	20.51			
5	16QAM	25	0	20.46	20.53	20.42			
5	64QAM	1	0	20.59	20.60	20.56	22	2	
5	64QAM	1	12	20.44	20.54	20.46			
5	64QAM	1	24	20.57	20.65	20.65			
5	64QAM	12							



Band 2 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power (W)	Power (W)	Power (W)	Turn-up (dB)	MPR (dB)		
Channel	Ch. 1 / Freq.	Ch. 2 / Freq.	Ch. 3 / Freq.	Ch. 1 / Freq.	Ch. 2 / Freq.	Ch. 3 / Freq.	Ch. 1 / Freq.	Ch. 2 / Freq.	Ch. 3 / Freq.	Turn-up (dB)
20	QPSK	1	0	16.24	16.37	16.19		17.4	0	
20	QPSK	1	49	16.09	16.19	16.05				
20	QPSK	50	0	16.19	16.26	16.23				
20	QPSK	50	24	16.08	16.13	16.13				
20	QPSK	50	49	16.13	16.19	16.12				
20	QPSK	100	0	16.08	16.23	16.17				
20	QPSK	100	24	16.21	16.27	16.23				
20	QPSK	100	49	16.13	16.20	16.08				
20	QPSK	150	0	16.24	16.26	16.19				
20	QPSK	150	24	16.17	16.21	16.14				
20	QPSK	150	49	16.07	16.12	16.12				
20	QPSK	150	74	16.13	16.20	16.10				
20	QPSK	150	99	16.10	16.16	16.05		17.4	0	
20	QPSK	150	124	16.02	16.16	16.12				
20	QPSK	150	149	16.06	16.21	16.09				
20	QPSK	150	174	16.11	16.16	16.04				
20	QPSK	100	0	16.19	16.26	16.25				
20	QPSK	100	24	16.09	16.16	16.09				
20	QPSK	100	49	15.97	16.03	15.93			17	0.4
20	QPSK	100	74	16.08	16.11	16.04				
20	QPSK	100	99	16.09	16.14	16.06				
20	QPSK	100	124	16.11	16.16	16.04				
20	QPSK	100	149	15.83	15.94	15.85			17	0.4
20	QPSK	100	174	15.81	15.88	15.86				
20	QPSK	100	199	15.85	15.92	15.85				
20	QPSK	150	0	16.07	16.20	16.14				
20	QPSK	150	24	16.07	16.20	16.14				
20	QPSK	150	49	16.20	16.25	16.14				
20	QPSK	150	74	16.12	16.26	16.13				
20	QPSK	150	99	16.22	16.27	16.13				
20	QPSK	150	124	16.21	16.27	16.13				
20	QPSK	150	149	16.23	16.30	16.23				
20	QPSK	150	174	16.20	16.27	16.14				
20	QPSK	150	199	16.23	16.30	16.23				
20	QPSK	150	224	16.23	16.30	16.23				
20	QPSK	150	249	16.23	16.30	16.23				
20	QPSK	150	274	16.23	16.30	16.23				
20	QPSK	150	299	16.23	16.30	16.23				
20	QPSK	150	324	16.23	16.30	16.23				
20	QPSK	150	349	16.23	16.30	16.23				
20	QPSK	150	374	16.23	16.30	16.23				
20	QPSK	150	399	16.23	16.30	16.23				
20	QPSK	150	424	16.23	16.30	16.23				
20	QPSK	150	449	16.23	16.30	16.23				
20	QPSK	150	474	16.23	16.30	16.23				
20	QPSK	150	499	16.23	16.30	16.23				
20	QPSK	150	524	16.23	16.30	16.23				
20	QPSK	150	549	16.23	16.30	16.23				
20	QPSK	150	574	16.23	16.30	16.23				
20	QPSK	150	599	16.23	16.30	16.23				
20	QPSK	150	624	16.23	16.30	16.23				
20	QPSK	150	649	16.23	16.30	16.23				
20	QPSK	150	674	16.23	16.30	16.23				
20	QPSK	150	699	16.23	16.30	16.23				
20	QPSK	150	724	16.23	16.30	16.23				
20	QPSK	150	749	16.23	16.30	16.23				
20	QPSK	150	774	16.23	16.30	16.23				
20	QPSK	150	799	16.23	16.30	16.23				
20	QPSK	150	824	16.23	16.30	16.23				
20	QPSK	150	849	16.23	16.30	16.23				
20	QPSK	150	874	16.23	16.30	16.23				
20	QPSK	150	899	16.23	16.30	16.23				
20	QPSK	150	924	16.23	16.30	16.23				
20	QPSK	150	949	16.23	16.30	16.23				
20	QPSK	150	974	16.23	16.30	16.23				
20	QPSK	150	999	16.23	16.30	16.23				
20	QPSK	150	1024	16.23	16.30	16.23				
20	QPSK	150	1049	16.23	16.30	16.23				
20	QPSK	150	1074	16.23	16.30	16.23				
20	QPSK	150	1099	16.23	16.30	16.23				
20	QPSK	150	1124	16.23	16.30	16.23				
20	QPSK	150	1149	16.23	16.30	16.23				
20	QPSK	150	1174	16.23	16.30	16.23				
20	QPSK	150	1199	16.23	16.30	16.23				
20	QPSK	150	1224	16.23	16.30	16.23				
20	QPSK	150	1249	16.23	16.30	16.23				
20	QPSK	150	1274	16.23	16.30	16.23				
20	QPSK	150	1299	16.23	16.30	16.23				
20	QPSK	150	1324	16.23	16.30	16.23				
20	QPSK	150	1349	16.23	16.30	16.23				
20	QPSK	150	1374	16.23	16.30	16.23				
20	QPSK	150	1399	16.23	16.30	16.23				
20	QPSK	150	1424	16.23	16.30	16.23				
20	QPSK	150	1449	16.23	16.30	16.23				
20	QPSK	150	1474	16.23	16.30	16.23				
20	QPSK	150	1499	16.23	16.30	16.23				
20	QPSK	150	1524	16.23	16.30	16.23				
20	QPSK	150	1549	16.23	16.30	16.23				
20	QPSK	150	1574	16.23	16.30	16.23				
20	QPSK	150	1599	16.23	16.30	16.23				
20	QPSK	150	1624	16.23	16.30	16.23				
20	QPSK	150	1649	16.23	16.30	16.23				
20	QPSK	150	1674	16.23	16.30	16.23				
20	QPSK	150	1699	16.23	16.30	16.23				
20	QPSK	150	1724	16.23	16.30	16.23				
20	QPSK	150	1749	16.23	16.30	16.23				
20	QPSK	150	1774	16.23	16.30	16.23				
20	QPSK	150	1799	16.23	16.30	16.23				
20	QPSK	150	1824	16.23	16.30	16.23				
20	QPSK	150	1849	16.23	16.30	16.23				
20	QPSK	150	1874	16.23	16.30	16.23				
20	QPSK	150	1899	16.23	16.30	16.23				
20	QPSK	150	1924	16.23	16.30	16.23				
20	QPSK	150	1949	16.23	16.30	16.23				
20	QPSK	150	1974	16.23	16.30	16.23				
20	QPSK	150	1999	16.23	16.30	16.23				
20	QPSK	150	2024	16.23	16.30	16.23				
20	QPSK	150	2049	16.23	16.30	16.23				
20	QPSK	150	2074	16.23	16.30	16.23				
20	QPSK	150	2099	16.23	16.30	16.23				
20	QPSK	150	2124	16.23	16.30	16.23				
20	QPSK	150	2149	16.23	16.30	16.23				
20	QPSK	150	2174	16.23	16.30	16.23				
20	QPSK	150	2199	16.23	16.30	16.23				
20	QPSK	150	2224	16.23	16.30	16.23				
20	QPSK	150	2249	16.23	16.30	16.23				
20	QPSK	150	2274	16.23	16.30	16.23				
20	QPSK	150	2299	16.23	16.30	16.23				
20	QPSK	150	2324	16.23	16.30	16.23				
20	QPSK	150	2349	16.23	16.30	16.23				
20	QPSK	150	2374	16.23	16.30	16.23				
20	QPSK	150	2399	16.23	16.30	16.23				
20	QPSK	150	2424	16.23	16.30	16.23				
20	QPSK	150	2449	16.23	16.30	16.23				
20	QPSK	150	2474	16.23	16.30	16.23				
20	QPSK	150	2499	16.23	16.30	16.23				
20	QPSK	150								



Band 12 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (min)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.58	22.70	22.82				
10	QPSK	1	25	22.58	22.70	22.82	24	0		
10	QPSK	1	49	22.56	22.70	22.87				
10	QPSK	25	0	21.68	21.71	21.64				
10	QPSK	25	12	21.54	21.68	21.82	23	1		
10	QPSK	25	25	21.62	21.66	21.62				
10	QPSK	50	0	21.60	21.67	21.63				
10	16QAM	1	0	21.70	21.72	21.64	23	1		
10	16QAM	1	25	21.54	21.63	21.51				
10	16QAM	1	49	21.57	21.66	21.63				
10	16QAM	25	0	20.83	20.70	20.86	22	2		
10	16QAM	25	12	20.83	20.74	20.83				
10	16QAM	25	25	20.86	20.78	20.72				
10	16QAM	50	0	20.84	20.73	20.89				
10	64QAM	1	0	20.80	20.89	20.83				
10	64QAM	1	25	20.67	20.77	20.64	22	2		
10	64QAM	1	49	20.63	20.68	20.64				
10	64QAM	25	0	19.52	19.55	19.54				
10	64QAM	25	12	19.62	19.71	19.59	21	3		
10	64QAM	25	25	19.51	19.55	19.55				
10	64QAM	50	0	19.62	19.70	19.62				
10	256QAM	1	0	17.57	17.71	17.66	19	5		
10	256QAM	1	25	17.51	17.65	17.56				
10	256QAM	1	49	17.54	17.66	17.62				
10	256QAM	25	0	17.54	17.66	17.64	19	5		
10	256QAM	25	12	17.59	17.74	17.62				
10	256QAM	25	25	17.56	17.62	17.56				
10	256QAM	50	0	17.56	17.62	17.56				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.47	22.70	22.49				
5	QPSK	1	12	22.40	22.66	22.41	24	0		
5	QPSK	1	24	22.42	22.56	22.44				
5	QPSK	12	0	21.60	21.85	21.50				
5	QPSK	12	7	21.40	21.62	21.62	23	1		
5	QPSK	12	13	21.53	21.56	21.49				
5	QPSK	25	0	21.61	21.61	21.61				
5	16QAM	1	0	21.58	21.64	21.57	23	1		
5	16QAM	1	12	21.46	21.51	21.39				
5	16QAM	1	24	21.44	21.62	21.59				
5	16QAM	12	0	20.48	20.66	20.52	22	2		
5	16QAM	12	7	20.55	20.68	20.49				
5	16QAM	12	13	20.50	20.59	20.59				
5	16QAM	25	0	20.59	20.61	20.59				
5	64QAM	1	0	20.74	20.81	20.76	22	2		
5	64QAM	1	12	20.44	20.62	20.59				
5	64QAM	1	24	20.52	20.63	20.50				
5	64QAM	12	0	19.45	19.51	19.50	21	3		
5	64QAM	12	7	19.48	19.51	19.41				
5	64QAM	12	13	19.48	19.51	19.41				
5	64QAM	25	0	19.67	19.60	19.49				
5	256QAM	1	0	17.50	17.59	17.50	19	5		
5	256QAM	1	12	17.36	17.42	17.47				
5	256QAM	1	24	17.45	17.58	17.56				
5	256QAM	12	0	17.48	17.55	17.48	19	5		
5	256QAM	12	7	17.48	17.55	17.49				
5	256QAM	12	13	17.42	17.53	17.49				
5	256QAM	25	0	17.54	17.61	17.50				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.11	22.18	22.11				
3	QPSK	1	8	22.38	22.51	22.46	24	0		
3	QPSK	1	14	22.44	22.63	22.52				
3	QPSK	8	0	21.60	21.62	21.60				
3	QPSK	8	4	21.43	21.58	21.49	23	1		
3	QPSK	8	7	21.56	21.62	21.50				
3	16QAM	1	0	21.54	21.62	21.51	23	1		
3	16QAM	1	8	21.62	21.67	21.54				
3	16QAM	1	14	21.44	21.60	21.38				
3	16QAM	8	0	20.55	20.62	20.50	22	2		
3	16QAM	8	4	20.55	20.66	20.56				
3	16QAM	8	7	20.67	20.66	20.62				
3	16QAM	15	0	20.51	20.67	20.59				
3	64QAM	1	0	20.76	20.80	20.77	22	2		
3	64QAM	1	8	20.52	20.70	20.54				
3	64QAM	1	14	20.54	20.64	20.55				
3	64QAM	8	0	19.41	19.58	19.47	21	3		
3	64QAM	8	4	19.40	19.47	19.51				
3	64QAM	8	7	19.45	19.52	19.45				
3	64QAM	15	0	19.54	19.60	19.50				
3	256QAM	1	0	17.53	17.60	17.55	19	5		
3	256QAM	1	8	17.44	17.50	17.50				
3	256QAM	1	14	17.41	17.62	17.58				
3	256QAM	8	0	17.51	17.58	17.52	19	5		
3	256QAM	8	4	17.54	17.63	17.47				
3	256QAM	8	7	17.44	17.54	17.47				
3	256QAM	15	0	17.60	17.69	17.57				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.52	22.61	22.65				
1.4	QPSK	1	3	22.41	22.53	22.53	24	0		
1.4	QPSK	1	5	22.48	22.55	22.59				
1.4	QPSK	3	0	21.64	21.67	21.63				
1.4	QPSK	3	1	21.44	21.59	21.43	23	1		
1.4	QPSK	3	3	21.49	21.63	21.59				
1.4	QPSK	8	0	21.67	21.64	21.55				
1.4	16QAM	1	0	21.61	21.63	21.54	23	1		
1.4	16QAM	1	3	21.45	21.54	21.39				
1.4	16QAM	1	5	21.47	21.63	21.48				
1.4	16QAM	3	0	21.48	21.56	21.46				
1.4	16QAM	3	1	21.53	21.71	21.54				
1.4	16QAM	3	3	21.56	21.73	21.67				
1.4	64QAM	1	0	20.53	20.66	20.60	22	2		
1.4	64QAM	1	3	20.54	20.64	20.53				
1.4	64QAM	1	5	20.49	20.60	20.55				
1.4	64QAM	3	0	20.43	20.50	20.40	22	2		
1.4	64QAM	3	1	20.52	20.60	20.49				
1.4	64QAM	3	3	20.41	20.47	20.44				
1.4	64QAM	6	0	19.53	19.58	19.50	21	3		
1.4	256QAM	1	0	17.46	17.57	17.56	19	5		
1.4	256QAM	1	3	17.36	17.50	17.49				
1.4	256QAM	1	5	17.47	17.51	17.57				
1.4	256QAM	3	0	17.50	17.56	17.57	19	5		
1.4	256QAM	3	1	17.53	17.70	17.55				
1.4	256QAM	3	3	17.51	17.47	17.45				
1.4	256QAM	6	0	17.53	17.51	17.54	19	5		

Band 13 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (min)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.52						
10	QPSK	1	25	22.43			24	0		
10	QPSK	1	49	22.37						
10	QPSK	25	0	21.40			23	1		
10	QPSK	25	12	21.44						
10	QPSK	25	25	21.41						
10	QPSK	50	0	21.46						
10	16QAM	1	0	21.70			23	1		
10	16QAM	1	25	21.54						
10	16QAM	1	49	21.57						
10	16QAM	25	0	20.52			22	2		
10	16QAM	25	12	20.43						
10	16QAM	25	25	20.49						
10	16QAM	50	0	20.42						
10	64QAM	1	0	20.86			22	2		
10	64QAM	1	25	20.54						
10	64QAM	1	49	20.51						
10	64QAM	25	0	19.54						
10										



Band 25 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Peak Ch./Freq.	Time-up limit (min)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	16.22	16.23	16.03				
20	QPSK	1	49	16.18	16.12	16.13	17.4	0		
20	QPSK	1	99	16.18	16.26	16.13				
20	QPSK	50	0	16.24	16.20	16.10				
20	QPSK	50	24	16.07	16.07	16.03	17.4	0		
20	QPSK	50	50	16.19	16.23	16.09				
20	QPSK	100	0	16.25	16.22	16.21				
20	16QAM	50	0	16.15	16.25	16.14				
20	16QAM	1	49	16.21	16.18	16.26	17.4	0		
20	16QAM	1	99	16.25	16.18	16.19				
20	16QAM	50	0	16.16	16.10	16.07				
20	16QAM	50	24	16.13	16.22	16.17	17.4	0		
20	16QAM	50	50	16.16	16.11	16.17				
20	16QAM	100	0	16.06	16.20	16.10				
20	84QAM	1	49	16.03	16.19	16.10	17.4	0		
20	84QAM	1	99	16.17	16.12	16.17				
20	84QAM	50	0	16.26	16.12	16.17				
20	84QAM	50	24	16.12	16.26	16.21	17.4	0		
20	84QAM	50	50	16.10	16.20	16.21				
20	84QAM	100	0	16.23	16.11	16.14				
20	256QAM	1	49	15.86	16.07	15.84	17.4	0		
20	256QAM	1	99	15.85	16.03	15.80				
20	256QAM	50	24	15.82	15.97	15.79	17.4	0		
20	256QAM	50	50	15.77	15.89	15.84				
20	256QAM	100	0	15.70	15.83	15.83				
Channel										
Frequency (MHz)										
15	QPSK	1	0	16.10	16.11	15.92				
15	QPSK	1	37	16.07	16.08	16.01	17.4	0		
15	QPSK	1	74	16.12	16.18	16.05				
15	QPSK	36	0	16.09	16.18	15.95				
15	QPSK	36	28	16.01	16.08	15.98	17.4	0		
15	QPSK	36	39	16.14	16.19	16.16				
15	QPSK	75	0	16.21	16.22	16.15				
15	16QAM	1	37	16.09	16.17	16.11	17.4	0		
15	16QAM	1	74	16.12	16.05	16.08				
15	16QAM	36	0	16.11	16.21	16.23				
15	16QAM	36	28	16.09	16.19	16.07	17.4	0		
15	16QAM	36	39	16.13	16.22	16.08				
15	16QAM	75	0	16.13	16.22	16.08				
15	84QAM	1	0	15.96	16.07	15.99	17.4	0		
15	84QAM	1	37	16.05	16.06	16.06				
15	84QAM	1	74	16.13	16.25	16.04				
15	84QAM	36	0	16.16	16.23	16.05	17.4	0		
15	84QAM	36	28	16.07	16.17	16.08				
15	84QAM	36	39	16.04	16.12	16.10				
15	84QAM	75	0	16.12	16.24	16.04				
15	256QAM	1	0	15.86	15.96	15.86	17.4	0		
15	256QAM	1	37	15.85	15.95	15.87				
15	256QAM	1	74	15.87	15.84	15.69				
15	256QAM	36	28	15.71	15.83	15.84	17.4	0		
15	256QAM	36	39	15.63	15.85	15.79				
15	256QAM	75	0	15.61	15.82	15.82				
Channel										
Frequency (MHz)										
10	QPSK	1	0	16.03	16.03	15.90				
10	QPSK	1	25	16.08	16.05	15.97	17.4	0		
10	QPSK	1	49	16.12	16.12	16.01				
10	QPSK	12	0	16.10	16.10	16.08	17.4	0		
10	QPSK	12	13	15.96	16.14	15.98				
10	QPSK	25	25	16.04	16.09	16.06				
10	16QAM	1	0	16.05	16.19	16.02	17.4	0		
10	16QAM	1	24	16.11	16.22	16.11				
10	16QAM	12	0	16.07	16.14	16.04				
10	16QAM	12	13	16.06	16.15	16.03	17.4	0		
10	16QAM	25	0	16.06	16.20	16.21				
10	16QAM	25	12	16.05	16.15	16.03				
10	16QAM	50	0	16.08	16.22	16.10				
10	84QAM	1	0	16.03	16.13	16.03	17.4	0		
10	84QAM	1	37	15.93	16.03	15.93				
10	84QAM	1	49	16.12	16.23	16.13				
10	84QAM	25	0	16.22	16.21	16.02	17.4	0		
10	84QAM	25	12	16.07	16.19	16.20				
10	84QAM	50	0	16.12	16.20	16.09				
10	256QAM	1	0	15.81	15.96	15.87	17.4	0		
10	256QAM	1	49	15.70	15.91	15.89				
10	256QAM	12	0	15.85	15.87	15.87				
10	256QAM	12	13	15.75	15.84	15.73	17.4	0		
10	256QAM	25	25	15.66	15.81	15.73				
10	256QAM	50	0	15.62	15.81	15.78				
Channel										
Frequency (MHz)										
5	QPSK	1	0	16.03	16.03	15.90				
5	QPSK	1	12	16.01	16.05	15.96	17.4	0		
5	QPSK	1	24	16.08	16.18	16.04				
5	QPSK	12	0	16.10	16.10	16.08	17.4	0		
5	QPSK	12	7	15.96	16.17	15.93				
5	QPSK	12	13	16.14	16.11	15.99				
5	16QAM	1	0	16.10	16.19	16.10	17.4	0		
5	16QAM	1	12	16.09	16.17	16.14				
5	16QAM	12	13	16.24	16.17	16.07	17.4	0		
5	16QAM	12	7	16.06	16.17	16.08				
5	16QAM	25	0	16.06	16.20	16.12				
5	84QAM	1	0	15.97	16.15	15.99	17.4	0		
5	84QAM	1	12	15.92	16.10	16.02				
5	84QAM	1	24	16.09	16.27	16.07				
5	84QAM	12	0	16.13	16.25	16.11	17.4	0		
5	84QAM	12	7	16.00	16.17	16.08				
5	84QAM	12	13	15.95	16.11	16.11				
5	84QAM	25	0	16.16	16.18	16.06				
5	256QAM	1	0	15.89	15.96	15.84	17.4	0		
5	256QAM	1	12	15.81	15.91	15.90				
5	256QAM	12	0	15.71	15.84	15.76				
5	256QAM	12	13	15.76	15.91	15.84	17.4	0		
5	256QAM	12	7	15.78	15.74	15.69				
5	256QAM	25	25	15.63	15.86	15.81				
5	256QAM	50	0	15.60	15.81	15.86				
Channel										
Frequency (MHz)										
3	QPSK	1	0	16.09	16.22	16.19				
3	QPSK	1	8	16.05	16.06	16.04	17.4	0		
3	QPSK	1	14	16.13	16.15	16.00				
3	QPSK	8	0	16.14	16.15	16.03				
3	QPSK	8	4	15.98	16.12	15.98	17.4	0		
3	QPSK	8	7	16.05	16.17	15.99				
3	QPSK	15	0	16.11	16.22	16.15				
3	16QAM	1	0	16.05	16.15	16.01	17.4	0		
3	16QAM	1	8	16.11	16.23	16.14				
3	16QAM	1	14	16.18	16.17	16.07				
3	16QAM	8	0	16.08	16.20	16.14	17.4	0		
3	16QAM	8	4	16.02	16.10	16.14				
3	16QAM	8	7	16.21	16.29	16.05				
3	16QAM	15	0	16.11	16.27	16.02				
3	84QAM	1	0	15.98	16.12	15.97	17.4	0		
3	84QAM	1	8	15.96	16.10	16.02				
3	84QAM	1	14	16.09	16.22	16.12				
3	84QAM	8	0	16.21	16.18	16.05	17.4	0		
3	84QAM	8	4	16.01	16.18	16.12				
3	84QAM	8	7	16.03	16.17	16.19				
3	84QAM	15	0	15.92	16.00	15.83				
3	256QAM	1	0	15.82	15.91	15.85	17.4	0		
3	256QAM	1	8	15.85	15.91	15.85				
3	256QAM	8	0	15.77	15.87	15.79				
3	256QAM	8	4	15.75	15.80	15.88	17.4	0		
3	256QAM	15	0	15.						





Band 38 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel				37850	38050	38150			
Frequency (MHz)				2590	2595	2610			
20	QPSK	1	0	16.99	16.99	16.99	17.9	0	
20	QPSK	1	49	16.71	16.89	16.84			
20	QPSK	1	99	16.81	16.80	16.80			
20	QPSK	50	0	16.85	17.00	16.80			
20	QPSK	50	24	16.83	16.88	16.87	17.9	0	
20	QPSK	100	0	16.81	16.98	16.80			
20	HQAM	1	0	16.79	16.81	16.83	17.9	0	
20	HQAM	1	49	16.80	16.80	16.80			
20	HQAM	1	99	16.77	16.87	16.85			
20	HQAM	50	0	16.80	16.86	16.79			
20	HQAM	50	24	16.82	16.82	16.80	17.9	0	
20	HQAM	50	50	16.74	16.81	16.88			
20	HQAM	100	0	16.82	16.80	16.81			
20	HQAM	100	0	16.83	16.85	16.75			
20	HQAM	1	49	16.83	16.86	16.87	17.9	0	
20	HQAM	1	99	16.80	16.82	16.71			
20	HQAM	50	0	16.77	16.89	16.73			
20	HQAM	50	24	16.82	16.85	16.80	17.9	0	
20	HQAM	50	50	16.83	17.00	16.80			
20	HQAM	100	0	16.89	16.93	16.79			
20	ZSSBAM	1	0	16.81	16.86	16.47			
20	ZSSBAM	1	49	16.87	16.80	16.30	17.9	0	
20	ZSSBAM	1	99	16.46	16.52	16.39			
20	ZSSBAM	50	0	16.81	16.82	16.67			
20	ZSSBAM	50	24	16.34	16.44	16.40	17.9	0	
20	ZSSBAM	50	50	16.80	16.83	16.61			
20	ZSSBAM	100	0	16.82	16.82	16.52			
Channel				37850	38050	38175			
Frequency (MHz)				2577.5	2592.5	2612.5			
15	QPSK	1	0	16.83	17.00	16.80	17.9	0	
15	QPSK	1	37	16.66	16.82	16.69			
15	QPSK	1	74	16.68	16.76	16.69			
15	QPSK	36	0	16.80	16.87	16.77			
15	QPSK	36	20	16.78	16.88	16.73	17.9	0	
15	QPSK	36	37	16.85	16.80	16.80			
15	QPSK	75	0	16.71	16.91	16.71			
15	HQAM	1	0	16.69	16.82	16.73	17.9	0	
15	HQAM	1	37	16.81	16.80	16.80			
15	HQAM	1	74	16.64	16.74	16.72			
15	HQAM	36	0	16.74	16.79	16.63			
15	HQAM	36	20	16.74	16.84	16.70	17.9	0	
15	HQAM	36	37	16.65	16.85	16.77			
15	HQAM	75	0	16.77	16.81	16.70			
15	HQAM	1	0	16.73	16.72	16.69	17.9	0	
15	HQAM	1	37	16.70	16.82	16.76			
15	HQAM	1	74	16.76	16.76	16.69			
15	HQAM	36	0	16.74	16.82	16.61			
15	HQAM	36	20	16.80	16.84	16.74	17.9	0	
15	HQAM	36	37	16.85	16.80	16.70			
15	HQAM	75	0	16.81	16.82	16.70			
15	ZSSBAM	1	0	16.47	16.51	16.40	17.9	0	
15	ZSSBAM	1	37	16.29	16.33	16.20			
15	ZSSBAM	1	74	16.40	16.40	16.30			
15	ZSSBAM	36	0	16.52	16.46	16.38	17.9	0	
15	ZSSBAM	36	20	16.50	16.50	16.40			
15	ZSSBAM	36	37	16.54	16.55	16.47			
15	ZSSBAM	75	0	16.43	16.57	16.44			
Channel				37850	38050	38175			
Frequency (MHz)				2575	2595	2615			
10	QPSK	1	0	16.80	16.80	16.80	17.9	0	
10	QPSK	1	25	16.59	16.85	16.71			
10	QPSK	1	49	16.76	16.87	16.68			
10	QPSK	12	0	16.81	16.87	16.77			
10	QPSK	25	12	16.84	16.80	16.72	17.9	0	
10	QPSK	25	25	16.73	16.72	16.69			
10	QPSK	50	0	16.74	16.80	16.70			
10	HQAM	1	0	16.76	16.80	16.77	17.9	0	
10	HQAM	1	25	16.80	16.86	16.79			
10	HQAM	1	49	16.72	16.80	16.74			
10	HQAM	25	0	16.65	16.77	16.62			
10	HQAM	25	12	16.84	16.80	16.69	17.9	0	
10	HQAM	25	25	16.81	16.78	16.77			
10	HQAM	50	0	16.70	16.70	16.70			
10	HQAM	1	0	16.73	16.80	16.71	17.9	0	
10	HQAM	1	25	16.79	16.82	16.80			
10	HQAM	1	49	16.70	16.73	16.68			
10	HQAM	25	0	16.72	16.70	16.63			
10	HQAM	25	12	16.88	16.88	16.85	17.9	0	
10	HQAM	25	25	16.85	16.84	16.76			
10	HQAM	50	0	16.78	16.80	16.71			
10	ZSSBAM	1	0	16.46	16.40	16.34	17.9	0	
10	ZSSBAM	1	25	16.36	16.40	16.30			
10	ZSSBAM	1	49	16.80	16.82	16.69			
10	ZSSBAM	25	0	16.52	16.50	16.40	17.9	0	
10	ZSSBAM	25	12	16.28	16.20	16.30			
10	ZSSBAM	25	25	16.50	16.45	16.30			
10	ZSSBAM	50	0	16.41	16.58	16.44			

Band 38 HPUE Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel				37850	38050	38150			
Frequency (MHz)				2590	2595	2610			
20	QPSK	1	0	16.43	16.43	16.44	19.5	0	
20	QPSK	1	49	16.31	16.37	16.24			
20	QPSK	1	99	16.36	16.41	16.31			
20	QPSK	50	0	16.26	16.41	16.30			
20	QPSK	50	24	16.33	16.37	16.26	19.5	0	
20	QPSK	100	0	16.30	16.31	16.25			
20	QPSK	100	0	16.27	16.36	16.29			
20	HQAM	1	0	16.33	16.39	16.21	19.5	0	
20	HQAM	1	49	16.26	16.31	16.16			
20	HQAM	1	99	16.21	16.34	16.23			
20	HQAM	50	0	16.29	16.42	16.37			
20	HQAM	50	24	16.29	16.36	16.29	19.5	0	
20	HQAM	50	50	16.21	16.33	16.30			
20	HQAM	100	0	16.22	16.41	16.37			
20	HQAM	100	0	16.24	16.39	16.30			
20	HQAM	1	49	16.33	16.41	16.38	19.5	0	
20	HQAM	1	99	16.29	16.36	16.23			
20	HQAM	50	24	16.22	16.38	16.22	19.5	0	
20	HQAM	50	50	16.25	16.31	16.23			
20	HQAM	100	0	16.26	16.35	16.32			
20	ZSSBAM	1	0	16.26	16.42	16.24			
20	ZSSBAM	1	49	16.22	16.33	16.21	19.5	0	
20	ZSSBAM	1	99	16.31	16.38	16.38			
20	ZSSBAM	50	0	16.26	16.41	16.28			
20	ZSSBAM	50	24	16.27	16.30	16.21	19.5	0	
20	ZSSBAM	50	50	16.20	16.38	16.23			
20	ZSSBAM	100	0	16.32	16.30	16.20			
Channel				37850	38050	38175			
Frequency (MHz)				2577.5	2592.5	2612.5			
15	QPSK	1	0	16.36	16.43	16.23	19.5	0	
15	QPSK	1	37	16.17	16.28	16.13			
15	QPSK	1	74	16.22	16.30	16.26			
15	QPSK	36	0	16.20	16.30	16.24			
15	QPSK	36	20	16.29	16.25	16.11	19.5	0	
15	QPSK	36	37	16.14	16.19	16.19			
15	QPSK	75	0	16.12	16.29	16.24			
15	HQAM	1	0	16.19	16.36	16.08	19.5	0	
15	HQAM	1	37	16.13	16.26	16.05			
15	HQAM	1	74	16.06	16.24	16.09			
15	HQAM	36	0	16.24	16.30	16.25			
15	HQAM	36	20	16.13	16.28	16.26	19.5	0	
15	HQAM	36	37	16.14	16.19	16.28			
15	HQAM	75	0	16.15	16.35	16.24			
15	HQAM	1	0	16.15	16.28	16.23	19.5	0	
15	HQAM	1	37	16.09	16.22	16.09			
15	HQAM	1	74	16.19	16.30	16.19			
15	HQAM	36	0	16.26	16.26	16.19			
15	HQAM	36	20	16.19	16.31	16.18	19.5	0	
15	HQAM	36	37	16.28	16.28	16.20			
15	HQAM	75	0	16.16	16.23	16.17			
15	ZSSBAM	1	0	16.19	16.28	16.22	19.5	0	
15	ZSSBAM	1	37	16.09	16.22	16.09			
15	ZSSBAM	1	74	16.19	16.30	16.26			
15	ZSSBAM	36	0	16.14	16.30	16.23			
15	ZSSBAM	36	20	16.16	16.18	16.18	19.5	0	
15	ZSSBAM	36	37	16.24	16.24	16.19			
15	ZSSBAM	75	0	16.26	16.26	16.20			
Channel				37850	38050	38175			
Frequency (MHz)				2575	2595	2615			
10	QPSK	1	0	16.31	16.41	16.20	19.5	0	
10	QPSK	1	25	16.23	16.31	16.18			
10	QPSK	1	49	16.16	16.36	16.22			
10	QPSK	12	0	16.16	16.36	16.25			
10	QPSK	25	12	16.27	16.31	16.13	19.5	0	
10	QPSK	25	25	16.08	16.24	16.09			
10	QPSK	50	0	16.22	16.27	16.16			
10	HQAM	1	0	16.25	16.27	16.07	19.5	0	



Band 41 Ant1												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)	
Channel												
Frequency (MHz)				39790	40198	40600	41006	41406	41806			
20	QPSK	1	0	16.81	16.97	17.03	17.03	17.03	17.03	17.0	0	
20	QPSK	1	49	17.02	16.96	17.05	16.87	16.88	16.88	17.0	0	
20	QPSK	1	99	16.98	17.05	17.09	16.98	16.99	16.99	17.0	0	
20	QPSK	50	0	17.00	16.90	17.02	16.93	16.93	16.93	17.0	0	
20	QPSK	50	24	16.94	16.91	16.97	16.83	16.80	16.80	17.0	0	
20	QPSK	100	0	16.93	16.86	16.92	16.80	16.80	16.80	17.0	0	
20	QPSK	100	0	16.85	16.82	16.92	16.89	16.92	16.92	17.0	0	
20	HQAM	1	0	16.83	16.84	16.95	16.94	16.92	16.92	17.0	0	
20	HQAM	1	49	17.02	17.01	17.09	16.94	16.94	16.94	17.0	0	
20	HQAM	1	99	17.05	16.99	17.09	17.01	16.94	16.94	17.0	0	
20	HQAM	50	0	16.90	16.77	16.99	16.77	16.79	16.79	17.0	0	
20	HQAM	50	24	16.79	16.84	16.97	16.85	16.82	16.82	17.0	0	
20	HQAM	50	50	16.89	16.96	17.05	16.98	16.90	16.90	17.0	0	
20	HQAM	100	0	16.91	17.00	17.05	16.87	16.84	16.84	17.0	0	
20	HQAM	100	0	16.73	16.93	16.95	16.77	16.75	16.75	17.0	0	
20	HQAM	1	49	16.72	16.78	16.87	16.78	16.83	16.83	17.0	0	
20	HQAM	1	99	16.87	16.97	17.06	16.93	16.88	16.88	17.0	0	
20	HQAM	50	0	16.87	16.83	16.97	16.85	16.85	16.85	17.0	0	
20	HQAM	50	24	16.90	16.90	17.03	16.89	16.93	16.93	17.0	0	
20	HQAM	50	50	16.96	16.91	17.01	16.98	16.85	16.85	17.0	0	
20	HQAM	100	0	16.88	16.93	16.96	16.81	16.89	16.89	17.0	0	
20	ZSFGM	1	0	16.46	16.54	16.67	16.58	16.51	16.51	17.0	0	
20	ZSFGM	1	49	16.52	16.59	16.71	16.59	16.56	16.56	17.0	0	
20	ZSFGM	1	99	16.48	16.48	16.52	16.48	16.47	16.47	17.0	0	
20	ZSFGM	50	0	16.52	16.52	16.59	16.50	16.44	16.44	17.0	0	
20	ZSFGM	50	24	16.36	16.45	16.54	16.48	16.40	16.40	17.0	0	
20	ZSFGM	50	50	16.40	16.57	16.66	16.61	16.54	16.54	17.0	0	
20	ZSFGM	100	0	16.48	16.67	16.76	16.71	16.64	16.64	17.0	0	
Channel												
Frequency (MHz)				39725	40173	40620	41068	41515	41962			
15	QPSK	1	0	16.51	16.61	17.02	16.78	16.81	16.81	17.0	0	
15	QPSK	1	37	16.68	16.92	16.91	16.84	16.78	16.78	18	0	
15	QPSK	1	74	16.93	16.93	16.93	16.93	16.90	16.90	18	0	
15	QPSK	36	0	16.94	16.94	16.94	16.78	16.78	16.78	17.0	0	
15	QPSK	36	20	16.84	16.84	16.92	16.73	16.68	16.68	17.0	0	
15	QPSK	36	20	16.84	16.84	16.92	16.73	16.68	16.68	17.0	0	
15	QPSK	75	0	16.81	16.73	16.85	16.76	16.86	16.86	17.0	0	
15	HQAM	1	0	16.75	16.71	16.81	16.73	16.73	16.73	17.0	0	
15	HQAM	1	37	16.97	16.98	16.99	16.86	16.82	16.82	17.0	0	
15	HQAM	1	74	16.97	16.98	16.95	16.89	16.89	16.89	17.0	0	
15	HQAM	36	0	16.78	16.68	16.90	16.74	16.73	16.73	17.0	0	
15	HQAM	36	20	16.85	16.78	16.83	16.78	16.72	16.72	17.0	0	
15	HQAM	36	39	16.79	16.86	16.95	16.74	16.78	16.78	17.0	0	
15	HQAM	75	0	16.83	16.90	17.03	16.83	16.96	16.96	17.0	0	
15	HQAM	1	0	16.64	16.61	16.94	16.73	16.73	16.73	17.0	0	
15	HQAM	1	37	16.69	16.67	16.83	16.73	16.68	16.68	17.0	0	
15	HQAM	1	74	16.74	16.76	16.82	16.69	16.76	16.76	17.0	0	
15	HQAM	36	0	16.78	16.77	16.83	16.73	16.73	16.73	17.0	0	
15	HQAM	36	20	16.78	16.84	17.00	16.78	16.79	16.79	17.0	0	
15	HQAM	36	39	16.89	16.84	16.97	16.81	16.81	16.81	17.0	0	
15	HQAM	75	0	16.74	16.83	16.93	16.89	16.81	16.81	17.0	0	
15	ZSFGM	1	0	16.40	16.42	16.59	16.49	16.44	16.44	17.0	0	
15	ZSFGM	1	49	16.41	16.44	16.51	16.44	16.44	16.44	17.0	0	
15	ZSFGM	1	99	16.34	16.34	16.34	16.34	16.32	16.32	17.0	0	
15	ZSFGM	36	0	16.20	16.36	16.53	16.40	16.22	16.22	17.0	0	
15	ZSFGM	36	20	16.32	16.31	16.44	16.41	16.34	16.34	17.0	0	
15	ZSFGM	36	39	16.34	16.49	16.55	16.52	16.45	16.45	17.0	0	
15	ZSFGM	75	0	16.36	16.58	16.58	16.53	16.50	16.50	17.0	0	
Channel												
Frequency (MHz)				39700	40150	40600	41050	41500	41950			
10	QPSK	1	0	16.41	16.47	16.63	16.53	16.53	16.53	17.0	0	
10	QPSK	1	25	16.88	16.82	16.99	16.79	16.80	16.80	17.0	0	
10	QPSK	1	49	16.84	16.97	16.85	16.91	16.79	16.79	17.0	0	
10	QPSK	1	74	16.90	16.90	16.90	16.80	16.80	16.80	17.0	0	
10	QPSK	25	12	16.84	16.77	16.88	16.88	16.71	16.71	17.0	0	
10	QPSK	25	25	16.72	16.81	16.93	16.89	16.73	16.73	17.0	0	
10	QPSK	25	49	16.81	16.71	16.85	16.85	16.79	16.79	17.0	0	
10	HQAM	1	0	16.80	16.78	16.83	16.73	16.67	16.67	17.0	0	
10	HQAM	1	25	16.88	16.92	17.03	16.84	16.86	16.86	17.0	0	
10	HQAM	1	49	16.99	16.99	17.01	16.94	16.90	16.90	17.0	0	
10	HQAM	25	0	16.81	16.70	16.88	16.66	16.74	16.74	17.0	0	
10	HQAM	25	12	16.76	16.72	16.89	16.72	16.69	16.69	17.0	0	
10	HQAM	25	25	16.75	16.65	17.01	16.81	16.81	16.81	17.0	0	
10	HQAM	50	0	16.80	16.85	16.94	16.84	16.87	16.87	17.0	0	
10	HQAM	50	12	16.74	16.86	16.98	16.76	16.88	16.88	17.0	0	
10	HQAM	1	25	16.82	16.89	16.95	16.72	16.70	16.70	17.0	0	
10	HQAM	1	49	16.77	16.80	16.85	16.85	16.82	16.82	17.0	0	
10	HQAM	25	0	16.78	16.69	16.92	16.81	16.82	16.82	17.0	0	
10	HQAM	25	12	16.84	16.82	16.90	16.85	16.88	16.88	17.0	0	
10	HQAM	25	25	16.85	16.79	16.89	16.81	16.78	16.78	17.0	0	
10	HQAM	50	0	16.82	16.88	16.97	16.77	16.81	16.81	17.0	0	
10	ZSFGM	1	0	16.39	16.40	16.56	16.52	16.43	16.43	17.0	0	
10	ZSFGM	1	25	16.47	16.50	16.64	16.52	16.51	16.51	17.0	0	
10	ZSFGM	1	49	16.39	16.34	16.48	16.36	16.30	16.30	17.0	0	
10	ZSFGM	25	0	16.25	16.44	16.52	16.38	16.21	16.21	17.0	0	
10	ZSFGM	25	12	16.33	16.39	16.42	16.37	16.30	16.30	17.0	0	
10	ZSFGM	25	25	16.35	16.42	16.57	16.52	16.45	16.45	17.0	0	
10	ZSFGM	50	0	16.33	16.58	16.63	16.61	16.42	16.42	17.0	0	
Channel												
Frequency (MHz)				2498.5	2545.5	2593	2640.5	2687.5	2734.5			
5	QPSK	1	0	16.73	16.90	17.07	16.99	16.91	16.91	17.0	0	
5	QPSK	1	15	16.94	16.93	16.94	16.78	16.78	16.78	17.0	0	
5	QPSK	1	24	16.90	17.01	17.00	16.88	16.88	16.88	17.0	0	
5	QPSK	12	0	16.86	16.86	16.96	16.73	16.81	16.81	17.0	0	
5	QPSK	12	7	16.81	16.79	16.84	16.73	16.77	16.77	17.0	0	
5	QPSK	12	13	16.72	16.83	16.88	16.84	16.82	16.82	17.0	0	
5	QPSK	25	0	16.80	16.76	16.87	16.87	16.78	16.78	17.0	0	
5	HQAM	1	0	16.79	16.69	16.89	16.74	16.72	16.72	17.0	0	
5	HQAM	1	12	16.88	16.91	17.04	16.90	16.89	16.89	17.0	0	
5	HQAM	1	24	17.01	16.93	16.94	16.87	16.81	16.81	17.0	0	
5	HQAM	12	0	16.85	16.87	16.91	16.83	16.76	16.76	17.0	0	
5	HQAM	12	7	16.69	16.77	16.84	16.80	16.70	16.70	17.0	0	
5	HQAM	12										



Band 2 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
1860 1860 1960										
20	QPSK	1	0	22.58	22.70	22.65				
20	QPSK	1	49	22.48	22.60	22.55	24	0		
20	QPSK	1	99	22.50	22.64	22.57				
20	QPSK	50	0	21.61	21.70	21.62				
20	QPSK	50	24	21.56	21.71	21.64				
20	QPSK	50	50	21.47	21.62	21.56			23	1
20	QPSK	100	0	21.52	21.67	21.59				
20	16QAM	50	0	21.70	21.79	21.76				
20	16QAM	1	49	21.62	21.76	21.71	23	1		
20	16QAM	1	99	21.77	21.82	21.78				
20	16QAM	50	0	20.51	20.59	20.59				
20	16QAM	50	24	20.58	20.67	20.55			22	2
20	16QAM	50	50	20.57	20.72	20.68				
20	16QAM	100	0	20.56	20.69	20.62				
20	16QAM	1	0	20.59	20.74	20.67				
20	16QAM	1	49	20.77	20.90	20.89	22	2		
20	16QAM	50	0	20.61	20.83	20.83				
20	16QAM	50	24	20.58	20.85	20.85				
20	16QAM	50	50	20.57	20.93	20.92			21	3
20	16QAM	100	0	20.63	20.93	20.92				
20	16QAM	1	49	20.78	21.05	21.05				
20	16QAM	1	99	21.01	21.17	21.17				
20	16QAM	50	0	19.53	19.85	19.82				
20	16QAM	50	24	19.59	19.95	19.92				
20	16QAM	50	50	19.64	20.03	20.02				
20	16QAM	100	0	19.63	19.93	19.92			21	3
20	16QAM	1	49	19.74	20.07	20.07				
20	16QAM	1	99	20.01	20.17	20.17				
20	16QAM	50	0	17.85	17.95	17.87				
20	16QAM	50	24	17.86	18.01	17.95				
20	16QAM	50	50	17.84	18.01	17.95			19	5
20	16QAM	100	0	17.85	18.01	17.95				
20	16QAM	100	0	17.85	18.01	17.95				
Channel										
1817.5 1880 1922.5										
15	QPSK	1	0	22.44	22.46	22.41				
15	QPSK	1	37	22.41	22.47	22.47	24	0		
15	QPSK	1	74	22.47	22.57	22.43				
15	QPSK	36	0	21.53	21.67	21.53				
15	QPSK	36	24	21.57	21.66	21.62				
15	QPSK	36	39	21.35	21.58	21.43			23	1
15	QPSK	75	0	21.49	21.68	21.68				
15	16QAM	36	0	21.61	21.68	21.60				
15	16QAM	1	37	21.59	21.62	21.51	23	1		
15	16QAM	1	74	21.62	21.77	21.68				
15	16QAM	36	0	20.38	20.37	20.38				
15	16QAM	36	24	20.35	20.52	20.59			22	2
15	16QAM	36	39	20.35	20.58	20.53				
15	16QAM	75	0	20.52	20.58	20.53				
15	16QAM	1	0	20.46	20.60	20.60				
15	16QAM	1	37	20.61	20.74	20.74	22	2		
15	16QAM	1	74	20.50	20.65	20.59				
15	16QAM	36	0	19.48	19.61	19.51				
15	16QAM	36	24	19.46	19.68	19.63				
15	16QAM	36	39	19.49	19.85	19.51				
15	16QAM	75	0	19.39	19.59	19.47			21	3
15	16QAM	1	0	17.86	17.95	17.87				
15	16QAM	1	37	17.69	17.70	17.72				
15	16QAM	1	74	17.60	17.68	17.58				
15	16QAM	36	0	17.51	17.68	17.68				
15	16QAM	36	24	17.54	17.61	17.46				
15	16QAM	36	39	17.52	17.66	17.55				
15	16QAM	75	0	17.48	17.62	17.63			19	5
15	16QAM	75	0	17.48	17.62	17.63				
Channel										
1865 1860 1925										
10	QPSK	1	0	22.37	22.37	22.37				
10	QPSK	1	25	22.37	22.52	22.45	24	0		
10	QPSK	1	49	22.41	22.53	22.53				
10	QPSK	36	0	21.56	21.66	21.62				
10	QPSK	36	24	21.56	21.67	21.64				
10	QPSK	36	39	21.36	21.67	21.54				
10	QPSK	75	0	21.49	21.67	21.67				
10	16QAM	36	0	21.61	21.68	21.60				
10	16QAM	1	24	21.53	21.64	21.51	23	1		
10	16QAM	1	49	21.66	21.84	21.84				
10	16QAM	36	0	20.37	20.37	20.39				
10	16QAM	36	24	20.34	20.52	20.59				
10	16QAM	36	39	20.30	20.63	20.67			22	2
10	16QAM	50	0	20.55	20.57	20.59				
10	16QAM	1	0	20.51	20.62	20.53				
10	16QAM	1	37	20.72	20.83	20.88	22	2		
10	16QAM	1	49	20.48	20.64	20.57				
10	16QAM	25	0	19.46	19.54	19.50				
10	16QAM	25	12	19.45	19.56	19.48				
10	16QAM	25	24	19.53	19.70	19.56				
10	16QAM	50	0	19.49	19.54	19.52				
10	16QAM	50	24	19.46	19.61	19.61				
10	16QAM	50	39	19.49	19.59	19.51				
10	16QAM	75	0	17.68	17.67	17.66				
10	16QAM	1	24	17.69	17.70	17.72				
10	16QAM	1	49	17.60	17.70	17.54				
10	16QAM	36	0	17.46	17.51	17.51				
10	16QAM	36	24	17.45	17.50	17.37				
10	16QAM	36	39	17.52	17.66	17.55				
10	16QAM	75	0	17.43	17.48	17.48				
10	16QAM	75	0	17.43	17.48	17.48				
Channel										
1822.5 1860 1917.5										
5	QPSK	1	0	22.40	22.43	22.43				
5	QPSK	1	12	22.42	22.52	22.49	24	0		
5	QPSK	1	24	22.42	22.52	22.54				
5	QPSK	12	0	21.67	21.80	21.67				
5	QPSK	12	7	21.56	21.67	21.62				
5	QPSK	12	13	21.39	21.60	21.44				
5	QPSK	25	0	21.43	21.58	21.46				
5	16QAM	1	0	21.62	21.65	21.54	23	1		
5	16QAM	1	12	21.58	21.62	21.66				
5	16QAM	1	24	21.65	21.73	21.68				
5	16QAM	12	0	20.41	20.52	20.38				
5	16QAM	12	7	20.47	20.60	20.46				
5	16QAM	12	13	20.44	20.58	20.56				
5	16QAM	25	0	20.59	20.56	20.58				
5	16QAM	1	0	20.46	20.66	20.52				
5	16QAM	1	12	20.64	20.71	20.66	22	2		
5	16QAM	1	24	20.51	20.58	20.54				
5	16QAM	12	0	19.39	19.83	19.55				
5	16QAM	12	7	19.45	19.56	19.63				
5	16QAM	12	13	19.50	19.63	19.59				
5	16QAM	25	0	19.49	19.87	19.59				
5	16QAM	1	0	17.47	17.59	17.47				
5	16QAM	1	12	17.68	17.77	17.71				
5	16QAM	1	24	17.56	17.66	17.63				
5	16QAM	12	0	17.49	17.58	17.63				
5	16QAM	12	7	17.50	17.68	17.54				
5	16QAM	12	13	17.52	17.69	17.67				
5	16QAM	25	0	17.49	17.50	17.45				
5	16QAM	25	0	17.49	17.50	17.45				
Channel										
1861.5 1860 1918.5										
3	QPSK	1	0	22.54	22.57	22.55				
3	QPSK	1	8	22.42	22.57	22.44	24	0		
3	QPSK	1	14	22.47	22.51	22.46				
3	QPSK	8	0	21.51	21.66	21.51				
3	QPSK	8	4	21.52	21.61	21.68				
3	QPSK	8	7	21.40						



Band 25 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up time (min)	MPE (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.56	22.72	22.83	24	0	
20	QPSK	1	49	22.54	22.68	22.83			
20	QPSK	1	99	22.52	22.60	22.47			
20	QPSK	50	0	21.68	21.75	21.70	23	1	
20	QPSK	50	24	21.87	21.84	21.83			
20	QPSK	50	50	21.83	21.71	21.83			
20	QPSK	100	0	21.50	21.63	21.56			
20	16QAM	100	0	21.62	21.70	21.70			
20	16QAM	1	49	21.56	21.70	21.85	23	1	
20	16QAM	1	99	21.55	21.64	21.57			
20	16QAM	50	0	20.92	20.99	20.95			
20	16QAM	50	24	20.80	20.83	20.50			
20	16QAM	50	50	20.87	20.71	20.58			
20	16QAM	100	0	20.99	20.90	20.94			
20	64QAM	1	0	20.85	20.70	20.63			
20	64QAM	1	49	20.63	20.77	20.73	22	2	
20	64QAM	1	99	20.57	20.65	20.54			
20	64QAM	50	0	19.53	19.63	19.51			
20	64QAM	50	24	19.59	19.50	19.56			
20	64QAM	50	50	19.51	19.54	19.65			
20	64QAM	100	0	19.57	19.65	19.61	21	3	
20	256QAM	1	49	17.58	17.77	17.66			
20	256QAM	1	99	17.65	17.74	17.67	19	5	
20	256QAM	50	24	17.56	17.66	17.58			
20	256QAM	50	50	17.67	17.73	17.64	19	5	
20	256QAM	100	0	17.65	17.67	17.67			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.43	22.62	22.58	24	0	
15	QPSK	1	37	22.45	22.60	22.48			
15	QPSK	1	74	22.47	22.50	22.34			
15	QPSK	36	0	21.83	21.87	21.86	23	1	
15	QPSK	36	20	21.42	21.46	21.41			
15	QPSK	36	39	21.51	21.59	21.60			
15	16QAM	1	0	21.43	21.50	21.45			
15	16QAM	1	24	21.48	21.60	21.61			
15	16QAM	1	37	21.46	21.65	21.59	23	1	
15	16QAM	1	74	21.54	21.58	21.56			
15	16QAM	36	0	20.94	20.92	20.80			
15	16QAM	36	20	20.48	20.57	20.39			
15	16QAM	36	39	20.53	20.56	20.54			
15	16QAM	75	0	20.46	20.55	20.57			
15	64QAM	1	0	20.57	20.57	20.58	22	2	
15	64QAM	1	37	20.60	20.65	20.64			
15	64QAM	1	74	20.47	20.55	20.40			
15	64QAM	36	0	19.46	19.53	19.43			
15	64QAM	36	20	19.50	19.48	19.45			
15	64QAM	36	39	19.55	19.52	19.52	21	3	
15	64QAM	75	0	19.54	19.58	19.57			
15	256QAM	1	37	17.53	17.58	17.54			
15	256QAM	1	74	17.49	17.54	17.41	19	5	
15	256QAM	1	74	17.83	17.66	17.63			
15	256QAM	36	0	17.50	17.52	17.46			
15	256QAM	36	20	17.47	17.53	17.48	19	5	
15	256QAM	36	39	17.57	17.59	17.59			
15	256QAM	75	0	17.41	17.46	17.45			
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.50	22.64	22.60	24	0	
10	QPSK	1	25	22.42	22.57	22.50			
10	QPSK	1	49	22.38	22.51	22.34			
10	QPSK	25	0	21.86	21.88	21.88	23	1	
10	QPSK	25	12	21.42	21.58	21.44			
10	QPSK	25	25	21.59	21.66	21.60			
10	16QAM	1	0	21.58	21.60	21.62			
10	16QAM	1	25	21.47	21.65	21.51	23	1	
10	16QAM	1	49	21.50	21.65	21.65			
10	16QAM	25	0	20.48	20.57	20.39			
10	16QAM	25	12	20.54	20.58	20.38			
10	16QAM	25	25	20.56	20.56	20.44	22	2	
10	16QAM	50	0	20.50	20.54	20.58			
10	64QAM	1	0	20.58	20.63	20.52	22	2	
10	64QAM	1	25	20.54	20.58	20.68			
10	64QAM	1	49	20.52	20.40	20.46			
10	64QAM	25	0	19.45	19.58	19.48			
10	64QAM	25	12	19.55	19.52	19.47			
10	64QAM	25	25	19.54	19.63	19.55	21	3	
10	64QAM	50	0	19.51	19.56	19.46			
10	256QAM	1	25	17.50	17.52	17.48			
10	256QAM	1	25	17.48	17.48	17.41	19	5	
10	256QAM	1	49	17.56	17.62	17.52			
10	256QAM	25	12	17.49	17.59	17.50			
10	256QAM	25	25	17.64	17.60	17.59	19	5	
10	256QAM	50	0	17.58	17.62	17.51			
Channel									
Frequency (MHz)									
5	QPSK	1	0	22.47	22.55	22.44	24	0	
5	QPSK	1	12	22.46	22.52	22.44			
5	QPSK	1	24	22.37	22.55	22.38			
5	QPSK	12	0	21.54	21.71	21.63	23	1	
5	QPSK	12	7	21.44	21.60	21.37			
5	QPSK	12	13	21.27	21.62	21.59			
5	QPSK	25	0	21.46	21.53	21.47			
5	16QAM	1	0	21.50	21.68	21.59	23	1	
5	16QAM	1	12	21.45	21.59	21.59			
5	16QAM	1	24	21.49	21.48	21.48			
5	16QAM	12	0	20.57	20.59	20.53			
5	16QAM	12	7	20.53	20.53	20.39	22	2	
5	16QAM	12	13	20.56	20.50	20.45			
5	16QAM	25	0	20.48	20.56	20.58			
5	64QAM	1	0	20.54	20.57	20.50	22	2	
5	64QAM	1	12	20.56	20.70	20.68			
5	64QAM	1	24	20.46	20.47	20.47			
5	64QAM	12	0	19.39	19.53	19.41			
5	64QAM	12	7	19.54	19.58	19.48			
5	64QAM	12	13	19.57	19.68	19.62	21	3	
5	64QAM	25	0	19.52	19.55	19.56			
5	256QAM	1	1	17.53	17.67	17.58			
5	256QAM	1	12	17.54	17.50	17.39	19	5	
5	256QAM	1	24	17.60	17.70	17.62			
5	256QAM	12	0	17.46	17.53	17.43			
5	256QAM	12	7	17.41	17.62	17.48	19	5	
5	256QAM	12	13	17.58	17.65	17.59			
5	256QAM	25	0	17.63	17.58	17.53			
Channel									
Frequency (MHz)									
3	QPSK	1	0	22.51	22.60	22.53	24	0	
3	QPSK	1	8	22.42	22.59	22.49			
3	QPSK	1	14	22.39	22.47	22.43			
3	QPSK	8	0	21.68	21.65	21.67	23	1	
3	QPSK	8	4	21.52	21.61	21.36			
3	QPSK	8	7	21.58	21.65	21.58			
3	QPSK	15	0	21.46	21.65	21.68			
3	16QAM	1	0	21.49	21.69	21.62	23	1	
3	16QAM	1	8	21.45	21.62	21.67			
3	16QAM	1	15	21.42	21.65	21.63			
3	16QAM	8	0	20.51	20.63	20.55			
3	16QAM	8	4	20.50	20.56	20.42	22	2	
3	16QAM	15	0	20.53	20.56	20.49			
3	64QAM	1	0	20.55	20.64	20.57			
3	64QAM	1	8	20.51	20.64	20.51	22	2	
3	64QAM	1	15	20.50	20.70	20.59			
3	64QAM	8	0	19.47	19.67	19.42			
3	64QAM	8	7	19.47	19.70	19.56	21	3	
3	64QAM	15	0	19.42	19.67	19.57			
3	64QAM	8	4	19.47	19.61	19.51			
3	256QAM	1	0	17.52	17.68	17.48			
3	256QAM	1	8	17.53	17.53	17.49	19	5	
3	256QAM	1	15	17.60	17.65	17.60			
3	256QAM	8	0	17.52	17.51	17.40			
3	256QAM	8	4	17.51	17.59	17.53	19	5	
3	256QAM	8	7	17.61	17.66	17.61			
3	256QAM	15	0	17.59	17.62	17.47			



Band 41 Ant0												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Power High High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel												
Frequency (MHz)												
20	QPSK	1	0	22.11	22.24	22.33	22.27	22.21	22.27	22.21	23	0
20	QPSK	1	49	22.03	21.97	22.01	21.96	22.00	22.00	22.00	23	0
20	QPSK	1	99	22.02	22.00	22.10	22.06	22.02	22.02	22.02	23	0
20	QPSK	50	0	21.08	21.11	21.22	21.10	21.22	21.10	21.22	22	1
20	QPSK	50	24	21.01	20.97	21.01	20.96	21.02	20.96	21.02	22	1
20	QPSK	100	0	20.90	21.00	21.06	20.94	21.02	20.94	21.02	22	1
20	QPSK	100	0	20.92	20.99	21.02	21.00	21.04	20.99	21.04	22	1
20	HSIGAM	1	0	21.00	20.99	21.09	21.06	21.04	21.06	21.04	21	2
20	HSIGAM	1	49	20.92	20.90	20.94	20.89	20.93	20.89	20.93	21	2
20	HSIGAM	1	99	20.82	20.79	20.85	20.77	20.89	20.79	20.89	20	3
20	HSIGAM	1	149	20.86	20.87	20.98	20.96	20.91	20.96	20.91	20	3
20	HSIGAM	50	24	20.92	20.90	21.02	20.90	21.04	20.90	21.04	20	3
20	HSIGAM	50	50	20.83	20.89	20.95	20.89	20.99	20.89	20.99	20	3
20	HSIGAM	100	0	20.92	20.94	21.11	20.99	21.09	20.99	21.09	20	3
20	HSIGAM	100	0	20.10	20.13	20.26	20.15	20.14	20.14	20.14	20	3
20	HSIGAM	1	49	20.04	19.99	20.12	20.01	19.95	19.95	19.95	21	2
20	HSIGAM	1	99	20.11	20.06	20.20	20.15	20.15	20.15	20.15	20	3
20	HSIGAM	50	24	18.93	18.86	18.91	18.76	18.81	18.81	18.81	20	3
20	HSIGAM	50	50	18.89	18.90	18.92	18.84	18.84	18.84	18.84	20	3
20	HSIGAM	100	0	18.93	18.91	18.10	18.00	18.02	18.02	18.02	20	3
20	ZSIGAM	1	0	17.04	17.00	17.10	17.05	17.00	17.00	17.00	18	5
20	ZSIGAM	1	49	16.91	16.88	16.96	16.91	16.91	16.91	16.91	18	5
20	ZSIGAM	1	99	17.06	16.99	17.11	16.99	16.98	16.98	16.98	18	5
20	ZSIGAM	50	24	16.98	16.97	17.00	16.96	16.96	16.96	16.96	18	5
20	ZSIGAM	50	24	16.80	16.75	16.84	16.81	16.79	16.79	16.79	18	5
20	ZSIGAM	50	50	16.70	16.77	16.84	16.73	16.75	16.75	16.75	18	5
20	ZSIGAM	100	0	16.83	16.80	16.84	16.80	16.83	16.80	16.83	18	5
Channel												
Frequency (MHz)												
15	QPSK	1	0	22.11	22.24	22.33	22.27	22.21	22.27	22.21	23	0
15	QPSK	1	37	21.97	21.91	21.95	21.89	21.94	21.89	21.94	23	0
15	QPSK	1	74	21.96	21.94	22.04	22.00	22.09	22.00	22.09	23	0
15	QPSK	36	0	21.00	21.09	21.19	21.04	21.16	21.04	21.16	22	1
15	QPSK	36	20	20.95	20.91	20.95	20.89	20.96	20.89	20.96	22	1
15	QPSK	36	36	20.86	20.97	20.99	20.94	20.98	20.94	20.98	22	1
15	QPSK	75	0	20.86	20.90	20.99	20.94	20.98	20.94	20.98	22	1
15	HSIGAM	1	0	20.94	20.93	21.03	21.00	20.98	21.00	20.98	22	1
15	HSIGAM	1	49	20.85	20.86	20.96	20.94	20.98	20.94	20.98	22	1
15	HSIGAM	1	74	20.78	20.73	20.83	20.71	20.74	20.74	20.74	21	2
15	HSIGAM	36	0	19.89	19.81	20.00	19.80	19.85	19.85	19.85	21	2
15	HSIGAM	36	20	19.86	19.84	19.95	19.84	19.87	19.87	19.87	21	2
15	HSIGAM	36	36	19.77	19.82	19.89	19.75	19.83	19.83	19.83	21	2
15	HSIGAM	75	0	19.97	19.98	20.05	19.94	20.00	19.94	20.00	21	2
15	HSIGAM	1	37	20.04	20.13	20.20	20.10	20.07	20.10	20.07	21	2
15	HSIGAM	1	37	19.98	19.93	20.05	19.95	19.99	19.99	19.99	21	2
15	HSIGAM	1	74	20.05	19.99	20.15	20.06	20.04	20.04	20.04	20	3
15	HSIGAM	36	0	18.89	18.87	18.91	18.80	18.86	18.86	18.86	20	3
15	HSIGAM	36	20	18.78	18.80	18.85	18.79	18.75	18.75	18.75	20	3
15	HSIGAM	36	36	18.80	18.82	18.86	18.80	18.83	18.83	18.83	20	3
15	HSIGAM	75	0	18.97	18.95	19.03	18.94	18.99	18.99	18.99	20	3
15	ZSIGAM	1	0	18.98	18.94	17.04	16.99	18.94	16.99	18.94	18	5
15	ZSIGAM	1	49	18.92	18.88	18.95	18.86	18.92	18.86	18.92	18	5
15	ZSIGAM	1	99	18.99	18.94	18.94	18.84	18.90	18.84	18.90	18	5
15	ZSIGAM	36	20	18.64	18.71	18.78	18.67	18.68	18.68	18.68	18	5
15	ZSIGAM	75	0	18.97	18.96	18.98	18.88	18.93	18.88	18.93	18	5
Channel												
Frequency (MHz)												
10	QPSK	1	0	22.11	22.24	22.33	22.27	22.21	22.27	22.21	23	0
10	QPSK	1	25	21.97	21.91	21.95	21.89	21.94	21.89	21.94	23	0
10	QPSK	1	49	21.96	21.94	22.04	22.00	22.09	22.00	22.09	23	0
10	QPSK	12	0	21.01	21.09	21.16	21.04	21.16	21.04	21.16	22	1
10	QPSK	12	13	20.95	20.90	20.95	20.89	20.96	20.89	20.96	22	1
10	QPSK	25	25	20.83	20.97	21.02	20.88	20.96	20.88	20.96	22	1
10	QPSK	25	0	20.86	20.90	20.98	20.94	20.98	20.94	20.98	22	1
10	HSIGAM	1	0	20.93	20.93	21.04	21.00	20.98	21.00	20.98	22	1
10	HSIGAM	1	25	20.76	20.80	20.88	20.84	20.75	20.75	20.75	21	2
10	HSIGAM	1	49	20.79	20.73	20.83	20.71	20.74	20.74	20.74	21	2
10	HSIGAM	12	0	20.85	20.83	20.93	20.86	20.94	20.86	20.94	21	2
10	HSIGAM	12	7	19.95	19.94	20.06	19.94	19.99	19.99	19.99	21	2
10	HSIGAM	12	13	19.77	19.83	19.90	19.74	19.83	19.83	19.83	21	2
10	HSIGAM	25	0	19.97	19.98	20.05	19.93	20.00	19.93	20.00	21	2
10	HSIGAM	1	0	20.04	20.13	20.21	20.10	20.08	20.10	20.08	21	2
10	HSIGAM	1	12	19.99	19.99	20.06	19.96	19.99	19.99	19.99	21	2
10	HSIGAM	1	24	20.06	19.99	20.14	20.10	20.04	20.10	20.04	20	3
10	HSIGAM	12	0	18.99	18.91	18.92	18.89	18.87	18.87	18.87	20	3
10	HSIGAM	12	7	18.97	18.95	18.95	18.70	18.75	18.75	18.75	20	3
10	HSIGAM	12	13	18.82	18.83	18.85	18.78	18.78	18.78	18.78	20	3
10	HSIGAM	25	0	18.97	18.96	19.04	18.94	18.98	18.98	18.98	20	3
10	ZSIGAM	1	0	16.98	16.94	17.04	16.99	16.94	16.94	16.94	18	5
10	ZSIGAM	1	12	16.86	16.82	16.88	16.85	16.84	16.84	16.84	18	5
10	ZSIGAM	1	24	16.90	16.93	17.05	16.93	16.93	16.93	16.93	18	5
10	ZSIGAM	12	0	16.92	16.89	16.94	16.85	16.90	16.85	16.90	18	5
10	ZSIGAM	12	7	16.74	16.73	16.88	16.75	16.72	16.72	16.72	18	5
10	ZSIGAM	12	13	16.84	16.73	16.78	16.67	16.70	16.70	16.70	18	5
10	ZSIGAM	25	0	16.87	16.86	16.98	16.96	16.96	16.96	16.96	18	5

Band 41 HPUE Ant0												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Power High High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel												
Frequency (MHz)												
20	QPSK	1	0	24.16	24.21	24.33	24.25	24.28	24.28	24.28	24.5	0
20	QPSK	1	49	24.11	24.21	24.21	24.25	24.10	24.10	24.10	24.5	0
20	QPSK	1	99	24.08	24.09	24.20	24.13	24.12	24.12	24.12	24.5	0
20	QPSK	50	0	24.21	24.25	24.34	24.33	24.32	24.32	24.32	24	0
20	QPSK	50	24	24.16	24.26	24.30	24.15	24.17	24.17	24.17	24	0
20	QPSK	100	0	24.15	24.12	24.24	24.16	24.20	24.20	24.20	24	0
20	HSIGAM	1	0	24.16	24.22	24.24	24.23	24.21	24.21	24.21	24	0
20	HSIGAM	1	49	24.00	24.10	24.13	24.05	24.10	24.10	24.10	24	0
20	HSIGAM	1	99	24.00	23.98	24.03	23.99	24.01				



Band 38 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel				3750	3800	3850			
Frequency (MHz)				256	256	256			
20	QPSK	1	0	22.72	22.80	22.88			
20	QPSK	1	49	22.71	22.84	22.80		24	0
20	QPSK	1	99	22.69	22.71	22.71			
20	QPSK	50	0	21.82	21.90	21.93			
20	QPSK	50	24	21.84	21.89	21.79		23	1
20	QPSK	100	0	21.81	21.85	21.85			
20	QPSK	100	49	21.86	21.74	21.80		23	1
20	HQAM	1	0	21.76	21.85	21.78			
20	HQAM	1	49	21.81	21.74	21.80			
20	HQAM	50	0	20.81	20.85	20.80			
20	HQAM	50	24	20.87	20.79	20.73		22	2
20	HQAM	100	0	20.80	20.85	20.84			
20	HQAM	100	49	20.85	20.75	20.85		22	2
20	HQAM	1	99	20.74	21.81	21.73			
20	HQAM	50	24	19.75	19.81	19.77		21	3
20	HQAM	50	50	19.88	19.70	19.69			
20	HQAM	100	0	19.82	19.96	19.90			
20	HQAM	100	49	19.84	19.94	19.82			
20	ZSSBQAM	1	0	17.84	17.94	17.82			
20	ZSSBQAM	1	49	17.79	17.80	17.85		19	5
20	ZSSBQAM	1	99	17.89	17.92	17.84			
20	ZSSBQAM	50	0	17.81	17.86	17.79			
20	ZSSBQAM	50	24	17.80	17.83	17.74		19	5
20	ZSSBQAM	50	50	17.82	17.78	17.87			
20	ZSSBQAM	100	0	17.85	17.80	17.85			
Channel				3750	3800	3815			
Frequency (MHz)				257.5	257.5	257.5			
15	QPSK	1	0	22.62	22.70	22.74			
15	QPSK	1	37	22.66	22.73	22.68		24	0
15	QPSK	1	74	22.63	22.63	22.64			
15	QPSK	36	0	21.79	21.80	21.84			
15	QPSK	36	20	21.75	21.78	21.78		23	1
15	QPSK	72	0	21.78	21.80	21.80			
15	QPSK	72	0	21.76	21.82	21.70			
15	HQAM	1	0	21.67	21.73	21.65			
15	HQAM	1	37	21.65	21.65	21.67		23	1
15	HQAM	1	74	21.60	21.70	21.70			
15	HQAM	36	0	20.72	20.73	20.67			
15	HQAM	36	20	20.62	20.65	20.59		22	2
15	HQAM	36	39	20.54	20.70	20.56			
15	HQAM	72	0	20.81	20.85	20.69			
15	HQAM	72	0	20.78	20.80	20.73		22	2
15	HQAM	1	37	20.68	20.79	20.69			
15	HQAM	1	74	20.63	20.74	20.61			
15	HQAM	36	0	19.67	19.71	19.62		21	3
15	HQAM	36	20	19.69	19.74	19.64			
15	HQAM	36	39	19.58	19.62	19.52			
15	HQAM	72	0	19.71	19.80	19.70			
15	ZSSBQAM	1	0	17.76	17.82	17.78		19	5
15	ZSSBQAM	1	37	17.85	17.84	17.80			
15	ZSSBQAM	1	74	17.81	17.82	17.80			
15	ZSSBQAM	36	0	17.65	17.81	17.68		19	5
15	ZSSBQAM	36	20	17.75	17.80	17.63			
15	ZSSBQAM	36	39	17.48	17.68	17.63			
15	ZSSBQAM	72	0	17.70	17.80	17.67			
Channel				3750	3800	3815			
Frequency (MHz)				257.5	257.5	257.5			
10	QPSK	1	0	22.62	22.70	22.74			
10	QPSK	1	25	22.61	22.70	22.73		24	0
10	QPSK	1	49	22.61	22.62	22.65			
10	QPSK	12	0	21.74	21.80	21.81			
10	QPSK	25	12	21.79	21.78	21.69		23	1
10	QPSK	25	25	21.62	21.62	21.76			
10	QPSK	50	0	21.73	21.80	21.65			
10	QPSK	50	12	21.76	21.70	21.65		23	1
10	HQAM	1	0	21.68	21.66	21.66			
10	HQAM	1	25	21.68	21.66	21.66			
10	HQAM	1	49	21.64	21.67	21.64			
10	HQAM	25	0	20.70	20.77	20.71			
10	HQAM	25	12	20.68	20.68	20.65		22	2
10	HQAM	25	25	20.58	20.73	20.63			
10	HQAM	50	0	20.76	20.88	20.79			
10	HQAM	50	12	20.79	20.84	20.75		22	2
10	HQAM	1	49	20.66	20.80	20.62			
10	HQAM	25	0	19.74	19.82	19.60		21	3
10	HQAM	25	12	19.64	19.70	19.68			
10	HQAM	25	25	19.62	19.65	19.58			
10	HQAM	50	0	19.76	19.87	19.81			
10	ZSSBQAM	1	0	17.74	17.80	17.68		19	5
10	ZSSBQAM	1	25	17.88	17.76	17.76			
10	ZSSBQAM	1	49	17.81	17.88	17.75			
10	ZSSBQAM	25	0	17.68	17.74	17.69		19	5
10	ZSSBQAM	25	12	17.73	17.66	17.64			
10	ZSSBQAM	25	25	17.50	17.71	17.63			
10	ZSSBQAM	50	0	17.76	17.78	17.78			

Band 38 HPUE Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel				3780	3800	3850			
Frequency (MHz)				256	256	256			
20	QPSK	1	0	24.75	24.65	24.60			
20	QPSK	1	49	24.71	24.79	24.67		25.5	0
20	QPSK	1	99	24.50	24.76	24.67			
20	QPSK	50	0	24.85	24.90	24.79			
20	QPSK	50	24	24.81	24.89	24.76		25.5	0
20	QPSK	100	0	24.83	24.83	24.72			
20	QPSK	100	49	24.84	24.84	24.90			
20	HQAM	1	0	24.72	24.82	24.71		25.5	0
20	HQAM	1	49	24.82	24.74	24.67			
20	HQAM	1	99	24.55	24.84	24.55			
20	HQAM	50	0	23.76	23.91	23.84			
20	HQAM	50	24	23.73	23.84	23.71		25	0.5
20	HQAM	50	50	23.66	23.77	23.69			
20	HQAM	100	0	23.62	24.06	23.62			
20	HQAM	100	49	24.05	24.10	24.04			
20	HQAM	1	49	23.86	23.98	23.90		25	0.5
20	HQAM	1	99	23.90	24.03	23.90			
20	HQAM	50	0	22.88	22.92	22.88			
20	HQAM	50	24	22.73	22.85	22.81		24	1.5
20	HQAM	50	50	22.77	22.81	22.71			
20	HQAM	100	0	22.88	22.98	22.83			
20	ZSSBQAM	1	0	20.84	21.01	20.90			
20	ZSSBQAM	1	49	20.87	20.96	20.88		22	3.5
20	ZSSBQAM	1	99	20.75	20.84	20.70			
20	ZSSBQAM	50	0	20.69	20.89	20.78			
20	ZSSBQAM	50	24	20.72	20.79	20.64		22	3.5
20	ZSSBQAM	50	50	20.73	20.87	20.78			
20	ZSSBQAM	100	0	20.90	20.96	20.88			
Channel				3780	3800	3815			
Frequency (MHz)				257.5	257.5	257.5			
15	QPSK	1	0	24.63	24.63	24.63			
15	QPSK	1	37	24.61	24.75	24.67		25.5	0
15	QPSK	1	74	24.53	24.96	24.60			
15	QPSK	36	0	24.73	24.78	24.68			
15	QPSK	36	20	24.71	24.85	24.66		25.5	0
15	QPSK	72	0	24.63	24.76	24.67			
15	QPSK	72	0	24.78	24.80	24.83			
15	HQAM	1	0	24.83	24.90	24.84			
15	HQAM	1	37	24.71	24.85	24.85		25.5	0
15	HQAM	1	74	24.67	24.72	24.63			
15	HQAM	36	0	23.82	23.82	23.79			
15	HQAM	36	20	23.62	23.76	23.67		25	0.5
15	HQAM	36	39	23.60	23.65	23.54			
15	HQAM	72	0	23.78	23.90	23.80			
15	HQAM	72	0	23.94	24.07	23.97		25	0.5
15	HQAM	1	37	23.77	23.94	23.81			
15	HQAM	1	74	23.84	23.96	23.87			
15	HQAM	36	0	22.79	22.79	22.74		24	1.5
15	HQAM	36	20	22.66	22.77	22.75			
15	HQAM	36	39	22.70	22.70	22.65			
15	HQAM	72	0	22.74	22.88	22.59			
15	ZSSBQAM	1	0	20.86	20.86	20.84		22	3.5
15	ZSSBQAM	1	37	20.77	20.85	20.84			
15	ZSSBQAM	1	74	20.64	20.78	20.63			
15	ZSSBQAM	36	0	20.71	20.85	20.70		22	3.5
15	ZSSBQAM	36	20	20.68	20.71	20.60			
15	ZSSBQAM	36	39	20.59	20.78	20.68			
15	ZSSBQAM	72	0	20.83	20.87	20.78			
Channel				3780	3800	3815			
Frequency (MHz)				257.5	257.5	257.5			
10	QPSK	1	0	24.58	24.74	24.62			
10	QPSK	1	25	24.56	24.66	24.52		25.5	0
10	QPSK	1	49	24.60	24.77	24.68			
10	QPSK	12	0	24.62	24.81	24.67			
10	QPSK	25	12	24.67	24.84	24.69		25.5	0
10	QPSK	25	25	24.66	24.76	24.62			
10	QPSK	50	0	24.70	24.87	24.67			
10	QPSK	50	12	24.78	24.81	24.82			
10	HQAM	1	0	24.87	24.90	24.76		25.5	0
10	HQAM	1							



Band 41 Ant2											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Mid Ch / Freq	Power High Low Ch / Freq	Power High High Ch / Freq	Power High High Ch / Freq	Turn-up (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41400	41800		
20	QPSK	1	0	22.61	22.83	23.03	23.23	23.43	23.63	24	0
20	QPSK	1	40	22.65	22.73	22.79	22.75	22.72	22.74	24	0
20	QPSK	1	80	22.78	22.79	22.84	22.74	22.78	22.78	24	0
20	QPSK	50	0	21.79	21.90	21.94	21.85	21.80	21.80	23	1
20	QPSK	50	24	21.79	21.72	21.85	21.78	21.75	21.75	23	1
20	QPSK	50	48	21.80	21.82	21.81	21.78	21.78	21.78	23	1
20	QPSK	100	0	21.82	21.86	21.90	21.79	21.84	21.84	23	1
20	HQAM	1	0	21.81	21.83	21.88	21.81	21.79	21.79	23	1
20	HQAM	1	40	21.71	21.72	21.81	21.78	21.78	21.78	23	1
20	HQAM	1	80	21.86	21.82	21.75	21.89	21.83	21.83	23	1
20	HQAM	50	0	20.79	20.89	20.94	20.89	20.82	20.82	22	2
20	HQAM	50	24	20.77	20.99	20.93	20.70	20.71	20.71	22	2
20	HQAM	50	48	20.77	20.80	20.88	20.83	20.84	20.84	22	2
20	HQAM	100	0	20.87	20.79	20.85	20.84	20.79	20.79	22	2
20	HQAM	100	1	20.82	20.81	20.93	20.79	20.82	20.82	22	2
20	HQAM	100	1	20.79	20.80	20.81	20.88	20.77	20.77	22	2
20	HQAM	18	80	20.78	20.81	20.84	20.72	20.71	20.71	21	3
20	HQAM	50	24	19.73	19.73	19.77	19.85	19.84	19.84	21	3
20	HQAM	50	48	19.70	19.71	19.79	19.74	19.70	19.70	21	3
20	HQAM	100	0	19.79	19.79	19.92	19.81	19.79	19.79	21	3
20	25QAM	1	0	17.77	17.84	17.90	17.82	17.84	17.84	19	5
20	25QAM	1	40	17.71	17.71	17.83	17.72	17.75	17.75	19	5
20	25QAM	1	80	17.66	17.70	17.78	17.67	17.66	17.66	19	5
20	25QAM	50	0	17.68	17.68	17.86	17.66	17.78	17.78	19	5
20	25QAM	50	24	17.69	17.70	17.74	17.66	17.61	17.61	19	5
20	25QAM	50	48	17.68	17.68	17.80	17.73	17.71	17.71	19	5
20	25QAM	100	0	17.68	17.68	17.86	17.66	17.78	17.78	19	5
Channel											
Frequency (MHz)				39745	40173	40600	41068	41515	41962		
15	QPSK	1	0	22.61	22.74	22.93	23.13	23.32	23.52	24	0
15	QPSK	1	37	22.52	22.68	22.86	22.83	22.87	22.87	24	0
15	QPSK	1	74	22.71	22.87	22.72	22.94	22.74	22.74	24	0
15	QPSK	36	0	21.72	21.87	21.86	21.71	21.75	21.75	23	1
15	QPSK	36	20	21.69	21.57	21.78	21.64	21.70	21.70	23	1
15	QPSK	36	40	21.68	21.73	21.86	21.68	21.78	21.78	23	1
15	QPSK	75	0	21.67	21.80	21.76	21.67	21.77	21.77	23	1
15	HQAM	1	0	21.71	21.76	21.82	21.76	21.86	21.86	23	1
15	HQAM	1	37	21.61	21.66	21.80	21.64	21.67	21.67	23	1
15	HQAM	1	74	21.55	21.58	21.87	21.84	21.57	21.57	23	1
15	HQAM	36	0	20.72	20.72	20.90	20.74	20.77	20.77	22	2
15	HQAM	36	20	20.64	20.54	20.85	20.65	20.68	20.68	22	2
15	HQAM	36	40	20.68	20.69	20.75	20.73	20.78	20.78	22	2
15	HQAM	75	0	20.78	20.82	20.80	20.76	20.84	20.84	22	2
15	HQAM	1	37	20.71	20.72	20.89	20.75	20.88	20.88	22	2
15	HQAM	1	74	20.73	20.76	20.77	20.87	20.87	20.87	22	2
15	HQAM	36	0	19.84	19.88	19.77	19.85	19.74	19.74	21	3
15	HQAM	36	20	19.54	19.69	19.71	19.56	19.52	19.52	21	3
15	HQAM	36	40	19.58	19.58	19.88	19.58	19.58	19.58	21	3
15	HQAM	75	0	19.75	19.74	19.85	19.70	19.83	19.83	21	3
15	25QAM	1	0	17.64	17.73	17.78	17.78	17.71	17.71	19	5
15	25QAM	1	37	17.69	17.68	17.83	17.69	17.62	17.62	19	5
15	25QAM	1	74	17.60	17.60	17.72	17.63	17.59	17.59	19	5
15	25QAM	36	0	17.73	17.68	17.73	17.75	17.63	17.63	19	5
15	25QAM	36	20	17.63	17.61	17.68	17.60	17.52	17.52	19	5
15	25QAM	36	40	17.67	17.61	17.66	17.61	17.54	17.54	19	5
15	25QAM	75	0	17.62	17.60	17.86	17.62	17.64	17.64	19	5
Channel											
Frequency (MHz)				39701	40147	40600	41100	41540	41980		
10	QPSK	1	0	22.67	22.78	22.97	23.17	23.37	23.57	24	0
10	QPSK	1	25	22.59	22.81	22.72	22.80	22.80	22.80	24	0
10	QPSK	1	49	22.70	22.83	22.78	22.82	22.74	22.74	24	0
10	QPSK	1	73	22.75	22.84	22.83	22.75	22.75	22.75	24	0
10	QPSK	25	12	21.74	21.58	21.73	21.71	21.72	21.72	23	1
10	QPSK	25	26	21.73	21.79	21.81	21.74	21.75	21.75	23	1
10	QPSK	25	50	21.70	21.74	21.79	21.74	21.74	21.74	23	1
10	HQAM	1	0	21.67	21.74	21.77	21.68	21.72	21.72	23	1
10	HQAM	1	25	21.68	21.66	21.76	21.68	21.66	21.66	23	1
10	HQAM	1	49	21.61	21.61	21.63	21.63	21.60	21.60	23	1
10	HQAM	25	0	20.70	20.70	20.82	20.85	20.74	20.74	22	2
10	HQAM	25	12	20.66	20.56	20.75	20.66	20.56	20.56	22	2
10	HQAM	25	26	20.70	20.73	20.81	20.80	20.70	20.70	22	2
10	HQAM	50	0	20.78	20.85	20.80	20.81	20.71	20.71	22	2
10	HQAM	1	0	20.71	20.72	20.80	20.71	20.70	20.70	22	2
10	HQAM	1	25	20.73	20.74	20.78	20.77	20.69	20.69	22	2
10	HQAM	1	49	20.70	20.68	20.70	20.67	20.67	20.67	22	2
10	HQAM	25	0	19.89	19.89	19.78	19.83	19.83	19.83	21	3
10	HQAM	25	12	19.61	19.68	19.64	19.53	19.59	19.59	21	3
10	HQAM	25	26	19.56	19.57	19.75	19.63	19.66	19.66	21	3
10	HQAM	50	0	19.78	19.84	19.84	19.89	19.67	19.67	21	3
10	25QAM	1	0	17.73	17.71	17.77	17.77	17.73	17.73	19	5
10	25QAM	1	25	17.66	17.61	17.70	17.60	17.61	17.61	19	5
10	25QAM	1	49	17.58	17.58	17.64	17.59	17.58	17.58	19	5
10	25QAM	25	0	17.73	17.64	17.83	17.77	17.63	17.63	19	5
10	25QAM	25	12	17.68	17.68	17.68	17.54	17.63	17.63	19	5
10	25QAM	25	26	17.51	17.54	17.73	17.61	17.53	17.53	19	5
10	25QAM	50	0	17.61	17.75	17.81	17.75	17.79	17.79	19	5
Channel											
Frequency (MHz)				39615	39645	39900	40000	40100	40200		
5	QPSK	1	0	22.65	22.75	22.84	22.84	22.78	22.78	24	0
5	QPSK	1	15	22.61	22.63	22.67	22.67	22.67	22.67	24	0
5	QPSK	1	24	22.63	22.58	22.78	22.58	22.56	22.56	24	0
5	QPSK	12	0	21.66	21.63	21.86	21.73	21.76	21.76	23	1
5	QPSK	12	7	21.71	21.68	21.79	21.69	21.64	21.64	23	1
5	QPSK	12	13	21.66	21.79	21.80	21.73	21.70	21.70	23	1
5	QPSK	25	0	21.78	21.72	21.79	21.73	21.74	21.74	23	1
5	HQAM	1	0	21.69	21.79	21.75	21.78	21.68	21.68	23	1
5	HQAM	1	12	21.61	21.68	21.75	21.62	21.61	21.61	23	1
5	HQAM	1	24	21.66	21.68	21.82	21.66	21.67	21.67	23	1
5	HQAM	12	0	20.67	20.70	20.88	20.74	20.78	20.78	22	2
5	HQAM	12	7	20.64	20.60	20.70	20.68	20.63	20.63	22	2
5	HQAM	12	13	20.70	20.70	20.76	20.74	20.70	20.70	22	2
5	HQAM	25	0	20.75	20.67	20.76	20.69	20.68	20.68	22	2
5	HQAM	1	0	20.79	20.73	20.89	20.84	20.71	20.71	22	2
5	HQAM	1	12	20.71	20.74	20.87	20.79	20.66	20.66	22	2
5	HQAM	1	24	20.71	20.67	20.80	20.63	20.66	20.66	22	2
5	HQAM	12	0	19.63	19.69	19.78	19.66	19.71	19.71	21	3
5	HQAM	12	7	19.53	19.67	19.66	19.55	19.58	19.58	21	3
5	HQAM	12	13	19.60	19.63	19.67	19.66	19.58	19.58	21	3
5	HQAM	25	0	19.74	19.76	19.83	19.69	19.80	19.80	21	3
5	25QAM	1	0	17.68	17.72	17.84	17.75	17.70	17.70	19	5
5	25QAM	1	12	17.62	17.56	17.69	17.68	17.67	17.67	19	5
5	25QAM	1	24	17.67	17.60	17.73	17.62	17.68	17.68	19	5
5	25QAM	12	0	17.78	17.70	17.76	17.68	17.71	17.71	19	5
5	25QAM	12	7	17.59	17.58	17.70	17.62	17.61	17.61	19	5
5	25QAM	12	13	17.67	17.67	17.68	17.61	17.65	17.65	19	5
5	25QAM	25	0	17.60	17.77	17.91	17.74	17.75	17.75	19	5

Band 41 HPUE Ant2										
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Band 42 FCC Part27Q Ant3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm) MPR (dB)
Channel							
Frequency (MHz)							
20	QPSK	1	0	20.91	21.13	21.10	21.5 0
20	QPSK	1	49	20.96	21.11	21.04	
20	QPSK	1	99	20.98	21.00	20.91	
20	QPSK	50	0	19.09	19.15	19.07	
20	QPSK	50	24	19.03	19.07	18.96	20.5 1
20	QPSK	100	0	18.01	18.02	18.07	
20	HDQAM	1	0	19.89	19.95	19.95	20.5 1
20	HDQAM	1	49	19.84	19.97	19.94	
20	HDQAM	1	99	20.04	20.10	19.98	
20	HDQAM	50	0	17.82	18.00	18.07	
20	HDQAM	50	24	18.11	18.13	18.07	19.5 2
20	HDQAM	100	0	16.81	16.96	16.93	
20	HDQAM	100	1	16.13	16.15	16.09	
20	HDQAM	1	49	18.87	18.11	18.89	19.5 2
20	HDQAM	1	99	19.03	19.07	18.96	
20	HDQAM	50	0	17.00	17.05	17.02	
20	HDQAM	50	24	16.84	16.97	16.86	18.5 3
20	HDQAM	50	50	17.01	17.10	17.06	
20	HDQAM	100	0	16.97	17.02	16.88	
20	HDQAM	100	1	16.85	16.76	16.87	
20	HDQAM	1	49	19.81	19.76	19.84	20.5 1
20	HDQAM	1	99	19.51	19.43	19.49	
20	HDQAM	50	0	19.71	19.77	19.67	
20	HDQAM	50	24	19.56	19.48	19.41	20.5 1
20	HDQAM	50	50	19.81	19.70	19.68	
20	HDQAM	100	0	18.82	18.78	18.74	
Channel							
Frequency (MHz)							
15	QPSK	1	0	20.92	21.13	21.10	21.5 0
15	QPSK	1	47	20.82	21.04	20.98	
15	QPSK	1	74	20.91	20.96	20.81	
15	QPSK	36	0	18.95	18.91	18.82	
15	QPSK	36	20	18.92	18.87	18.89	20.5 1
15	QPSK	75	0	18.87	19.02	18.86	
15	HDQAM	1	0	19.87	19.89	19.85	20.5 1
15	HDQAM	1	47	19.73	19.77	19.71	
15	HDQAM	1	74	19.06	20.02	19.85	
15	HDQAM	36	0	17.87	18.01	17.84	
15	HDQAM	36	20	18.95	18.94	18.92	19.5 2
15	HDQAM	36	39	17.82	17.88	17.73	
15	HDQAM	75	0	17.82	17.87	17.88	
15	HDQAM	75	0	19.07	19.09	19.09	19.5 2
15	HDQAM	1	47	18.98	19.09	18.89	
15	HDQAM	1	74	18.96	19.05	18.98	
15	HDQAM	36	0	16.88	16.84	16.87	18.5 3
15	HDQAM	36	20	16.89	16.89	16.78	
15	HDQAM	36	39	17.00	17.00	16.95	
15	HDQAM	75	0	16.95	16.93	16.82	
15	HDQAM	1	0	19.46	19.87	19.52	20.5 1
15	HDQAM	1	47	19.35	19.40	19.35	
15	HDQAM	1	74	19.42	19.57	19.48	
15	HDQAM	36	0	19.61	19.73	19.54	20.5 1
15	HDQAM	36	20	19.51	19.59	19.59	
15	HDQAM	36	39	19.50	19.48	19.59	
15	HDQAM	75	0	19.47	19.45	19.43	
Channel							
Frequency (MHz)							
10	QPSK	1	0	20.82	21.04	21.01	21.5 0
10	QPSK	1	25	20.86	20.97	20.86	
10	QPSK	1	49	20.83	20.99	20.83	
10	QPSK	12	0	18.95	18.92	18.86	
10	QPSK	25	12	18.90	18.87	18.87	20.5 1
10	QPSK	25	25	18.83	18.82	18.79	
10	QPSK	50	0	18.84	18.81	18.82	
10	QPSK	1	0	19.91	20.00	19.85	20.5 1
10	HDQAM	1	25	19.78	19.84	19.77	
10	HDQAM	1	49	19.97	20.00	19.86	
10	HDQAM	25	0	17.88	18.00	17.86	
10	HDQAM	25	12	17.88	18.00	18.04	19.5 2
10	HDQAM	50	0	17.86	17.88	18.01	
10	HDQAM	1	0	19.03	19.11	18.94	
10	HDQAM	1	25	18.01	18.00	18.01	19.5 2
10	HDQAM	1	49	18.92	19.05	18.87	
10	HDQAM	25	0	16.88	17.00	16.91	18.5 3
10	HDQAM	25	12	16.75	16.88	16.72	
10	HDQAM	25	25	16.84	17.00	17.02	
10	HDQAM	50	0	16.90	16.90	16.77	
10	HDQAM	1	0	19.52	19.59	19.42	20.5 1
10	HDQAM	1	25	19.45	19.46	19.39	
10	HDQAM	1	49	19.85	19.85	19.54	
10	HDQAM	25	0	18.58	18.57	18.48	20.5 1
10	HDQAM	25	12	18.47	18.50	18.54	
10	HDQAM	25	25	19.45	19.52	19.35	
10	HDQAM	50	0	19.54	19.67	19.69	
Channel							
Frequency (MHz)							
5	QPSK	1	0	20.86	21.12	21.05	21.5 0
5	QPSK	1	24	20.88	20.99	20.85	
5	QPSK	12	0	19.00	19.00	18.90	
5	QPSK	12	7	18.97	19.01	18.84	20.5 1
5	QPSK	12	13	18.85	18.86	18.83	
5	QPSK	25	0	18.98	19.00	18.99	
5	QPSK	1	0	19.94	20.00	19.89	20.5 1
5	HDQAM	1	12	19.78	19.80	19.77	
5	HDQAM	1	24	19.88	20.00	19.91	
5	HDQAM	12	0	17.86	18.01	17.87	
5	HDQAM	12	7	18.05	18.06	18.00	19.5 2
5	HDQAM	12	13	17.88	17.97	17.82	
5	HDQAM	25	0	17.87	18.00	17.97	
5	HDQAM	1	0	19.02	19.11	19.03	
5	HDQAM	1	12	18.92	19.00	18.94	19.5 2
5	HDQAM	1	24	18.96	19.02	18.92	
5	HDQAM	12	0	16.84	17.00	16.86	
5	HDQAM	12	7	16.77	16.91	16.86	18.5 3
5	HDQAM	12	13	16.86	17.03	17.01	
5	HDQAM	25	0	16.92	16.98	16.82	
5	HDQAM	1	0	19.49	19.54	19.51	20.5 1
5	HDQAM	1	12	19.38	19.46	19.41	
5	HDQAM	1	24	19.85	19.87	19.54	
5	HDQAM	12	0	19.51	19.52	19.54	20.5 1
5	HDQAM	12	13	19.54	19.62	19.61	
5	HDQAM	25	0	19.58	19.69	19.67	

Band 42 FCC Part96 Ant3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm) MPR (dB)
Channel							
Frequency (MHz)							
20	QPSK	1	0	20.85	21.11	20.99	21.5 0
20	QPSK	1	49	20.83	21.05	20.97	
20	QPSK	1	99	20.88	20.99	20.82	
20	QPSK	50	0	19.03	19.09	18.92	
20	QPSK	50	24	18.88	18.97	18.84	20.5 1
20	QPSK	100	0	18.77	18.88	18.82	
20	QPSK	100	0	18.89	18.92	18.84	
20	HDQAM	1	0	19.86	19.91	19.85	20.5 1
20	HDQAM	1	49	19.76	19.85	19.72	
20	HDQAM	1	99	19.92	20.01	19.87	
20	HDQAM	50	0	17.83	17.97	17.86	
20	HDQAM	50	24	17.99	18.01	17.97	19.5 2
20	HDQAM	50	50	17.85	17.96	17.74	
20	HDQAM	100	0	16.82	17.04	17.02	
20	HDQAM	100	1	16.95	17.09	17.03	
20	HDQAM	1	49	18.87	19.04	18.88	19.5 2
20	HDQAM	1	99	18.96	18.96	18.87	
20	HDQAM	50	0	16.88	17.01	16.88	
20	HDQAM	50	24	16.89	16.86	16.80	18.5 3
20	HDQAM	50	50	16.88	17.01	16.97	
20	HDQAM	100	0	16.87	16.89	16.82	
20	HDQAM	100	1	16.90	16.84	16.84	
20	HDQAM	1	49	19.31	19.44	19.38	20.5 1
20	HDQAM	1	99	19.49	19.54	19.49	
20	HDQAM	50	0	18.65	18.66	18.62	
20	HDQAM	50	24	18.41	18.57	18.48	20.5 1
20	HDQAM	50	50	18.52	18.55	18.48	
20	HDQAM	100	0	18.52	18.48	18.48	
Channel							
Frequency (MHz)							
15	QPSK	1	0	20.89	21.13	21.09	21.5 0
15	QPSK	1	37	20.88	20.91	20.89	
15	QPSK	1	74	20.86	20.90	20.71	
15	QPSK	36	0	18.91	18.91	18.81	
15	QPSK	36	20	18.87	18.85	18.77	20.5 1
15	QPSK	75	0	18.72	18.81	18.75	
15	QPSK	75	0	18.81	18.92	18.75	
15	HDQAM	1	0	19.79	19.89	19.80	20.5 1
15	HDQAM	1	37	19.62	19.65	19.51	
15	HDQAM	1	74	19.88	19.87	19.77	
15	HDQAM	36	0	17.81	17.90	17.73	
15	HDQAM	36	20	17.82	17.84	17.80	19.5 2
15	HDQAM	36	39	17.76	17.83	17.63	
15	HDQAM	75	0	17.77	17.88	17.73	
15	HDQAM	75	0	19.07	19.09	18.94	19.5 2





Band 43 for FCC use Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	20.86	20.86	20.77	21.5	0
20	QPSK	1	49	20.71	20.80	20.74		
20	QPSK	1	99	20.56	20.65	20.57		
20	QPSK	50	0	18.86	18.86	18.78	20.5	1
20	QPSK	50	24	18.81	18.84	18.74		
20	QPSK	50	49	18.76	18.79	18.69		
20	QPSK	100	0	18.75	18.84	18.76		
20	HQAM	1	0	19.84	19.87	19.72	20.5	1
20	HQAM	1	49	19.79	19.77	19.82		
20	HQAM	1	99	19.75	19.83	19.78		
20	HQAM	50	0	17.86	17.86	17.84	19.5	2
20	HQAM	50	24	17.84	17.81	17.83		
20	HQAM	50	50	17.87	17.79	17.83		
20	HQAM	100	0	17.74	17.87	17.77		
20	HQAM	100	0	18.55	18.55	18.51	19.5	2
20	HQAM	100	49	18.83	18.80	18.83		
20	HQAM	100	99	18.80	18.80	18.82		
20	HQAM	50	0	16.82	16.82	16.83	18.5	3
20	HQAM	50	24	16.81	16.82	16.87		
20	HQAM	50	50	16.85	16.85	16.81		
20	HQAM	100	0	16.69	16.82	16.74		
20	ZSSBAM	1	0	19.45	19.45	19.45	20.5	1
20	ZSSBAM	1	49	19.46	19.46	19.46		
20	ZSSBAM	1	99	19.46	19.49	19.51		
20	ZSSBAM	50	0	19.67	19.64	19.62	20.5	1
20	ZSSBAM	50	24	19.59	19.60	19.59		
20	ZSSBAM	50	50	19.55	19.60	19.62		
20	ZSSBAM	100	0	19.39	19.39	19.39		
Channel								
Frequency (MHz)								
15	QPSK	1	0	20.73	20.91	20.66	21.5	0
15	QPSK	1	37	20.88	20.70	20.83		
15	QPSK	1	74	20.71	20.71	20.88		
15	QPSK	36	0	18.79	18.82	18.88	20.5	1
15	QPSK	36	20	18.73	18.79	18.89		
15	QPSK	36	39	18.87	18.74	18.74		
15	QPSK	75	0	18.71	18.78	18.74		
15	HQAM	1	0	19.77	19.77	19.84	20.5	1
15	HQAM	1	37	19.88	19.82	19.82		
15	HQAM	1	74	19.65	19.71	19.70		
15	HQAM	36	0	17.74	17.78	17.72	19.5	2
15	HQAM	36	20	17.73	17.74	17.73		
15	HQAM	36	39	17.81	17.75	17.79		
15	HQAM	75	0	17.60	17.76	17.75	19.5	2
15	HQAM	75	0	18.79	18.81	18.81		
15	HQAM	1	37	18.89	18.79	18.72	19.5	2
15	HQAM	1	74	18.80	18.75	18.74		
15	HQAM	36	0	16.79	16.82	16.79	18.5	3
15	HQAM	36	20	16.89	16.79	16.73		
15	HQAM	36	39	16.84	16.79	16.82		
15	HQAM	75	0	16.55	16.70	16.65		
15	ZSSBAM	1	0	19.38	19.48	19.37	20.5	1
15	ZSSBAM	1	37	19.41	19.35	19.38		
15	ZSSBAM	1	74	19.31	19.41	19.48		
15	ZSSBAM	36	0	19.44	19.57	19.49	20.5	1
15	ZSSBAM	36	20	19.53	19.46	19.47		
15	ZSSBAM	36	39	19.44	19.46	19.45		
15	ZSSBAM	75	0	19.42	19.40	19.34		
Channel								
Frequency (MHz)								
10	QPSK	1	0	20.79	20.92	20.72	21.5	0
10	QPSK	1	25	20.58	20.77	20.59		
10	QPSK	1	49	20.88	20.78	20.72		
10	QPSK	12	0	18.78	18.82	18.79	20.5	1
10	QPSK	25	12	18.74	18.73	18.65		
10	QPSK	25	25	18.66	18.73	18.65		
10	QPSK	50	0	18.64	18.77	18.64	19.5	2
10	HQAM	1	0	19.76	19.83	19.87	20.5	1
10	HQAM	1	25	19.89	19.83	19.88		
10	HQAM	1	49	19.69	19.80	19.65		
10	HQAM	25	0	17.74	17.77	17.70	19.5	2
10	HQAM	25	12	17.78	17.86	17.79		
10	HQAM	25	25	17.81	17.75	17.74		
10	HQAM	50	0	17.63	17.77	17.62	19.5	2
10	HQAM	50	0	18.80	18.80	18.80		
10	HQAM	1	25	18.70	18.84	18.72	19.5	2
10	HQAM	1	49	18.70	18.81	18.70		
10	HQAM	25	0	16.74	16.80	16.81	18.5	3
10	HQAM	25	12	16.87	16.77	16.78		
10	HQAM	25	25	16.75	16.71	16.70		
10	HQAM	50	0	16.67	16.87	16.69		
10	ZSSBAM	1	0	19.32	19.51	19.43	20.5	1
10	ZSSBAM	1	25	19.43	19.41	19.46		
10	ZSSBAM	1	49	19.40	19.35	19.46		
10	ZSSBAM	25	0	19.39	19.52	19.37	20.5	1
10	ZSSBAM	25	12	19.47	19.40	19.54		
10	ZSSBAM	25	25	19.40	19.55	19.40		
10	ZSSBAM	50	0	19.34	19.45	19.32		
Channel								
Frequency (MHz)								
5	QPSK	1	0	20.79	20.92	20.72	21.5	0
5	QPSK	1	12	20.55	20.74	20.58		
5	QPSK	1	24	20.74	20.80	20.70		
5	QPSK	12	0	18.78	18.80	18.71	20.5	1
5	QPSK	12	7	18.75	18.79	18.68		
5	QPSK	12	13	18.64	18.70	18.69		
5	HQAM	1	0	19.69	19.70	19.71	20.5	1
5	HQAM	1	12	19.74	19.71	19.78		
5	HQAM	1	24	19.89	19.78	19.73		
5	HQAM	12	0	17.81	17.84	17.78	19.5	2
5	HQAM	12	7	17.78	17.76	17.78		
5	HQAM	12	13	17.80	17.71	17.77		
5	HQAM	25	0	17.67	17.81	17.71	19.5	2
5	HQAM	1	0	18.82	18.80	18.80	19.5	2
5	HQAM	1	12	18.76	18.87	18.76		
5	HQAM	1	24	18.76	18.82	18.76		
5	HQAM	12	0	16.75	16.86	16.86	18.5	3
5	HQAM	12	7	16.80	16.75	16.81		
5	HQAM	12	13	16.79	16.80	16.74		
5	HQAM	25	0	16.64	16.78	16.67		
5	ZSSBAM	1	0	19.40	19.52	19.38	20.5	1
5	ZSSBAM	1	12	19.41	19.42	19.43		
5	ZSSBAM	1	24	19.41	19.43	19.45		
5	ZSSBAM	12	0	19.43	19.58	19.46	20.5	1
5	ZSSBAM	12	7	19.52	19.55	19.53		
5	ZSSBAM	12	13	19.45	19.50	19.47		
5	ZSSBAM	25	0	19.43	19.46	19.34		

Band 48_FCC Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	20.46	20.46	20.34	21.5	0
20	QPSK	1	49	20.41	20.56	20.43		
20	QPSK	1	99	20.46	20.51	20.48		
20	QPSK	50	0	19.14	19.19	19.16	20.5	1
20	QPSK	50	24	19.08	19.12	19.03		
20	QPSK	50	49	19.11	19.18	19.10		
20	QPSK	100	0	19.12	19.15	19.01	19.5	2
20	HQAM	1	0	19.91	19.96	19.92	20.5	1
20	HQAM	1	49	19.84	19.84	19.85		
20	HQAM	1	99	19.81	19.82	19.82		
20	HQAM	50	0	17.95	17.97	17.93	19.5	2
20	HQAM	50	24	17.95	17.99	17.88		
20	HQAM	50	50	17.99	17.93	17.95		
20	HQAM	100	0	18.42	18.41	18.31	19.5	2
20	HQAM	100	0	18.91	19.02	18.92		
20	HQAM	100	49	18.89	18.97	18.95	19.5	2
20	HQAM	100	99	18.93	18.94	18.92		
20	HQAM	50	0	16.96	17.08	17.02	18.5	3
20	HQAM	50	24	16.95	17.05	16.93		
20	HQAM	50	50	17.01	17.00	17.03		
20	HQAM	100	0	17.92	17.16	17.13	18.5	3
20	ZSSBAM	1	0	19.67	19.72	19.60	20.5	1
20	ZSSBAM	1	49	19.61	19.68	19.62		
20	ZSSBAM	1	99	19.67	19.68	19.49		
20	ZSSBAM	50	0	19.67	19.74	19.67	20.5	1
20	ZSSBAM	50	24	19.60	19.63	19.67		
20	ZSSBAM	50	50	19.65	19.68	19.47		
20	ZSSBAM	100	0	19.59	19.59	19.56		
Channel								
Frequency (MHz)								
15	QPSK	1	0	20.13	20.49	20.24	21.5	0
15	QPSK	1	37					



Band 41 Ant4											
RW (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 Hgt Ch / Freq	Power High Hgt Ch / Freq	Turn-up time (dBm)	MPR (dB)
Channel											
Frequency (MHz)				39790	40190	40600	41000	41400			
20	QPSK	1	0	18.01	18.15	18.13	18.13	18.14			
20	QPSK	1	49	17.95	18.02	18.10	18.04	17.97	18.0	18.0	0
20	QPSK	1	99	18.01	18.15	18.13	18.13	18.14			
20	QPSK	50	0	17.92	18.00	18.15	17.98	18.05			
20	QPSK	50	24	17.85	17.93	18.02	17.96	17.88	18.0	18.0	0
20	QPSK	100	0	18.02	18.16	18.14	18.14	18.15			
20	QPSK	100	0	17.79	17.86	18.03	17.89	17.90			
20	HQAM	1	0	17.90	18.03	18.13	18.08	18.01			
20	HQAM	1	49	17.78	17.90	17.99	17.93	17.89	18.0	18.0	0
20	HQAM	1	99	17.87	17.92	18.05	17.93	17.98			
20	HQAM	50	0	18.16	18.30	18.37	18.30	18.31			
20	HQAM	50	24	18.08	18.17	18.30	18.25	18.21	18.0	18.0	0
20	HQAM	50	50	18.05	18.20	18.32	18.22	18.24			
20	HQAM	100	0	18.04	18.21	18.37	18.26	18.29			
20	HQAM	100	0	18.53	18.95	19.13	19.10	19.05			
20	HQAM	1	49	18.76	18.80	18.89	18.80	18.73	18	0.9	
20	HQAM	1	99	18.85	18.94	19.01	18.97	18.92			
20	HQAM	50	0	18.85	19.01	19.09	19.03	19.04			
20	HQAM	50	24	18.86	18.95	19.08	18.99	18.93	18	0.9	
20	HQAM	50	50	18.75	18.84	18.98	18.78	18.81			
20	HQAM	100	0	18.20	18.37	18.55	18.45	18.48			
20	HQAM	100	0	18.58	19.05	19.21	19.05	19.07			
20	HQAM	1	49	18.76	18.84	18.88	18.77	18.72	20	0.5	
20	HQAM	1	99	18.85	19.00	19.06	18.94	18.94			
20	HQAM	50	0	18.35	18.44	18.58	18.49	18.43			
20	HQAM	50	24	18.47	18.55	18.66	18.51	18.50	20	0.5	
20	HQAM	50	50	18.54	18.67	18.79	18.69	18.63			
20	HQAM	100	0	18.94	19.02	19.05	18.97	18.92			
20	HQAM	100	0	19.21	19.22	19.27	19.11	19.12			
20	HQAM	1	99	18.96	19.04	19.09	18.99	18.96	18	2.5	
20	HQAM	1	49	18.96	19.04	19.09	18.99	18.96			
20	HQAM	50	24	18.91	19.05	19.07	18.88	18.95	18	2.5	
20	HQAM	50	50	18.87	19.03	19.12	18.98	18.97			
20	HQAM	100	0	19.09	19.10	19.14	19.03	19.02			
Channel											
Frequency (MHz)				39795	40173	40600	41000	41415			
15	QPSK	1	0	17.25	18.01	18.13	18.02	18.04			
15	QPSK	1	37	17.89	17.96	18.04	17.88	17.81	19	0	
15	QPSK	1	74	17.96	18.04	18.08	17.92	18.02			
15	QPSK	36	0	17.87	18.00	18.08	17.93	17.99			
15	QPSK	36	20	17.79	17.87	17.96	17.80	17.82	18.0	0	
15	QPSK	36	20	17.86	17.94	18.02	17.86	17.88			
15	QPSK	75	0	17.72	17.90	17.97	17.84	17.84			
15	HQAM	1	0	17.85	17.96	18.07	18.01	17.95			
15	HQAM	1	37	17.81	17.88	17.92	17.86	17.83	18.0	0	
15	HQAM	1	74	17.81	17.88	17.90	17.88	17.93			
15	HQAM	36	0	18.72	18.83	18.94	18.85	18.85			
15	HQAM	36	20	18.62	18.71	18.83	18.72	18.75	18	0.9	
15	HQAM	36	39	18.59	18.64	18.76	18.66	18.68			
15	HQAM	75	0	18.79	18.95	19.01	18.93	18.90			
15	HQAM	1	37	18.79	18.84	18.93	18.74	18.67	18	0.9	
15	HQAM	1	74	18.79	18.88	18.99	18.81	18.85			
15	HQAM	36	0	18.78	18.95	19.02	18.90	18.88			
15	HQAM	36	20	18.60	18.72	18.79	18.61	18.63	17	1.9	
15	HQAM	36	39	18.57	18.68	18.79	18.69	18.71			
15	HQAM	75	0	18.53	18.94	19.09	18.97	18.99			
15	HQAM	1	0	18.65	18.72	18.86	18.75	18.76	15	3.9	
15	HQAM	1	37	18.65	18.76	18.87	18.68	18.74			
15	HQAM	1	74	18.65	18.76	18.87	18.68	18.74			
15	HQAM	36	0	18.72	18.92	19.04	18.91	18.88	15	3.9	
15	HQAM	36	20	18.62	18.80	18.83	18.63	18.68			
15	HQAM	36	39	18.67	18.83	18.89	18.62	18.63			
15	HQAM	75	0	18.79	18.92	19.04	18.96	18.98			
Channel											
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	17.66	18.10	18.24	18.08	18.14			
10	QPSK	1	25	17.88	17.98	18.06	17.98	17.91	18.0	0	
10	QPSK	1	49	17.95	18.04	18.08	17.92	18.02			
10	QPSK	25	0	17.82	17.96	18.09	17.94	17.99			
10	QPSK	25	12	17.79	17.86	17.95	17.80	17.83	18.0	0	
10	QPSK	25	25	17.86	17.95	17.98	17.84	17.84			
10	QPSK	50	0	17.72	17.86	17.98	17.86	17.89			
10	HQAM	1	0	17.83	17.87	18.07	18.00	17.98			
10	HQAM	1	25	17.72	17.86	17.93	17.88	17.83	18.0	0	
10	HQAM	1	49	17.81	17.87	18.00	17.96	17.93			
10	HQAM	25	0	18.72	18.83	18.95	18.86	18.85			
10	HQAM	25	12	18.67	18.72	18.83	18.71	18.72	18	0.9	
10	HQAM	25	25	18.50	18.63	18.75	18.55	18.57			
10	HQAM	50	0	18.77	18.96	19.01	18.96	18.99			
10	HQAM	1	25	18.60	18.67	18.80	18.66	18.63	20	0.5	
10	HQAM	1	49	18.84	18.90	19.02	18.84	18.84			
10	HQAM	25	0	18.78	18.85	18.95	18.85	18.87			
10	HQAM	25	12	18.62	18.70	18.79	18.75	18.74	20	0.5	
10	HQAM	25	25	18.52	18.60	18.70	18.52	18.54			
10	HQAM	50	0	18.78	19.00	19.00	19.02	18.90			
10	HQAM	1	25	18.60	18.78	18.81	18.71	18.65	20	0.5	
10	HQAM	1	49	18.79	18.84	18.90	18.77	18.88			
10	HQAM	25	0	18.43	18.59	18.59	18.55	18.52			
10	HQAM	25	12	18.29	18.30	18.43	18.44	18.37			
10	HQAM	25	25	18.41	18.48	18.60	18.44	18.53			
10	HQAM	50	0	18.48	18.61	18.72	18.53	18.57			
10	HQAM	1	0	18.68	18.96	19.00	18.91	18.97	18	2.5	
10	HQAM	1	25	17.04	17.17	17.21	17.04	17.16			
10	HQAM	1	49	18.92	19.08	19.04	18.92	18.99			
10	HQAM	25	0	18.52	19.00	19.00	18.82	18.91	18	2.5	
10	HQAM	25	12	18.29	18.91	18.91	18.88	18.82			
10	HQAM	25	25	18.51	18.95	19.06	18.92	19.01			
10	HQAM	50	0	18.95	19.14	19.24	19.12	19.15			
Channel											
Frequency (MHz)				2498.5	2545.5	2593	2640.5	2687.5			
5	QPSK	1	0	18.85	18.94	19.05	18.87	18.94			
5	QPSK	1	18	18.69	18.80	18.91	18.81	18.80	20	0	
5	QPSK	1	24	18.78	18.89	18.94	18.75	18.86			
5	QPSK	12	0	18.91	19.02	19.04	18.87	18.96			
5	QPSK	12	7	18.77	18.88	18.95	18.87	18.89	20	0	
5	QPSK	12	13	18.86	18.96	19.00	18.82	18.91			
5	QPSK	25	0	18.79	18.91	19.01	18.88	18.92			
5	HQAM	1	0	18.81	18.93	19.03	18.96	19.01			
5	HQAM	1	12	18.69	18.88	18.94	18.85	18.82	20	0	
5	HQAM	1	24	18.85	18.99	19.01	18.83	18.93			
5	HQAM	12	0	18.77	18.85	18.94	18.84	18.86			
5	HQAM	12	7	18.61	18.69	18.79	18.75	18.76	20	0.5	
5	HQAM	12	13	18.64	18.67	18.83	18.72	18.75			
5	HQAM	25	0	18.77	19.02	18.99	19.03	18.91			
5	HQAM	1	0	18.90	19.00	19.05	18.99	19.00			
5	HQAM	1	12	18.71	18.78	18.83	18.71	18.66	20	0.5	
5	HQAM	1	24	18.79	18.84	19.00	18.78	18.88			
5	HQAM	12	0	18.42	18.50	18.60	18.44	18.52			
5	HQAM	12	7	18.47	18.52	18.74	18.53	18.57	20	0.5	
5	HQAM	12	13	18.40	18.49	18.61	18.46	18.54			
5	HQAM	25	0	18.62	18.90	19.00	18.88	18.97			
5	HQAM	25	12	18.38	18.90	19.00	18.81	18.91	18	2.5	
5	HQAM	25	25	18.62	19.07	19.13	18.97	19.06			
5	HQAM	50	0	18.95	19.17	19.24	19.13	19.16			

Band 41 HPUE Ant4											
RW (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 Hgt Ch / Freq	Power High Hgt Ch / Freq	Turn-up time (dBm)	MPR (dB)
Channel											
Frequency (MHz)				39790	40190	40600	4				



Band 42 FCC Part27Q Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3416	3500	3584			
20	QPSK	1	0	19.24	19.61	19.41	20	0	
20	QPSK	1	49	19.46	19.49	19.43			
20	QPSK	1	99	19.67	19.69	19.62			
20	QPSK	50	0	17.53	17.57	17.51			
20	QPSK	50	24	17.40	17.53	17.41	19	1	
20	QPSK	100	0	17.42	17.50	17.47			
20	HQAM	1	0	18.41	18.46	18.32	19	1	
20	HQAM	1	49	18.39	18.41	18.40			
20	HQAM	1	99	18.41	18.32	18.40			
20	HQAM	50	0	18.41	18.39	18.38			
20	HQAM	50	24	18.27	18.40	18.38	18	2	
20	HQAM	100	0	18.40	18.40	18.48			
20	HQAM	100	0	17.41	17.52	17.37			
20	HQAM	1	49	17.59	17.48	17.43	18	2	
20	HQAM	1	99	17.37	17.48	17.62			
20	HQAM	50	24	15.60	15.38	15.43	17	3	
20	HQAM	50	50	15.44	15.40	15.42			
20	HQAM	100	0	15.40	15.51	15.37			
20	HQAM	100	0	18.11	18.13	18.00			
20	ZSSBAM	1	49	18.02	18.02	18.02	19	1	
20	ZSSBAM	1	99	18.03	18.03	18.02			
20	ZSSBAM	50	0	18.02	18.02	18.02			
20	ZSSBAM	50	24	18.13	18.07	18.14	19	1	
20	ZSSBAM	50	50	18.17	18.09	18.09			
20	ZSSBAM	100	0	18.12	18.15	18.02			
Channel									
Frequency (MHz)				42166	42560	43015			
15	QPSK	1	0	19.13	19.33	19.30	20	0	
15	QPSK	1	37	19.36	19.39	19.40			
15	QPSK	1	74	19.37	19.47	19.49			
15	QPSK	36	0	17.69	17.62	17.47			
15	QPSK	36	20	17.33	17.48	17.36	19	1	
15	QPSK	36	39	17.28	17.46	17.48			
15	QPSK	75	0	17.27	17.38	17.42			
15	HQAM	1	0	18.31	18.40	18.29	19	1	
15	HQAM	1	37	18.31	18.27	18.30			
15	HQAM	1	74	18.27	18.20	18.30			
15	HQAM	36	0	16.28	16.45	16.33	18	2	
15	HQAM	36	20	16.28	16.33	16.37			
15	HQAM	36	39	16.33	16.42	16.35			
15	HQAM	75	0	16.33	16.44	16.29			
15	HQAM	75	0	17.28	17.42	17.28			
15	HQAM	1	37	17.38	17.44	17.34	18	2	
15	HQAM	1	74	17.34	17.33	17.38			
15	HQAM	36	20	15.39	15.29	15.29	17	3	
15	HQAM	36	39	15.38	15.38	15.38			
15	HQAM	75	0	15.29	15.44	15.25			
15	ZSSBAM	1	0	18.07	18.01	17.88	19	1	
15	ZSSBAM	1	37	18.03	17.85	17.88			
15	ZSSBAM	1	74	17.92	18.00	17.87			
15	ZSSBAM	36	0	17.07	18.17	18.07	19	1	
15	ZSSBAM	36	20	18.04	18.00	18.00			
15	ZSSBAM	36	39	18.04	18.00	18.04			
15	ZSSBAM	75	0	18.12	18.10	18.00			
Channel									
Frequency (MHz)				3415	3500	3545			
10	QPSK	1	0	19.42	19.44	19.37	20	0	
10	QPSK	1	25	19.42	19.44	19.32			
10	QPSK	1	49	19.29	19.48	19.43			
10	QPSK	12	7	17.54	17.48	17.46			
10	QPSK	25	12	17.31	17.42	17.32	19	1	
10	QPSK	25	25	17.29	17.48	17.34			
10	QPSK	50	0	17.33	17.38	17.36			
10	HQAM	1	0	18.30	18.39	18.21	19	1	
10	HQAM	1	25	18.29	18.28	18.28			
10	HQAM	1	49	18.29	18.29	18.32			
10	HQAM	25	0	16.33	16.44	16.24	18	2	
10	HQAM	25	12	16.38	16.31	16.38			
10	HQAM	25	25	16.30	16.38	16.41			
10	HQAM	50	0	16.41	16.39	16.22			
10	HQAM	1	0	17.33	17.38	17.36	18	2	
10	HQAM	1	25	17.28	17.34	17.35			
10	HQAM	1	49	17.28	17.39	17.27			
10	HQAM	25	0	15.30	15.40	15.40	17	3	
10	HQAM	25	12	15.43	15.33	15.37			
10	HQAM	25	25	15.36	15.28	15.28			
10	HQAM	50	0	15.24	15.45	15.25			
10	ZSSBAM	1	0	18.08	18.02	17.94	19	1	
10	ZSSBAM	1	25	18.00	17.96	18.08			
10	ZSSBAM	1	49	17.85	17.88	17.88			
10	ZSSBAM	25	0	17.06	18.12	17.87	19	1	
10	ZSSBAM	25	12	18.03	17.99	18.00			
10	ZSSBAM	25	25	18.04	18.02	17.94			
10	ZSSBAM	50	0	18.08	18.00	18.05			
Channel									
Frequency (MHz)				3433.5	3500	3547.5			
5	QPSK	1	0	19.18	19.54	19.36	20	0	
5	QPSK	1	12	19.40	19.42	19.37			
5	QPSK	1	24	19.38	19.50	19.45			
5	QPSK	12	7	17.48	17.38	17.48			
5	QPSK	12	7	17.54	17.48	17.38	19	1	
5	QPSK	25	13	17.31	17.42	17.37			
5	QPSK	25	0	17.28	17.44	17.41			
5	HQAM	1	0	18.35	18.39	18.27	19	1	
5	HQAM	1	12	18.33	18.38	18.35			
5	HQAM	1	24	18.28	18.25	18.35			
5	HQAM	12	7	16.35	16.42	16.29	18	2	
5	HQAM	12	0	16.35	16.42	16.29			
5	HQAM	12	7	16.41	16.34	16.33			
5	HQAM	12	31	16.34	16.40	16.41			
5	HQAM	25	0	16.41	16.40	16.32			
5	HQAM	1	0	17.35	17.46	17.32	18	2	
5	HQAM	1	12	17.53	17.41	17.38			
5	HQAM	1	24	17.30	17.38	17.37			
5	HQAM	12	0	15.31	15.46	15.43	17	3	
5	HQAM	12	7	15.44	15.32	15.37			
5	HQAM	12	13	15.38	15.34	15.35			
5	HQAM	25	0	15.35	15.45	15.30			
5	ZSSBAM	1	0	18.06	18.00	17.95	19	1	
5	ZSSBAM	1	12	18.02	18.00	18.04			
5	ZSSBAM	1	24	17.86	17.88	17.86			
5	ZSSBAM	12	0	18.01	18.14	18.05	19	1	
5	ZSSBAM	12	7	18.07	18.05	18.09			
5	ZSSBAM	12	13	18.12	18.00	18.09			
5	ZSSBAM	25	0	18.05	18.17	18.09			

Band 42 FCC Part96 Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				43190	43340	43490			
20	QPSK	1	0	19.12	19.23	19.27	20	0	
20	QPSK	1	49	19.37	19.38	19.31			
20	QPSK	1	99	19.31	19.47	19.45			
20	QPSK	50	0	17.38	17.53	17.37			
20	QPSK	50	24	17.33	17.42	17.32	19	1	
20	QPSK	100	0	17.38	17.44	17.32			
20	QPSK	100	0	17.30	17.42	17.38			
20	HQAM	1	0	18.33	18.35	18.25	19	1	
20	HQAM	1	49	18.24	18.30	18.29			
20	HQAM	1	99	18.27	18.17	18.27			
20	HQAM	50	0	18.34	18.45	18.31			
20	HQAM	50	24	18.17	18.34	18.32	18	2	
20	HQAM	100	0	18.28	18.36	18.34			
20	HQAM	100	0	17.34	17.42	17.35			
20	HQAM	1	49	17.27	17.42	17.33	18	2	
20	HQAM	1	99	17.92	17.38	17.34			
20	HQAM	50	24	15.25	15.43	15.28	17	3	
20	HQAM	50	50	15.39	15.27	15.30			
20	HQAM	100	0	15.33	15.34	15.25			
20	HQAM	100	0	18.33	18.44	18.28			
20	ZSSBAM	1	0	18.01	17.99	17.93	19	1	
20	ZSSBAM	1	49	17.95	17.95	17.99			
20	ZSSBAM	1	99	17.97					



Band 43 for FCC use Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.64	18.60	18.59	20	0	
20	QPSK	1	49	18.49	18.50	18.54			
20	QPSK	1	99	18.42	18.50	18.42			
20	QPSK	50	0	17.26	17.52	17.22			
20	QPSK	50	24	17.14	17.24	17.18	19	1	
20	QPSK	100	0	17.11	17.23	17.21			
20	QPSK	1	0	18.18	18.30	18.23			
20	HQAM	1	49	18.31	18.22	18.22	19	1	
20	HQAM	1	99	18.19	18.19	18.18			
20	HQAM	50	0	16.93	16.90	16.92			
20	HQAM	50	24	16.81	16.90	16.85	18	2	
20	HQAM	100	0	16.80	16.90	16.85			
20	HQAM	1	0	17.21	17.25	17.20			
20	HQAM	1	49	17.26	17.31	17.25	18	2	
20	HQAM	1	99	17.28	17.30	17.30			
20	HQAM	50	0	15.30	15.34	15.31			
20	HQAM	50	24	15.29	15.20	15.29			
20	HQAM	100	0	15.27	15.20	15.25	17	3	
20	HQAM	100	0	15.18	15.25	15.13			
20	ZSSQAM	1	0	17.13	17.27	17.15			
20	ZSSQAM	1	49	17.24	17.22	17.23	19	1	
20	ZSSQAM	1	99	17.22	17.21	17.14			
20	ZSSQAM	50	0	17.07	17.20	17.07			
20	ZSSQAM	50	24	17.24	17.21	17.20	19	1	
20	ZSSQAM	100	0	17.21	17.23	17.25			
Channel									
Frequency (MHz)									
15	QPSK	1	0	18.53	18.50	18.53	20	0	
15	QPSK	1	37	18.42	18.50	18.47			
15	QPSK	1	74	18.30	18.46	18.36			
15	QPSK	38	0	17.02	17.20	17.16			
15	QPSK	38	20	17.08	17.17	17.13	19	1	
15	QPSK	38	39	17.17	17.17	17.11			
15	QPSK	75	0	17.04	17.17	17.16			
15	HQAM	1	0	18.12	18.24	18.17			
15	HQAM	1	37	18.28	18.24	18.24	19	1	
15	HQAM	1	74	18.13	18.13	18.11			
15	HQAM	38	0	16.18	16.20	16.19			
15	HQAM	38	20	16.25	16.24	16.20	18	2	
15	HQAM	38	39	16.28	16.28	16.24			
15	HQAM	75	0	16.14	16.20	16.12			
15	HQAM	1	0	17.18	17.20	17.16			
15	HQAM	1	37	17.19	17.22	17.18	18	2	
15	HQAM	1	74	17.19	17.23	17.24			
15	HQAM	38	0	15.24	15.28	15.25			
15	HQAM	38	20	15.23	15.14	15.23	17	3	
15	HQAM	38	39	15.25	15.25	15.25			
15	HQAM	75	0	15.10	15.15	15.05			
15	ZSSQAM	1	0	17.07	17.22	17.09	19	1	
15	ZSSQAM	1	37	17.08	17.20	17.15			
15	ZSSQAM	1	74	17.16	17.14	17.08			
15	ZSSQAM	38	0	17.21	17.27	17.21	19	1	
15	ZSSQAM	38	20	17.19	17.25	17.25			
15	ZSSQAM	38	39	17.18	17.17	17.20			
15	ZSSQAM	75	0	17.12	17.16	17.13			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.46	18.40	18.44	20	0	
10	QPSK	1	25	18.43	18.49	18.40			
10	QPSK	1	49	18.39	18.46	18.36			
10	QPSK	12	7	17.08	17.18	17.16			
10	QPSK	25	12	17.08	17.18	17.11	19	1	
10	QPSK	25	25	17.11	17.20	17.12			
10	QPSK	50	0	16.82	17.00	16.88			
10	HQAM	1	0	18.12	18.23	18.17			
10	HQAM	1	25	18.17	18.18	18.19	19	1	
10	HQAM	1	49	18.13	18.12	18.12			
10	HQAM	25	0	16.18	16.29	16.21			
10	HQAM	25	12	16.26	16.14	16.20	18	2	
10	HQAM	25	25	16.28	16.24	16.20			
10	HQAM	50	0	16.14	16.19	16.11			
10	HQAM	1	0	17.08	17.20	17.14			
10	HQAM	1	25	17.21	17.24	17.19	18	2	
10	HQAM	1	49	17.18	17.25	17.24			
10	HQAM	25	0	15.23	15.28	15.25			
10	HQAM	25	12	15.22	15.14	15.22	17	3	
10	HQAM	25	25	15.21	15.14	15.18			
10	HQAM	50	0	15.11	15.20	15.09			
10	ZSSQAM	1	0	17.07	17.21	17.09	19	1	
10	ZSSQAM	1	25	17.08	17.17	17.07			
10	ZSSQAM	1	49	17.15	17.14	17.09			
10	ZSSQAM	25	0	17.22	17.20	17.21	19	1	
10	ZSSQAM	25	12	17.20	17.14	17.25			
10	ZSSQAM	25	25	17.15	17.17	17.19			
10	ZSSQAM	50	0	17.08	17.19	17.13			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.88	18.80	18.84	20	0	
5	QPSK	1	12	18.82	18.80	18.87			
5	QPSK	1	24	18.37	18.45	18.36			
5	QPSK	12	7	17.20	17.28	17.18			
5	QPSK	12	7	17.08	17.18	17.11	19	1	
5	QPSK	12	13	17.10	17.20	17.13			
5	QPSK	25	0	17.08	17.16	17.09			
5	HQAM	1	0	18.12	18.23	18.17			
5	HQAM	1	12	18.18	18.18	18.17	19	1	
5	HQAM	1	24	18.13	18.12	18.11			
5	HQAM	12	0	16.17	16.20	16.21			
5	HQAM	12	7	16.25	16.14	16.19	18	2	
5	HQAM	12	13	16.27	16.25	16.19			
5	HQAM	25	0	16.13	16.20	16.13			
5	HQAM	1	0	17.15	17.26	17.13			
5	HQAM	1	12	17.21	17.20	17.20	18	2	
5	HQAM	1	24	17.17	17.24	17.23			
5	HQAM	12	0	15.20	15.28	15.24			
5	HQAM	12	7	15.25	15.14	15.21	17	3	
5	HQAM	12	13	15.20	15.19	15.18			
5	HQAM	25	0	15.11	15.19	15.06			
5	ZSSQAM	1	0	17.07	17.22	17.09	19	1	
5	ZSSQAM	1	12	17.07	17.16	17.17			
5	ZSSQAM	1	24	17.15	17.16	17.09			
5	ZSSQAM	12	0	17.21	17.28	17.21	19	1	
5	ZSSQAM	12	7	17.18	17.15	17.24			
5	ZSSQAM	12	13	17.16	17.19	17.18	19	1	
5	ZSSQAM	25	0	17.08	17.18	17.12			

Band 48_FCC Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.10	18.12	18.11	20	0	
20	QPSK	1	49	18.08	18.25	18.16	18.11		
20	QPSK	1	99	18.01	18.05	18.01	18.00		
20	QPSK	50	0	17.54	17.02	17.49	17.43		
20	QPSK	50	24	17.41	17.58	17.43	17.44	19	1
20	QPSK	100	0	17.38	17.02	17.47	17.46		
20	QPSK	100	0	17.47	17.02	17.49	17.50		
20	HQAM	1	0	17.53	17.07	17.58	17.63	19	1
20	HQAM	1	49	17.52	17.01	17.65	17.64		
20	HQAM	1	99	17.56	17.01	17.59	17.61		
20	HQAM	50	0	16.34	16.46	16.36	16.35		
20	HQAM	50	24	16.34	16.35	16.35	16.35	18	2
20	HQAM	100	0	16.41	16.47	16.30	16.40		
20	HQAM	100	0	16.45	16.56	16.37	16.45		
20	HQAM	1	0	16.57	16.66	16.59	16.57		
20	HQAM	1	49	16.60	16.62	16.63	16.66	18	2
20	HQAM	1	99	16.62	16.55	16.54	16.55		
20	HQAM	50	0	15.36	15.46	15.35	15.35		
20	HQAM	50	24	15.31	15.33	15.38	15.42	17	3
20	HQAM	100	0	15.35	15.37	15.27	15.41		
20	HQAM	100	0	15.50	15.59	15.59	15.48		
20	ZSSQAM	1	0	17.32	17.41	17.38	17.37		
20	ZSSQAM	1	49	17.23	17.37	17.31	17.29	19	1
20	ZSSQAM	1	99	17.30	17.34	17.38	1		



Reduced Power Mode for OSG Standalone

GSM850 A-Net						
Tx Channel	Burst Average Power (dBm)			Frame Average Power (dBm)		
	194.2	194.4	194.6	194.2	194.4	194.6
Frequency (MHz)	814.2	814.4	814.6	814.2	814.4	814.6
DRM 1 Tx watt	32.81	32.85	32.87	33.50	33.81	33.93
OPRS 1 Tx watt	30.96	30.94	30.91	31.50	31.96	31.91
OPRS 2 Tx watt	28.18	28.80	29.49	30.50	29.18	29.49
OPRS 3 Tx watt	23.00	26.28	28.70	29.00	23.74	23.56
OPRS 4 Tx watt	21.99	26.02	28.37	27.00	22.90	22.97
EDGE 1 Tx watt	25.36	25.72	26.42	26.50	18.36	18.42
EDGE 2 Tx watt	23.76	23.97	23.72	24.00	17.76	17.72
EDGE 3 Tx watt	22.54	22.77	22.54	23.50	18.28	18.31
EDGE 4 Tx watt	20.46	20.85	20.46	21.50	17.46	17.48

  

WCDMA V A-Net						
Tx Channel	Burst Average Power (dBm)			Frame Average Power (dBm)		
	4152	4152	4233	4152	4152	4233
Frequency (MHz)	814.2	814.4	814.6	814.2	814.4	814.6
3GPP Rel99	AMR 12.2kps	23.88	24.13	23.98	25.00	25.00
3GPP Rel99	AMR 12.2kps	23.92	24.20	24.02	25.00	25.00
3GPP Rel6	HSPA Subclass-1	22.50	23.27	23.15	24.00	24.00
3GPP Rel6	HSPA Subclass-2	22.32	23.11	23.18	24.00	24.00
3GPP Rel6	HSPA Subclass-3	21.34	22.11	22.31	23.00	23.00
3GPP Rel6	HSPA Subclass-4	22.42	22.71	22.82	23.00	23.00
3GPP Rel6	DC-HSPA Subclass-1	23.92	23.78	23.98	24.00	24.00
3GPP Rel6	DC-HSPA Subclass-2	22.81	23.07	23.07	24.00	24.00
3GPP Rel6	DC-HSPA Subclass-3	21.54	22.01	22.62	23.00	23.00
3GPP Rel6	DC-HSPA Subclass-4	22.30	22.69	22.46	23.00	23.00
3GPP Rel6	HSPA Subclass-1	22.84	23.11	23.00	24.00	24.00
3GPP Rel6	HSPA Subclass-2	21.01	21.52	21.95	22.00	22.00
3GPP Rel6	HSPA Subclass-3	21.92	22.17	22.01	23.00	23.00
3GPP Rel6	HSPA Subclass-4	20.72	21.08	21.08	22.00	22.00
3GPP Rel6	HSPA Subclass-5	22.89	23.23	23.12	24.00	24.00





COMTDD Avg									
Tx Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)	
	952	961	810		952	961	810		
FRM1 Tx slot	20.31	20.34	20.40	20.60	20.31	20.34	20.40	21.00	
OPRS 1 Tx slot	20.34	20.47	20.43	20.60	20.34	20.47	20.43	21.00	
OPRS 2 Tx slot	20.60	20.64	20.72	20.70	20.60	20.64	20.72	21.00	
OPRS 3 Tx slot	24.42	24.35	24.48	25.50	25.16	25.09	25.22	21.24	
OPRS 4 Tx slot	21.64	21.60	21.80	23.00	21.64	21.60	21.80	20.00	
EDGE 1 Tx slot	23.82	23.87	23.88	25.00	14.82	14.87	14.89	16.00	
EDGE 2 Tx slot	23.70	22.30	23.73	23.00	18.70	18.74	18.75	17.00	
EDGE 3 Tx slot	20.90	20.68	20.95	22.00	18.64	18.72	18.69	17.74	
EDGE 4 Tx slot	18.75	18.88	18.81	20.00	12.75	15.83	15.81	17.00	
WCDMA II Avg									
Tx Channel	WCDMA II Avg			Tune-up Limit (dBm)	WCDMA IV Avg			Tune-up Limit (dBm)	
	952	960	958		1512	1513	1513		
FRM1 Tx slot	20.24	20.24	20.24	21.00	20.24	20.24	20.24	21.00	
OPRS 1 Tx slot	21.84	21.84	21.84	23.00	21.84	21.84	21.84	21.80	
OPRS 2 Tx slot	21.84	21.84	21.84	23.00	21.84	21.84	21.84	21.80	
OPRS 3 Tx slot	20.85	20.73	20.71	22.00	20.85	20.67	20.64	21.80	
OPRS 4 Tx slot	20.02	20.28	20.18	21.00	20.02	20.31	20.09	21.80	
EDGE 1 Tx slot	20.12	20.15	20.12	22.00	20.08	20.07	20.06	21.80	
EDGE 2 Tx slot	20.85	20.85	20.85	22.00	20.85	20.75	20.75	21.80	
EDGE 3 Tx slot	20.40	20.50	20.60	21.00	20.30	20.31	20.50	21.30	
EDGE 4 Tx slot	20.33	20.20	20.07	21.00	20.14	20.09	19.83	21.30	
EDGE 5 Tx slot	21.84	21.71	21.83	22.00	21.75	21.71	21.48	21.80	
EDGE 6 Tx slot	18.54	18.67	18.65	20.00	18.25	18.72	18.45	19.80	
EDGE 7 Tx slot	20.69	20.70	20.40	21.00	20.73	20.68	20.37	20.80	
EDGE 8 Tx slot	18.78	18.72	18.73	20.00	18.52	18.75	18.67	19.80	
EDGE 9 Tx slot	21.95	21.75	21.76	22.00	21.90	21.68	21.56	21.80	



Band 5 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up limit (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.60	22.73	22.68				
10	QPSK	1	25	22.54	22.67	22.61			24	0
10	QPSK	1	49	22.50	22.64	22.55				
10	QPSK	25	0	21.69	21.72	21.62				
10	QPSK	25	12	21.64	21.67	21.61			23	1
10	QPSK	25	25	21.63	21.66	21.61				
10	QPSK	50	0	21.61	21.65	21.59				
10	HQAM	1	0	21.69	21.67	21.61			23	1
10	HQAM	1	25	21.41	21.52	21.38				
10	HQAM	1	49	21.54	21.60	21.45				
10	HQAM	25	0	20.47	20.55	20.43			22	2
10	HQAM	25	12	20.35	20.40	20.35				
10	HQAM	25	25	20.50	20.60	20.50				
10	HQAM	50	0	20.54	20.68	20.59				
10	HQAM	1	0	20.51	20.59	20.54			22	2
10	HQAM	1	25	20.45	20.51	20.47				
10	HQAM	1	49	20.66	20.65	20.59				
10	HQAM	25	0	19.47	19.53	19.40			21	3
10	HQAM	25	12	19.52	19.58	19.56				
10	HQAM	25	25	19.44	19.49	19.35				
10	HQAM	50	0	19.50	19.62	19.54				
10	SSBQAM	1	25	17.46	17.54	17.44			19	5
10	SSBQAM	1	25	17.44	17.48	17.40				
10	SSBQAM	1	49	17.49	17.62	17.52				
10	SSBQAM	25	0	17.64	17.68	17.64			19	5
10	SSBQAM	25	12	17.50	17.83	17.50				
10	SSBQAM	25	25	17.50	17.68	17.44				
10	SSBQAM	50	0	17.54	17.67	17.50				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.54	22.66	22.64				
5	QPSK	1	12	22.39	22.48	22.44			24	0
5	QPSK	1	24	22.45	22.54	22.47				
5	QPSK	12	0	21.60	21.68	21.56				
5	QPSK	12	7	21.50	21.44	21.39			23	1
5	QPSK	12	13	21.45	21.52	21.51				
5	QPSK	25	0	21.60	21.64	21.60				
5	HQAM	1	0	21.53	21.58	21.52			23	1
5	HQAM	1	12	21.31	21.46	21.32				
5	HQAM	1	24	21.47	21.48	21.44				
5	HQAM	12	0	20.43	20.51	20.37			22	2
5	HQAM	12	7	20.25	20.36	20.21				
5	HQAM	12	13	20.41	20.48	20.39				
5	HQAM	25	0	20.46	20.68	20.46				
5	HQAM	1	0	20.38	20.54	20.48			22	2
5	HQAM	1	12	20.21	20.35	20.28				
5	HQAM	1	24	20.43	20.55	20.47				
5	HQAM	12	0	19.38	19.40	19.25			21	3
5	HQAM	12	7	19.47	19.47	19.21				
5	HQAM	12	13	19.39	19.41	19.24				
5	HQAM	25	0	19.38	19.52	19.39				
5	SSBQAM	1	12	17.40	17.48	17.40			19	5
5	SSBQAM	1	12	17.40	17.40	17.31				
5	SSBQAM	1	24	17.45	17.55	17.45				
5	SSBQAM	12	0	17.45	17.45	17.45			19	5
5	SSBQAM	12	7	17.44	17.60	17.45				
5	SSBQAM	12	13	17.45	17.50	17.35				
5	SSBQAM	25	0	17.54	17.60	17.48				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.44	22.53	22.57				
3	QPSK	1	8	22.42	22.53	22.41			24	0
3	QPSK	1	14	22.36	22.60	22.51				
3	QPSK	8	0	21.66	21.66	21.66				
3	QPSK	8	4	21.39	21.49	21.34			23	1
3	QPSK	8	7	21.40	21.55	21.57				
3	HQAM	1	0	21.67	21.66	21.66				
3	HQAM	1	8	21.49	21.56	21.52			23	1
3	HQAM	1	14	21.34	21.41	21.31				
3	HQAM	8	0	20.41	20.49	20.35				
3	HQAM	8	4	20.21	20.40	20.21			22	2
3	HQAM	8	7	20.35	20.51	20.47				
3	HQAM	15	0	20.48	20.61	20.50				
3	HQAM	1	0	20.47	20.44	20.45			22	2
3	HQAM	1	8	20.33	20.40	20.33				
3	HQAM	1	14	20.43	20.62	20.43				
3	HQAM	8	0	19.35	19.40	19.23			21	3
3	HQAM	8	4	19.38	19.52	19.23				
3	HQAM	8	7	19.36	19.39	19.23				
3	HQAM	15	0	19.37	19.54	19.46				
3	SSBQAM	1	0	17.36	17.41	17.34			19	5
3	SSBQAM	1	8	17.37	17.38	17.22				
3	SSBQAM	1	14	17.40	17.57	17.37				
3	SSBQAM	8	0	17.29	17.41	17.25			19	5
3	SSBQAM	8	4	17.39	17.59	17.47				
3	SSBQAM	8	7	17.40	17.52	17.40				
3	SSBQAM	15	0	17.47	17.60	17.46				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.54	22.70	22.62				
1.4	QPSK	1	3	22.40	22.50	22.49			24	0
1.4	QPSK	1	5	22.35	22.59	22.41				
1.4	QPSK	3	0	22.64	22.67	22.64				
1.4	QPSK	3	1	22.35	22.43	22.39			23	1
1.4	QPSK	3	1	22.41	22.52	22.48				
1.4	QPSK	6	0	21.48	21.56	21.48			23	1
1.4	HQAM	1	0	21.48	21.52	21.58				
1.4	HQAM	1	3	21.32	21.45	21.29				
1.4	HQAM	1	5	21.48	21.52	21.40				
1.4	HQAM	3	0	21.37	21.47	21.37			23	1
1.4	HQAM	3	1	21.32	21.42	21.20				
1.4	HQAM	3	3	21.35	21.48	21.43				
1.4	HQAM	6	0	20.43	20.56	20.49			22	2
1.4	HQAM	1	0	20.37	20.55	20.45				
1.4	HQAM	1	3	20.40	20.49	20.39			22	2
1.4	HQAM	1	5	20.41	20.61	20.39				
1.4	HQAM	3	0	20.32	20.49	20.32				
1.4	HQAM	1	0	20.48	20.48	20.50			21	3
1.4	HQAM	3	3	20.39	20.40	20.28				
1.4	HQAM	6	0	19.40	19.39	19.46				
1.4	SSBQAM	1	0	17.40	17.47	17.35			19	5
1.4	SSBQAM	1	3	17.40	17.40	17.36				
1.4	SSBQAM	1	5	17.43	17.49	17.36				
1.4	SSBQAM	3	0	17.28	17.36	17.41			19	5
1.4	SSBQAM	3	1	17.41	17.52	17.45				
1.4	SSBQAM	3	3	17.44	17.42	17.25			19	5
1.4	SSBQAM	6	0	17.54	17.57	17.45				

Band 10 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up limit (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.78	22.98	22.85				
10	QPSK	1	25	22.71	22.81	22.71			24	0
10	QPSK	1	49	22.79	22.91	22.87				
10	QPSK	25	0	21.74	21.99	21.82				
10	QPSK	25	12	21.74	21.85	21.65			23	1
10	QPSK	25	25	21.74	21.83	21.74				
10	QPSK	50	0	21.86	21.91	21.86				
10	HQAM	1	0	21.93	21.92	21.90			23	1
10	HQAM	1	25	21.75	21.89	21.75				
10	HQAM	1	49	21.86	21.93	21.83				
10	HQAM	25	0	20.92	20.97	20.91			22	2
10	HQAM	25	12	20.90	20.95	20.87				
10	HQAM	25	25	20.76	20.84	20.71				
10	HQAM	50	0	20.78	20.85	20.82			22	2
10	HQAM	1	25	20.76	20.90	20.85				
10	HQAM	1	49	20.72	20.82	20.77				
10	HQAM	25	0							





Band 17 Ant0														
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Mid Ch / Freq.	Power High Ch / Freq.	Turn-up time (sec)	MPE (dB)						
Channel														
				709	710	711								
10	QPSK	1	0	22.86	22.96	22.92	24	0						
10	QPSK	1	25	22.77	22.86	22.82								
10	QPSK	1	49	22.75	22.81	22.68								
10	QPSK	25	0	21.92	21.94	21.84								
10	QPSK	25	12	21.78	21.90	21.83								
10	QPSK	25	25	21.71	21.85	21.79								
10	QPSK	50	0	21.80	21.86	21.77			23	1				
10	16QAM	1	0	22.05	22.04	22.04								
10	16QAM	1	25	21.83	21.98	21.90								
10	16QAM	1	49	21.83	21.91	21.87								
10	16QAM	25	0	20.81	20.95	20.82								
10	16QAM	25	12	20.71	20.82	20.78								
10	16QAM	25	25	20.79	20.87	20.80								
10	16QAM	50	0	20.81	20.91	20.82								
10	16QAM	1	0	21.00	21.04	21.00								
10	16QAM	1	25	20.89	20.94	20.86								
10	16QAM	1	49	20.82	20.87	20.79	22	2						
10	16QAM	25	0	19.84	19.78	19.65								
10	16QAM	25	12	19.79	19.86	19.73								
10	16QAM	25	25	19.87	19.71	19.87								
10	16QAM	50	0	19.75	19.89	19.85								
10	16QAM	1	0	17.89	18.01	17.88								
10	16QAM	1	25	17.89	17.94	17.88								
10	16QAM	1	49	17.71	17.86	17.78								
10	16QAM	25	0	17.81	17.99	17.88								
10	16QAM	25	12	17.74	17.84	17.75								
10	16QAM	25	25	17.66	17.79	17.75	19	5						
10	16QAM	50	0	17.70	17.83	17.85								
Channel														
				706.5	713	713.5			Turn-up time (sec)	MPE (dB)				
5	QPSK	1	0	22.71	22.85	22.83			24	0				
5	QPSK	1	24	22.70	22.71	22.71								
5	QPSK	12	0	21.76	21.90	21.80								
5	QPSK	12	7	21.67	21.79	21.71								
5	QPSK	12	13	21.65	21.75	21.66					23	1		
5	QPSK	25	0	21.60	21.77	21.64								
5	16QAM	1	0	21.86	21.97	21.85								
5	16QAM	1	12	21.69	21.89	21.84								
5	16QAM	1	24	21.78	21.89	21.75								
5	16QAM	12	0	20.67	20.91	20.77								
5	16QAM	12	7	20.64	20.70	20.64								
5	16QAM	12	13	20.80	20.88	20.83								
5	16QAM	25	0	20.75	20.78	20.78								
5	16QAM	1	0	20.90	20.95	20.90	22	2						
5	16QAM	1	12	20.80	20.84	20.83								
5	16QAM	1	24	20.68	20.81	20.69								
5	16QAM	12	0	19.53	19.66	19.61								
5	16QAM	12	7	19.58	19.63	19.64								
5	16QAM	12	13	19.60	19.62	19.53								
5	16QAM	25	0	19.61	19.78	19.77								
5	16QAM	1	0	17.84	17.92	17.79								
5	16QAM	1	12	17.75	17.85	17.75								
5	16QAM	1	24	17.58	17.76	17.63								
5	16QAM	12	0	17.76	17.77	17.54								
5	16QAM	12	7	17.60	17.75	17.63	19	5						
5	16QAM	12	13	17.57	17.65	17.71								
5	16QAM	25	0	17.72	17.86	17.78								

Band 26 for FCC Ant0												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Mid Ch / Freq.	Power High Ch / Freq.	Turn-up time (sec)	MPE (dB)				
Channel												
				811.5	811.5	811.5						
15	QPSK	1	0	22.58	22.77	22.67	24	0				
15	QPSK	1	37	22.47	22.57	22.52						
15	QPSK	1	74	22.59	22.63	22.54						
15	QPSK	36	0	21.51	21.63	21.60						
15	QPSK	36	20	21.60	21.58	21.60			23	1		
15	QPSK	36	39	21.40	21.54	21.46						
15	QPSK	75	0	21.59	21.67	21.57						
15	QPSK	1	0	21.72	21.80	21.75						
15	16QAM	1	37	21.58	21.71	21.63						
15	16QAM	1	74	21.65	21.68	21.53						
15	16QAM	36	0	20.49	20.52	20.48						
15	16QAM	36	20	20.58	20.73	20.52						
15	16QAM	36	39	20.64	20.67	20.61						
15	16QAM	75	0	20.59	20.68	20.58	22	2				
15	16QAM	1	0	20.88	20.72	20.60						
15	16QAM	1	37	20.55	20.64	20.54						
15	16QAM	1	74	20.65	20.76	20.76						
15	16QAM	36	0	19.54	19.53	19.56						
15	16QAM	36	20	19.62	19.74	19.61						
15	16QAM	36	39	19.64	19.63	19.64						
15	16QAM	75	0	19.50	19.54	19.51						
15	16QAM	1	0	17.60	17.71	17.68			21	3		
15	16QAM	1	37	17.56	17.61	17.55						
15	16QAM	1	74	17.59	17.67	17.57						
15	16QAM	36	0	17.62	17.63	17.58						
15	16QAM	36	20	17.65	17.72	17.65						
15	16QAM	36	39	17.62	17.65	17.61						
15	16QAM	75	0	17.62	17.68	17.65						
Channel												
				813	813.5	814	Turn-up time (sec)	MPE (dB)				
10	QPSK	1	0	22.40	22.72	22.60	24	0				
10	QPSK	1	25	22.59	22.44	22.48						
10	QPSK	1	49	22.56	22.51	22.40						
10	QPSK	25	0	21.37	21.54	21.37						
10	QPSK	25	12	21.40	21.48	21.41			23	1		
10	QPSK	25	25	21.34	21.48	21.41						
10	QPSK	50	0	21.44	21.52	21.46						
10	16QAM	1	0	21.61	21.68	21.65						
10	16QAM	1	25	21.52	21.67	21.54						
10	16QAM	1	49	21.62	21.66	21.66						
10	16QAM	25	0	20.42	20.58	20.48						
10	16QAM	25	12	20.64	20.59	20.49						
10	16QAM	25	25	20.58	20.56	20.55						
10	16QAM	50	0	20.44	20.53	20.48	22	2				
10	16QAM	1	0	20.55	20.60	20.51						
10	16QAM	1	25	20.52	20.55	20.46						
10	16QAM	1	49	20.57	20.55	20.57						
10	16QAM	25	0	19.59	19.56	19.52						
10	16QAM	25	12	19.58	19.59	19.58						
10	16QAM	25	25	19.53	19.54	19.43						
10	16QAM	50	0	19.41	19.66	19.40						
10	16QAM	1	0	17.57	17.62	17.58						
10	16QAM	1	25	17.52	17.52	17.42			19	5		
10	16QAM	1	49	17.45	17.63	17.44						
10	16QAM	25	0	17.42	17.55	17.48						
10	16QAM	25	12	17.51	17.57	17.52						
10	16QAM	25	25	17.43	17.52	17.48						
10	16QAM	50	0	17.53	17.60	17.48						
Channel												
				811.5	811.5	811.5	Turn-up time (sec)	MPE (dB)				
5	QPSK	1	0	22.47	22.54	22.51	24	0				
5	QPSK	1	12	22.36	22.47	22.48						
5	QPSK	1	24	22.55	22.50	22.47						
5	QPSK	12	0	21.37	21.51	21.46						
5	QPSK	12	7	21.40	21.47	21.43			23	1		
5	QPSK	12	13	21.28	21.45	21.38						
5	QPSK	25	0	21.48	21.61	21.54						
5	16QAM	1	0	21.63	21.68	21.58						
5	16QAM	1	12	21.52	21.60	21.52						
5	16QAM	1	24	21.67	21.65	21.66						
5	16QAM	12	0	20.37	20.53	20.47						
5	16QAM	12	7	20.65	20.67	20.53						
5	16QAM	12	13	20.59	20.59	20.51						
5	16QAM	25	0	20.49	20.53	20.42	22	2				
5	16QAM	1	0	20.59	20.60	20.56						
5	16QAM	1	12	20.44	20.54	20.48						
5	16QAM	1	24	20.67	20.68	20.65						
5	16QAM	12	0	19.44	19.57	19.44						
5	16QAM	12	7	19.51	19.53	19.52						
5	16QAM	12	13	19.55	19.59	19.41						
5	16QAM	25	0	19.45	19.57	19.41						
5	16QAM	1	0	17.49	17.67	17.54						
5	16QAM	1	12	17.45	17.46	17.42			19	5		
5	16QAM	1	24	17.49	17.58	17.45						
5	16QAM	12	0	17.42	17.53	17.48						
5	16QAM	12	7	17.54	17.69	17.51						
5	16QAM	12	13	17.46	17.59	17.51						
5	16QAM											



Band 2 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Hd./Ch./F.Freq.	Power Hd./F.Freq.	Turn-up Time (min)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	17.21	17.26	17.16				
20	QPSK	1	49	17.17	17.22	17.12			18.4	0
20	QPSK	1	99	17.05	17.14	17.03				
20	QPSK	50	0	17.23	17.26	17.12				
20	QPSK	13	24	17.13	17.22	17.14			18.4	0
20	QPSK	50	17	17.10	17.25	17.11				
20	QPSK	100	0	17.02	17.16	17.03				
20	QPSK	100	17	17.19	17.14	17.02			18.4	0
20	16QAM	1	49	17.06	17.18	17.08			18.4	0
20	16QAM	1	99	17.11	17.20	17.13				
20	16QAM	50	0	17.17	17.25	17.18			18.4	0
20	16QAM	50	24	17.02	17.12	17.09				
20	16QAM	50	39	17.19	17.24	17.19			18.4	0
20	16QAM	100	0	17.05	17.21	17.11				
20	16QAM	100	0	17.07	17.12	17.01			18.4	0
20	16QAM	1	49	17.05	17.15	17.05				
20	16QAM	1	99	16.99	17.13	17.05			18.4	0
20	16QAM	50	24	17.04	17.14	17.01				
20	16QAM	50	39	17.07	17.20	17.15			18.4	0
20	16QAM	100	0	17.03	17.17	17.11				
20	256QAM	1	49	15.97	16.03	15.93			17.5	1.4
20	256QAM	1	99	15.98	16.11	16.04				
20	256QAM	50	24	15.96	16.02	15.93			17.5	1.4
20	256QAM	50	39	15.91	15.94	15.85				
20	256QAM	100	0	15.93	15.98	15.86			17.5	1.4
20	256QAM	100	0	15.92	16.00	15.90				
Channel										
Frequency (MHz)										
15	QPSK	1	0	17.08	17.13	17.08				
15	QPSK	1	37	17.07	17.12	17.02			18.4	0
15	QPSK	1	74	16.98	17.01	16.98				
15	QPSK	36	0	17.16	17.22	17.08				
15	QPSK	36	13	17.08	17.14	17.03			18.4	0
15	QPSK	36	39	16.97	17.14	16.99				
15	QPSK	75	0	16.96	17.09	16.92				
15	16QAM	1	37	16.98	17.07	16.91			18.4	0
15	16QAM	1	74	17.01	17.05	16.98				
15	16QAM	36	0	17.08	17.22	17.11			18.4	0
15	16QAM	36	20	16.95	17.06	16.93				
15	16QAM	36	29	16.96	17.03	16.92			18.4	0
15	16QAM	75	0	17.03	17.09	17.04				
15	16QAM	75	0	17.05	17.11	17.01			18.4	0
15	16QAM	1	74	16.97	17.13	17.05				
15	16QAM	36	0	16.98	17.07	16.98			18.4	0
15	16QAM	36	20	16.96	17.04	16.93				
15	16QAM	36	29	16.91	17.05	16.92			18.4	0
15	16QAM	75	0	17.01	17.07	17.05				
15	16QAM	75	0	17.03	17.13	17.05			18.4	0
15	256QAM	1	37	15.93	15.95	15.88			17.5	1.4
15	256QAM	1	74	15.91	16.02	15.96				
15	256QAM	50	24	15.89	15.94	15.86			17.5	1.4
15	256QAM	50	39	15.84	15.85	15.75				
15	256QAM	100	0	15.74	15.92	15.72			17.5	1.4
15	256QAM	100	0	15.76	15.92	15.72				
Channel										
Frequency (MHz)										
10	QPSK	1	0	17.03	17.08	17.03				
10	QPSK	1	25	17.03	17.16	17.04			18.4	0
10	QPSK	1	49	16.99	17.00	16.99				
10	QPSK	12	13	17.07	17.20	17.08			18.4	0
10	QPSK	25	12	17.07	17.20	17.08				
10	QPSK	25	25	16.96	17.17	17.00			18.4	0
10	QPSK	50	0	17.02	17.08	17.00				
10	16QAM	1	0	17.00	17.00	16.90			18.4	0
10	16QAM	1	26	16.99	17.14	16.96				
10	16QAM	25	12	17.08	17.21	17.09			18.4	0
10	16QAM	25	12	17.09	17.22	17.11				
10	16QAM	50	0	17.02	17.07	17.05			18.4	0
10	16QAM	50	0	17.05	17.05	16.98				
10	16QAM	100	0	16.98	17.05	16.98			18.4	0
10	16QAM	100	0	16.97	17.13	17.05				
10	16QAM	25	12	17.04	17.06	17.00			18.4	0
10	16QAM	25	12	17.07	17.13	17.04				
10	16QAM	50	0	16.99	17.11	17.01			18.4	0
10	16QAM	50	25	16.95	17.13	17.02				
10	16QAM	100	0	16.97	17.13	17.02			18.4	0
10	16QAM	100	0	16.96	17.05	16.92				
10	256QAM	1	24	15.93	15.92	15.83			17.5	1.4
10	256QAM	1	49	15.93	15.94	15.86				
10	256QAM	50	12	15.92	15.98	15.85			17.5	1.4
10	256QAM	50	12	15.89	15.93	15.82				
10	256QAM	100	0	15.78	15.92	15.80			17.5	1.4
10	256QAM	100	0	15.78	15.90	15.83				
Channel										
Frequency (MHz)										
5	QPSK	1	0	17.02	17.05	17.02				
5	QPSK	1	12	17.05	17.19	16.96			18.4	0
5	QPSK	1	24	16.99	17.02	16.93				
5	QPSK	12	13	17.09	17.20	17.08			18.4	0
5	QPSK	12	13	17.01	17.13	17.02				
5	QPSK	25	12	16.93	17.03	16.90			18.4	0
5	16QAM	1	0	16.98	17.05	16.92			18.4	0
5	16QAM	1	12	17.01	17.08	16.92				
5	16QAM	12	13	17.08	17.21	17.04			18.4	0
5	16QAM	25	0	17.09	17.13	17.02				
5	16QAM	25	0	16.99	17.00	16.92			18.4	0
5	16QAM	50	0	16.96	17.13	17.02				
5	256QAM	1	12	15.93	15.94	15.86			17.5	1.4
5	256QAM	1	24	15.95	16.02	15.92				
5	256QAM	50	12	15.90	15.95	15.89			17.5	1.4
5	256QAM	50	12	15.87	15.91	15.83				
5	256QAM	100	0	15.76	15.90	15.83			17.5	1.4
5	256QAM	100	0	15.76	15.91	15.82				
Channel										
Frequency (MHz)										
3	QPSK	1	0	17.07	17.23	17.03				
3	QPSK	1	8	17.08	17.22	16.97			18.4	0
3	QPSK	1	14	17.02	17.04	16.99				
3	QPSK	13	13	17.13	17.21	17.01			18.4	0
3	QPSK	8	4	17.01	17.21	17.06				
3	QPSK	8	7	17.05	17.16	17.05			18.4	0
3	16QAM	1	0	17.00	17.00	16.98				
3	16QAM	1	8	16.99	17.04	16.93			18.4	0
3	16QAM	1	14	16.98	17.07	16.95				
3	16QAM	8	4	16.98	17.09	16.94			18.4	0
3	16QAM	8	7	16.94	17.01	16.91				
3	16QAM	15	0	16.99	17.14	16.97			18.4	0
3	16QAM	15	0	16.96	17.08	16.96				
3	16QAM	8	7	16.94	17.06	16.94			18.4	0
3	16QAM	8	7	17.04	17.17	17.12				
3	256QAM	1	0	15.95	16.06	15.94			17.5	1.4
3	256QAM	1	8	15.91	15.96	15.82				
3	256QAM	50	0	15.92	16.04	15.93			17.5	1.4
3	256QAM	50	0	15.78	15.90	15.82				
3	256QAM	100	0	15.76	15.91	15.82			17.5	1.4
3	256QAM	100	0	15.76	15.90	15.82				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	17.14	17.22	17.10				
1.4	QPSK	1	3	17.04	17.15	17.07			18.4	0
1.4	QPSK	1	15	16.97	17.11	16.90				
1.4	QPSK	3	3	17.01	17.20	17.04			18.4	0
1.4	QPSK	3	3	17.01	17.10	16.90				
1.4	QPSK	6	0	16.96	17.10	16.88				



Band 12 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.58	22.79	22.82	24	0		
10	QPSK	1	25	22.62	22.83	22.86				
10	QPSK	1	49	22.86	22.70	22.57				
10	QPSK	25	0	21.68	21.71	21.64				
10	QPSK	25	12	21.64	21.68	21.68				
10	QPSK	25	25	21.62	21.66	21.62				
10	QPSK	50	0	21.60	21.67	21.63	23	1		
10	QPSK	1	0	21.70	21.75	21.84				
10	HQAM	1	25	21.54	21.53	21.51	23	1		
10	HQAM	1	49	21.57	21.59	21.63				
10	HQAM	25	0	20.83	20.70	20.66				
10	HQAM	25	12	20.83	20.74	20.83	22	2		
10	HQAM	25	25	20.88	20.78	20.72				
10	HQAM	50	0	20.84	20.73	20.69				
10	HQAM	1	0	20.80	20.89	20.83	22	2		
10	HQAM	1	25	20.87	20.77	20.84				
10	HQAM	1	49	20.83	20.89	20.84				
10	HQAM	25	0	19.62	19.85	19.54				
10	HQAM	25	12	19.62	19.70	19.66	21	3		
10	HQAM	25	25	19.51	19.59	19.55				
10	HQAM	50	0	19.62	19.70	19.62				
10	HQAM	1	25	17.51	17.65	17.56	19	5		
10	HQAM	1	49	17.54	17.66	17.62				
10	HQAM	25	0	17.66	17.64	17.64				
10	HQAM	25	12	17.59	17.74	17.63	19	5		
10	HQAM	25	25	17.66	17.62	17.58				
10	HQAM	50	0	17.60	17.67	17.63				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.47	22.70	22.49	24	0		
5	QPSK	1	12	22.40	22.58	22.51				
5	QPSK	1	24	22.42	22.56	22.41				
5	QPSK	12	0	21.63	21.68	21.50				
5	QPSK	12	7	21.49	21.62	21.52				
5	QPSK	12	13	21.53	21.56	21.49	23	1		
5	QPSK	25	0	21.56	21.56	21.52				
5	QPSK	1	0	21.58	21.64	21.67				
5	HQAM	1	12	21.46	21.51	21.39	23	1		
5	HQAM	1	25	20.83	20.86	20.82				
5	HQAM	12	0	20.48	20.66	20.52				
5	HQAM	12	7	20.55	20.68	20.49	22	2		
5	HQAM	12	13	20.53	20.57	20.52				
5	HQAM	25	0	20.59	20.61	20.59				
5	HQAM	1	0	20.74	20.81	20.78	22	2		
5	HQAM	1	12	20.47	20.54	20.47				
5	HQAM	1	24	20.52	20.63	20.50				
5	HQAM	12	0	19.45	19.51	19.50				
5	HQAM	12	7	19.44	19.62	19.49	21	3		
5	HQAM	12	13	19.49	19.51	19.41				
5	HQAM	25	0	19.57	19.60	19.49				
5	HQAM	1	12	17.36	17.54	17.42	19	5		
5	HQAM	1	24	17.45	17.58	17.56				
5	HQAM	12	0	17.46	17.54	17.46				
5	HQAM	12	7	17.48	17.68	17.48	19	5		
5	HQAM	12	13	17.42	17.53	17.49				
5	HQAM	25	0	17.44	17.57	17.48				
Channel										
Frequency (MHz)										
3	QPSK	1	0	22.61	22.75	22.65	24	0		
3	QPSK	1	8	22.39	22.51	22.48				
3	QPSK	1	14	22.44	22.63	22.52				
3	QPSK	8	0	21.60	21.59	21.59				
3	QPSK	8	4	21.43	21.59	21.49	23	1		
3	QPSK	8	7	21.66	21.62	21.50				
3	QPSK	15	0	21.64	21.66	21.62				
3	HQAM	1	0	21.62	21.67	21.54				
3	HQAM	1	8	21.44	21.60	21.38	23	1		
3	HQAM	1	14	21.61	21.64	21.55				
3	HQAM	8	0	20.59	20.62	20.60				
3	HQAM	8	4	20.55	20.65	20.58	22	2		
3	HQAM	8	7	20.57	20.66	20.65				
3	HQAM	15	0	20.51	20.67	20.58				
3	HQAM	1	0	20.78	20.80	20.77	22	2		
3	HQAM	1	8	20.55	20.70	20.54				
3	HQAM	1	14	20.54	20.64	20.55				
3	HQAM	8	0	19.41	19.58	19.47				
3	HQAM	8	4	19.49	19.67	19.61	21	3		
3	HQAM	8	7	19.45	19.52	19.48				
3	HQAM	15	0	19.54	19.80	19.50				
3	HQAM	1	8	17.43	17.60	17.55	19	5		
3	HQAM	1	14	17.44	17.50	17.49				
3	HQAM	8	0	17.48	17.68	17.48	19	5		
3	HQAM	8	7	17.44	17.54	17.47				
3	HQAM	15	0	17.60	17.50	17.57				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	22.52	22.57	22.55	24	0		
1.4	QPSK	1	3	22.41	22.53	22.53				
1.4	QPSK	1	5	22.48	22.55	22.50				
1.4	QPSK	3	0	22.64	22.57	22.52				
1.4	QPSK	3	1	22.44	22.59	22.43				
1.4	QPSK	3	3	22.49	22.63	22.59	23	1		
1.4	QPSK	6	0	21.67	21.64	21.55				
1.4	HQAM	1	0	21.61	21.63	21.54				
1.4	HQAM	1	3	21.45	21.54	21.39	23	1		
1.4	HQAM	1	5	21.47	21.63	21.48				
1.4	HQAM	3	0	21.48	21.55	21.58				
1.4	HQAM	3	1	21.63	21.71	21.54				
1.4	HQAM	6	0	21.06	21.73	21.67				
1.4	HQAM	6	0	20.83	20.65	20.60	22	2		
1.4	HQAM	1	0	20.74	20.80	20.71				
1.4	HQAM	1	3	20.64	20.64	20.53				
1.4	HQAM	1	5	20.49	20.60	20.55	22	2		
1.4	HQAM	3	0	20.43	20.50	20.40				
1.4	HQAM	3	1	20.52	20.60	20.49				
1.4	HQAM	6	0	20.41	20.47	20.44	21	3		
1.4	HQAM	6	0	19.53	19.99	19.60				
1.4	HQAM	1	0	17.46	17.67	17.56				
1.4	HQAM	1	3	17.36	17.50	17.49	19	5		
1.4	HQAM	1	5	17.47	17.51	17.57				
1.4	HQAM	3	0	17.60	17.86	17.52				
1.4	HQAM	3	1	17.63	17.70	17.56				
1.4	HQAM	6	0	17.61	17.47	17.46	19	5		
1.4	HQAM	6	0	17.63	17.57	17.54				

Band 13 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.52			24	0		
10	QPSK	1	25	22.48						
10	QPSK	1	49	22.37						
10	QPSK	25	0	21.49						
10	QPSK	25	12	21.44						
10	QPSK	25	25	21.41						
10	QPSK	50	0	21.46						
10	QPSK	1	0	21.70						
10	HQAM	1	25	21.84			23	1		
10	HQAM	1	49	21.57						
10	HQAM	25	0	20.52						
10	HQAM	25	12	20.43			22	2		
10	HQAM	25	25	20.49						
10	HQAM	50	0	20.42						
10	HQAM	1	0	20.66						
10	HQAM	1	25	20.54			22	2		
10	HQAM	1	49	20.51						
10	HQAM	25	0	19.54						
10	HQAM	25	12	19.51			21	3		
10	HQAM	25	25	19.45						
10	HQAM	50	0	19.37						
10	HQAM	1	0	17.46						
10	HQAM	1	25	17.48			19	5		
10	HQAM	1	49	17.49						
10	HQAM	25	0	17.50						
10	HQAM	25	12	17.42			19	5		
10	HQAM	25								



Band 25 Ant1										
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Peak Ch./Freq.	Turn-up (dB)	MPE (dB)		
Channel										
1800 1800 1900										
20	QPSK	1	0	16.96	17.52	17.13				
20	QPSK	1	49	17.13	17.17	17.03	18.4	0		
20	QPSK	1	99	17.13	17.17	17.03				
20	QPSK	50	0	17.22	17.26	17.20				
20	QPSK	50	24	17.14	17.18	17.14	18.4	0		
20	QPSK	50	50	17.14	17.18	17.12				
20	QPSK	100	0	17.15	17.20	17.17				
20	QPSK	100	0	17.22	17.26	17.22				
20	QPSK	100	0	17.22	17.26	17.22				
20	QPSK	1	49	17.05	17.21	17.07	18.4	0		
20	QPSK	1	99	17.21	17.26	17.22				
20	QPSK	50	0	17.24	17.28	17.14				
20	QPSK	50	24	17.22	17.27	17.16	18.4	0		
20	QPSK	50	50	17.16	17.26	17.12				
20	QPSK	100	0	17.17	17.28	17.25				
20	QPSK	100	0	17.03	17.19	17.07				
20	QPSK	1	49	17.14	17.25	17.20	18.4	0		
20	QPSK	1	99	17.02	17.16	17.03				
20	QPSK	50	0	17.15	17.22	17.18				
20	QPSK	50	24	17.16	17.24	17.10	18.4	0		
20	QPSK	50	50	17.13	17.24	17.09				
20	QPSK	100	0	17.11	17.16	17.12				
20	QPSK	100	0	17.18	17.24	17.19				
20	QPSK	1	49	15.85	16.01	15.94				
20	QPSK	1	99	15.81	15.86	15.84	17	1.4		
20	QPSK	50	0	15.87	15.92	15.88				
20	QPSK	50	24	15.82	15.87	15.78	17	1.4		
20	QPSK	50	50	15.77	15.82	15.84				
20	QPSK	100	0	15.83	15.88	15.85				
Channel										
24115 24120 24125										
15	QPSK	1	0	18.88	17.28	17.27				
15	QPSK	1	31	17.19	17.24	17.21	18.4	0		
15	QPSK	1	74	16.99	17.10	16.92				
15	QPSK	36	0	17.08	17.18	17.13				
15	QPSK	36	29	17.00	17.14	16.98	18.4	0		
15	QPSK	36	39	17.11	17.09	17.05				
15	QPSK	75	0	17.00	17.11	17.01				
15	QPSK	75	0	17.18	17.24	17.19				
15	QPSK	1	31	16.92	17.17	17.13	18.4	0		
15	QPSK	1	74	16.86	16.99	16.87				
15	QPSK	36	0	17.16	17.24	17.03				
15	QPSK	36	29	17.11	17.15	17.02	18.4	0		
15	QPSK	36	39	17.02	17.14	17.14				
15	QPSK	75	0	17.12	17.14	17.14				
15	QPSK	75	0	16.94	17.06	16.93				
15	QPSK	1	31	17.02	17.16	17.07	18.4	0		
15	QPSK	1	74	17.05	17.03	16.96				
15	QPSK	36	0	17.00	17.15	17.11				
15	QPSK	36	29	16.96	17.04	16.97	18.4	0		
15	QPSK	36	39	17.11	17.13	17.04				
15	QPSK	75	0	17.00	17.04	17.01				
15	QPSK	75	0	17.18	17.24	17.19				
15	QPSK	1	31	15.85	15.95	15.87	17	1.4		
15	QPSK	1	74	15.87	15.84	15.89				
15	QPSK	36	0	15.80	15.85	15.86				
15	QPSK	36	29	15.71	15.83	15.84	17	1.4		
15	QPSK	36	39	15.83	15.85	15.79				
15	QPSK	75	0	15.81	15.82	15.81				
Channel										
26900 26905 26910										
10	QPSK	1	0	18.85	18.80	19.10				
10	QPSK	1	25	17.10	17.21	17.10	18.4	0		
10	QPSK	1	49	17.09	17.05	16.92				
10	QPSK	12	0	17.08	17.05	16.97				
10	QPSK	12	13	17.04	17.11	17.06	18.4	0		
10	QPSK	12	25	17.08	17.05	16.97				
10	QPSK	1	0	17.10	17.22	17.21				
10	QPSK	1	24	16.91	17.14	16.97	18.4	0		
10	QPSK	1	49	16.86	16.96	16.86				
10	QPSK	12	0	17.19	17.15	17.09				
10	QPSK	12	13	17.12	17.23	17.09	18.4	0		
10	QPSK	12	25	17.03	17.14	17.06				
10	QPSK	50	0	17.03	17.18	17.21				
10	QPSK	1	0	16.95	17.06	16.98				
10	QPSK	1	24	17.03	17.03	16.94	18.4	0		
10	QPSK	1	49	16.96	17.05	16.89				
10	QPSK	12	0	17.05	17.10	17.04				
10	QPSK	12	13	17.01	17.07	16.95	18.4	0		
10	QPSK	12	25	17.08	17.17	16.97				
10	QPSK	50	0	17.00	17.10	17.05				
10	QPSK	50	0	15.81	15.92	15.86				
10	QPSK	1	24	15.80	15.86	15.87	17	1.4		
10	QPSK	1	49	15.70	15.81	15.80				
10	QPSK	12	0	15.85	15.87	15.86				
10	QPSK	12	13	15.75	15.84	15.73	17	1.4		
10	QPSK	12	25	15.85	15.81	15.73				
10	QPSK	50	0	15.92	15.96	15.98				
Channel										
26965 26970 26975										
5	QPSK	1	0	18.82	18.80	19.15				
5	QPSK	1	12	17.11	17.20	17.12	18.4	0		
5	QPSK	1	24	17.07	17.02	17.00				
5	QPSK	12	0	17.09	17.14	17.04				
5	QPSK	12	7	17.02	17.13	17.04				
5	QPSK	12	13	17.09	17.04	17.04	18.4	0		
5	QPSK	12	25	17.04	17.07	16.98				
5	QPSK	1	0	17.12	17.22	17.21				
5	QPSK	1	12	17.02	17.06	17.00	18.4	0		
5	QPSK	1	24	17.15	17.14	17.01				
5	QPSK	12	0	17.15	17.18	17.02				
5	QPSK	12	7	17.17	17.15	17.11	18.4	0		
5	QPSK	12	13	17.08	17.15	17.01				
5	QPSK	12	25	17.11	17.14	17.14				
5	QPSK	1	0	16.94	17.07	16.93				
5	QPSK	1	12	17.08	17.15	17.05	18.4	0		
5	QPSK	1	24	17.07	17.10	16.93				
5	QPSK	12	0	17.06	17.13	17.08				
5	QPSK	12	7	17.01	17.20	17.02	18.4	0		
5	QPSK	12	13	17.09	17.10	17.05				
5	QPSK	12	25	16.96	17.11	17.04				
5	QPSK	50	0	15.83	15.93	15.82				
5	QPSK	50	0	15.81	15.91	15.90	17	1.4		
5	QPSK	1	24	15.71	15.84	15.76				
5	QPSK	12	0	15.76	15.81	15.84				
5	QPSK	12	7	15.78	15.74	15.69	17	1.4		
5	QPSK	12	13	15.83	15.86	15.81				
5	QPSK	12	25	15.90	15.91	15.86				
Channel										
26967 26972 26977										
1.4	QPSK	1	0	18.90	17.25	17.15				
1.4	QPSK	1	8	17.12	17.26	17.16	18.4	0		
1.4	QPSK	1	14	17.05	17.14	16.99				
1.4	QPSK	1	15	17.18	17.16	17.05				
1.4	QPSK	8	4	17.10	17.05	16.94	18.4	0		
1.4	QPSK	8	7	17.09	17.08	16.99				
1.4	QPSK	15	0	17.01	17.02	16.98				
1.4	QPSK	15	0	17.12	17.25	17.21				
1.4	QPSK	1	8	16.93	17.09	17.01	18.4	0		
1.4	QPSK	1	14	17.10	17.24	17.17				
1.4	QPSK	1	15	17.11	17.14	17.02				
1.4	QPSK	8	4	17.14	17.15	17.01	18.4	0		
1.4	QPSK	8	7	17.11	17.20	17.08				
1.4	QPSK	15	0	17.10	17.22	17.11				
1.4	QPSK	1	0	16.89	17.05	16.96				



Band 38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel				3765	3850	3815		
Frequency (MHz)				2577.5	2577.5	2612		
20	QPSK	1	0	19.96	20.21	20.11	21.2	0
20	QPSK	1	49	19.94	20.19	20.08		
20	QPSK	1	99	19.90	20.05	19.95		
20	QPSK	50	0	20.04	20.15	20.02		
20	QPSK	50	24	19.91	20.14	20.10	21.2	0
20	QPSK	100	0	20.01	20.15	20.00		
20	QPSK	1	0	19.88	20.07	19.96	21.2	0
20	HQAM	1	49	19.95	20.09	19.96		
20	HQAM	1	99	19.90	20.12	20.00		
20	HQAM	50	0	19.92	19.98	19.91		
20	HQAM	50	24	19.93	19.95	19.40	21	0.2
20	HQAM	50	50	19.48	19.54	19.48		
20	HQAM	100	0	19.97	19.95	19.49		
20	HQAM	1	0	19.40	19.51	19.47		
20	HQAM	1	49	19.57	19.66	19.56	21	0.2
20	HQAM	1	99	19.40	19.54	19.39		
20	HQAM	50	0	18.47	18.57	18.54		
20	HQAM	50	24	18.53	18.53	18.52		
20	HQAM	50	50	18.38	18.52	18.42	20	1.2
20	HQAM	100	0	18.50	18.60	18.48		
20	ZSSBAM	1	0	18.51	18.56	18.47		
20	ZSSBAM	1	49	18.57	18.55	18.39	18	3.2
20	ZSSBAM	1	99	18.46	18.52	18.39		
20	ZSSBAM	50	0	18.57	18.57	18.50		
20	ZSSBAM	50	24	18.54	18.44	18.40	18	3.2
20	ZSSBAM	50	50	18.60	18.63	18.61		
20	ZSSBAM	100	0	18.52	18.52	18.48		
Channel				3765	3850	3815		
Frequency (MHz)				2577.5	2577.5	2612		
15	QPSK	1	0	19.90	20.13	20.14	21.2	0
15	QPSK	1	37	19.91	20.13	19.97		
15	QPSK	1	74	19.77	19.95	19.80		
15	QPSK	36	0	20.04	20.09	19.90		
15	QPSK	36	20	19.99	20.03	19.97	21.2	0
15	QPSK	36	57	19.88	19.92	19.85		
15	QPSK	75	0	19.90	20.04	19.99		
15	HQAM	1	0	19.79	19.89	19.84		
15	HQAM	1	37	19.90	19.97	19.85	21.2	0
15	HQAM	1	74	19.78	19.97	20.05		
15	HQAM	36	0	19.47	19.47	19.43		
15	HQAM	36	20	19.24	19.35	19.24	21	0.2
15	HQAM	36	59	19.24	19.48	19.35		
15	HQAM	75	0	19.51	19.50	19.38		
15	HQAM	1	0	19.45	19.45	19.37		
15	HQAM	1	37	19.48	19.52	19.47	21	0.2
15	HQAM	1	74	19.25	19.46	19.26		
15	HQAM	36	0	18.57	18.52	18.40		
15	HQAM	36	20	18.43	18.59	18.51	20	1.2
15	HQAM	36	59	18.44	18.44	18.44		
15	HQAM	75	0	18.40	18.55	18.44		
15	ZSSBAM	1	0	18.45	18.51	18.34	18	3.2
15	ZSSBAM	1	37	18.29	18.33	18.18		
15	ZSSBAM	1	74	18.40	18.40	18.38		
15	ZSSBAM	36	0	18.53	18.59	18.44		
15	ZSSBAM	36	20	18.29	18.31	18.31	18	3.2
15	ZSSBAM	36	59	18.51	18.48	18.39		
15	ZSSBAM	75	0	18.42	18.50	18.37		
Channel				3765	3850	3815		
Frequency (MHz)				2577.5	2577.5	2612		
10	QPSK	1	0	19.80	20.13	20.01	21.2	0
10	QPSK	1	25	19.79	20.13	19.98		
10	QPSK	1	49	19.75	19.86	19.88		
10	QPSK	12	7	19.79	20.05	20.01		
10	QPSK	25	12	19.74	20.02	20.08	21.2	0
10	QPSK	25	25	19.77	19.95	19.87		
10	QPSK	50	0	19.84	20.10	19.92		
10	HQAM	1	0	19.86	20.03	19.88		
10	HQAM	1	25	19.81	19.86	19.88	21.2	0
10	HQAM	1	49	19.78	20.04	19.91		
10	HQAM	25	0	19.43	19.59	19.39		
10	HQAM	25	12	19.28	19.52	19.28	21	0.2
10	HQAM	25	26	19.24	19.52	19.43		
10	HQAM	50	0	19.51	19.49	19.42		
10	HQAM	1	0	19.33	19.57	19.34		
10	HQAM	1	25	19.50	19.57	19.49	21	0.2
10	HQAM	1	49	19.37	19.37	19.30		
10	HQAM	25	0	18.44	18.43	18.42		
10	HQAM	25	12	18.20	18.59	18.35	20	1.2
10	HQAM	25	26	18.24	18.46	18.29		
10	HQAM	50	0	18.63	18.51	18.38		
10	ZSSBAM	1	0	18.38	18.43	18.46		
10	ZSSBAM	1	25	18.27	18.36	18.18	18	3.2
10	ZSSBAM	1	49	18.41	18.45	18.25		
10	ZSSBAM	25	0	18.44	18.50	18.40		
10	ZSSBAM	25	12	18.24	18.52	18.37	18	3.2
10	ZSSBAM	25	26	18.57	18.52	18.49		
10	ZSSBAM	50	0	18.42	18.46	18.49		
Channel				2577.5	2595	2617.5		
Frequency (MHz)				2577.5	2595	2617.5		
5	QPSK	1	0	19.80	20.13	20.01	21.2	0
5	QPSK	1	12	19.87	20.03	19.96		
5	QPSK	1	24	19.57	19.89	19.93		
5	QPSK	12	7	20.00	20.07	20.00		
5	QPSK	12	7	19.79	20.05	20.01	21.2	0
5	QPSK	12	13	19.63	20.02	19.92		
5	QPSK	25	0	19.88	19.99	19.89		
5	HQAM	1	0	19.82	19.93	19.85		
5	HQAM	1	12	19.80	19.97	19.82	21.2	0
5	HQAM	1	24	19.86	19.90	20.03		
5	HQAM	12	0	19.47	19.44	19.36		
5	HQAM	12	7	19.19	19.43	19.37	21	0.2
5	HQAM	12	31	19.31	19.41	19.45		
5	HQAM	25	0	19.63	19.50	19.32		
5	HQAM	1	0	19.44	19.52	19.44		
5	HQAM	1	12	19.51	19.52	19.39	21	0.2
5	HQAM	1	24	19.33	19.51	19.22		
5	HQAM	12	0	18.38	18.46	18.47		
5	HQAM	12	7	18.41	18.47	18.48	20	1.2
5	HQAM	12	13	18.24	18.41	18.38		
5	HQAM	25	0	18.39	18.48	18.32		
5	ZSSBAM	1	0	18.41	18.39	18.37		
5	ZSSBAM	1	12	18.53	18.38	18.18	18	3.2
5	ZSSBAM	1	24	18.29	18.30	18.24		
5	ZSSBAM	12	0	18.20	18.46	18.31	18	3.2
5	ZSSBAM	12	31	18.44	18.50	18.35		
5	ZSSBAM	25	0	18.43	18.50	18.37		

Band 38 HPUE Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel				3780	3800	3810		
Frequency (MHz)				2170	2152	2143		
20	QPSK	1	0	21.70	21.52	21.43	22.8	0
20	QPSK	1	49	21.68	21.73	21.61		
20	QPSK	1	99	21.60	21.67	21.58		
20	QPSK	50	0	21.71	21.79	21.73		
20	QPSK	50	24	21.59	21.73	21.69	22.8	0
20	QPSK	100	0	21.66	21.72	21.66		
20	QPSK	100	0	21.55	21.66	21.64		
20	HQAM	1	0	21.58	21.68	21.54	22.8	0
20	HQAM	1	49	21.67	21.79	21.72		
20	HQAM	1	99	21.66	21.73	21.62		
20	HQAM	50	0	21.63	21.77	21.64		
20	HQAM	50	24	21.59	21.69	21.62	22.8	0
20	HQAM	50	50	21.70	21.80	21.69		
20	HQAM	100	0	21.66	21.77	21.64		
20	HQAM	1	0	21.62	21.75	21.55		
20	HQAM	1	49	21.60	21.66	21.50	22.8	0
20	HQAM	1	99	21.50	21.58	21.53		
20	HQAM	50	0	21.49	21.62	21.53	22.8	0
20	HQAM	50	24	21.50	21.54	21.41		
20	HQAM	100	0	21.55	21.60	21.53		
20	ZSSBAM	1	0	19.62	19.71	19.60		
20	ZSSBAM	1	49	19.52	19.62	19.52	21	1.8
20	ZSSBAM	1	99	19.63	19.67	19.56		
20	ZSSBAM	50	0	19.53	19.56	19.49		
20	ZSSBAM	50	24	19.49	19.55	19.45	21	1.8
20	ZSSBAM	50	50	19.61	19.64	19.54		
20	ZSSBAM	100	0	19.48	19.48	19.48		
Channel				3780	3800	3810		
Frequency (MHz)				2170	2170	2171.5		
15	QPSK	1	0	21.64	21.71	21.52	22.8	0
15	QPSK	1	37	21.62	21.64	21.47		
15	QPSK	1	74	21.50	21.64	21.51		
15	QPSK	36	0	21.64	21.72	21.62		
15	QPSK	36	20	21.48	21.68	21.64	22.8	0
15	QPSK	36	57	21.58	21.58	21.58		
15	QPSK	75	0	21.45	21.56	21.60		
15	HQAM	1	0	21.52	21.57	21.43		
15	HQAM	1	37	21.54	21.74	21.61	22.8	0
15	HQAM	1	74	21.58	21.68	21.51		
15	HQAM	36	0	21.53	21.71	21.51		
15	HQAM	36	20	21.52	21.68	21.48	22.8	0
15	HQAM	36	59	21.67	21.68	21.63		
15	HQAM	75	0	21.61	21.64	21.62		
15	HQAM	1	0	21.49	21.67	21.60		
15	HQAM	1	37	21.38	21.59	21.44	22.8	0
15	HQAM	1	74	21.60	21.66	21.56		
15	HQAM	36	0	21.59	21.66	21.57		
15	HQAM	36	20	21.38	21.61			



Band 41 Ant1												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (min)	MFR (dB)	
Channel												
Frequency (MHz)				39790	40198	40600	41006	41400	41800			
20	QPSK	1	0	20.00	20.24	20.19	20.15	20.22	20.22	21.2	0	
20	QPSK	1	49	20.11	20.20	20.28	20.17	20.12	20.12			
20	QPSK	1	89	20.13	20.18	20.32	20.11	20.16	20.16			
20	QPSK	50	0	20.22	20.11	20.27	20.12	20.07	20.07			
20	QPSK	50	24	20.16	20.12	20.20	20.11	20.17	20.17	21.2	0	
20	QPSK	100	0	20.15	20.14	20.24	20.10	20.13	20.13			
20	QPSK	100	0	20.11	20.12	20.15	20.01	20.02	20.02			
20	HQAM	1	0	20.01	20.01	20.16	20.01	20.08	20.08	21.2	0	
20	HQAM	1	49	20.02	20.02	20.06	20.19	20.13	20.13			
20	HQAM	1	89	20.14	20.14	20.23	20.12	20.13	20.13			
20	HQAM	1	129	20.20	20.20	20.26	20.16	20.16	20.16			
20	HQAM	50	24	19.92	19.92	19.95	19.94	19.94	19.94	21	0.2	
20	HQAM	50	50	19.98	19.94	19.92	19.98	19.90	19.90			
20	HQAM	100	0	19.94	19.94	19.95	19.91	19.94	19.94			
20	HQAM	100	0	19.95	19.94	19.94	19.97	19.95	19.95			
20	HQAM	1	49	19.97	19.92	19.83	19.99	19.93	19.93	21	0.2	
20	HQAM	1	89	19.92	19.92	19.90	19.92	19.92	19.92			
20	HQAM	50	0	18.35	18.48	18.52	18.39	18.33	18.33			
20	HQAM	50	24	18.20	18.35	18.40	18.28	18.24	18.24	20	1.2	
20	HQAM	50	50	18.24	18.34	18.48	18.37	18.26	18.26			
20	HQAM	100	0	18.39	18.50	18.61	18.63	18.47	18.47			
20	ZSFGM	1	0	18.46	18.54	18.67	18.58	18.51	18.51	18	3.2	
20	ZSFGM	1	49	18.52	18.48	18.51	18.59	18.56	18.56			
20	ZSFGM	1	89	18.48	18.48	18.52	18.48	18.47	18.47			
20	ZSFGM	50	0	18.52	18.50	18.57	18.67	18.64	18.64			
20	ZSFGM	50	24	18.36	18.45	18.54	18.48	18.40	18.40	18	3.2	
20	ZSFGM	50	50	18.40	18.57	18.66	18.61	18.54	18.54			
20	ZSFGM	100	0	18.48	18.67	18.76	18.65	18.59	18.59			
Channel												
Frequency (MHz)				39725	40173	40600	41068	41515	41960			
15	QPSK	1	0	19.92	20.19	20.19	20.17	20.21	20.21	21	0	
15	QPSK	1	37	19.96	20.08	20.13	20.11	20.02	20.02	21	0	
15	QPSK	1	74	20.03	20.15	20.12	19.98	19.96	19.96			
15	QPSK	1	111	20.07	19.99	20.15	20.15	20.15	20.15			
15	QPSK	36	20	20.07	20.08	20.04	20.03	20.05	20.05	21.2	0	
15	QPSK	36	56	20.10	20.04	20.03	19.97	19.96	19.96			
15	HQAM	1	0	19.92	19.94	20.00	19.97	19.90	19.90	21.2	0	
15	HQAM	1	37	19.97	19.95	20.00	19.96	19.96	19.96			
15	HQAM	1	74	20.10	20.03	20.16	20.04	20.00	20.00			
15	HQAM	36	0	19.20	19.39	19.48	19.37	19.41	19.41	21	0.2	
15	HQAM	36	36	19.26	19.45	19.51	19.41	19.35	19.35			
15	HQAM	36	39	19.33	19.39	19.47	19.37	19.31	19.31	21	0.2	
15	HQAM	75	0	19.29	19.37	19.45	19.47	19.22	19.22			
15	HQAM	1	37	19.45	19.53	19.71	19.61	19.49	19.49	21	0.2	
15	HQAM	1	74	19.46	19.54	19.59	19.52	19.36	19.36			
15	HQAM	36	0	18.30	18.30	18.42	18.30	18.30	18.30	20	1.2	
15	HQAM	36	20	18.05	18.31	18.36	18.29	18.19	18.19			
15	HQAM	36	39	18.08	18.28	18.34	18.24	18.14	18.14			
15	HQAM	75	0	18.24	18.44	18.48	18.45	18.43	18.43			
15	ZSFGM	1	0	18.40	18.42	18.59	18.49	18.44	18.44	18	3.2	
15	ZSFGM	1	37	18.46	18.46	18.44	18.44	18.44	18.44			
15	ZSFGM	1	74	18.34	18.42	18.58	18.34	18.42	18.42			
15	ZSFGM	36	0	18.20	18.36	18.53	18.40	18.22	18.22	18	3.2	
15	ZSFGM	36	20	18.02	18.21	18.44	18.41	18.24	18.24			
15	ZSFGM	36	39	18.34	18.49	18.55	18.52	18.44	18.44			
15	ZSFGM	75	0	18.26	18.50	18.58	18.61	18.50	18.50			
Channel												
Frequency (MHz)				39701	39747	40193	40640	41100	41560			
10	QPSK	1	0	20.11	20.11	20.11	20.11	20.11	20.11	21	20	
10	QPSK	1	25	20.05	20.05	20.17	20.03	19.94	19.94			
10	QPSK	1	49	20.03	20.10	20.11	19.94	19.89	19.89			
10	QPSK	1	74	20.08	20.02	20.12	19.96	19.91	19.91			
10	QPSK	25	12	20.11	19.98	20.03	20.01	20.04	20.04	21.2	0	
10	QPSK	25	26	20.00	20.05	20.18	20.16	20.01	20.01			
10	QPSK	1	0	20.04	20.01	19.98	19.96	19.91	19.91	21.2	0	
10	HQAM	1	0	19.94	19.98	20.07	19.96	20.00	20.00			
10	HQAM	1	25	20.06	20.04	20.10	20.01	20.09	20.09			
10	HQAM	1	49	20.07	20.06	20.16	20.09	20.03	20.03			
10	HQAM	25	0	19.29	19.38	19.45	19.33	19.34	19.34	21	0.2	
10	HQAM	25	19	19.06	19.26	19.31	19.26	19.11	19.11			
10	HQAM	25	19	19.35	19.35	19.47	19.43	19.32	19.32			
10	HQAM	50	0	19.40	19.37	19.55	19.37	19.32	19.32	21	0.2	
10	HQAM	1	0	19.80	19.83	19.85	19.83	19.41	19.41			
10	HQAM	1	25	19.44	19.44	19.50	19.38	19.31	19.31	21	0.2	
10	HQAM	1	49	19.42	19.47	19.55	19.49	19.47	19.47			
10	HQAM	25	0	18.26	18.36	18.43	18.30	18.29	18.29	20	1.2	
10	HQAM	25	12	18.13	18.31	18.31	18.24	18.14	18.14			
10	HQAM	25	25	18.16	18.30	18.44	18.28	18.22	18.22			
10	HQAM	50	0	18.30	18.45	18.57	18.46	18.37	18.37			
10	ZSFGM	1	0	18.39	18.40	18.56	18.62	18.43	18.43	18	3.2	
10	ZSFGM	1	25	18.47	18.50	18.64	18.52	18.51	18.51			
10	ZSFGM	1	49	18.38	18.34	18.48	18.36	18.30	18.30			
10	ZSFGM	25	0	18.25	18.44	18.52	18.38	18.21	18.21	18	3.2	
10	ZSFGM	25	19	18.33	18.39	18.42	18.37	18.30	18.30			
10	ZSFGM	25	25	18.35	18.42	18.57	18.52	18.48	18.48			
10	ZSFGM	50	0	18.33	18.58	18.63	18.61	18.42	18.42			
Channel												
Frequency (MHz)				3969.5	3974.5	40193	40640	41100	41560			
5	QPSK	1	0	19.83	20.14	20.24	20.06	19.94	19.94	21	20	
5	QPSK	1	15	19.95	20.07	20.15	20.00	19.90	19.90			
5	QPSK	1	24	20.03	20.08	20.20	19.97	20.05	20.05			
5	QPSK	12	0	20.04	19.96	20.13	20.04	20.17	20.17	21.2	0	
5	QPSK	12	7	20.04	20.05	20.07	19.96	20.10	20.10			
5	QPSK	12	13	20.04	20.00	20.09	20.10	20.01	20.01			
5	QPSK	25	0	19.94	19.99	20.02	19.96	19.96	19.96	21.2	0	
5	HQAM	1	0	19.96	19.83	20.01	19.93	19.96	19.96			
5	HQAM	1	12	20.08	20.18	20.13	19.92	20.07	20.07			
5	HQAM	1	24	20.03	20.02	20.09	20.04	20.00	20.00			
5	HQAM	12	0	19.27	19.29	19.42	19.32	19.31	19.31	21	0.2	
5	HQAM	12	7	19.16	19.33	19.38	19.30	19.18	19.18			
5	HQAM	12	13	19.33	19.33	19.44	19.44	19.30	19.30			
5	HQAM	25	0	19.38	19.32	19.51	19.43	19.30	19.30	21	0.2	
5	HQAM	1	0	19.93	19.84	19.88	19.88	19.80	19.80			
5	HQAM	1	12	19.90	19.98	19.97	19.96	19.96	19.96			
5	HQAM	1	24	19.38	19.46	19.55	19.50	19.36	19.36	20	1.2	
5	HQAM	12	0	18.29	18.39	18.41	18.27	18.23	18.23			
5	HQAM	12	0	18.17	18.23	18.36	18.19	18.12	18.12			
5	HQAM	12	13	18.10	18.31	18.41	18.32	18.22	18.22			
5	HQAM	25	0	18.30	18.47	18.55	18.50	18.38	18.38	21	1.8	
5	ZSFGM	1	0	18.30	18.41	18.56	18.55	18.45	18.45			
5	ZSFGM	1	12	18.50	18.56	18.63	18.55	18.49	18.49			
5	ZSFGM	1	24	18.44	18.35	18.48	18.41	18.43	18.43			
5	ZSFGM	12	0	18.24	18.44	18.46	18.42	18.22	18.22	18	3.2	
5	ZSFGM	12	7	18.27	18.37	18.45	18.41	18.27	18.27			
5	ZSFGM	12	13	18.42	18.52	18.62	18.55	18.47	18.47			
5	ZSFGM	25	0	18.40	18.62	18.62	18.55	18.50	18.50			

Band 41 HPUE Ant1												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (min)	MFR (dB)	
Channel												
Frequency (MHz)				39790	40198	40600	41006	41400	41800			
20	QPSK	1	0	21.66	21.74	21.69	21.75	21.82</				



Band 2 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Time-up (min)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.30	21.37	21.36				
20	QPSK	1	49	21.44	21.44	21.44	22	0.6		
20	QPSK	1	99	21.36	21.39	21.34				
20	QPSK	50	0	21.41	21.43	21.38				
20	QPSK	50	24	21.36	21.34	21.39				
20	QPSK	50	50	21.32	21.42	21.38				
20	QPSK	100	0	21.28	21.33	21.33				
20	16QAM	50	0	21.25	21.31	21.29				
20	16QAM	1	49	21.41	21.38	21.38	22	0.6		
20	16QAM	1	99	21.30	21.44	21.39				
20	16QAM	50	0	20.85	20.95	20.90				
20	16QAM	50	24	20.88	20.87	20.95				
20	16QAM	50	50	20.87	20.72	20.88				
20	16QAM	100	0	20.84	20.88	20.84				
20	84QAM	1	0	20.59	20.74	20.67				
20	84QAM	1	49	20.77	20.80	20.69	22	0.6		
20	84QAM	50	0	20.81	20.83	20.83				
20	84QAM	50	24	19.54	19.58	19.59				
20	84QAM	50	50	19.55	19.65	19.52				
20	84QAM	100	0	19.54	19.62	19.62				
20	84QAM	100	0	19.53	19.63	19.58	21	1.6		
20	84QAM	150	0	17.86	17.75	17.80				
20	256QAM	1	49	17.76	17.76	17.76	19	3.6		
20	256QAM	1	99	17.86	17.75	17.87				
20	256QAM	50	0	17.84	17.82	17.85				
20	256QAM	50	24	17.84	17.61	17.46				
20	256QAM	50	50	17.65	17.71	17.61				
20	256QAM	100	0	17.56	17.59	17.61				
Channel										
Frequency (MHz)										
15	QPSK	1	0	21.21	21.32	21.31				
15	QPSK	1	37	21.23	21.36	21.36	22	0.6		
15	QPSK	1	74	21.30	21.34	21.29				
15	QPSK	36	0	21.32	21.29	21.19				
15	QPSK	36	25	21.17	21.25	21.20				
15	QPSK	36	39	21.22	21.28	21.12				
15	QPSK	75	0	21.11	21.27	21.20				
15	16QAM	1	49	21.09	21.13	21.13	22	0.6		
15	16QAM	1	37	21.38	21.39	21.37				
15	16QAM	1	74	21.30	21.37	21.30				
15	16QAM	36	0	20.38	20.57	20.38				
15	16QAM	36	29	20.50	20.62	20.59				
15	16QAM	36	49	20.52	20.58	20.58	22	0.6		
15	16QAM	75	0	20.52	20.58	20.53				
15	84QAM	1	0	20.46	20.60	20.60				
15	84QAM	1	37	20.64	20.64	20.64	22	0.6		
15	84QAM	1	74	20.50	20.65	20.59				
15	84QAM	36	0	19.48	19.61	19.51				
15	84QAM	36	49	19.50	19.58	19.58				
15	84QAM	36	39	19.49	19.55	19.51				
15	84QAM	75	0	19.39	19.59	19.47	21	1.6		
15	256QAM	1	49	17.86	17.86	17.86				
15	256QAM	1	37	17.69	17.70	17.72	19	3.6		
15	256QAM	1	74	17.69	17.68	17.58				
15	256QAM	36	0	17.61	17.62	17.62				
15	256QAM	36	29	17.59	17.50	17.42				
15	256QAM	36	39	17.52	17.66	17.55				
15	256QAM	75	0	17.46	17.48	17.43				
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.05	21.09	21.05				
10	QPSK	1	25	21.26	21.39	21.26	22	0.6		
10	QPSK	1	49	21.34	21.23	21.24				
10	QPSK	12	0	21.02	21.02	21.02				
10	QPSK	25	12	21.12	21.32	21.23				
10	QPSK	25	25	21.25	21.30	21.13				
10	16QAM	1	0	21.17	21.23	21.13				
10	16QAM	1	24	21.30	21.42	21.22	22	0.6		
10	16QAM	1	49	21.08	21.08	21.08				
10	16QAM	25	0	20.37	20.57	20.39				
10	16QAM	25	12	20.43	20.62	20.49				
10	16QAM	25	25	20.60	20.60	20.67	22	0.6		
10	16QAM	50	0	20.55	20.57	20.58				
10	84QAM	1	0	20.51	20.62	20.53				
10	84QAM	1	25	20.72	20.72	20.68	22	0.6		
10	84QAM	1	49	20.48	20.64	20.57				
10	84QAM	25	0	19.46	19.54	19.50				
10	84QAM	25	12	19.56	19.56	19.48				
10	84QAM	25	25	19.53	19.70	19.56	21	1.6		
10	84QAM	50	0	19.49	19.54	19.52				
10	256QAM	1	49	17.58	17.67	17.66				
10	256QAM	1	25	17.69	17.70	17.72	19	3.6		
10	256QAM	1	49	17.60	17.70	17.54				
10	256QAM	12	0	17.46	17.61	17.51				
10	256QAM	25	12	17.45	17.50	17.37				
10	256QAM	25	25	17.52	17.61	17.53				
10	256QAM	50	0	17.43	17.48	17.38				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.03	21.08	21.03				
5	QPSK	1	12	21.28	21.39	21.13	22	0.6		
5	QPSK	1	24	21.24	21.28	21.21				
5	QPSK	12	0	21.06	21.06	21.06				
5	QPSK	12	7	21.11	21.10	21.13				
5	QPSK	12	13	21.28	21.30	21.13				
5	16QAM	1	0	21.11	21.28	21.08				
5	16QAM	1	12	21.34	21.33	21.29	22	0.6		
5	16QAM	1	24	21.15	21.27	21.04				
5	16QAM	12	0	20.41	20.52	20.42				
5	16QAM	12	7	20.47	20.60	20.46				
5	16QAM	12	13	20.46	20.68	20.56	22	0.6		
5	16QAM	25	0	20.59	20.56	20.58				
5	84QAM	1	0	20.46	20.66	20.52				
5	84QAM	1	12	20.64	20.71	20.67	22	0.6		
5	84QAM	1	24	20.51	20.58	20.54				
5	84QAM	12	0	19.39	19.63	19.55				
5	84QAM	12	7	19.45	19.56	19.43				
5	84QAM	12	13	19.50	19.63	19.59	21	1.6		
5	84QAM	25	0	19.49	19.67	19.50				
5	256QAM	1	0	17.47	17.66	17.58				
5	256QAM	1	12	17.68	17.77	17.71	19	3.6		
5	256QAM	1	24	17.36	17.66	17.43				
5	256QAM	12	0	17.49	17.58	17.43				
5	256QAM	12	7	17.50	17.68	17.54				
5	256QAM	12	13	17.52	17.69	17.61	19	3.6		
5	256QAM	25	0	17.49	17.50	17.45				
Channel										
Frequency (MHz)										
3	QPSK	1	0	21.16	21.33	21.27				
3	QPSK	1	8	21.21	21.28	21.14	22	0.6		
3	QPSK	1	14	21.29	21.34	21.19				
3	QPSK	8	0	21.37	21.37	21.34				
3	QPSK	8	4	21.07	21.30	21.15				
3	QPSK	8	7	21.25	21.38	21.17	22	0.6		
3	QPSK	15	0	21.25	21.30	21.08				
3	16QAM	1	0	21.10	21.25	21.13				
3	16QAM	1	8	21.25	21.40	21.21	22	0.6		
3	16QAM	1	14	21.20	21.41	21.08				
3	16QAM	8	0	20.41	20.53	20.43				
3	16QAM	8	4	20.43	20.68	20.51				
3	16QAM	8	7	20.47	20.63	20.57	22	0.6		
3	16QAM	15	0	20.60	20.59	20.50				
3	84QAM	1	0	20.46	20.63	20.50				
3	84QAM	1	8	20.63	20.68	20.64	22	0.6		
3	84QAM	1	14	20.49	20.64	20.53				
3										





Band 25 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up (min)	MPE (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.25	21.50	21.53			
20	QPSK	1	49	21.27	21.43	21.43	22.6	0	
20	QPSK	1	99	21.35	21.39	21.29			
20	QPSK	50	0	21.38	21.42	21.39			
20	QPSK	50	24	21.39	21.43	21.34			
20	QPSK	50	50	21.37	21.39	21.21	22.6	0	
20	QPSK	100	0	21.34	21.43	21.40			
20	16QAM	1	0	21.37	21.44	21.34			
20	16QAM	1	49	21.33	21.43	21.37	22.6	0	
20	16QAM	1	99	21.42	21.40	21.34			
20	16QAM	50	0	20.92	20.99	20.95			
20	16QAM	50	24	20.95	20.93	20.90			
20	16QAM	50	50	20.97	20.71	20.58	22	0.8	
20	16QAM	100	0	20.99	20.99	20.94			
20	64QAM	1	0	20.95	20.70	20.63			
20	64QAM	1	49	20.93	20.71	20.73	22	0.6	
20	64QAM	1	99	20.97	20.92	20.73			
20	64QAM	50	0	20.97	20.92	20.84			
20	64QAM	50	24	20.99	20.99	20.94			
20	64QAM	50	50	20.97	20.92	20.81	21	1.6	
20	256QAM	1	0	17.58	17.77	17.66			
20	256QAM	1	49	17.58	17.62	17.53	19	3.8	
20	256QAM	1	99	17.65	17.74	17.67			
20	256QAM	50	0	17.58	17.68	17.64			
20	256QAM	50	24	17.58	17.68	17.58	19	3.8	
20	256QAM	50	50	17.67	17.73	17.64			
20	256QAM	100	0	17.65	17.67	17.61			
Channel									
Frequency (MHz)									
15	QPSK	1	0	21.23	21.36	21.28			
15	QPSK	1	37	21.19	21.36	21.17	22.6	0	
15	QPSK	1	74	21.30	21.20	21.16			
15	QPSK	36	0	21.33	21.30	21.31			
15	QPSK	36	20	21.23	21.35	21.04	22.6	0	
15	QPSK	36	39	21.16	21.28	21.09			
15	QPSK	75	0	21.30	21.30	21.26			
15	16QAM	1	0	21.28	21.32	21.24			
15	16QAM	1	37	21.29	21.38	21.25	22.6	0	
15	16QAM	1	74	21.34	21.28	21.28			
15	16QAM	36	0	20.94	20.92	20.80			
15	16QAM	36	20	20.48	20.57	20.39	22	0.8	
15	16QAM	75	0	20.48	20.55	20.57			
15	64QAM	1	0	20.57	20.57	20.58			
15	64QAM	1	37	20.60	20.55	20.54	22	0.8	
15	64QAM	1	74	20.47	20.52	20.40			
15	64QAM	36	0	19.46	19.53	19.43			
15	64QAM	36	20	19.50	19.48	19.48	21	1.6	
15	64QAM	36	39	19.55	19.52	19.52			
15	64QAM	75	0	19.54	19.58	19.57			
15	256QAM	1	0	17.53	17.58	17.54			
15	256QAM	1	37	17.49	17.54	17.41	19	3.8	
15	256QAM	1	74	17.63	17.66	17.63			
15	256QAM	36	0	17.50	17.52	17.48			
15	256QAM	36	20	17.47	17.53	17.48	19	3.8	
15	256QAM	36	39	17.57	17.59	17.59			
15	256QAM	75	0	17.41	17.48	17.45			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.11	21.44	21.40			
10	QPSK	1	25	21.12	21.27	21.27	22.6	0	
10	QPSK	1	49	21.24	21.27	21.13			
10	QPSK	25	0	21.23	21.27	21.28			
10	QPSK	25	12	21.18	21.31	21.29	22.6	0	
10	QPSK	25	25	21.21	21.26	21.09			
10	16QAM	1	0	21.24	21.30	21.24			
10	16QAM	1	25	21.21	21.34	21.29	22.6	0	
10	16QAM	1	49	21.33	21.27	21.22			
10	16QAM	25	0	20.48	20.57	20.39			
10	16QAM	25	12	20.54	20.58	20.38	22	0.8	
10	16QAM	25	25	20.56	20.56	20.44			
10	16QAM	50	0	20.50	20.54	20.58			
10	64QAM	1	0	20.58	20.63	20.52			
10	64QAM	1	25	20.54	20.58	20.58	22	0.8	
10	64QAM	1	49	20.52	20.40	20.46			
10	64QAM	25	0	19.45	19.58	19.48			
10	64QAM	25	12	19.55	19.52	19.47	21	1.6	
10	64QAM	25	25	19.54	19.63	19.55			
10	64QAM	50	0	19.51	19.56	19.48			
10	256QAM	1	0	17.59	17.72	17.68			
10	256QAM	1	25	17.48	17.48	17.41	19	3.8	
10	256QAM	1	49	17.56	17.62	17.52			
10	256QAM	25	0	17.44	17.58	17.38			
10	256QAM	25	12	17.49	17.59	17.50	19	3.8	
10	256QAM	25	25	17.64	17.60	17.59			
10	256QAM	50	0	17.68	17.62	17.51			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.23	21.38	21.40			
5	QPSK	1	12	21.14	21.52	21.24	22.6	0	
5	QPSK	1	24	21.21	21.29	21.24			
5	QPSK	12	0	21.23	21.28	21.28			
5	QPSK	12	7	21.27	21.33	21.30	22.6	0	
5	QPSK	12	13	21.12	21.26	21.14			
5	QPSK	25	0	21.31	21.43	21.33			
5	16QAM	1	0	21.28	21.33	21.24			
5	16QAM	1	12	21.26	21.34	21.33	22.6	0	
5	16QAM	1	24	21.28	21.31	21.21			
5	16QAM	12	0	20.57	20.59	20.53			
5	16QAM	12	7	20.53	20.53	20.39	22	0.8	
5	16QAM	12	13	20.56	20.50	20.45			
5	16QAM	25	0	20.48	20.56	20.58			
5	64QAM	1	0	20.54	20.57	20.50			
5	64QAM	1	12	20.56	20.70	20.68	22	0.8	
5	64QAM	1	24	20.46	20.47	20.47			
5	64QAM	12	0	19.39	19.53	19.41			
5	64QAM	12	7	19.54	19.48	19.48	21	1.6	
5	64QAM	12	13	19.57	19.68	19.62			
5	64QAM	25	0	19.62	19.62	19.56			
5	256QAM	1	0	17.53	17.67	17.58			
5	256QAM	1	12	17.54	17.50	17.39	19	3.8	
5	256QAM	1	24	17.60	17.70	17.62			
5	256QAM	12	0	17.48	17.53	17.43			
5	256QAM	12	7	17.41	17.62	17.48	19	3.8	
5	256QAM	12	13	17.58	17.65	17.59			
5	256QAM	25	0	17.63	17.58	17.53			
Channel									
Frequency (MHz)									
3	QPSK	1	0	21.11	21.40	21.13			
3	QPSK	1	8	21.17	21.30	21.27	22.6	0	
3	QPSK	1	14	21.19	21.28	21.26			
3	QPSK	8	0	21.36	21.28	21.33			
3	QPSK	8	4	21.20	21.30	21.29	22.6	0	
3	QPSK	8	7	21.17	21.27	21.16			
3	QPSK	15	0	21.31	21.28	21.33			
3	16QAM	1	0	21.28	21.30	21.20			
3	16QAM	1	8	21.24	21.38	21.35	22.6	0	
3	16QAM	1	15	21.31	21.36	21.32			
3	16QAM	8	0	20.51	20.63	20.55			
3	16QAM	8	4	20.50	20.56	20.42	22	0.8	
3	16QAM	8	7	20.53	20.56	20.49			
3	64QAM	1	0	20.50	20.64	20.51			
3	64QAM	1	8	20.50	20.70	20.59	22	0.8	
3	64QAM	1	14	20.47	20.47	20.42			
3	64QAM	8	0	19.47	19.60	19.59			
3	64QAM	8	4	19.47	19.61	19.51	21	1.6	
3	64QAM	8	7	19.47	19.70	19.56			
3	64QAM	15	0	19.42	19.62	19.57			
3	256QAM	1	0	17.52	17.68	17.48			
3	256QAM	1	8	17.53	17.53	17.49	19	3.8	
3	256QAM	1	15	17.60	17.65	17.65			
3	256QAM	8	0	17.52	17.51	17.40			
3	256QAM	8	4	17.51	17.59	17.53	19		





Band 41 Ant0											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up Int (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41008	41416			
20	QPSK	1	0	21.02	21.02	21.02	21.02	21.02		21.6	0
20	QPSK	1	49	21.00	20.98	21.03	20.98	21.03			
20	QPSK	1	89	21.03	20.99	21.10	21.04	21.13			
20	QPSK	50	0	21.05	21.08	21.12	21.08	21.08			
20	QPSK	50	24	21.06	20.99	21.08	20.96	21.01		21.6	0
20	QPSK	50	49	20.93	21.04	21.07	20.98	21.02			
20	QPSK	100	0	20.93	20.96	21.06	20.99	21.04			
20	HQAM	1	0	21.02	20.96	21.08	21.05	21.02		21.6	0
20	HQAM	1	49	20.92	20.98	20.95	20.98	20.97			
20	HQAM	1	89	20.79	20.77	20.87	20.75	20.82			
20	HQAM	50	0	19.97	19.89	20.04	19.99	19.90			
20	HQAM	50	24	20.04	19.98	20.12	20.00	20.02			
20	HQAM	50	50	19.84	19.86	19.97	19.83	19.81		20.6	1
20	HQAM	100	0	20.05	20.05	20.15	20.06	20.07			
20	HQAM	100	1	20.12	20.17	20.27	20.17	20.14			
20	HQAM	1	49	20.02	20.02	20.10	20.06	19.98		20.6	1
20	HQAM	1	89	20.13	20.06	20.16	20.13	20.17			
20	HQAM	50	24	18.95	18.84	18.88	18.74	18.84		19.6	2
20	HQAM	100	0	19.02	19.03	19.10	18.96	19.04			
20	ZSFGM	1	0	17.04	17.00	17.13	17.03	17.01			
20	ZSFGM	1	49	16.88	16.89	16.96	16.88	16.89		17.6	4
20	ZSFGM	1	89	17.06	17.01	17.10	16.97	16.97			
20	ZSFGM	50	0	16.89	16.89	16.92	16.89	16.88			
20	ZSFGM	50	24	16.82	16.85	16.94	16.81	16.80		17.6	4
20	ZSFGM	50	50	16.72	16.73	16.85	16.71	16.78			
20	ZSFGM	100	0	16.85	16.84	16.94	16.81	16.82			
Channel											
Frequency (MHz)				39795	40173	40600	41008	41515			
15	QPSK	1	0	21.02	21.24	21.33	21.27	21.21		22.0	0
15	QPSK	1	37	20.84	20.87	21.04	20.86	20.82			
15	QPSK	1	74	20.91	20.91	21.06	21.07	21.00			
15	QPSK	36	0	20.99	21.09	21.01	20.94	20.91			
15	QPSK	36	20	20.86	20.88	20.95	20.90	20.87		21.6	0
15	QPSK	36	56	20.79	20.97	20.97	20.88	20.89			
15	QPSK	75	0	20.90	20.90	20.97	20.88	20.89			
15	HQAM	1	0	20.93	20.90	20.97	20.91	20.89		21.6	0
15	HQAM	1	37	20.86	20.90	20.91	20.75	20.78			
15	HQAM	1	74	20.70	20.72	20.78	20.71	20.72			
15	HQAM	36	0	19.94	19.77	19.95	19.79	19.84			
15	HQAM	36	20	20.02	19.86	20.00	19.85	19.85		20.6	1
15	HQAM	36	56	19.69	19.72	19.88	19.72	19.78			
15	HQAM	75	0	19.91	20.01	20.00	19.89	19.93			
15	HQAM	1	37	19.96	19.99	20.03	19.89	19.89		20.6	1
15	HQAM	1	74	20.06	19.97	20.09	20.06	20.05			
15	HQAM	36	0	18.85	18.89	18.93	18.89	18.80			
15	HQAM	36	20	18.75	18.72	18.74	18.84	18.71		19.6	2
15	HQAM	36	56	18.87	18.87	18.87	18.87	18.87			
15	HQAM	75	0	18.97	18.93	18.97	18.90	18.94			
15	ZSFGM	1	0	17.01	16.88	16.99	16.91	16.88		17.6	4
15	ZSFGM	1	37	16.89	16.89	16.94	16.74	16.84			
15	ZSFGM	1	74	16.93	16.96	16.96	16.89	16.91			
15	ZSFGM	36	0	16.94	16.87	16.94	16.77	16.89		17.6	4
15	ZSFGM	36	20	16.89	16.89	16.93	16.74	16.84			
15	ZSFGM	36	56	16.85	16.70	16.75	16.59	16.66			
15	ZSFGM	75	0	16.93	16.80	16.90	16.87	16.91		17.6	4
Channel											
Frequency (MHz)				39791	40447	40900	41360	41920			
10	QPSK	1	0	21.07	21.29	21.32	21.24	21.17		21.60	0
10	QPSK	1	25	21.04	21.05	21.01	20.98	21.03			
10	QPSK	1	49	20.98	20.97	21.05	20.90	20.92			
10	QPSK	1	74	20.84	20.97	20.97	20.86	20.87			
10	QPSK	25	12	20.99	20.86	20.97	20.83	20.89		21.6	0
10	QPSK	25	26	20.80	20.95	21.04	20.85	20.88			
10	QPSK	50	0	20.99	20.90	20.97	20.90	20.91			
10	HQAM	1	0	20.98	20.83	21.02	20.81	20.81		21.6	0
10	HQAM	1	25	20.71	20.83	20.83	20.81	20.78			
10	HQAM	1	49	20.67	20.63	20.75	20.69	20.74			
10	HQAM	25	0	19.90	19.79	19.88	19.79	19.86			
10	HQAM	25	12	19.99	19.96	20.05	19.81	19.87		20.6	1
10	HQAM	25	26	19.77	19.71	19.85	19.75	19.75			
10	HQAM	50	0	19.95	19.98	20.09	19.91	20.02			
10	HQAM	1	0	20.08	20.08	20.22	20.06	20.03			
10	HQAM	1	25	19.95	19.98	20.04	19.94	19.98		20.6	1
10	HQAM	1	49	20.02	19.93	20.09	20.03	20.04			
10	HQAM	25	0	18.81	18.90	18.91	18.76	18.85			
10	HQAM	25	12	18.82	18.75	18.73	18.59	18.80		19.6	2
10	HQAM	25	26	18.79	18.87	18.90	18.83	18.81			
10	HQAM	50	0	18.94	18.97	19.07	18.92	18.91			
10	ZSFGM	1	0	16.94	16.90	17.07	16.95	16.95			
10	ZSFGM	1	25	16.73	16.78	16.86	16.81	16.84		17.6	4
10	ZSFGM	1	49	16.97	16.97	17.04	16.91	16.95			
10	ZSFGM	25	0	16.95	16.86	16.88	16.78	16.82			
10	ZSFGM	25	12	16.78	16.77	16.83	16.68	16.78			
10	ZSFGM	25	26	16.61	16.70	16.75	16.64	16.63		17.6	4
10	ZSFGM	50	0	16.90	16.89	17.01	16.91	16.96			
Channel											
Frequency (MHz)				39795	40445	40900	41360	41920			
5	QPSK	1	0	21.05	21.23	21.11	21.04	21.14		21.60	0
5	QPSK	1	18	20.92	20.87	21.04	20.89	20.89			
5	QPSK	1	24	21.04	21.02	21.00	20.98	20.95			
5	QPSK	12	0	20.90	21.07	20.99	20.86	20.86			
5	QPSK	12	7	20.84	20.85	20.95	20.83	20.81		21.6	0
5	QPSK	12	13	20.83	20.80	21.01	20.83	20.81			
5	QPSK	25	0	20.89	20.91	20.83	20.81	20.84			
5	QPSK	1	0	20.97	20.87	20.95	20.80	20.87			
5	HQAM	1	12	20.76	20.82	20.90	20.77	20.87		21.6	0
5	HQAM	1	24	20.65	20.63	20.72	20.56	20.78			
5	HQAM	12	0	19.94	19.83	19.86	19.79	19.85			
5	HQAM	12	7	19.97	19.87	20.09	19.94	19.93		20.6	1
5	HQAM	12	13	19.79	19.72	19.84	19.69	19.80			
5	HQAM	25	0	19.89	20.02	20.03	19.89	20.04			
5	HQAM	1	0	20.02	20.08	20.18	20.09	20.08			
5	HQAM	1	12	19.91	19.89	19.99	19.86	19.85		20.6	1
5	HQAM	1	24	20.06	19.97	20.09	20.01	20.01			
5	HQAM	12	0	18.91	18.91	18.92	18.86	18.92			
5	HQAM	12	7	18.75	18.74	18.75	18.59	18.75		19.6	2
5	HQAM	12	13	18.82	18.87	18.80	18.73	18.80			
5	HQAM	25	0	18.82	18.90	19.03	18.81	18.80			
5	ZSFGM	1	0	16.94	16.93	17.05	16.97	16.94			
5	ZSFGM	1	12	16.84	16.85	16.91	16.75	16.80		17.6	4
5	ZSFGM	1	24	16.90	16.96	16.98	16.83	16.86			
5	ZSFGM	12	0	16.98	16.83	16.95	16.85	16.81			



Band 38 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.72	22.92	23.12	23.5	0	
20	QPSK	1	49	22.71	22.84	22.80			
20	QPSK	1	99	22.69	22.71	22.71			
20	QPSK	50	0	21.82	21.95	21.93	22.9	0.6	
20	QPSK	50	24	21.84	21.89	21.79			
20	QPSK	50	49	21.86	21.91	21.86			
20	QPSK	100	0	21.81	21.85	21.85	22.9	0.6	
20	HQDM	1	0	21.76	21.85	21.78			
20	HQDM	1	49	21.66	21.74	21.69			
20	HQDM	1	99	21.74	21.81	21.73			
20	HQDM	50	0	20.81	20.85	20.80	21.9	1.6	
20	HQDM	50	24	20.87	20.91	20.79			
20	HQDM	50	49	20.83	20.79	20.71			
20	HQDM	100	0	20.80	20.85	20.84	21.9	1.6	
20	HQDM	100	24	20.78	20.91	20.83			
20	HQDM	100	49	20.74	20.84	20.74			
20	HQDM	50	0	19.75	19.85	19.72	20.9	2.6	
20	HQDM	50	24	19.75	19.81	19.77			
20	HQDM	50	49	19.68	19.70	19.69			
20	HQDM	100	0	19.62	19.66	19.60	20.9	2.6	
20	HQDM	100	24	19.62	19.66	19.60			
20	256QAM	1	0	17.84	17.94	17.82	18.9	4.6	
20	256QAM	1	49	17.79	17.80	17.85			
20	256QAM	1	99	17.89	17.92	17.84			
20	256QAM	50	0	17.81	17.86	17.79	18.9	4.6	
20	256QAM	50	24	17.80	17.83	17.74			
20	256QAM	50	49	17.82	17.78	17.67			
20	256QAM	100	0	17.85	17.85	17.85	18.9	4.6	
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.62	22.73	22.74	23.5	0	
15	QPSK	1	47	22.66	22.73	22.68			
15	QPSK	1	74	22.63	22.63	22.64			
15	QPSK	36	0	21.79	21.80	21.84	22.9	0.6	
15	QPSK	36	20	21.75	21.78	21.78			
15	QPSK	36	47	21.82	21.82	21.69			
15	QPSK	75	0	21.76	21.82	21.70	22.9	0.6	
15	HQDM	1	0	21.67	21.73	21.65	22.9	0.6	
15	HQDM	1	47	21.65	21.65	21.65			
15	HQDM	1	74	21.60	21.70	21.70			
15	HQDM	36	0	20.72	20.73	20.67	21.9	1.6	
15	HQDM	36	20	20.62	20.65	20.58			
15	HQDM	36	47	20.64	20.70	20.56			
15	HQDM	75	0	20.81	20.84	20.69	21.9	1.6	
15	HQDM	75	0	20.78	20.80	20.73			
15	HQDM	1	47	20.85	20.79	20.69	21.9	1.6	
15	HQDM	1	74	20.63	20.74	20.81			
15	HQDM	36	0	19.67	19.71	19.62	20.9	2.6	
15	HQDM	36	20	19.69	19.74	19.64			
15	HQDM	36	47	19.68	19.65	19.62			
15	HQDM	75	0	19.71	19.82	19.72	20.9	2.6	
15	256QAM	1	0	17.76	17.82	17.78	18.9	4.6	
15	256QAM	1	47	17.85	17.84	17.82			
15	256QAM	1	74	17.81	17.82	17.80			
15	256QAM	36	0	17.65	17.81	17.68	18.9	4.6	
15	256QAM	36	20	17.75	17.80	17.63			
15	256QAM	36	47	17.48	17.68	17.63			
15	256QAM	75	0	17.70	17.86	17.67	18.9	4.6	
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.62	22.73	22.74	23.5	0	
10	QPSK	1	25	22.61	22.70	22.73			
10	QPSK	1	49	22.61	22.62	22.65			
10	QPSK	12	0	21.74	21.80	21.81	22.9	0.6	
10	QPSK	25	12	21.79	21.78	21.69			
10	QPSK	25	25	21.62	21.62	21.76			
10	QPSK	50	0	21.73	21.80	21.65	22.9	0.6	
10	HQDM	1	0	21.70	21.70	21.65			
10	HQDM	1	25	21.68	21.66	21.66			
10	HQDM	1	49	21.64	21.67	21.64			
10	HQDM	25	0	20.70	20.77	20.71	21.9	1.6	
10	HQDM	25	12	20.68	20.68	20.64			
10	HQDM	25	25	20.65	20.63	20.61			
10	HQDM	50	0	20.76	20.88	20.79	21.9	1.6	
10	HQDM	50	12	20.79	20.84	20.75			
10	HQDM	50	25	20.71	20.82	20.77			
10	HQDM	100	0	20.71	20.82	20.82	21.9	1.6	
10	HQDM	100	12	20.74	20.82	20.82			
10	HQDM	100	25	20.74	20.82	20.82			
10	HQDM	25	12	19.64	19.70	19.68	20.9	2.6	
10	HQDM	25	25	19.62	19.65	19.58			
10	HQDM	50	0	19.76	19.87	19.81	20.9	2.6	
10	256QAM	1	0	17.74	17.82	17.68	18.9	4.6	
10	256QAM	1	25	17.88	17.76	17.76			
10	256QAM	1	49	17.81	17.88	17.75			
10	256QAM	25	0	17.68	17.74	17.69	18.9	4.6	
10	256QAM	25	12	17.73	17.66	17.64			
10	256QAM	25	25	17.50	17.71	17.63			
10	256QAM	50	0	17.76	17.78	17.78	18.9	4.6	

Band 38 HPUE Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	24.18	24.15	24.12	25.1	0	
20	QPSK	1	49	23.99	24.12	24.04			
20	QPSK	1	99	24.12	24.16	24.12			
20	QPSK	50	0	24.12	24.20	24.08	25.1	0	
20	QPSK	50	24	24.07	24.16	24.03			
20	QPSK	50	49	24.07	24.17	24.08			
20	QPSK	100	0	24.13	24.22	24.17	25.1	0	
20	16QAM	1	0	24.14	24.24	24.20	25.1	0	
20	16QAM	1	49	24.14	24.22	24.08			
20	16QAM	1	99	24.09	24.20	24.13			
20	16QAM	50	0	23.76	23.91	23.84	24.9	0.2	
20	16QAM	50	24	23.73	23.84	23.71			
20	16QAM	50	49	23.66	23.77	23.68			
20	16QAM	100	0	23.62	23.66	23.59	24.9	0.2	
20	16QAM	100	24	23.65	23.76	23.65			
20	16QAM	100	49	23.66	23.68	23.66			
20	16QAM	50	0	22.88	22.92	22.88	23.9	1.2	
20	16QAM	50	24	22.73	22.85	22.81			
20	16QAM	50	49	22.77	22.81	22.71			
20	16QAM	100	0	22.88	22.88	22.88	23.9	1.2	
20	256QAM	1	0	20.84	21.01	20.90	21.9	3.2	
20	256QAM	1	49	20.87	20.96	20.86			
20	256QAM	1	99	20.75	20.84	20.70			
20	256QAM	50	0	20.69	20.89	20.78	21.9	3.2	
20	256QAM	50	24	20.72	20.79	20.64			
20	256QAM	50	49	20.73	20.87	20.78			
20	256QAM	100	0	20.90	20.96	20.88	21.9	3.2	
Channel									
Frequency (MHz)									
15	QPSK	1	0	24.08	24.15	24.12	25.1	0	
15	QPSK	1	47	23.94	24.08	23.99			
15	QPSK	1	74	24.03	24.10	23.97			
15	QPSK	36	0	24.08	24.16	24.00	25.1	0	
15	QPSK	36	20	24.04	24.11	23.93			
15	QPSK	36	47	24.02	24.08	23.94			
15	QPSK	75	0	24.02	24.10	24.10	25.1	0	
15	16QAM	1	0	24.00	24.14	24.07	25.1	0	
15	16QAM	1	47	24.07	24.16	24.00			
15	16QAM	1	74	23.98	24.06	24.00			
15	16QAM	36	0	23.62	23.82	23.79	24.9	0.2	
15	16QAM	36	20	23.62	23.76	23.67			
15	16QAM	36	47	23.60	23.65	23.54			
15	16QAM	75	0	23.78	23.90	23.80	24.9	0.2	
15	16QAM	75	0	23.94	24.07	23.92			
15	16QAM	1	47	23.77	23.94	23.81	24.9	0.2	
15	16QAM	1	74	23.98	24.06	24.00			
15	16QAM	36	0	22.82	22.82	22.7			



Band 41 Ant2											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39760	40198	40636	41074	41512	41950		
20	QPSK	1	0	22.61	22.73	22.85	22.97	23.10	23.22	23.5	0
20	QPSK	1	49	22.65	22.73	22.79	22.75	22.72	22.70	23.5	0
20	QPSK	1	89	22.78	22.79	22.84	22.74	22.78	22.78	23.5	0
20	QPSK	50	0	21.79	21.90	21.94	21.85	21.80	21.80	21.9	0.6
20	QPSK	50	24	21.79	21.72	21.85	21.78	21.75	21.75	21.9	0.6
20	QPSK	50	48	21.80	21.82	21.81	21.78	21.78	21.78	21.9	0.6
20	QPSK	100	0	21.82	21.86	21.90	21.79	21.84	21.84	21.9	0.6
20	HQAM	1	0	21.81	21.83	21.88	21.81	21.79	21.79	21.9	0.6
20	HQAM	1	49	21.71	21.72	21.81	21.69	21.68	21.68	21.9	0.6
20	HQAM	1	99	21.86	21.82	21.75	21.89	21.83	21.83	21.9	0.6
20	HQAM	50	0	20.79	20.89	20.94	20.89	20.82	20.82	21.9	1.6
20	HQAM	50	24	20.77	20.99	20.93	20.76	20.71	20.71	21.9	1.6
20	HQAM	50	50	20.77	20.80	20.88	20.83	20.84	20.84	21.9	1.6
20	HQAM	100	0	20.87	20.78	20.85	20.84	20.78	20.78	21.9	1.6
20	HQAM	100	0	20.82	20.81	20.93	20.78	20.82	20.82	21.9	1.6
20	HQAM	100	49	20.79	20.80	20.81	20.88	20.77	20.77	21.9	1.6
20	HQAM	100	99	20.78	20.81	20.84	20.72	20.71	20.71	21.9	1.6
20	HQAM	50	24	19.73	19.70	19.84	19.70	19.78	19.78	20.9	2.6
20	HQAM	50	24	19.86	19.73	19.77	19.85	19.84	19.84	20.9	2.6
20	HQAM	50	50	19.70	19.71	19.79	19.74	19.70	19.70	20.9	2.6
20	HQAM	100	0	19.79	19.79	19.92	19.81	19.79	19.79	20.9	2.6
20	ZSFGM	1	0	17.77	17.84	17.90	17.82	17.84	17.84	18.9	4.6
20	ZSFGM	1	49	17.71	17.71	17.84	17.72	17.78	17.78	18.9	4.6
20	ZSFGM	1	99	17.66	17.70	17.78	17.67	17.66	17.66	18.9	4.6
20	ZSFGM	50	0	17.68	17.68	17.68	17.68	17.68	17.68	18.9	4.6
20	ZSFGM	50	24	17.69	17.70	17.74	17.66	17.61	17.61	18.9	4.6
20	ZSFGM	50	50	17.68	17.68	17.80	17.73	17.71	17.71	18.9	4.6
20	ZSFGM	100	0	17.68	17.68	17.68	17.68	17.68	17.68	18.9	4.6
Channel											
Frequency (MHz)											
				39765	40173	40630	41088	41515	41952		
15	QPSK	1	0	22.61	22.74	22.83	22.73	22.82	22.92	23.0	0
15	QPSK	1	37	22.52	22.68	22.66	22.83	22.67	22.67	24.0	0
15	QPSK	1	74	22.71	22.67	22.72	22.94	22.74	22.74	24.0	0
15	QPSK	36	0	21.72	21.87	21.86	21.71	21.75	21.75	21.9	0.6
15	QPSK	36	20	21.69	21.57	21.78	21.64	21.70	21.70	21.9	0.6
15	QPSK	36	40	21.68	21.73	21.86	21.67	21.78	21.78	21.9	0.6
15	QPSK	75	0	21.67	21.80	21.76	21.67	21.77	21.77	21.9	0.6
15	HQAM	1	0	21.71	21.78	21.82	21.78	21.86	21.86	22.0	0.6
15	HQAM	1	37	21.61	21.68	21.68	21.64	21.67	21.67	22.0	0.6
15	HQAM	1	74	21.55	21.58	21.67	21.54	21.57	21.57	22.0	0.6
15	HQAM	36	0	20.72	20.72	20.90	20.74	20.77	20.77	21.9	1.6
15	HQAM	36	20	20.64	20.54	20.82	20.65	20.74	20.74	21.9	1.6
15	HQAM	36	39	20.68	20.69	20.75	20.73	20.78	20.78	21.9	1.6
15	HQAM	75	0	20.78	20.82	20.80	20.76	20.84	20.84	21.9	1.6
15	HQAM	75	20	20.71	20.72	20.89	20.75	20.88	20.88	21.9	1.6
15	HQAM	1	37	20.78	20.78	20.83	20.78	20.87	20.87	21.9	1.6
15	HQAM	1	74	20.73	20.76	20.77	20.67	20.67	20.67	21.9	1.6
15	HQAM	36	0	19.84	19.88	19.97	19.85	19.74	19.74	20.9	2.6
15	HQAM	36	20	19.54	19.69	19.71	19.58	19.52	19.52	20.9	2.6
15	HQAM	36	39	19.88	19.88	19.88	19.88	19.88	19.88	20.9	2.6
15	HQAM	75	0	19.75	19.74	19.85	19.76	19.88	19.88	20.9	2.6
15	ZSFGM	1	0	17.64	17.73	17.75	17.78	17.71	17.71	18.9	4.6
15	ZSFGM	1	37	17.61	17.61	17.68	17.60	17.62	17.62	18.9	4.6
15	ZSFGM	1	74	17.60	17.60	17.72	17.63	17.59	17.59	18.9	4.6
15	ZSFGM	36	0	17.73	17.68	17.73	17.75	17.63	17.63	18.9	4.6
15	ZSFGM	36	20	17.63	17.63	17.68	17.60	17.62	17.62	18.9	4.6
15	ZSFGM	36	39	17.67	17.51	17.66	17.61	17.60	17.60	18.9	4.6
15	ZSFGM	75	0	17.62	17.60	17.86	17.72	17.84	17.84	18.9	4.6
Channel											
Frequency (MHz)											
				39765	40173	40630	41088	41515	41952		
10	QPSK	1	0	22.67	22.78	22.82	22.80	22.82	22.80	23.0	0
10	QPSK	1	25	22.59	22.61	22.72	22.80	22.80	22.80	23.0	0
10	QPSK	1	49	22.70	22.63	22.78	22.82	22.74	22.74	23.0	0
10	QPSK	1	74	22.75	22.79	22.84	22.75	22.78	22.78	23.0	0
10	QPSK	25	12	21.74	21.58	21.73	21.71	21.72	21.72	22.0	0.6
10	QPSK	25	25	21.73	21.79	21.81	21.74	21.75	21.75	22.0	0.6
10	QPSK	50	0	21.79	21.74	21.79	21.74	21.79	21.79	22.0	0.6
10	HQAM	1	0	21.67	21.74	21.77	21.68	21.72	21.72	22.0	0.6
10	HQAM	1	25	21.68	21.68	21.76	21.68	21.66	21.66	22.0	0.6
10	HQAM	1	49	21.61	21.61	21.63	21.63	21.60	21.60	22.0	0.6
10	HQAM	25	0	20.70	20.70	20.82	20.85	20.74	20.74	21.9	1.6
10	HQAM	25	12	20.68	20.56	20.75	20.68	20.58	20.58	21.9	1.6
10	HQAM	25	25	20.70	20.73	20.81	20.80	20.75	20.75	21.9	1.6
10	HQAM	50	0	20.78	20.85	20.80	20.81	20.71	20.71	21.9	1.6
10	HQAM	50	0	20.71	20.72	20.80	20.71	20.70	20.70	21.9	1.6
10	HQAM	50	25	20.73	20.74	20.78	20.77	20.69	20.69	21.9	1.6
10	HQAM	1	49	20.70	20.68	20.70	20.67	20.67	20.67	21.9	1.6
10	HQAM	25	0	19.89	19.89	19.78	19.83	19.83	19.83	20.9	2.6
10	HQAM	25	12	19.61	19.68	19.64	19.53	19.59	19.59	20.9	2.6
10	HQAM	25	25	19.56	19.57	19.75	19.63	19.66	19.66	20.9	2.6
10	HQAM	50	0	19.78	19.64	19.84	19.69	19.67	19.67	20.9	2.6
10	ZSFGM	1	0	17.73	17.71	17.77	17.77	17.73	17.73	18.9	4.6
10	ZSFGM	1	25	17.66	17.61	17.70	17.60	17.71	17.71	18.9	4.6
10	ZSFGM	1	49	17.58	17.58	17.64	17.59	17.58	17.58	18.9	4.6
10	ZSFGM	25	0	17.73	17.64	17.83	17.77	17.63	17.63	18.9	4.6
10	ZSFGM	25	12	17.68	17.68	17.68	17.68	17.68	17.68	18.9	4.6
10	ZSFGM	25	25	17.51	17.54	17.73	17.61	17.53	17.53	18.9	4.6
10	ZSFGM	50	0	17.61	17.75	17.81	17.75	17.79	17.79	18.9	4.6
Channel											
Frequency (MHz)											
				39765	40173	40630	41088	41515	41952		
5	QPSK	1	0	22.65	22.75	22.84	22.84	22.78	22.78	23.0	0
5	QPSK	1	12	22.61	22.63	22.67	22.67	22.67	22.67	23.0	0
5	QPSK	1	24	22.63	22.58	22.78	22.58	22.58	22.58	23.0	0
5	QPSK	12	0	21.66	21.63	21.86	21.73	21.76	21.76	22.0	0.6
5	QPSK	12	7	21.71	21.68	21.79	21.69	21.84	21.84	22.0	0.6
5	QPSK	12	13	21.66	21.79	21.80	21.73	21.79	21.79	22.0	0.6
5	QPSK	25	0	21.78	21.72	21.79	21.73	21.74	21.74	22.0	0.6
5	QPSK	25	12	21.69	21.79	21.75	21.78	21.68	21.68	22.0	0.6
5	HQAM	1	12	21.61	21.68	21.75	21.62	21.61	21.61	22.0	0.6
5	HQAM	1	24	21.68	21.68	21.63	21.66	21.67	21.67	22.0	0.6
5	HQAM	12	0	20.67	20.70	20.88	20.74	20.78	20.78	21.9	1.6
5	HQAM	12	7	20.64	20.60	20.70	20.68	20.63	20.63	21.9	1.6
5	HQAM	12	13	20.70	20.70	20.76	20.74	20.70	20.70	21.9	1.6
5	HQAM	25	0	20.75	20.67	20.76	20.69	20.68	20.68	21.9	1.6
5	HQAM	25	12	20.79	20.73	20.89	20.84	20.71	20.71	21.9	1.6
5	HQAM	25	24	20.71	20.74	20.87	20.79	20.66	20.66	21.9	1.6
5	HQAM	1	24	20.71	20.67	20.80	20.63	20.66	20.66	21.9	1.6
5	HQAM	12	0	19.63	19.69	19.78	19.66	19.71	19.71	20.9	2.6
5	HQAM	12	0	19.53	19.67	19.66	19.55	19.58	19.58	20.9	2.6
5	HQAM	12	13	19.60	19.63	19.67	19.66	19.58	19.58	20.9	2.6
5	HQAM	25	0	19.74	19.76	19.83	19.69	19.69	19.69	20.9	2.6
5	ZSFGM	1	0	17.68	17.72	17.84	17.75	17.70	17.70	18.9	4.6
5	ZSFGM	1	12	17.62	17.56	17.69	17.68	17			



Band 42 FCC Part27Q Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Med Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel				42190	42690	42990			
Frequency (MHz)									
20	QPSK	1	0	20.22	20.31	20.43			
20	QPSK	1	49	20.28	20.37	20.33		21.5	0
20	QPSK	1	99	20.35	20.31	20.25			
20	QPSK	50	0	20.34	20.45	20.34			
20	QPSK	50	24	20.27	20.34	20.29		20.5	1
20	QPSK	100	0	20.31	20.38	20.34			
20	QPSK	100	0	20.39	20.48	20.42			
20	16QAM	1	0	20.31	20.48	20.33		20.5	1
20	16QAM	1	49	20.31	20.44	20.37			
20	16QAM	1	99	20.44	20.48	20.43			
20	16QAM	50	0	19.30	19.38	19.29			
20	16QAM	50	24	19.32	19.42	19.28			
20	16QAM	50	50	19.28	19.34	19.25		19.5	2
20	16QAM	100	0	19.35	19.38	19.29			
20	16QAM	100	0	19.35	19.45	19.42			
20	16QAM	100	49	19.25	19.38	19.25		19.5	2
20	16QAM	1	99	19.34	19.45	19.28			
20	16QAM	50	0	18.17	18.22	18.14			
20	16QAM	50	24	18.08	18.11	18.03		18.5	3
20	16QAM	50	50	18.15	18.21	18.09			
20	16QAM	100	0	18.09	18.20	18.12			
20	256QAM	1	0	16.15	16.21	16.14			
20	256QAM	1	49	16.21	16.27	16.14		16.5	5
20	256QAM	1	99	16.17	16.10	16.00			
20	256QAM	50	0	16.23	16.28	16.13			
20	256QAM	50	24	16.14	16.23	16.08		16.5	5
20	256QAM	50	50	16.02	16.14	16.03			
20	256QAM	100	0	16.18	16.21	16.06			
Channel									
Frequency (MHz)				42165	42690	43015	Tune-up Int (dBm)	MPR (dB)	
15	QPSK	1	0	20.23	20.42	20.43			
15	QPSK	1	37	20.16	20.24	20.28		21.5	0
15	QPSK	1	74	20.20	20.30	20.10			
15	QPSK	36	0	20.25	20.42	20.20			
15	QPSK	36	20	20.16	20.28	20.20		20.5	1
15	QPSK	75	0	20.32	20.34	20.28			
15	16QAM	1	0	20.19	20.39	20.28		20.5	1
15	16QAM	1	37	20.20	20.26	20.20			
15	16QAM	1	74	20.31	20.39	20.30			
15	16QAM	36	0	19.22	19.34	19.20			
15	16QAM	36	39	19.13	19.23	19.12		19.5	2
15	16QAM	75	0	19.30	19.27	19.30			
15	16QAM	75	0	19.29	19.32	19.30			
15	16QAM	1	37	19.23	19.29	19.12		19.5	2
15	16QAM	1	74	19.29	19.36	19.20			
15	16QAM	36	39	18.13	18.14	18.09		18.5	3
15	16QAM	36	20	17.95	17.98	17.92			
15	16QAM	75	0	18.00	18.13	18.05			
15	256QAM	1	0	16.05	16.16	16.06		16.5	5
15	256QAM	1	37	16.15	16.15	16.05			
15	256QAM	1	74	16.08	16.07	16.08			
15	256QAM	36	0	16.15	16.15	16.04		16.5	5
15	256QAM	36	39	16.08	16.06	16.07			
15	256QAM	75	0	16.14	16.15	16.10			
Channel									
Frequency (MHz)				43140	43690	43940	Tune-up Int (dBm)	MPR (dB)	
10	QPSK	1	0	20.21	20.43	20.43			
10	QPSK	1	25	20.15	20.32	20.29		21.5	0
10	QPSK	1	49	20.18	20.22	20.07			
10	QPSK	12	0	20.26	20.35	20.20			
10	QPSK	25	12	20.23	20.30	20.23		20.5	1
10	QPSK	25	25	20.23	20.35	20.16			
10	QPSK	1	0	20.31	20.31	20.28			
10	16QAM	1	0	20.23	20.42	20.19		20.5	1
10	16QAM	1	25	20.22	20.29	20.18			
10	16QAM	1	49	20.33	20.37	20.33			
10	16QAM	25	0	19.23	19.35	19.15		19.5	2
10	16QAM	25	12	19.27	19.38	19.18			
10	16QAM	25	25	19.15	19.30	19.15			
10	16QAM	50	0	19.31	19.33	19.22			
10	16QAM	1	0	19.24	19.36	19.27			
10	16QAM	1	25	19.20	19.31	19.20		19.5	2
10	16QAM	1	49	19.22	19.29	19.16			
10	16QAM	25	0	18.03	18.17	18.00		18.5	3
10	16QAM	25	12	17.96	18.06	17.84			
10	16QAM	25	25	18.08	18.13	17.99			
10	16QAM	50	0	17.86	18.08	17.87			
10	256QAM	1	0	16.02	16.11	16.00		16.5	5
10	256QAM	1	25	16.10	16.21	16.01			
10	256QAM	1	49	16.06	16.08	16.06			
10	256QAM	25	0	16.21	16.23	16.07		16.5	5
10	256QAM	25	12	16.00	16.06	16.00			
10	256QAM	25	25	15.89	16.00	15.92			
10	256QAM	50	0	16.03	16.17	16.07			
Channel									
Frequency (MHz)				34515	35000	35475	Tune-up Int (dBm)	MPR (dB)	
5	QPSK	1	0	20.22	20.41	20.39			
5	QPSK	1	12	20.00	20.23	20.27		21.5	0
5	QPSK	1	24	20.19	20.29	20.09			
5	QPSK	12	0	20.27	20.36	20.19			
5	QPSK	12	7	20.22	20.26	20.15		20.5	1
5	QPSK	12	13	20.20	20.30	20.18			
5	QPSK	25	0	20.33	20.37	20.20			
5	16QAM	1	0	20.17	20.38	20.20			
5	16QAM	1	12	20.19	20.39	20.21		20.5	1
5	16QAM	1	24	20.30	20.34	20.28			
5	16QAM	12	0	19.18	19.26	19.21			
5	16QAM	12	7	19.23	19.32	19.18		19.5	2
5	16QAM	12	13	19.15	19.27	19.09			
5	16QAM	25	0	19.30	19.33	19.32			
5	16QAM	1	0	19.29	19.37	19.26			
5	16QAM	1	12	19.17	19.32	19.13		19.5	2
5	16QAM	1	24	19.26	19.27	19.16			
5	16QAM	12	0	18.04	18.11	18.11		18.5	3
5	16QAM	12	7	17.95	18.00	17.90			
5	16QAM	12	13	18.09	18.08	18.01			
5	16QAM	25	0	18.06	18.16	18.03			
5	256QAM	1	0	16.13	16.07	16.02		16.5	5
5	256QAM	1	12	16.11	16.23	16.06			
5	256QAM	1	24	16.01	16.01	16.07			
5	256QAM	12	0	16.12	16.19	16.08		16.5	5
5	256QAM	12	7	16.02	16.13	16.02			
5	256QAM	12	13	15.92	16.08	15.92			
5	256QAM	25	0	16.04	16.02	16.10			

Band 42 FCC Part96 Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Med Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel				43190	43340	43490			
Frequency (MHz)									
20	QPSK	1	0	20.44	20.39	20.32			
20	QPSK	1	49	20.22	20.28	20.21		21.5	0
20	QPSK	1	99	20.11	20.22	20.10			
20	QPSK	50	0	20.30	20.35	20.25			
20	QPSK	50	24	20.21	20.27	20.23		20.5	1
20	QPSK	100	0	20.34	20.34	20.18			
20	QPSK	100	0	20.29	20.34	20.24			
20	16QAM	1	0	20.25	20.39	20.26		20.5	1
20	16QAM	1	49	20.24	20.36	20.22			
20	16QAM	1	99	20.38	20.33	20.38			
20	16QAM	50	0	19.16	19.28	19.14		19.5	2
20	16QAM	50	24	19.20	19.28	19.17			
20	16QAM	50	50	19.17	19.21	19.16			
20	16QAM	100	0	19.20	19.27	19.24			
20	16QAM	100	0	19.25	19.35	19.27			
20	16QAM	100	49	19.14	19.32	19.18		19.5	2
20	16QAM	1	99	19.33	19.28	19.32			
20	16QAM	50	0	18.06	18.11	18.02		18.5	3
20	16QAM	50	24	18.00	18.03	17.94			
20	16QAM	50	50	18.07	18.08	18.01			
20	16QAM	100	0	17.86	18.06	17.88			
20	256QAM	1	0	16.06	16.15	16.05		16.5	5
20	256QAM	1	49	16.12	16.22	16.03			
20	256QAM	1	99	16.07	16.04	16.03			
20	256QAM	50	0	16.14	16.14	16.09			
20	256QAM	50	24	16.00	16.15	16.09		16.5	5
20	256QAM	50	50	16.03	16.07	16.03			
20	256QAM	100	0	16.10	16.16	16.06			
Channel									
Frequency (MHz)				43145	43340	43515	Tune-up Int (dBm)	MPR (dB)	
15	QPSK	1	0	20.21	20.41	20.21			
15	QPSK	1	37	20.09	20.18	20.18		21.5	0
15	QPSK	1	74	20.13	20.24	20.06			
15	QPSK	36	0	20.12	20.29	20.11			
15	QPSK	36	20	20.08	20.15	20.05		20.5	1
15	QPSK	75	0	20.20	20.28	20.20			
15	16QAM	1	0	20.11	20.33	20.21		20.5	1
15	16QAM	1	37	20.20	20.25	20.10			
15	16QAM	1	74	20.10	20.25	20.24			
15	16QAM	36	0	19.14	19.26	19.13		19.5	2
15	16QAM	36	39	19.13	19.28	19.12			
15									



Band 43 for FCC use Ant3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel			43660	44060	44460					
Frequency (MHz)										
20	QPSK	1	0	20.37	20.47	20.52	21.5	0		
20	QPSK	1	49	20.45	20.40	20.38				
20	QPSK	1	99	20.35	20.41	20.38				
20	QPSK	50	0	20.32	20.40	20.30				
20	QPSK	50	24	20.36	20.37	20.35				
20	QPSK	100	0	20.28	20.30	20.21				
20	16QAM	1	0	20.29	20.41	20.30				
20	16QAM	1	49	20.36	20.32	20.31				
20	16QAM	1	99	20.24	20.31	20.38				
20	16QAM	50	0	20.29	20.36	20.16				
20	16QAM	50	24	20.24	20.34	20.30				
20	16QAM	50	50	20.34	20.25	20.31				
20	16QAM	100	0	20.25	20.45	20.22				
20	16QAM	1	0	20.33	20.32	20.34				
20	16QAM	1	49	20.31	20.29	20.24				
20	16QAM	1	99	20.24	20.38	20.19				
20	16QAM	50	0	19.93	19.92	19.87				
20	16QAM	50	24	20.00	19.89	19.91				
20	16QAM	50	50	19.84	19.89	19.87				
20	16QAM	100	0	19.94	19.96	19.84				
20	256QAM	1	0	17.87	17.77	17.76				
20	256QAM	1	49	17.87	17.87	17.89				
20	256QAM	1	99	17.71	17.82	17.76				
20	256QAM	50	0	17.73	17.86	17.81				
20	256QAM	50	24	17.64	17.66	17.82				
20	256QAM	50	50	17.70	17.78	17.80				
20	256QAM	100	0	17.68	17.78	17.82				
Channel										
Frequency (MHz)			43660	44060	44515					
15	QPSK	1	0	20.23	20.28	20.23				
15	QPSK	1	37	20.41	20.40	20.27				
15	QPSK	1	74	20.34	20.30	20.29				
15	QPSK	36	0	20.26	20.42	20.27				
15	QPSK	36	20	20.28	20.36	20.26				
15	QPSK	36	39	20.22	20.38	20.22				
15	QPSK	75	0	20.26	20.26	20.20				
15	16QAM	1	0	20.24	20.40	20.26				
15	16QAM	1	37	20.29	20.36	20.23				
15	16QAM	1	74	20.21	20.25	20.23				
15	16QAM	36	0	20.20	20.34	20.15				
15	16QAM	36	20	20.15	20.12	20.20				
15	16QAM	36	39	20.22	20.14	20.25				
15	16QAM	75	0	20.29	20.35	20.14				
15	16QAM	75	0	20.31	20.20	20.20				
15	16QAM	1	37	20.21	20.28	20.23				
15	16QAM	1	74	20.16	20.27	20.16				
15	16QAM	36	0	19.93	19.91	19.83				
15	16QAM	36	20	20.01	19.79	19.83				
15	16QAM	36	39	19.83	19.83	19.83				
15	16QAM	75	0	19.92	19.94	19.72				
15	256QAM	1	0	17.86	17.78	17.76				
15	256QAM	1	37	17.77	17.78	17.78				
15	256QAM	1	74	17.71	17.69	17.74				
15	256QAM	36	0	17.70	17.78	17.83				
15	256QAM	36	20	17.64	17.66	17.77				
15	256QAM	36	39	17.65	17.77	17.78				
15	256QAM	75	0	17.86	17.77	17.78				
Channel										
Frequency (MHz)			3605	3650	3695					
10	QPSK	1	0	20.28	20.33	20.30				
10	QPSK	1	25	20.38	20.33	20.30				
10	QPSK	1	49	20.20	20.29	20.38				
10	QPSK	12	0	20.34	20.37	20.38				
10	QPSK	25	12	20.33	20.31	20.26				
10	QPSK	25	25	20.35	20.38	20.20				
10	QPSK	1	0	20.16	20.30	20.20				
10	16QAM	1	0	20.10	20.33	20.17				
10	16QAM	1	25	20.36	20.26	20.19				
10	16QAM	1	49	20.19	20.18	20.34				
10	16QAM	25	0	20.28	20.26	20.16				
10	16QAM	25	12	20.17	20.21	20.19				
10	16QAM	25	25	20.30	20.23	20.20				
10	16QAM	50	0	20.34	20.23	20.21				
10	16QAM	50	0	20.35	20.40	20.19				
10	16QAM	50	25	20.20	20.20	20.20				
10	16QAM	1	25	20.24	20.29	20.12				
10	16QAM	1	49	20.25	20.25	20.15				
10	16QAM	25	0	19.80	19.81	19.87				
10	16QAM	25	12	19.91	19.88	19.83				
10	16QAM	25	25	19.76	19.85	19.86				
10	16QAM	50	0	19.84	19.88	19.75				
10	256QAM	1	0	17.57	17.71	17.66				
10	256QAM	1	25	17.78	17.80	17.76				
10	256QAM	1	49	17.70	17.76	17.70				
10	256QAM	25	0	17.82	17.75	17.81				
10	256QAM	25	12	17.67	17.64	17.78				
10	256QAM	25	25	17.82	17.70	17.58				
10	256QAM	50	0	17.82	17.69	17.47				
Channel										
Frequency (MHz)			3605	3650	3695					
5	QPSK	1	0	20.28	20.43	20.25				
5	QPSK	1	12	20.36	20.33	20.32				
5	QPSK	1	24	20.25	20.36	20.38				
5	QPSK	12	0	20.29	20.26	20.25				
5	QPSK	12	7	20.29	20.35	20.23				
5	QPSK	12	13	20.25	20.38	20.21				
5	QPSK	25	0	20.16	20.26	20.09				
5	16QAM	1	0	20.23	20.34	20.20				
5	16QAM	1	12	20.36	20.24	20.18				
5	16QAM	1	24	20.23	20.23	20.23				
5	16QAM	12	0	20.21	20.28	20.07				
5	16QAM	12	7	20.24	20.19	20.23				
5	16QAM	12	13	20.24	20.22	20.31				
5	16QAM	25	0	20.39	20.32	20.24				
5	16QAM	1	0	20.29	20.32	20.22				
5	16QAM	1	12	20.21	20.23	20.12				
5	16QAM	1	24	20.18	20.22	20.07				
5	16QAM	12	0	19.88	19.87	19.86				
5	16QAM	12	7	19.94	19.83	19.82				
5	16QAM	12	13	19.72	19.84	19.88				
5	16QAM	25	0	19.82	19.85	19.82				
5	256QAM	1	0	17.68	17.69	17.71				
5	256QAM	1	12	17.87	17.74	17.82				
5	256QAM	1	24	17.83	17.81	17.75				
5	256QAM	12	0	17.82	17.73	17.80				
5	256QAM	12	7	17.58	17.64	17.74				
5	256QAM	12	13	17.70	17.86	17.73				
5	256QAM	25	0	17.52	17.49	17.51				

Band 48 FCC Ant3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
Channel			36580	36980	37380					
Frequency (MHz)										
20	QPSK	1	0	20.40	20.50	20.41	21.5	0		
20	QPSK	1	49	20.50	20.47	20.42				
20	QPSK	1	99	20.46	20.41	20.38				
20	QPSK	50	0	20.40	20.51	20.48				
20	QPSK	50	24	20.46	20.35	20.40				
20	QPSK	100	0	20.32	20.44	20.40				
20	16QAM	1	0	20.44	20.54	20.47				
20	16QAM	1	49	20.38	20.33	20.37				
20	16QAM	1	99	20.30	20.43	20.42				
20	16QAM	50	0	20.35	20.43	20.42				
20	16QAM	50	24	20.38	20.30	20.32				
20	16QAM	50	50	20.40	20.46	20.37				
20	16QAM	100	0	20.29	20.39	20.35				
20	16QAM	1	0	20.32	20.51	20.49				
20	16QAM	1	49	20.39	20.28	20.32				
20	16QAM	1	99	20.34	20.34	20.41				
20	16QAM	50	0	19.93	20.01	19.96				
20	16QAM	50	24	20.01	19.90	19.84				
20	16QAM	50	50	19.83	19.88	19.86				
20	16QAM	100	0	19.86	19.88	19.84				
20	256QAM	1	0	17.21	17.50	17.42				
20	256QAM	1	49	17.48	17.51	17.46				
20	256QAM	1	99	17.39	17.51	17.35				
20	256QAM	50	0	17.48	17.56	17.47				
20	256QAM	50	24	17.32	17.48	17.32				
20	256QAM	50	50	17.37	17.48	17.41				
20	256QAM	100	0	17.48	17.56	17.54				
Channel										
Frequency (MHz)			36580	36980	37380					
15	QPSK	1	0	20.43	20.53	20.37				
15	QPSK	1	37	20.50	20.38	20.36				
15	QPSK	1	74	20.41	20.45	20.40				
15	QPSK	36	0	20.42	20.49	20.42				
15	QPSK	36	20	20.37	20.23	20.27				
15	QPSK	36	39	20.42	20.40	20.37				
15	QPSK	75	0							



Band 41 Ant4											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39760	40198	40636	41074	41512	41950		
20	QPSK	1	0	18.52	19.13	19.74	20.35	20.96	21.57	20	0
20	QPSK	1	49	18.89	19.06	19.13	18.98	19.07	19.16	20	0
20	QPSK	1	89	18.87	19.09	19.01	18.96	18.98	19.02	20	0
20	QPSK	50	0	17.97	18.30	18.38	18.02	18.10	18.20	19	1
20	QPSK	50	24	17.96	17.97	18.06	17.99	17.94	17.94	19	1
20	QPSK	100	0	17.84	18.01	18.09	17.94	17.94	17.94	19	1
20	HQAM	1	0	17.94	18.08	18.18	18.12	18.06	18.06	19	1
20	HQAM	1	49	17.92	17.95	17.98	17.98	17.94	17.94	19	1
20	HQAM	1	89	17.92	17.96	18.10	17.98	18.03	18.03	19	1
20	HQAM	50	0	16.95	16.95	17.07	16.98	16.96	16.96	18	2
20	HQAM	50	24	16.74	16.84	16.95	16.84	16.89	16.89	18	2
20	HQAM	50	50	16.70	16.76	16.89	16.78	16.80	16.80	18	2
20	HQAM	100	0	16.91	17.07	17.12	17.07	17.02	17.02	18	2
20	HQAM	100	0	16.58	17.05	17.19	17.15	17.05	17.05	18	2
20	HQAM	100	49	16.83	16.88	16.84	16.87	16.85	16.85	18	2
20	HQAM	100	89	16.81	16.96	17.02	16.93	16.99	16.99	18	2
20	HQAM	50	0	15.90	15.97	16.05	15.98	15.90	15.90	17	3
20	HQAM	50	24	15.71	15.85	15.92	15.83	15.84	15.84	17	3
20	HQAM	50	50	15.82	15.89	16.03	15.98	15.99	15.99	17	3
20	HQAM	100	0	15.84	16.06	16.11	16.00	15.99	15.99	17	3
20	ZSFGM	1	0	13.77	13.84	13.88	13.87	13.86	13.86	15	5
20	ZSFGM	1	49	13.93	14.01	14.01	14.01	14.02	14.02	15	5
20	ZSFGM	1	89	13.88	13.96	14.02	13.94	13.89	13.89	15	5
20	ZSFGM	50	0	13.82	13.86	13.86	13.84	13.82	13.82	15	5
20	ZSFGM	50	24	13.73	13.92	13.95	13.80	13.82	13.82	15	5
20	ZSFGM	50	50	13.79	13.95	14.00	13.92	13.81	13.81	15	5
20	ZSFGM	100	0	13.92	14.04	14.04	14.04	14.04	14.04	15	5
Channel											
15	QPSK	1	0	39725	40173	40620	41068	41515	41962	20	0
15	QPSK	1	37	18.77	18.98	19.08	18.91	18.88	18.88	20	0
15	QPSK	1	74	18.81	18.78	18.96	18.96	18.84	18.84	20	0
15	QPSK	36	0	17.63	17.68	17.68	17.68	18.05	18.05	19	1
15	QPSK	36	20	17.78	17.90	17.93	17.84	17.80	17.80	19	1
15	QPSK	36	56	17.81	17.86	17.86	17.86	17.86	17.86	19	1
15	QPSK	75	0	17.70	17.97	17.98	17.85	17.83	17.83	19	1
15	HQAM	1	0	17.89	18.03	18.14	17.99	17.97	17.97	19	1
15	HQAM	1	37	17.93	17.99	17.99	17.99	17.99	17.99	19	1
15	HQAM	1	74	17.85	17.90	18.03	17.94	17.92	17.92	19	1
15	HQAM	36	0	16.73	16.83	17.02	16.95	16.85	16.85	18	2
15	HQAM	36	20	16.85	16.89	16.92	16.88	16.88	16.88	18	2
15	HQAM	36	56	16.58	16.64	16.80	16.72	16.68	16.68	18	2
15	HQAM	75	0	16.78	17.02	17.09	16.95	16.93	16.93	18	2
15	HQAM	1	0	16.92	16.91	17.06	17.11	16.95	16.95	18	2
15	HQAM	1	37	16.68	16.76	16.84	16.79	16.75	16.75	18	2
15	HQAM	1	74	16.77	16.91	16.97	16.90	16.90	16.90	18	2
15	HQAM	36	0	15.81	15.85	15.91	15.88	15.85	15.85	17	3
15	HQAM	36	20	15.99	15.76	15.80	15.71	15.74	15.74	17	3
15	HQAM	36	56	15.82	15.83	15.83	15.83	15.83	15.83	17	3
15	HQAM	75	0	15.51	15.97	16.00	15.90	15.89	15.89	17	3
15	ZSFGM	1	0	13.73	13.77	13.87	13.78	13.80	13.80	15	5
15	ZSFGM	1	37	13.82	14.02	14.02	13.97	13.97	13.97	15	5
15	ZSFGM	1	74	13.77	13.85	13.90	13.88	13.88	13.88	15	5
15	ZSFGM	36	0	13.77	13.98	14.01	13.91	13.97	13.97	15	5
15	ZSFGM	36	20	13.80	13.85	13.88	13.89	13.88	13.88	15	5
15	ZSFGM	36	56	13.72	13.82	13.85	13.79	13.85	13.85	15	5
15	ZSFGM	75	0	13.79	13.90	14.00	13.93	13.97	13.97	15	5
Channel											
10	QPSK	1	0	2501	2547	2593	2639	2685	2731	20	0
10	QPSK	1	25	18.79	18.92	19.02	18.84	19.03	19.03	20	0
10	QPSK	1	49	18.78	18.84	18.90	18.90	18.80	18.80	20	0
10	QPSK	1	74	17.88	17.96	18.00	17.96	17.96	17.96	20	0
10	QPSK	25	12	17.75	17.88	17.97	17.93	17.86	17.86	19	1
10	QPSK	25	26	17.87	18.02	17.98	17.88	17.92	17.92	19	1
10	QPSK	1	0	17.70	17.92	17.94	17.84	17.84	17.84	19	1
10	HQAM	1	0	17.88	17.88	18.09	17.87	17.88	17.88	19	1
10	HQAM	1	25	17.72	17.81	17.89	17.86	17.82	17.82	19	1
10	HQAM	1	49	17.84	17.91	17.97	17.92	17.95	17.95	19	1
10	HQAM	25	0	16.81	16.82	17.01	16.85	16.85	16.85	18	2
10	HQAM	25	14	16.84	16.78	16.86	16.86	16.79	16.79	18	2
10	HQAM	25	28	16.83	16.83	16.84	16.87	16.80	16.80	18	2
10	HQAM	50	0	16.80	16.83	17.01	17.03	16.99	16.99	18	2
10	HQAM	50	0	15.85	15.83	16.00	15.84	15.88	15.88	18	2
10	HQAM	50	26	16.70	16.83	16.89	16.80	16.78	16.78	18	2
10	HQAM	1	49	16.87	16.87	17.00	16.80	16.87	16.87	18	2
10	HQAM	25	0	15.85	15.83	16.00	15.84	15.88	15.88	17	3
10	HQAM	25	12	15.67	15.74	15.80	15.70	15.79	15.79	17	3
10	HQAM	25	26	15.79	15.75	15.85	15.79	15.86	15.86	17	3
10	HQAM	50	0	15.86	15.85	16.03	15.92	15.89	15.89	17	3
10	ZSFGM	1	0	13.72	13.71	13.87	13.72	13.82	13.82	15	5
10	ZSFGM	1	25	13.80	14.04	14.10	13.90	13.91	13.91	15	5
10	ZSFGM	1	49	13.82	13.91	13.91	13.91	13.91	13.91	15	5
10	ZSFGM	25	0	13.73	13.93	13.93	13.81	13.82	13.82	15	5
10	ZSFGM	25	14	13.83	13.98	14.04	13.79	13.88	13.88	15	5
10	ZSFGM	25	28	13.72	13.82	13.91	13.79	13.78	13.78	15	5
10	ZSFGM	50	0	13.83	13.95	14.06	13.99	14.04	14.04	15	5
Channel											
5	QPSK	1	0	18.85	18.99	19.21	18.95	19.18	19.18	20	0
5	QPSK	1	18	18.83	18.93	19.00	18.95	18.99	18.99	20	0
5	QPSK	1	24	18.76	18.79	18.93	18.88	18.84	18.84	20	0
5	QPSK	12	0	17.86	17.96	18.04	17.97	18.02	18.02	19	1
5	QPSK	12	7	17.85	17.85	18.01	17.93	17.84	17.84	19	1
5	QPSK	12	13	17.90	17.90	17.96	17.86	17.83	17.83	19	1
5	QPSK	25	0	17.74	17.90	17.96	17.86	17.84	17.84	19	1
5	HQAM	1	0	17.87	17.99	18.05	18.05	17.94	17.94	19	1
5	HQAM	1	12	17.89	17.84	17.97	17.90	17.87	17.87	19	1
5	HQAM	1	24	17.82	17.96	17.97	17.86	17.88	17.88	19	1
5	HQAM	12	0	16.74	16.89	16.97	16.91	16.88	16.88	18	2
5	HQAM	12	7	16.62	16.74	16.88	16.79	16.80	16.80	18	2
5	HQAM	12	13	16.90	16.71	16.81	16.69	16.73	16.73	18	2
5	HQAM	25	0	16.87	17.00	17.07	17.02	16.98	16.98	18	2
5	HQAM	1	0	16.90	16.98	17.09	17.07	16.94	16.94	18	2
5	HQAM	1	12	16.71	16.74	16.85	16.82	16.72	16.72	18	2
5	HQAM	1	24	16.77	16.87	16.96	16.88	16.91	16.91	18	2
5	HQAM	12	0	15.77	15.83	16.00	15.89	15.92	15.92	17	3
5	HQAM	12	0	15.83	15.76	15.82	15.70	15.72	15.72	17	3
5	HQAM	12	13	15.77	15.85	15.99	15.80	15.89	15.89	17	3
5	HQAM	25	0	15.82	15.99	16.03	15.86	15.88	15.88	17	3
5	ZSFGM	1	0	13.72	13.80	13.84	13.76	13.83	13.83	15	5
5	ZSFGM	1	12	13.83	13.95	14.04	13.89	13.98	13.98	15	5
5	ZSFGM	1	24	13.84	13.84	13.97	13.90	13.80	13.80	15	5
5	ZSFGM	12	0	13.72	13.89	14.04	13.82	13.87	13.87	15	5
5	ZSFGM	12	7	13.87	13.82	13.81	13.77	13.77	13.77	15	5
5	ZSFGM	12	13	13.88	13.82	13.96	13.86	13.85	13.85	15	5
5	ZSFGM	25	0	13.87	13.91	14.00	13.92	14.00	14.00	15	5

Band 41 HPUE Ant4											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39760	40198	40636					



Band 42 FCC Part27Q Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	16.46	16.52	16.52	17.4	0	
20	QPSK	1	49	16.43	16.49	16.43			
20	QPSK	1	99	16.37	16.39	16.36			
20	QPSK	50	0	16.50	16.57	16.44			
20	QPSK	50	24	16.35	16.49	16.42	17.4	0	
20	QPSK	100	0	16.29	16.45	16.42			
20	HQAM	1	0	16.40	16.46	16.38	17.4	0	
20	HQAM	1	49	16.25	16.42	16.31			
20	HQAM	1	99	16.23	16.37	16.31			
20	HQAM	50	0	16.35	16.46	16.38	17.4	0	
20	HQAM	50	24	16.30	16.42	16.38			
20	HQAM	50	50	16.42	16.49	16.40			
20	HQAM	100	0	16.28	16.47	16.39			
20	HQAM	100	0	16.42	16.55	16.39			
20	HQAM	1	49	16.48	16.54	16.55	17.4	0	
20	HQAM	1	99	16.45	16.55	16.41			
20	HQAM	50	0	16.31	16.34	16.25			
20	HQAM	50	24	16.41	16.53	16.49	17.4	0	
20	HQAM	50	50	16.47	16.52	16.43			
20	HQAM	100	0	16.32	16.42	16.41			
20	ZSSBAM	1	0	16.37	16.42	16.30	16.5	0.9	
20	ZSSBAM	1	49	16.20	16.47	16.44			
20	ZSSBAM	1	99	16.46	16.46	16.44			
20	ZSSBAM	50	0	16.48	16.47	16.33			
20	ZSSBAM	50	24	16.29	16.39	16.30	16.5	0.9	
20	ZSSBAM	50	50	16.43	16.48	16.40			
20	ZSSBAM	100	0	16.28	16.39	16.30			
Channel									
Frequency (MHz)									
15	QPSK	1	0	16.43	16.51	16.50	17.4	0	
15	QPSK	1	37	16.31	16.40	16.35			
15	QPSK	1	74	16.15	16.29	16.30			
15	QPSK	36	0	16.27	16.42	16.36			
15	QPSK	36	20	16.32	16.41	16.28	17.4	0	
15	QPSK	75	0	16.22	16.38	16.38			
15	HQAM	1	0	16.38	16.44	16.31	17.4	0	
15	HQAM	1	37	16.23	16.35	16.37			
15	HQAM	1	74	16.24	16.27	16.20			
15	HQAM	36	0	16.22	16.41	16.33	17.4	0	
15	HQAM	36	20	16.23	16.34	16.37			
15	HQAM	36	59	16.28	16.44	16.28			
15	HQAM	75	0	16.30	16.32	16.28	17.4	0	
15	HQAM	1	0	16.29	16.39	16.29			
15	HQAM	1	37	16.49	16.51	16.41	17.4	0	
15	HQAM	1	74	16.33	16.33	16.34			
15	HQAM	36	0	16.23	16.37	16.18	17.4	0	
15	HQAM	36	20	16.33	16.42	16.38			
15	HQAM	36	59	16.34	16.44	16.39			
15	HQAM	75	0	16.20	16.33	16.31			
15	ZSSBAM	1	0	16.28	16.30	16.23	16.5	0.9	
15	ZSSBAM	1	37	16.35	16.38	16.28			
15	ZSSBAM	1	74	16.44	16.49	16.41			
15	ZSSBAM	36	0	16.32	16.39	16.23	16.5	0.9	
15	ZSSBAM	36	20	16.24	16.31	16.29			
15	ZSSBAM	36	59	16.38	16.39	16.35			
15	ZSSBAM	75	0	16.15	16.27	16.14			
Channel									
Frequency (MHz)									
10	QPSK	1	0	16.43	16.50	16.45	17.4	0	
10	QPSK	1	25	16.34	16.47	16.34			
10	QPSK	1	49	16.22	16.29	16.28			
10	QPSK	12	7	16.28	16.42	16.32			
10	QPSK	25	12	16.27	16.48	16.24	17.4	0	
10	QPSK	25	25	16.32	16.38	16.39			
10	HQAM	1	0	16.21	16.30	16.27	17.4	0	
10	HQAM	1	0	16.31	16.32	16.36			
10	HQAM	1	25	16.13	16.32	16.16			
10	HQAM	1	49	16.19	16.24	16.29			
10	HQAM	25	0	16.28	16.39	16.33	17.4	0	
10	HQAM	25	12	16.20	16.29	16.33			
10	HQAM	50	0	16.29	16.36	16.22			
10	HQAM	1	0	16.30	16.40	16.28	17.4	0	
10	HQAM	1	25	16.28	16.37	16.33			
10	HQAM	1	49	16.34	16.47	16.45			
10	HQAM	25	12	16.27	16.40	16.35	17.4	0	
10	HQAM	25	25	16.31	16.42	16.33			
10	HQAM	50	0	16.24	16.30	16.34			
10	ZSSBAM	1	0	16.25	16.29	16.21	16.5	0.9	
10	ZSSBAM	1	25	16.35	16.40	16.40			
10	ZSSBAM	1	49	16.24	16.43	16.40			
10	ZSSBAM	25	0	16.27	16.30	16.28	16.5	0.9	
10	ZSSBAM	25	12	16.29	16.34	16.31			
10	ZSSBAM	25	25	16.35	16.41	16.41			
10	ZSSBAM	50	0	16.25	16.30	16.18			
Channel									
Frequency (MHz)									
5	QPSK	1	0	16.42	16.49	16.39	17.4	0	
5	QPSK	1	12	16.33	16.40	16.34			
5	QPSK	1	24	16.21	16.25	16.28			
5	QPSK	12	7	16.42	16.39	16.37	17.4	0	
5	QPSK	12	7	16.28	16.30	16.28			
5	QPSK	12	13	16.30	16.34	16.26			
5	HQAM	1	0	16.39	16.29	16.29	17.4	0	
5	HQAM	1	12	16.14	16.25	16.22			
5	HQAM	1	24	16.23	16.30	16.23			
5	HQAM	12	7	16.23	16.34	16.16	17.4	0	
5	HQAM	12	13	16.29	16.44	16.32			
5	HQAM	25	0	16.32	16.38	16.19	17.4	0	
5	HQAM	1	0	16.41	16.43	16.23			
5	HQAM	1	12	16.43	16.45	16.49			
5	HQAM	1	24	16.39	16.50	16.36			
5	HQAM	12	7	16.22	16.26	16.21	17.4	0	
5	HQAM	12	13	16.35	16.45	16.41			
5	HQAM	12	13	16.42	16.44	16.37			
5	HQAM	25	0	16.16	16.31	16.16			
5	ZSSBAM	1	0	16.33	16.29	16.28	16.5	0.9	
5	ZSSBAM	1	12	16.29	16.43	16.39			
5	ZSSBAM	1	24	16.49	16.48	16.47			
5	ZSSBAM	12	7	16.20	16.27	16.27	16.5	0.9	
5	ZSSBAM	12	13	16.28	16.42	16.43			
5	ZSSBAM	25	0	16.25	16.27	16.08			

Band 42 FCC Part96 Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	16.34	16.41	16.44	17.4	0	
20	QPSK	1	49	16.31	16.40	16.38			
20	QPSK	1	99	16.23	16.29	16.28			
20	QPSK	50	0	16.38	16.47	16.34			
20	QPSK	50	24	16.30	16.41	16.37	17.4	0	
20	QPSK	100	0	16.37	16.38	16.36			
20	QPSK	100	0	16.20	16.36	16.32			
20	HQAM	1	0	16.28	16.35	16.26	17.4	0	
20	HQAM	1	49	16.18	16.29	16.18			
20	HQAM	1	99	16.12	16.32	16.17			
20	HQAM	50	0	16.24	16.38	16.35	17.4	0	
20	HQAM	50	24	16.19	16.30	16.32			
20	HQAM	50	50	16.31	16.38	16.29			
20	HQAM	100	0	16.22	16.46	16.37			
20	HQAM	100	0	16.30	16.39	16.25			
20	HQAM	1	49	16.40	16.38	16.42	17.4	0	
20	HQAM	1	99	16.34	16.43	16.29			
20	HQAM	50	0	16.23	16.27	16.12			
20	HQAM	50	24	16.28	16.40	16.38	17.4	0	
20	HQAM	50	50	16.39	16.39	16.20			
20	HQAM	100	0	16.21	16.33	16.27			
20	ZSSBAM	1	0	16.32	16.36	16.19	16.5	0.9	
20	ZSSBAM	1	49	16.29	16.38	16.33			
20	ZSSBAM	1	99	16.36	16.36	16.34			
20	ZSSBAM	50	0	16.37	16.42	16.29			
20	ZSSBAM	50	24	16.17	16.24	16.18	16.5	0.9	
20	ZSSBAM	50	50	16.30	16.40	16.36			
20	ZSSBAM	100	0	16.19	16.30	16.28			
Channel									
Frequency (MHz)									
15	QPSK	1	0	16.23	16.44	16.42	17.4	0	
15	QPSK	1	37	16.23	16.34	16.24			
15	QPSK	1	74	16.00	16.17	16.23			
15	QPSK	36	0	16.30	16.42	16.29			
15	QPSK	36	20	16.23	16.29	16.11	17.4	0	
15	QPSK	75	0	16.29	16.17	16.29			
15	QPSK	75	0	16.17	16.25	16.29			
15	HQAM	1	0	16.31	16.30	16.24	17.4	0	
15	HQAM	1	37	16.09	16.16	16.11			
15	HQAM	1	74	16.10	16.14	16.14			
15	HQAM	36	0	16.12	16.34	16.21	17.4	0	
15	HQAM	36	20	16.12	16.24	16.06			
15	HQAM	36	59	16.18	16.30	16.17			
15	HQAM	75	0	16.17	16.24	16.12			
15	HQAM	75	0	16.18	16.31	16.18			
15	HQAM	1	37	16.29	16.40	16.31	17.4	0	
15	HQAM	1	74	16.29	16.40	16.31			
15	HQAM	36	0	16.17	16.24	16.12			
15	HQAM	36	20	16.18	16.31	16.24			
15	HQAM	36	59	16.23	16.35	16.32	17.4	0	
15									



Band 43 for FCC use Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
20	QPSK	1	0	18.26	18.42	18.26			
20	QPSK	1	49	18.41	18.40	18.29		19.1	0
20	QPSK	1	99	18.31	18.29	18.26			
20	QPSK	50	0	18.38	18.30	18.17			
20	QPSK	50	24	18.18	18.28	18.21		19	0.1
20	QPSK	100	0	18.27	18.38	18.27			
20	QPSK	100	1	18.17	18.31	18.26		19	0.1
20	HQAM	1	49	18.27	18.35	18.21			
20	HQAM	1	99	18.28	18.29	18.15			
20	HQAM	50	0	17.40	17.45	17.22		18	1.1
20	HQAM	50	24	17.35	17.35	17.28			
20	HQAM	50	50	17.17	17.41	17.25			
20	HQAM	100	0	17.23	17.25	17.25			
20	HQAM	100	1	17.23	17.25	17.25		18	1.1
20	HQAM	50	0	16.35	16.32	16.13			
20	HQAM	50	24	16.23	16.29	16.17		17	2.1
20	HQAM	50	50	16.21	16.29	16.21			
20	HQAM	100	0	16.43	16.38	16.34			
20	ZSSBAM	1	0	14.34	14.36	14.10		15	4.1
20	ZSSBAM	1	49	14.35	14.29	14.22			
20	ZSSBAM	1	99	14.21	14.39	14.19			
20	ZSSBAM	50	0	14.40	14.42	14.21			
20	ZSSBAM	50	24	14.13	14.37	14.31		15	4.1
20	ZSSBAM	50	50	14.31	14.35	14.22			
20	ZSSBAM	100	0	14.21	14.35	14.22			
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
15	QPSK	1	0	18.23	18.41	18.27			
15	QPSK	1	37	18.41	18.35	18.28		19.1	0
15	QPSK	1	74	18.09	18.23	18.18			
15	QPSK	36	0	18.39	18.38	18.26			
15	QPSK	36	20	18.08	18.33	18.17		19	0.1
15	QPSK	75	0	18.21	18.29	18.27			
15	HQAM	1	0	18.10	18.23	18.14			
15	HQAM	1	37	18.24	18.29	18.14		19	0.1
15	HQAM	1	74	18.20	18.35	18.15			
15	HQAM	36	0	17.31	17.36	17.22			
15	HQAM	36	20	17.23	17.23	17.13		18	1.1
15	HQAM	36	59	17.14	17.39	17.22			
15	HQAM	75	0	17.28	17.35	17.28			
15	HQAM	1	0	17.22	17.29	17.22		18	1.1
15	HQAM	1	37	17.21	17.29	17.03			
15	HQAM	1	74	17.24	17.30	17.03			
15	HQAM	36	0	16.24	16.29	16.03			
15	HQAM	36	20	16.13	16.29	16.15		17	2.1
15	HQAM	36	59	16.10	16.35	16.14			
15	HQAM	75	0	16.40	16.35	16.31			
15	ZSSBAM	1	0	14.25	14.24	14.01		15	4.1
15	ZSSBAM	1	37	14.15	14.22	14.21			
15	ZSSBAM	1	74	14.11	14.25	14.10			
15	ZSSBAM	36	0	14.27	14.32	14.27			
15	ZSSBAM	36	20	14.01	14.29	14.27		15	4.1
15	ZSSBAM	36	59	14.22	14.23	14.18			
15	ZSSBAM	75	0	14.18	14.30	14.15			
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
10	QPSK	1	0	18.24	18.39	18.19			
10	QPSK	1	25	18.27	18.31	18.19		19.1	0
10	QPSK	1	49	18.04	18.17	18.25			
10	QPSK	25	0	18.23	18.29	18.15			
10	QPSK	25	12	18.12	18.20	18.07		19	0.1
10	QPSK	25	25	18.22	18.23	18.23			
10	QPSK	50	0	18.28	18.29	18.14			
10	HQAM	1	0	18.12	18.19	18.13			
10	HQAM	1	25	18.22	18.26	18.11		19	0.1
10	HQAM	1	49	18.18	18.38	18.04			
10	HQAM	25	0	17.34	17.38	17.12			
10	HQAM	25	12	17.21	17.21	17.13		18	1.1
10	HQAM	25	25	17.15	17.23	17.15			
10	HQAM	50	0	17.32	17.36	17.30			
10	HQAM	1	0	17.11	17.15	17.28			
10	HQAM	1	25	17.28	17.30	17.13		18	1.1
10	HQAM	1	49	17.23	17.32	17.21			
10	HQAM	25	0	16.24	16.10	16.08			
10	HQAM	25	12	16.18	16.23	16.15		17	2.1
10	HQAM	25	25	16.16	16.34	16.13			
10	HQAM	50	0	16.28	16.31	16.29			
10	ZSSBAM	1	0	14.23	14.20	13.99		15	4.1
10	ZSSBAM	1	25	14.08	14.22	14.10			
10	ZSSBAM	1	49	14.08	14.23	14.08			
10	ZSSBAM	25	0	14.38	14.41	14.28			
10	ZSSBAM	25	12	14.08	14.29	14.17		15	4.1
10	ZSSBAM	25	25	14.25	14.25	14.12			
10	ZSSBAM	50	0	14.25	14.29	14.15			
Channel									
Frequency (MHz)				3697.5	3699	3699.5			
5	QPSK	1	0	18.38	18.35	18.13			
5	QPSK	1	12	18.38	18.40	18.28		19.1	0
5	QPSK	1	24	17.98	18.23	18.16			
5	QPSK	12	0	18.38	18.38	18.08			
5	QPSK	12	7	18.07	18.28	18.17		19	0.1
5	QPSK	12	13	18.19	18.20	18.17			
5	QPSK	25	0	18.25	18.29	18.17			
5	HQAM	1	0	18.15	18.21	18.19			
5	HQAM	1	12	18.23	18.31	18.20		19	0.1
5	HQAM	1	24	18.27	18.34	18.15			
5	HQAM	12	0	17.26	17.32	17.18			
5	HQAM	12	7	17.03	17.27	17.22		18	1.1
5	HQAM	12	13	17.07	17.30	17.12			
5	HQAM	25	0	17.26	17.32	17.30			
5	HQAM	1	0	17.13	17.17	17.22			
5	HQAM	1	12	17.19	17.37	17.06		18	1.1
5	HQAM	1	24	17.28	17.27	17.03			
5	HQAM	12	0	16.28	16.27	16.11			
5	HQAM	12	7	16.10	16.21	16.11		17	2.1
5	HQAM	12	13	16.10	16.38	16.11			
5	HQAM	25	0	16.40	16.25	16.29			
5	ZSSBAM	1	0	14.22	14.30	14.05		15	4.1
5	ZSSBAM	1	12	14.08	14.27	14.14			
5	ZSSBAM	1	24	14.14	14.20	14.15			
5	ZSSBAM	12	0	14.47	14.35	14.27			
5	ZSSBAM	12	7	14.05	14.36	14.20		15	4.1
5	ZSSBAM	12	13	14.24	14.29	14.09			
5	ZSSBAM	25	0	14.22	14.34	14.03			

Band 48_FCC Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)
Channel									
Frequency (MHz)				56340	56350	56350	56350		
20	QPSK	1	0	18.49	18.42	18.36			
20	QPSK	1	49	18.42	18.46	18.40		19.1	0
20	QPSK	1	99	18.19	18.35	18.27			
20	QPSK	50	0	18.38	18.40	18.27			
20	QPSK	50	24	18.20	18.38	18.24		19	0.1
20	QPSK	100	0	18.27	18.38	18.28			
20	QPSK	100	1	18.40	18.44	18.32			
20	HQAM	1	0	18.23	18.38	18.32		19	0.1
20	HQAM	1	49	18.34	18.41	18.30			
20	HQAM	1	99	18.20	18.42	18.32			
20	HQAM	50	0	17.39	17.46	17.32			
20	HQAM	50	24	17.27	17.38	17.28		18	1.1
20	HQAM	50	50	17.29	17.33	17.31			
20	HQAM	100	0	17.22	17.27	17.27			
20	HQAM	100	1	17.25	17.40	17.25			
20	HQAM	1	49	17.32	17.46	17.34		18	1.1
20	HQAM	1	99	17.24	17.35	17.27			
20	HQAM	50	0	16.68	16.78	16.58			
20	HQAM	50	24	16.83	16.96	16.78		17	2.1
20	HQAM	50	50	16.82	16.90	16.80			
20	HQAM	100	0	16.55	16.65	16.45			
20	ZSSBAM	1	0	14.88	14.77	14.56		15	4.1
20	ZSSBAM	1	49	14.85	14.86	14.79			
20	ZSSBAM	1	99	14.84	14.87	14.77			
20	ZSSBAM	50	0	14.69	14.81	14.67			
20	ZSSBAM	50	24	14.85	14.97	14.78		15	4.1
20	ZSSBAM	50	50	14.83	14.93	14.80			
20	ZSSBAM	100	0	14.58	14.83	14.54			
Channel									
Frequency (MHz)				56315	56320	56320	56320		
15	QPSK	1	0	18.03	18.14	18.03			
15	QPSK	1	37	18.02	18.02	18.02		19.1	0
15	QPSK	1	74	17.77	17.94	17.86			
15	QPSK	36	0	17.96	18.02	17.89			
15	QPSK	36	20	17.77	17.92	17.88		19	0.1
15	QPSK	75	0	18.05	18.07	17.92			
15	QPSK	75	0	18.04	17.99	17.95			
15	HQAM	1	0	17.77	17.93	17.90			
15	HQAM	1	37	17.92	18.05	17.90		19	0.1
15	HQAM	1	74	17.89	18.00	17.90			
15	HQAM	36	0	17.91	17.92	17.92			
15	HQAM	36	20	17.81	17.84	17.86		18	1.1
15	HQAM	36	59	17.84	17.93	17.			





Reduced Power Mode for DBS Simultaneous

Channel	Band Average Power (dBm)			Frequency Power Limit			Timegap Limit (µs)
	12E	16E	20E	12E	16E	20E	
Frequency (MHz)	32.9	37.4	38.8	33.0	37.4	38.8	24.50
CRS1 Tx Peak	32.01	32.55	32.29	33.00	33.03	33.03	24.50
CRS2 Tx Peak	32.56	32.64	32.51	33.00	33.04	33.03	24.50
CRS3 Tx Peak	32.16	32.65	32.49	33.00	33.06	33.04	24.50
CRS4 Tx Peak	32.00	32.38	32.15	33.00	33.74	33.04	24.74
CRS5 Tx Peak	32.00	32.02	32.07	33.00	32.99	32.92	24.00
EDGE 1 Tx Peak	23.36	23.22	23.42	24.50	18.36	18.45	18.50
EDGE 2 Tx Peak	23.76	23.67	23.72	24.50	17.76	17.67	18.50
EDGE 3 Tx Peak	23.54	22.77	22.54	23.00	18.28	18.51	18.34
EDGE 4 Tx Peak	20.48	20.65	20.48	21.00	17.48	17.48	18.50

Band	WCDMA V			Timegap Limit (µs)
	4152	4152	4253	
Tx Channel	4307	4407	4459	25.00
Frequency (MHz)	832.4	832.4	848.8	25.00
SCPP Pair 0	IMB 11_20pp	23.02	24.02	24.50
SCPP Pair 1	IMB 12_20pp	23.02	24.02	24.50
SCPP Pair 2	HSDPA Subcar-0	22.80	22.87	23.00
SCPP Pair 3	HSDPA Subcar-1	22.84	22.75	23.00
SCPP Pair 4	HSDPA Subcar-2	22.42	22.71	23.00
SCPP Pair 5	HSDPA Subcar-3	22.99	23.38	24.00
SCPP Pair 6	HSDPA Subcar-4	23.01	23.07	24.00
SCPP Pair 7	HSDPA Subcar-5	22.34	22.61	23.00
SCPP Pair 8	HSDPA Subcar-6	22.80	22.80	23.00
SCPP Pair 9	HSDPA Subcar-7	23.84	23.11	24.00
SCPP Pair 10	HSDPA Subcar-8	21.61	21.52	23.00
SCPP Pair 11	HSDPA Subcar-9	21.92	22.01	23.00
SCPP Pair 12	HSDPA Subcar-10	20.73	21.08	22.00
SCPP Pair 13	HSDPA Subcar-11	22.89	23.23	24.00



Band 5 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (dB)	MPE (dB)		
Channel										
10	QPSK	1	0	22.60	22.73	22.68				
10	QPSK	1	25	22.64	22.77	22.71			24	0
10	QPSK	1	49	22.50	22.64	22.55				
10	QPSK	25	0	21.69	21.72	21.62				
10	QPSK	25	12	21.44	21.52	21.44				
10	QPSK	25	25	21.53	21.66	21.61			23	1
10	QPSK	50	0	21.61	21.65	21.59				
10	16QAM	1	0	21.59	21.67	21.61				
10	16QAM	1	25	21.41	21.52	21.38			23	1
10	16QAM	1	49	21.54	21.60	21.45				
10	16QAM	25	0	20.47	20.55	20.43				
10	16QAM	25	12	20.35	20.49	20.35			22	2
10	16QAM	25	25	20.50	20.60	20.53				
10	16QAM	50	0	20.54	20.59	20.59				
10	64QAM	1	0	20.51	20.59	20.54				
10	64QAM	1	25	20.45	20.51	20.47			22	2
10	64QAM	1	49	20.56	20.66	20.53				
10	64QAM	25	0	19.47	19.53	19.40				
10	64QAM	25	12	19.52	19.63	19.59			21	3
10	64QAM	25	25	19.44	19.55	19.35				
10	64QAM	50	0	19.50	19.62	19.54				
10	256QAM	1	0	17.46	17.48	17.43			19	5
10	256QAM	1	25	17.44	17.45	17.40				
10	256QAM	1	49	17.40	17.62	17.52				
10	256QAM	25	0	17.40	17.56	17.44				
10	256QAM	25	12	17.50	17.63	17.50			19	5
10	256QAM	25	25	17.50	17.56	17.44				
10	256QAM	50	0	17.41	17.53	17.45				
Channel										
5	QPSK	1	0	22.54	22.66	22.54				
5	QPSK	1	12	22.39	22.48	22.44			24	0
5	QPSK	1	24	22.45	22.54	22.47				
5	QPSK	12	0	21.60	21.58	21.55				
5	QPSK	12	7	21.35	21.44	21.39				
5	QPSK	12	13	21.45	21.52	21.51			23	1
5	QPSK	25	0	21.60	21.54	21.48				
5	16QAM	1	0	21.53	21.56	21.52				
5	16QAM	1	12	21.31	21.40	21.32			23	1
5	16QAM	1	24	21.41	21.47	21.31				
5	16QAM	12	0	20.43	20.51	20.37				
5	16QAM	12	7	20.25	20.39	20.21			22	2
5	16QAM	12	13	20.44	20.56	20.38				
5	16QAM	25	0	20.48	20.58	20.46				
5	64QAM	1	0	20.38	20.54	20.48				
5	64QAM	1	12	19.38	19.40	19.25			22	2
5	64QAM	1	24	19.41	19.52	19.35				
5	64QAM	12	0	19.38	19.40	19.25				
5	64QAM	12	7	19.39	19.44	19.21			21	3
5	64QAM	12	13	19.39	19.44	19.21				
5	64QAM	25	0	19.38	19.52	19.39				
5	256QAM	1	0	17.38	17.40	17.38			19	5
5	256QAM	1	12	17.40	17.40	17.31				
5	256QAM	1	24	17.45	17.52	17.45				
5	256QAM	12	0	17.35	17.46	17.38				
5	256QAM	12	7	17.44	17.50	17.45			19	5
5	256QAM	12	13	17.45	17.50	17.35				
5	256QAM	25	0	17.44	17.46	17.45				
Channel										
3	QPSK	1	0	22.61	22.63	22.61				
3	QPSK	1	8	22.42	22.53	22.41			24	0
3	QPSK	1	14	22.38	22.60	22.51				
3	QPSK	8	0	21.66	21.66	21.66				
3	QPSK	8	4	21.38	21.43	21.34				
3	QPSK	8	7	21.40	21.55	21.57			23	1
3	QPSK	16	0	21.66	21.66	21.66				
3	16QAM	1	0	21.49	21.55	21.52				
3	16QAM	1	8	21.34	21.41	21.31			23	1
3	16QAM	1	14	21.42	21.42	21.30				
3	16QAM	8	0	20.41	20.49	20.30				
3	16QAM	8	4	20.21	20.40	20.21			22	2
3	16QAM	8	7	20.30	20.50	20.47				
3	64QAM	1	0	20.48	20.61	20.50				
3	64QAM	1	8	20.47	20.44	20.45			22	2
3	64QAM	1	14	20.33	20.40	20.33				
3	64QAM	8	0	20.43	20.62	20.43				
3	64QAM	8	4	19.35	19.40	19.33			21	3
3	64QAM	8	7	19.38	19.39	19.23				
3	64QAM	15	0	19.37	19.54	19.46				
3	256QAM	1	0	17.38	17.41	17.34				
3	256QAM	1	8	17.37	17.38	17.27			19	5
3	256QAM	1	14	17.40	17.57	17.57				
3	256QAM	8	0	17.39	17.41	17.35				
3	256QAM	8	4	17.39	17.59	17.47			19	5
3	256QAM	8	7	17.40	17.52	17.40				
3	256QAM	15	0	17.47	17.60	17.46				
Channel										
1.4	QPSK	1	0	22.54	22.70	22.57				
1.4	QPSK	1	3	22.40	22.50	22.49			24	0
1.4	QPSK	1	5	22.35	22.50	22.41				
1.4	QPSK	3	0	22.54	22.67	22.48				
1.4	QPSK	3	1	22.35	22.43	22.39				
1.4	QPSK	3	3	22.41	22.52	22.48			23	1
1.4	QPSK	6	0	21.48	21.56	21.48				
1.4	16QAM	1	0	21.48	21.52	21.56				
1.4	16QAM	1	3	21.32	21.45	21.39			23	1
1.4	16QAM	1	5	21.48	21.52	21.40				
1.4	16QAM	3	0	21.37	21.47	21.37				
1.4	16QAM	3	1	21.32	21.42	21.30				
1.4	16QAM	3	3	21.35	21.48	21.43				
1.4	16QAM	6	0	20.43	20.56	20.49			22	2
1.4	64QAM	1	0	20.37	20.55	20.45				
1.4	64QAM	1	3	20.40	20.45	20.39				
1.4	64QAM	1	5	20.41	20.61	20.39			22	2
1.4	64QAM	3	0	20.32	20.48	20.32				
1.4	64QAM	3	1	20.48	20.48	20.30				
1.4	64QAM	3	3	20.39	20.40	20.28			21	3
1.4	64QAM	6	0	19.40	19.55	19.46				
1.4	256QAM	1	0	17.40	17.47	17.35				
1.4	256QAM	1	3	17.40	17.40	17.38			19	5
1.4	256QAM	1	5	17.43	17.49	17.38				
1.4	256QAM	3	0	17.35	17.35	17.41				
1.4	256QAM	3	1	17.41	17.52	17.45				
1.4	256QAM	3	3	17.44	17.42	17.43			19	5
1.4	256QAM	6	0	17.54	17.51	17.43				

Band 12 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (dB)	MPE (dB)		
Channel										
10	QPSK	1	0	22.78	22.98	22.85				
10	QPSK	1	25	22.81	22.91	22.81			24	0
10	QPSK	1	49	22.79	22.91	22.87				
10	QPSK	25	0	21.74	21.80	21.82				
10	QPSK	25	12	21.74	21.83	21.85				
10	QPSK	25	25	21.74	21.83	21.74			23	1
10	QPSK	50	0	21.88	21.91	21.86				
10	16QAM	1	0	21.93	21.92	21.90				
10	16QAM	1	25	21.75	21.89	21.75			23	1
10	16QAM	1	49	21.88	21.93	21.83				
10	16QAM	25	0	20.82	20.87	20.81				
10	16QAM	25	12	20.90	20.95	20.87			22	2
10	16QAM	25	25	20.76	20.84	20.71				
10	16QAM	50	0	20.78	20.85	20.78				
10	64QAM	1	0	20.85	20.95	20.82				
10	64QAM	1	25	20.76	20.80	20.85			22	



Band 17 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				700	710	711			
10	QPSK	1	0	22.86	22.86	22.92	24	0	
10	QPSK	1	24	22.77	22.83	22.88			
10	QPSK	1	48	22.75	22.81	22.86			
10	QPSK	25	0	21.82	21.94	21.84			
10	QPSK	25	12	21.78	21.80	21.83			
10	QPSK	25	24	21.71	21.69	21.79	23	1	
10	QPSK	50	0	21.80	21.85	21.77			
10	16QAM	1	0	20.92	20.92	22.04			
10	16QAM	1	24	21.83	21.98	21.90	23	1	
10	16QAM	5	48	21.83	21.91	21.87			
10	16QAM	25	0	20.92	20.95	20.92			
10	16QAM	25	12	20.71	20.82	20.78	22	2	
10	16QAM	25	24	20.79	20.87	20.80			
10	16QAM	50	0	20.81	20.91	20.82			
10	64QAM	1	0	21.00	21.04	21.00			
10	64QAM	1	24	20.89	20.92	20.96	22	2	
10	64QAM	1	48	20.82	20.87	20.79			
10	64QAM	25	0	19.54	19.78	19.65			
10	64QAM	25	12	19.79	19.86	19.73	21	3	
10	64QAM	25	24	19.87	19.71	19.57			
10	64QAM	50	0	19.75	19.89	19.85			
10	256QAM	1	0	17.89	18.01	17.86			
10	256QAM	1	24	17.85	17.84	17.88	19	5	
10	256QAM	1	48	17.71	17.86	17.78			
10	256QAM	25	0	17.81	17.80	17.86			
10	256QAM	25	12	17.74	17.84	17.75	19	5	
10	256QAM	25	24	17.85	17.79	17.75			
10	256QAM	50	0	17.73	17.85	17.85			
Channel									
				706.5	710	713.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.71	22.85	22.83	24	0	
5	QPSK	1	12	22.70	22.71	22.71			
5	QPSK	1	24	22.68	22.78	22.61			
5	QPSK	12	0	21.76	21.90	21.80			
5	QPSK	12	7	21.67	21.79	21.71	23	1	
5	QPSK	12	13	21.65	21.75	21.66			
5	QPSK	25	0	21.67	21.77	21.66			
5	16QAM	1	0	21.98	21.98	21.92	23	1	
5	16QAM	1	12	21.89	21.93	21.84			
5	16QAM	1	24	21.79	21.80	21.75			
5	16QAM	12	0	20.87	20.91	20.77	22	2	
5	16QAM	12	7	20.84	20.79	20.64			
5	16QAM	12	13	20.71	20.78	20.70			
5	16QAM	25	0	20.75	20.78	20.78			
5	64QAM	1	0	20.90	20.95	20.90	22	2	
5	64QAM	1	12	20.80	20.80	20.85			
5	64QAM	1	24	20.88	20.91	20.89			
5	64QAM	12	0	19.53	19.65	19.61			
5	64QAM	12	7	19.63	19.63	19.64	21	3	
5	64QAM	12	13	19.60	19.52	19.53			
5	64QAM	25	0	19.61	19.76	19.77			
5	256QAM	1	0	17.84	17.80	17.78			
5	256QAM	1	12	17.75	17.85	17.75	19	5	
5	256QAM	1	24	17.88	17.76	17.63			
5	256QAM	12	0	17.78	17.71	17.74			
5	256QAM	12	7	17.60	17.75	17.63	19	5	
5	256QAM	12	13	17.87	17.65	17.71			
5	256QAM	25	0	17.72	17.88	17.78			

Band 26 for FCC Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				811.5	811.5	811.5			
15	QPSK	1	0	22.58	22.77	22.67	24	0	
15	QPSK	1	37	22.47	22.57	22.55			
15	QPSK	1	74	22.39	22.63	22.54			
15	QPSK	36	0	21.51	21.63	21.60			
15	QPSK	36	20	21.50	21.58	21.60	23	1	
15	QPSK	36	39	21.40	21.54	21.48			
15	QPSK	75	0	21.59	21.67	21.67			
15	QPSK	1	0	21.72	21.80	21.79			
15	16QAM	1	37	21.56	21.71	21.63	23	1	
15	16QAM	1	74	21.55	21.68	21.63			
15	16QAM	36	0	20.48	20.52	20.48			
15	16QAM	36	20	20.88	20.73	20.52	22	2	
15	16QAM	36	39	20.94	20.67	20.61			
15	16QAM	75	0	20.50	20.58	20.52			
15	64QAM	1	0	20.68	20.72	20.63	22	2	
15	64QAM	1	37	20.55	20.64	20.54			
15	64QAM	1	74	20.65	20.78	20.72			
15	64QAM	36	0	19.54	19.63	19.59			
15	64QAM	36	20	19.52	19.74	19.61	21	3	
15	64QAM	36	39	19.54	19.68	19.54			
15	64QAM	75	0	19.50	19.64	19.51			
15	256QAM	1	0	17.66	17.71	17.68			
15	256QAM	1	37	17.56	17.61	17.55	19	5	
15	256QAM	1	74	17.59	17.67	17.67			
15	256QAM	36	0	17.62	17.65	17.67			
15	256QAM	36	20	17.65	17.72	17.65	19	5	
15	256QAM	36	39	17.52	17.66	17.61			
15	256QAM	75	0	17.46	17.60	17.57			
Channel									
				819	831.5	844	Time-up (min)	MPE (dB)	
10	QPSK	1	0	22.49	22.72	22.60	24	0	
10	QPSK	1	12	22.39	22.44	22.43			
10	QPSK	1	49	22.55	22.61	22.40			
10	QPSK	25	0	21.37	21.54	21.37			
10	QPSK	25	12	21.40	21.48	21.41	23	1	
10	QPSK	25	24	21.34	21.48	21.41			
10	QPSK	50	0	21.54	21.58	21.61			
10	16QAM	1	0	21.61	21.68	21.65			
10	16QAM	1	25	21.52	21.67	21.54	23	1	
10	16QAM	1	49	21.61	21.62	21.60			
10	16QAM	25	0	20.42	20.58	20.38			
10	16QAM	25	12	20.64	20.59	20.49	22	2	
10	16QAM	25	24	20.56	20.58	20.51			
10	16QAM	50	0	20.44	20.53	20.46			
10	64QAM	1	0	20.55	20.60	20.51	22	2	
10	64QAM	1	25	20.51	20.58	20.48			
10	64QAM	1	49	20.57	20.65	20.57			
10	64QAM	25	0	19.39	19.38	19.52			
10	64QAM	25	12	19.45	19.69	19.38	21	3	
10	64QAM	25	24	19.53	19.54	19.43			
10	64QAM	50	0	19.41	19.58	19.40			
10	256QAM	1	0	17.57	17.52	17.55			
10	256QAM	1	25	17.52	17.55	17.48	19	5	
10	256QAM	1	49	17.45	17.63	17.44			
10	256QAM	25	0	17.42	17.52	17.43			
10	256QAM	25	12	17.51	17.67	17.52	19	5	
10	256QAM	25	24	17.43	17.52	17.46			
10	256QAM	50	0	17.53	17.60	17.48			
Channel									
				817.5	831.5	847.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.47	22.54	22.57	24	0	
5	QPSK	1	12	22.36	22.47	22.48			
5	QPSK	1	24	22.55	22.50	22.47			
5	QPSK	12	0	21.37	21.61	21.48			
5	QPSK	12	7	21.40	21.47	21.45	23	1	
5	QPSK	12	13	21.28	21.45	21.36			
5	QPSK	25	0	21.48	21.61	21.44			
5	16QAM	1	0	21.63	21.68	21.58	23	1	
5	16QAM	1	12	21.52	21.60	21.52			
5	16QAM	1	24	21.47	21.58	21.48			
5	16QAM	12	0	20.37	20.53	20.41			
5	16QAM	12	7	20.65	20.67	20.53	22	2	
5	16QAM	12	13	20.56	20.58	20.51			
5	16QAM	25	0	20.46	20.53	20.42			
5	64QAM	1	0	20.59	20.60	20.56	22	2	
5	64QAM	1	12	20.44	20.54	20.46			
5	64QAM	1	24	20.57	20.65	20.65			
5	64QAM	12							





GSM900 Act															
Channel	Base-Average Power (dBm)			Turn-up Limit (dBm)	Frame-Average Power (dBm)			Turn-up Limit (dBm)							
TX Channel	198	199	201	198	199	201	198	199	201						
Frequency (MHz)	893.2	893.4	893.6	893.2	893.4	893.6	893.2	893.4	893.6						
OPRS-1 Tx side	32.74	32.73	32.83	33.20	23.74	23.73	23.83	24.20	24.20						
OPRS-1 Rx side	24.87	24.71	25.00	33.20	23.87	23.71	23.88	24.20	24.20						
OPRS-2 Tx side	25.55	25.43	25.41	30.20	23.55	23.43	23.41	24.20	24.20						
OPRS-2 Rx side	27.81	27.94	27.91	28.50	23.55	23.68	23.65	24.20	24.20						
OPRS-4 Tx side	26.34	26.51	26.50	27.20	23.34	23.51	23.50	24.20	24.20						
EDGE-1 Tx side	25.75	25.91	25.84	27.00	18.75	18.91	18.84	18.50	18.50						
EDGE-1 Rx side	24.01	24.20	23.50	25.50	18.01	18.20	17.50	18.50	18.50						
EDGE-3 Tx side	22.84	22.57	22.74	24.00	18.58	18.71	18.48	18.74	18.74						
EDGE-3 Rx side	20.94	20.69	20.81	22.00	17.84	17.69	17.81	18.00	18.00						
GSM1800															
Channel	Base-Average Power (dBm)			Turn-up Limit (dBm)	Frame-Average Power (dBm)			Turn-up Limit (dBm)							
TX Channel	1892.2	1893	1893.8	1892.2	1893	1893.8	1892.2	1893	1893.8						
Frequency (MHz)	1892.2	1893	1893.8	1892.2	1893	1893.8	1892.2	1893	1893.8						
OPRS-1 Tx side	25.21	25.41	25.32	26.40	18.21	18.44	18.32	17.40	17.40						
OPRS-1 Rx side	21.65	21.86	21.82	23.40	16.65	16.86	16.82	17.40	17.40						
OPRS-2 Tx side	20.49	20.81	20.59	21.70	16.74	16.41	16.33	17.44	17.44						
OPRS-2 Rx side	20.11	20.33	20.11	20.40	17.11	17.33	17.11	17.40	17.40						
EDGE-1 Tx side	21.85	21.68	21.81	23.80	13.83	13.69	13.81	14.80	14.80						
EDGE-1 Rx side	22.82	22.57	22.81	23.20	18.82	18.51	18.51	18.30	18.30						
EDGE-3 Tx side	22.45	22.46	22.49	20.20	18.19	18.20	18.23	18.54	18.54						
EDGE-3 Rx side	18.41	18.45	18.43	18.50	15.41	15.45	15.43	15.50	15.50						
WCDMA															
Channel	Base			MCDMA II			MCDMA IV			WCDMA V			Turn-up Limit (dBm)		
TX Channel	3682	3680	3658	3682	3680	3658	3682	3680	3658	3682	3680	3658	3682	3680	3658
Frequency (MHz)	3682.4	3680.4	3658.6	3682.4	3680.4	3658.6	3682.4	3680.4	3658.6	3682.4	3680.4	3658.6	3682.4	3680.4	3658.6
ISPP-Base	16.01	16.24	16.06	17.20	15.30	15.54	15.44	15.50	22.78	22.90	22.81	25.00	25.00	25.00	25.00
ISPP-Base	15.16	15.26	15.15	17.20	15.37	15.65	15.55	15.60	21.83	22.01	21.90	25.00	25.00	25.00	25.00
ISPP-Base	15.03	15.40	15.20	18.20	14.45	14.74	14.87	15.50	22.83	22.97	22.79	24.00	24.00	24.00	24.00
ISPP-Base	15.08	15.21	15.20	18.20	14.38	14.69	14.68	15.50	22.82	22.98	22.83	24.00	24.00	24.00	24.00
ISPP-Base	14.84	14.88	14.70	18.20	13.93	14.20	14.04	15.50	22.37	22.48	22.18	23.50	23.50	23.50	23.50
ISPP-Base	14.86	14.71	14.87	18.20	13.97	14.74	14.16	15.50	22.54	22.48	22.18	23.50	23.50	23.50	23.50
ISPP-Base	15.10	15.22	15.20	18.20	14.51	14.61	14.63	15.50	23.10	22.95	22.89	24.00	24.00	24.00	24.00
ISPP-Base	15.01	15.27	15.22	18.20	14.40	14.47	14.50	15.50	22.76	22.84	22.80	24.00	24.00	24.00	24.00
ISPP-Base	14.54	14.72	14.72	18.20	13.95	14.14	14.12	15.50	22.41	22.49	22.18	23.50	23.50	23.50	23.50
ISPP-Base	14.54	14.65	14.53	18.20	13.87	14.01	13.88	15.50	22.27	22.22	22.07	23.50	23.50	23.50	23.50
ISPP-Base	15.86	16.28	16.17	18.20	13.93	13.57	13.50	15.50	22.86	22.78	22.59	24.00	24.00	24.00	24.00
ISPP-Base	14.06	14.02	14.10	14.30	13.38	13.24	13.43	13.50	20.99	20.99	20.55	22.00	22.00	22.00	22.00
ISPP-Base	14.51	13.26	13.21	13.20	14.43	14.44	14.48	14.50	17.78	17.87	17.48	23.50	23.50	23.50	23.50
ISPP-Base	13.50	14.10	14.20	14.30	13.27	13.15	13.26	13.50	20.80	20.72	20.60	22.00	22.00	22.00	22.00
ISPP-Base	16.08	16.07	16.11	16.20	15.41	15.24	15.50	15.50	22.90	22.88	22.70	24.00	24.00	24.00	24.00



Band 2 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	16.24	16.31	16.19				
20	QPSK	1	49	16.22	16.29	16.23	17.4	0		
20	QPSK	1	99	16.09	16.19	16.06				
20	QPSK	50	0	16.19	16.28	16.23				
20	QPSK	24	0	16.17	16.27	16.22	17.4	0		
20	QPSK	50	50	16.13	16.19	16.12				
20	QPSK	100	0	16.09	16.23	16.17				
20	QPSK	100	0	16.21	16.29	16.25				
20	HQAM	1	49	16.13	16.20	16.08	17.4	0		
20	HQAM	1	99	16.24	16.28	16.19				
20	HQAM	50	0	16.17	16.23	16.17				
20	HQAM	50	24	16.14	16.24	16.14	17.4	0		
20	HQAM	50	50	16.07	16.21	16.14				
20	HQAM	100	0	16.07	16.19	16.12				
20	HQAM	1	0	16.13	16.25	16.10				
20	HQAM	1	49	16.10	16.18	16.06	17.4	0		
20	HQAM	50	24	16.09	16.21	16.09				
20	HQAM	50	24	16.20	16.29	16.20				
20	HQAM	100	0	16.19	16.28	16.20	17.4	0		
20	ZSSBAM	1	49	16.09	16.16	16.07				
20	ZSSBAM	1	99	16.07	16.03	15.93	17	0.4		
20	ZSSBAM	1	99	15.98	16.11	16.04				
20	ZSSBAM	50	0	16.07	16.22	16.07				
20	ZSSBAM	50	24	15.81	15.94	15.85	17	0.4		
20	ZSSBAM	50	50	15.83	15.88	15.88				
20	ZSSBAM	100	0	15.85	15.92	15.85				
Channel										
Frequency (MHz)										
15	QPSK	1	0	16.14	16.17	16.08				
15	QPSK	1	37	16.12	16.08	16.02	17.4	0		
15	QPSK	1	74	16.06	16.09	16.02				
15	QPSK	36	0	16.14	16.21	16.10				
15	QPSK	20	0	16.03	16.06	16.02	17.4	0		
15	QPSK	36	36	16.09	16.09	16.08				
15	QPSK	75	0	16.18	16.19	16.10				
15	HQAM	1	24	16.08	16.16	16.02	17.4	0		
15	HQAM	1	37	16.05	16.11	15.98				
15	HQAM	36	0	16.04	16.09	16.02				
15	HQAM	36	20	16.09	16.14	16.04	17.4	0		
15	HQAM	75	0	16.07	16.10	16.07				
15	HQAM	75	0	15.94	16.03	15.98				
15	HQAM	1	0	16.08	16.12	15.97	17.4	0		
15	HQAM	37	0	16.08	16.12	15.97				
15	HQAM	74	0	16.11	16.23	16.15				
15	HQAM	36	0	15.90	16.02	16.08	17.4	0		
15	HQAM	36	36	16.08	16.08	16.08				
15	HQAM	36	36	15.99	16.12	16.04				
15	HQAM	75	0	16.16	16.18	16.20				
15	HQAM	75	0	15.84	15.94	15.84				
15	ZSSBAM	1	37	15.83	15.95	15.88	17	0.4		
15	ZSSBAM	1	74	15.91	16.02	15.98				
15	ZSSBAM	36	0	16.08	16.15	16.08				
15	ZSSBAM	36	20	15.89	15.88	15.75	17	0.4		
15	ZSSBAM	36	39	16.14	16.02	16.12				
15	ZSSBAM	75	0	15.85	16.01	15.92				
Channel										
Frequency (MHz)										
10	QPSK	1	0	16.10	16.08	16.01	17.4	0		
10	QPSK	1	25	16.10	16.08	16.01				
10	QPSK	1	49	15.99	16.10	16.02				
10	QPSK	25	0	16.14	16.09	16.02	17.4	0		
10	QPSK	25	12	15.95	16.07	15.96				
10	QPSK	25	25	16.03	16.07	16.08				
10	QPSK	75	0	16.08	16.09	16.02				
10	HQAM	1	0	16.07	16.17	16.08	17.4	0		
10	HQAM	1	25	16.08	16.15	15.98				
10	HQAM	25	0	16.03	16.05	16.03				
10	HQAM	25	12	16.06	16.20	16.03	17.4	0		
10	HQAM	25	25	16.08	16.12	16.03				
10	HQAM	50	0	16.00	16.09	16.08				
10	HQAM	1	0	16.03	16.11	15.99	17.4	0		
10	HQAM	25	0	15.96	16.01	15.98				
10	HQAM	49	0	16.15	16.15	16.20				
10	HQAM	25	0	15.90	16.06	16.06				
10	HQAM	25	12	16.02	16.12	16.03	17.4	0		
10	HQAM	50	0	16.12	16.22	16.13				
10	ZSSBAM	1	25	15.84	16.05	15.95				
10	ZSSBAM	1	25	15.93	16.02	15.83	17	0.4		
10	ZSSBAM	1	49	15.83	16.04	15.98				
10	ZSSBAM	25	0	15.83	16.08	15.92				
10	ZSSBAM	25	12	15.72	16.00	15.71	17	0.4		
10	ZSSBAM	25	25	15.78	15.90	15.83				
10	ZSSBAM	50	0	15.88	16.00	15.92				
Channel										
Frequency (MHz)										
5	QPSK	1	0	16.13	16.17	16.00	17.4	0		
5	QPSK	1	12	16.13	16.15	16.00				
5	QPSK	1	24	16.00	16.14	15.99				
5	QPSK	12	0	16.08	16.20	16.01	17.4	0		
5	QPSK	12	7	16.04	16.05	15.97				
5	QPSK	12	13	16.04	16.09	16.03				
5	QPSK	25	0	16.02	16.13	16.04				
5	HQAM	1	0	16.15	16.18	16.05	17.4	0		
5	HQAM	1	12	16.00	16.15	15.97				
5	HQAM	12	0	16.03	16.17	16.04	17.4	0		
5	HQAM	12	0	16.10	16.11	16.04				
5	HQAM	12	7	16.00	16.13	16.04				
5	HQAM	25	0	15.96	16.08	16.07				
5	HQAM	1	0	16.09	16.15	16.07	17.4	0		
5	HQAM	12	0	15.98	16.07	15.97				
5	HQAM	1	24	16.10	16.19	16.18				
5	HQAM	12	0	15.88	16.06	16.00				
5	HQAM	12	7	16.02	16.17	16.02	17.4	0		
5	HQAM	12	13	16.06	16.13	15.94				
5	HQAM	25	0	16.06	16.16	16.14				
5	HQAM	1	0	16.03	16.05	15.97	17.4	0		
5	ZSSBAM	1	12	15.84	15.95	15.86	17	0.4		
5	ZSSBAM	1	24	15.94	16.01	15.93				
5	ZSSBAM	12	0	15.83	16.08	15.83				
5	ZSSBAM	12	7	15.70	16.06	15.78	17	0.4		
5	ZSSBAM	12	13	15.75	15.90	15.82				
5	ZSSBAM	25	0	15.90	16.01	15.97				
Channel										
Frequency (MHz)										
3	QPSK	1	0	16.13	16.28	16.15				
3	QPSK	1	8	16.11	16.11	16.00	17.4	0		
3	QPSK	1	14	16.02	16.06	15.96				
3	QPSK	8	0	16.14	16.15	16.15				
3	QPSK	8	4	15.86	16.07	15.98	17.4	0		
3	QPSK	8	7	16.10	16.10	16.00				
3	QPSK	15	0	15.97	16.12	16.02				
3	HQAM	1	0	16.09	16.24	16.02	17.4	0		
3	HQAM	1	8	16.03	16.13	15.98				
3	HQAM	14	0	16.19	16.21	16.04				
3	HQAM	8	4	16.05	16.14	16.05	17.4	0		
3	HQAM	8	7	16.08	16.16	15.99				
3	HQAM	15	0	16.08	16.11	16.00				
3	HQAM	1	0	15.93	16.06	16.02	17.4	0		
3	HQAM	1	8	16.07	16.04	15.80				
3	HQAM	1	14	16.11	16.17	16.17				
3	HQAM	8	0	16.02	16.13	16.07				
3	HQAM	8	4	16.05	16.08	16.04				
3	HQAM	8	7	16.04	16.13	15.96				
3	ZSSBAM	15	0	15.95	16.06	16.04				
3	ZSSBAM	1	8	15.91	15.96	15.82	17	0.4		
3	ZSSBAM	14	0	15.88	16.07	15.84				
3	ZSSBAM	8	0	15.89	16.0					



Band 7 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up (MHz)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	15.41	15.42	15.36				
20	QPSK	1	49	15.24	15.23	15.16	16.6	0		
20	QPSK	1	99	15.33	15.38	15.24				
20	QPSK	50	0	15.31	15.42	15.39				
20	QPSK	50	24	15.17	15.29	15.18				
20	QPSK	50	50	15.29	15.39	15.25	16.6	0		
20	QPSK	100	0	15.15	15.30	15.17				
20	16QAM	1	0	15.34	15.43	15.38				
20	16QAM	1	49	15.25	15.37	15.23	16.6	0		
20	16QAM	1	99	15.28	15.34	15.27				
20	16QAM	50	0	15.24	15.33	15.16				
20	16QAM	50	24	15.18	15.23	15.28	16.6	0		
20	16QAM	50	50	15.18	15.29	15.20				
20	16QAM	100	0	15.14	15.29	15.21				
20	16QAM	1	0	15.34	15.43	15.33				
20	16QAM	1	49	15.27	15.40	15.27	16.6	0		
20	16QAM	1	99	15.24	15.30	15.29				
20	16QAM	50	0	15.22	15.28	15.23				
20	16QAM	50	24	15.29	15.32	15.30	16.6	0		
20	16QAM	50	50	15.21	15.33	15.19				
20	256QAM	1	0	15.25	15.29	15.23				
20	256QAM	1	49	15.25	15.29	15.23	16.6	0		
20	256QAM	1	99	15.25	15.28	15.22				
20	256QAM	50	0	15.17	15.31	15.26				
20	256QAM	50	24	15.19	15.29	15.15	16.6	0		
20	256QAM	50	50	15.19	15.28	15.21				
20	256QAM	100	0	15.15	15.30	15.22				
Channel										
Frequency (MHz)										
5	QPSK	1	0	20.97	21.00	21.02				
5	QPSK	1	0	15.28	15.33	15.24	16.6	0		
5	QPSK	1	49	15.13	15.29	15.24				
5	QPSK	1	99	15.29	15.24	15.09				
5	QPSK	36	0	15.18	15.20	15.27				
5	QPSK	36	20	15.24	15.20	15.14	16.6	0		
5	QPSK	36	39	15.22	15.25	15.11				
5	QPSK	75	0	15.09	15.20	15.09				
5	16QAM	1	0	15.22	15.29	15.24				
5	16QAM	1	37	15.19	15.32	15.16	16.6	0		
5	16QAM	1	74	15.12	15.29	15.11				
5	16QAM	36	0	15.10	15.20	15.06				
5	16QAM	36	20	15.05	15.29	15.24	16.6	0		
5	16QAM	36	39	15.13	15.23	15.15				
5	16QAM	75	0	15.10	15.14	15.11				
5	16QAM	1	0	15.27	15.29	15.25				
5	16QAM	1	0	15.30	15.29	15.15	16.6	0		
5	16QAM	1	74	15.36	15.38	15.23				
5	16QAM	36	0	15.08	15.23	15.15				
5	16QAM	36	20	15.13	15.22	15.19	16.6	0		
5	16QAM	36	39	15.08	15.20	15.13				
5	16QAM	75	0	15.12	15.20	15.20				
5	16QAM	1	0	15.30	15.29	15.11				
5	256QAM	1	37	15.11	15.21	15.18	16.6	0		
5	256QAM	1	74	15.12	15.18	15.16				
5	256QAM	36	0	15.06	15.20	15.15				
5	256QAM	36	20	15.12	15.23	15.08	16.6	0		
5	256QAM	36	39	15.13	15.24	15.12				
5	256QAM	75	0	15.13	15.28	15.12				
Channel										
Frequency (MHz)										
5	QPSK	1	0	20.95	21.00	21.00				
5	QPSK	1	25	15.15	15.21	15.04	16.6	0		
5	QPSK	1	49	15.26	15.21	15.11				
5	QPSK	12	0	15.16	15.30	15.08				
5	QPSK	25	14	15.09	15.20	15.08	16.6	0		
5	QPSK	25	25	15.16	15.30	15.20				
5	16QAM	1	0	15.30	15.30	15.29				
5	16QAM	1	25	15.19	15.30	15.17	16.6	0		
5	16QAM	1	49	15.07	15.18	15.06				
5	16QAM	25	0	15.19	15.18	15.12				
5	16QAM	25	14	15.05	15.26	15.24	16.6	0		
5	16QAM	50	0	15.07	15.18	15.06				
5	16QAM	50	0	15.01	15.19	15.17				
5	16QAM	1	0	15.20	15.28	15.19				
5	16QAM	1	25	15.16	15.31	15.15	16.6	0		
5	16QAM	1	49	15.21	15.26	15.17				
5	16QAM	25	0	15.14	15.22	15.11				
5	16QAM	25	14	15.15	15.27	15.07	16.6	0		
5	16QAM	50	0	15.15	15.33	15.12				
5	256QAM	1	0	15.10	15.18	15.04				
5	256QAM	1	25	15.22	15.23	15.12	16.6	0		
5	256QAM	1	49	15.12	15.23	15.12				
5	256QAM	1	99	15.16	15.20	15.16				
5	256QAM	50	0	15.10	15.18	15.18				
5	256QAM	50	12	15.15	15.20	15.07	16.6	0		
5	256QAM	50	25	15.06	15.22	15.07				
5	256QAM	100	0	15.16	15.38	15.29				

Band 12 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up (MHz)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.58	22.70	22.62				
10	16QAM	1	25	20.83	20.70	20.66	24	0		
10	QPSK	1	49	22.36	22.70	22.67				
10	QPSK	25	0	21.68	21.71	21.64				
10	QPSK	25	12	21.54	21.68	21.65	23	1		
10	QPSK	25	25	21.82	21.66	21.62				
10	QPSK	50	0	21.60	21.67	21.63				
10	16QAM	1	25	21.70	21.75	21.64	23	1		
10	16QAM	1	25	21.54	21.63	21.51				
10	16QAM	1	49	21.57	21.69	21.63				
10	16QAM	25	0	20.83	20.70	20.66	22	2		
10	16QAM	25	12	20.83	20.74	20.83				
10	16QAM	25	25	20.88	20.78	20.72				
10	16QAM	50	0	20.84	20.77	20.69				
10	16QAM	1	0	20.80	20.89	20.83				
10	16QAM	1	25	20.87	20.77	20.64	22	2		
10	16QAM	1	49	20.83	20.68	20.64				
10	16QAM	25	0	19.92	19.71	19.59	21	3		
10	16QAM	25	12	19.51	19.58	19.55				
10	16QAM	50	0	19.82	19.70	19.62				
10	256QAM	1	25	17.51	17.71	17.68	19	5		
10	256QAM	1	49	17.54	17.66	17.62				
10	256QAM	50	0	17.46	17.64	17.64				
10	256QAM	25	12	17.69	17.74	17.62	19	5		
10	256QAM	25	25	17.56	17.62	17.56				
10	256QAM	100	0	17.53	17.69	17.62				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.47	22.70	22.49				
5	QPSK	1	24	22.42	22.66	22.41	24	0		
5	QPSK	12	0	21.60	21.60	21.60				
5	QPSK	12	7	21.42	21.62	21.52	23	1		
5	QPSK	12	13	21.53	21.56	21.49				
5	QPSK	25	0	21.52	21.59	21.54				
5	16QAM	1	0	21.58	21.64	21.67				
5	16QAM	1	12	21.46	21.51	21.39	23	1		
5	16QAM	1	24	21.44	21.54	21.52				
5	16QAM	12	0	20.48	20.66	20.52				
5	16QAM	12	7	20.55	20.68	20.49	22	2		
5	16QAM	12	13	20.48	20.64	20.65				
5	16QAM	25	0	20.59	20.61	20.59				
5	16QAM	1	0	20.74	20.81	20.76	22	2		
5	16QAM	1	24	20.52	20.63	20.50				
5	16QAM	12	0	19.45	19.51	19.50				



Band 25 Ant1													
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (min)	MPE (dB)					
Channel													
Frequency (MHz)				1890	1890	1890							
20	QPSK	1	0	16.22	16.26	16.13							
20	QPSK	1	49	16.18	16.26	16.13	17.4	0					
20	QPSK	1	99	16.18	16.26	16.13							
20	QPSK	50	0	16.24	16.26	16.10							
20	QPSK	24	0	16.07	16.26	16.02							
20	QPSK	50	50	16.19	16.23	16.09	17.4	0					
20	QPSK	100	0	16.25	16.27	16.21							
20	16QAM	1	0	16.15	16.26	16.14							
20	16QAM	1	49	16.21	16.28	16.26	17.4	0					
20	16QAM	1	99	16.25	16.28	16.19							
20	16QAM	50	0	16.16	16.26	16.27							
20	16QAM	50	24	16.13	16.22	16.17	17.4	0					
20	16QAM	50	50	16.28	16.31	16.17							
20	16QAM	100	0	16.19	16.30	16.17							
20	16QAM	1	0	16.06	16.20	16.10							
20	16QAM	1	49	16.03	16.19	16.10	17.4	0					
20	16QAM	1	99	16.26	16.30	16.17							
20	16QAM	50	0	16.23	16.30	16.21							
20	16QAM	50	24	16.12	16.26	16.21	17.4	0					
20	16QAM	50	50	16.10	16.25	16.16							
20	16QAM	100	0	16.23	16.31	16.14							
20	16QAM	1	0	15.96	16.07	16.04							
20	16QAM	1	49	15.95	16.03	16.00	17	0.4					
20	16QAM	1	99	15.81	15.98	15.84							
20	16QAM	50	0	15.97	16.06	15.96							
20	16QAM	50	24	15.82	15.87	15.78	17	0.4					
20	16QAM	50	50	15.77	15.89	15.84							
20	16QAM	100	0	15.81	16.01	15.84							
Channel													
Frequency (MHz)				1897.5	1890	1907.5	Turn-up time (min)	MPE (dB)					
15	QPSK	1	0	16.10	16.21	15.92							
15	QPSK	1	49	15.97	16.08	16.01	17.4	0					
15	QPSK	1	99	16.12	16.18	16.05							
15	QPSK	36	0	16.09	16.18	15.99							
15	QPSK	36	20	16.01	16.09	15.98	17.4	0					
15	QPSK	36	36	16.14	16.18	15.94							
15	QPSK	75	0	16.21	16.12	16.15							
15	16QAM	1	0	16.08	16.22	16.08							
15	16QAM	1	37	16.06	16.17	16.11	17.4	0					
15	16QAM	1	74	16.16	16.25	16.14							
15	16QAM	36	0	16.11	16.21	16.23							
15	16QAM	36	20	16.09	16.18	16.07	17.4	0					
15	16QAM	75	0	16.13	16.22	16.08							
15	16QAM	1	0	15.98	16.07	15.99							
15	16QAM	1	49	15.96	16.04	15.96	17.4	0					
15	16QAM	1	99	16.13	16.25	16.04							
15	16QAM	36	0	16.16	16.23	16.05							
15	16QAM	36	20	16.00	16.11	16.10	17.4	0					
15	16QAM	75	0	16.14	16.11	16.10							
15	16QAM	1	0	16.12	16.24	16.04							
15	16QAM	1	49	16.06	16.13	16.06	17	0.4					
15	16QAM	1	99	15.85	15.90	15.87							
15	16QAM	50	0	16.07	16.14	15.89							
15	16QAM	50	24	15.71	15.83	15.84	17	0.4					
15	16QAM	50	36	15.83	15.85	15.79							
15	16QAM	100	0	15.81	16.01	15.83							
Channel													
Frequency (MHz)				1895	1890	1910	Turn-up time (min)	MPE (dB)					
10	QPSK	1	0	16.09	16.09	15.97							
10	QPSK	1	26	16.09	16.09	15.97	17.4	0					
10	QPSK	1	49	16.12	16.12	16.01							
10	QPSK	12	0	16.03	16.17	16.04							
10	QPSK	25	0	15.95	16.10	15.88	17.4	0					
10	QPSK	25	25	16.04	16.09	16.06							
10	16QAM	1	0	16.05	16.19	16.02							
10	16QAM	1	26	16.11	16.22	16.11	17.4	0					
10	16QAM	1	49	16.14	16.17	16.08							
10	16QAM	25	0	16.06	16.20	16.21							
10	16QAM	25	12	16.05	16.15	16.03	17.4	0					
10	16QAM	50	0	16.08	16.22	16.04							
10	16QAM	50	0	16.03	16.13	16.03	17.4	0					
10	16QAM	1	0	16.03	16.13	16.03							
10	16QAM	1	49	16.12	16.23	16.13	17.4	0					
10	16QAM	25	0	16.22	16.21	16.02							
10	16QAM	25	25	16.05	16.19	16.20	17.4	0					
10	16QAM	50	0	16.12	16.20	16.06							
10	16QAM	50	1	16.20	15.98	16.17	17	0.4					
10	16QAM	1	49	15.70	15.91	15.86							
10	16QAM	25	0	15.85	15.89	15.86							
10	16QAM	25	12	15.75	15.84	15.73	17	0.4					
10	16QAM	25	25	15.85	15.81	15.73							
10	16QAM	50	0	15.81	15.89	15.86							
Channel													
Frequency (MHz)				2695	2690	2685	Turn-up time (min)	MPE (dB)					
5	QPSK	1	0	16.13	16.21	16.04							
5	QPSK	1	24	16.01	16.05	15.96	17.4	0					
5	QPSK	1	10	16.08	16.18	16.04							
5	QPSK	12	0	15.96	16.17	15.93							
5	QPSK	12	13	16.14	16.11	15.99	17.4	0					
5	QPSK	24	0	16.10	16.16	16.08							
5	16QAM	1	0	16.10	16.18	16.10							
5	16QAM	1	12	16.09	16.17	16.14	17.4	0					
5	16QAM	1	24	16.12	16.19	16.15							
5	16QAM	12	0	16.04	16.20	16.14							
5	16QAM	12	7	16.06	16.17	16.08	17.4	0					
5	16QAM	12	13	16.24	16.17	16.07							
5	16QAM	25	0	16.09	16.20	16.12							
5	16QAM	1	0	15.97	16.15	15.99							
5	16QAM	1	49	15.92	16.12	15.96	17.4	0					
5	16QAM	1	24	16.09	16.27	16.07							
5	16QAM	12	0	16.13	16.22	16.11	17.4	0					
5	16QAM	12	13	16.00	16.11	16.04							
5	16QAM	25	0	16.16	16.19	16.06							
5	16QAM	1	0	15.89	15.99	15.82							
5	16QAM	1	12	15.81	15.91	15.90	17	0.4					
5	16QAM	1	24	15.76	15.94	15.76							
5	16QAM	12	0	15.70	15.79	15.71							
5	16QAM	12	7	15.78	15.74	15.66	17	0.4					
5	16QAM	25	0	15.80	16.00	15.81							
5	16QAM	50	0	15.80	15.98	15.86							
Channel													
Frequency (MHz)				2695	2690	2675	Turn-up time (min)	MPE (dB)					
3	QPSK	1	0	16.10	16.22	16.15							
3	QPSK	1	8	16.05	16.08	16.04	17.4	0					
3	QPSK	1	14	16.13	16.15	16.00							
3	QPSK	1	4	16.08	16.17	16.06							
3	QPSK	8	4	16.38	16.12	15.88	17.4	0					
3	QPSK	8	7	16.05	16.17	15.99							
3	16QAM	1	0	16.11	16.21	16.15							
3	16QAM	1	8	16.15	16.15	16.01	17.4	0					
3	16QAM	1	16	16.11	16.22	16.15							
3	16QAM	1	8	16.16	16.17	16.04							
3	16QAM	8	0	16.08	16.25	16.18							
3	16QAM	8	4	16.02	16.10	16.14	17.4	0					
3	16QAM	15	0	16.21	16.29	16.05							
3	16QAM	16	0	16.11	16.27	16.02							
3	16QAM	1	0	15.98	16.12	15.99	17.4	0					
3	16QAM	1	8	15.98	16.13	15.97							
3	16QAM	1	14	16.09	16.22	16.12							
3	16QAM	8	0	16.21	16.12	16.04							
3	16QAM	8	7	16.03	16.17	16.19	17.4	0					
3	16QAM	15	0	16.01	16.19	16.12							
3	16QAM	1	0	15.92	16.00	15.83							
3	16QAM	1	8	15.85	15.97	15.86	17	0.4					
3	16QAM	8	4	15.75	15.80	15.88							
3	16QAM	1	12	15.77	15.81	15.71							
3	16QAM	15	0	15.94	16.02	15.95	17	0.4					
3	16QAM	15	0	15.94	16.02	15.95							
Channel													
Frequency (MHz)				2697	2690	2683	Turn-up time (min)	MPE (dB)					
1.4	QPSK	1	0	16.12	16.20	15.90							
1.4	QPSK	1	3	16.04	16.07	16.00							
1.4	QPSK	1	9	16.08	16.19	16.01	17.4	0					
1.4	QPSK	3	0	16.16	16.13	16.02							
1.4	QPSK	3	1	16.03	16.15	15.88							
1.4	QPSK	3	9	16.08	16.19	16.05	17.4	0					
1.4	16QAM	1	0	16.02	16.20	16.11							
1.4	16QAM	1	3	16.07	16.17	16.07							
1.4	16QAM	3	0	16.18	16.24	16.14	17.4	0					
1.4	16QAM	3	9	16.13	16.20	16.20							
1.4	16QAM	1	0	16.09	16.14	16.06							
1.4	16QAM	3	0	16.18	16.24	16.12							
1.4	16QAM	3	9	16.05	16.18	16.10	17.4	0					
1.4	16QAM	1	0	15.97	16.11	16.02		</					





Band 38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2590	2595	2600		
20	QPSK	1	0	16.10	16.24	16.24	17.2	0
20	QPSK	1	49	16.09	16.23	16.18		
20	QPSK	1	99	16.07	16.21	16.06		
20	QPSK	50	0	16.01	16.17	16.11		
20	QPSK	50	24	16.11	16.14	16.07	17.2	0
20	QPSK	100	0	16.16	16.20	16.16		
20	QPSK	100	49	16.13	16.16	16.05		
20	HQAM	1	0	16.04	16.10	16.06	17.2	0
20	HQAM	1	99	16.03	16.10	16.15		
20	HQAM	50	0	16.07	16.10	16.01		
20	HQAM	50	24	16.07	16.10	16.11	17.2	0
20	HQAM	50	50	16.06	16.21	16.07		
20	HQAM	100	0	16.04	16.17	16.05		
20	HQAM	100	49	16.14	16.23	16.10		
20	HQAM	1	0	16.17	16.23	16.20	17.2	0
20	HQAM	1	99	16.06	16.09	16.06		
20	HQAM	50	0	16.15	16.18	16.14		
20	HQAM	50	24	16.00	16.10	16.03	17.2	0
20	HQAM	50	50	16.12	16.10	16.02		
20	HQAM	100	0	16.03	16.18	16.03		
20	ZSSBAM	1	0	16.02	16.10	16.09		
20	ZSSBAM	1	99	16.00	16.10	16.10	17.2	0
20	ZSSBAM	1	99	15.97	16.12	16.08		
20	ZSSBAM	50	0	16.02	16.12	16.07		
20	ZSSBAM	50	24	16.01	16.11	16.05		
20	ZSSBAM	50	50	16.03	16.10	16.04	17.2	0
20	ZSSBAM	100	0	16.02	16.12	16.07		
Channel				37825	38000	38175		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	16.00	16.14	16.14	17.2	0
15	QPSK	1	37	16.07	16.14	16.12		
15	QPSK	1	74	16.02	16.04	16.06		
15	QPSK	36	0	16.00	16.01	16.00		
15	QPSK	36	20	16.02	16.06	16.00	17.2	0
15	QPSK	36	36	16.00	16.01	16.00		
15	QPSK	75	0	16.07	16.11	16.09		
15	HQAM	1	0	16.08	16.09	16.09		
15	HQAM	1	37	16.04	16.04	16.07	17.2	0
15	HQAM	1	74	16.04	16.04	16.07		
15	HQAM	36	0	16.02	16.07	16.03		
15	HQAM	36	20	16.00	16.04	16.03	17.2	0
15	HQAM	36	36	16.01	16.00	16.05		
15	HQAM	75	0	16.07	16.17	16.11		
15	HQAM	1	0	16.05	16.06	16.06	17.2	0
15	HQAM	1	37	16.03	16.12	16.08		
15	HQAM	36	0	16.03	16.02	16.06		
15	HQAM	36	20	16.05	16.02	16.08	17.2	0
15	HQAM	36	36	16.00	16.02	16.05		
15	HQAM	75	0	16.01	16.02	16.05		
15	ZSSBAM	1	0	16.02	16.06	16.05		
15	ZSSBAM	1	37	16.00	16.02	16.05	17.2	0
15	ZSSBAM	1	74	16.07	16.07	16.05		
15	ZSSBAM	36	0	16.02	16.03	16.00		
15	ZSSBAM	36	20	16.00	16.06	16.05	17.2	0
15	ZSSBAM	36	36	16.01	16.03	16.05		
15	ZSSBAM	75	0	16.12	16.14	16.09		
Channel				37825	38000	38175		
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	16.08	16.21	16.21	17.2	0
10	QPSK	1	25	16.06	16.18	16.15		
10	QPSK	1	49	16.01	16.04	16.04		
10	QPSK	12	0	16.03	16.01	16.06		
10	QPSK	25	12	16.08	16.11	16.08	17.2	0
10	QPSK	25	25	16.06	16.06	16.09		
10	QPSK	50	0	16.04	16.07	16.13		
10	HQAM	1	0	16.03	16.12	16.00		
10	HQAM	1	25	16.01	16.03	16.06	17.2	0
10	HQAM	1	49	16.00	16.10	16.08		
10	HQAM	25	0	16.02	16.00	16.07		
10	HQAM	25	12	16.04	16.06	16.05		
10	HQAM	25	25	16.06	16.18	16.05	17.2	0
10	HQAM	50	0	16.07	16.08	16.09		
10	HQAM	1	0	16.04	16.00	16.14		
10	HQAM	1	25	16.04	16.03	16.02	17.2	0
10	HQAM	1	49	16.04	16.03	16.02		
10	HQAM	25	12	16.02	16.07	16.06		
10	HQAM	25	25	16.08	16.06	16.08	17.2	0
10	HQAM	50	0	16.03	16.12	16.09		
10	HQAM	1	0	16.08	16.00	16.04		
10	HQAM	1	25	16.00	16.00	16.04	17.2	0
10	HQAM	1	49	16.01	16.01	16.04		
10	HQAM	25	12	16.02	16.04	16.07		
10	HQAM	25	25	16.03	16.04	16.04	17.2	0
10	HQAM	50	0	16.03	16.11	16.06		
10	HQAM	1	0	16.07	16.04	16.03		
10	HQAM	1	24	16.07	16.00	16.03	17.2	0
10	HQAM	12	0	16.02	16.11	16.06		
10	HQAM	12	7	16.01	16.06	16.00		
10	HQAM	12	13	16.01	16.10	16.01	17.2	0
10	HQAM	25	0	16.04	16.07	16.05		
10	HQAM	25	13	16.08	16.02	16.05		
10	HQAM	1	0	16.08	16.02	16.00		
10	HQAM	1	12	16.08	16.06	16.05	17.2	0
10	HQAM	1	24	16.05	16.00	16.00		
10	HQAM	12	0	16.03	16.04	16.05		
10	HQAM	12	7	16.01	16.06	16.00	17.2	0
10	HQAM	12	13	16.01	16.10	16.00		
10	HQAM	25	0	16.01	16.04	16.07		
10	HQAM	25	13	16.08	16.08	16.08	17.2	0
10	HQAM	25	13	16.03	16.06	16.00		
10	HQAM	25	0	16.15	16.20	16.00		

Band 38 HPUE Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2600	2605	2610		
20	QPSK	1	0	17.67	17.72	17.63	18.8	0
20	QPSK	1	49	17.52	17.64	17.61		
20	QPSK	1	99	17.50	17.71	17.50		
20	QPSK	50	0	17.51	17.68	17.50		
20	QPSK	50	24	17.61	17.67	17.62	18.8	0
20	QPSK	100	0	17.56	17.62	17.50		
20	QPSK	100	49	17.54	17.70	17.65		
20	HQAM	1	0	17.71	17.73	17.65	18.8	0
20	HQAM	1	49	17.50	17.62	17.50		
20	HQAM	1	99	17.50	17.64	17.61		
20	HQAM	50	0	17.53	17.68	17.50		
20	HQAM	50	24	17.52	17.52	17.50	18.8	0
20	HQAM	50	50	17.57	17.70	17.60		
20	HQAM	100	0	17.57	17.76	17.50		
20	HQAM	100	49	17.55	17.68	17.50		
20	HQAM	1	0	17.60	17.74	17.66	18.8	0
20	HQAM	1	99	17.52	17.66	17.67		
20	HQAM	50	0	17.52	17.65	17.65		
20	HQAM	50	24	17.60	17.71	17.58	18.8	0
20	HQAM	50	50	17.62	17.76	17.63		
20	HQAM	100	0	17.61	17.73	17.69		
20	ZSSBAM	1	0	17.55	17.69	17.56		
20	ZSSBAM	1	49	17.49	17.64	17.61	18.8	0
20	ZSSBAM	1	99	17.52	17.66	17.50		
20	ZSSBAM	50	0	17.52	17.70	17.64		
20	ZSSBAM	50	24	17.56	17.65	17.57	18.8	0
20	ZSSBAM	50	50	17.61	17.62	17.52		
20	ZSSBAM	100	0	17.54	17.67	17.50		
Channel				37825	38000	38175		
Frequency (MHz)				2612.5	2630	2647.5		
15	QPSK	1	0	17.52	17.72	17.63	18.8	0
15	QPSK	1	37	17.38	17.65	17.58		
15	QPSK	1	74	17.36	17.61	17.46		
15	QPSK	36	0	17.40	17.51	17.41		
15	QPSK	36	20	17.50	17.52	17.50	18.8	0
15	QPSK	36	36	17.50	17.50	17.50		
15	QPSK	75	0	17.37	17.53	17.58		
15	HQAM	1	0	17.60	17.63	17.53		
15	HQAM	1	37	17.44	17.56	17.50	18.8	0
15	HQAM	1	74	17.51	17.51	17.50		
15	HQAM	36	0	17.45	17.62	17.47		
15	HQAM	36	20	17.40	17.48	17.41	18.8	0
15	HQAM	36	36	17.49	17.53	17.49		
15	HQAM	75	0	17.50	17.56	17.44		
15	HQAM	1	0	17.51	17.59	17.58	18.8	0
15	HQAM	1	37	17.45	17.67	17.51		
15	HQAM	1	74	17.45	17.62	17.54		
15	HQAM	36	0	17.39	17.62	17.41		
15	HQAM	36	20	17.52	17.63	17.44	18.8	0
15	HQAM	36	36	17.50	17.50	17.50		
15	HQAM	75	0	17.55	17.70	17.54		
15	ZSSBAM	1	0	17.51	17.67	17.48	18.8	0
15	ZSSBAM	1	37	17.40	17.48	17.45		
15	ZSSBAM	1	74	17.48	17.54	17.45		
15	ZSSBAM	36	0	17.50	17.56	17.51		
15	ZSSBAM	36	20	17.52	17.53	17.50	18.8	0
15	ZSSBAM	36	36	17.39	17.47	17.38		
15	ZSSBAM	75	0	17.51	17.64	17.52		
Channel				37825	38000	38175		
Frequency (MHz)				2615	2635	2655		
10	QPSK	1	0	17.57	17.66	17.49	18.8	0
10	QPSK	1	25	17.43	17.60	17.51		
10	Q							



Band 41 Ant1												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up (dBm)	MPR (dB)	
Channel												
Frequency (MHz)				39760	40198	40636	41074	41512	41950			
20	QPSK	1	0	16.20	16.27	16.33	16.20	16.33	16.20			
20	QPSK	1	49	16.05	16.19	16.22	16.06	16.19	16.05	17.2	0	
20	QPSK	1	99	16.07	16.20	16.23	16.14	16.27	16.07			
20	QPSK	50	0	16.12	16.13	16.24	16.22	16.20				
20	QPSK	50	24	16.15	16.12	16.18	16.03	16.11	17.2	0		
20	QPSK	100	0	16.15	16.14	16.17	16.14	16.14				
20	QPSK	100	0	16.19	16.07	16.22	16.16	16.06				
20	HQAM	1	0	16.13	16.08	16.22	16.19	16.19	17.2	0		
20	HQAM	1	49	16.12	16.10	16.18	16.13	16.20				
20	HQAM	1	99	16.13	16.13	16.15	16.02	16.12				
20	HQAM	50	0	16.20	16.26	16.26	16.15	16.12				
20	HQAM	50	24	16.09	16.14	16.20	16.09	16.07	17.2	0		
20	HQAM	100	0	16.15	16.22	16.28	16.21	16.18				
20	HQAM	100	0	16.12	16.09	16.15	16.04	16.12				
20	HQAM	1	49	16.04	16.09	16.18	16.15	16.14	17.2	0		
20	HQAM	1	99	16.15	16.08	16.20	16.14	16.11				
20	HQAM	50	24	16.19	16.11	16.27	16.21	16.11	17.2	0		
20	HQAM	50	50	16.04	16.05	16.17	16.01	16.11				
20	HQAM	100	0	16.19	16.20	16.22	16.18	16.09				
20	256QAM	1	0	16.03	16.07	16.15	16.09	16.05				
20	256QAM	1	49	16.14	16.27	16.27	16.23	16.16	17.2	0		
20	256QAM	1	99	16.17	16.17	16.27	16.25	16.13				
20	256QAM	50	0	16.22	16.22	16.24	16.21	16.21				
20	256QAM	50	24	16.23	16.12	16.26	16.12	16.09	17.2	0		
20	256QAM	50	50	16.10	16.14	16.27	16.20	16.14				
20	256QAM	100	0	16.22	16.22	16.24	16.21	16.21				
Channel												
15	QPSK	1	0	16.20	16.27	16.33	16.20	16.33	16.20			
15	QPSK	1	37	15.83	16.04	16.05	15.88	16.09	17	0		
15	QPSK	1	74	15.90	16.08	16.20	15.99	16.03				
15	QPSK	36	0	16.02	16.07	16.14	16.03	16.12				
15	QPSK	36	20	16.05	16.08	16.05	15.88	16.06	17.2	0		
15	QPSK	36	20	16.03	16.03	16.03	16.03	16.03				
15	QPSK	75	0	16.05	15.98	16.07	15.99	15.97				
15	HQAM	1	0	16.06	15.91	16.14	16.15	16.03	17.2	0		
15	HQAM	1	37	16.04	15.97	16.04	16.00	16.04				
15	HQAM	1	74	16.11	16.08	16.08	15.91	15.98				
15	HQAM	36	0	16.14	16.11	16.18	16.03	15.96	17.2	0		
15	HQAM	36	20	16.08	16.06	16.13	16.01	16.08				
15	HQAM	36	39	16.02	16.10	16.19	16.18	16.10	17.2	0		
15	HQAM	75	0	16.00	15.92	16.05	15.95	15.97				
15	HQAM	1	37	15.98	16.07	16.14	16.03	16.12				
15	HQAM	1	37	15.97	15.96	16.03	16.04	16.06	17	0		
15	HQAM	1	74	16.05	16.03	16.06	16.11	16.07				
15	HQAM	36	0	15.95	15.95	16.07	16.03	16.12				
15	HQAM	36	20	16.10	15.97	16.11	16.15	16.01	17.2	0		
15	HQAM	36	39	16.08	15.98	16.07	16.00	16.03				
15	HQAM	75	0	16.05	16.13	16.17	16.10	16.05				
15	256QAM	1	0	15.99	16.04	16.09	15.95	15.95	17.2	0		
15	256QAM	1	37	16.02	16.24	16.21	16.07	16.08				
15	256QAM	1	74	16.10	16.00	16.22	16.19	16.06				
15	256QAM	36	0	16.15	16.23	16.20	16.12	16.06	17.2	0		
15	256QAM	36	20	16.17	15.96	16.23	16.08	16.22				
15	256QAM	36	39	16.04	16.00	16.10	16.13	16.00				
15	256QAM	75	0	16.13	16.10	16.26	16.06	16.22				
Channel												
10	QPSK	1	0	20.01	20.47	20.93	20.39	20.85	20.01			
10	QPSK	1	25	19.99	19.13	19.13	19.04	19.07	17.20	0		
10	QPSK	1	49	19.80	19.11	19.20	19.08	19.02				
10	QPSK	1	74	19.84	19.06	19.10	19.15	19.06				
10	QPSK	25	12	19.90	19.95	19.16	19.90	19.04	17.2	0		
10	QPSK	25	26	19.07	19.06	19.03	19.03	19.03				
10	QPSK	50	0	19.13	19.01	19.06	19.00	19.02				
10	HQAM	1	0	16.03	16.06	16.15	16.03	16.12	17.2	0		
10	HQAM	1	25	16.08	16.07	16.14	16.07	16.01				
10	HQAM	1	49	15.98	16.06	16.01	15.90	16.05				
10	HQAM	25	0	16.18	16.14	16.14	16.03	16.03	17.2	0		
10	HQAM	25	12	16.09	16.05	16.12	16.07	16.03				
10	HQAM	50	0	16.09	16.01	16.06	16.00	16.10				
10	HQAM	1	25	15.93	16.03	16.11	16.10	16.05	17.2	0		
10	HQAM	1	49	16.08	16.02	16.07	16.11	15.96				
10	HQAM	25	0	16.03	16.06	16.10	16.00	16.14				
10	HQAM	25	12	16.11	15.96	16.15	16.08	16.02	17.2	0		
10	HQAM	25	26	15.94	15.98	16.10	15.94	16.02				
10	HQAM	50	0	16.13	16.13	16.19	16.07	15.93				
10	256QAM	1	0	15.87	16.01	16.09	15.92	15.97				
10	256QAM	1	25	16.06	16.14	16.20	16.15	16.10	17.2	0		
10	256QAM	1	49	16.10	16.10	16.13	16.10	16.03				
10	256QAM	25	0	16.05	16.17	16.17	16.12	16.17				
10	256QAM	25	12	16.11	16.04	16.10	16.01	16.03	17.2	0		
10	256QAM	25	26	15.98	15.99	16.23	16.10	16.05				
10	256QAM	50	0	16.09	16.09	16.25	16.08	16.13				
Channel												
5	QPSK	1	0	16.06	16.10	16.25	16.08	16.10				
5	QPSK	1	16	15.99	16.00	16.00	16.00	16.05	17.20	0		
5	QPSK	1	24	15.97	16.09	16.15	16.04	15.93				
5	QPSK	12	0	15.96	16.10	16.18	16.08	15.94				
5	QPSK	12	7	16.05	15.97	16.00	15.90	15.85	17.2	0		
5	QPSK	12	13	16.08	16.04	16.04	15.96	15.88				
5	QPSK	25	0	16.16	16.09	16.12	16.06	16.02				
5	HQAM	1	0	15.98	15.98	16.19	16.05	16.09				
5	HQAM	1	12	16.06	16.04	16.08	15.96	16.07	17.2	0		
5	HQAM	1	24	16.02	16.03	16.04	16.06	16.10				
5	HQAM	12	0	16.17	16.18	16.22	16.07	16.09				
5	HQAM	12	7	16.05	15.98	16.08	16.02	15.99	17.2	0		
5	HQAM	12	13	16.00	16.17	16.25	16.07	16.08				
5	HQAM	25	0	16.01	16.04	16.01	16.00	15.88				
5	HQAM	1	0	16.05	15.95	16.18	16.11	16.02	17.2	0		
5	HQAM	1	12	15.98	15.96	16.10	16.00	15.89				
5	HQAM	1	24	16.08	15.97	16.04	16.07	15.99				
5	HQAM	12	0	16.05	16.02	16.13	16.09	16.13	17.2	0		
5	HQAM	12	0	16.03	16.06	16.22	16.07	15.95				
5	HQAM	12	13	15.98	16.03	16.04	15.86	16.03				
5	HQAM	25	0	16.07	16.10	16.09	16.10	15.88				
5	256QAM	1	0	15.92	16.02	16.11	15.85	16.00				
5	256QAM	1	12	16.12	16.20	16.15	16.07	16.08	17.2	0		
5	256QAM	1	24	16.10	16.02	16.19	16.19	15.89				
5	256QAM	12	0	16.10	16.19	16.15	16.15	16.07				
5	256QAM	12	7	16.19	15.96	16.22	16.07	15.92	17.2	0		
5	256QAM	12	13	15.93	16.00	16.15	16.18	16.05				
5	256QAM	25	0	16.07	16.09	16.15	16.05	16.14				

Band 41 HPUE Ant1												
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up (dBm)	MPR (dB)	
Channel												
Frequency (MHz)				39760	40198	40636	41074	41512	41950			
20	QPSK	1	0	17.62	17.62	17.63	17.63	17.63	17.63			
20	QPSK	1	49	17.64	17.66	17.64	17.72	17.64	18.8	0		
20	QPSK	1	99	17.60	17.60	17.74	17.68	17.68				
20	QPSK	50	0	17.72	17.72	17.82	17.87	17.85				
20	QPSK	50	24	17.62	17.59	17.70	17.61	17.67	18.8	0		
20	QPSK	100	0	17.62	17.68	17.74	17.68	17.62				
20	QPSK	100	0	17.56	17.54	17.69	1					



GSM750 A/G									
Carrier	Base-Average Power (dBm)			Turnup	Frame-Average Power (dBm)			Turnup	
Tx Channel	812	861	810	Limit	812	861	810	Limit	
Frequency (MHz)	1802.2	1851	1801.8	(dBm)	1802.2	1851	1801.8	(dBm)	
OMA 1 Tx site	26.68	26.78	26.66	22.25	17.68	17.78	17.66	18.20	
OPNS 1 Tx site	26.48	26.60	26.57	22.20	17.48	17.60	17.57	18.20	
OPNS 2 Tx site	22.92	23.00	22.97	24.20	19.92	17.00	19.97	18.20	
OPNS 3 Tx site	21.72	21.75	21.73	22.50	17.46	17.49	17.47	18.24	
OPNS 4 Tx site	20.81	20.61	20.84	21.20	17.61	17.61	17.64	18.20	
EDGE 1 Tx site	23.15	23.14	23.11	25.00	14.15	14.14	14.11	16.00	
EDGE 2 Tx site	21.41	21.61	21.56	23.20	14.41	15.01	14.56	17.00	
EDGE 3 Tx site	20.03	20.03	20.01	22.00	15.77	15.76	15.75	17.34	
EDGE 4 Tx site	18.01	18.01	18.01	20.00	13.01	15.00	13.01	17.00	
WCDMA A/G									
Band	WCDMA-B			Turnup	WCDMA-TX			Turnup	
Tx Channel	5852	5850	5838	Limit	5312	5313	5318	Limit	
Frequency (MHz)	5852	5850	5838	(dBm)	5312	5313	5318	(dBm)	
SOPP Rel (G)	19.62	19.62	19.62	20.00	16.12	16.12	16.12	20.00	
SOPP Rel (B)	19.05	19.05	19.05	20.00	15.31	15.47	15.45	20.00	
SOPP Rel (G)	19.83	19.77	19.84	20.00	19.39	19.64	19.31	20.00	
SOPP Rel (B)	19.37	19.27	19.36	19.00	18.39	18.65	18.25	19.00	
SOPP Rel (G)	18.82	18.39	18.37	19.00	18.59	18.32	18.33	19.00	
SOPP Rel (B)	17.92	18.21	17.87	18.20	17.56	18.10	17.62	18.00	
SOPP Rel (G)	17.97	17.88	17.84	18.20	18.02	18.10	17.95	18.00	
SOPP Rel (B)	18.77	18.44	18.47	19.00	18.88	18.99	18.91	19.00	
SOPP Rel (B)	18.38	18.50	18.37	19.00	18.42	18.60	18.21	19.00	
SOPP Rel (B)	18.15	18.05	17.85	19.40	17.85	18.58	17.78	19.00	
SOPP Rel (B)	18.00	17.80	17.70	19.40	17.80	17.85	17.82	19.00	
SOPP Rel (G)	19.47	19.38	19.37	19.00	18.12	19.47	18.17	19.00	
SOPP Rel (B)	17.21	17.40	17.59	17.20	17.38	17.40	17.26	17.50	
SOPP Rel (B)	16.45	16.47	16.23	18.00	16.47	16.50	16.17	18.00	
SOPP Rel (B)	17.50	17.47	17.46	17.00	17.23	17.48	17.40	17.00	
SOPP Rel (B)	19.05	19.00	19.03	19.00	19.29	19.41	19.26	19.00	



Band 2 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Time-up (min)	APR (dB)		
Channel										
1860 1860 1900										
20	QPSK	1	0	18.60	18.62	18.68	20.1	0		
20	QPSK	1	49	18.60	18.62	18.68				
20	QPSK	1	99	18.59	18.73	18.88				
20	QPSK	50	0	18.69	18.62	18.67				
20	QPSK	50	24	18.71	18.62	18.67				
20	QPSK	50	50	18.60	18.74	18.89			21.8	0
20	QPSK	100	0	18.70	18.64	18.60				
20	QPSK	100	0	18.71	18.64	18.68				
20	16QAM	1	49	18.71	18.70	18.69	20.1	0		
20	16QAM	1	99	18.65	18.74	18.66				
20	16QAM	50	0	18.67	18.76	18.68				
20	16QAM	50	24	18.68	18.60	18.70				
20	16QAM	100	0	18.64	18.76	18.64				
20	16QAM	100	0	18.70	18.76	18.63				
20	84QAM	1	0	18.63	18.77	18.72				
20	84QAM	1	49	18.69	18.84	18.78	20.1	0		
20	84QAM	50	0	18.69	18.89	18.89				
20	84QAM	50	0	18.66	18.77	18.69				
20	84QAM	50	24	18.60	18.84	18.69				
20	84QAM	100	0	18.60	18.74	18.67	20.1	0		
20	84QAM	100	0	18.74	18.77	18.69				
20	256QAM	1	49	17.76	17.76	17.76	19	1.1		
20	256QAM	1	99	17.66	17.76	17.67				
20	256QAM	50	0	17.64	17.76	17.65				
20	256QAM	50	24	17.64	17.61	17.46				
20	256QAM	100	0	17.65	17.71	17.61	19	1.1		
20	256QAM	100	0	17.56	17.69	17.61				
Channel										
1867.5 1860 1902.5										
15	QPSK	1	0	18.66	18.78	18.78	20.1	0		
15	QPSK	1	37	18.62	18.62	18.62				
15	QPSK	1	74	18.50	18.61	18.50				
15	QPSK	36	0	18.47	18.66	18.59				
15	QPSK	36	25	18.46	18.64	18.63				
15	QPSK	36	39	18.59	18.50	18.52	20.1	0		
15	QPSK	75	0	18.63	18.67	18.61				
15	16QAM	1	0	18.62	18.64	18.61				
15	16QAM	1	37	18.58	18.69	18.57	20.1	0		
15	16QAM	1	74	18.47	18.67	18.60				
15	16QAM	36	0	18.66	18.63	18.63				
15	16QAM	36	20	18.51	18.65	18.63	20.1	0		
15	16QAM	36	29	18.50	18.66	18.65				
15	16QAM	75	0	18.46	18.68	18.46				
15	84QAM	1	0	18.47	18.69	18.67				
15	84QAM	1	37	18.59	18.69	18.69	20.1	0		
15	84QAM	1	74	18.56	18.71	18.56				
15	84QAM	36	0	18.42	18.58	18.51				
15	84QAM	36	20	18.40	18.68	18.68				
15	84QAM	36	39	18.55	18.50	18.52	20.1	0		
15	84QAM	75	0	18.68	18.67	18.63				
15	256QAM	1	0	17.66	17.66	17.66				
15	256QAM	1	37	17.69	17.70	17.72	19	1.1		
15	256QAM	1	74	17.60	17.68	17.58				
15	256QAM	36	0	17.61	17.61	17.46				
15	256QAM	36	20	17.59	17.50	17.42				
15	256QAM	36	39	17.62	17.66	17.55	19	1.1		
15	256QAM	75	0	17.46	17.68	17.63				
Channel										
1860 1860 1910										
10	QPSK	1	0	18.72	18.78	18.78	20.1	0		
10	QPSK	1	25	18.63	18.71	18.56				
10	QPSK	1	49	18.54	18.66	18.59				
10	QPSK	12	0	18.74	18.78	18.64				
10	QPSK	12	13	18.63	18.68	18.51				
10	QPSK	25	0	18.47	18.66	18.62	20.1	0		
10	QPSK	25	25	18.72	18.62	18.62				
10	16QAM	1	0	18.56	18.65	18.62				
10	16QAM	1	26	18.64	18.64	18.58	20.1	0		
10	16QAM	1	49	18.67	18.67	18.60				
10	16QAM	25	0	18.64	18.74	18.61				
10	16QAM	25	12	18.55	18.72	18.58	20.1	0		
10	16QAM	36	0	18.67	18.69	18.63				
10	16QAM	50	0	18.56	18.61	18.59				
10	84QAM	1	0	18.49	18.67	18.59				
10	84QAM	1	26	18.50	18.67	18.60	20.1	0		
10	84QAM	1	49	18.61	18.77	18.59				
10	84QAM	25	0	18.51	18.70	18.59				
10	84QAM	25	12	18.75	18.67	18.64				
10	84QAM	25	26	18.59	18.67	18.65	20.1	0		
10	84QAM	50	0	18.47	18.67	18.59				
10	256QAM	1	0	17.56	17.67	17.66				
10	256QAM	1	26	17.69	17.67	17.66	19	1.1		
10	256QAM	1	49	17.60	17.70	17.54				
10	256QAM	12	0	17.46	17.61	17.60				
10	256QAM	25	12	17.45	17.50	17.47	19	1.1		
10	256QAM	25	25	17.62	17.61	17.53				
10	256QAM	50	0	17.43	17.48	17.43				
Channel										
1862.5 1860 1917.5										
5	QPSK	1	0	18.74	18.78	18.78	20.1	0		
5	QPSK	1	12	18.62	18.68	18.61				
5	QPSK	1	24	18.63	18.60	18.63				
5	QPSK	12	0	18.56	18.66	18.59				
5	QPSK	12	7	18.60	18.66	18.50				
5	QPSK	12	13	18.55	18.67	18.61	20.1	0		
5	QPSK	25	0	18.44	18.78	18.78				
5	16QAM	1	0	18.65	18.67	18.62				
5	16QAM	1	12	18.60	18.69	18.65	20.1	0		
5	16QAM	1	24	18.65	18.68	18.65				
5	16QAM	12	0	18.58	18.73	18.60				
5	16QAM	12	7	18.61	18.72	18.63	20.1	0		
5	16QAM	12	13	18.56	18.67	18.63				
5	16QAM	25	0	18.65	18.64	18.65				
5	84QAM	1	0	18.54	18.63	18.61	20.1	0		
5	84QAM	1	12	18.63	18.61	18.61				
5	84QAM	1	24	18.60	18.68	18.66				
5	84QAM	12	0	18.59	18.64	18.60				
5	84QAM	12	7	18.60	18.74	18.67	20.1	0		
5	84QAM	12	13	18.61	18.67	18.60				
5	84QAM	25	0	18.63	18.69	18.56				
5	256QAM	1	0	17.47	17.66	17.58				
5	256QAM	1	12	17.68	17.71	17.71	19	1.1		
5	256QAM	1	24	17.56	17.66	17.63				
5	256QAM	12	0	17.49	17.56	17.63				
5	256QAM	12	7	17.50	17.68	17.54	19	1.1		
5	256QAM	12	13	17.48	17.50	17.65				
Channel										
1861.5 1860 1918.5										
3	QPSK	1	0	18.73	18.77	18.74	20.1	0		
3	QPSK	1	8	18.59	18.68	18.62				
3	QPSK	1	14	18.52	18.68	18.59				
3	QPSK	8	0	18.56	18.61	18.54				
3	QPSK	8	4	18.59	18.62	18.60	20.1	0		
3	QPSK	8	7	18.47	18.69	18.55				
3	QPSK	15	0	18.70	18.74	18.71				
3	16QAM	1	0	18.62	18.71	18.58	20.1	0		
3	16QAM	1	8	18.62	18.69	18.64				
3	16QAM	1	14	18.52	18.60	18.63				
3	16QAM	8	0	18.62	18.67	18.61	20.1	0		
3	16QAM	8	4	18.58	18.69	18.65				
3	16QAM	8	7	18.53	18.66	18.61				
3	16QAM	15	0	18.59	18.64	18.50				
3	84QAM	1	0	18.64	18.74	18.60	20.1	0		
3	84QAM	1	8	18.59	18.70	18.71				



Band 25 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up (min)	APR (dB)		
Channel										
Frequency (MHz)				1860	1868	1905				
20	QPSK	1	0	18.69	18.94	18.78				
20	QPSK	1	49	18.66	18.78	18.71	20.1	0		
20	QPSK	1	99	18.76	18.82	18.70				
20	QPSK	50	0	18.78	18.82	18.73				
20	QPSK	50	24	18.78	18.82	18.73	20.1	0		
20	QPSK	50	50	18.81	18.89	18.70				
20	QPSK	100	0	18.87	18.83	18.72				
20	QPSK	100	24	18.78	18.82	18.72	20.1	0		
20	16QAM	1	49	18.84	18.92	18.78				
20	16QAM	1	99	18.79	18.87	18.77				
20	16QAM	50	0	18.72	18.82	18.74				
20	16QAM	50	24	18.72	18.77	18.82	20.1	0		
20	16QAM	50	50	18.80	18.82	18.80				
20	16QAM	100	0	18.77	18.82	18.78				
20	16QAM	1	0	18.71	18.88	18.73				
20	16QAM	1	49	18.79	18.83	18.75	20.1	0		
20	16QAM	1	99	18.78	18.82	18.83				
20	16QAM	50	0	18.86	18.81	18.70				
20	16QAM	50	24	18.88	18.78	18.82	20.1	0		
20	16QAM	50	50	18.73	18.89	18.85				
20	16QAM	100	0	18.72	18.87	18.73				
20	16QAM	1	49	17.58	17.57	17.53			19	1.1
20	256QAM	1	99	17.85	17.74	17.67				
20	256QAM	50	24	17.95	17.88	17.82				
20	256QAM	50	24	17.95	17.88	17.82	19	1.1		
20	256QAM	50	50	17.87	17.73	17.64				
20	256QAM	100	0	17.85	17.87	17.82				
Channel										
15	QPSK	1	0	18.77	18.80	18.73				
15	QPSK	1	37	18.84	18.82	18.81	20.1	0		
15	QPSK	1	74	18.72	18.86	18.83				
15	QPSK	36	0	18.73	18.74	18.81				
15	QPSK	36	20	18.70	18.86	18.71	20.1	0		
15	QPSK	36	39	18.70	18.81	18.84				
15	QPSK	75	0	18.89	18.73	18.84				
15	16QAM	1	0	18.71	18.79	18.73	20.1	0		
15	16QAM	1	37	18.79	18.79	18.82				
15	16QAM	1	74	18.87	18.73	18.73				
15	16QAM	36	0	18.80	18.78	18.89				
15	16QAM	36	20	18.87	18.89	18.83	20.1	0		
15	16QAM	36	39	18.75	18.78	18.85				
15	16QAM	75	0	18.89	18.72	18.71				
15	16QAM	1	0	18.88	18.72	18.88				
15	16QAM	1	37	18.87	18.82	18.83	20.1	0		
15	16QAM	1	74	18.71	18.85	18.83				
15	16QAM	36	0	18.88	18.78	18.88				
15	16QAM	36	20	18.85	18.78	18.83	20.1	0		
15	16QAM	36	39	18.80	18.87	18.81				
15	16QAM	75	0	18.84	18.84	18.84				
15	16QAM	1	0	17.83	17.88	17.84				
15	256QAM	1	37	17.49	17.54	17.41			19	1.1
15	256QAM	1	74	17.83	17.86	17.83				
15	256QAM	36	0	17.85	17.82	17.88				
15	256QAM	36	20	17.47	17.83	17.48				
15	256QAM	36	39	17.87	17.89	17.89	19	1.1		
15	256QAM	75	0	17.81	17.86	17.85				
Channel										
10	QPSK	1	0	18.85	18.89	19.10				
10	QPSK	1	25	18.82	18.82	18.82	20.1	0		
10	QPSK	1	49	18.89	18.70	18.84				
10	QPSK	25	0	18.89	18.73	18.84				
10	QPSK	25	12	18.88	18.70	18.86	20.1	0		
10	QPSK	25	25	18.77	18.78	18.87				
10	QPSK	50	0	18.83	18.83	18.84				
10	16QAM	1	0	18.71	18.70	18.89	20.1	0		
10	16QAM	1	25	18.72	18.87	18.86				
10	16QAM	1	49	18.74	18.82	18.74				
10	16QAM	25	0	18.89	18.60	18.89				
10	16QAM	25	12	18.86	18.86	18.81	20.1	0		
10	16QAM	25	25	18.89	18.86	18.86				
10	16QAM	50	0	18.72	18.72	18.89				
10	16QAM	1	0	18.88	18.78	18.82				
10	16QAM	1	25	18.84	18.82	18.82	20.1	0		
10	16QAM	1	49	18.82	18.78	18.86				
10	16QAM	25	0	18.83	18.72	18.88				
10	16QAM	25	12	18.80	18.72	18.88	20.1	0		
10	16QAM	25	25	18.71	18.78	18.82				
10	16QAM	50	0	18.84	18.81	18.81				
10	16QAM	1	0	17.89	17.72	17.88				
10	256QAM	1	25	17.48	17.48	17.41			19	1.1
10	256QAM	1	49	17.86	17.82	17.82				
10	256QAM	25	12	17.49	17.89	17.80				
10	256QAM	25	25	17.84	17.80	17.89	19	1.1		
10	256QAM	50	0	17.88	17.82	17.81				
Channel										
5	QPSK	1	0	18.78	18.78	18.78				
5	QPSK	1	12	18.85	18.85	18.85	20.1	0		
5	QPSK	1	24	18.86	18.86	18.81				
5	QPSK	12	0	18.73	18.78	18.86				
5	QPSK	12	7	18.88	18.80	18.72	20.1	0		
5	QPSK	12	13	18.75	18.81	18.82				
5	QPSK	25	0	18.81	18.88	18.88				
5	16QAM	1	0	18.85	18.72	18.71	20.1	0		
5	16QAM	1	12	18.72	18.80	18.74				
5	16QAM	1	24	18.70	18.82	18.74				
5	16QAM	12	0	18.87	18.72	18.82				
5	16QAM	12	7	18.80	18.81	18.86	20.1	0		
5	16QAM	12	13	18.84	18.71	18.78				
5	16QAM	25	0	18.72	18.74	18.74				
5	16QAM	1	0	18.88	18.72	18.88				
5	16QAM	1	12	18.75	18.86	18.87	20.1	0		
5	16QAM	1	24	18.73	18.73	18.71				
5	16QAM	12	0	18.84	18.73	18.85				
5	16QAM	12	7	18.82	18.72	18.88	20.1	0		
5	16QAM	12	13	18.80	18.83	18.77				
5	16QAM	25	0	18.89	18.70	18.83				
5	256QAM	1	0	17.83	17.87	17.88				
5	256QAM	1	12	17.84	17.82	17.89			19	1.1
5	256QAM	1	24	17.80	17.70	17.82				
5	256QAM	12	0	17.48	17.82	17.43				
5	256QAM	12	7	17.41	17.82	17.89				
5	256QAM	12	13	17.88	17.85	17.89	19	1.1		
5	256QAM	25	0	17.83	17.82	17.83				
Channel										
3	QPSK	1	0	18.82	18.80	18.74				
3	QPSK	1	8	18.81	18.84	18.83	20.1	0		
3	QPSK	1	14	18.70	18.71	18.87				
3	QPSK	8	0	18.86	18.82	18.80				
3	QPSK	8	4	18.71	18.70	18.80	20.1	0		
3	QPSK	8	7	18.87	18.70	18.83				
3	QPSK	15	0	18.80	18.80	18.83				
3	16QAM	1	0	18.82	18.78	18.87				
3	16QAM	1	8	18.81	18.87	18.86	20.1	0		
3	16QAM	1	14	18.82	18.79	18.85				
3	16QAM	8	0	18.87	18.78	18.86				
3	16QAM	8	4	18.84	18.86	18.85	20.1	0		
3	16QAM	8	7	18.76	18.79	18.78				
3	16QAM	15	0	18.71	18.74	18.87				
3	16QAM	1	0	18.88	18.82	18.71				
3	16QAM	1	8	18.82	18.72	18.83	20.1	0		
3	16QAM	1	14	18.75	18.80	18.79				
3	16QAM	8	0	18.82	18.82	18.82				
3	16QAM	8	4	18.80	18.84	18.89				
3	16QAM	8	7	18.89	18.87	18.89	20.1	0		
3	16QAM	15	0	18.85	18.78	18.80				
3	256QAM	1	0	17.82	17.88	17.48				
3	256QAM	1	8	17.83	17.83	17.49			19	1.1
3	256QAM	1	14	17.80	17.80	17.48				
3	256QAM	8	0	17.82	17.81	17.40				
3	256QAM	8	4	17.81	17.89	17.83				
3	256QAM	8	7	17.81	17.86	17.84	19	1.1		
3	256QAM	15	0	17.89	17.82	17.47				
Channel										
1.4	QPSK	1	0	18.82	18.84	18.89				
1.4	QPSK	1	3	18.88	18.85	18.86	20.1	0		
1.4	QPSK	1	5	18.89	18.74	18.80				
1.4	QPSK	3	0	18.89	18.78	18.88				
1.4	QPSK	3	1	18.86	18.87	18.81				
1.4	QPSK	3	3	18.89	18.72	18.84	20.1	0		
1.4	16QAM	1	0	18.81	18.87	18.81				
1.4	16QAM	1	3	18.78	18.74	18.76	20.1	0		
1.4	16QAM	1	5	18.74	18.87	18.85				
1.4										



Band 38 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.72	22.92	23.12	23.5	0	
20	QPSK	1	49	22.71	22.84	22.80			
20	QPSK	1	99	22.69	22.71	22.71			
20	QPSK	50	0	21.82	21.50	21.93			
20	QPSK	50	24	21.84	21.69	21.79		22.9	0.6
20	QPSK	100	0	21.81	21.55	21.85			
20	QPSK	100	49	21.76	21.85	21.78			
20	HQAM	1	0	21.66	21.74	21.69		22.9	0.6
20	HQAM	1	99	21.74	21.81	21.73			
20	HQAM	50	0	20.81	20.85	20.80			
20	HQAM	50	24	20.77	20.79	20.79		21.9	1.6
20	HQAM	100	0	20.80	20.85	20.84			
20	HQAM	100	49	20.85	20.85	20.85			
20	HQAM	1	49	20.78	20.91	20.83		21.9	1.6
20	HQAM	1	99	20.74	20.84	20.74			
20	HQAM	50	0	19.75	19.85	19.72			
20	HQAM	50	24	19.75	19.81	19.77		20.9	2.6
20	HQAM	100	0	19.68	19.70	19.69			
20	HQAM	100	49	19.82	19.96	19.90			
20	ZSSBAM	1	0	17.84	17.94	17.82			
20	ZSSBAM	1	49	17.79	17.80	17.85		18.9	4.6
20	ZSSBAM	1	99	17.89	17.92	17.84			
20	ZSSBAM	50	0	17.81	17.86	17.79			
20	ZSSBAM	50	24	17.80	17.83	17.74		18.9	4.6
20	ZSSBAM	50	50	17.82	17.78	17.87			
20	ZSSBAM	100	0	17.85	17.85	17.85			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.62	22.73	22.74			
15	QPSK	1	47	22.66	22.73	22.68		23.5	0
15	QPSK	1	74	22.63	22.63	22.64			
15	QPSK	36	0	21.79	21.80	21.84			
15	QPSK	36	20	21.75	21.78	21.78		22.9	0.6
15	QPSK	75	0	21.76	21.82	21.70			
15	HQAM	1	0	21.67	21.73	21.65			
15	HQAM	1	47	21.65	21.65	21.65		22.9	0.6
15	HQAM	1	74	21.60	21.70	21.70			
15	HQAM	36	0	20.72	20.73	20.67			
15	HQAM	36	20	20.62	20.65	20.59		21.9	1.6
15	HQAM	36	59	20.54	20.70	20.56			
15	HQAM	75	0	20.81	20.86	20.69			
15	HQAM	1	0	20.78	20.80	20.73			
15	HQAM	1	47	20.85	20.79	20.69		21.9	1.6
15	HQAM	1	74	20.63	20.74	20.61			
15	HQAM	36	0	19.67	19.71	19.62			
15	HQAM	36	20	19.69	19.74	19.64		20.9	2.6
15	HQAM	36	59	19.68	19.65	19.65			
15	HQAM	75	0	19.71	19.85	19.75			
15	ZSSBAM	1	0	17.76	17.82	17.78		18.9	4.6
15	ZSSBAM	1	47	17.85	17.84	17.83			
15	ZSSBAM	1	74	17.81	17.82	17.80			
15	ZSSBAM	36	0	17.65	17.81	17.68			
15	ZSSBAM	36	20	17.75	17.80	17.63		18.9	4.6
15	ZSSBAM	36	59	17.48	17.68	17.63			
15	ZSSBAM	75	0	17.70	17.86	17.67			
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.62	22.73	22.74			
10	QPSK	1	25	22.61	22.79	22.73		23.5	0
10	QPSK	1	49	22.61	22.62	22.65			
10	QPSK	12	0	21.74	21.80	21.81			
10	QPSK	25	12	21.79	21.78	21.69		22.9	0.6
10	QPSK	25	25	21.62	21.62	21.76			
10	QPSK	50	0	21.73	21.80	21.67			
10	HQAM	1	0	21.70	21.70	21.65			
10	HQAM	1	25	21.68	21.66	21.66		22.9	0.6
10	HQAM	1	49	21.64	21.67	21.64			
10	HQAM	25	0	20.70	20.77	20.71			
10	HQAM	25	12	20.68	20.68	20.65		21.9	1.6
10	HQAM	25	25	20.65	20.65	20.64			
10	HQAM	50	0	20.76	20.88	20.79			
10	HQAM	1	0	20.79	20.84	20.75			
10	HQAM	1	25	20.71	20.85	20.77		21.9	1.6
10	HQAM	1	49	20.66	20.80	20.62			
10	HQAM	25	0	19.74	19.82	19.69			
10	HQAM	25	12	19.64	19.70	19.68		20.9	2.6
10	HQAM	25	25	19.65	19.65	19.58			
10	HQAM	50	0	19.76	19.87	19.81			
10	ZSSBAM	1	0	17.74	17.80	17.68		18.9	4.6
10	ZSSBAM	1	25	17.88	17.76	17.76			
10	ZSSBAM	1	49	17.81	17.86	17.75			
10	ZSSBAM	25	0	17.68	17.74	17.69			
10	ZSSBAM	25	12	17.73	17.66	17.64		18.9	4.6
10	ZSSBAM	25	25	17.50	17.71	17.63			
10	ZSSBAM	50	0	17.76	17.78	17.78			

Band 38 HPUE Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1 <th>0</th> <th>24.18 <th>24.15 <th>24.12 <th>24.5 <th>0</th> <th></th> </th></th></th></th>	0	24.18 <th>24.15 <th>24.12 <th>24.5 <th>0</th> <th></th> </th></th></th>	24.15 <th>24.12 <th>24.5 <th>0</th> <th></th> </th></th>	24.12 <th>24.5 <th>0</th> <th></th> </th>	24.5 <th>0</th> <th></th>	0	
20	QPSK	1	49	23.99	24.12	24.04		25.1	0
20	QPSK	1	99	24.12	24.16	24.12			
20	QPSK	50	0	24.12	24.20	24.08			
20	QPSK	50	24	24.07	24.16	24.03		25.1	0
20	QPSK	100	0	24.07	24.17	24.08			
20	QPSK	100	49	24.13	24.22	24.17			
20	HQAM	1	0	24.14	24.24	24.20		25.1	0
20	HQAM	1	49	24.14	24.22	24.08			
20	HQAM	1	99	24.09	24.20	24.13			
20	HQAM	50	0	23.76	23.91	23.84			
20	HQAM	50	24	23.73	23.84	23.71		24.9	0.2
20	HQAM	50	50	23.66	23.77	23.69			
20	HQAM	100	0	23.62	24.06	23.92			
20	HQAM	100	49	24.05	24.10	24.04			
20	HQAM	1	49	23.86	23.98	23.95		24.9	0.2
20	HQAM	1	99	23.90	24.03	23.90			
20	HQAM	50	0	22.88	22.92	22.88			
20	HQAM	50	24	22.73	22.85	22.81		23.9	1.2
20	HQAM	100	0	22.88	22.88	22.88			
20	ZSSBAM	1	0	20.84	21.01	20.90			
20	ZSSBAM	1	49	20.87	20.96	20.86		21.9	3.2
20	ZSSBAM	1	99	20.75	20.84	20.70			
20	ZSSBAM	50	0	20.69	20.69	20.69			
20	ZSSBAM	50	24	20.72	20.79	20.64		21.9	3.2
20	ZSSBAM	50	50	20.73	20.87	20.78			
20	ZSSBAM	100	0	20.90	20.96	20.88			
Channel									
Frequency (MHz)									
15	QPSK	1	0	24.08	24.15	24.12			
15	QPSK	1	37	23.94	24.08	23.99		25.1	0
15	QPSK	1	74	24.03	24.10	23.97			
15	QPSK	36	0	24.08	24.16	24.00			
15	QPSK	36	20	24.04	24.11	23.93		25.1	0
15	QPSK	75	0	24.02	24.08	24.00			
15	QPSK	75	0	24.02	24.10	24.10			
15	HQAM	1	0	24.00	24.14	24.07			
15	HQAM	1	37	24.07	24.16	24.08		25.1	0
15	HQAM	1	74	23.98	24.06	24.00			
15	HQAM	36	0	23.62	23.82	23.79			
15	HQAM	36	20	23.62	23.76	23.67		24.9	0.2
15	HQAM	36	59	23.60	23.65	23.54			
15	HQAM	75	0	23.78	23.90	23.80			
15	HQAM	1	0	23.94	24.07	23.92			
15	HQAM	1	37	23.77	23.94	23.81		24.9	0.2
15	HQAM	1	74	23.84	23.96	23.91			
15	HQAM	36	0	22.76	22.79	22.74			
15	HQAM	36	20	22.66	22.77	22.75		23.9	1.2
15	HQAM	36	59	22.70	22.70	22.65			
15	HQAM	75	0	22.74	22.89	22.59			
15	ZSSBAM	1	0	20.86	20.86	20.84		21.9	3.2
15	ZSSBAM	1	37	20.77	20.80	20.75			
15	ZSSBAM	1	74	20.64	20.78	20.63			
15	ZSSBAM	36	0	20.71	20.85	20.70			
15	ZSSBAM	36	20	20.68	20.71	20.64		21.9	3.2
15	ZSSBAM	36	59	20.59	20.78	20.68			
15	ZSSBAM	75	0	20.88	20.87	20.78			
Channel									
Frequency (MHz)									
10	QPSK	1	0	24.07	24.14	24.12			
10	QPSK	1	25	23.91	24.08	23.98		25.1	0
10	QPSK	1	49	24.00	24.08	23.98			
10	QPSK	12	0	23.99	24.15	23.95			
10	QPSK	25	12	24.00	24.06	24.00		25.1	0
10	QPSK	25	25	23.94	24.05	23.90			
10	HQAM	1	0	24.05	24.14	24.03			
10	HQAM	1	25	23.99	24.11	24.12			
10	HQAM	1	49	24.01	24.18	24.02		25.1	0
10	HQAM	1	99	23.96	24.10	24.00			
10	HQAM	25	0	23.61	23.78	23.61			
10	HQAM	25	12	23.61	23.73	23.61		24.9	0.2
10	HQAM	25	25	23.58	23.63	23.54			
10	HQAM	50	0	23.62	23.87	23.86			
10	HQAM	1	0	24.00	24.05	23.89			
10	HQAM	1	25	24.01	24.18	24.02		24.9	0.2





Band 42 FCC Part27Q Ant3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm) MPR (dB)
Channel							
Frequency (MHz)				3416	3500	3584	
20	QPSK	1	0	19.42	19.43	19.44	20.6 0
20	QPSK	1	49	19.31	19.43	19.37	
20	QPSK	1	99	19.20	19.43	19.40	
20	QPSK	50	0	19.41	19.57	19.43	
20	QPSK	50	24	19.34	19.48	19.40	20.6 0
20	QPSK	50	49	19.23	19.43	19.38	
20	QPSK	100	0	19.29	19.43	19.36	
20	HQAM	1	0	19.27	19.44	19.34	20.6 0
20	HQAM	1	49	19.25	19.54	19.44	
20	HQAM	1	99	19.32	19.43	19.38	
20	HQAM	50	0	19.44	19.43	19.42	
20	HQAM	50	24	19.20	19.40	19.28	19.5 1.1
20	HQAM	50	50	19.35	19.40	19.28	
20	HQAM	100	0	19.41	19.40	19.44	
20	HQAM	100	0	19.32	19.44	19.41	
20	HQAM	1	49	19.46	19.44	19.38	19.5 1.1
20	HQAM	1	99	19.35	19.47	19.31	
20	HQAM	50	0	18.43	18.44	18.39	
20	HQAM	50	24	18.41	18.42	18.44	18.5 2.1
20	HQAM	50	50	18.34	18.40	18.28	
20	HQAM	100	0	18.40	18.48	18.47	
20	ZSSBAM	1	0	18.20	18.26	18.18	
20	ZSSBAM	1	49	18.27	18.20	18.40	18.5 4.1
20	ZSSBAM	1	99	18.18	18.20	18.22	
20	ZSSBAM	50	0	18.27	18.21	18.19	
20	ZSSBAM	50	24	18.22	18.35	18.21	18.5 4.1
20	ZSSBAM	50	50	18.24	18.38	18.20	
20	ZSSBAM	100	0	18.19	18.25	18.20	
Channel							
Frequency (MHz)				4216	4299	4383	
15	QPSK	1	0	19.22	19.43	19.30	20.6 0
15	QPSK	1	47	19.23	19.39	19.30	
15	QPSK	1	74	19.36	19.40	19.40	
15	QPSK	36	0	19.25	19.41	19.30	
15	QPSK	36	20	19.27	19.37	19.34	20.6 0
15	QPSK	36	36	19.28	19.37	19.30	
15	QPSK	75	0	19.14	19.30	19.28	
15	HQAM	1	0	19.30	19.37	19.22	20.6 0
15	HQAM	1	47	19.28	19.32	19.25	
15	HQAM	1	74	19.28	19.32	19.25	
15	HQAM	36	0	19.38	19.46	19.37	
15	HQAM	36	20	19.43	19.42	19.33	19.5 1.1
15	HQAM	36	36	19.28	19.25	19.12	
15	HQAM	75	0	19.27	19.43	19.36	
15	HQAM	1	47	19.31	19.30	19.25	19.5 1.1
15	HQAM	1	74	19.27	19.34	19.19	
15	HQAM	36	0	18.24	18.36	18.27	
15	HQAM	36	20	18.35	18.39	18.23	18.5 2.1
15	HQAM	36	36	18.28	18.30	18.22	
15	HQAM	75	0	18.30	18.33	18.17	
15	ZSSBAM	1	0	18.19	18.34	18.21	18.5 4.1
15	ZSSBAM	1	47	18.28	18.32	18.22	
15	ZSSBAM	1	74	18.19	18.20	18.21	
15	ZSSBAM	36	0	18.23	18.34	18.20	
15	ZSSBAM	36	20	18.29	18.22	18.22	18.5 4.1
15	ZSSBAM	36	36	18.18	18.30	18.25	
15	ZSSBAM	75	0	18.27	18.36	18.21	
Channel							
Frequency (MHz)				3415	3500	3585	
10	QPSK	1	0	19.42	19.43	19.40	20.6 0
10	QPSK	1	25	19.19	19.37	19.20	
10	QPSK	1	49	19.44	19.47	19.39	
10	QPSK	12	0	19.20	19.42	19.31	
10	QPSK	25	12	19.23	19.40	19.36	20.6 0
10	QPSK	25	25	19.27	19.36	19.31	
10	QPSK	50	0	19.18	19.37	19.33	
10	HQAM	1	0	19.33	19.32	19.27	20.6 0
10	HQAM	1	25	19.30	19.43	19.40	
10	HQAM	1	49	19.24	19.38	19.33	
10	HQAM	25	0	19.32	19.43	19.35	
10	HQAM	25	12	19.48	19.41	19.39	19.5 1.1
10	HQAM	25	25	19.26	19.33	19.22	
10	HQAM	50	0	19.34	19.43	19.33	
10	HQAM	1	49	19.27	19.20	19.36	19.5 1.1
10	HQAM	1	25	19.29	19.30	19.22	
10	HQAM	1	49	19.23	19.37	19.26	19.5 1.1
10	HQAM	25	0	18.20	18.31	18.21	
10	HQAM	25	12	18.21	18.35	18.19	18.5 2.1
10	HQAM	25	25	18.25	18.27	18.23	
10	HQAM	50	0	18.24	18.32	18.30	
10	ZSSBAM	1	0	18.23	18.30	18.24	18.5 4.1
10	ZSSBAM	1	25	18.26	18.27	18.18	
10	ZSSBAM	1	49	18.23	18.25	18.25	
10	ZSSBAM	25	0	18.28	18.37	18.17	
10	ZSSBAM	25	12	18.29	18.30	18.20	18.5 4.1
10	ZSSBAM	25	25	18.25	18.34	18.21	
10	ZSSBAM	50	0	18.18	18.30	18.27	
Channel							
Frequency (MHz)				3415.5	3500	3585.5	
5	QPSK	1	0	19.23	19.40	19.30	20.6 0
5	QPSK	1	12	19.19	19.40	19.22	
5	QPSK	1	24	19.40	19.47	19.42	
5	QPSK	12	0	19.20	19.41	19.38	
5	QPSK	12	7	19.20	19.40	19.36	20.6 0
5	QPSK	12	13	19.31	19.32	19.34	
5	QPSK	25	0	19.18	19.30	19.22	
5	HQAM	1	0	19.28	19.37	19.22	
5	HQAM	1	12	19.42	19.47	19.40	20.6 0
5	HQAM	1	24	19.25	19.30	19.25	
5	HQAM	12	0	19.30	19.37	19.33	
5	HQAM	12	7	19.39	19.47	19.29	19.5 1.1
5	HQAM	12	13	19.23	19.28	19.22	
5	HQAM	25	0	19.34	19.38	19.34	
5	HQAM	1	12	19.22	19.33	19.30	19.5 1.1
5	HQAM	1	24	19.31	19.30	19.28	
5	HQAM	12	0	18.21	18.26	18.21	
5	HQAM	12	7	18.25	18.33	18.17	18.5 2.1
5	HQAM	12	13	18.22	18.24	18.25	
5	HQAM	25	0	18.27	18.30	18.20	
5	ZSSBAM	1	0	18.23	18.32	18.20	
5	ZSSBAM	1	12	18.26	18.27	18.18	18.5 4.1
5	ZSSBAM	1	24	18.21	18.30	18.25	
5	ZSSBAM	12	0	18.27	18.34	18.17	
5	ZSSBAM	12	7	18.19	18.26	18.19	18.5 4.1
5	ZSSBAM	12	13	18.27	18.30	18.22	
5	ZSSBAM	25	0	18.20	18.20	18.21	

Band 42 FCC Part96 Ant3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm) MPR (dB)
Channel							
Frequency (MHz)				4190	4340	4360	
20	QPSK	1	0	19.42	19.43	19.42	20.6 0
20	QPSK	1	49	19.22	19.39	19.27	
20	QPSK	1	99	19.40	19.44	19.35	
20	QPSK	50	0	19.35	19.40	19.38	
20	QPSK	50	24	19.26	19.41	19.26	20.6 0
20	QPSK	50	49	19.30	19.38	19.30	
20	QPSK	100	0	19.21	19.32	19.27	
20	HQAM	1	0	19.24	19.30	19.20	20.6 0
20	HQAM	1	49	19.38	19.39	19.30	
20	HQAM	1	99	19.20	19.35	19.33	
20	HQAM	50	0	19.38	19.40	19.35	
20	HQAM	50	24	19.42	19.35	19.28	19.5 1.1
20	HQAM	50	50	19.22	19.30	19.11	
20	HQAM	100	0	19.21	19.26	19.28	
20	HQAM	100	0	19.22	19.29	19.25	
20	HQAM	1	49	19.30	19.37	19.21	19.5 1.1
20	HQAM	1	99	19.29	19.35	19.22	
20	HQAM	50	0	18.33	18.34	18.29	
20	HQAM	50	24	18.38	18.36	18.38	18.5 2.1
20	HQAM	50	50	18.00	18.00	18.00	
20	HQAM	100	0	18.28	18.39	18.34	
20	ZSSBAM	1	0	18.08	18.20	18.10	
20	ZSSBAM	1	49	18.19	18.22	18.14	18.5 4.1
20	ZSSBAM	1	99	18.12	18.15	18.08	
20	ZSSBAM	50	0	18.14	18.20	18.14	
20	ZSSBAM	50	24	18.11	18.22	18.12	18.5 4.1
20	ZSSBAM	50	50	18.11	18.21	18.12	
20	ZSSBAM	100	0	18.10	18.11	18.09	
Channel							
Frequency (MHz)				4192	4340	4351.5	
15	QPSK	1	0	19.12	19.30	19.23	20.6 0
15	QPSK	1	37	19.10	19.33	19.20	
15	QPSK	1	74	19.23	19.42	19.32	
15	QPSK	36	0	19.20	19.34	19.23	
15	QPSK	36	20	19.17	19.24	19.28	20.6 0
15	QPSK	36	36	19.22	19.23	19.22	
15	QPSK	75	0	19.08	19.21	19.22	
15	HQAM	1	0	19.22	19.27	19.15	20.6 0
15	HQAM	1	37				





Band 43 for FCC use Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	20.34	20.35	20.42	21.5	0	
20	QPSK	1	49	20.28	20.44	20.41			
20	QPSK	1	99	20.49	20.40	20.41			
20	QPSK	50	0	19.11	19.22	19.14			
20	QPSK	50	24	19.06	19.13	19.04	20.5	1	
20	QPSK	50	49	19.23	19.08	19.05			
20	QPSK	100	0	19.07	19.16	19.16			
20	HQAM	1	0	19.69	19.83	19.87	20.5	1	
20	HQAM	1	49	19.84	19.94	19.95			
20	HQAM	1	99	19.78	19.83	19.78			
20	HQAM	50	0	17.87	17.91	17.81	19.5	2	
20	HQAM	50	24	17.91	17.85	17.81			
20	HQAM	50	50	17.97	17.82	17.84			
20	HQAM	100	0	18.07	18.05	18.02			
20	HQAM	100	0	18.05	18.04	18.03			
20	HQAM	100	49	18.73	18.97	18.91	19.5	2	
20	HQAM	100	49	18.93	18.86	18.92			
20	HQAM	100	99	18.08	17.97	18.02			
20	HQAM	100	99	18.06	17.97	18.02			
20	HQAM	500	0	16.99	17.06	16.91	18.5	3	
20	HQAM	500	24	16.96	17.01	16.88			
20	HQAM	500	50	16.91	16.88	16.98			
20	HQAM	1000	0	16.99	17.06	16.91			
20	HQAM	1000	24	16.96	17.01	16.88			
20	HQAM	1000	50	16.91	16.88	16.98			
20	HQAM	1000	99	16.99	17.06	16.91			
20	ZSSBAM	1	0	19.54	19.63	19.59	20.5	1	
20	ZSSBAM	1	49	19.61	19.58	19.60			
20	ZSSBAM	1	99	19.55	19.53	19.54			
20	ZSSBAM	50	0	19.07	19.07	19.07			
20	ZSSBAM	50	24	19.00	19.03	19.00	20.5	1	
20	ZSSBAM	50	50	19.07	19.71	19.65			
20	ZSSBAM	100	0	19.05	19.05	19.05			
Channel									
Frequency (MHz)									
15	QPSK	1	0	20.20	20.43	20.43	21.5	0	
15	QPSK	1	37	20.29	20.29	20.32			
15	QPSK	1	74	20.36	20.34	20.42			
15	QPSK	36	0	19.04	19.13	19.09	20.5	1	
15	QPSK	36	20	18.98	18.98	19.00			
15	QPSK	36	37	19.08	19.12	19.05			
15	QPSK	75	0	19.08	19.12	19.05			
15	HQAM	1	0	19.75	19.83	19.79	20.5	1	
15	HQAM	1	37	19.83	19.80	19.81			
15	HQAM	1	74	19.69	19.85	19.80			
15	HQAM	36	0	17.74	17.86	17.76	19.5	2	
15	HQAM	36	20	17.85	17.82	17.82			
15	HQAM	36	37	17.81	17.81	17.76			
15	HQAM	75	0	17.81	18.16	18.10	19.5	2	
15	HQAM	75	0	18.82	18.82	18.78			
15	HQAM	1	37	18.82	18.89	18.83			
15	HQAM	1	74	18.81	18.74	18.82			
15	HQAM	36	0	18.81	17.82	18.81	18.5	3	
15	HQAM	36	20	18.86	17.80	18.86			
15	HQAM	36	37	18.85	18.88	18.85			
15	HQAM	75	0	18.85	17.04	18.85			
15	ZSSBAM	1	0	19.53	19.48	19.47	20.5	1	
15	ZSSBAM	1	37	19.47	19.48	19.47			
15	ZSSBAM	1	74	19.40	19.37	19.38			
15	ZSSBAM	36	0	19.05	19.09	19.05	20.5	1	
15	ZSSBAM	36	20	19.01	19.09	19.09			
15	ZSSBAM	36	37	19.71	19.61	19.61			
15	ZSSBAM	75	0	19.68	19.70	19.71			
Channel									
Frequency (MHz)									
10	QPSK	1	0	20.27	20.50	20.36	21.5	0	
10	QPSK	1	25	20.32	20.32	20.44			
10	QPSK	1	49	20.46	20.29	20.43			
10	QPSK	12	7	19.85	19.14	19.00	20.5	1	
10	QPSK	25	12	19.04	19.13	19.08			
10	QPSK	25	25	18.99	19.04	18.82			
10	QPSK	50	0	18.06	18.10	18.07	19.5	2	
10	HQAM	1	0	19.77	19.68	19.82	20.5	1	
10	HQAM	1	25	19.71	19.84	19.82			
10	HQAM	1	49	19.69	19.79	19.60			
10	HQAM	25	0	17.88	18.04	17.87	19.5	2	
10	HQAM	25	12	17.87	17.87	17.82			
10	HQAM	25	25	17.82	17.83	17.76			
10	HQAM	50	0	17.98	17.87	18.14	19.5	2	
10	HQAM	50	0	18.78	18.80	18.71			
10	HQAM	50	24	18.85	18.86	18.88	19.5	2	
10	HQAM	50	49	18.90	18.80	18.84			
10	HQAM	100	0	18.82	18.83	18.82	18.5	3	
10	HQAM	100	24	18.90	18.91	18.88			
10	HQAM	100	25	18.90	18.87	18.84			
10	HQAM	500	0	18.91	17.05	17.08	18.5	3	
10	HQAM	500	0	18.91	18.81	18.85			
10	HQAM	500	24	18.94	18.91	18.88			
10	HQAM	500	49	18.82	18.91	18.81	19.5	2	
10	HQAM	1000	0	18.07	18.11	18.04	17.8		
10	HQAM	1000	12	18.88	18.97	18.85	18.77		
10	HQAM	1000	12	18.82	18.91	18.81	19.5	2	
10	HQAM	1000	24	18.87	18.89	18.87	18.76		
10	HQAM	1000	25	18.87	17.80	18.86			
10	HQAM	1000	49	18.95	18.99	18.95	18.5	3	
10	HQAM	1000	12	18.95	18.96	18.97	18.84		
10	HQAM	1000	25	19.07	19.10	19.07	19.56		
10	ZSSBAM	1	0	19.67	19.67	19.62	20.5	1	
10	ZSSBAM	1	12	19.67	19.51	19.39			
10	ZSSBAM	1	24	19.54	19.50	19.52			
10	ZSSBAM	12	0	19.62	19.68	19.60	20.5	1	
10	ZSSBAM	12	7	19.42	19.55	19.55			
10	ZSSBAM	12	13	19.62	19.70	19.66			
10	ZSSBAM	25	0	19.58	19.74	19.70			

Band 48_FCC Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	20.46	20.47	20.53	21.5	0	
20	QPSK	1	49	20.41	20.56	20.43			
20	QPSK	1	99	20.46	20.51	20.48			
20	QPSK	50	0	19.14	19.19	19.16	20.5	1	
20	QPSK	50	24	19.08	19.12	19.03			
20	QPSK	50	49	19.11	19.18	19.03			
20	QPSK	100	0	19.12	19.15	19.01	19.5	1	
20	HQAM	1	0	19.91	19.96	19.92	20.5	1	
20	HQAM	1	49	19.84	19.94	19.85			
20	HQAM	1	99	19.81	19.82	19.82			
20	HQAM	50	0	17.95	18.07	17.95	19.5	2	
20	HQAM	50	24	17.95	17.99	17.95			
20	HQAM	50	50	17.99	17.93	17.95			
20	HQAM	100	0	18.12	18.11	18.11	19.5	2	
20	HQAM	100	0	18.91	19.02	18.92			
20	HQAM	100	49	18.89	18.97	18.95	19.5	2	
20	HQAM	100	99	18.93	18.86	18.92			
20	HQAM	500	0	18.95	17.05	18.93	18.5	3	
20	HQAM	500	24	18.95	17.05	18.93			
20	HQAM	500	50	17.01	17.00	17.01			
20	HQAM	1000	0	17.92	17.98	17.93	17.61		
20	HQAM	1000	24	18.87	19.72	19.60	19.45		
20	HQAM	1000	49	19.81	19.58	19.60	20.5	1	
20	HQAM	1000	99	19.67	19.68	19.49			
20	ZSSBAM	1	0	19.67	19.74	19.67	19.56		
20	ZSSBAM	50	0	19.67	19.74	19.67			
20	ZSSBAM	50	24	19.60	19.63	19.67	20.5	1	
20	ZSSBAM	50	50	19.65	19.68	19.66			
20	ZSSBAM	100	0	19.65	19.68	19.66			
Channel									
Frequency (MHz)									
15	QPSK	1	0	20.33	20.43	20.43	21.5	0	
15	QPSK	1	37	20.37	20.80	20.38	20.24		
15	QPSK	1	74	20.40					



Band 41 Ant4											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41400	41800		
20	QPSK	1	0	14.82	16.74	17.03	17.53	18.04	18.54	18	0
20	QPSK	1	49	18.69	18.82	18.82	18.78	18.74	18.74	18	0
20	QPSK	1	99	16.89	16.74	16.72	16.87	16.82	16.87	18	0
20	QPSK	50	0	16.69	16.68	16.63	16.75	16.77	16.77	18	0
20	QPSK	50	24	18.54	18.67	18.76	18.74	18.67	18.67	18	0
20	QPSK	100	0	16.62	16.61	16.70	16.82	16.84	16.84	18	0
20	IQDM	1	0	16.81	16.72	16.91	16.85	16.87	16.87	18	0
20	IQDM	1	49	18.69	18.68	18.62	18.64	18.62	18.62	18	0
20	IQDM	1	99	16.75	16.54	16.57	16.78	16.81	16.81	18	0
20	IQDM	50	0	16.63	16.63	16.72	16.87	16.84	16.84	18	0
20	IQDM	50	24	18.49	18.48	18.54	18.50	18.49	18.49	18	0
20	IQDM	100	0	16.72	16.63	16.68	16.67	16.72	16.72	18	0
20	IQDM	100	0	16.59	16.49	16.67	16.66	16.67	16.67	18	0
20	IQDM	100	0	16.71	16.55	16.92	16.90	16.90	16.90	18	0
20	IQDM	1	49	18.48	18.64	18.61	18.77	18.68	18.68	18	0
20	IQDM	1	99	16.71	16.63	16.64	16.77	16.77	16.77	18	0
20	IQDM	50	0	16.63	16.55	16.68	16.67	16.66	16.66	18	0
20	IQDM	50	24	18.35	18.60	18.72	18.64	18.63	18.63	18	0
20	IQDM	50	50	16.72	16.69	16.61	16.63	16.71	16.71	17	1
20	IQDM	100	0	16.43	16.51	16.59	16.61	16.63	16.63	18	0
20	ZSFGM	1	0	14.82	14.58	14.56	14.67	14.64	14.64	15	3
20	ZSFGM	1	49	14.33	14.58	14.72	14.64	14.63	14.63	15	3
20	ZSFGM	1	99	14.69	14.59	14.63	14.65	14.69	14.69	15	3
20	ZSFGM	50	0	16.72	16.54	16.56	16.49	16.48	16.48	15	3
20	ZSFGM	50	24	14.64	14.56	14.70	14.66	14.69	14.69	15	3
20	ZSFGM	50	50	14.37	14.57	14.74	14.68	14.64	14.64	15	3
20	ZSFGM	100	0	14.20	14.43	14.43	14.46	14.48	14.48	15	3
Channel											
Frequency (MHz)				2501.5	2541.9	2593	2637.8	2692.5	2747.5	Turn-up time (dBm)	MFR (dB)
15	QPSK	1	0	16.51	16.69	16.94	16.93	16.93	16.93	18	0
15	QPSK	1	37	16.67	16.80	16.71	16.79	16.71	16.71	18	0
15	QPSK	1	74	16.74	16.58	16.81	16.78	16.69	16.69	18	0
15	QPSK	36	0	16.69	16.69	16.76	16.82	16.82	16.82	18	0
15	QPSK	36	20	16.48	16.61	16.62	16.73	16.54	16.54	18	0
15	QPSK	36	20	16.64	16.54	16.65	16.61	16.61	16.61	18	0
15	QPSK	75	0	16.51	16.58	16.69	16.61	16.48	16.48	18	0
15	IQDM	1	0	16.75	16.63	16.87	16.96	16.82	16.82	18	0
15	IQDM	1	49	18.69	18.63	18.63	18.63	18.63	18.63	18	0
15	IQDM	1	74	16.73	16.54	16.53	16.72	16.78	16.78	18	0
15	IQDM	36	0	16.41	16.69	16.65	16.66	16.53	16.53	18	0
15	IQDM	36	20	16.65	16.52	16.64	16.64	16.62	16.62	18	0
15	IQDM	36	39	16.58	16.57	16.51	16.56	16.58	16.58	18	0
15	IQDM	75	0	16.43	16.33	16.48	16.33	16.49	16.49	18	0
15	IQDM	1	49	18.69	18.45	18.79	18.53	18.74	18.74	18	0
15	IQDM	1	37	16.43	16.58	16.55	16.71	16.48	16.48	18	0
15	IQDM	1	74	16.56	16.66	16.52	16.66	16.56	16.56	18	0
15	IQDM	36	0	16.58	16.44	16.60	16.56	16.56	16.56	18	0
15	IQDM	36	20	16.40	16.54	16.63	16.69	16.54	16.54	17	1
15	IQDM	36	39	16.68	16.48	16.42	16.48	16.42	16.42	17	1
15	IQDM	75	0	16.43	16.40	16.45	16.49	16.45	16.45	18	0
15	ZSFGM	1	0	14.45	14.35	14.50	14.49	14.46	14.46	15	3
15	ZSFGM	1	49	14.23	14.42	14.43	14.46	14.45	14.45	15	3
15	ZSFGM	1	74	14.52	14.41	14.40	14.45	14.49	14.49	15	3
15	ZSFGM	36	0	14.23	14.31	14.41	14.33	14.32	14.32	15	3
15	ZSFGM	36	20	14.63	14.32	14.48	14.47	14.45	14.45	15	3
15	ZSFGM	36	39	14.16	14.41	14.53	14.44	14.41	14.41	15	3
15	ZSFGM	75	0	14.32	14.37	14.42	14.44	14.44	14.44	15	3
Channel											
Frequency (MHz)				2501	2547	2593	2638	2693	2748	Turn-up time (dBm)	MFR (dB)
10	QPSK	1	0	16.69	16.69	16.73	16.84	16.84	16.84	18	0
10	QPSK	1	25	16.55	16.70	16.59	16.70	16.59	16.59	18	0
10	QPSK	1	49	16.71	16.58	16.65	16.72	16.70	16.70	18	0
10	QPSK	25	0	16.65	16.48	16.65	16.65	16.65	16.65	18	0
10	QPSK	25	12	16.49	16.57	16.67	16.64	16.58	16.58	18	0
10	QPSK	25	25	16.69	16.61	16.44	16.63	16.73	16.73	18	0
10	QPSK	25	0	16.43	16.50	16.58	16.66	16.66	16.66	18	0
10	IQDM	1	0	16.67	16.59	16.81	16.48	16.64	16.64	18	0
10	IQDM	1	25	16.64	16.60	16.50	16.56	16.40	16.40	18	0
10	IQDM	1	49	16.62	16.54	16.48	16.71	16.63	16.63	18	0
10	IQDM	25	0	16.44	16.63	16.58	16.34	16.53	16.53	18	0
10	IQDM	25	12	16.29	16.41	16.51	16.44	16.44	16.44	18	0
10	IQDM	25	25	16.46	16.45	16.52	16.53	16.54	16.54	18	0
10	IQDM	50	0	16.39	16.37	16.56	16.29	16.49	16.49	18	0
10	IQDM	1	0	16.63	16.47	16.62	16.52	16.70	16.70	18	0
10	IQDM	1	25	16.48	16.50	16.55	16.67	16.39	16.39	18	0
10	IQDM	1	49	16.57	16.46	16.60	16.61	16.45	16.45	18	0
10	IQDM	25	0	16.46	16.36	16.61	16.60	16.67	16.67	18	0
10	IQDM	25	12	16.43	16.50	16.60	16.58	16.41	16.41	17	1
10	IQDM	25	25	16.58	16.56	16.50	16.52	16.49	16.49	17	1
10	IQDM	50	0	16.52	16.34	16.41	16.37	16.35	16.35	18	0
10	ZSFGM	1	0	14.46	14.36	14.50	14.49	14.44	14.44	15	3
10	ZSFGM	1	25	14.13	14.49	14.39	14.46	14.46	14.46	15	3
10	ZSFGM	1	49	14.53	14.42	14.43	14.45	14.45	14.45	15	3
10	ZSFGM	25	0	14.23	14.29	14.38	14.31	14.35	14.35	15	3
10	ZSFGM	25	12	14.45	14.39	14.47	14.44	14.43	14.43	15	3
10	ZSFGM	25	25	14.15	14.33	14.51	14.45	14.45	14.45	15	3
10	ZSFGM	50	0	14.51	14.39	14.40	14.45	14.49	14.49	15	3
Channel											
Frequency (MHz)				2698.5	2645.8	2693	2648.30	2697.5	2644.30	Turn-up time (dBm)	MFR (dB)
5	QPSK	1	0	16.72	16.63	16.88	16.72	16.63	16.63	18	0
5	QPSK	1	16	16.62	16.71	16.67	16.74	16.63	16.63	18	0
5	QPSK	1	24	16.70	16.54	16.62	16.62	16.71	16.71	18	0
5	QPSK	12	0	16.61	16.64	16.73	16.60	16.64	16.64	18	0
5	QPSK	12	7	16.54	16.58	16.66	16.60	16.68	16.68	18	0
5	QPSK	12	13	16.61	16.62	16.55	16.63	16.68	16.68	18	0
5	QPSK	25	0	16.63	16.54	16.64	16.65	16.66	16.66	18	0
5	IQDM	1	0	16.64	16.67	16.77	16.52	16.51	16.51	18	0
5	IQDM	1	12	16.60	16.63	16.50	16.52	16.49	16.49	18	0
5	IQDM	1	24	16.68	16.64	16.50	16.76	16.65	16.65	18	0
5	IQDM	12	0	16.48	16.51	16.72	16.49	16.61	16.61	18	0
5	IQDM	12	7	16.36	16.44	16.60	16.62	16.55	16.55	18	0
5	IQDM	12	13	16.67	16.60	16.69	16.61	16.67	16.67	18	0
5	IQDM	25	0	16.40	16.32	16.58	16.35	16.42	16.42	18	0
5	IQDM	1	0	16.60	16.44	16.30	16.59	16.64	16.64	18	0
5	IQDM	1	12	16.42	16.53	16.60	16.64	16.68	16.68	18	0
5	IQDM	1	24	16.66	16.61	16.64	16.66	16.54	16.54	18	0
5	IQDM	12	0	16.61	16.52	16.68	16.67	16.56	16.56	18	0
5	IQDM	12	0	16.31	16.48	16.61	16.61	16.50	16.50	17	1
5	IQDM	12	13	16.56	16.55	16.42	16.48	16.58	16.58	17	1
5	IQDM	25	0	16.38	16.46	16.56	16.34	16.52	16.52	18	0
5	ZSFGM	1	0	14.41	14.38	14.47	14.45	14.43	14.43	15	3
5	ZSFGM	1	12	14.15	14.38	14.49	14.42	14.46	14.46	15	3
5	ZSFGM	1	24	14.53	14.36	14.39	14.45	14.53	14.53	15	3
5	ZSFGM	12	0	14.21	14.29	14.41	14.30	14.33	14.33	15	3
5	ZSFGM	12	7	14.42	14.33	14.50	14.45	14.45	14.45	15	3
5	ZSFGM	12	13	14.14	14.42	14.54	14.46	14.42	14.42	15	3
5	ZSFGM	25	0	14.44	14.37	14.46	14.46				



Band 42 FCC Part27Q Ant8								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	15.51	15.52	15.47	16.4	0
20	QPSK	1	49	15.49	15.53	15.44		
20	QPSK	1	99	15.49	15.57	15.44		
20	QPSK	50	0	15.49	15.54	15.50		
20	QPSK	50	24	15.36	15.48	15.38	16.4	0
20	QPSK	50	49	15.36	15.52	15.38		
20	QPSK	100	0	15.36	15.47	15.37		
20	HQDM	1	0	15.44	15.56	15.43	16.4	0
20	HQDM	1	49	15.40	15.52	15.46		
20	HQDM	1	99	15.31	15.44	15.37		
20	HQDM	50	0	15.40	15.53	15.39		
20	HQDM	50	24	15.49	15.40	15.47	16.4	0
20	HQDM	50	50	15.27	15.37	15.22		
20	HQDM	100	0	15.27	15.47	15.27		
20	HQDM	100	0	15.25	15.35	15.24		
20	HQDM	1	49	15.49	15.53	15.40	16.4	0
20	HQDM	1	99	15.38	15.50	15.35		
20	HQDM	50	0	15.31	15.39	15.30		
20	HQDM	50	24	15.36	15.42	15.36	16.4	0
20	HQDM	50	50	15.49	15.52	15.42		
20	HQDM	100	0	15.37	15.48	15.34		
20	HQDM	100	0	15.37	15.48	15.34		
20	HQDM	100	0	15.37	15.48	15.34		
20	256QAM	1	0	15.30	15.43	15.29	16.4	0
20	256QAM	1	49	15.24	15.47	15.29		
20	256QAM	1	99	15.48	15.49	15.45		
20	256QAM	50	0	15.39	15.50	15.35		
20	256QAM	50	24	15.33	15.39	15.35	16.4	0
20	256QAM	50	50	15.47	15.37	15.47		
20	256QAM	100	0	15.29	15.39	15.29		
Channel								
Frequency (MHz)								
15	QPSK	1	0	15.44	15.52	15.52	16.4	0
15	QPSK	1	37	15.52	15.44	15.37		
15	QPSK	1	74	15.36	15.44	15.36		
15	QPSK	36	0	15.24	15.39	15.28		
15	QPSK	36	20	15.30	15.39	15.23	16.4	0
15	QPSK	36	37	15.29	15.47	15.29		
15	QPSK	75	0	15.52	15.32	15.31		
15	HQDM	1	0	15.40	15.49	15.37	16.4	0
15	HQDM	1	37	15.28	15.40	15.32		
15	HQDM	1	74	15.21	15.33	15.22		
15	HQDM	36	0	15.28	15.49	15.34		
15	HQDM	36	20	15.41	15.43	15.34	16.4	0
15	HQDM	36	37	15.13	15.28	15.13		
15	HQDM	75	0	15.13	15.33	15.15		
15	HQDM	1	0	15.15	15.19	15.19		
15	HQDM	1	37	15.38	15.43	15.28	16.4	0
15	HQDM	1	74	15.32	15.31	15.21		
15	HQDM	36	0	15.20	15.21	15.24		
15	HQDM	36	20	15.25	15.27	15.22	16.4	0
15	HQDM	36	37	15.47	15.47	15.47		
15	HQDM	75	0	15.25	15.35	15.24		
15	256QAM	1	0	15.25	15.36	15.17	16.4	0
15	256QAM	1	37	15.39	15.34	15.22		
15	256QAM	1	74	15.41	15.45	15.31		
15	256QAM	36	0	15.33	15.33	15.25	16.4	0
15	256QAM	36	20	15.20	15.20	15.24		
15	256QAM	36	37	15.34	15.47	15.33		
15	256QAM	75	0	15.19	15.29	15.20		
Channel								
Frequency (MHz)								
10	QPSK	1	0	15.44	15.49	15.49	16.4	0
10	QPSK	1	25	15.31	15.50	15.37		
10	QPSK	1	49	15.36	15.40	15.41		
10	QPSK	12	0	15.41	15.40	15.42		
10	QPSK	25	12	15.22	15.32	15.24	16.4	0
10	QPSK	25	25	15.34	15.37	15.32		
10	QPSK	50	0	15.34	15.39	15.36		
10	HQDM	1	0	15.34	15.41	15.34	16.4	0
10	HQDM	1	25	15.37	15.45	15.38		
10	HQDM	1	49	15.24	15.37	15.31		
10	HQDM	25	0	15.28	15.44	15.25		
10	HQDM	25	12	15.41	15.44	15.42	16.4	0
10	HQDM	25	25	15.20	15.23	15.06		
10	HQDM	50	0	15.14	15.36	15.14		
10	HQDM	1	0	15.20	15.20	15.16		
10	HQDM	1	25	15.43	15.39	15.34	16.4	0
10	HQDM	1	49	15.24	15.37	15.28		
10	HQDM	25	0	15.21	15.28	15.25		
10	HQDM	25	12	15.30	15.38	15.28	16.4	0
10	HQDM	25	25	15.29	15.36	15.30		
10	HQDM	50	0	15.21	15.35	15.20		
10	256QAM	1	0	15.20	15.27	15.25	16.4	0
10	256QAM	1	25	15.29	15.42	15.30		
10	256QAM	1	49	15.42	15.40	15.30		
10	256QAM	25	0	15.32	15.39	15.30	16.4	0
10	256QAM	25	12	15.20	15.20	15.20		
10	256QAM	25	25	15.42	15.45	15.40		
10	256QAM	50	0	15.18	15.28	15.17		
Channel								
Frequency (MHz)								
5	QPSK	1	0	15.41	15.54	15.34	16.4	0
5	QPSK	1	12	15.34	15.41	15.30		
5	QPSK	1	24	15.31	15.40	15.35		
5	QPSK	12	0	15.36	15.41	15.40		
5	QPSK	12	7	15.25	15.31	15.30	16.4	0
5	QPSK	12	13	15.31	15.32	15.27		
5	QPSK	25	0	15.25	15.29	15.27		
5	HQDM	1	0	15.31	15.48	15.30	16.4	0
5	HQDM	1	12	15.37	15.39	15.42		
5	HQDM	1	24	15.27	15.38	15.25		
5	HQDM	12	0	15.27	15.40	15.24	16.4	0
5	HQDM	12	7	15.40	15.50	15.37		
5	HQDM	12	13	15.15	15.27	15.14		
5	HQDM	25	0	15.16	15.33	15.20		
5	HQDM	1	0	15.21	15.36	15.13	16.4	0
5	HQDM	1	12	15.41	15.40	15.37		
5	HQDM	1	24	15.39	15.39	15.27		
5	HQDM	12	0	15.27	15.30	15.21		
5	HQDM	12	7	15.32	15.33	15.31	16.4	0
5	HQDM	12	13	15.27	15.40	15.29		
5	HQDM	25	0	15.31	15.38	15.26		
5	256QAM	1	0	15.23	15.31	15.15	16.4	0
5	256QAM	1	12	15.37	15.25	15.23		
5	256QAM	1	24	15.44	15.40	15.30		
5	256QAM	12	0	15.31	15.33	15.34	16.4	0
5	256QAM	12	7	15.25	15.26	15.29		
5	256QAM	12	13	15.28	15.40	15.34		
5	256QAM	25	0	15.25	15.22	15.22		

Band 42 FCC Part96 Ant8								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	15.37	15.43	15.41	16.4	0
20	QPSK	1	49	15.35	15.46	15.36		
20	QPSK	1	99	15.35	15.45	15.36		
20	QPSK	50	0	15.36	15.40	15.44		
20	QPSK	50	24	15.30	15.38	15.32	16.4	0
20	QPSK	50	49	15.35	15.31	15.32		
20	QPSK	100	0	15.31	15.34	15.23		
20	HQDM	1	0	15.36	15.41	15.33	16.4	0
20	HQDM	1	49	15.30	15.45	15.40		
20	HQDM	1	99	15.16	15.35	15.24		
20	HQDM	50	0	15.29	15.42	15.26		
20	HQDM	50	24	15.37	15.48	15.28	16.4	0
20	HQDM	50	50	15.20	15.22	15.14		
20	HQDM	100	0	15.12	15.34	15.17		
20	HQDM	100	0	15.21	15.33	15.11		
20	HQDM	1	49	15.36	15.38	15.34	16.4	0
20	HQDM	1	99	15.31	15.31	15.21		
20	HQDM	50	0	15.23	15.34	15.24		
20	HQDM	50	24	15.22	15.29	15.22	16.4	0
20	HQDM	50	50	15.33	15.38	15.26		
20	HQDM	100	0	15.23	15.37	15.21		
20	256QAM	1	0	15.16	15.28	15.19	16.4	0
20	256QAM	1	49	15.31	15.41	15.27		
20	256QAM	1	99	15.41	15.48	15.31		
20	256QAM	50	0	15.27	15.37	15.28		
20	256QAM	50	24	15.28	15.29	15.22	16.4	0
20	256QAM	50	50	15.37	15.46	15.3		



Band 43 for FCC use Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				3695	3695	3695			
20	QPSK	1	0	17.06	17.13	17.20			
20	QPSK	1	49	17.06	17.13	17.20	18.1	0	
20	QPSK	1	99	16.93	17.00	17.07			
20	QPSK	50	0	17.04	17.11	17.18			
20	QPSK	50	24	17.02	17.08	17.15	18.1	0	
20	QPSK	50	49	17.02	17.08	17.15			
20	QPSK	100	0	17.03	17.07	17.11			
20	HQAM	1	0	16.84	17.05	16.99			
20	HQAM	1	49	17.00	17.15	17.07	18.1	0	
20	HQAM	1	99	16.99	17.01	16.85			
20	HQAM	50	0	16.96	17.06	16.92			
20	HQAM	50	24	16.99	17.08	16.99	18	0.1	
20	HQAM	50	49	17.05	17.16	17.01			
20	HQAM	100	0	16.99	17.05	16.99			
20	HQAM	100	24	16.95	17.05	16.85	18	0.1	
20	HQAM	100	49	17.06	17.14	17.09			
20	HQAM	1	99	16.98	17.00	16.82			
20	HQAM	50	24	16.00	16.06	15.93			
20	HQAM	50	49	16.19	16.11	16.00	17	1.1	
20	HQAM	100	0	15.92	16.04	15.99			
20	ZSSBAM	1	0	14.02	14.04	13.98			
20	ZSSBAM	1	49	13.98	14.02	13.98	15	3.1	
20	ZSSBAM	1	99	14.06	14.11	13.96			
20	ZSSBAM	50	0	14.02	14.02	13.92			
20	ZSSBAM	50	24	13.94	13.97	13.87	15	3.1	
20	ZSSBAM	50	49	14.05	14.03	14.04			
20	ZSSBAM	100	0	13.98	14.00	13.92			
Channel									
Frequency (MHz)				3697.5	3697.5	3697.5			
15	QPSK	1	0	16.84	17.02	17.01			
15	QPSK	1	47	17.01	17.01	16.96	18.1	0	
15	QPSK	1	74	16.88	16.94	16.81			
15	QPSK	36	0	16.84	17.02	17.02			
15	QPSK	36	20	16.98	17.01	16.86	18.1	0	
15	QPSK	36	36	16.85	16.96	16.89			
15	QPSK	75	0	17.00	17.05	16.91			
15	HQAM	1	0	16.87	16.99	16.85			
15	HQAM	1	47	16.98	16.98	16.92	18.1	0	
15	HQAM	1	74	16.82	16.90	16.79			
15	HQAM	36	0	16.89	16.91	16.82			
15	HQAM	36	20	16.82	16.92	16.84	18	0.1	
15	HQAM	36	36	16.91	17.00	16.90			
15	HQAM	75	0	16.87	16.86	16.93			
15	HQAM	1	47	16.78	16.84	16.84	18	0.1	
15	HQAM	1	74	16.75	16.70	16.75			
15	HQAM	1	74	16.75	16.87	16.84			
15	HQAM	36	20	15.85	15.97	15.77	17	1.1	
15	HQAM	36	36	15.97	16.04	15.85			
15	HQAM	75	0	15.84	15.92	15.92			
15	ZSSBAM	1	0	13.83	14.02	13.97	15	3.1	
15	ZSSBAM	1	47	13.95	14.00	13.94			
15	ZSSBAM	1	74	14.03	14.00	13.85			
15	ZSSBAM	36	0	13.88	14.00	13.95	15	3.1	
15	ZSSBAM	36	20	13.91	13.90	13.82			
15	ZSSBAM	36	36	13.96	13.90	13.91			
15	ZSSBAM	75	0	13.92	14.01	13.88			
Channel									
Frequency (MHz)				3697.5	3697.5	3697.5			
10	QPSK	1	0	17.01	17.01	17.00			
10	QPSK	1	25	17.03	17.08	16.90	18.1	0	
10	QPSK	1	49	16.83	17.00	16.79			
10	QPSK	12	7	16.98	17.00	16.96			
10	QPSK	25	12	16.97	17.02	16.89	18.1	0	
10	QPSK	25	25	16.96	16.98	16.89			
10	QPSK	50	0	16.88	16.90	16.80			
10	HQAM	1	0	16.88	17.00	16.90			
10	HQAM	1	25	16.85	17.04	16.98	18.1	0	
10	HQAM	1	49	16.83	16.97	16.90			
10	HQAM	25	0	16.89	16.95	16.84			
10	HQAM	25	12	16.87	17.00	16.81	18	0.1	
10	HQAM	25	25	16.95	17.05	16.91			
10	HQAM	50	0	16.89	17.03	16.89			
10	HQAM	1	49	16.84	16.89	16.81			
10	HQAM	1	25	17.00	17.05	17.05	18	0.1	
10	HQAM	1	49	16.77	16.98	16.95			
10	HQAM	25	0	15.88	15.90	15.78	17	1.1	
10	HQAM	25	12	15.87	15.87	15.81			
10	HQAM	25	25	16.06	16.02	15.91			
10	HQAM	50	0	15.85	15.92	15.98			
10	ZSSBAM	1	0	14.00	13.97	13.94			
10	ZSSBAM	1	25	13.91	13.96	13.97	15	3.1	
10	ZSSBAM	1	49	14.00	14.00	13.85			
10	ZSSBAM	25	0	13.98	14.07	13.83	15	3.1	
10	ZSSBAM	25	12	13.91	13.91	13.86			
10	ZSSBAM	25	25	13.95	13.95	14.01			
10	ZSSBAM	50	0	13.89	14.06	13.96			
Channel									
Frequency (MHz)				3697.5	3697.5	3697.5			
5	QPSK	1	0	16.92	17.06	17.01			
5	QPSK	1	12	16.97	17.02	16.87	18.1	0	
5	QPSK	1	24	16.95	17.02	16.80			
5	QPSK	12	0	16.98	17.08	16.94			
5	QPSK	12	7	16.98	16.98	16.85	18.1	0	
5	QPSK	12	13	16.97	17.01	16.86			
5	QPSK	25	0	16.95	17.05	16.89			
5	HQAM	1	0	16.83	17.00	16.88			
5	HQAM	1	12	16.92	17.01	16.85	18.1	0	
5	HQAM	1	24	16.75	16.91	16.73			
5	HQAM	12	0	16.85	16.90	16.88			
5	HQAM	12	7	16.83	17.01	16.91	18	0.1	
5	HQAM	12	13	16.93	17.00	16.82			
5	HQAM	25	0	16.94	17.02	16.95			
5	HQAM	1	0	16.81	16.91	16.77	18	0.1	
5	HQAM	1	12	16.96	17.00	16.96			
5	HQAM	1	24	16.80	16.88	16.95			
5	HQAM	12	0	15.81	15.87	15.87			
5	HQAM	12	7	15.92	15.95	15.85	17	1.1	
5	HQAM	12	13	16.05	15.98	15.93			
5	ZSSBAM	1	0	13.92	13.98	13.84			
5	ZSSBAM	1	12	13.89	14.02	13.97	15	3.1	
5	ZSSBAM	1	24	14.02	14.03	13.83			
5	ZSSBAM	12	0	14.01	14.07	14.04			
5	ZSSBAM	12	7	13.89	13.85	13.84	15	3.1	
5	ZSSBAM	12	13	13.93	13.92	13.96			
5	ZSSBAM	25	0	13.87	14.00	14.01			

Band 48_FCC Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				5630	5630	5630			
20	QPSK	1	0	17.20	17.21	17.26			
20	QPSK	1	49	17.02	17.08	17.12	18.1	0	
20	QPSK	1	99	17.12	17.21	17.26			
20	QPSK	50	0	17.16	17.21	17.14			
20	QPSK	50	24	17.06	17.13	17.08	18.1	0	
20	QPSK	50	49	17.16	17.25	17.24			
20	QPSK	100	0	16.96	17.03	17.04			
20	HQAM	1	0	17.03	17.14	17.04	18.1	0	
20	HQAM	1	49	17.11	17.15	17.05			
20	HQAM	1	99	17.00	17.08	17.02			
20	HQAM	50	0	17.03	17.13	17.00			
20	HQAM	50	24	16.98	17.01	16.92	18	0.1	
20	HQAM	50	49	17.07	17.12	17.06			
20	HQAM	100	0	17.02	17.16	17.07			
20	HQAM	100	24	17.04	17.11	16.97	18	0.1	
20	HQAM	100	49	17.10	17.15	17.01			
20	HQAM	1	99	16.93	16.98	16.85			
20	HQAM	50	24	15.88	15.97	15.94	17	1.1	
20	HQAM	50	49	16.03	16.00	16.05			
20	HQAM	100	0	15.95	16.13	16.07			
20	ZSSBAM	1	0	14.25	14.20	14.22			
20	ZSSBAM	1	49	13.96	14.10	14.14	15	3.1	
20	ZSSBAM	1	99	14.10	14.09	14.06			
20	ZSSBAM	50	0	14.06	14.09	14.06			
20	ZSSBAM	50	24	14.27	14.37	14.21	15	3.1	
20	ZSSBAM	50	49	14.04	14.05	14.05			
20	ZSSBAM	100	0	14.11	14.15	14.09			
Channel									
Frequency (MHz)				5632	5632	5632			
15	QPSK	1	0	17.21	17.21	17.21			
15	QPSK	1	37	17.00	17.06	17.00	18.1	0	
15	QPSK	1	74	17.08	17.18	17.01			
15	QPSK	36	0	17.17	17.18	17.07			
15	QPSK	36	20	17.04	17.07	17.02	18.1	0	
15	QPSK	36	36	17.03	17.16	17.02			
15	QPSK	75	0	16.99	16.97	16.99			
15	HQAM	1	0	17.01	17.12	16.93			
15	HQAM	1	37	17.03	17.15	16.94	18.1	0	
15	HQAM	1	74	17.00	17.01	16.97			
15	HQAM	36	0	16.97	17.11	16.88	18.04		
15	HQAM	36	20	16.92	16.93	16.92	18	0.1	
15	HQAM	36	36	17.05	17.07	17.02			



Reduced Power Mode for DSB

CDMA2000								
	Best Average Power (dBm)			Lowup	Frame-Average Power (dBm)			
	120	180	251	Limit	120	180	251	Limit
TX Channel	32.82	33.84	33.81	33.00	23.81	23.05	23.57	24.50
FRONT-TRX	31.50	32.24	31.57	31.00	23.49	23.14	23.81	24.50
FRONT-TRX	29.18	29.68	29.40	30.00	21.78	21.88	21.64	24.50
FRONT-TRX	28.00	28.36	28.10	29.00	21.74	24.10	23.89	24.74
FRONT-TRX	25.80	26.02	25.97	27.00	22.00	23.02	22.95	24.00
EDGE-TRX	25.36	25.72	25.42	26.50	18.38	18.72	18.42	17.50
EDGE-TRX	23.70	23.87	23.72	24.50	17.76	17.87	17.72	18.50
EDGE-TRX	22.54	22.77	22.54	23.50	18.28	18.51	18.28	19.24
EDGE-TRX	20.95	21.02	20.98	21.00	17.48	17.65	17.48	18.50
WCDMA V. Airo								
	Best			WCDMA V. Airo			Lowup	
	4132	4182	4233				Limit	
TX Channel	4387	4407	4458				Limit	
FRONT-TRX	33.64	33.64	33.64				33.00	
3GPP Rel99	AMR 12.2kps	23.88	24.13	23.96				25.00
3GPP Rel99	AMR 12.2kps	23.92	24.22	24.02				25.00
3GPP RelE	HSPA Subclass-1	23.95	23.97	23.95				24.00
3GPP RelE	HSPA Subclass-2	22.92	23.11	23.19				24.00
3GPP RelE	HSPA Subclass-3	23.34	22.73	23.21				23.50
3GPP RelE	HSPA Subclass-4	22.42	22.71	22.82				23.50
3GPP RelE	DCH/HSPA Subclass-1	23.66	23.30	23.68				24.00
3GPP RelE	DCH/HSPA Subclass-2	23.81	23.07	23.01				24.00
3GPP RelE	DCH/HSPA Subclass-3	22.34	22.81	22.82				23.50
3GPP RelE	DCH/HSPA Subclass-4	22.30	22.59	22.46				23.00
3GPP RelE	HSPA Subclass-1	22.84	23.11	23.00				24.00
3GPP RelE	HSPA Subclass-2	21.01	21.20	21.06				22.00
3GPP RelE	HSPA Subclass-3	21.92	22.77	22.01				23.00
3GPP RelE	HSPA Subclass-4	20.28	21.48	21.08				22.00
3GPP RelE	HSPA Subclass-5	21.80	21.20	21.12				24.00



Band 5 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (dB)	MPE (dB)		
Channel										
10	QPSK	1	0	22.60	22.73	22.68				
10	QPSK	1	25	22.64	22.77	22.72			24	0
10	QPSK	1	49	22.50	22.64	22.55				
10	QPSK	25	0	21.69	21.72	21.62				
10	QPSK	25	12	21.44	21.52	21.44				
10	QPSK	25	25	21.53	21.66	21.61			23	1
10	QPSK	50	0	21.61	21.65	21.59				
10	16QAM	1	0	21.59	21.67	21.61				
10	16QAM	1	25	21.41	21.52	21.38			23	1
10	16QAM	1	49	21.54	21.60	21.45				
10	16QAM	25	0	20.47	20.55	20.43				
10	16QAM	25	12	20.35	20.49	20.35			22	2
10	16QAM	25	25	20.50	20.60	20.53				
10	16QAM	50	0	20.54	20.59	20.59				
10	64QAM	1	0	20.51	20.59	20.54				
10	64QAM	1	25	20.45	20.51	20.47			22	2
10	64QAM	1	49	20.56	20.66	20.53				
10	64QAM	25	0	19.47	19.53	19.40				
10	64QAM	25	12	19.52	19.63	19.59			21	3
10	64QAM	25	25	19.44	19.55	19.35				
10	64QAM	50	0	19.50	19.62	19.54				
10	256QAM	1	0	17.46	17.48	17.43			19	5
10	256QAM	1	25	17.44	17.45	17.40				
10	256QAM	1	49	17.40	17.62	17.52				
10	256QAM	25	0	17.40	17.56	17.44			19	5
10	256QAM	25	12	17.50	17.63	17.50				
10	256QAM	25	25	17.50	17.56	17.44				
10	256QAM	50	0	17.41	17.53	17.50				
Channel										
				20625	20625	20625	Turn-up time (dB)	MPE (dB)		
5	QPSK	1	0	22.54	22.66	22.54				
5	QPSK	1	12	22.39	22.46	22.44			24	0
5	QPSK	1	24	22.45	22.54	22.47				
5	QPSK	12	0	21.60	21.68	21.55				
5	QPSK	12	7	21.35	21.44	21.39				
5	QPSK	12	13	21.45	21.52	21.51			23	1
5	QPSK	25	0	21.60	21.64	21.48				
5	16QAM	1	0	21.53	21.56	21.52				
5	16QAM	1	12	21.31	21.40	21.32			23	1
5	16QAM	1	24	21.41	21.47	21.31				
5	16QAM	12	0	20.43	20.51	20.37				
5	16QAM	12	7	20.25	20.39	20.21			22	2
5	16QAM	12	13	20.44	20.56	20.38				
5	16QAM	25	0	20.48	20.58	20.46				
5	64QAM	1	0	20.38	20.54	20.48			22	2
5	64QAM	1	12	19.36	19.40	19.25				
5	64QAM	1	24	19.41	19.52	19.35				
5	64QAM	12	0	19.38	19.40	19.25			21	3
5	64QAM	12	13	19.39	19.44	19.21				
5	64QAM	25	0	19.38	19.52	19.39				
5	256QAM	1	0	17.36	17.37	17.36			19	5
5	256QAM	1	12	17.40	17.40	17.31				
5	256QAM	1	24	17.45	17.52	17.45				
5	256QAM	12	0	17.35	17.46	17.38			19	5
5	256QAM	12	7	17.44	17.50	17.35				
5	256QAM	12	13	17.45	17.50	17.35				
5	256QAM	25	0	17.44	17.46	17.46				
Channel										
				20615	20625	20635	Turn-up time (dB)	MPE (dB)		
3	QPSK	1	0	22.63	22.63	22.63				
3	QPSK	1	8	22.42	22.53	22.41			24	0
3	QPSK	1	14	22.38	22.60	22.51				
3	QPSK	8	0	21.66	21.66	21.66				
3	QPSK	8	4	21.38	21.43	21.34				
3	QPSK	8	7	21.40	21.55	21.57			23	1
3	16QAM	1	0	21.49	21.55	21.52				
3	16QAM	1	8	21.34	21.41	21.31			23	1
3	16QAM	1	14	21.42	21.46	21.30				
3	16QAM	8	0	20.41	20.49	20.30				
3	16QAM	8	4	20.21	20.40	20.21			22	2
3	16QAM	8	7	20.30	20.50	20.47				
3	64QAM	1	0	20.48	20.61	20.50				
3	64QAM	1	8	20.47	20.44	20.45			22	2
3	64QAM	1	14	20.33	20.40	20.33				
3	64QAM	8	0	20.43	20.62	20.43				
3	64QAM	8	4	19.35	19.40	19.33			21	3
3	64QAM	8	7	19.38	19.39	19.23				
3	64QAM	15	0	19.37	19.54	19.46				
3	256QAM	1	0	17.38	17.41	17.34				
3	256QAM	1	8	17.37	17.38	17.27			19	5
3	256QAM	1	14	17.40	17.57	17.57				
3	256QAM	8	0	17.39	17.41	17.35				
3	256QAM	8	4	17.39	17.59	17.47			19	5
3	256QAM	8	7	17.40	17.52	17.40				
3	256QAM	15	0	17.47	17.60	17.46				
Channel										
				20607	20628	20643	Turn-up time (dB)	MPE (dB)		
1.4	QPSK	1	0	22.54	22.70	22.57				
1.4	QPSK	1	3	22.40	22.50	22.49			24	0
1.4	QPSK	1	5	22.35	22.50	22.41				
1.4	QPSK	3	0	22.54	22.67	22.48				
1.4	QPSK	3	1	22.35	22.43	22.39				
1.4	QPSK	3	3	22.41	22.52	22.48			23	1
1.4	QPSK	3	1	21.48	21.56	21.48				
1.4	16QAM	1	0	21.48	21.52	21.56				
1.4	16QAM	1	3	21.32	21.45	21.39			23	1
1.4	16QAM	1	5	21.48	21.52	21.40				
1.4	16QAM	3	0	21.37	21.47	21.37				
1.4	16QAM	3	1	21.32	21.42	21.30				
1.4	16QAM	3	3	21.35	21.48	21.43				
1.4	16QAM	6	0	20.43	20.56	20.49			22	2
1.4	64QAM	1	0	20.37	20.55	20.45				
1.4	64QAM	1	3	20.40	20.45	20.39				
1.4	64QAM	1	5	20.41	20.61	20.39			22	2
1.4	64QAM	3	0	20.32	20.48	20.32				
1.4	64QAM	3	1	20.48	20.48	20.30				
1.4	64QAM	3	3	20.39	20.40	20.38			21	3
1.4	64QAM	6	0	19.40	19.55	19.46				
1.4	256QAM	1	0	17.40	17.47	17.35				
1.4	256QAM	1	3	17.40	17.40	17.38			19	5
1.4	256QAM	1	5	17.43	17.49	17.38				
1.4	256QAM	3	0	17.35	17.35	17.41				
1.4	256QAM	3	1	17.41	17.52	17.45				
1.4	256QAM	3	3	17.44	17.42	17.43			19	5
1.4	256QAM	6	0	17.54	17.51	17.43				

Band 12 Ant0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up time (dB)	MPE (dB)		
Channel										
10	QPSK	1	0	22.78	22.88	22.85				
10	QPSK	1	25	22.81	22.91	22.81			24	0
10	QPSK	1	49	22.79	22.91	22.87				
10	QPSK	25	0	21.74	21.80	21.82				
10	QPSK	25	12	21.74	21.83	21.85				
10	QPSK	25	25	21.74	21.83	21.74			23	1
10	QPSK	50	0	21.88	21.91	21.86				
10	16QAM	1	0	21.93	21.92	21.90				
10	16QAM	1	25	21.75	21.89	21.75			23	1
10	16QAM	1	49	21.88	21.93	21.83				
10	16QAM	25	0	20.82	20.87	20.81				
10	16QAM	25	12	20.90	20.95	20.87			22	2
10	16QAM	25	25	20.76	20.84	20.71				
10	16QAM	50	0	20.78	20.85	20.78				
10	64QAM	1	0	20.85	20.95	20.82				



Band 17 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				700	710	711			
10	QPSK	1	0	22.86	22.86	22.92	24	0	
10	QPSK	1	24	22.77	22.83	22.88			
10	QPSK	1	48	22.75	22.81	22.86			
10	QPSK	25	0	21.82	21.94	21.84			
10	QPSK	25	12	21.78	21.80	21.83			
10	QPSK	25	24	21.71	21.69	21.79	23	1	
10	QPSK	50	0	21.80	21.85	21.77			
10	16QAM	1	0	20.92	20.92	22.04			
10	16QAM	1	24	21.83	21.90	21.90	23	1	
10	16QAM	5	48	21.83	21.91	21.87			
10	16QAM	25	0	20.92	20.95	20.92			
10	16QAM	25	12	20.71	20.82	20.78	22	2	
10	16QAM	25	24	20.79	20.87	20.80			
10	16QAM	50	0	20.81	20.91	20.82			
10	64QAM	1	0	21.00	21.04	21.00			
10	64QAM	1	24	20.89	20.92	20.96	22	2	
10	64QAM	1	48	20.82	20.87	20.79			
10	64QAM	25	0	19.54	19.78	19.65			
10	64QAM	25	12	19.79	19.86	19.73	21	3	
10	64QAM	25	24	19.87	19.71	19.57			
10	64QAM	50	0	19.75	19.80	19.85			
10	256QAM	1	0	17.89	18.01	17.86	19	5	
10	256QAM	1	24	17.85	17.84	17.88			
10	256QAM	1	48	17.71	17.86	17.78			
10	256QAM	25	0	17.81	17.80	17.86			
10	256QAM	25	12	17.74	17.84	17.75	19	5	
10	256QAM	25	24	17.85	17.79	17.75			
10	256QAM	50	0	17.73	17.80	17.85			
Channel									
				706.5	710	713.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.71	22.85	22.83	24	0	
5	QPSK	1	12	22.70	22.71	22.71			
5	QPSK	1	24	22.68	22.78	22.61			
5	QPSK	12	0	21.76	21.90	21.80			
5	QPSK	12	7	21.67	21.79	21.71	23	1	
5	QPSK	12	13	21.65	21.75	21.66			
5	QPSK	25	0	21.67	21.77	21.66			
5	16QAM	1	0	21.98	21.98	21.92	23	1	
5	16QAM	1	12	21.89	21.93	21.84			
5	16QAM	1	24	21.79	21.80	21.75			
5	16QAM	12	0	20.87	20.91	20.77	22	2	
5	16QAM	12	7	20.84	20.70	20.64			
5	16QAM	12	13	20.71	20.70	20.70			
5	16QAM	25	0	20.75	20.78	20.78			
5	64QAM	1	0	20.90	20.95	20.90	22	2	
5	64QAM	1	12	20.80	20.80	20.85			
5	64QAM	1	24	20.88	20.91	20.89			
5	64QAM	12	0	19.53	19.65	19.61	21	3	
5	64QAM	12	7	19.63	19.63	19.64			
5	64QAM	12	13	19.00	19.02	19.03			
5	64QAM	25	0	19.81	19.78	19.77			
5	256QAM	1	0	17.84	17.80	17.78	19	5	
5	256QAM	1	12	17.75	17.85	17.75			
5	256QAM	1	24	17.88	17.78	17.83			
5	256QAM	12	0	17.78	17.71	17.74			
5	256QAM	12	7	17.60	17.75	17.83	19	5	
5	256QAM	12	13	17.87	17.65	17.71			
5	256QAM	25	0	17.72	17.88	17.78			

Band 26 for FCC Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up (min)	MPE (dB)	
Channel									
				811.5	811.5	811.5			
15	QPSK	1	0	22.58	22.77	22.67	24	0	
15	QPSK	1	37	22.47	22.52	22.52			
15	QPSK	1	74	22.39	22.63	22.54			
15	QPSK	36	0	21.51	21.63	21.60	23	1	
15	QPSK	36	20	21.50	21.58	21.60			
15	QPSK	36	39	21.40	21.54	21.48			
15	QPSK	75	0	21.59	21.67	21.67			
15	QPSK	1	0	21.72	21.80	21.79	23	1	
15	16QAM	1	37	21.56	21.71	21.63			
15	16QAM	1	74	21.55	21.88	21.63			
15	16QAM	36	0	20.48	20.52	20.48	22	2	
15	16QAM	36	20	20.88	20.73	20.52			
15	16QAM	36	39	20.94	20.67	20.61			
15	16QAM	75	0	20.50	20.58	20.52			
15	64QAM	1	0	20.68	20.72	20.63	22	2	
15	64QAM	1	37	20.55	20.94	20.54			
15	64QAM	1	74	20.65	20.78	20.72			
15	64QAM	36	0	19.54	19.63	19.59	21	3	
15	64QAM	36	20	19.52	19.74	19.61			
15	64QAM	36	39	19.54	19.68	19.54			
15	64QAM	75	0	19.50	19.64	19.51			
15	256QAM	1	0	17.66	17.71	17.68	19	5	
15	256QAM	1	37	17.56	17.61	17.65			
15	256QAM	1	74	17.59	17.67	17.67			
15	256QAM	36	0	17.62	17.65	17.67	19	5	
15	256QAM	36	20	17.65	17.72	17.65			
15	256QAM	36	39	17.52	17.66	17.61			
15	256QAM	75	0	17.46	17.60	17.57			
Channel									
				819	831.5	844	Time-up (min)	MPE (dB)	
10	QPSK	1	0	22.49	22.72	22.60	24	0	
10	QPSK	1	12	22.39	22.44	22.43			
10	QPSK	1	48	22.55	22.61	22.40			
10	QPSK	25	0	21.37	21.54	21.37	23	1	
10	QPSK	25	12	21.40	21.48	21.41			
10	QPSK	25	24	21.34	21.48	21.41			
10	QPSK	50	0	21.54	21.58	21.61			
10	16QAM	1	0	21.61	21.68	21.65	23	1	
10	16QAM	1	25	21.52	21.67	21.54			
10	16QAM	1	48	21.41	21.62	21.40			
10	16QAM	25	0	20.42	20.58	20.38	22	2	
10	16QAM	25	12	20.64	20.59	20.49			
10	16QAM	25	24	20.56	20.58	20.51			
10	16QAM	50	0	20.44	20.53	20.46			
10	64QAM	1	0	20.55	20.60	20.51	22	2	
10	64QAM	1	25	20.51	20.58	20.48			
10	64QAM	1	48	20.57	20.65	20.57			
10	64QAM	25	0	19.39	19.38	19.52	21	3	
10	64QAM	25	12	19.45	19.69	19.38			
10	64QAM	25	24	19.53	19.24	19.43			
10	64QAM	50	0	19.41	19.58	19.40			
10	256QAM	1	0	17.57	17.52	17.55	19	5	
10	256QAM	1	25	17.52	17.55	17.48			
10	256QAM	1	49	17.45	17.63	17.44			
10	256QAM	25	0	17.42	17.52	17.49	19	5	
10	256QAM	25	12	17.51	17.67	17.52			
10	256QAM	25	24	17.43	17.52	17.46			
10	256QAM	50	0	17.53	17.60	17.46			
Channel									
				817.5	831.5	847.5	Time-up (min)	MPE (dB)	
5	QPSK	1	0	22.47	22.54	22.57	24	0	
5	QPSK	1	12	22.36	22.47	22.48			
5	QPSK	1	24	22.55	22.50	22.47			
5	QPSK	12	0	21.37	21.61	21.48	23	1	
5	QPSK	12	7	21.40	21.47	21.45			
5	QPSK	12	13	21.28	21.45	21.36			
5	QPSK	25	0	21.48	21.61	21.44			
5	16QAM	1	0	21.63	21.68	21.58	23	1	
5	16QAM	1	12	21.52	21.60	21.52			
5	16QAM	1	24	21.47	21.58	21.48			
5	16QAM	12	0	20.37	20.53	20.41	22	2	
5	16QAM	12	7	20.65	20.67	20.53			
5	16QAM	12	13	20.56	20.58	20.51			
5	16QAM	25	0	20.46	20.53	20.42			
5	64QAM	1	0	20.59	20.60	20.56	22	2	
5	64QAM	1	12	20.44	20.54	20.46			
5	64QAM	1	24	20.57	20.65	20.65			
5	64QAM	12							



Band 41 Ant0											
RW (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 Hgt Ch / Freq	Power High Hgt Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41400	41800		
20	QPSK	1	0	20.83	20.96	20.97	20.93	20.82	20.82	22	0
20	QPSK	1	49	20.85	20.78	20.84	20.82	20.79	20.79		
20	QPSK	1	89	20.89	20.78	20.84	20.81	20.84	20.84		
20	QPSK	50	0	20.79	20.94	20.97	20.96	20.91	20.91		
20	QPSK	50	24	20.76	20.90	20.96	20.90	20.82	20.82	22	0
20	QPSK	50	48	20.85	20.86	20.89	20.87	20.83	20.83		
20	QPSK	100	0	20.79	20.81	20.97	20.73	20.89	20.89		
20	HQAM	1	0	20.92	20.84	20.87	20.89	20.86	20.86	22	0
20	HQAM	1	49	20.70	20.79	20.84	20.87	20.83	20.83		
20	HQAM	1	89	20.79	20.85	20.78	20.84	20.79	20.79		
20	HQAM	50	0	19.85	19.75	19.89	19.86	19.83	19.83		
20	HQAM	50	24	20.91	19.86	20.11	19.94	20.04	20.04		
20	HQAM	50	50	19.81	19.83	19.84	19.86	19.81	19.81	21	1
20	HQAM	100	0	20.92	20.89	20.81	19.86	20.21	20.21		
20	HQAM	100	0	20.92	20.95	20.14	20.04	20.04	20.04		
20	HQAM	1	49	19.85	20.02	20.07	19.88	19.82	19.82	21	1
20	HQAM	1	89	20.07	19.92	20.77	20.08	19.99	19.99		
20	HQAM	50	0	19.46	19.35	19.56	19.34	19.44	19.44		
20	HQAM	50	24	19.35	19.23	19.33	19.17	19.25	19.25		
20	HQAM	50	50	19.25	19.40	19.42	19.26	19.34	19.34	20	2
20	HQAM	100	0	19.63	19.41	19.37	19.36	19.43	19.43		
20	ZSFGM	1	0	18.90	18.97	17.93	18.97	18.87	18.87		
20	ZSFGM	1	49	18.92	18.99	19.93	18.93	18.79	18.79	18	4
20	ZSFGM	1	89	18.96	17.90	17.93	16.93	18.97	18.97		
20	ZSFGM	50	0	18.97	18.99	18.89	18.86	18.86	18.86		
20	ZSFGM	50	24	18.70	16.88	16.87	16.82	16.77	16.77	18	4
20	ZSFGM	50	50	18.67	16.69	16.77	16.73	16.70	16.70		
20	ZSFGM	100	0	18.95	18.84	18.84	18.84	18.84	18.84		
Channel											
Frequency (MHz)				39725	40173	40600	41068	41515	41960		
15	QPSK	1	0	20.83	20.94	20.93	20.74	20.82	20.82	22	0
15	QPSK	1	37	20.83	20.85	20.71	20.81	20.78	20.78		
15	QPSK	1	74	20.83	20.72	20.72	20.74	20.82	20.82		
15	QPSK	36	0	20.82	20.93	20.94	20.91	20.84	20.84		
15	QPSK	36	20	20.74	20.84	20.87	20.74	20.89	20.89	22	0
15	QPSK	36	40	20.82	20.82	20.82	20.82	20.82	20.82		
15	QPSK	75	0	20.73	20.78	20.98	20.82	20.79	20.79		
15	HQAM	1	0	20.86	20.71	20.34	20.88	20.51	20.51	22	0
15	HQAM	1	37	20.86	20.74	20.86	20.86	20.73	20.73		
15	HQAM	1	74	20.70	20.83	20.86	20.55	20.51	20.51		
15	HQAM	36	0	19.83	19.69	19.95	19.80	19.70	19.70	21	1
15	HQAM	36	20	19.85	19.78	19.12	19.00	19.00	19.00		
15	HQAM	36	39	19.71	19.79	19.79	19.72	19.79	19.79		
15	HQAM	75	0	19.91	19.91	19.97	19.97	19.91	19.91		
15	HQAM	1	37	19.84	19.92	20.16	19.98	20.06	20.06	21	1
15	HQAM	1	74	20.06	19.82	20.11	20.06	19.90	19.90		
15	HQAM	36	0	19.97	19.89	19.84	19.24	19.46	19.46		
15	HQAM	36	20	19.22	19.21	19.30	19.15	19.19	19.19	20	2
15	HQAM	36	39	19.88	19.33	19.33	19.33	19.33	19.33		
15	HQAM	75	0	19.40	19.30	19.43	19.29	19.41	19.41		
15	ZSFGM	1	0	18.81	18.91	18.90	18.95	18.84	18.84	18	4
15	ZSFGM	1	37	18.81	18.85	18.83	18.89	18.83	18.83		
15	ZSFGM	1	74	18.85	18.87	18.98	18.84	18.84	18.84		
15	ZSFGM	36	0	18.99	18.74	18.84	18.79	18.51	18.51	18	4
15	ZSFGM	36	20	18.97	18.69	18.83	18.83	18.73	18.73		
15	ZSFGM	36	39	18.64	18.61	18.64	18.68	18.58	18.58		
15	ZSFGM	75	0	18.86	18.78	18.91	18.86	18.86	18.86		
Channel											
Frequency (MHz)				39700	40164	40600	41060	41500	41940		
10	QPSK	1	0	20.83	20.84	20.87	20.87	20.80	20.80	22	0
10	QPSK	1	25	20.83	20.77	20.73	20.89	20.84	20.84		
10	QPSK	1	49	20.84	20.84	20.74	20.72	20.79	20.79		
10	QPSK	12	0	20.87	20.82	20.82	20.82	20.82	20.82		
10	QPSK	25	12	20.72	20.78	20.88	20.70	20.89	20.89	22	0
10	QPSK	25	25	20.80	20.84	20.81	20.74	20.81	20.81		
10	QPSK	50	0	20.82	20.81	20.83	20.82	20.84	20.84		
10	HQAM	1	0	20.81	20.78	20.86	20.88	20.84	20.84	22	0
10	HQAM	1	25	20.87	20.84	20.71	20.81	20.81	20.81		
10	HQAM	1	49	20.87	20.90	20.72	20.49	20.44	20.44		
10	HQAM	25	0	19.72	19.85	20.04	19.84	19.76	19.76		
10	HQAM	25	12	19.89	19.83	19.87	19.89	19.82	19.82	21	1
10	HQAM	25	25	19.74	19.75	19.75	19.80	19.80	19.80		
10	HQAM	50	0	19.93	19.83	19.88	19.92	19.89	19.89		
10	HQAM	1	25	19.85	19.99	19.97	19.88	19.90	19.90	21	1
10	HQAM	1	49	20.07	19.90	20.05	20.00	19.92	19.92		
10	HQAM	25	0	19.92	19.97	19.42	19.29	19.34	19.34		
10	HQAM	25	12	19.35	19.07	19.29	19.08	19.19	19.19	20	2
10	HQAM	25	25	19.23	19.33	19.35	19.09	19.23	19.23		
10	HQAM	50	0	19.46	19.29	19.42	19.30	19.31	19.31		
10	ZSFGM	1	0	18.81	18.91	18.94	18.82	18.83	18.83	18	4
10	ZSFGM	1	25	18.73	18.76	18.70	18.73	18.70	18.70		
10	ZSFGM	1	49	18.88	18.84	18.90	18.82	18.84	18.84		
10	ZSFGM	25	0	18.85	18.75	18.88	18.73	18.79	18.79		
10	ZSFGM	25	12	18.87	18.68	18.76	18.74	18.87	18.87		
10	ZSFGM	25	25	18.63	18.57	18.97	18.51	18.53	18.53	18	4
10	ZSFGM	50	0	18.86	18.72	18.86	18.91	18.86	18.86		
Channel											
Frequency (MHz)				39700	40164	40600	41060	41500	41940		
5	QPSK	1	0	20.76	20.83	20.94	20.85	20.88	20.88	22	0
5	QPSK	1	18	20.89	20.80	20.91	20.96	20.82	20.82		
5	QPSK	1	24	20.84	20.85	20.85	20.83	20.87	20.87		
5	QPSK	12	0	20.81	20.87	20.94	20.86	20.83	20.83	22	0
5	QPSK	12	7	20.87	20.73	20.91	20.75	20.83	20.83		
5	QPSK	12	13	20.79	20.79	20.71	20.83	20.71	20.71		
5	QPSK	25	0	20.73	20.84	20.82	20.85	20.79	20.79		
5	HQAM	1	0	20.73	20.80	20.90	20.82	20.81	20.81		
5	HQAM	1	12	20.85	20.82	20.69	20.50	20.88	20.88	22	0
5	HQAM	1	24	20.60	20.58	20.70	20.52	20.46	20.46		
5	HQAM	12	0	19.75	19.81	19.88	19.70	19.85	19.85		
5	HQAM	12	7	19.89	19.77	19.99	19.74	19.96	19.96	21	1
5	HQAM	12	13	19.63	19.65	19.75	19.73	19.80	19.80		
5	HQAM	25	0	18.89	18.88	18.83	19.80	19.88	19.88		
5	HQAM	1	0	20.05	20.02	20.10	19.87	19.91	19.91	21	1
5	HQAM	1	12	19.79	19.94	19.90	19.73	19.86	19.86		
5	HQAM	1	24	19.92	19.87	20.10	20.02	19.86	19.86		
5	HQAM	12	0	19.18	19.20	19.42	19.24	19.30	19.30	20	2
5	HQAM	12	7	19.18	19.18	19.14	19.01	19.12	1		





CDMA2000 1X									
Cell	Tx Channel	Base Average Power (dBm)			Tx Power Limit (dBm)	Frame Average Power (dBm)			Tx Power Limit (dBm)
		198.2	198.4	198.6		198.2	198.4	198.6	
1	TV Channel	198	199	201	198	199	201	198	199
1	Frequency (MHz)	891.2	891.4	891.6	891.2	891.4	891.6	891.2	891.4
1	OPRS 1 Tx Rate	32.74	32.78	32.83	33.50	23.74	23.78	23.83	24.50
1	OPRS 1 Tx Power	24.69	24.71	24.80	33.80	23.87	23.71	23.88	24.50
1	OPRS 2 Tx Rate	25.55	25.43	25.41	30.50	23.55	23.48	23.41	24.50
1	OPRS 2 Tx Power	27.51	28.52	27.56	29.00	23.85	23.77	23.70	24.74
1	OPRS 4 Tx Rate	26.34	26.54	26.50	27.50	23.34	23.54	23.50	24.50
1	EDGE 1 Tx Rate	25.75	25.91	25.84	27.00	18.75	18.91	18.84	18.50
1	EDGE 2 Tx Rate	24.07	24.21	24.10	25.00	18.07	18.21	18.10	18.50
1	EDGE 3 Tx Rate	22.84	22.57	22.74	24.00	18.58	18.71	18.48	19.74
1	EDGE 4 Tx Rate	20.94	20.69	20.81	22.00	17.84	17.69	17.81	19.00
CDMA2000 1X Rev. A									
Cell	Tx Channel	Base Average Power (dBm)			Tx Power Limit (dBm)	Frame Average Power (dBm)			Tx Power Limit (dBm)
		199.2	199.4	199.6		199.2	199.4	199.6	
1	TV Channel	199.2	199.4	199.6	199.2	199.4	199.6	199.2	199.4
1	Frequency (MHz)	1692.2	1692.4	1692.6	1692.2	1692.4	1692.6	1692.2	1692.4
1	OPRS 1 Tx Rate	29.52	29.53	29.41	36.50	20.52	20.53	20.41	21.50
1	OPRS 1 Tx Power	29.21	29.45	29.33	36.50	20.21	20.45	20.33	21.50
1	OPRS 2 Tx Rate	20.88	20.86	20.82	27.00	19.88	19.86	19.82	21.00
1	OPRS 3 Tx Rate	24.30	24.32	24.11	29.50	19.84	20.09	19.95	21.24
1	OPRS 4 Tx Rate	21.67	21.57	21.77	23.00	18.67	18.51	18.77	20.50
1	EDGE 1 Tx Rate	19.85	19.86	19.93	25.00	14.85	14.86	14.93	16.00
1	EDGE 2 Tx Rate	22.83	22.27	22.88	23.50	18.83	18.27	18.88	17.50
1	EDGE 3 Tx Rate	20.76	21.06	20.92	22.50	18.50	18.80	18.66	17.74
1	EDGE 4 Tx Rate	18.48	18.75	18.58	20.00	16.48	16.75	16.58	17.00
WCDMA Rev. A									
Cell	Tx Channel	Base Average Power (dBm)			Tx Power Limit (dBm)	Frame Average Power (dBm)			Tx Power Limit (dBm)
		1992.4	1992.6	1992.8		1992.4	1992.6	1992.8	
1	TV Channel	1992	1992	1992	1992	1992	1992	1992	1992
1	Frequency (MHz)	1692.4	1692.6	1692.8	1692.4	1692.6	1692.8	1692.4	1692.6
1	SOPF Rate	20.00	20.20	20.25	21.50	20.70	20.80	20.77	21.80
1	SOPF Rate	20.14	20.35	20.31	21.50	20.73	20.87	20.84	21.80
1	SOPF Rate	19.15	19.44	19.38	20.50	19.78	20.08	19.98	20.80
1	SOPF Rate	19.18	19.39	19.29	20.50	19.81	19.99	19.97	20.80
1	SOPF Rate	18.89	18.87	18.71	20.00	18.23	18.64	18.38	20.30
1	SOPF Rate	18.75	18.82	18.81	20.00	18.36	18.47	18.44	20.30
1	SOPF Rate	19.20	19.41	19.38	20.50	19.77	19.69	20.01	20.80
1	SOPF Rate	19.12	19.35	19.29	20.50	19.71	19.98	19.92	20.80
1	SOPF Rate	18.14	18.91	18.80	20.00	19.36	19.45	19.51	20.30
1	SOPF Rate	18.69	18.77	18.82	20.00	18.21	18.41	18.38	20.30
1	SOPF Rate	18.00	18.20	18.04	20.00	18.57	18.32	18.60	20.80
1	SOPF Rate	18.02	18.34	18.14	18.50	18.72	18.45	18.77	20.80
1	SOPF Rate	18.00	18.20	18.03	19.50	18.52	18.38	18.74	20.80
1	SOPF Rate	17.55	18.11	18.16	18.50	18.55	18.74	18.66	18.80
1	SOPF Rate	20.07	20.32	20.19	20.50	20.71	20.45	20.57	20.80





Band 12 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
704 707.5 711										
10	QPSK	1	0	22.58	22.70	22.82			24	0
10	QPSK	1	25	22.58	22.70	22.82				
10	QPSK	1	49	22.56	22.70	22.87				
10	QPSK	25	0	21.68	21.71	21.64				
10	QPSK	25	12	21.54	21.68	21.62			23	1
10	QPSK	25	25	21.62	21.66	21.62				
10	QPSK	50	0	21.60	21.67	21.63				
10	16QAM	1	0	21.70	21.75	21.64			23	1
10	16QAM	1	25	21.54	21.63	21.51				
10	16QAM	1	49	21.57	21.60	21.63				
10	16QAM	25	0	20.83	20.70	20.86			22	2
10	16QAM	25	12	20.83	20.74	20.83				
10	16QAM	25	25	20.86	20.78	20.72				
10	16QAM	50	0	20.84	20.73	20.89				
10	64QAM	1	0	20.80	20.89	20.83				
10	64QAM	1	25	20.87	20.77	20.84			22	2
10	64QAM	1	49	20.83	20.86	20.84				
10	64QAM	25	0	19.82	19.85	19.84				
10	64QAM	25	12	19.82	19.71	19.89			21	3
10	64QAM	25	25	19.81	19.85	19.85				
10	64QAM	50	0	19.82	19.70	19.82				
10	256QAM	1	0	17.87	17.71	17.88			19	5
10	256QAM	1	25	17.81	17.65	17.86				
10	256QAM	1	49	17.84	17.66	17.82				
10	256QAM	25	0	17.86	17.69	17.84			19	5
10	256QAM	25	12	17.89	17.74	17.82				
10	256QAM	25	25	17.86	17.82	17.86				
10	256QAM	50	0	17.83	17.69	17.82				
Channel										
705.5 707.5 711.5										
5	QPSK	1	0	22.47	22.70	22.49			24	0
5	QPSK	1	25	22.40	22.68	22.41				
5	QPSK	1	49	22.42	22.56	22.44				
5	QPSK	12	0	21.80	21.83	21.80				
5	QPSK	12	7	21.40	21.62	21.62			23	1
5	QPSK	12	13	21.53	21.56	21.49				
5	QPSK	25	0	21.62	21.61	21.61				
5	16QAM	1	0	21.58	21.64	21.57			23	1
5	16QAM	1	12	21.46	21.51	21.39				
5	16QAM	12	0	20.48	20.66	20.52			22	2
5	16QAM	12	7	20.55	20.69	20.49				
5	16QAM	12	13	20.56	20.69	20.64				
5	16QAM	25	0	20.59	20.61	20.59				
5	64QAM	1	0	20.74	20.81	20.76			22	2
5	64QAM	1	25	20.74	20.82	20.81				
5	64QAM	1	49	20.74	20.82	20.81				
5	64QAM	12	0	19.45	19.51	19.50			21	3
5	64QAM	12	7	19.46	19.48	19.48				
5	64QAM	12	13	19.46	19.51	19.41				
5	64QAM	25	0	19.87	19.80	19.49				
5	256QAM	1	0	17.83	17.69	17.86			19	5
5	256QAM	1	12	17.38	17.42	17.47				
5	256QAM	1	24	17.45	17.58	17.56				
5	256QAM	12	0	17.48	17.48	17.48			19	5
5	256QAM	12	7	17.48	17.48	17.48				
5	256QAM	12	13	17.42	17.53	17.49			19	5
5	256QAM	25	0	17.54	17.61	17.60				
Channel										
2305 2305 2305										
3	QPSK	1	0	22.11	22.11	22.11			24	0
3	QPSK	1	8	22.38	22.51	22.46				
3	QPSK	1	14	22.44	22.63	22.52				
3	QPSK	8	0	21.80	21.80	21.80				
3	QPSK	8	4	21.43	21.59	21.49			23	1
3	QPSK	8	7	21.56	21.62	21.50				
3	16QAM	1	0	21.62	21.67	21.54			23	1
3	16QAM	1	8	21.44	21.60	21.38				
3	16QAM	1	14	21.57	21.64	21.48				
3	16QAM	8	0	20.55	20.62	20.80			22	2
3	16QAM	8	4	20.55	20.65	20.58				
3	16QAM	8	7	20.87	20.66	20.82				
3	64QAM	1	0	20.51	20.67	20.59				
3	64QAM	1	8	20.76	20.80	20.77			22	2
3	64QAM	1	14	20.54	20.64	20.55				
3	64QAM	8	0	19.41	19.58	19.47			21	3
3	64QAM	8	4	19.40	19.67	19.51				
3	64QAM	8	7	19.45	19.52	19.45				
3	256QAM	1	0	17.54	17.60	17.55			19	5
3	256QAM	1	8	17.44	17.50	17.50				
3	256QAM	1	14	17.41	17.62	17.58				
3	256QAM	8	0	17.51	17.56	17.52			19	5
3	256QAM	8	4	17.54	17.63	17.47				
3	256QAM	8	7	17.44	17.54	17.47				
3	256QAM	15	0	17.80	17.69	17.67				
Channel										
2305 2305 2305										
1.4	QPSK	1	0	22.52	22.61	22.65			24	0
1.4	QPSK	1	3	22.41	22.53	22.53				
1.4	QPSK	1	5	22.48	22.55	22.59				
1.4	QPSK	3	0	22.54	22.53	22.52				
1.4	QPSK	3	1	22.44	22.59	22.43				
1.4	QPSK	3	3	22.49	22.63	22.59			23	1
1.4	QPSK	8	0	21.87	21.84	21.85				
1.4	16QAM	1	0	21.61	21.63	21.54			23	1
1.4	16QAM	1	3	21.45	21.54	21.39				
1.4	16QAM	1	5	21.47	21.63	21.48				
1.4	16QAM	3	0	21.48	21.55	21.46				
1.4	16QAM	3	1	21.53	21.71	21.54				
1.4	16QAM	3	3	21.56	21.73	21.67				
1.4	64QAM	1	0	20.53	20.65	20.40			22	2
1.4	64QAM	1	3	20.74	20.80	20.74				
1.4	64QAM	1	5	20.94	20.64	20.53				
1.4	64QAM	3	0	20.43	20.50	20.40			22	2
1.4	64QAM	3	1	20.52	20.60	20.49				
1.4	64QAM	3	3	20.41	20.47	20.44				
1.4	64QAM	6	0	19.53	19.59	19.50			21	3
1.4	256QAM	1	0	17.46	17.50	17.56				
1.4	256QAM	1	3	17.36	17.50	17.49				
1.4	256QAM	1	5	17.47	17.51	17.57			19	5
1.4	256QAM	3	0	17.50	17.56	17.57				
1.4	256QAM	3	1	17.53	17.70	17.55				
1.4	256QAM	3	3	17.51	17.47	17.45				
1.4	256QAM	6	0	17.53	17.51	17.54			19	5

Band 13 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up time (sec)	MPE (dB)		
Channel										
782										
10	QPSK	1	0	22.52	22.52	22.52			24	0
10	QPSK	1	25	22.43	22.43	22.43				
10	QPSK	1	49	22.37	22.37	22.37				
10	QPSK	25	0	21.40	21.40	21.40			23	1
10	QPSK	25	12	21.44	21.44	21.44				
10	QPSK	25	25	21.41	21.41	21.41				
10	QPSK	50	0	21.46	21.46	21.46				
10	16QAM	1	0	21.70	21.70	21.70			23	1
10	16QAM	1	25	21.54	21.54	21.54				
10	16QAM	1	49	21.57	21.57	21.57				
10	16QAM	25	0	20.32	20.32	20.32			22	2
10	16QAM	25	12	20.43	20.43	20.43				
10	16QAM	25	25	20.49	20.49	20.49				
10	16QAM	50	0	20.42	20.42	20.42				
10	64QAM	1	0	20.86	20.86	20.86			22	2
10	64QAM	1	25	20.54	20.54	20.54				
10	64QAM	1	49	20.51	20.51	20.51				
10	64QAM	25	0	19.54	19.54	19.54				
10	64QAM									



Band 25 Ant1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Peak Ch./Freq.	Time-up (min)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	20.29	20.34	20.33	21.5	0		
20	QPSK	1	49	20.29	20.34	20.33				
20	QPSK	1	99	20.24	20.27	20.27				
20	QPSK	50	0	20.07	20.13	20.06				
20	QPSK	50	24	20.04	20.10	20.06				
20	QPSK	50	50	20.03	20.12	20.06	21	0.5		
20	QPSK	100	0	19.91	19.99	19.92				
20	QPSK	100	25	19.93	20.01	19.97				
20	QPSK	1	49	19.95	20.05	19.98	21	0.5		
20	QPSK	1	99	19.98	20.06	19.98				
20	QPSK	50	0	19.84	19.94	19.90				
20	QPSK	50	24	19.79	19.89	19.84	20	1.5		
20	QPSK	50	50	19.85	19.96	19.88				
20	QPSK	100	0	19.82	19.92	19.86				
20	QPSK	100	25	19.14	19.18	19.12				
20	QPSK	1	49	19.04	19.04	19.00	20	1.5		
20	QPSK	1	99	19.07	19.06	19.00				
20	QPSK	50	0	17.85	17.97	17.87				
20	QPSK	50	24	17.80	17.88	17.83				
20	QPSK	50	50	17.83	17.96	17.77	19	2.5		
20	QPSK	100	0	17.91	18.03	17.89				
20	QPSK	100	25	17.86	18.07	17.94				
20	QPSK	1	49	15.95	16.03	16.00	17	4.5		
20	QPSK	1	99	15.81	15.96	15.84				
20	QPSK	50	0	15.89	15.99	15.88				
20	QPSK	50	24	15.82	15.97	15.79	17	4.5		
20	QPSK	50	50	15.77	15.89	15.84				
20	QPSK	100	0	15.70	15.80	15.70				
Channel										
Frequency (MHz)										
19	QPSK	1	0	20.24	20.28	20.20	21.5	0		
19	QPSK	1	37	20.10	20.17	20.10				
19	QPSK	1	74	20.20	20.23	20.19				
19	QPSK	36	0	19.99	20.00	19.92				
19	QPSK	36	25	19.95	19.99	19.90				
19	QPSK	36	39	19.94	20.02	19.91	21	0.5		
19	QPSK	75	0	19.84	19.97	19.86				
19	QPSK	75	25	19.86	20.06	19.85				
19	QPSK	1	37	19.80	19.98	19.85	21	0.5		
19	QPSK	1	74	19.86	19.95	19.86				
19	QPSK	36	0	18.90	19.01	18.91				
19	QPSK	36	29	18.97	18.92	18.72	20	1.5		
19	QPSK	36	49	18.96	18.96	18.88				
19	QPSK	75	0	18.80	18.99	18.92				
19	QPSK	1	9	19.09	19.10	19.08	20	1.5		
19	QPSK	1	37	18.86	18.97	18.86				
19	QPSK	1	74	18.91	19.05	19.05	20	1.5		
19	QPSK	36	0	17.78	17.84	17.80				
19	QPSK	36	25	17.80	17.88	17.78	19	2.5		
19	QPSK	36	39	17.75	17.74	17.63				
19	QPSK	75	0	17.80	17.88	17.78				
19	QPSK	1	37	15.85	15.95	15.87	17	4.5		
19	QPSK	1	74	15.87	15.84	15.69				
19	QPSK	36	0	15.85	15.85	15.86				
19	QPSK	36	29	15.71	15.83	15.84	17	4.5		
19	QPSK	36	39	15.63	15.85	15.79				
19	QPSK	75	0	15.69	15.81	15.82				
Channel										
Frequency (MHz)										
10	QPSK	1	0	20.27	20.31	20.20	21.5	0		
10	QPSK	1	25	20.16	20.21	20.10				
10	QPSK	1	49	20.19	20.23	20.22				
10	QPSK	12	0	20.00	20.04	20.00				
10	QPSK	25	12	19.90	19.98	19.95				
10	QPSK	25	25	19.92	20.06	19.97	21	0.5		
10	QPSK	50	0	19.87	19.97	19.86				
10	QPSK	1	0	19.91	19.98	20.00				
10	QPSK	1	24	19.88	19.91	19.91	21	0.5		
10	QPSK	1	49	19.86	19.96	19.86				
10	QPSK	25	0	18.96	18.92	18.89				
10	QPSK	25	12	18.76	18.77	18.75	20	1.5		
10	QPSK	25	25	18.70	18.86	18.78				
10	QPSK	50	0	18.84	18.93	18.89				
10	QPSK	1	0	19.08	19.05	19.08	20	1.5		
10	QPSK	1	25	18.91	19.03	19.03				
10	QPSK	1	49	18.92	19.01	19.02				
10	QPSK	25	0	17.71	17.92	17.75	19	2.5		
10	QPSK	25	12	17.72	17.85	17.62				
10	QPSK	25	25	17.70	17.85	17.71				
10	QPSK	50	0	17.67	17.93	17.62				
10	QPSK	1	0	15.81	15.85	15.87	17	4.5		
10	QPSK	1	24	15.80	15.86	15.87				
10	QPSK	25	12	15.75	15.84	15.73	17	4.5		
10	QPSK	25	25	15.66	15.81	15.73				
10	QPSK	50	0	15.62	15.81	15.69				
Channel										
Frequency (MHz)										
5	QPSK	1	0	20.24	20.29	20.20	21.5	0		
5	QPSK	1	12	20.10	20.21	20.07				
5	QPSK	1	24	20.16	20.27	20.16				
5	QPSK	12	0	19.95	20.05	19.90				
5	QPSK	12	13	19.97	20.00	19.99	21	0.5		
5	QPSK	25	0	19.85	19.92	19.83				
5	QPSK	1	0	19.98	20.07	19.93				
5	QPSK	1	12	19.85	19.98	19.90	21	0.5		
5	QPSK	1	24	19.84	19.96	19.82				
5	QPSK	12	0	18.83	18.93	18.92				
5	QPSK	12	7	18.69	18.78	18.78	20	1.5		
5	QPSK	12	14	18.72	18.81	18.80				
5	QPSK	25	0	18.82	18.97	18.81				
5	QPSK	1	0	18.02	18.11	18.02	20	1.5		
5	QPSK	1	12	18.07	18.09	18.08				
5	QPSK	1	24	18.02	18.11	18.05				
5	QPSK	12	0	17.72	17.93	17.75	19	2.5		
5	QPSK	12	13	17.74	17.72	17.72				
5	QPSK	25	0	17.68	17.94	17.75				
5	QPSK	25	13	17.69	17.92	17.62				
5	QPSK	1	12	15.81	15.91	15.90	17	4.5		
5	QPSK	1	24	15.71	15.84	15.76				
5	QPSK	12	0	15.76	15.91	15.84				
5	QPSK	12	7	15.78	15.74	15.61	17	4.5		
5	QPSK	12	13	15.63	15.86	15.61				
5	QPSK	25	0	15.30	15.61	15.56				
Channel										
Frequency (MHz)										
3	QPSK	1	0	20.25	20.25	20.20	21.5	0		
3	QPSK	1	8	20.13	20.21	20.16				
3	QPSK	1	14	20.12	20.22	20.13				
3	QPSK	8	0	20.01	20.04	20.01				
3	QPSK	8	4	19.95	20.06	19.94	21	0.5		
3	QPSK	8	7	19.98	20.04	19.83				
3	QPSK	15	0	19.85	19.92	19.85				
3	QPSK	1	0	19.97	20.04	19.98	21	0.5		
3	QPSK	1	8	19.91	19.93	19.90				
3	QPSK	1	14	19.83	19.91	19.87				
3	QPSK	8	0	18.82	18.83	18.79	20	1.5		
3	QPSK	8	7	18.90	18.91	18.77				
3	QPSK	15	0	18.88	18.97	18.90				
3	QPSK	1	0	18.01	18.10	18.06	20	1.5		
3	QPSK	1	8	18.06	18.09	18.08				
3	QPSK	1	14	18.03	18.02	18.01				
3	QPSK	8	0	17.78	17.87	17.87	19	2.5		
3	QPSK	8	7	17.70	17.79	17.73				
3	QPSK	15	0	17.76	17.78	17.73				
3	QPSK	1	0	15.82	15.90	15.83	17	4.5		
3	QPSK	1	8	15.85	15.91					



Band 38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)				37850	38050	38150		
20	QPSK	1	0	21.51	21.60	21.70	22.3	0
20	QPSK	1	49	21.45	21.57	21.49		
20	QPSK	1	99	21.39	21.49	21.58		
20	QPSK	50	0	20.53	20.55	20.51		
20	QPSK	50	24	20.54	20.61	20.51	22	0.3
20	QPSK	100	0	20.48	20.61	20.47		
20	QPSK	1	0	20.60	20.63	20.50		
20	HQAM	1	49	20.63	20.51	20.49	22	0.3
20	HQAM	1	99	20.47	20.50	20.48		
20	HQAM	50	0	19.52	19.38	19.30		
20	HQAM	50	24	19.53	19.50	19.40	21	1.3
20	HQAM	50	50	19.48	19.54	19.48		
20	HQAM	100	0	19.57	19.56	19.49		
20	HQAM	1	0	19.40	19.51	19.47		
20	HQAM	1	49	19.57	19.66	19.56	21	1.3
20	HQAM	1	99	19.40	19.56	19.39		
20	HQAM	50	0	18.47	18.57	18.54		
20	HQAM	50	24	18.53	18.53	18.52	20	2.3
20	HQAM	50	50	18.38	18.52	18.42		
20	HQAM	100	0	18.50	18.60	18.48		
20	ZSSQAM	1	0	18.51	18.56	18.47		
20	ZSSQAM	1	49	18.57	18.50	18.39	18	4.3
20	ZSSQAM	1	99	18.46	18.52	18.39		
20	ZSSQAM	50	0	18.50	18.50	18.50		
20	ZSSQAM	50	24	18.54	18.44	18.40	18	4.3
20	ZSSQAM	50	50	18.60	18.53	18.61		
20	ZSSQAM	100	0	18.52	18.52	18.52		
Channel								
Frequency (MHz)				37825	38025	38175	Tune-up Int. (dBm)	MPR (dB)
15	QPSK	1	0	21.77	21.60	21.74	22.3	0
15	QPSK	1	47	21.36	21.43	21.45		
15	QPSK	1	74	21.25	21.37	21.33		
15	QPSK	36	0	20.40	20.50	20.42		
15	QPSK	36	20	20.47	20.57	20.42	22	0.3
15	QPSK	75	0	20.34	20.50	20.36		
15	HQAM	1	0	20.48	20.59	20.38		
15	HQAM	1	37	20.35	20.45	20.39	22	0.3
15	HQAM	1	74	20.39	20.54	20.40		
15	HQAM	36	0	19.48	19.45	19.42		
15	HQAM	36	20	19.20	19.43	19.38	21	1.3
15	HQAM	36	39	19.43	19.48	19.42		
15	HQAM	75	0	19.44	19.60	19.35		
15	HQAM	1	0	19.28	19.47	19.35		
15	HQAM	1	37	19.48	19.52	19.44	21	1.3
15	HQAM	1	74	19.32	19.43	19.29		
15	HQAM	36	0	18.54	18.47	18.42		
15	HQAM	36	20	18.48	18.51	18.38	20	2.3
15	HQAM	36	39	18.48	18.52	18.42		
15	HQAM	75	0	18.35	18.52	18.41		
15	ZSSQAM	1	0	18.47	18.51	18.40		
15	ZSSQAM	1	37	18.29	18.53	18.29	18	4.3
15	ZSSQAM	1	74	18.40	18.40	18.30		
15	ZSSQAM	36	0	18.52	18.46	18.38		
15	ZSSQAM	36	20	18.20	18.20	18.20	18	4.3
15	ZSSQAM	36	39	18.54	18.50	18.47		
15	ZSSQAM	75	0	18.43	18.50	18.44		
Channel								
Frequency (MHz)				37810	38010	38175	Tune-up Int. (dBm)	MPR (dB)
10	QPSK	1	0	21.41	21.50	21.46	22.3	0
10	QPSK	1	25	21.37	21.49	21.37		
10	QPSK	1	49	21.30	21.38	21.28		
10	QPSK	12	0	20.30	20.54	20.41		
10	QPSK	25	12	20.48	20.51	20.38	22	0.3
10	QPSK	25	25	20.39	20.53	20.40		
10	QPSK	50	0	20.42	20.51	20.38		
10	HQAM	1	0	20.47	20.54	20.42		
10	HQAM	1	25	20.33	20.47	20.46	22	0.3
10	HQAM	1	49	20.34	20.47	20.33		
10	HQAM	25	0	19.37	19.48	19.46		
10	HQAM	25	12	19.39	19.41	19.31		
10	HQAM	25	25	19.35	19.43	19.41	21	1.3
10	HQAM	50	0	19.54	19.50	19.34		
10	HQAM	1	0	19.44	19.56	19.44		
10	HQAM	1	25	19.44	19.48	19.31	21	1.3
10	HQAM	25	0	18.35	18.53	18.48		
10	HQAM	25	12	18.46	18.52	18.40	20	2.3
10	HQAM	25	25	18.33	18.47	18.32		
10	HQAM	50	0	18.62	18.50	18.44		
10	ZSSQAM	1	0	18.46	18.40	18.34		
10	ZSSQAM	1	25	18.34	18.40	18.19	18	4.3
10	ZSSQAM	1	49	18.50	18.50	18.29		
10	ZSSQAM	25	0	18.52	18.50	18.40		
10	ZSSQAM	25	12	18.28	18.20	18.20	18	4.3
10	ZSSQAM	25	25	18.50	18.40	18.30		
10	ZSSQAM	50	0	18.41	18.58	18.44		
Channel								
Frequency (MHz)				37815	38015	38175	Tune-up Int. (dBm)	MPR (dB)
5	QPSK	1	0	21.42	21.55	21.46	22.3	0
5	QPSK	1	24	21.31	21.44	21.25		
5	QPSK	12	0	20.40	20.50	20.38		
5	QPSK	12	7	20.42	20.54	20.38	22	0.3
5	QPSK	12	13	20.47	20.46	20.46		
5	QPSK	25	0	20.44	20.56	20.36		
5	HQAM	1	0	20.49	20.55	20.44		
5	HQAM	1	12	20.29	20.40	20.38	22	0.3
5	HQAM	1	24	20.03	20.50	20.39		
5	HQAM	12	0	19.47	19.52	19.36		
5	HQAM	12	7	19.23	19.38	19.32	21	1.3
5	HQAM	12	31	19.41	19.43	19.44		
5	HQAM	25	0	19.52	19.54	19.38		
5	HQAM	1	0	19.44	19.48	19.39		
5	HQAM	1	12	19.47	19.50	19.33	21	1.3
5	HQAM	1	24	19.29	19.50	19.30		
5	HQAM	12	0	18.44	18.46	18.40		
5	HQAM	12	7	18.54	18.51	18.40	20	2.3
5	HQAM	12	13	18.26	18.40	18.37		
5	HQAM	25	0	18.47	18.48	18.42		
5	ZSSQAM	1	0	18.39	18.40	18.38		
5	ZSSQAM	1	12	18.24	18.52	18.28	18	4.3
5	ZSSQAM	1	24	18.38	18.43	18.28		
5	ZSSQAM	12	0	18.52	18.26	18.27	18	4.3
5	ZSSQAM	12	31	18.54	18.54	18.39		
5	ZSSQAM	25	0	18.38	18.50	18.46		

Band 38 HPUE Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)				37860	38060	38160		
20	QPSK	1	0	22.52	22.57	22.51	23.9	0
20	QPSK	1	49	22.33	22.54	22.51		
20	QPSK	1	99	22.48	22.56	22.48		
20	QPSK	50	0	22.45	22.59	22.34		
20	QPSK	50	24	22.31	22.41	22.44	23.9	0
20	QPSK	50	50	22.34	22.38	22.48		
20	QPSK	100	0	22.48	22.50	22.42		
20	HQAM	1	0	22.60	22.42	22.50	23.9	0
20	HQAM	1	49	22.48	22.48	22.49		
20	HQAM	1	99	22.48	22.61	22.47		
20	HQAM	50	0	22.37	22.44	22.34		
20	HQAM	50	24	22.49	22.37	22.52	23.9	0
20	HQAM	50	50	22.51	22.48	22.38		
20	HQAM	100	0	22.55	22.46	22.49		
20	HQAM	1	0	22.64	22.35	22.53		
20	HQAM	1	49	22.51	22.41	22.52	23.9	0
20	HQAM	1	99	22.57	22.55	22.52		
20	HQAM	50	0	22.44	22.42	22.39		
20	HQAM	50	24	22.33	22.09	22.46	23	0.9
20	HQAM	50	50	22.42	22.54	22.27		
20	HQAM	100	0	21.47	21.48	21.59		
20	ZSSQAM	1	0	18.53	18.62	18.50		
20	ZSSQAM	1	49	18.37	18.61	18.41	21	2.9
20	ZSSQAM	1	99	18.60	18.62	18.54		
20	ZSSQAM	50	0	18.49	18.49	18.49		
20	ZSSQAM	50	24	18.40	18.42	18.32	21	2.9
20	ZSSQAM	50	50	18.53	18.59	18.45		
20	ZSSQAM	100	0	18.37	18.54	18.35		
Channel								
Frequency (MHz)				37825	38025	38175	Tune-up Int. (dBm)	MPR (dB)
15	QPSK	1	0	22.48	22.54	22.40	23.9	0
15	QPSK	1	37	22.24	22.46	22.37		
15	QPSK	1	74	22.40	22.50	22.32		
15	QPSK	36	0	20.38	22.02	22.00		
15	QPSK	36	20	22.27	22.38	22.34	23.9	0
15	QPSK	75	0	22.22	22.34	22.28		
15	QPSK	75	0	22.33	22.42	22.33		
15	HQAM	1	0	22.53	22.38	22.40	23.9	0
15	HQAM	1	37	22.34	22.34	22.29		
15	HQAM	1	74	22.41	22.54	22.38		
15	HQAM	36	0	22.31	22.27	22.29		
15	HQAM	36	20	22.35	22.36	22.27	23.9	0
15	HQAM	36	39	22.44	22.35	22.23		
15	HQAM	75	0	22.44	22.47	22.39		
15	HQAM	1	0	22.51	22.31	22.38	23.9	0
15	HQAM	1	37	22.38	22.32	22.42		
15	HQAM	1	74	22.41	22.47	22.47		
15	HQAM	36	0	22.38	22.37	22.37		
15	HQAM	36	20	22.18	22.29	22.45	23	0.9
15	HQAM	36	39	22.37	22.31	22.31		
15	HQAM	75	0	21.32	21.38	21.45		
15	ZSSQAM	1	0	18.40	18.54	18.36	21	2.9
15	ZSSQAM							



Band 41 Ant1											
RW (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 Hgh Ch / Freq	Power High Hgh Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41400	41800		
20	QPSK	1	0	21.44	21.64	21.93	21.54	21.53	21.53	22.3	0
20	QPSK	1	49	21.39	21.48	21.58	21.49	21.49	21.47		
20	QPSK	1	89	21.61	21.61	21.61	21.61	21.61	21.61		
20	QPSK	50	0	20.51	20.64	20.58	20.50	20.48	20.48		
20	QPSK	50	24	20.36	20.45	20.37	20.45	20.38	20.38	22	0.3
20	QPSK	50	49	20.38	20.37	20.51	20.45	20.37	20.37		
20	QPSK	100	0	20.41	20.53	20.50	20.52	20.44	20.44		
20	HQAM	1	0	20.46	20.56	20.61	20.46	20.49	20.49	22	0.3
20	HQAM	1	49	20.38	20.45	20.46	20.38	20.45	20.45		
20	HQAM	1	89	20.38	20.45	20.58	20.49	20.43	20.43		
20	HQAM	50	0	19.33	19.42	19.39	19.46	19.44	19.44		
20	HQAM	50	24	19.22	19.40	19.46	19.34	19.24	19.24	21	1.3
20	HQAM	50	50	19.38	19.44	19.52	19.48	19.40	19.40		
20	HQAM	100	0	19.44	19.44	19.55	19.51	19.44	19.44		
20	HQAM	100	0	19.55	19.54	19.74	19.57	19.55	19.55		
20	HQAM	1	49	19.47	19.52	19.63	19.49	19.43	19.43	21	1.3
20	HQAM	1	89	19.52	19.52	19.60	19.57	19.52	19.52		
20	HQAM	50	0	18.35	18.46	18.52	18.39	18.33	18.33		
20	HQAM	50	24	18.20	18.35	18.40	18.28	18.24	18.24	20	2.3
20	HQAM	50	50	18.24	18.34	18.48	18.37	18.29	18.29		
20	HQAM	100	0	18.39	18.50	18.61	18.63	18.47	18.47		
20	ZSFGM	1	0	18.46	18.54	18.67	18.58	18.51	18.51	18	4.3
20	ZSFGM	1	49	18.52	18.59	18.71	18.69	18.56	18.56		
20	ZSFGM	1	89	18.48	18.48	18.52	18.48	18.47	18.47		
20	ZSFGM	50	0	18.32	18.40	18.47	18.47	18.38	18.38		
20	ZSFGM	50	24	18.36	18.45	18.54	18.48	18.40	18.40	18	4.3
20	ZSFGM	50	50	18.40	18.47	18.66	18.61	18.54	18.54		
20	ZSFGM	100	0	18.48	18.47	18.67	18.61	18.54	18.54		
Channel											
Frequency (MHz)											
15	QPSK	1	0	2201.5	2249	2293	2274	2262.5	2262.5	Turn-up time (dBm)	MFR (dB)
15	QPSK	1	37	21.38	21.34	21.46	21.44	21.38	21.38	22	0
15	QPSK	1	74	21.40	21.41	21.60	21.48	21.41	21.41		
15	QPSK	36	0	20.44	20.60	20.60	20.50	20.34	20.34		
15	QPSK	36	20	20.20	20.39	20.52	20.35	20.26	20.26	22	0.3
15	QPSK	36	40	20.27	20.46	20.46	20.46	20.34	20.34		
15	QPSK	75	0	20.27	20.44	20.48	20.46	20.34	20.34		
15	HQAM	1	0	20.38	20.44	20.56	20.33	20.44	20.44	22	0.3
15	HQAM	1	37	20.29	20.39	20.45	20.34	20.32	20.32		
15	HQAM	1	74	20.27	20.38	20.45	20.37	20.27	20.27		
15	HQAM	36	0	19.20	19.39	19.48	19.37	19.41	19.41	21	1.3
15	HQAM	36	20	18.48	18.31	18.31	18.25	18.25	18.25		
15	HQAM	36	36	19.33	19.39	19.47	19.37	19.31	19.31	21	1.3
15	HQAM	75	0	19.29	19.37	19.45	19.47	19.22	19.22		
15	HQAM	1	0	19.45	19.53	19.71	19.61	19.49	19.49	21	1.3
15	HQAM	1	37	19.38	19.43	19.58	19.44	19.37	19.37		
15	HQAM	1	74	19.46	19.54	19.59	19.52	19.36	19.36		
15	HQAM	36	0	18.30	18.30	18.42	18.30	18.20	18.20	20	2.3
15	HQAM	36	20	18.05	18.31	18.36	18.29	18.19	18.19		
15	HQAM	36	36	18.08	18.28	18.34	18.22	18.10	18.10		
15	HQAM	75	0	18.24	18.44	18.45	18.45	18.43	18.43		
15	ZSFGM	1	0	18.40	18.42	18.59	18.49	18.44	18.44	18	4.3
15	ZSFGM	1	37	18.41	18.46	18.54	18.44	18.44	18.44		
15	ZSFGM	1	74	18.34	18.42	18.58	18.34	18.42	18.42		
15	ZSFGM	36	0	18.20	18.36	18.53	18.40	18.22	18.22	18	4.3
15	ZSFGM	36	20	18.02	18.31	18.44	18.41	18.29	18.29		
15	ZSFGM	36	36	18.34	18.49	18.55	18.52	18.45	18.45		
15	ZSFGM	75	0	18.36	18.58	18.58	18.50	18.50	18.50		
Channel											
Frequency (MHz)											
10	QPSK	1	0	2501	2547	2593	2574	2565	2565	Turn-up time (dBm)	MFR (dB)
10	QPSK	1	25	21.40	21.68	21.67	21.47	21.44	21.41	22.30	0
10	QPSK	1	49	21.47	21.46	21.50	21.49	21.44	21.44		
10	QPSK	1	89	20.48	20.50	20.58	20.45	20.45	20.45		
10	QPSK	55	12	20.22	20.38	20.42	20.30	20.26	20.26	22	0.3
10	QPSK	55	26	20.23	20.26	20.45	20.39	20.19	20.19		
10	QPSK	100	0	20.20	20.42	20.48	20.45	20.32	20.32		
10	HQAM	1	0	20.34	20.41	20.54	20.35	20.48	20.48	22	0.3
10	HQAM	1	25	20.30	20.30	20.38	20.31	20.22	20.22		
10	HQAM	1	49	20.27	20.31	20.44	20.36	20.24	20.24		
10	HQAM	55	0	19.29	19.38	19.45	19.33	19.34	19.34	21	1.3
10	HQAM	55	12	19.08	19.26	19.31	19.26	19.11	19.11		
10	HQAM	55	26	19.35	19.35	19.47	19.43	19.32	19.32		
10	HQAM	100	0	19.40	19.37	19.55	19.37	19.32	19.32	21	1.3
10	HQAM	100	0	19.50	19.53	19.65	19.63	19.41	19.41		
10	HQAM	25	0	18.26	18.36	18.43	18.29	18.24	18.24	20	2.3
10	HQAM	25	12	18.13	18.31	18.31	18.24	18.14	18.14		
10	HQAM	25	26	18.16	18.30	18.44	18.28	18.22	18.22		
10	HQAM	50	0	18.30	18.45	18.57	18.46	18.37	18.37		
10	ZSFGM	1	0	18.39	18.40	18.56	18.62	18.43	18.43		
10	ZSFGM	1	25	18.47	18.50	18.64	18.52	18.51	18.51	18	4.3
10	ZSFGM	1	49	18.38	18.34	18.48	18.36	18.40	18.40		
10	ZSFGM	25	0	18.25	18.44	18.52	18.38	18.21	18.21		
10	ZSFGM	25	12	18.23	18.39	18.42	18.37	18.20	18.20		
10	ZSFGM	25	26	18.35	18.42	18.57	18.52	18.45	18.45	18	4.3
10	ZSFGM	50	0	18.33	18.58	18.63	18.61	18.42	18.42		
Channel											
Frequency (MHz)											
5	QPSK	1	0	2498.5	2545.5	2593	2574.5	2567.5	2567.5	Turn-up time (dBm)	MFR (dB)
5	QPSK	1	0	21.38	21.55	21.55	21.48	21.39	21.39	22.30	0
5	QPSK	1	15	21.29	21.34	21.44	21.39	21.33	21.33		
5	QPSK	1	24	21.36	21.40	21.50	21.51	21.47	21.47		
5	QPSK	12	0	20.27	20.61	20.61	20.62	20.26	20.26	22	0.3
5	QPSK	12	7	20.23	20.30	20.51	20.40	20.23	20.23		
5	QPSK	12	13	20.25	20.27	20.42	20.46	20.27	20.27		
5	QPSK	25	0	20.27	20.59	20.59	20.44	20.21	20.21		
5	HQAM	1	0	20.41	20.48	20.54	20.38	20.38	20.38	22	0.3
5	HQAM	1	12	20.35	20.22	20.38	20.42	20.22	20.22		
5	HQAM	1	24	20.26	20.32	20.43	20.35	20.26	20.26		
5	HQAM	12	0	19.27	19.29	19.42	19.32	19.31	19.31	21	1.3
5	HQAM	12	7	19.16	19.33	19.36	19.30	19.18	19.18		
5	HQAM	12	13	19.33	19.33	19.44	19.44	19.30	19.30		
5	HQAM	25	0	19.38	19.32	19.51	19.43	19.30	19.30	21	1.3
5	HQAM	1	0	19.53	19.54	19.66	19.56	19.50	19.50		
5	HQAM	1	12	19.39	19.38	19.57	19.39	19.36	19.36		
5	HQAM	1	24	19.38	19.46	19.55	19.50	19.36	19.36		
5	HQAM	12	0	18.29	18.39	18.41	18.27	18.23	18.23	20	2.3
5	HQAM	12	0	18.17	18.23	18.36	18.19	18.12	18.12		
5	HQAM	12	13	18.15	18.31	18.41	18.32	18.22	18.22		
5	HQAM	25	0	18.30	18.47	18.55	18.50	18.38	18.38		
5	ZSFGM	1	0	18.39	18.41	18.56	18.55	18.45	18.45	18	4.3
5	ZSFGM	1	12	18.50	18.56	18.63	18.55	18.49	18.49		
5	ZSFGM	1	24	18.44	18.35	18.48	18.41	18.43	18.43		
5	ZSFGM	12	0	18.24	18.44	18.46	18.42	18.22	18.22		
5	ZSFGM	12	7	18.27	18.37	18.45	18.41	18.27	18.27		
5	ZSFGM	12	13	18.42	18.52	18.62	18.55	18.47	18.47	18	4.3
5	ZSFGM	25	0	18.40	18.62	18.62	18.55	18.50	18.50		

Band 41 HPUE Ant1											
RW (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 Hgh Ch / Freq	Power High Hgh Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39790	40198	40600	41006	41400	41800		
20	QPSK	1	0	22.88	22.97	22.93	22.83	22.83	22.83	23.9	0
20	QPSK	1	49	22.38	22.83	22.86					



GEMTPO AVG									
Channel	Build Average Power (dBm)			Turn-up	Frame Average Power (dBm)			Turn-up	Limit
	812	861	810	Limit	812	861	810	Limit	
Receiving (WRC)	180.2	180.3	180.8	(dBm)	180.2	180.0	180.8	(dBm)	
OMN 1 Tx site	29.31	29.64	29.43	30.00	29.31	29.64	29.43	31.00	
OPNS 1 Tx site	29.24	29.47	29.30	30.00	29.24	29.47	29.30	31.00	
OPNS 2 Tx site	29.06	29.84	29.72	27.00	29.06	29.84	29.72	27.00	
OPNS 3 Tx site	24.42	24.20	24.48	25.00	24.18	23.99	24.24	25.00	
OPNS 4 Tx site	21.84	21.90	21.86	23.00	18.64	18.92	18.96	20.00	
EDGE 1 Tx site	23.82	23.87	23.88	25.00	14.82	14.87	14.88	16.00	
EDGE 2 Tx site	22.70	22.70	22.73	23.00	14.70	14.70	14.73	17.00	
EDGE 3 Tx site	20.00	20.00	20.00	22.00	18.64	18.72	18.83	17.74	
EDGE 4 Tx site	18.75	18.83	18.81	20.00	12.75	13.83	13.81	17.00	
WCCMA 4C									
Band	WCCMA 6			Turn-up	WCCMA 1V			Turn-up	Limit
Tx Channel	5862	5900	5938	Limit	5312	5451	5513	Limit	
Rx Channel	5902	5900	5938	(dBm)	5317	5368	5398	(dBm)	
Receiving (WRC)	69.24	69.00	69.18	70.00	69.24	69.00	69.18	70.00	
SOPF Rel 50	AWR 12 200us	21.03	21.30	21.21	22.00	21.48	21.55	21.73	23.00
SOPF Rel 50	RMC 12 200us	21.05	21.21	21.44	22.00	21.58	21.78	21.76	23.00
SOPF Rate	HEOPA Subsite 1	20.27	20.41	20.21	21.00	20.77	20.90	20.81	22.00
SOPF Rate	HEOPA Subsite 2	20.23	20.20	20.19	21.00	20.79	20.77	20.58	22.00
SOPF Rate	HEOPA Subsite 3	19.84	19.81	19.80	21.00	21.17	20.20	20.00	21.00
SOPF Rate	HEOPA Subsite 4	18.75	18.84	18.58	21.00	20.40	20.09	20.00	21.00
SOPF Rate	DC-HEOPA Subsite 1	20.45	20.24	20.30	21.00	21.03	20.80	20.87	22.00
SOPF Rate	DC-HEOPA Subsite 2	20.14	20.20	20.11	21.00	20.85	20.81	20.85	22.00
SOPF Rate	DC-HEOPA Subsite 3	19.88	19.85	19.85	21.00	20.32	20.27	19.87	21.00
SOPF Rate	DC-HEOPA Subsite 4	19.83	19.70	19.47	21.00	20.07	20.08	20.11	21.00
SOPF Rate	HEOPA Subsite 1	21.46	21.32	21.18	21.00	21.85	21.73	21.41	22.00
SOPF Rate	HEOPA Subsite 2	19.26	19.20	19.25	18.00	14.54	14.72	14.28	16.00
SOPF Rate	HEOPA Subsite 3	20.20	20.41	20.02	20.00	20.64	20.73	20.44	21.00
SOPF Rate	HEOPA Subsite 4	18.38	19.21	18.14	19.00	18.48	19.71	18.82	20.00
SOPF Rate	HEOPA Subsite 5	21.15	21.34	21.17	21.00	21.98	21.84	21.54	22.00



Band 2 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Time-up (min)	MRR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.08	21.10	21.01	21.8	0		
20	QPSK	1	49	20.89	20.98	20.84	21.8	0		
20	QPSK	1	99	20.87	21.07	20.98	21.8	0		
20	QPSK	50	24	20.97	21.00	20.97	21.8	0		
20	QPSK	50	50	20.90	21.02	20.93	21.8	0		
20	QPSK	100	0	21.00	21.12	20.98	21.8	0		
20	16QAM	50	0	20.96	21.00	20.99	21.8	0		
20	16QAM	1	49	21.01	21.03	21.03	21.8	0		
20	16QAM	1	99	20.97	21.05	20.98	21.8	0		
20	16QAM	50	0	20.91	20.99	20.99	21.8	0		
20	16QAM	50	24	20.98	20.97	20.95	21.8	0		
20	16QAM	50	50	20.97	20.92	20.88	21.8	0		
20	16QAM	100	0	20.94	20.98	20.92	21.8	0		
20	64QAM	1	0	20.99	20.97	20.87	21.8	0		
20	64QAM	1	49	20.77	20.90	20.89	21.8	0		
20	64QAM	50	0	20.81	20.89	20.83	21.8	0		
20	64QAM	50	24	20.85	20.88	20.89	21.8	0		
20	64QAM	50	50	20.84	20.85	20.82	21.8	0		
20	64QAM	100	0	20.83	20.83	20.82	21.8	0		
20	256QAM	1	49	17.76	17.75	17.67	19.2	2.8		
20	256QAM	1	99	17.76	17.75	17.67	19.2	2.8		
20	256QAM	50	24	17.54	17.61	17.46	19.2	2.8		
20	256QAM	50	50	17.65	17.71	17.61	19.2	2.8		
20	256QAM	100	0	17.56	17.69	17.61	19.2	2.8		
Channel										
Frequency (MHz)										
15	QPSK	1	0	20.96	21.00	20.94	21.8	0		
15	QPSK	1	37	20.94	21.00	20.91	21.8	0		
15	QPSK	1	74	20.78	20.92	20.78	21.8	0		
15	QPSK	36	0	20.93	21.01	20.83	21.8	0		
15	QPSK	36	20	20.85	20.94	20.80	21.8	0		
15	QPSK	36	39	20.85	20.96	20.87	21.8	0		
15	QPSK	75	0	20.89	20.97	20.86	21.8	0		
15	QPSK	75	0	20.92	20.96	20.78	21.8	0		
15	16QAM	1	37	20.97	20.96	20.97	21.8	0		
15	16QAM	1	74	20.81	20.87	20.85	21.8	0		
15	16QAM	36	0	20.88	20.97	20.88	21.8	0		
15	16QAM	36	20	20.70	20.82	20.70	21.8	0		
15	16QAM	75	0	20.92	20.95	20.93	21.8	0		
15	64QAM	1	0	20.46	20.60	20.50	21.8	0		
15	64QAM	1	37	20.81	20.89	20.83	21.8	0		
15	64QAM	1	74	20.50	20.50	20.50	21.8	0		
15	64QAM	36	0	19.48	19.61	19.51	21.8	0.8		
15	64QAM	36	20	19.40	19.58	19.40	21.8	0.8		
15	64QAM	36	39	19.49	19.55	19.51	21.8	0.8		
15	64QAM	75	0	19.39	19.59	19.47	21.8	0.8		
15	256QAM	1	37	17.69	17.70	17.72	19.2	2.8		
15	256QAM	1	74	17.60	17.68	17.58	19.2	2.8		
15	256QAM	36	0	17.51	17.68	17.48	19.2	2.8		
15	256QAM	36	20	17.39	17.50	17.42	19.2	2.8		
15	256QAM	36	39	17.52	17.66	17.55	19.2	2.8		
15	256QAM	75	0	17.46	17.62	17.63	19.2	2.8		
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.00	21.00	21.00	21.8	0		
10	QPSK	1	25	20.90	21.01	20.94	21.8	0		
10	QPSK	1	49	20.77	20.85	20.78	21.8	0		
10	QPSK	12	0	20.97	21.00	20.97	21.8	0		
10	QPSK	25	12	20.91	20.93	20.93	21.8	0		
10	QPSK	25	25	20.87	20.87	20.88	21.8	0		
10	QPSK	50	0	20.96	20.96	20.96	21.8	0		
10	16QAM	1	0	20.85	20.87	20.79	21.8	0		
10	16QAM	1	24	20.96	20.96	20.96	21.8	0		
10	16QAM	25	12	20.43	20.62	20.49	21.8	0		
10	16QAM	25	25	20.50	20.60	20.50	21.8	0		
10	16QAM	50	0	20.55	20.57	20.59	21.8	0		
10	64QAM	1	0	20.51	20.62	20.53	21.8	0		
10	64QAM	1	24	20.72	20.72	20.73	21.8	0		
10	64QAM	1	49	20.48	20.64	20.57	21.8	0		
10	64QAM	25	0	19.46	19.54	19.50	21.8	0.8		
10	64QAM	25	12	19.55	19.70	19.56	21.8	0.8		
10	64QAM	50	0	19.49	19.54	19.52	21.8	0.8		
10	256QAM	1	24	17.66	17.61	17.61	19.2	2.8		
10	256QAM	1	49	17.60	17.70	17.54	19.2	2.8		
10	256QAM	12	0	17.48	17.61	17.50	19.2	2.8		
10	256QAM	25	12	17.45	17.50	17.47	19.2	2.8		
10	256QAM	25	25	17.52	17.61	17.53	19.2	2.8		
10	256QAM	50	0	17.43	17.48	17.48	19.2	2.8		
Channel										
Frequency (MHz)										
5	QPSK	1	0	20.90	21.00	20.95	21.8	0		
5	QPSK	1	12	20.90	21.00	20.91	21.8	0		
5	QPSK	1	24	20.85	20.90	20.80	21.8	0		
5	QPSK	12	0	20.93	21.00	20.94	21.8	0		
5	QPSK	12	7	20.88	20.90	20.87	21.8	0		
5	QPSK	12	13	20.82	20.86	20.80	21.8	0		
5	QPSK	25	0	20.93	21.00	20.94	21.8	0		
5	16QAM	1	0	20.92	20.90	20.80	21.8	0		
5	16QAM	1	12	20.92	21.00	20.91	21.8	0		
5	16QAM	12	0	20.84	20.88	20.86	21.8	0		
5	16QAM	12	7	20.47	20.60	20.46	21.8	0		
5	16QAM	25	0	20.46	20.58	20.56	21.8	0		
5	16QAM	25	7	20.47	20.56	20.58	21.8	0		
5	64QAM	1	0	20.46	20.56	20.52	21.8	0		
5	64QAM	1	12	20.94	20.91	20.85	21.8	0		
5	64QAM	1	24	20.51	20.58	20.54	21.8	0		
5	64QAM	12	0	19.39	19.63	19.55	21.8	0.8		
5	64QAM	12	7	19.45	19.55	19.63	21.8	0.8		
5	64QAM	12	13	19.50	19.63	19.59	21.8	0.8		
5	64QAM	25	0	19.49	19.67	19.50	21.8	0.8		
5	64QAM	25	7	17.47	17.60	17.58	19.2	2.8		
5	256QAM	1	12	17.68	17.77	17.71	19.2	2.8		
5	256QAM	1	24	17.36	17.66	17.63	19.2	2.8		
5	256QAM	12	0	17.49	17.58	17.63	19.2	2.8		
5	256QAM	12	7	17.50	17.47	17.41	19.2	2.8		
5	256QAM	12	13	17.50	17.68	17.54	19.2	2.8		
5	256QAM	25	0	17.49	17.50	17.65	19.2	2.8		
Channel										
Frequency (MHz)										
3	QPSK	1	0	21.00	21.00	20.95	21.8	0		
3	QPSK	1	8	21.00	21.00	20.81	21.8	0		
3	QPSK	1	14	20.80	20.93	20.79	21.8	0		
3	QPSK	8	0	20.92	21.00	20.95	21.8	0		
3	QPSK	8	4	20.88	20.95	20.84	21.8	0		
3	QPSK	8	7	20.81	20.89	20.80	21.8	0		
3	QPSK	15	0	20.98	21.00	20.98	21.8	0		
3	16QAM	1	0	20.87	20.90	20.78	21.8	0		
3	16QAM	1	8	20.86	21.00	20.95	21.8	0		
3	16QAM	8	0	20.41	20.53	20.43	21.8	0		
3	16QAM	8	4	20.43	20.48	20.51	21.8	0		
3	16QAM	15	0	20.47	20.63	20.57	21.8	0		
3	16QAM	15	0	20.60	20.59	20.50	21.8	0		
3	64QAM	1	0	20.46	20.63	20.50	21.8	0		
3	64QAM	1	8	20.63	20.68	20.64	21.8	0		
3	64QAM	1	14	20.49	20.64	20.53	21.8	0		
3	64QAM	8	0	19.30	19.64	19.61	21.8	0.8		
3	64QAM	8	4	19.48	19.55	19.46	21.8	0.8		
3	64QAM	8	7	19.58	19.63	19.				





Band 25 Ant2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	20.97	21.02	21.10	21.8	0		
20	QPSK	1	49	21.12	21.18	21.11				
20	QPSK	1	99	21.12	21.18	21.11				
20	QPSK	50	0	21.04	21.17	21.02				
20	QPSK	50	24	20.98	21.01	21.03				
20	QPSK	50	50	20.92	21.03	20.92	21.8	0		
20	QPSK	100	0	21.09	21.15	21.11				
20	16QAM	1	0	21.06	21.11	21.04	21.8	0		
20	16QAM	1	49	21.03	21.14	21.04				
20	16QAM	1	99	21.06	21.06	21.00				
20	16QAM	50	0	20.92	20.99	20.95				
20	16QAM	50	24	20.85	20.83	20.90	21.8	0		
20	16QAM	50	50	20.87	20.71	20.86				
20	16QAM	100	0	20.99	20.96	20.94				
20	64QAM	1	0	20.85	20.70	20.83	21.8	0		
20	64QAM	1	49	20.83	20.77	20.73				
20	64QAM	1	99	20.87	20.82	20.84				
20	64QAM	50	0	19.83	19.83	19.81	21	0.8		
20	64QAM	50	24	19.89	19.94	19.86				
20	64QAM	50	50	19.81	19.88	19.85				
20	64QAM	100	0	19.87	19.85	19.81	19	2.8		
20	256QAM	1	0	17.85	17.77	17.85	19	2.8		
20	256QAM	1	49	17.85	17.82	17.82				
20	256QAM	1	99	17.85	17.84	17.87				
20	256QAM	50	24	17.85	17.86	17.84	19	2.8		
20	256QAM	50	50	17.87	17.73	17.84				
20	256QAM	100	0	17.85	17.87	17.85				
Channel										
Frequency (MHz)										
15	QPSK	1	0	20.84	21.07	20.88	21.8	0		
15	QPSK	1	37	21.04	21.09	20.97				
15	QPSK	1	74	21.08	21.01	21.03				
15	QPSK	36	0	20.99	21.07	20.88	21.8	0		
15	QPSK	36	20	20.93	21.06	20.90				
15	QPSK	36	36	20.79	20.96	20.85				
15	16QAM	1	0	21.01	21.16	21.02	21.8	0		
15	16QAM	1	49	20.99	21.08	20.93				
15	16QAM	1	37	20.98	21.10	20.99				
15	16QAM	1	74	21.02	21.04	21.02				
15	16QAM	36	0	20.84	20.82	20.80	21.8	0		
15	16QAM	36	20	20.48	20.57	20.39				
15	16QAM	75	0	20.48	20.55	20.57				
15	64QAM	1	0	20.87	20.87	20.88	21.8	0		
15	64QAM	1	37	20.83	20.85	20.84				
15	64QAM	1	74	20.47	20.52	20.40				
15	64QAM	36	0	19.46	19.53	19.43	21	0.8		
15	64QAM	36	20	19.50	19.48	19.48				
15	64QAM	36	36	19.35	19.25	19.32				
15	64QAM	75	0	19.84	19.88	19.87				
15	256QAM	1	0	17.83	17.86	17.84	19	2.8		
15	256QAM	1	37	17.49	17.54	17.41				
15	256QAM	1	74	17.83	17.86	17.83				
15	256QAM	36	20	17.85	17.82	17.48	19	2.8		
15	256QAM	36	36	17.47	17.53	17.48				
15	256QAM	36	39	17.87	17.59	17.59				
15	256QAM	75	0	17.41	17.48	17.45				
Channel										
Frequency (MHz)										
10	QPSK	1	0	20.82	21.01	21.01	21.8	0		
10	QPSK	1	25	20.99	21.08	21.04				
10	QPSK	1	49	21.04	21.09	21.02				
10	QPSK	25	0	20.99	21.07	20.88	21.8	0		
10	QPSK	25	12	20.94	21.04	20.92				
10	QPSK	25	25	20.81	20.91	20.82				
10	16QAM	1	0	21.02	21.16	20.97	21.8	0		
10	16QAM	1	0	20.91	21.04	20.90				
10	16QAM	1	25	20.83	21.10	20.94				
10	16QAM	1	49	20.83	20.96	20.86	21.8	0		
10	16QAM	25	0	20.48	20.57	20.39				
10	16QAM	25	12	20.54	20.58	20.38				
10	16QAM	25	25	20.96	20.94	20.94				
10	16QAM	50	0	20.50	20.54	20.58				
10	64QAM	1	0	20.88	20.83	20.82	21.8	0		
10	64QAM	1	25	20.84	20.86	20.88				
10	64QAM	1	49	20.42	20.40	20.48				
10	64QAM	25	0	19.45	19.58	19.48	21	0.8		
10	64QAM	25	12	19.55	19.42	19.47				
10	64QAM	25	25	19.54	19.63	19.55				
10	64QAM	50	0	19.51	19.55	19.48				
10	256QAM	1	0	17.83	17.82	17.48	19	2.8		
10	256QAM	1	25	17.48	17.48	17.41				
10	256QAM	1	49	17.86	17.82	17.82				
10	256QAM	25	12	17.48	17.59	17.50	19	2.8		
10	256QAM	25	25	17.84	17.80	17.59				
10	256QAM	50	0	17.88	17.82	17.81				
Channel										
Frequency (MHz)										
5	QPSK	1	0	20.82	21.01	21.01	21.8	0		
5	QPSK	1	12	21.00	21.16	21.02				
5	QPSK	1	24	21.07	21.06	21.05				
5	QPSK	12	0	20.91	21.03	20.90	21.8	0		
5	QPSK	12	7	20.85	21.04	20.91				
5	QPSK	12	13	20.78	21.00	20.81				
5	QPSK	25	0	21.02	21.03	20.98	21.8	0		
5	16QAM	1	0	20.91	20.90	20.92	21.8	0		
5	16QAM	1	12	20.88	21.08	21.00				
5	16QAM	1	24	20.93	20.96	20.94				
5	16QAM	12	0	20.57	20.59	20.83	21.8	0		
5	16QAM	12	7	20.53	20.53	20.39				
5	16QAM	12	13	20.86	20.90	20.84				
5	16QAM	25	0	20.48	20.56	20.58				
5	64QAM	1	0	20.84	20.87	20.80	21.8	0		
5	64QAM	1	12	20.86	20.79	20.88				
5	64QAM	1	24	20.46	20.47	20.47				
5	64QAM	12	0	19.39	19.53	19.41	21	0.8		
5	64QAM	12	7	19.54	19.48	19.48				
5	64QAM	12	13	19.57	19.68	19.62				
5	64QAM	25	0	19.82	19.85	19.86				
5	256QAM	1	0	17.83	17.87	17.58	19	2.8		
5	256QAM	1	12	17.54	17.51	17.39				
5	256QAM	1	24	17.80	17.70	17.62				
5	256QAM	12	0	17.48	17.53	17.43	19	2.8		
5	256QAM	12	7	17.41	17.62	17.48				
5	256QAM	12	13	17.88	17.85	17.59				
5	256QAM	25	0	17.83	17.58	17.53				
Channel										
Frequency (MHz)										
3	QPSK	1	0	20.82	21.16	21.15	21.8	0		
3	QPSK	1	8	21.05	21.06	20.97				
3	QPSK	1	14	21.08	21.12	21.06				
3	QPSK	8	0	20.87	21.14	20.95	21.8	0		
3	QPSK	8	4	20.88	20.97	21.00				
3	QPSK	8	7	20.85	20.93	20.85				
3	QPSK	15	0	21.04	21.10	21.05				
3	16QAM	1	0	21.02	21.07	20.96	21.8	0		
3	16QAM	1	8	20.89	21.02	20.95				
3	16QAM	1	15	20.95	20.99	20.91				
3	16QAM	8	0	20.51	20.63	20.55	21.8	0		
3	16QAM	8	4	20.50	20.56	20.42				
3	16QAM	8	7	20.53	20.56	20.49				
3	16QAM	15	0	20.55	20.64	20.57				
3	64QAM	1	0	20.81	20.84	20.81	21.8	0		
3	64QAM	1	8	20.90	20.77	20.99				
3	64QAM	1	14	20.47	20.47	20.42				
3	64QAM	8	0	19.47	1					



Band 38 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel							37850	38000	38150
Frequency (MHz)							2575	2590	2610
20	QPSK	1	0	22.72	22.80	22.88	23.4	0	
20	QPSK	1	49	22.71	22.84	22.80			
20	QPSK	1	99	22.69	22.71	22.71			
20	QPSK	50	0	21.82	21.90	21.93			
20	QPSK	50	24	21.84	21.89	21.79	23	0.4	
20	QPSK	50	49	21.86	21.86	21.86			
20	QPSK	100	0	21.81	21.85	21.85			
20	HQAM	1	0	21.76	21.85	21.78	23	0.4	
20	HQAM	1	49	21.66	21.74	21.60			
20	HQAM	1	99	21.74	21.81	21.73			
20	HQAM	50	0	20.81	20.86	20.80	22	1.4	
20	HQAM	50	24	20.77	20.79	20.79			
20	HQAM	50	50	20.63	20.70	20.71			
20	HQAM	100	0	20.60	20.65	20.64			
20	HQAM	1	0	20.55	20.55	20.85	22	1.4	
20	HQAM	1	49	20.78	20.91	20.83			
20	HQAM	1	99	20.74	20.84	20.74			
20	HQAM	50	0	19.75	19.85	19.72	21	2.4	
20	HQAM	50	24	19.75	19.81	19.77			
20	HQAM	50	50	19.69	19.70	19.69			
20	HQAM	100	0	19.62	19.96	19.90			
20	256QAM	1	0	17.84	17.94	17.82	19	4.4	
20	256QAM	1	49	17.79	17.80	17.85			
20	256QAM	1	99	17.89	17.92	17.84			
20	256QAM	50	0	17.81	17.86	17.79			
20	256QAM	50	24	17.80	17.83	17.74	19	4.4	
20	256QAM	50	50	17.82	17.78	17.87			
20	256QAM	100	0	17.85	17.85	17.85			
Channel							37850	38000	38175
Frequency (MHz)							2577.5	2595	2617.5
15	QPSK	1	0	22.60	22.70	22.74	23.4	0	
15	QPSK	1	47	22.66	22.73	22.68			
15	QPSK	1	74	22.63	22.63	22.84			
15	QPSK	36	0	21.79	21.80	21.84			
15	QPSK	36	20	21.75	21.78	21.78	23	0.4	
15	QPSK	36	49	21.76	21.80	21.69			
15	QPSK	75	0	21.76	21.82	21.70			
15	HQAM	1	0	21.67	21.73	21.65	23	0.4	
15	HQAM	1	47	21.65	21.65	21.86			
15	HQAM	1	74	21.60	21.70	21.70			
15	HQAM	36	0	20.72	20.73	20.67	22	1.4	
15	HQAM	36	20	20.62	20.65	20.59			
15	HQAM	36	36	20.54	20.70	20.56			
15	HQAM	75	0	20.81	20.86	20.69	22	1.4	
15	HQAM	1	0	20.78	20.80	20.79			
15	HQAM	1	47	20.85	20.79	20.69	22	1.4	
15	HQAM	1	74	20.63	20.74	20.81			
15	HQAM	36	0	19.67	19.71	19.65	21	2.4	
15	HQAM	36	20	19.69	19.74	19.64			
15	HQAM	36	36	19.68	19.68	19.68			
15	HQAM	75	0	19.71	19.80	19.70			
15	256QAM	1	0	17.76	17.82	17.78	19	4.4	
15	256QAM	1	47	17.81	17.84	17.82			
15	256QAM	1	74	17.81	17.82	17.80			
15	256QAM	36	0	17.65	17.81	17.68	19	4.4	
15	256QAM	36	20	17.75	17.80	17.63			
15	256QAM	36	36	17.48	17.68	17.63			
15	256QAM	75	0	17.60	17.86	17.67			
Channel							37850	38000	38175
Frequency (MHz)							2575	2595	2615
10	QPSK	1	0	22.62	22.74	22.74	23.4	0	
10	QPSK	1	25	22.61	22.79	22.73			
10	QPSK	1	49	22.61	22.62	22.65			
10	QPSK	12	0	21.74	21.80	21.81			
10	QPSK	25	12	21.79	21.78	21.69	23	0.4	
10	QPSK	25	25	21.62	21.62	21.76			
10	QPSK	50	0	21.73	21.80	21.65			
10	HQAM	1	0	21.70	21.70	21.65	23	0.4	
10	HQAM	1	25	21.68	21.66	21.86			
10	HQAM	1	49	21.64	21.67	21.64			
10	HQAM	25	0	20.70	20.77	20.71	22	1.4	
10	HQAM	25	12	20.68	20.68	20.65			
10	HQAM	25	25	20.56	20.53	20.63			
10	HQAM	50	0	20.76	20.88	20.79	22	1.4	
10	HQAM	1	0	20.79	20.84	20.72			
10	HQAM	1	25	20.71	20.80	20.77	22	1.4	
10	HQAM	25	0	19.74	19.82	19.60	21	2.4	
10	HQAM	25	12	19.64	19.70	19.68			
10	HQAM	25	25	19.62	19.65	19.58			
10	HQAM	50	0	19.76	19.87	19.81			
10	256QAM	1	0	17.74	17.80	17.68	19	4.4	
10	256QAM	1	25	17.68	17.76	17.76			
10	256QAM	1	49	17.81	17.86	17.75			
10	256QAM	25	0	17.68	17.74	17.69	19	4.4	
10	256QAM	25	12	17.73	17.66	17.64			
10	256QAM	25	25	17.50	17.71	17.63			
10	256QAM	50	0	17.76	17.78	17.78			
Channel							37875	38000	38175
Frequency (MHz)							2577.5	2595	2617.5
5	QPSK	1	0	22.63	22.75	22.74	23.4	0	
5	QPSK	1	25	22.58	22.70	22.68			
5	QPSK	1	24	22.58	22.69	22.58			
5	QPSK	12	0	21.66	21.80	21.66			
5	QPSK	12	7	21.71	21.77	21.75	23	0.4	
5	QPSK	12	13	21.79	21.79	21.71			
5	QPSK	25	0	21.74	21.69	21.72			
5	HQAM	1	0	21.72	21.80	21.71	23	0.4	
5	HQAM	1	12	21.62	21.61	21.62			
5	HQAM	1	24	21.69	21.74	21.68			
5	HQAM	12	0	20.72	20.81	20.69	22	1.4	
5	HQAM	12	7	20.74	20.67	20.56			
5	HQAM	12	13	20.68	20.61	20.62			
5	HQAM	25	0	20.86	20.92	20.74	22	1.4	
5	HQAM	1	0	20.82	20.91	20.80			
5	HQAM	1	12	20.73	20.86	20.77			
5	HQAM	1	24	20.66	20.77	20.68			
5	HQAM	12	0	19.66	19.72	19.69	21	2.4	
5	HQAM	12	7	19.72	19.76	19.66			
5	HQAM	12	13	19.68	19.69	19.64			
5	HQAM	25	0	19.71	19.83	19.66			
5	256QAM	1	0	17.72	17.87	17.74	19	4.4	
5	256QAM	1	12	17.67	17.84	17.75			
5	256QAM	1	24	17.82	17.79	17.77			
5	256QAM	12	7	17.77	17.76	17.69	19	4.4	
5	256QAM	12	13	17.69	17.62	17.68			
5	256QAM	25	0	17.72	17.60	17.66			

Band 38 HPUE Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel							37860	38000	38150
Frequency (MHz)							2576	2590	2610
20	QPSK	1	0	23.83	23.97	23.90	25	0	
20	QPSK	1	49	23.75	23.81	23.76			
20	QPSK	1	99	23.84	23.85	23.83			
20	QPSK	50	0	23.78	23.95	23.77			
20	QPSK	50	24	23.76	23.86	23.81	25	0	
20	QPSK	50	50	23.82	23.77	23.83			
20	QPSK	100	0	23.83	23.89	23.75			
20	HQAM	1	0	23.86	23.96	23.89	25	0	
20	HQAM	1	49	23.88	23.92	23.85			
20	HQAM	1	99	23.89	23.81	23.79			
20	HQAM	50	0	23.69	23.84	23.76	25	0	
20	HQAM	50	24	23.71	23.82	23.85			
20	HQAM	50	50	23.58	23.77	23.66			
20	HQAM	100	0	23.65	23.86	23.59			
20	HQAM	1	0	23.80	23.77	23.51			
20	HQAM	1	49	23.88	23.86	23.59	25	0	
20	HQAM	1	99	23.62	23.81	23.83			
20	HQAM	50	0	22.51	22.78	22.57	24	1	
20	HQAM	50	24	22.59	22.60	22.58			
20	HQAM	50	50	22.53	22.56	22.46			
20	HQAM	100	0	22.66	22.79	22.74			
20	256QAM	1	0	20.87	21.00	20.81	22	3	
20	256QAM	1	49	20.77	20.85	20.82			
20	256QAM	1	99	20.72	20.81	20.60			
20	256QAM	50	0	20.70	20.61	20.79			
20	256QAM	50	24	20.69	20.71	20.57	22	3	
20	256QAM	50	50	20.61	20.84	20.64			
20	256QAM	100	0	20.84	20.87	20.84			
Channel							37825	38000	38175
Frequency (MHz)							2577.5	2595	2617.5
15	QPSK	1	0	23.73	23.80	23.82	25	0	
15	QPSK	1	47	23.56	23.68	23.62			
15	QPSK	1	74	23.76	23.79	23.75			
15	QPSK	36	0	23.69	23.77	23.67			
15	QPSK	36	20	23.56	23.69	23.65	25	0	
15	QPSK	36	49	23.54	23.69	23.67			
15	QPSK	75	0	23.67	23.71	23.60			
15	HQAM	1	0	23.65	23.81	23.62	25	0	
15	HQAM	1	47	23.75	23.85	23.86			
15	HQAM	1	74	23.59	23.71	23.68			
15	HQAM	36	0	23.55	23.78	23.67	25	0	
15	HQAM	36	20	23.50	23.62	23.46			
15	HQAM	36	36	23.43	23.65	23.46			
15	HQAM	75	0	23.75	23.84	23.74			
15	HQAM	1	0	23.81	23.99	23.73	25	0	
15	HQAM	1	47	23.42	23.70	23.59			
15	HQAM	1	74	23.52	23.66	23.36			
15	HQAM	36	0	23.43	23.68	23.51			
15	HQAM	36	20	22.4					



Band 41 Ant2												
RW (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 Hgt Ch / Freq	Power High Hgt Ch / Freq	Turn-up Int (dBm)	MPR (dB)	
Channel												
Frequency (MHz)				39790	40198	40600	41006	41406	41800			
20	QPSK	1	0	22.43	22.43	22.54	22.59	22.52	22.52	23.4	0	
20	QPSK	1	49	22.35	22.43	22.49	22.45	22.42	22.42			
20	QPSK	1	89	22.48	22.48	22.54	22.41	22.48	22.48			
20	QPSK	50	0	21.49	21.60	21.54	21.55	21.50	21.50	23	0.4	
20	QPSK	50	24	21.49	21.42	21.55	21.48	21.45	21.45			
20	QPSK	50	48	21.52	21.52	21.51	21.51	21.51	21.51			
20	QPSK	100	0	21.52	21.56	21.50	21.49	21.54	21.54	23	0.4	
20	HQAM	1	0	21.51	21.53	21.58	21.51	21.49	21.49			
20	HQAM	1	49	21.41	21.42	21.51	21.38	21.38	21.38			
20	HQAM	1	99	21.38	21.32	21.45	21.39	21.33	21.33			
20	HQAM	50	0	20.49	20.50	20.54	20.59	20.52	20.52	22	1.4	
20	HQAM	50	24	20.47	20.39	20.53	20.46	20.41	20.41			
20	HQAM	50	50	20.47	20.50	20.58	20.53	20.54	20.54			
20	HQAM	100	0	20.52	20.49	20.67	20.54	20.49	20.49	22	1.4	
20	HQAM	100	0	20.52	20.51	20.63	20.45	20.52	20.52			
20	HQAM	1	49	20.49	20.50	20.61	20.58	20.47	20.47			
20	HQAM	1	99	20.49	20.53	20.54	20.42	20.41	20.41			
20	HQAM	50	24	19.36	19.43	19.47	19.35	19.34	19.34	21	2.4	
20	HQAM	50	50	19.40	19.41	19.49	19.42	19.40	19.40			
20	HQAM	100	0	19.49	19.49	19.82	19.51	19.49	19.49			
20	25QAM	1	0	17.47	17.54	17.60	17.52	17.54	17.54	19	4.4	
20	25QAM	1	49	17.41	17.41	17.54	17.42	17.48	17.48			
20	25QAM	1	99	17.36	17.40	17.48	17.37	17.36	17.36			
20	25QAM	50	0	17.44	17.46	17.56	17.46	17.48	17.48			
20	25QAM	50	24	17.39	17.40	17.44	17.36	17.31	17.31	19	4.4	
20	25QAM	50	50	17.38	17.38	17.50	17.43	17.41	17.41			
20	25QAM	100	0	17.48	17.48	17.66	17.50	17.58	17.58			
Channel												
Frequency (MHz)												
15	QPSK	1	0	22.21	22.42	22.63	22.74	22.62	22.62	23	0	
15	QPSK	1	37	22.22	22.39	22.36	22.33	22.37	22.37			
15	QPSK	1	74	22.41	22.37	22.42	22.34	22.44	22.44			
15	QPSK	36	0	21.42	21.97	21.56	21.41	21.45	21.45	23	0.4	
15	QPSK	36	20	21.39	21.27	21.48	21.34	21.40	21.40			
15	QPSK	36	40	21.48	21.43	21.54	21.48	21.48	21.48			
15	QPSK	75	0	21.37	21.60	21.46	21.37	21.47	21.47	23	0.4	
15	HQAM	1	0	21.41	21.48	21.52	21.46	21.36	21.36			
15	HQAM	1	37	21.39	21.39	21.34	21.34	21.34	21.34			
15	HQAM	1	74	21.25	21.26	21.37	21.34	21.27	21.27	23	0.4	
15	HQAM	36	0	20.42	20.42	20.60	20.44	20.47	20.47	22	1.4	
15	HQAM	36	20	20.44	20.34	20.30	20.25	20.25	20.25			
15	HQAM	36	36	20.38	20.39	20.45	20.43	20.48	20.48			
15	HQAM	75	0	20.48	20.30	20.50	20.46	20.34	20.34	22	1.4	
15	HQAM	1	37	20.41	20.42	20.59	20.45	20.38	20.38			
15	HQAM	1	74	20.43	20.46	20.47	20.37	20.37	20.37			
15	HQAM	36	0	19.34	19.34	19.47	19.35	19.44	19.44	21	2.4	
15	HQAM	36	20	19.24	19.39	19.41	19.29	19.22	19.22			
15	HQAM	36	36	19.38	19.38	19.38	19.28	19.28	19.28			
15	HQAM	75	0	19.45	19.44	19.55	19.45	19.35	19.35			
15	25QAM	1	0	17.34	17.43	17.45	17.48	17.41	17.41	19	4.4	
15	25QAM	1	49	17.41	17.38	17.43	17.38	17.42	17.42			
15	25QAM	1	74	17.30	17.30	17.42	17.33	17.29	17.29			
15	25QAM	36	0	17.43	17.38	17.43	17.45	17.33	17.33	19	4.4	
15	25QAM	36	20	17.23	17.38	17.30	17.22	17.22	17.22			
15	25QAM	36	36	17.27	17.31	17.36	17.31	17.31	17.31			
15	25QAM	75	0	17.52	17.50	17.56	17.46	17.54	17.54			
Channel												
Frequency (MHz)												
10	QPSK	1	0	22.27	22.46	22.62	22.74	22.62	22.62	23.0	0	
10	QPSK	1	25	22.29	22.31	22.42	22.30	22.30	22.30			
10	QPSK	1	49	22.40	22.33	22.48	22.32	22.44	22.44			
10	QPSK	1	74	21.45	21.46	21.54	21.45	21.45	21.45	23	0.4	
10	QPSK	25	12	21.44	21.28	21.43	21.41	21.42	21.42			
10	QPSK	25	25	21.43	21.46	21.51	21.44	21.45	21.45			
10	QPSK	50	0	21.49	21.44	21.48	21.44	21.44	21.44	23	0.4	
10	HQAM	1	0	21.37	21.44	21.47	21.38	21.42	21.42			
10	HQAM	1	25	21.38	21.36	21.46	21.26	21.26	21.26			
10	HQAM	1	49	21.31	21.21	21.33	21.33	21.30	21.30	23	0.4	
10	HQAM	25	0	20.40	20.40	20.52	20.55	20.44	20.44	22	1.4	
10	HQAM	25	12	20.39	20.28	20.45	20.38	20.28	20.28			
10	HQAM	25	25	20.40	20.43	20.51	20.51	20.41	20.41			
10	HQAM	50	0	20.41	20.42	20.50	20.44	20.40	20.40	22	1.4	
10	HQAM	50	12	20.43	20.44	20.48	20.47	20.39	20.39			
10	HQAM	1	49	20.40	20.38	20.40	20.37	20.27	20.27			
10	HQAM	25	0	19.29	19.29	19.48	19.33	19.33	19.33	21	2.4	
10	HQAM	25	12	19.31	19.38	19.34	19.23	19.23	19.23			
10	HQAM	25	25	19.26	19.27	19.45	19.33	19.36	19.36			
10	HQAM	50	0	19.46	19.34	19.54	19.39	19.37	19.37			
10	25QAM	1	0	17.43	17.41	17.47	17.47	17.43	17.43	19	4.4	
10	25QAM	1	25	17.26	17.31	17.40	17.30	17.41	17.41			
10	25QAM	1	49	17.28	17.27	17.34	17.29	17.28	17.28			
10	25QAM	25	0	17.43	17.34	17.53	17.47	17.33	17.33	19	4.4	
10	25QAM	25	12	17.25	17.33	17.39	17.25	17.23	17.23			
10	25QAM	25	25	17.31	17.24	17.43	17.31	17.33	17.33			
10	25QAM	50	0	17.51	17.45	17.51	17.45	17.49	17.49			
Channel												
Frequency (MHz)												
5	QPSK	1	0	22.25	22.45	22.54	22.54	22.48	22.48	23.0	0	
5	QPSK	1	12	22.21	22.33	22.37	22.37	22.27	22.27			
5	QPSK	1	24	22.33	22.28	22.48	22.28	22.36	22.36			
5	QPSK	12	0	21.26	21.53	21.56	21.43	21.46	21.46	23	0.4	
5	QPSK	12	7	21.41	21.38	21.49	21.39	21.34	21.34			
5	QPSK	12	13	21.36	21.49	21.50	21.43	21.40	21.40			
5	QPSK	25	0	21.46	21.42	21.49	21.43	21.44	21.44	23	0.4	
5	HQAM	1	0	21.39	21.49	21.45	21.48	21.38	21.38			
5	HQAM	1	12	21.31	21.38	21.45	21.32	21.31	21.31	23	0.4	
5	HQAM	1	24	21.26	21.18	21.38	21.36	21.27	21.27			
5	HQAM	12	0	20.37	20.40	20.58	20.44	20.48	20.48	22	1.4	
5	HQAM	12	7	20.34	20.30	20.40	20.38	20.33	20.33			
5	HQAM	12	13	20.40	20.40	20.45	20.42	20.40	20.40			
5	HQAM	25	0	20.45	20.37	20.46	20.39	20.38	20.38	22	1.4	
5	HQAM	1	0	20.49	20.43	20.59	20.34	20.41	20.41			
5	HQAM	1	12	20.41	20.44	20.57	20.49	20.36	20.36			
5	HQAM	1	24	20.41	20.37	20.50	20.33	20.30	20.30			
5	HQAM	12	0	19.33	19.35	19.48	19.34	19.41	19.41	21	2.4	
5	HQAM	12	7	19.23	19.37	19.38	19.25	19.25	19.25			
5	HQAM	12	13	19.30	19.33	19.37	19.36	19.28	19.28			
5	HQAM	25	0	19.44	19.46	19.53	19.36	19.39	19.39	21	2.4	
5	25QAM	1	0	17.38	17.42	17.54	17.45	17.40	17.40	19	4.4	
5	25QAM	1	12	17.32	17.28	17.39	17.38	17.27	17.27			
5	25QAM	1	24	17.27	17.30	17.43	17.22	17.28	17.28			
5	25QAM	12	0	17.48	17.40	17.46	17.38	17.41	17.41	19	4.4	
5	25QAM	12	7	17.29	17.28	17.40	17.32	17.21	17.21			
5	25QAM	12	13	17.27	17.27	17.38	17.31	17.25	17.25			
5	25QAM	25	0	17.50	17.47	17.51	17.44	17.45	17.45			

Band 41 HPUE Ant2												
RW (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 Hgt Ch / Freq	Power High Hgt Ch / Freq	Turn-up Int (dBm)	MPR (dB)	
Channel												
Frequency (MHz)				39790	40198	40600	41006	41406	41800			
20	QPSK	1	0	22.54	22.63	22.63	22.63	22.63	22.63	25	0	
20	QPSK	1	49	23.59	23.68	23.78	23.74	23.68	23.68			
20	QPSK	1	89	23.69	23.69	23.80	23.69	23.69	23.69			
20	QPSK	50	0	23.80	23.							



Band 42 FCC Part27Q Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)				42190	42590	42990		
20	QPSK	1	0	20.91	21.11	21.10	21.5	0
20	QPSK	1	49	20.96	21.11	21.04		
20	QPSK	1	99	20.98	21.00	20.97		
20	QPSK	50	0	19.09	19.15	19.07		
20	QPSK	50	24	19.03	19.07	18.96	20.5	1
20	QPSK	100	0	18.01	18.02	18.07		
20	HQAM	1	0	19.89	19.95	19.95	20.5	1
20	HQAM	1	49	19.84	19.97	19.84		
20	HQAM	1	99	20.04	20.10	19.98		
20	HQAM	50	0	17.82	18.00	18.07		
20	HQAM	50	24	18.11	18.13	18.07	19.5	2
20	HQAM	50	50	17.85	18.02	17.87		
20	HQAM	100	0	16.81	16.86	16.85		
20	HQAM	100	1	16.13	16.15	16.09		
20	HQAM	1	49	18.87	18.11	18.89	19.5	2
20	HQAM	1	99	19.03	19.07	18.98		
20	HQAM	50	0	17.00	17.05	17.02		
20	HQAM	50	24	16.84	16.97	16.86	18.5	3
20	HQAM	50	50	17.01	17.10	17.06		
20	HQAM	100	0	16.97	17.02	16.88		
20	ZSSBAM	1	0	19.85	19.70	19.87	20.5	1
20	ZSSBAM	1	49	19.81	19.46	19.86		
20	ZSSBAM	1	99	19.51	19.43	19.69		
20	ZSSBAM	50	0	19.77	19.67	19.87		
20	ZSSBAM	50	24	19.56	19.48	19.61	20.5	1
20	ZSSBAM	50	50	19.61	19.70	19.68		
20	ZSSBAM	100	0	19.82	19.78	19.84		
Channel								
Frequency (MHz)				42195	42595	42995		
15	QPSK	1	0	20.92	21.11	21.05	21.5	0
15	QPSK	1	37	20.82	21.04	20.98		
15	QPSK	1	74	20.91	20.96	20.81		
15	QPSK	36	0	19.05	19.09	19.02		
15	QPSK	36	20	18.92	18.87	18.89	20.5	1
15	HQAM	1	0	19.87	19.92	19.86	20.5	1
15	HQAM	1	37	19.73	19.77	19.82		
15	HQAM	1	74	19.06	20.02	19.85		
15	HQAM	36	0	17.87	18.01	17.84		
15	HQAM	36	20	18.05	18.04	18.02	19.5	2
15	HQAM	36	59	17.82	17.88	17.73		
15	HQAM	75	0	17.82	17.87	17.88		
15	HQAM	1	0	19.07	19.09	19.09	19.5	2
15	HQAM	1	37	18.98	19.09	18.89		
15	HQAM	1	74	18.96	19.05	18.98		
15	HQAM	36	0	16.88	16.84	16.87	18.5	3
15	HQAM	36	20	16.89	16.89	16.78		
15	HQAM	36	59	17.00	17.00	16.85		
15	HQAM	75	0	16.95	16.95	16.82		
15	ZSSBAM	1	0	19.46	19.87	19.82	20.5	1
15	ZSSBAM	1	37	19.35	19.45	19.62		
15	ZSSBAM	1	74	19.42	19.57	19.48		
15	ZSSBAM	36	0	19.61	19.73	19.54	20.5	1
15	ZSSBAM	36	20	19.51	19.59	19.59		
15	ZSSBAM	36	59	19.50	19.68	19.59		
15	ZSSBAM	75	0	19.47	19.62	19.63		
Channel								
Frequency (MHz)				42198	42598	42998		
10	QPSK	1	0	20.88	21.12	21.01	21.5	0
10	QPSK	1	25	20.86	20.97	20.86		
10	QPSK	1	49	20.83	20.99	20.83		
10	QPSK	12	0	18.00	18.00	18.04		
10	QPSK	25	12	18.00	18.07	18.07	20.5	1
10	QPSK	25	25	18.83	18.82	18.79		
10	HQAM	1	0	18.84	18.81	18.82	20.5	1
10	HQAM	1	25	19.78	19.84	19.77		
10	HQAM	1	49	19.97	20.00	19.86		
10	HQAM	25	0	17.88	18.00	17.86		
10	HQAM	25	12	17.88	18.00	18.04		
10	HQAM	25	25	17.82	17.87	17.75	19.5	2
10	HQAM	50	0	17.96	17.88	18.01		
10	HQAM	1	0	19.03	19.11	18.54		
10	HQAM	1	25	18.01	18.50	18.97	19.5	2
10	HQAM	1	49	18.82	19.05	18.87		
10	HQAM	25	0	16.88	17.00	16.81	18.5	3
10	HQAM	25	12	16.75	16.88	16.72		
10	HQAM	25	25	16.84	17.00	17.02		
10	HQAM	50	0	16.90	16.90	16.77		
10	ZSSBAM	1	0	19.52	19.59	19.42	20.5	1
10	ZSSBAM	1	25	19.45	19.46	19.39		
10	ZSSBAM	1	49	19.85	19.50	19.54		
10	ZSSBAM	25	0	19.58	19.67	19.48	20.5	1
10	ZSSBAM	25	12	19.47	19.50	19.54		
10	ZSSBAM	25	25	19.45	19.52	19.35		
10	ZSSBAM	50	0	19.54	19.67	19.69		
Channel								
Frequency (MHz)				3453.5	3503	3547.5		
5	QPSK	1	0	20.86	21.12	21.05	21.5	0
5	QPSK	1	12	20.80	21.00	20.99		
5	QPSK	1	24	20.88	20.99	20.85		
5	QPSK	12	0	18.00	18.00	18.00		
5	QPSK	12	7	18.07	18.01	18.00	20.5	1
5	QPSK	12	13	18.85	18.80	18.83		
5	HQAM	1	0	19.94	20.00	19.89	20.5	1
5	HQAM	1	12	19.78	19.80	19.77		
5	HQAM	1	24	19.88	20.00	19.91		
5	HQAM	12	0	17.86	18.01	17.87		
5	HQAM	12	7	18.05	18.06	18.00	19.5	2
5	HQAM	12	13	17.88	17.97	17.82		
5	HQAM	25	0	17.87	18.00	17.97		
5	HQAM	1	0	19.02	19.11	19.03	19.5	2
5	HQAM	1	12	18.92	19.00	19.84		
5	HQAM	1	24	18.96	19.02	18.92		
5	HQAM	12	0	16.84	17.00	16.86	18.5	3
5	HQAM	12	7	16.77	16.91	16.86		
5	HQAM	12	13	16.96	17.03	17.01		
5	HQAM	25	0	16.92	16.98	16.82		
5	ZSSBAM	1	0	19.49	19.54	19.51	20.5	1
5	ZSSBAM	1	12	19.38	19.46	19.41		
5	ZSSBAM	1	24	19.65	19.67	19.54		
5	ZSSBAM	12	0	19.51	19.62	19.54	20.5	1
5	ZSSBAM	12	7	19.54	19.62	19.61		
5	ZSSBAM	12	13	19.54	19.60	19.67		
5	ZSSBAM	25	0	19.59	19.69	19.67		

Band 42 FCC Part96 Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)				43190	43440	43490		
20	QPSK	1	0	20.84	21.03	21.01	21.5	0
20	QPSK	1	49	20.88	21.03	20.96		
20	QPSK	1	99	20.88	20.95	20.83		
20	QPSK	50	0	18.96	19.10	19.01		
20	QPSK	50	24	18.97	18.97	18.83	20.5	1
20	QPSK	100	0	18.86	18.91	18.85		
20	QPSK	100	0	18.90	18.92	18.87		
20	HQAM	1	0	19.92	19.96	19.86	20.5	1
20	HQAM	1	49	19.76	19.97	19.93		
20	HQAM	1	99	19.89	19.96	19.86		
20	HQAM	50	0	17.87	17.98	17.79		
20	HQAM	50	24	17.97	18.01	18.00	19.5	2
20	HQAM	50	50	17.81	17.97	17.79		
20	HQAM	100	0	17.86	17.86	17.86		
20	HQAM	100	1	16.03	16.05	16.05		
20	HQAM	1	49	18.83	19.04	18.88	19.5	2
20	HQAM	1	99	18.96	19.00	18.88		
20	HQAM	50	0	16.90	16.94	16.90		
20	HQAM	50	24	16.79	16.82	16.72	18.5	3
20	HQAM	50	50	16.89	17.02	16.85		
20	HQAM	100	0	16.82	16.89	16.89		
20	ZSSBAM	1	0	19.48	19.61	19.46	20.5	1
20	ZSSBAM	1	49	19.28	19.42	19.27		
20	ZSSBAM	1	99	19.43	19.49	19.48		
20	ZSSBAM	50	0	19.64	19.72	19.62		
20	ZSSBAM	50	24	19.51	19.58	19.48	20.5	1
20	ZSSBAM	50	50	19.48	19.59	19.56		
20	ZSSBAM	100	0	19.53	19.64	19.61		
Channel								
Frequency (MHz)				43195	43445	43515		
15	QPSK	1	0	20.78	21.03	20.90	21.5	0
15	QPSK	1	37	20.72	20.82	20.59		
15	QPSK	1	74	20.86	20.88	20.74	</	



Band 43 for FCC use Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	20.86	20.86	20.77	21.5	0
20	QPSK	1	49	20.71	20.80	20.74		
20	QPSK	1	99	20.56	20.65	20.57		
20	QPSK	50	0	18.86	18.86	18.78	20.5	1
20	QPSK	50	24	18.81	18.84	18.74		
20	QPSK	50	49	18.76	18.79	18.69		
20	QPSK	100	0	18.75	18.84	18.76		
20	HQAM	1	0	19.84	19.87	19.72	20.5	1
20	HQAM	1	49	19.79	19.77	19.82		
20	HQAM	1	99	19.75	19.83	19.78		
20	HQAM	50	0	17.86	17.86	17.84	19.5	2
20	HQAM	50	24	17.84	17.81	17.83		
20	HQAM	50	50	17.87	17.79	17.83		
20	HQAM	100	0	17.74	17.87	17.77		
20	HQAM	100	24	18.83	18.80	18.83	19.5	2
20	HQAM	100	49	18.82	18.85	18.82		
20	HQAM	50	0	16.82	16.82	16.83	18.5	3
20	HQAM	50	24	16.81	16.82	16.87		
20	HQAM	50	50	16.85	16.85	16.81		
20	HQAM	100	0	16.69	16.82	16.74		
20	ZSSBAM	1	0	19.45	19.45	19.45	20.5	1
20	ZSSBAM	1	49	19.46	19.47	19.46		
20	ZSSBAM	1	99	19.46	19.49	19.51		
20	ZSSBAM	50	0	19.67	19.64	19.62	20.5	1
20	ZSSBAM	50	24	19.59	19.60	19.59		
20	ZSSBAM	50	50	19.55	19.60	19.62		
20	ZSSBAM	100	0	19.39	19.39	19.39		
Channel								
Frequency (MHz)								
15	QPSK	1	0	20.73	20.92	20.66	21.5	0
15	QPSK	1	37	20.88	20.70	20.83		
15	QPSK	1	74	20.71	20.71	20.88		
15	QPSK	36	0	18.79	18.82	18.68	20.5	1
15	QPSK	36	20	18.73	18.79	18.59		
15	QPSK	36	39	18.67	18.74	18.59		
15	QPSK	75	0	18.71	18.79	18.74		
15	HQAM	1	0	19.77	19.77	19.64	20.5	1
15	HQAM	1	37	19.88	19.82	19.74		
15	HQAM	1	74	19.65	19.71	19.70		
15	HQAM	36	0	17.74	17.78	17.72	19.5	2
15	HQAM	36	20	17.73	17.74	17.73		
15	HQAM	36	39	17.81	17.75	17.79		
15	HQAM	75	0	17.60	17.76	17.75	19.5	2
15	HQAM	75	0	18.79	18.81	18.71		
15	HQAM	1	37	18.89	18.79	18.72	18.5	2
15	HQAM	1	74	18.80	18.75	18.74		
15	HQAM	36	0	16.79	16.82	16.79	18.5	3
15	HQAM	36	20	16.89	16.79	16.73		
15	HQAM	36	39	16.84	16.79	16.82		
15	HQAM	75	0	16.55	16.70	16.65		
15	ZSSBAM	1	0	19.38	19.48	19.37	20.5	1
15	ZSSBAM	1	37	19.41	19.35	19.38		
15	ZSSBAM	1	74	19.31	19.41	19.48		
15	ZSSBAM	36	0	19.44	19.57	19.49	20.5	1
15	ZSSBAM	36	20	19.53	19.46	19.47		
15	ZSSBAM	36	39	19.44	19.46	19.45		
15	ZSSBAM	75	0	19.42	19.40	19.34		
Channel								
Frequency (MHz)								
10	QPSK	1	0	20.73	20.92	20.66	21.5	0
10	QPSK	1	25	20.58	20.77	20.59		
10	QPSK	1	49	20.58	20.78	20.72		
10	QPSK	12	0	18.74	18.82	18.68	20.5	1
10	QPSK	12	25	18.74	18.73	18.65		
10	QPSK	25	0	18.66	18.73	18.65		
10	HQAM	1	0	19.86	19.87	19.82	20.5	1
10	HQAM	1	25	19.89	19.83	19.88		
10	HQAM	1	49	19.69	19.80	19.65		
10	HQAM	25	0	17.74	17.77	17.70	19.5	2
10	HQAM	25	12	17.76	17.86	17.75		
10	HQAM	25	25	17.81	17.75	17.74		
10	HQAM	50	0	17.63	17.77	17.62	19.5	2
10	HQAM	50	0	18.80	18.80	18.80		
10	HQAM	1	25	18.70	18.84	18.72	19.5	2
10	HQAM	1	49	18.70	18.81	18.70		
10	HQAM	25	0	16.74	16.80	16.81	18.5	3
10	HQAM	25	12	16.87	16.77	16.78		
10	HQAM	25	25	16.75	16.71	16.70		
10	HQAM	50	0	16.67	16.87	16.69		
10	ZSSBAM	1	0	19.32	19.51	19.43	20.5	1
10	ZSSBAM	1	25	19.43	19.41	19.46		
10	ZSSBAM	1	49	19.40	19.35	19.46		
10	ZSSBAM	25	0	19.39	19.52	19.37	20.5	1
10	ZSSBAM	25	12	19.47	19.40	19.54		
10	ZSSBAM	25	25	19.40	19.55	19.40		
10	ZSSBAM	50	0	19.34	19.45	19.32		
Channel								
Frequency (MHz)								
5	QPSK	1	0	20.79	20.95	20.72	21.5	0
5	QPSK	1	12	20.55	20.74	20.68		
5	QPSK	1	24	20.74	20.80	20.70		
5	QPSK	12	0	18.79	18.89	18.71	20.5	1
5	QPSK	12	7	18.75	18.79	18.68		
5	QPSK	12	13	18.64	18.70	18.69		
5	HQAM	1	0	19.79	19.81	19.66	20.5	1
5	HQAM	1	12	19.74	19.71	19.78		
5	HQAM	1	24	19.89	19.79	19.73		
5	HQAM	12	0	17.81	17.84	17.78	19.5	2
5	HQAM	12	7	17.78	17.76	17.78		
5	HQAM	12	13	17.80	17.71	17.77		
5	HQAM	25	0	17.67	17.81	17.71	19.5	2
5	HQAM	1	0	18.82	18.80	18.80	19.5	2
5	HQAM	1	12	18.79	18.87	18.79		
5	HQAM	1	24	18.79	18.82	18.79		
5	HQAM	12	0	16.85	16.86	16.86	18.5	3
5	HQAM	12	7	16.85	16.75	16.81		
5	HQAM	12	13	16.79	16.80	16.74		
5	HQAM	25	0	16.84	16.79	16.82		
5	ZSSBAM	1	0	19.40	19.52	19.38	20.5	1
5	ZSSBAM	1	12	19.41	19.42	19.43		
5	ZSSBAM	1	24	19.41	19.43	19.45		
5	ZSSBAM	12	0	19.43	19.58	19.46	20.5	1
5	ZSSBAM	12	7	19.52	19.55	19.53		
5	ZSSBAM	12	13	19.45	19.55	19.47		
5	ZSSBAM	25	0	19.43	19.46	19.34		

Band 48_FCC Ant3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int (dBm)	MFR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	20.46	20.47	20.43	21.5	0
20	QPSK	1	49	20.41	20.56	20.43		
20	QPSK	1	99	20.46	20.51	20.48		
20	QPSK	50	0	19.14	19.19	19.16	20.5	1
20	QPSK	50	24	19.08	19.12	19.03		
20	QPSK	50	49	19.11	19.18	19.03		
20	QPSK	100	0	19.12	19.15	19.01	19.5	2
20	HQAM	1	0	19.91	19.96	19.92	20.5	1
20	HQAM	1	49	19.84	19.84	19.85		
20	HQAM	1	99	19.81	19.82	19.82		
20	HQAM	50	0	17.95	17.97	17.93	19.5	2
20	HQAM	50	24	17.95	17.99	17.96		
20	HQAM	50	50	17.99	17.93	17.95		
20	HQAM	100	0	18.42	18.41	18.41	19.5	2
20	HQAM	100	24	18.89	18.97	18.95	19.5	2
20	HQAM	100	49	18.93	18.86	18.92		
20	HQAM	50	0	16.96	17.08	17.02	18.5	3
20	HQAM	50	24	16.95	17.05	16.93		
20	HQAM	50	50	17.01	17.00	17.03		
20	HQAM	100	0	17.92	17.16	17.13	18.5	3
20	ZSSBAM	1	0	19.67	19.72	19.60	20.5	1
20	ZSSBAM	1	49	19.61	19.68	19.62		
20	ZSSBAM	1	99	19.67	19.68	19.49		
20	ZSSBAM	50	0	19.67	19.74	19.67	20.5	1
20	ZSSBAM	50	24	19.60	19.63	19.67		
20	ZSSBAM	50	50	19.65	19.68	19.47		
20	ZSSBAM	100	0	19.59	19.59	19.56		
Channel								
Frequency (MHz)								
15	QPSK	1	0	20.37	20.49	20.41	21.5	0
15	QPSK	1	37	20.37	20.82	20.38		
15	QPSK	1	74	20.40	20.39	20.36		
15	QPSK	36	0	19.02	19.08	19.03	20.5	1
15	QPSK	36	20					



Band 41 Ant4											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39760	40188	40620	41056	41496			
20	QPSK	1	0	18.52	19.13	19.74	20.35	20.96			
20	QPSK	1	40	18.89	19.06	19.13	18.98	19.07		20	0
20	QPSK	1	80	18.87	19.06	19.01	18.96	18.98			
20	QPSK	50	0	17.97	18.10	18.12	18.02	18.10			
20	QPSK	50	24	17.96	17.97	18.06	17.99	17.94		19	1
20	QPSK	50	48	17.96	18.06	18.06	17.96	18.05			
20	IQAM	100	0	17.84	18.01	18.09	17.94	17.94			
20	IQAM	1	0	17.94	18.08	18.18	18.12	18.06			
20	IQAM	1	40	17.92	17.95	17.98	17.98	17.94		19	1
20	IQAM	1	80	17.92	17.96	18.10	17.98	18.03			
20	IQAM	50	0	18.95	18.95	17.07	18.98	18.98			
20	IQAM	50	24	18.74	18.84	18.95	18.84	18.89			
20	IQAM	50	50	18.70	18.78	18.89	18.78	18.80		18	2
20	IQAM	100	0	18.91	17.97	17.12	17.87	17.82			
20	IQAM	1	0	18.58	17.05	17.19	17.15	17.05			
20	IQAM	1	40	18.83	18.88	18.84	18.87	18.85		18	2
20	IQAM	1	80	18.81	18.96	17.02	18.93	18.99			
20	IQAM	50	0	15.90	15.97	16.05	15.98	15.90			
20	IQAM	50	24	15.71	15.85	15.92	15.83	15.84			
20	IQAM	50	50	15.82	15.89	16.03	15.98	15.99		17	3
20	IQAM	100	0	15.88	16.06	16.11	16.00	15.99			
20	256QAM	1	0	13.77	13.84	13.88	13.87	13.86			
20	256QAM	1	40	13.93	14.01	14.01	14.01	14.02		15	5
20	256QAM	1	80	13.88	13.96	14.02	13.94	13.89			
20	256QAM	50	0	13.82	13.96	14.00	13.84	14.00			
20	256QAM	50	24	13.73	13.92	13.95	13.80	13.82		15	5
20	256QAM	50	50	13.79	13.95	14.00	13.92	13.81			
20	256QAM	100	0	13.92	14.04	14.08	13.92	14.08			
Channel											
Frequency (MHz)				39725	40173	40620	41056	41515			
15	QPSK	1	0	20.03	19.81	19.92	20.73	20.24			
15	QPSK	1	37	18.77	18.98	19.08	18.91	18.88		20	0
15	QPSK	1	74	18.81	18.78	18.96	18.96	18.84			
15	QPSK	36	0	17.83	17.86	18.06	17.86	18.05			
15	QPSK	36	20	17.78	17.90	17.93	17.84	17.80		19	1
15	QPSK	36	40	17.81	17.86	18.06	17.86	18.05			
15	QPSK	75	0	17.70	17.97	17.98	17.85	17.83			
15	IQAM	1	0	17.89	18.03	18.14	17.99	17.97			
15	IQAM	1	37	17.93	17.99	17.99	17.96	17.84		19	1
15	IQAM	1	74	17.85	17.90	18.03	17.94	17.92			
15	IQAM	36	0	18.73	18.83	17.92	18.95	18.85			
15	IQAM	36	20	18.85	18.82	18.78	18.82	18.76		18	2
15	IQAM	36	36	18.58	18.64	18.80	18.72	18.68			
15	IQAM	75	0	18.78	17.92	17.99	18.95	18.93			
15	IQAM	1	0	18.92	18.91	17.96	17.11	18.95		18	2
15	IQAM	1	37	18.68	18.78	18.84	18.79	18.75			
15	IQAM	1	74	18.77	18.91	18.97	18.90	18.95			
15	IQAM	36	0	18.81	18.85	18.91	18.88	18.85		17	3
15	IQAM	36	20	18.59	18.78	18.80	18.71	18.74			
15	IQAM	36	36	18.82	18.83	18.83	18.83	18.83			
15	IQAM	75	0	15.91	15.97	16.00	15.90	15.93			
15	256QAM	1	0	13.73	13.77	13.87	13.78	13.80		15	5
15	256QAM	1	37	13.82	14.02	14.02	13.87	13.87			
15	256QAM	1	74	13.77	13.85	13.90	13.88	13.88			
15	256QAM	36	0	13.77	13.98	14.01	13.91	13.97		15	5
15	256QAM	36	20	13.80	13.85	13.88	13.89	13.89			
15	256QAM	36	36	13.72	13.82	13.85	13.79	13.85			
15	256QAM	75	0	13.79	13.90	14.03	13.87	13.97			
Channel											
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	18.83	19.06	19.12	18.84	18.84			
10	QPSK	1	25	18.79	18.92	19.02	18.94	19.03		20.00	0
10	QPSK	1	49	18.78	18.84	18.90	18.90	18.80			
10	QPSK	12	0	17.88	17.96	18.00	17.96	18.00			
10	QPSK	25	12	17.75	17.88	17.97	17.93	17.86		19	1
10	QPSK	25	25	17.87	18.02	17.98	17.88	17.92			
10	QPSK	1	0	17.70	17.92	17.94	18.04	17.94			
10	IQAM	1	0	17.88	17.88	18.09	17.87	17.88		19	1
10	IQAM	1	25	17.72	17.81	17.89	17.86	17.82			
10	IQAM	1	49	17.84	17.91	17.97	17.92	17.95			
10	IQAM	25	0	18.81	18.82	17.90	17.96	18.85			
10	IQAM	25	0	18.71	18.82	17.91	18.85	18.85		18	2
10	IQAM	25	12	18.84	18.78	18.86	18.86	18.79			
10	IQAM	25	25	18.83	18.83	18.84	18.87	18.90			
10	IQAM	50	0	18.80	18.83	17.91	17.93	18.99			
10	IQAM	1	0	18.81	18.96	17.90	17.96	18.85			
10	IQAM	1	25	18.70	18.83	18.89	18.80	18.78		18	2
10	IQAM	1	49	18.87	18.87	17.90	18.80	18.87			
10	IQAM	25	0	15.85	15.83	16.00	15.84	15.88			
10	IQAM	25	12	15.67	15.74	15.80	15.70	15.79		17	3
10	IQAM	25	25	15.79	15.75	15.95	15.79	15.86			
10	IQAM	50	0	15.88	15.95	16.03	15.92	15.89			
10	256QAM	1	0	13.72	13.71	13.87	13.72	13.82			
10	256QAM	1	25	13.82	14.04	14.10	13.90	13.91		15	5
10	256QAM	1	49	13.82	13.91	13.91	13.81	13.82			
10	256QAM	25	0	13.73	13.93	13.93	13.81	13.82			
10	256QAM	25	12	13.83	13.98	14.04	13.79	13.88			
10	256QAM	25	25	13.72	13.82	13.91	13.79	13.78		15	5
10	256QAM	50	0	13.83	13.95	14.06	13.99	14.04			
Channel											
Frequency (MHz)				2648.5	2648.5	2693	2648.50	2687.5			
5	QPSK	1	0	18.85	18.90	19.21	18.95	19.18			
5	QPSK	1	18	18.83	18.93	19.00	18.95	18.99		20.00	0
5	QPSK	1	24	18.78	18.79	18.93	18.88	18.84			
5	QPSK	12	0	17.86	17.96	18.04	17.97	18.02			
5	QPSK	12	7	17.85	17.85	18.01	17.93	17.84		19	1
5	QPSK	12	13	17.90	17.90	17.96	17.86	17.93			
5	QPSK	25	0	17.74	17.90	17.96	17.86	17.84			
5	IQAM	1	0	17.87	17.99	18.05	18.05	17.94			
5	IQAM	1	12	17.89	17.84	17.97	17.90	17.87		19	1
5	IQAM	1	24	17.82	17.96	17.87	17.86	17.88			
5	IQAM	12	0	18.74	18.89	18.97	18.91	18.88			
5	IQAM	12	7	18.62	18.74	18.88	18.79	18.80		18	2
5	IQAM	12	13	18.60	18.71	18.81	18.69	18.73			
5	IQAM	25	0	18.87	17.00	17.07	17.02	18.88			
5	IQAM	1	0	18.90	18.98	17.99	17.97	18.94			
5	IQAM	1	12	18.71	18.74	18.95	18.82	18.72		18	2
5	IQAM	1	24	18.77	18.87	18.96	18.88	18.91			
5	IQAM	12	0	15.77	15.82	16.00	15.89	15.92			
5	IQAM	12	7	15.83	15.78	15.92	15.79	15.72		17	3
5	IQAM	12	13	15.77	15.85	15.99	15.80	15.89			
5	IQAM	25	0	15.82	15.99	16.03	15.86	15.88			
5	256QAM	1	0	13.72	13.80	13.84	13.76	13.83			
5	256QAM	1	12	13.83	13.95	14.04	13.89	13.98		15	5
5	256QAM	1	24	13.84	13.84	13.97	13.90	13.80			
5	256QAM	12	0	13.72	13.89	14.04	13.82	13.87			
5	256QAM	12	7	13.87	13.82	13.81	13.77	13.77		15	5
5	256QAM	12	13	13.88	13.82	13.96	13.86	13.85			
5	256QAM	25	0	13.87	13.91	14.00	13.92	14.00			

Band 41 HPUE Ant4											
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Turn-up time (dBm)	MFR (dB)
Channel											
Frequency (MHz)				39760	40188	40620	41056	41496			
20	QPSK	1	0	21.11	21.23	21.31	21.33	21.26			
20	QPSK	1	40	20.98	21.08	21.17	21.08	21.08		21.5	0
20	QPSK	1	80	21.09	21.14	21.32	21.04	21.10			
20	QPSK	50	0	21.15	21.25	21.33	21.19	21.25			
20	QPSK	50	24	21.03	21.13	21.22	21.13	21.13		21.5	0
20	QPSK										



Band 42 FCC Part27Q Ant8								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	19.24	19.61	19.41	20	0
20	QPSK	1	49	19.49	19.49	19.43		
20	QPSK	1	99	19.73	19.52	19.52		
20	QPSK	50	0	17.53	17.51	17.51	19	1
20	QPSK	50	24	17.40	17.53	17.41		
20	QPSK	100	0	17.42	17.50	17.47		
20	HDQAM	1	0	18.41	18.46	18.32	19	1
20	HDQAM	1	49	18.39	18.41	18.40		
20	HDQAM	1	99	18.41	18.32	18.40		
20	HDQAM	50	0	18.41	18.40	18.38	18	2
20	HDQAM	50	24	18.27	18.40	18.38		
20	HDQAM	100	0	18.40	18.40	18.48		
20	HDQAM	100	0	17.41	17.52	17.37		
20	HDQAM	1	49	17.59	17.48	17.43	18	2
20	HDQAM	1	99	17.37	17.48	17.62		
20	HDQAM	50	24	15.60	15.38	15.43	17	3
20	HDQAM	50	50	15.44	15.40	15.42		
20	HDQAM	100	0	15.40	15.51	15.37		
20	HDQAM	100	0	18.11	18.13	18.00		
20	HDQAM	1	49	18.02	18.02	18.02	19	1
20	HDQAM	1	99	18.03	18.03	18.02		
20	HDQAM	50	0	18.02	18.02	18.02		
20	HDQAM	50	24	18.13	18.07	18.14	19	1
20	HDQAM	50	50	18.17	18.09	18.09		
20	HDQAM	100	0	18.12	18.15	18.02		
Channel								
Frequency (MHz)								
15	QPSK	1	0	19.13	19.53	19.30	20	0
15	QPSK	1	37	19.38	19.39	19.40		
15	QPSK	1	74	19.37	19.47	19.49		
15	QPSK	38	0	17.69	17.62	17.47	19	1
15	QPSK	38	20	17.33	17.48	17.36		
15	QPSK	38	39	17.28	17.48	17.42		
15	QPSK	75	0	17.27	17.38	17.42		
15	HDQAM	1	0	18.31	18.40	18.29	19	1
15	HDQAM	1	37	18.31	18.28	18.30		
15	HDQAM	1	74	18.27	18.20	18.30		
15	HDQAM	38	0	16.28	16.45	16.33	18	2
15	HDQAM	38	20	16.28	16.33	16.37		
15	HDQAM	38	39	16.33	16.42	16.35		
15	HDQAM	75	0	16.33	16.44	16.29		
15	HDQAM	75	0	17.28	17.42	17.28	18	2
15	HDQAM	1	37	17.38	17.44	17.34		
15	HDQAM	1	74	17.34	17.38	17.38		
15	HDQAM	38	0	15.38	15.43	15.45	17	3
15	HDQAM	38	20	15.39	15.29	15.29		
15	HDQAM	38	39	15.34	15.32	15.32		
15	HDQAM	75	0	15.29	15.44	15.25		
15	HDQAM	1	0	18.07	18.01	17.88	19	1
15	HDQAM	1	37	18.03	17.85	17.88		
15	HDQAM	1	74	17.92	18.00	17.87		
15	HDQAM	38	0	17.07	18.17	18.07	19	1
15	HDQAM	38	20	18.04	18.02	18.02		
15	HDQAM	38	39	18.04	18.00	18.04		
15	HDQAM	75	0	18.12	18.10	18.00		
Channel								
Frequency (MHz)								
10	QPSK	1	0	19.42	19.44	19.37	20	0
10	QPSK	1	25	19.42	19.44	19.32		
10	QPSK	1	49	19.29	19.48	19.43		
10	QPSK	12	0	17.48	17.48	17.48	19	1
10	QPSK	25	12	17.31	17.42	17.32		
10	QPSK	25	25	17.29	17.48	17.34		
10	HDQAM	1	0	18.33	18.39	18.21	19	1
10	HDQAM	1	25	18.29	18.28	18.28		
10	HDQAM	1	49	18.29	18.29	18.32		
10	HDQAM	25	0	16.33	16.44	16.24	18	2
10	HDQAM	25	12	16.38	16.31	16.38		
10	HDQAM	25	25	16.30	16.38	16.41		
10	HDQAM	50	0	16.41	16.39	16.22		
10	HDQAM	1	0	17.33	17.38	17.26	18	2
10	HDQAM	1	25	17.28	17.34	17.35		
10	HDQAM	25	0	15.30	15.40	15.40	17	3
10	HDQAM	25	12	15.43	15.33	15.37		
10	HDQAM	25	25	15.36	15.28	15.28		
10	HDQAM	50	0	15.24	15.45	15.25		
10	HDQAM	1	0	18.08	18.02	17.94	19	1
10	HDQAM	1	25	18.00	17.98	18.08		
10	HDQAM	1	49	17.95	17.98	17.88		
10	HDQAM	25	0	17.08	18.12	17.87	19	1
10	HDQAM	25	12	18.03	17.98	18.05		
10	HDQAM	25	25	18.04	18.02	17.94		
10	HDQAM	50	0	18.08	18.00	18.05		
Channel								
Frequency (MHz)								
5	QPSK	1	0	19.18	19.54	19.36	20	0
5	QPSK	1	12	19.40	19.42	19.37		
5	QPSK	1	24	19.38	19.50	19.45		
5	QPSK	12	0	17.48	17.48	17.48	19	1
5	QPSK	12	7	17.24	17.48	17.38		
5	QPSK	12	13	17.31	17.42	17.37		
5	QPSK	25	0	17.28	17.44	17.41		
5	HDQAM	1	0	18.35	18.39	18.27	19	1
5	HDQAM	1	12	18.33	18.38	18.35		
5	HDQAM	1	24	18.28	18.25	18.25		
5	HDQAM	12	0	16.35	16.42	16.29	18	2
5	HDQAM	12	7	16.41	16.34	16.33		
5	HDQAM	12	13	16.34	16.40	16.41		
5	HDQAM	25	0	16.41	16.40	16.32		
5	HDQAM	1	0	17.35	17.45	17.32	18	2
5	HDQAM	1	12	17.53	17.41	17.38		
5	HDQAM	1	24	17.30	17.38	17.37		
5	HDQAM	12	0	15.31	15.46	15.43	17	3
5	HDQAM	12	7	15.44	15.32	15.37		
5	HDQAM	12	13	15.38	15.34	15.35		
5	HDQAM	25	0	15.35	15.45	15.30		
5	HDQAM	1	0	18.06	18.00	17.95	19	1
5	HDQAM	1	12	18.02	18.00	18.04		
5	HDQAM	1	24	17.86	17.88	17.86		
5	HDQAM	12	0	18.01	18.14	18.05	19	1
5	HDQAM	12	7	18.07	18.05	18.09		
5	HDQAM	12	13	18.12	18.00	18.09		
5	HDQAM	25	0	18.05	18.17	18.09		

Band 42 FCC Part96 Ant8								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up Int. (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	19.10	19.51	19.31	20	0
20	QPSK	1	49	19.33	19.41	19.34		
20	QPSK	1	99	19.30	19.44	19.45		
20	QPSK	50	0	17.43	17.50	17.44	19	1
20	QPSK	50	24	17.33	17.46	17.36		
20	QPSK	100	0	17.28	17.45	17.38		
20	QPSK	100	0	17.29	17.38	17.29		
20	HDQAM	1	0	18.32	18.35	18.20	19	1
20	HDQAM	1	49	18.34	18.30	18.30		
20	HDQAM	1	99	18.28	18.28	18.30		
20	HDQAM	50	0	18.29	18.40	18.28	18	2
20	HDQAM	50	24	18.34	18.39	18.30		
20	HDQAM	100	0	18.27	18.36	18.42		
20	HDQAM	100	0	17.32	17.55	17.37		
20	HDQAM	1	49	17.32	17.38	17.36	18	2
20	HDQAM	1	99	17.22	17.36	17.28		
20	HDQAM	50	24	15.41	15.27	15.37	17	3
20	HDQAM	50	50	15.32	15.26	15.27		
20	HDQAM	100	0	15.36	15.38	15.29		
20	HDQAM	100	0	18.02	18.08	17.90	19	1
20	HDQAM	1	49	18.04	18.01	17.98		
20	HDQAM	1	99	17.93	17.96	17.87		
20	HDQAM	50	0	17.97	18.03	17.94		
20	HDQAM	50	24	18.05	17.98	18.04	19	1
20	HDQAM	50	50	18.04	17.99	17.94		
20	HDQAM	100	0	18.01	18.02	18.02		
Channel								
Frequency (MHz)								
15	QPSK	1	0	19.10	19.51	19.31	20	0
15	QPSK	1	37	19.30	19.29	19.32		
15	QPSK	1	74	19.26	19.37	19.36		
15	QPSK	38	0	17.40	17.42	17.40	19	1
15	QPSK	38	20	17.26	17.37	17.24		
15	QPSK	38	39	17.18	17.34	17.25		
15	QPSK	75	0	17.21	17.26	17.29		
15	HDQAM	1	0	18.18	18.28	18.21	19	1



Band 43 for FCC use Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.64	18.60	18.59	20	0	
20	QPSK	1	49	18.49	18.50	18.54			
20	QPSK	1	99	18.34	18.50	18.42			
20	QPSK	50	0	17.26	17.52	17.22			
20	QPSK	50	24	17.14	17.24	17.18	19	1	
20	QPSK	100	0	17.11	17.23	17.21			
20	QPSK	1	0	18.18	18.30	18.23	19	1	
20	HQAM	1	49	18.31	18.22	18.22			
20	HQAM	1	99	18.19	18.19	18.18			
20	HQAM	50	0	16.93	16.90	16.92	18	2	
20	HQAM	50	24	16.81	16.90	16.85			
20	HQAM	100	0	16.80	16.80	16.80			
20	HQAM	1	0	17.21	17.25	17.20			
20	HQAM	1	49	17.26	17.31	17.25	18	2	
20	HQAM	1	99	17.28	17.30	17.30			
20	HQAM	50	0	15.30	15.34	15.31			
20	HQAM	50	24	15.29	15.20	15.29			
20	HQAM	100	0	15.27	15.20	15.25	17	3	
20	HQAM	100	0	15.18	15.25	15.13			
20	ZSSBAM	1	0	17.13	17.27	17.15			
20	ZSSBAM	1	49	17.14	17.22	17.23	19	1	
20	ZSSBAM	1	99	17.22	17.21	17.14			
20	ZSSBAM	50	0	17.07	17.20	17.07			
20	ZSSBAM	50	24	17.24	17.21	17.20	19	1	
20	ZSSBAM	50	50	17.21	17.23	17.25			
20	ZSSBAM	100	0	17.14	17.20	17.15			
Channel									
Frequency (MHz)									
15	QPSK	1	0	18.33	18.50	18.53	20	0	
15	QPSK	1	37	18.42	18.50	18.47			
15	QPSK	1	74	18.38	18.46	18.36			
15	QPSK	38	0	17.02	17.20	17.10	19	1	
15	QPSK	38	20	17.08	17.17	17.13			
15	QPSK	38	37	17.17	17.17	17.11			
15	QPSK	75	0	17.04	17.17	17.16			
15	HQAM	1	0	18.12	18.24	18.17	19	1	
15	HQAM	1	37	18.28	18.30	18.28			
15	HQAM	1	74	18.13	18.13	18.11			
15	HQAM	38	0	16.18	16.20	16.19	18	2	
15	HQAM	38	20	16.25	16.24	16.20			
15	HQAM	38	37	16.28	16.28	16.20			
15	HQAM	75	0	15.14	15.20	15.12			
15	HQAM	1	0	17.18	17.20	17.15	18	2	
15	HQAM	1	37	17.19	17.22	17.18			
15	HQAM	1	74	17.19	17.20	17.24			
15	HQAM	38	0	15.24	15.28	15.25	17	3	
15	HQAM	38	20	15.23	15.14	15.23			
15	HQAM	38	37	15.28	15.28	15.28			
15	HQAM	75	0	15.10	15.15	15.05			
15	ZSSBAM	1	0	17.07	17.22	17.09	19	1	
15	ZSSBAM	1	37	17.08	17.20	17.15			
15	ZSSBAM	1	74	17.16	17.14	17.08			
15	ZSSBAM	38	0	17.21	17.27	17.21	19	1	
15	ZSSBAM	38	20	17.19	17.25	17.25			
15	ZSSBAM	38	37	17.18	17.17	17.20			
15	ZSSBAM	75	0	17.12	17.16	17.13			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.46	18.60	18.64	20	0	
10	QPSK	1	25	18.43	18.49	18.49			
10	QPSK	1	49	18.39	18.48	18.36			
10	QPSK	12	7	17.08	17.18	17.16	19	1	
10	QPSK	25	12	17.08	17.18	17.11			
10	QPSK	25	25	17.11	17.20	17.12			
10	QPSK	50	0	16.82	17.00	16.88	18	2	
10	HQAM	1	0	18.12	18.23	18.17	19	1	
10	HQAM	1	25	18.17	18.18	18.19			
10	HQAM	1	49	18.13	18.12	18.12			
10	HQAM	25	0	16.18	16.20	16.21	18	2	
10	HQAM	25	12	16.26	16.14	16.20			
10	HQAM	25	25	16.28	16.24	16.20			
10	HQAM	50	0	16.14	16.19	16.11			
10	HQAM	1	0	17.08	17.20	17.14	18	2	
10	HQAM	1	25	17.21	17.24	17.19			
10	HQAM	25	0	15.23	15.28	15.22	17	3	
10	HQAM	25	12	15.22	15.14	15.22			
10	HQAM	25	25	15.21	15.14	15.18			
10	HQAM	50	0	15.11	15.20	15.09			
10	ZSSBAM	1	0	17.07	17.21	17.09	19	1	
10	ZSSBAM	1	25	17.08	17.17	17.17			
10	ZSSBAM	1	49	17.15	17.14	17.09			
10	ZSSBAM	25	0	17.22	17.20	17.21	19	1	
10	ZSSBAM	25	12	17.20	17.14	17.25			
10	ZSSBAM	25	25	17.15	17.17	17.19			
10	ZSSBAM	50	0	17.08	17.19	17.13			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.88	18.60	18.54	20	0	
5	QPSK	1	12	18.62	18.50	18.47			
5	QPSK	1	24	18.37	18.45	18.36			
5	QPSK	12	7	17.46	17.26	17.18	19	1	
5	QPSK	12	13	17.40	17.20	17.11			
5	QPSK	25	0	17.08	17.16	17.09			
5	HQAM	1	0	18.12	18.23	18.17	19	1	
5	HQAM	1	12	18.18	18.18	18.17			
5	HQAM	1	24	18.13	18.12	18.11			
5	HQAM	12	0	16.17	16.20	16.21	18	2	
5	HQAM	12	7	16.25	16.14	16.19			
5	HQAM	12	13	16.27	16.25	16.19			
5	HQAM	25	0	16.13	16.20	16.13			
5	HQAM	1	0	17.15	17.26	17.13	18	2	
5	HQAM	1	12	17.21	17.20	17.20			
5	HQAM	1	24	17.17	17.24	17.23			
5	HQAM	12	0	15.27	15.28	15.24	17	3	
5	HQAM	12	7	15.25	15.14	15.21			
5	HQAM	12	13	15.20	15.19	15.18			
5	HQAM	25	0	15.11	15.19	15.06			
5	ZSSBAM	1	0	17.07	17.22	17.09	19	1	
5	ZSSBAM	1	12	17.07	17.18	17.17			
5	ZSSBAM	1	24	17.15	17.16	17.09			
5	ZSSBAM	12	0	17.21	17.28	17.21	19	1	
5	ZSSBAM	12	7	17.18	17.15	17.24			
5	ZSSBAM	12	13	17.16	17.18	17.18			
5	ZSSBAM	25	0	17.08	17.18	17.12			

Band 48_FCC Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.10	18.12	18.11	20	0	
20	QPSK	1	49	18.08	18.25	18.16			
20	QPSK	1	99	18.01	18.05	18.01			
20	QPSK	50	0	17.54	17.02	17.49	19	1	
20	QPSK	50	24	17.41	17.58	17.43			
20	QPSK	100	0	17.38	17.02	17.46			
20	QPSK	100	0	17.47	17.02	17.49	19	1	
20	HQAM	1	0	17.53	17.07	17.58	17.50	1	
20	HQAM	1	49	17.52	17.01	17.65	17.64		
20	HQAM	1	99	17.56	17.01	17.59	17.61		
20	HQAM	50	0	16.34	16.46	16.36	18	2	
20	HQAM	50	24	16.34	16.35	16.35			
20	HQAM	50	50	16.41	16.47	16.30	18	2	
20	HQAM	100	0	16.45	16.56	16.37			
20	HQAM	100	0	16.57	16.66	16.59			
20	HQAM	1	49	16.60	16.62	16.63	18	2	
20	HQAM	1	99	16.62	16.55	16.54			
20	HQAM	50	0	15.36	15.46	15.35			
20	HQAM	50	24	15.31	15.33	15.38	17	3	
20	HQAM	100	0	15.35	15.37	15.27	17	3	
20	HQAM	100	0	15.50	15.59	15.59	18	4	
20	ZSSBAM	1	0	17.32	17.41	17.38	17.37	1	
20	ZSSBAM	1	49	17.23	17.37	17.31	17.29		
20	ZSSBAM	1	99	17.30	17.34	17.38	17.31		
20	ZSSBAM	50	0	17.37	17.47	17.41	17.38		
20	ZSSBAM	50	24	17.33	17.37</				





### Uplink CA Full Power

Ant1

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	21.28	22.50
21100	21298	QPSK	1	99	1	0	21.40	22.50
21350	21152	QPSK	1	0	1	99	21.20	22.50

Ant2

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.70	24.00
21100	21298	QPSK	1	99	1	0	22.81	24.00
21350	21152	QPSK	1	0	1	99	22.74	24.00

Ant1

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	21.30	23.00
37901	38099	QPSK	1	99	1	0	21.47	23.00
38150	37952	QPSK	1	0	1	99	21.39	23.00

Ant2

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	22.61	24.00
37901	38099	QPSK	1	99	1	0	22.78	24.00
38150	37952	QPSK	1	0	1	99	22.70	24.00

Ant1

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	21.52	23.00
40185	40383	QPSK	1	99	1	0	21.34	23.00
40620	40818	QPSK	1	99	1	0	21.56	23.00
41055	41253	QPSK	1	99	1	0	21.38	23.00
41480	41292	QPSK	1	0	1	99	21.44	23.00

Ant2

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	22.62	24.00
40185	40383	QPSK	1	99	1	0	22.69	24.00
40620	40818	QPSK	1	99	1	0	22.87	24.00
41055	41253	QPSK	1	99	1	0	22.76	24.00
41480	41292	QPSK	1	0	1	99	22.71	24.00

Ant0

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	22.11	23.00
40185	40383	QPSK	1	99	1	0	22.04	23.00
40620	40818	QPSK	1	99	1	0	22.23	23.00
41055	41253	QPSK	1	99	1	0	22.14	23.00
41480	41292	QPSK	1	0	1	99	22.20	23.00

Ant4

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	18.82	20.00
40185	40383	QPSK	1	99	1	0	18.95	20.00
40620	40818	QPSK	1	99	1	0	19.21	20.00
41055	41253	QPSK	1	99	1	0	18.86	20.00
41480	41292	QPSK	1	0	1	99	19.08	20.00

Ant3

CA_42C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42180	42388	QPSK	1	99	1	0	20.81	21.50
42590	42788	QPSK	1	99	1	0	21.10	21.50
42980	42792	QPSK	1	0	1	99	20.98	21.50

Ant8

CA_42C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42180	42388	QPSK	1	99	1	0	19.20	20.00
42590	42788	QPSK	1	99	1	0	19.54	20.00
42980	42792	QPSK	1	0	1	99	19.32	20.00



Uplink CA Down Power

Ant1 DS12 Standalone

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	17.26	18.80
21100	21298	QPSK	1	99	1	0	17.48	18.80
21350	21152	QPSK	1	0	1	99	17.36	18.80

Ant1 DS12 Simultaneous

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	16.21	17.80
21100	21298	QPSK	1	99	1	0	16.34	17.80
21350	21152	QPSK	1	0	1	99	16.28	17.80

Ant1 DS12 Standalone

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	17.98	18.90
37901	38099	QPSK	1	99	1	0	18.02	18.90
38150	37952	QPSK	1	0	1	99	17.94	18.90

Ant1 DS12 Simultaneous

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	16.82	17.90
37901	38099	QPSK	1	99	1	0	16.88	17.90
38150	37952	QPSK	1	0	1	99	16.73	17.90

Ant1 DS12 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	17.95	18.90
40185	40383	QPSK	1	99	1	0	17.99	18.90
40620	40818	QPSK	1	99	1	0	18.06	18.90
41055	41253	QPSK	1	99	1	0	18.01	18.90
41490	41292	QPSK	1	0	1	99	17.88	18.90

Ant1 DS12 Simultaneous

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	16.79	17.90
40185	40383	QPSK	1	99	1	0	16.88	17.90
40620	40818	QPSK	1	99	1	0	17.06	17.90
41055	41253	QPSK	1	99	1	0	16.77	17.90
41490	41292	QPSK	1	0	1	99	16.89	17.90

Ant2 DS13 Standalone

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.23	21.80
21100	21298	QPSK	1	99	1	0	20.44	21.80
21350	21152	QPSK	1	0	1	99	20.27	21.80

Ant2 DS13 Simultaneous

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.23	21.80
21100	21298	QPSK	1	99	1	0	20.33	21.80
21350	21152	QPSK	1	0	1	99	20.20	21.80

Ant2 DS13 Standalone

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	22.65	23.50
37901	38099	QPSK	1	99	1	0	22.78	23.50
38150	37952	QPSK	1	0	1	99	22.79	23.50

Ant2 DS13 Simultaneous

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	22.55	23.50
37901	38099	QPSK	1	99	1	0	22.86	23.50
38150	37952	QPSK	1	0	1	99	22.67	23.50

Ant2 DS13 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	22.53	23.50
40185	40383	QPSK	1	99	1	0	22.80	23.50
40620	40818	QPSK	1	99	1	0	22.82	23.50
41055	41253	QPSK	1	99	1	0	22.79	23.50
41490	41292	QPSK	1	0	1	99	22.65	23.50

Ant2 DS13 Simultaneous

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	22.67	23.50
40185	40383	QPSK	1	99	1	0	22.72	23.50
40620	40818	QPSK	1	99	1	0	22.88	23.50
41055	41253	QPSK	1	99	1	0	22.82	23.50
41490	41292	QPSK	1	0	1	99	22.66	23.50

Ant8 DS13 Standalone

CA_42C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	16.39	17.40
42590	42788	QPSK	1	99	1	0	16.40	17.40
42990	42792	QPSK	1	0	1	99	16.34	17.40

Ant8 DS13 Simultaneous

CA_42C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	15.45	16.40
42590	42788	QPSK	1	99	1	0	15.56	16.40
42990	42792	QPSK	1	0	1	99	15.32	16.40

Ant3 DS13 Standalone

CA_42C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	19.35	20.60
42590	42788	QPSK	1	99	1	0	19.35	20.60
42990	42792	QPSK	1	0	1	99	19.29	20.60

Ant3 DS16 Standalone

CA_42C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	20.81	21.50
42590	42788	QPSK	1	99	1	0	21.10	21.50
42990	42792	QPSK	1	0	1	99	20.98	21.50

Ant0 DS13 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	21.02	21.60
40185	40383	QPSK	1	99	1	0	21.17	21.60
40620	40818	QPSK	1	99	1	0	21.25	21.60
41055	41253	QPSK	1	99	1	0	21.20	21.60
41490	41292	QPSK	1	0	1	99	21.20	21.60

Ant0 DS13 Simultaneous

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	19.56	20.50
40185	40383	QPSK	1	99	1	0	19.71	20.50
40620	40818	QPSK	1	99	1	0	19.68	20.50
41055	41253	QPSK	1	99	1	0	19.62	20.50
41490	41292	QPSK	1	0	1	99	19.62	20.50

Ant4 DS12 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	18.80	19.50
40185	40383	QPSK	1	99	1	0	19.00	19.50
40620	40818	QPSK	1	99	1	0	19.11	19.50
41055	41253	QPSK	1	99	1	0	18.92	19.50
41490	41292	QPSK	1	0	1	99	19.15	19.50

Ant4 DS12 Simultaneous

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	17.80	18.90
40185	40383	QPSK	1	99	1	0	18.10	18.90
40620	40818	QPSK	1	99	1	0	18.19	18.90
41055	41253	QPSK	1	99	1	0	18.04	18.90
41490	41292	QPSK	1	0	1	99	17.98	18.90



Ant1 DS13 Standalone

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	19.51	20.80
21100	21298	QPSK	1	99	1	0	19.64	20.80
21350	21152	QPSK	1	0	1	99	19.47	20.80

Ant1 DS13 Simultaneous

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	15.20	16.60
21100	21298	QPSK	1	99	1	0	15.24	16.60
21350	21152	QPSK	1	0	1	99	15.16	16.60

Ant1 DS16

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.35	21.40
21100	21298	QPSK	1	99	1	0	20.48	21.40
21350	21152	QPSK	1	0	1	99	20.23	21.40

Ant1 DS13 Standalone

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	19.91	21.20
37901	38099	QPSK	1	99	1	0	20.04	21.20
38150	37952	QPSK	1	0	1	99	20.06	21.20

Ant1 DS13 Simultaneous

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	16.01	17.20
37901	38099	QPSK	1	99	1	0	16.14	17.20
38150	37952	QPSK	1	0	1	99	16.05	17.20

Ant1 DS16

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	21.30	22.30
37901	38099	QPSK	1	99	1	0	21.47	22.30
38150	37952	QPSK	1	0	1	99	21.42	22.30

Ant1 DS13 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	19.92	21.20
40185	40383	QPSK	1	99	1	0	20.09	21.20
40620	40818	QPSK	1	99	1	0	20.19	21.20
41055	41253	QPSK	1	99	1	0	19.93	21.20
41490	41292	QPSK	1	0	1	99	19.91	21.20

Ant1 DS13 Simultaneous

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	15.96	17.20
40185	40383	QPSK	1	99	1	0	16.10	17.20
40620	40818	QPSK	1	99	1	0	16.16	17.20
41055	41253	QPSK	1	99	1	0	16.09	17.20
41490	41292	QPSK	1	0	1	99	16.04	17.20

Ant1 DS16

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	21.35	22.30
40185	40383	QPSK	1	99	1	0	21.58	22.30
40620	40818	QPSK	1	99	1	0	21.59	22.30
41055	41253	QPSK	1	99	1	0	21.56	22.30
41490	41292	QPSK	1	0	1	99	21.35	22.30

Ant2 DS16 Standalone

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	21.65	23.10
21100	21298	QPSK	1	99	1	0	21.68	23.10
21350	21152	QPSK	1	0	1	99	21.66	23.10

Ant2 DS16 Standalone

CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	22.58	23.40
37901	38099	QPSK	1	99	1	0	22.80	23.40
38150	37952	QPSK	1	0	1	99	22.67	23.40

Ant2 DS16 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	22.37	23.40
40185	40383	QPSK	1	99	1	0	22.41	23.40
40620	40818	QPSK	1	99	1	0	22.47	23.40
41055	41253	QPSK	1	99	1	0	22.45	23.40
41490	41292	QPSK	1	0	1	99	22.52	23.40

Ant8 DS16 Standalone

CA_42C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	19.20	20.00
42590	42788	QPSK	1	99	1	0	19.54	20.00
42990	42792	QPSK	1	0	1	99	19.32	20.00

Ant0 DS16 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	20.72	22.00
40185	40383	QPSK	1	99	1	0	20.88	22.00
40620	40818	QPSK	1	99	1	0	20.93	22.00
41055	41253	QPSK	1	99	1	0	20.63	22.00
41490	41292	QPSK	1	0	1	99	20.80	22.00

Ant4 DS13 Simultaneous

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	16.69	18.00
40185	40383	QPSK	1	99	1	0	16.67	18.00
40620	40818	QPSK	1	99	1	0	16.70	18.00
41055	41253	QPSK	1	99	1	0	16.57	18.00
41490	41292	QPSK	1	0	1	99	16.82	18.00

Ant4 DS13 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	18.88	20.00
40185	40383	QPSK	1	99	1	0	18.85	20.00
40620	40818	QPSK	1	99	1	0	19.20	20.00
41055	41253	QPSK	1	99	1	0	19.00	20.00
41490	41292	QPSK	1	0	1	99	19.11	20.00

Ant4 DS16 Standalone

CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	18.82	20.00
40185	40383	QPSK	1	99	1	0	19.10	20.00
40620	40818	QPSK	1	99	1	0	19.16	20.00
41055	41253	QPSK	1	99	1	0	19.02	20.00
41490	41292	QPSK	1	0	1	99	19.14	20.00



2CA DL

CA List	PCC										SCC				Power		
	LTE	BW	BW	UL	UL	Mod.	UL#	UL	DL Antenna	DL Antenna Configuration	LTE	BW	DL	DL	DL Antenna Configuration	With CA	Without CA
	Band	Ant	(MHz)	Freq. (MHz)	Channel		RB	RB Offset			Band	(MHz)	(MHz)	Channel		Tx. Power (dBm)	Tx. Power (dBm)
CA_2C	Band 2	An1	20M	1880	18900	QPSK	1	0			Band 2	20M	1980	1098		21.03	21.14
	Band 2	An2	20M	1880	18900	QPSK	1	0			Band 2	20M	1980	1098		22.59	22.70
CA_2A-4A	Band 2	An1	20M	1880	18900	QPSK	1	0			Band 4	20M	2133	2175	4x4MIMO	21.03	21.14
	Band 2	An2	20M	1880	18900	QPSK	1	0			Band 4	20M	2133	2175	4x4MIMO	22.57	22.70
CA_2A-4A	Band 4	An1	20M	1732.5	20175	QPSK	1	0	4x4MIMO		Band 2	20M	1960	900		21.15	21.34
	Band 4	An2	20M	1732.5	20175	QPSK	1	0	4x4MIMO		Band 2	20M	1960	900		22.71	22.88
CA_2A-5A	Band 2	An1	20M	1880	18900	QPSK	1	0			Band 5	10M	881.5	2525		20.92	21.14
	Band 2	An2	20M	1880	18900	QPSK	1	0			Band 5	10M	881.5	2525		22.61	22.70
CA_2A-5A	Band 5	An0	10M	836.5	20525	QPSK	1	0			Band 2	20M	1960	900		22.52	22.73
	Band 5	An1	10M	836.5	20525	QPSK	1	0			Band 2	20M	1960	900		22.36	22.48
CA_2A-7A	Band 2	An1	20M	1880	18900	QPSK	1	0			Band 7	20M	2655	3100	4x4MIMO	20.94	21.14
	Band 2	An2	20M	1880	18900	QPSK	1	0			Band 7	20M	2655	3100	4x4MIMO	22.55	22.70
CA_2A-7A	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 2	20M	1960	900		21.24	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 2	20M	1960	900		22.90	23.04
CA_2A-68A	Band 2	An1	20M	1880	18900	QPSK	1	0			Band 66	20M	2155	68886	4x4MIMO	21.03	21.14
	Band 2	An2	20M	1880	18900	QPSK	1	0			Band 66	20M	2155	68886	4x4MIMO	22.52	22.70
CA_2A-68A	Band 66	An1	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 2	20M	1960	900		21.18	21.36
	Band 66	An2	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 2	20M	1960	900		22.80	22.95
CA_4A-5A	Band 4	An1	20M	1732.5	20175	QPSK	1	0	4x4MIMO		Band 5	10M	881.5	2525		21.24	21.34
	Band 4	An2	20M	1732.5	20175	QPSK	1	0	4x4MIMO		Band 5	10M	881.5	2525		22.77	22.88
CA_4A-5A	Band 5	An0	10M	836.5	20525	QPSK	1	0			Band 4	20M	2133	2175	4x4MIMO	22.59	22.73
	Band 5	An1	10M	836.5	20525	QPSK	1	0			Band 4	20M	2133	2175	4x4MIMO	22.32	22.48
CA_4A-7A	Band 4	An1	20M	1732.5	20175	QPSK	1	0	4x4MIMO		Band 7	20M	2655	3100	4x4MIMO	21.20	21.34
	Band 4	An2	20M	1732.5	20175	QPSK	1	0	4x4MIMO		Band 7	20M	2655	3100	4x4MIMO	22.74	22.88
CA_4A-7A	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 4	20M	2133	2175	4x4MIMO	21.26	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 4	20M	2133	2175	4x4MIMO	22.86	23.04
CA_5A-7A	Band 5	An0	10M	836.5	20525	QPSK	1	0			Band 7	20M	2655	3100	4x4MIMO	22.59	22.73
	Band 5	An1	10M	836.5	20525	QPSK	1	0			Band 7	20M	2655	3100	4x4MIMO	22.35	22.48
CA_5A-7A	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 5	10M	881.5	2525		21.35	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 5	10M	881.5	2525		22.94	23.04
CA_5A-41A	Band 5	An0	10M	836.5	20525	QPSK	1	0			Band 41	20M	2593	40620	4x4MIMO	22.51	22.73
	Band 5	An1	10M	836.5	20525	QPSK	1	0			Band 41	20M	2593	40620	4x4MIMO	22.32	22.48
CA_5A-41A	Band 5	An0	10M	836.5	20525	QPSK	1	0			Band 66	20M	2155	68886	4x4MIMO	22.59	22.73
	Band 5	An1	10M	836.5	20525	QPSK	1	0			Band 66	20M	2155	68886	4x4MIMO	22.39	22.48
CA_5A-68A	Band 66	An1	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 5	10M	881.5	2525		21.16	21.36
	Band 66	An2	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 5	10M	881.5	2525		22.73	22.95
CA_7B	Band 7	An1	15M	2535	21100	QPSK	1	0	4x4MIMO		Band 7	5M	2544	3193	4x4MIMO	21.28	21.45
	Band 7	An2	15M	2535	21100	QPSK	1	0	4x4MIMO		Band 7	5M	2544	3193	4x4MIMO	22.93	23.04
CA_7C	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 7	20M	2555	3298	4x4MIMO	21.28	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 7	20M	2555	3298	4x4MIMO	22.82	23.04
CA_7A-7A	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 7	5M	2688	3425	4x4MIMO	21.29	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 7	5M	2688	3425	4x4MIMO	22.89	23.04
CA_7A-26A	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 26	15M	876.5	8865		21.30	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 26	15M	876.5	8865		22.87	23.04
CA_7A-26A	Band 26	An0	15M	831.5	26865	QPSK	1	0			Band 7	20M	2655	3100	4x4MIMO	22.67	22.77
	Band 26	An1	15M	831.5	26865	QPSK	1	0			Band 7	20M	2655	3100	4x4MIMO	22.42	22.51
CA_7A-42A	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 42	20M	3500	42590	4x4MIMO	21.27	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 42	20M	3500	42590	4x4MIMO	22.93	23.04
CA_7A-68A	Band 7	An1	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 66	20M	2155	68886	4x4MIMO	21.28	21.45
	Band 7	An2	20M	2535	21100	QPSK	1	0	4x4MIMO		Band 66	20M	2155	68886	4x4MIMO	22.86	23.04
CA_7A-68A	Band 66	An1	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 7	20M	2655	3100	4x4MIMO	21.21	21.36
	Band 66	An2	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 7	20M	2655	3100	4x4MIMO	22.77	22.95
CA_28A-41A	Band 26	An0	15M	831.5	26865	QPSK	1	0			Band 41	20M	2593	40620	4x4MIMO	22.57	22.77
	Band 26	An1	15M	831.5	26865	QPSK	1	0			Band 41	20M	2593	40620	4x4MIMO	22.29	22.51
CA_38C	Band 38	An1	20M	2580	37850	QPSK	1	0	4x4MIMO		Band 38	20M	2600	38048	4x4MIMO	21.48	21.65
	Band 38	An2	20M	2580	37850	QPSK	1	0	4x4MIMO		Band 38	20M	2600	38048	4x4MIMO	22.72	22.90
CA_41C	Band 41	An0	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	20M	2613	40818	4x4MIMO	22.16	22.32
	Band 41	An1	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	20M	2613	40818	4x4MIMO	21.57	21.70
CA_41C	Band 41	An2	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	20M	2613	40818	4x4MIMO	22.81	22.94
	Band 41	An4	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	20M	2613	40818	4x4MIMO	19.95	19.25
CA_41A-41A	Band 41	An0	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	5M	2688	41565	4x4MIMO	22.23	22.32
	Band 41	An1	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	5M	2688	41565	4x4MIMO	21.54	21.70
CA_41A-41A	Band 41	An2	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	5M	2688	41565	4x4MIMO	22.82	22.94
	Band 41	An4	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 41	5M	2688	41565	4x4MIMO	19.15	19.25
CA_41A-42A	Band 41	An0	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 42	20M	3500	42590	4x4MIMO	22.14	22.32
	Band 41	An1	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 42	20M	3500	42590	4x4MIMO	21.54	21.70
CA_41A-42A	Band 41	An2	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 42	20M	3500	42590	4x4MIMO	22.73	22.94
	Band 41	An4	20M	2593	40620	QPSK	1	0	4x4MIMO		Band 42	20M	3500	42590	4x4MIMO	19.14	19.25
CA_42C	Band 42	An3	20M	3500	42590	QPSK	1	0	4x4MIMO		Band 41	20M	2593	40620	4x4MIMO	21.01	21.18
	Band 42	An8	20M	3500	42590	QPSK	1	0	4x4MIMO		Band 41	20M	2593	40620	4x4MIMO	19.53	19.61
CA_42A-42A	Band 42	An3	20M	3500	42590	QPSK	1	0	4x4MIMO		Band 42	20M	3520	42788	4x4MIMO	21.11	21.18
	Band 42	An8	20M	3500	42590	QPSK	1	0	4x4MIMO		Band 42	20M	3520	42788	4x4MIMO	19.52	19.61
CA_42A-42A	Band 42	An3	20M	3500	42590	QPSK	1	0	4x4MIMO		Band 42	5M	3548	43065	4x4MIMO	21.15	21.18
	Band 42	An8	20M	3500	42590	QPSK	1	0	4x4MIMO		Band 42	5M	3548	43065	4x4MIMO	19.45	19.61
CA_66B	Band 66	An1	15M	1745	132322	QPSK	1	0	4x4MIMO		Band 66	5M	2164	66979	4x4MIMO	21.25	21.36
	Band 66	An2	15M	1745	132322	QPSK	1	0	4x4MIMO		Band 66	5M	2164	66979	4x4MIMO	22.73	22.95
CA_66C	Band 66	An1	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 66	20M	2165	66984	4x4MIMO	21.25	21.36
	Band 66	An2	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 66	20M	2165	66984	4x4MIMO	22.75	22.95
CA_66A-66A	Band 66	An1	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 66	5M	2198	67311	4x4MIMO	21.17	21.36
	Band 66	An2	20M	1745	132322	QPSK	1	0	4x4MIMO		Band 66	5M</					



3CA DL

3CA List	PCC										SCC1				SCC2				Power	
	LTE	BW	BW	UL	UL	Mod.	UL#	UL	LTE	BW	DL	DL	LTE	BW	DL	DL	With CA	Without CA		
	Band	Ant	(MHz)	(MHz)															Channel	Freq.
CA_2A-4A-5A	Band 2	Ant1	20M	1880	1890Q	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	20.94	21.14		
	Band 2	Ant2	20M	1880	1890Q	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	22.53	22.70		
	Band 4	Ant1	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	21.12	21.34		
	Band 4	Ant2	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	22.72	22.88		
CA_2A-4A-7A	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.59	22.73		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.28	22.48		
	Band 2	Ant1	20M	1880	1890Q	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	21.04	21.14		
	Band 2	Ant2	20M	1880	1890Q	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	22.51	22.70		
CA_2A-5A-7A	Band 4	Ant1	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	21.14	21.34		
	Band 4	Ant2	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	22.79	22.88		
	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	21.36	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.95	23.04		
CA_2A-5A-6A	Band 2	Ant1	20M	1880	1890Q	QPSK	1	0	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	20.94	21.14		
	Band 2	Ant2	20M	1880	1890Q	QPSK	1	0	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	22.52	22.70		
	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	22.60	22.73		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	22.27	22.48		
CA_2A-5A-66A	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.34	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	22.94	23.04		
	Band 2	Ant1	20M	1880	1890Q	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	20.94	21.14		
	Band 2	Ant2	20M	1880	1890Q	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	22.58	22.70		
CA_2A-7C	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 66	20M	2155	66886	Band 2	20M	1960	900	22.56	22.73		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 66	20M	2155	66886	Band 2	20M	1960	900	22.29	22.48		
	Band 66	Ant1	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.16	21.36		
	Band 66	Ant2	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	22.79	22.95		
CA_2A-7A-7A	Band 2	Ant1	20M	1880	1890Q	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	21.04	21.14		
	Band 2	Ant2	20M	1880	1890Q	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	22.57	22.70		
	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 2	20M	1960	900	21.35	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 2	20M	1960	900	22.94	23.04		
CA_2A-7A-66A	Band 2	Ant1	20M	1880	1890Q	QPSK	1	0	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	20.94	21.14		
	Band 2	Ant2	20M	1880	1890Q	QPSK	1	0	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	22.50	22.70		
	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 7	5M	2687.5	3425	Band 2	20M	1960	900	21.25	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 7	5M	2687.5	3425	Band 2	20M	1960	900	22.84	23.04		
CA_4A-7C	Band 2	Ant1	20M	1880	1890Q	QPSK	1	0	Band 66	20M	2155	66886	Band 7	20M	2655	3100	21.00	21.14		
	Band 2	Ant2	20M	1880	1890Q	QPSK	1	0	Band 66	20M	2155	66886	Band 7	20M	2655	3100	22.59	22.70		
	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	21.23	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	22.83	23.04		
CA_5A-7C	Band 66	Ant1	20M	1745	132322	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	21.18	21.36		
	Band 66	Ant2	20M	1745	132322	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	22.74	22.95		
	Band 4	Ant1	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	21.20	21.34		
	Band 4	Ant2	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	22.67	22.88		
CA_5A-7A-66A	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 4	20M	2132.5	2175	21.32	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 4	20M	2132.5	2175	22.93	23.04		
	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	22.63	22.73		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	22.27	22.48		
CA_5A-7A-66A	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 5	10M	881.5	2525	21.33	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 5	10M	881.5	2525	22.83	23.04		
	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 66	20M	2155	66886	Band 7	20M	2655	3100	22.62	22.73		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 66	20M	2155	66886	Band 7	20M	2655	3100	22.36	22.48		
CA_5A-66A-66A	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	21.29	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	22.92	23.04		
	Band 66	Ant1	20M	1745	132322	QPSK	1	0	Band 7	20M	2655	3100	Band 5	10M	881.5	2525	21.17	21.36		
	Band 66	Ant2	20M	1745	132322	QPSK	1	0	Band 7	20M	2655	3100	Band 5	10M	881.5	2525	22.77	22.95		
CA_7A-26A-66A	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.58	22.73		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.34	22.48		
	Band 66	Ant1	20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	21.20	21.36		
	Band 66	Ant2	20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	22.75	22.95		
CA_7A-66A-66A	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 66	20M	2155	66886	21.36	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 7	20M	2554.8	3298	Band 66	20M	2155	66886	22.94	23.04		
	Band 66	Ant1	20M	1745	132322	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	21.20	21.36		
	Band 66	Ant2	20M	1745	132322	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2554.8	3298	22.80	22.95		
CA_26A-41C	Band 7	Ant1	20M	2535	21100	QPSK	1	0	Band 26	15M	876.5	8865	Band 66	20M	2155	66886	21.26	21.45		
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	Band 26	15M	876.5	8865	Band 66	20M	2155	66886	22.87	23.04		
	Band 26	Ant0	15M	831.5	26865	QPSK	1	0	Band 66	20M	2155	66886	Band 7	20M	2655	3100	22.68	22.77		
	Band 26	Ant1	20M	1745	132322	QPSK	1	0	Band 66	20M	2155	66886	Band 7	20M	2655	3100	22.33	22.51		
CA_41D	Band 66	Ant1	20M	1745	132322	QPSK	1	0	Band 7	20M	2655	3100	Band 26	15M	876.5	8865	21.18	21.36		
	Band 66	Ant2	2																	







Full & Default power

n5 Ant0								
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				166800	167300	167800		
Frequency (MHz)				834	836.5	839		
20	Pi/2 BPSK	1	1	23.04	23.13	22.99		
20	Pi/2 BPSK	1	53	22.90	23.03	22.93	24.0	0.0
20	Pi/2 BPSK	1	104	23.00	23.10	22.97		
20	Pi/2 BPSK	50	0	22.56	22.64	22.55	23.5	0.5
20	Pi/2 BPSK	50	28	22.82	22.98	22.85	24.0	0.0
20	Pi/2 BPSK	50	56	22.57	22.70	22.53		
20	Pi/2 BPSK	100	0	22.61	22.73	22.58	23.5	0.5
20	QPSK	1	1	23.16	23.19	23.02		
20	QPSK	1	53	22.88	23.06	22.91	24.0	0.0
20	QPSK	1	104	23.09	23.12	23.04		
20	QPSK	50	0	22.15	22.17	22.13	23.0	1.0
20	QPSK	50	28	23.11	23.14	23.08	24.0	0.0
20	QPSK	50	56	22.12	22.22	22.06		
20	QPSK	100	0	22.28	22.31	22.24	23.0	1.0
20	16QAM	1	1	22.02	22.05	21.96	23.0	1.0
20	64QAM	1	1	20.97	21.02	20.95	21.5	2.5
20	256QAM	1	1	18.39	18.49	18.37	19.5	4.5
Channel				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	836.5	841.5		
15	QPSK	1	1	23.03	23.10	22.97	24.0	0.0
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	QPSK	1	1	23.05	23.02	22.95	24.0	0.0
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	1	23.08	23.04	22.85	24.0	0.0





n41 Ant0

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	59202	51859	52999					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	23.06	23.15	23.12		
100	PI2 BPSK	1	137	23.00	23.07	22.97	24.0	0.0
100	PI2 BPSK	1	271	23.05	23.13	23.05		
100	PI2 BPSK	135	61	22.57	22.71	22.85	23.5	0.5
100	PI2 BPSK	135	69	22.87	23.04	22.94	24.0	0.0
100	PI2 BPSK	135	138	22.56	22.88	22.51	23.5	0.5
100	PI2 BPSK	270	0	22.58	22.73	22.60		
100	QPSK	1	1	23.06	23.16	23.05		
100	QPSK	1	137	22.88	23.06	22.96	24.0	0.0
100	QPSK	1	271	23.00	23.12	23.09		
100	QPSK	135	0	22.09	22.18	22.07	23.0	1.0
100	QPSK	135	69	22.99	23.13	23.02	24.0	0.0
100	QPSK	135	138	22.11	22.18	22.13	23.0	1.0
100	QPSK	270	0	22.14	22.21	22.11		
100	16QAM	1	1	21.86	22.00	21.96	23.0	1.0
100	64QAM	1	1	20.57	20.88	20.62	21.5	2.5
100	256QAM	1	1	18.36	18.54	18.37	19.5	4.5
Channel	505202	51859	53998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	23.05	23.07	22.99	24.0	0.0
Channel	507204	51859	52998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2537.02	2592.99	2649.99					
80	QPSK	1	1	22.98	23.02	22.94	24.0	0.0
Channel	505202	51859	53100	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	22.93	23.03	22.98	24.0	0.0
Channel	505200	51859	53198	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2528	2592.99	2659.99					
60	QPSK	1	1	22.92	23.14	23.02	24.0	0.0
Channel	504204	51859	53998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	22.93	23.06	22.85	24.0	0.0
Channel	505202	51859	53100	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	23.07	23.11	22.89	24.0	0.0
Channel	502200	51859	53498	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	22.95	23.10	22.85	24.0	0.0
Channel	501204	51859	53998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	22.84	23.04	22.99	24.0	0.0
Channel	500700	51859	53848	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2501.5	2592.99	2682.48					
15	QPSK	1	1	22.98	23.16	22.99	24.0	0.0
Channel	500202	51859	53700	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	23.07	23.13	22.90	24.0	0.0



n2 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376000	380000			
Frequency (MHz)				1860	1860	1900			
20	PI2 BPSK	1	1	23.01	23.63	23.55			
20	PI2 BPSK	1	53	23.50	23.59	23.52	24.0	0.0	
20	PI2 BPSK	1	104	23.39	23.42	23.32			
20	PI2 BPSK	50	0	23.21	23.24	23.12	23.5	0.5	
20	PI2 BPSK	50	28	23.57	23.61	23.49	24.0	0.0	
20	PI2 BPSK	50	58	23.04	23.19	23.11	23.5	0.5	
20	PI2 BPSK	100	0	23.14	23.22	23.18			
20	QPSK	1	1	23.58	23.66	23.63			
20	QPSK	1	53	23.57	23.62	23.50	24.0	0.0	
20	QPSK	1	104	23.38	23.55	23.48			
20	QPSK	50	0	22.80	22.72	22.54	23.0	1.0	
20	QPSK	50	28	23.54	23.61	23.50	24.0	0.0	
20	QPSK	50	58	22.82	22.87	22.84	23.0	1.0	
20	QPSK	100	0	22.87	22.74	22.62			
20	16QAM	1	1	22.49	22.55	22.40	23.0	1.0	
20	16QAM	1	1	21.26	21.33	21.18	21.5	2.5	
20	256QAM	1	1	18.88	18.98	18.93	19.5	4.5	
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1857.5	1860	1902.5			
15	QPSK	1	1	23.48	23.50	23.55	24.0	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1855	1860	1905			
10	QPSK	1	1	23.43	23.49	23.60	24.0	0.0	
Channel				375500	376000	381500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1852.5	1860	1907.5			
5	QPSK	1	1	23.43	23.53	23.54	24.0	0.0	

n7 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				505000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI2 BPSK	1	1	23.18	23.25	23.21			
40	PI2 BPSK	1	108	23.20	23.30	23.17	24.0	0.0	
40	PI2 BPSK	1	214	23.22	23.28	23.21			
40	PI2 BPSK	108	0	22.82	22.89	22.82	23.5	0.5	
40	PI2 BPSK	108	54	23.24	23.33	23.24	24.0	0.0	
40	PI2 BPSK	108	108	22.75	22.88	22.73	23.5	0.5	
40	PI2 BPSK	216	0	22.77	22.91	22.79			
40	QPSK	1	1	23.27	23.34	23.31			
40	QPSK	1	108	23.12	23.27	23.09	24.0	0.0	
40	QPSK	1	214	23.19	23.24	23.06			
40	QPSK	108	0	22.20	22.32	22.24	23.0	1.0	
40	QPSK	108	54	23.20	23.29	23.27	24.0	0.0	
40	QPSK	108	108	22.22	22.38	22.25	23.0	1.0	
40	QPSK	216	0	22.30	22.35	22.34			
40	16QAM	1	1	22.22	22.27	22.18	23.0	1.0	
40	16QAM	1	1	20.90	20.90	20.87	21.5	2.5	
40	256QAM	1	1	18.73	18.75	18.58	19.5	4.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	23.21	23.20	23.19	24.0	0.0	
Channel				502000	507000	511500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2512.5	2535	2577.5			
25	QPSK	1	1	23.10	23.18	23.14	24.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	23.20	23.28	23.15	24.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	23.18	23.29	23.14	24.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	23.13	23.32	23.17	24.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	23.11	23.22	23.14	24.0	0.0	

n66 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				346000	349000	353000			
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	1	1	23.30	23.40	23.23			
40	PI2 BPSK	1	108	23.32	23.34	23.21	24.0	0.0	
40	PI2 BPSK	1	214	23.17	23.28	23.13			
40	PI2 BPSK	108	0	22.77	22.94	22.91	23.5	0.5	
40	PI2 BPSK	108	54	23.20	23.33	23.26	24.0	0.0	
40	PI2 BPSK	108	108	22.71	22.87	22.73	23.5	0.5	
40	PI2 BPSK	216	0	22.73	22.89	22.73			
40	QPSK	1	1	23.41	23.49	23.46			
40	QPSK	1	108	23.30	23.37	23.32	24.0	0.0	
40	QPSK	1	214	23.17	23.32	23.18			
40	QPSK	108	0	22.35	22.42	22.38	23.0	1.0	
40	QPSK	108	54	23.39	23.47	23.42	24.0	0.0	
40	QPSK	108	108	22.34	22.39	22.27	23.0	1.0	
40	QPSK	216	0	22.37	22.44	22.41			
40	16QAM	1	1	22.44	22.51	22.34	23.0	1.0	
40	16QAM	1	1	21.01	21.03	20.85	21.5	2.5	
40	256QAM	1	1	18.94	19.08	18.98	19.5	4.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	23.39	23.35	23.29	24.0	0.0	
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	23.28	23.45	23.34	24.0	0.0	
Channel				344000	349000	344000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	23.29	23.44	23.25	24.0	0.0	
Channel				343500	349000	344500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	23.28	23.41	23.32	24.0	0.0	
Channel				343000	349000	345000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	23.30	23.38	23.35	24.0	0.0	
Channel				342500	349000	345500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	23.35	23.31	23.37	24.0	0.0	



n38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				519394	519500	519596		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	23.05	23.16	23.11		
40	PI/2 BPSK	1	53	23.01	23.12	22.97	24.0	0.0
40	PI/2 BPSK	1	104	22.94	23.07	22.94		
40	PI/2 BPSK	50	0	22.54	22.89	22.58	23.5	0.5
40	PI/2 BPSK	50	28	23.01	23.09	22.94	24.0	0.0
40	PI/2 BPSK	50	56	22.57	22.81	22.45	23.5	0.5
40	PI/2 BPSK	100	0	22.48	22.65	22.55		
40	QPSK	1	1	23.09	23.22	23.16		
40	QPSK	1	53	22.94	23.08	22.90	24.0	0.0
40	QPSK	1	104	23.01	23.10	22.98		
40	QPSK	50	0	22.10	22.13	22.08	23.0	1.0
40	QPSK	50	28	23.12	23.17	23.03	24.0	0.0
40	QPSK	80	56	21.90	22.08	22.00	23.0	1.0
40	QPSK	100	0	22.12	22.15	22.05		
40	16QAM	1	1	22.00	22.14	22.10	23.0	1.0
40	16QAM	1	1	20.49	20.68	20.63	21.5	2.5
40	256QAM	1	1	18.44	18.62	18.48	19.5	4.5
Channel				517002	517000	520398	Tune-up limit (dBm)	MPR
Frequency (MHz)				2585.01	2585	2604.99		
30	QPSK	1	1	23.16	23.12	23.08	24.0	0.0
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR
Frequency (MHz)				2582.52	2595	2607.48		
25	QPSK	1	1	23.17	23.15	23.09	24.0	0.0
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	23.17	23.10	23.15	24.0	0.0
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	23.16	23.21	23.16	24.0	0.0
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	23.21	23.17	23.06	24.0	0.0

n41 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				526202	518598	526200		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	23.08	23.18	23.12		
100	PI/2 BPSK	1	137	23.04	23.15	22.99	24.0	0.0
100	PI/2 BPSK	1	271	22.95	23.10	22.97		
100	PI/2 BPSK	135	0	22.56	22.71	22.81	23.5	0.5
100	PI/2 BPSK	135	69	23.04	23.11	22.97	24.0	0.0
100	PI/2 BPSK	135	138	22.58	22.63	22.47	23.5	0.5
100	PI/2 BPSK	270	0	22.51	22.67	22.57		
100	QPSK	1	1	23.08	23.24	23.16		
100	QPSK	1	137	22.96	23.08	22.92	24.0	0.0
100	QPSK	1	271	23.03	23.13	23.00		
100	QPSK	135	0	22.13	22.16	22.10	23.0	1.0
100	QPSK	135	69	23.14	23.18	23.05	24.0	0.0
100	QPSK	135	138	21.92	22.09	22.01	23.0	1.0
100	QPSK	270	0	22.13	22.16	22.08		
100	16QAM	1	1	22.02	22.16	22.11	23.0	1.0
100	16QAM	1	1	20.52	20.69	20.66	21.5	2.5
100	256QAM	1	1	18.47	18.64	18.51	19.5	4.5
Channel				506300	518598	526398	Tune-up limit (dBm)	MPR
Frequency (MHz)				2541	2592.99	2644.99		
90	QPSK	1	1	22.94	23.21	23.11	24.0	0.0
Channel				507204	518598	529898	Tune-up limit (dBm)	MPR
Frequency (MHz)				2538.02	2592.99	2648.99		
80	QPSK	1	1	22.90	23.10	23.03	24.0	0.0
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	23.00	23.12	23.13	24.0	0.0
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	22.93	23.06	23.06	24.0	0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	22.91	23.17	23.06	24.0	0.0
Channel				503202	518598	533000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	23.01	23.20	23.06	24.0	0.0
Channel				502200	518598	534998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	22.85	23.07	23.06	24.0	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	23.00	23.15	23.15	24.0	0.0
Channel				500700	518598	536498	Tune-up limit (dBm)	MPR
Frequency (MHz)				2503.05	2592.99	2684.98		
15	QPSK	1	1	23.00	23.08	23.06	24.0	0.0
Channel				500202	518598	537000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	22.89	23.14	23.01	24.0	0.0



### n7 Ant2

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
40	2520	2535	2550		
Channel	50500	50700	51000		
Frequency (MHz)	2520	2535	2550		
40	1	1	23.20	23.18	23.12
40	1	108	23.18	23.23	23.10
40	1	214	23.23	23.14	23.07
40	108	0	22.51	22.83	22.85
40	108	54	22.82	23.14	23.13
40	108	108	22.88	22.74	22.81
40	108	0	22.81	22.74	22.81
40	1	1	23.09	23.30	23.28
40	1	108	23.24	23.19	23.08
40	1	214	23.05	23.19	23.17
40	108	0	22.06	22.08	22.14
40	108	54	23.03	23.29	23.21
40	108	108	22.17	22.25	22.27
40	216	0	22.02	22.31	22.30
40	1	1	22.16	22.25	22.17
40	1	1	20.49	20.83	20.69
40	1	1	18.82	18.72	18.88
Channel	50300	50700	51100		
Frequency (MHz)	2515	2535	2555		
30	1	1	23.06	23.26	23.19
Channel	502600	507000	511500		
Frequency (MHz)	2572.5	2535	2577.5		
25	1	1	23.01	23.10	23.12
Channel	502000	507000	512000		
Frequency (MHz)	2510	2535	2550		
20	1	1	23.25	23.09	23.12
Channel	501500	507000	512500		
Frequency (MHz)	2507.5	2535	2562.5		
15	1	1	23.01	23.19	23.24
Channel	501000	507000	513000		
Frequency (MHz)	2505	2535	2565		
10	1	1	22.97	23.10	23.02
Channel	500500	507000	513500		
Frequency (MHz)	2502.5	2535	2567.5		
5	1	1	23.20	23.10	23.05



n38 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				51904	51900	51996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	22.69	22.72	22.80		
40	PI/2 BPSK	1	53	22.60	22.66	22.58		
40	PI/2 BPSK	1	104	22.59	22.60	22.56	24.0	0.0
40	PI/2 BPSK	50	0	22.07	22.15	22.12	23.5	0.5
40	PI/2 BPSK	50	28	22.43	22.61	22.48	24.0	0.0
40	PI/2 BPSK	50	56	21.97	22.02	21.88	23.5	0.5
40	PI/2 BPSK	100	0	21.91	22.03	22.00		
40	QPSK	1	1	22.77	22.86	22.84	24.0	0.0
40	QPSK	1	53	22.54	22.66	22.53		
40	QPSK	1	104	22.56	22.61	22.50		
40	QPSK	50	0	21.46	21.59	21.43	23.0	1.0
40	QPSK	50	28	22.59	22.69	22.59	24.0	0.0
40	QPSK	80	56	21.51	21.54	21.53	23.0	1.0
40	QPSK	100	0	21.55	21.60	21.57		
40	16QAM	1	1	21.66	21.82	21.65	23.0	1.0
40	16QAM	1	1	20.49	20.58	20.40	21.5	2.5
40	256QAM	1	1	17.59	17.67	17.63	19.5	4.5
Channel				51702	51600	52098	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	22.20	22.22	22.03	24.0	0.0
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2592.52	2595	2607.48		
25	QPSK	1	1	22.10	22.20	22.11	24.0	0.0
Channel				516000	519000	520000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	22.18	22.15	22.07	24.0	0.0
Channel				515502	519000	52498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	22.19	22.12	22.09	24.0	0.0
Channel				515004	519000	52996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	22.08	22.10	22.11	24.0	0.0

n41 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				52620	51898	52900		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	22.86	22.94	22.91		
100	PI/2 BPSK	1	137	22.90	22.86	22.91	24.0	0.0
100	PI/2 BPSK	1	271	22.77	22.91	22.79		
100	PI/2 BPSK	135	0	22.47	22.55	22.41	23.5	0.5
100	PI/2 BPSK	135	69	22.93	22.98	22.85	24.0	0.0
100	PI/2 BPSK	135	138	22.40	22.49	22.44	23.5	0.5
100	PI/2 BPSK	270	0	22.36	22.53	22.45		
100	QPSK	1	1	22.96	23.03	22.99		
100	QPSK	1	137	22.87	23.00	22.85	24.0	0.0
100	QPSK	1	271	22.82	22.97	22.82		
100	QPSK	135	0	22.06	22.11	22.06	23.0	1.0
100	QPSK	135	69	22.93	22.97	22.91	24.0	0.0
100	QPSK	135	138	21.96	22.01	21.92	23.0	1.0
100	QPSK	270	0	21.98	22.03	21.94		
100	16QAM	1	1	21.91	22.08	21.97	23.0	1.0
100	16QAM	1	1	20.48	20.61	20.56	21.5	2.5
100	256QAM	1	1	18.48	18.52	18.46	19.5	4.5
Channel				50600	51898	52698	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.99		
90	QPSK	1	1	22.92	22.96	22.88	24.0	0.0
Channel				507204	518998	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2538.02	2592.99	2649.99		
80	QPSK	1	1	22.90	22.89	22.96	24.0	0.0
Channel				506202	518998	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	22.90	22.86	22.92	24.0	0.0
Channel				505200	518998	531998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	22.90	22.99	22.82	24.0	0.0
Channel				504204	518998	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	22.94	22.94	22.97	24.0	0.0
Channel				503202	518998	533000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	22.88	22.91	22.86	24.0	0.0
Channel				502200	518998	534998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	22.85	22.89	22.86	24.0	0.0
Channel				501204	518998	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	22.93	22.97	22.91	24.0	0.0
Channel				500700	518998	536498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.05	2592.99	2684.98		
15	QPSK	1	1	22.82	22.85	22.88	24.0	0.0
Channel				500202	518998	537000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	22.88	22.90	22.81	24.0	0.0



Part270 n77 Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)				3750	3840	3930			
100	PI2 BPSK	1	1	22.75	22.80	22.88			
100	PI2 BPSK	1	137	22.64	22.75	22.88			
100	PI2 BPSK	1	271	22.87	22.71	22.59	24.0	0.0	
100	PI2 BPSK	135	0	22.16	22.30	22.26	23.5	0.5	
100	PI2 BPSK	135	69	22.61	22.77	22.70	24.0	0.0	
100	PI2 BPSK	135	138	22.24	22.32	22.29	23.5	0.5	
100	PI2 BPSK	270	0	22.26	22.37	22.35			
100	QPSK	1	1	22.75	22.81	22.84			
100	QPSK	1	137	22.68	22.79	22.69	24.0	0.0	
100	QPSK	1	271	22.67	22.74	22.66			
100	QPSK	135	0	21.67	21.82	21.80	23.0	1.0	
100	QPSK	135	69	22.63	22.78	22.71	24.0	0.0	
100	QPSK	135	138	21.66	21.75	21.66	23.0	1.0	
100	QPSK	270	0	21.76	21.82	21.81			
100	16QAM	1	1	21.37	21.48	21.32	23.0	1.0	
100	16QAM	1	1	20.01	20.16	20.11	21.5	2.5	
100	256QAM	1	1	18.14	18.18	18.09	19.5	4.5	
Channel				649334	656000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	22.74	22.74	22.47	24.0	0.0	
Channel				649334	656000	662668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	22.65	22.69	22.58	24.0	0.0	
Channel				649300	656000	663000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	22.73	22.84	22.81	24.0	0.0	
Channel				648668	656000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	QPSK	1	1	22.63	22.68	22.56	24.0	0.0	
Channel				648334	656000	663668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	22.62	22.72	22.50	24.0	0.0	
Channel				648000	656000	663000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	22.74	22.77	22.57	24.0	0.0	
Channel				647668	656000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	22.75	22.70	22.49	24.0	0.0	
Channel				647500	656000	664500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	22.86	22.87	22.56	24.0	0.0	
Channel				647334	656000	664668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	22.73	22.71	22.47	24.0	0.0	
Channel				647168	656000	664834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	22.73	22.75	22.60	24.0	0.0	
Channel				647000	656000	665000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	22.67	22.78	22.52	24.0	0.0	

Part270 n77 PC2 Ant3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)				3750	3840	3930			
100	PI2 BPSK	1	1	25.68	25.78	25.74			
100	PI2 BPSK	1	137	25.65	25.62	25.79	27.0	0.0	
100	PI2 BPSK	1	271	25.64	25.77	25.60			
100	PI2 BPSK	135	0	25.22	25.37	25.20	26.5	0.5	
100	PI2 BPSK	135	69	25.77	25.85	25.82	27.0	0.0	
100	PI2 BPSK	135	138	25.27	25.33	25.18	26.5	0.5	
100	PI2 BPSK	270	0	25.29	25.39	25.24			
100	QPSK	1	1	25.70	25.69	25.84			
100	QPSK	1	137	25.67	25.62	25.80	27.0	0.0	
100	QPSK	1	271	25.69	25.78	25.68			
100	QPSK	135	0	24.69	24.61	24.69	26.0	1.0	
100	QPSK	135	69	25.66	25.77	25.72	27.0	0.0	
100	QPSK	135	138	24.64	24.62	24.72	26.0	1.0	
100	QPSK	270	0	24.71	24.50	24.83			
100	16QAM	1	1	24.77	24.85	24.79	26.0	1.0	
100	16QAM	1	1	23.35	23.39	23.28	24.5	2.5	
100	256QAM	1	1	20.99	21.02	20.88	22.5	4.5	
Channel				649668	656000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	25.62	25.62	25.69	27.0	0.0	
Channel				649334	656000	662668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	25.70	25.72	25.72	27.0	0.0	
Channel				649000	656000	663000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	25.72	25.78	25.70	27.0	0.0	
Channel				648668	656000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	QPSK	1	1	25.68	25.77	25.81	27.0	0.0	
Channel				648334	656000	663668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	25.69	25.74	25.75	27.0	0.0	
Channel				648000	656000	663000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	25.85	25.81	25.70	27.0	0.0	
Channel				647668	656000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	25.68	25.71	25.75	27.0	0.0	
Channel				647500	656000	664500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	25.73	25.76	25.79	27.0	0.0	
Channel				647334	656000	664668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	25.76	25.79	25.81	27.0	0.0	
Channel				647168	656000	664834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	25.73	25.85	25.74	27.0	0.0	
Channel				647000	656000	665000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	25.66	25.88	25.80	27.0	0.0	



Part270 n78 Ant3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
				3750	3750	3750			
100	PI2 BPSK	1	1		22.90				
100	PI2 BPSK	1	137		22.97				
100	PI2 BPSK	1	271		22.97				
100	PI2 BPSK	135	0		22.59		23.5	0.5	
100	PI2 BPSK	135	69		22.92		24.0	0.0	
100	PI2 BPSK	135	138		22.84		23.5	0.5	
100	PI2 BPSK	270	0		22.69				
100	QPSK	1	1		23.08				
100	QPSK	1	137		23.04		24.0	0.0	
100	QPSK	1	271		23.00				
100	QPSK	135	0		22.03		23.0	1.0	
100	QPSK	135	69		23.01		24.0	0.0	
100	QPSK	135	138		22.03		23.0	1.0	
100	QPSK	270	0		22.19				
100	16QAM	1	1		21.82		23.0	1.0	
100	16QAM	1	1		20.97		21.5	2.5	
100	256QAM	1	1		18.93		19.5	4.5	
Channel									
				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
				3745.02	3750	3755.01			
90	QPSK	1	1		22.88	22.75	22.84	24.0	0.0
Channel									
				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
				3740.01	3750	3760.02			
80	QPSK	1	1		22.92	22.84	22.82	24.0	0.0
Channel									
				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
				3735	3750	3765			
70	QPSK	1	1		22.98	23.01	22.80	24.0	0.0
Channel									
				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
				3730.02	3750	3730.01			
60	QPSK	1	1		22.85	22.87	22.88	24.0	0.0
Channel									
				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
				3725.01	3750	3735.02			
50	QPSK	1	1		22.76	22.85	22.86	24.0	0.0
Channel									
				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
				3720	3750	3780			
40	QPSK	1	1		22.84	22.85	22.86	24.0	0.0
Channel									
				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
				3715.02	3750	3765.01			
30	QPSK	1	0		22.85	22.85	22.85	24.0	0.0
Channel									
				647500	650000	652000	Tune-up limit (dBm)	MPR (dB)	
				3712.5	3750	3787.5			
25	QPSK	1	1		22.91	23.02	22.90	24.0	0.0
Channel									
				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
				3710.01	3750	3790.02			
20	QPSK	1	1		22.83	22.91	22.83	24.0	0.0
Channel									
				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
				3707.52	3750	3792.51			
15	QPSK	1	1		22.86	22.87	22.84	24.0	0.0
Channel									
				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
				3705	3750	3795			
10	QPSK	1	1		22.87	22.91	22.84	24.0	0.0

Part270 n78 PC2 Ant3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
				3750	3750	3750			
100	PI2 BPSK	1	1		25.80				
100	PI2 BPSK	1	137		25.79				
100	PI2 BPSK	1	271		25.83				
100	PI2 BPSK	135	0		25.42		26.5	0.5	
100	PI2 BPSK	135	69		25.75		27.0	0.0	
100	PI2 BPSK	135	138		25.25		26.5	0.5	
100	PI2 BPSK	270	0		25.28				
100	QPSK	1	1		25.86				
100	QPSK	1	137		25.82		27.0	0.0	
100	QPSK	1	271		25.69				
100	QPSK	135	0		24.91		26.0	1.0	
100	QPSK	135	69		25.84		27.0	0.0	
100	QPSK	135	138		24.71		26.0	1.0	
100	QPSK	270	0		24.78				
100	16QAM	1	1		25.07		26.0	1.0	
100	64QAM	1	1		23.73		24.5	2.5	
100	256QAM	1	1		21.55		22.5	4.5	
Channel									
				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
				3745.02	3750	3755.01			
90	QPSK	1	1		25.80	25.85	25.78	27.0	0.0
Channel									
				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
				3740.01	3750	3760.02			
80	QPSK	1	1		25.80	25.78	25.85	27.0	0.0
Channel									
				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
				3735	#VALUE!	3765			
70	QPSK	1	1		25.73	25.75	25.75	27.0	0.0
Channel									
				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
				3730.02	3750	3730.01			
60	QPSK	1	1		25.80	25.81	25.81	27.0	0.0
Channel									
				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
				3725.01	3750	3735.02			
50	QPSK	1	1		25.77	25.79	25.85	27.0	0.0
Channel									
				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
				3720	3750	3780			
40	QPSK	1	1		25.81	25.84	25.79	27.0	0.0
Channel									
				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
				3715.02	3750	3765.01			
30	QPSK	1	1		25.75	25.74	25.81	27.0	0.0
Channel									
				647500	650000	652000	Tune-up limit (dBm)	MPR (dB)	
				3712.5	3750	3787.5			
25	QPSK	1	1		25.80	25.75	25.74	27.0	0.0
Channel									
				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
				3710.01	3750	3790.02			
20	QPSK	1	1		25.72	25.78	25.80	27.0	0.0
Channel									
				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
				3707.52	3750	3792.51			
15	QPSK	1	1		25.78	25.82	25.82	27.0	0.0
Channel									
				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
				3705	3750	3795			
10	QPSK	1	1		25.80	25.66	25.73	27.0	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	59202	51858	52900					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	20.97	21.10	21.02	22.5	0.0
100	PI2 BPSK	1	137	21.11	21.06	21.07		
100	PI2 BPSK	1	271	20.79	20.88	20.77		
100	PI2 BPSK	135	61	20.46	20.59	20.55	22.0	0.5
100	PI2 BPSK	135	69	20.74	20.88	20.76	22.5	0.0
100	PI2 BPSK	135	138	20.58	20.84	20.55	22.0	0.5
100	PI2 BPSK	270	0	20.66	20.79	20.63		
100	QPSK	1	1	21.02	21.12	21.08	22.5	0.0
100	QPSK	1	137	20.95	21.07	20.96		
100	QPSK	1	271	20.81	20.93	20.76		
100	QPSK	135	0	20.63	20.77	20.62	21.5	1.0
100	QPSK	135	69	21.07	21.09	21.00	22.5	0.0
100	QPSK	135	138	20.32	20.38	20.25	21.5	1.0
100	QPSK	270	0	20.33	20.48	20.45		
100	16QAM	1	1	20.19	20.29	20.18	21.5	1.0
100	64QAM	1	1	19.56	19.73	19.66	20.0	2.5
100	256QAM	1	1	17.71	17.79	17.75	18.0	4.5
Channel	50520	51858	52998					
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	20.88	20.99	20.97	22.5	0.0
Channel	507204	518598	529998					
Frequency (MHz)	2536.02	2592.99	2649.99					
80	QPSK	1	1	20.87	21.02	20.99	22.5	0.0
Channel	505202	518598	531000					
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	20.89	21.07	20.89	22.5	0.0
Channel	505200	518598	531998					
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	20.99	21.03	21.03	22.5	0.0
Channel	504204	518598	532998					
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	20.88	21.09	21.00	22.5	0.0
Channel	502202	518598	534000					
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	20.91	20.96	21.02	22.5	0.0
Channel	502200	518598	534998					
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	20.92	20.95	21.02	22.5	0.0
Channel	501204	518598	535998					
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	20.98	20.99	20.98	22.5	0.0
Channel	500700	518598	536998					
Frequency (MHz)	2501.5	2592.99	2682.98					
15	QPSK	1	1	21.00	21.09	21.03	22.5	0.0
Channel	500202	518598	537000					
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	21.00	21.00	20.96	22.5	0.0





Part270 n77 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.56	23.61	23.05			
100	PI2 BPSK	1	137	23.44	23.56	23.03	24.0	0.0	
100	PI2 BPSK	1	271	23.22	23.41	23.05			
100	PI2 BPSK	135	0	23.42	23.35	23.11	23.5	0.5	
100	PI2 BPSK	135	69	23.38	23.55	23.01	24.0	0.0	
100	PI2 BPSK	135	138	23.28	23.35	22.91	23.5	0.5	
100	PI2 BPSK	270	0	23.49	23.43	22.98			
100	QPSK	1	1	23.54	23.65	23.08			
100	QPSK	1	137	23.49	23.53	23.10	24.0	0.0	
100	QPSK	1	271	23.35	23.43	23.03			
100	QPSK	135	0	22.66	22.65	22.95	23.0	1.0	
100	QPSK	135	69	23.51	23.58	23.01	24.0	0.0	
100	QPSK	135	138	22.44	22.38	22.29	23.0	1.0	
100	QPSK	270	0	22.43	22.45	22.39			
100	16QAM	1	1	22.54	22.59	22.66	23.0	1.0	
100	16QAM	1	1	21.45	21.34	20.98	21.5	2.5	
100	256QAM	1	1	19.01	19.03	19.05	19.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	22.47	22.59	22.01	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.50	22.60	22.03	24.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.47	22.51	22.06	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.38	22.54	22.01	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.44	22.57	22.05	24.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.47	22.63	22.05	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.51	22.53	22.01	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.49	22.60	22.05	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.50	22.55	22.05	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.47	22.58	22.04	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.38	22.64	22.03	24.0	0.0	

Part270 n78 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.50	23.56	23.50			
100	PI2 BPSK	1	137	23.41	23.51		24.0	0.0	
100	PI2 BPSK	1	271	23.28	23.38				
100	PI2 BPSK	135	0	23.30	23.30		23.5	0.5	
100	PI2 BPSK	135	69	23.50	23.50		24.0	0.0	
100	PI2 BPSK	135	138	23.30	23.30		23.5	0.5	
100	PI2 BPSK	270	0	23.38	23.38				
100	QPSK	1	1	23.40	23.40				
100	QPSK	1	137	23.48	23.48		24.0	0.0	
100	QPSK	1	271	23.38	23.38				
100	QPSK	135	0	22.60	22.60		23.0	1.0	
100	QPSK	135	69	23.53	23.53		24.0	0.0	
100	QPSK	135	138	22.33	22.33		23.0	1.0	
100	QPSK	270	0	22.39	22.39				
100	16QAM	1	1	22.54	22.54		23.0	1.0	
100	16QAM	1	1	21.29	21.29		21.5	2.5	
100	256QAM	1	1	18.98	18.98		19.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	22.86	22.87	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.63	22.63	22.72	24.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.68	22.61	22.74	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.84	22.68	22.68	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.74	22.68	22.73	24.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.88	22.74	22.81	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.72	22.72	22.82	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.74	22.62	22.61	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.74	22.60	22.59	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.71	22.71	22.65	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.67	22.73	22.68	24.0	0.0	



Part270 n77 Ant8									
BW (MHz)	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	3930			
100	PI2 BPSK	1	1	23.21	23.30	23.15			
100	PI2 BPSK	1	137	23.15	23.19	23.13	24.0	0.0	
100	PI2 BPSK	1	271	23.05	23.15	23.00			
100	PI2 BPSK	135	0	22.81	22.76	22.85	23.5	0.5	
100	PI2 BPSK	135	69	23.18	23.23	23.07	24.0	0.0	
100	PI2 BPSK	135	138	22.52	22.88	22.58	23.5	0.5	
100	PI2 BPSK	270	0	22.58	22.73	22.62			
100	QPSK	1	1	23.25	23.33	23.18			
100	QPSK	1	137	23.09	23.25	23.12	24.0	0.0	
100	QPSK	1	271	22.97	23.13	23.08			
100	QPSK	135	0	22.20	22.31	22.21	23.0	1.0	
100	QPSK	135	69	23.22	23.25	22.92	24.0	0.0	
100	QPSK	135	138	22.03	22.18	22.08	23.0	1.0	
100	QPSK	270	0	22.28	22.31	21.98			
100	16QAM	1	1	22.24	22.38	22.27	23.0	1.0	
100	16QAM	1	1	20.68	20.83	20.65	21.5	2.5	
100	256QAM	1	1	18.45	18.59	18.56	19.5	4.5	
Channel				64968	65000	64934	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3835.91			
90	QPSK	1	1	23.13	23.18	23.07	24.0	0.0	
Channel				64934	65000	64968	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3840.02			
80	QPSK	1	1	23.22	23.18	22.96	24.0	0.0	
Channel				64900	65000	65000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3845			
70	QPSK	1	1	23.25	23.20	22.95	24.0	0.0	
Channel				64868	65000	65334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3855.01			
60	QPSK	1	1	23.22	23.29	22.97	24.0	0.0	
Channel				64834	65000	66368	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3855.02			
50	QPSK	1	1	23.23	23.28	23.02	24.0	0.0	
Channel				64800	65000	64400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3890			
40	QPSK	1	1	23.20	23.18	22.95	24.0	0.0	
Channel				64768	65000	66434	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3823.01			
30	QPSK	1	1	23.15	23.20	23.03	24.0	0.0	
Channel				64700	65000	66450	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3867.5			
25	QPSK	1	1	23.12	23.17	23.00	24.0	0.0	
Channel				64734	65000	66468	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3870.00			
20	QPSK	1	1	23.21	23.28	23.00	24.0	0.0	
Channel				64718	65000	66484	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3872.51			
15	QPSK	1	1	23.21	23.22	23.05	24.0	0.0	
Channel				64700	65000	66500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3875			
10	QPSK	1	1	23.25	23.21	23.04	24.0	0.0	

Part270 n77 PC2 Ant8									
BW (MHz)	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	3930			
100	PI2 BPSK	1	1	25.27	25.23	24.56			
100	PI2 BPSK	1	137	25.16	25.15	24.54	26.5	0.0	
100	PI2 BPSK	1	271	25.17	25.27	24.87			
100	PI2 BPSK	135	0	24.81	24.84	24.30	26.0	0.5	
100	PI2 BPSK	135	69	25.25	25.21	24.57	26.5	0.0	
100	PI2 BPSK	135	138	24.63	24.63	24.06	26.0	0.5	
100	PI2 BPSK	270	0	24.72	24.77	24.24			
100	QPSK	1	1	25.28	25.35	24.82			
100	QPSK	1	137	25.33	25.26	24.53	26.5	0.0	
100	QPSK	1	271	25.09	25.13	24.51			
100	QPSK	135	0	24.41	24.31	23.71	25.5	1.0	
100	QPSK	135	69	25.22	25.30	24.82	26.5	0.0	
100	QPSK	135	138	24.17	24.11	24.25	26.5	1.0	
100	QPSK	270	0	24.23	24.32	23.75			
100	16QAM	1	1	24.44	24.48	23.93	25.5	1.0	
100	16QAM	1	1	22.81	22.74	22.17	24.0	2.5	
100	256QAM	1	1	20.53	20.58	20.11	22.0	4.5	
Channel				64968	65000	64934	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3835.91			
90	QPSK	1	1	25.20	25.12	24.52	26.5	0.0	
Channel				64934	65000	66268	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3840.02			
80	QPSK	1	1	25.23	25.12	24.53	26.5	0.0	
Channel				64900	65000	65000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3845			
70	QPSK	1	1	25.17	25.13	24.53	26.5	0.0	
Channel				64868	65000	66334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3855.01			
60	QPSK	1	1	25.15	25.08	24.52	26.5	0.0	
Channel				64834	65000	66368	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3855.02			
50	QPSK	1	1	25.18	25.13	24.57	26.5	0.0	
Channel				64800	65000	64400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3890			
40	QPSK	1	1	25.33	25.09	24.52	26.5	0.0	
Channel				64768	65000	66434	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3823.01			
30	QPSK	1	1	25.27	25.20	24.52	26.5	0.0	
Channel				64700	65000	66450	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3867.5			
25	QPSK	1	1	25.21	25.14	24.59	26.5	0.0	
Channel				64734	65000	66468	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3870.00			
20	QPSK	1	1	25.11	25.16	24.58	26.5	0.0	
Channel				64718	65000	66484	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3872.51			
15	QPSK	1	1	25.14	25.19	24.54	26.5	0.0	
Channel				64700	65000	66500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3875			
10	QPSK	1	1	25.27	25.19	24.59	26.5	0.0	



Part270 n78 Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3750	3750			
Frequency (MHz)									
100	PI/2 BPSK	1	1	23.39	23.39	23.39			
100	PI/2 BPSK	1	137	23.34	23.34	23.34	24.0	0.0	
100	PI/2 BPSK	1	271	23.26	23.26	23.26			
100	PI/2 BPSK	135	0	22.84	22.84	22.84	23.5	0.5	
100	PI/2 BPSK	135	69	23.23	23.23	23.23	24.0	0.0	
100	PI/2 BPSK	135	138	22.80	22.80	22.80	23.5	0.5	
100	PI/2 BPSK	270	0	22.82	22.82	22.82			
100	QPSK	1	1	23.43	23.43	23.43			
100	QPSK	1	137	23.40	23.40	23.40	24.0	0.0	
100	QPSK	1	271	23.24	23.24	23.24			
100	QPSK	135	0	22.41	22.41	22.41	23.0	1.0	
100	QPSK	135	69	23.38	23.38	23.38	24.0	0.0	
100	QPSK	135	138	22.28	22.28	22.28	23.0	1.0	
100	QPSK	270	0	22.30	22.30	22.30			
100	16QAM	1	1	22.24	22.24	22.24	23.0	1.0	
100	64QAM	1	1	21.24	21.24	21.24	21.5	2.5	
100	256QAM	1	1	18.69	18.69	18.69	19.5	4.5	
Channel				649688	650000	650312	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1	23.31	23.29	23.25	24.0	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1	23.23	23.28	23.41	24.0	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1	23.33	23.37	23.34	24.0	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3750	3770.01			
60	QPSK	1	1	23.32	23.32	23.36	24.0	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1	23.30	23.38	23.36	24.0	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1	23.30	23.35	23.29	24.0	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3750	3785.01			
30	QPSK	1	1	23.30	23.32	23.40	24.0	0.0	
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1	23.33	23.35	23.38	24.0	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3750	3790.02			
20	QPSK	1	1	23.39	23.38	23.29	24.0	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1	23.27	23.28	23.32	24.0	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1	23.35	23.40	23.34	24.0	0.0	

Part270 n78 PC2 Ant8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3750	3750			
Frequency (MHz)									
100	PI/2 BPSK	1	1	25.81	25.81	25.81			
100	PI/2 BPSK	1	137	25.73	25.73	25.73	26.5	0.0	
100	PI/2 BPSK	1	271	25.23	25.23	25.23			
100	PI/2 BPSK	135	0	25.38	25.38	25.38	26.0	0.5	
100	PI/2 BPSK	135	69	25.84	25.84	25.84	26.5	0.0	
100	PI/2 BPSK	135	138	25.37	25.37	25.37	26.0	0.5	
100	PI/2 BPSK	270	0	25.41	25.41	25.41			
100	QPSK	1	1	25.48	25.48	25.48			
100	QPSK	1	137	25.59	25.59	25.59	26.5	0.0	
100	QPSK	1	271	25.21	25.21	25.21			
100	QPSK	135	0	25.31	25.31	25.31	25.5	1.0	
100	QPSK	135	69	25.88	25.88	25.88	26.5	0.0	
100	QPSK	135	138	25.15	25.15	25.15	25.5	1.0	
100	QPSK	270	0	25.32	25.32	25.32			
100	16QAM	1	1	24.97	24.97	24.97	25.5	1.0	
100	64QAM	1	1	23.53	23.53	23.53	24.0	2.5	
100	256QAM	1	1	21.52	21.52	21.52	22.0	4.5	
Channel				649688	650000	650312	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1	25.84	25.85	25.93	26.5	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1	25.91	25.79	25.39	25.5	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1	25.91	25.82	25.84	26.5	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3750	3770.01			
60	QPSK	1	1	25.90	25.88	25.87	26.5	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1	25.80	25.91	25.88	26.5	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1	25.93	25.82	25.91	26.5	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3750	3785.01			
30	QPSK	1	1	25.92	25.91	25.91	25.5	0.0	
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1	25.81	25.82	25.85	26.5	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3750	3790.02			
20	QPSK	1	1	25.86	25.92	25.89	26.5	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1	25.79	25.93	25.87	26.5	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1	25.93	25.88	25.81	26.5	0.0	



Part270 n77 Ant9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)									
100	PI2 BPSK	1	1	22.35	22.41	22.24			
100	PI2 BPSK	1	137	22.30	22.37	22.33	24.0	0.0	
100	PI2 BPSK	1	271	22.24	22.27	22.12			
100	PI2 BPSK	135	0	22.08	22.04	21.92	23.5	0.5	
100	PI2 BPSK	135	69	22.21	22.36	22.22	24.0	0.0	
100	PI2 BPSK	135	138	21.89	21.87	21.55	23.5	0.5	
100	PI2 BPSK	270	0	21.76	21.90	21.73			
100	QPSK	1	1	22.41	22.47	22.41			
100	QPSK	1	137	22.27	22.36	22.17	24.0	0.0	
100	QPSK	1	271	22.11	22.30	22.28			
100	QPSK	135	0	21.53	21.50	21.45	23.0	1.0	
100	QPSK	135	69	22.35	22.41	22.36	24.0	0.0	
100	QPSK	135	138	21.38	21.38	21.21	23.0	1.0	
100	QPSK	270	0	21.35	22.12	21.40			
100	16QAM	1	1	21.43	21.60	21.47	23.0	1.0	
100	16QAM	1	1	20.16	20.27	20.09	21.5	2.5	
100	256QAM	1	1	17.88	17.93	17.78	19.5	4.5	
Channel				643983	650000	643334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3835.91			
90	QPSK	1	1	22.40	22.38	22.35	24.0	0.0	
Channel				649334	650000	662698	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3840.02			
80	QPSK	1	1	22.23	22.39	22.36	24.0	0.0	
Channel				645000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3845			
70	QPSK	1	1	22.29	22.36	22.31	24.0	0.0	
Channel				648688	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3850.01			
60	QPSK	1	1	22.32	22.39	22.27	24.0	0.0	
Channel				648334	650000	663698	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3855.02			
50	QPSK	1	1	22.41	22.40	22.32	24.0	0.0	
Channel				645000	650000	664000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3890			
40	QPSK	1	1	22.35	22.33	22.31	24.0	0.0	
Channel				647688	650000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3825.01			
30	QPSK	1	1	22.28	22.42	22.25	24.0	0.0	
Channel				647500	650000	664500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3887.5			
25	QPSK	1	1	22.27	22.37	22.27	24.0	0.0	
Channel				647334	650000	664688	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3870.02			
20	QPSK	1	1	22.34	22.37	22.25	24.0	0.0	
Channel				647188	650000	664834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3872.51			
15	QPSK	1	1	22.40	22.27	22.30	24.0	0.0	
Channel				647000	650000	665000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	22.38	22.42	22.24	24.0	0.0	

Part270 n77 PC2 Ant9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)									
100	PI2 BPSK	1	1	25.43	25.42	25.33			
100	PI2 BPSK	1	137	25.32	25.37	25.34	27.0	0.0	
100	PI2 BPSK	1	271	25.22	25.31	25.17			
100	PI2 BPSK	135	0	24.87	24.99	24.97	26.5	0.5	
100	PI2 BPSK	135	69	25.33	25.42	25.37	27.0	0.0	
100	PI2 BPSK	135	138	24.81	24.98	24.87	26.5	0.5	
100	PI2 BPSK	270	0	24.87	24.97	24.83			
100	QPSK	1	1	25.45	25.46	25.41			
100	QPSK	1	137	25.28	25.41	25.32	27.0	0.0	
100	QPSK	1	271	25.29	25.37	25.27			
100	QPSK	135	0	24.38	24.40	24.28	26.0	1.0	
100	QPSK	135	69	25.43	25.44	25.41	27.0	0.0	
100	QPSK	135	138	24.31	24.32	24.21	26.0	1.0	
100	QPSK	270	0	24.38	24.44	24.38			
100	16QAM	1	1	24.41	24.62	24.43	26.0	1.0	
100	16QAM	1	1	23.33	23.29	23.20	24.5	2.5	
100	256QAM	1	1	20.88	20.91	20.80	22.5	4.5	
Channel				645000	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3835.91			
90	QPSK	1	1	25.40	25.44	25.22	27.0	0.0	
Channel				649334	650000	662698	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3840.02			
80	QPSK	1	1	25.23	25.43	25.19	27.0	0.0	
Channel				645000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3845			
70	QPSK	1	1	25.42	25.39	25.20	27.0	0.0	
Channel				648688	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3850.01			
60	QPSK	1	1	25.31	25.40	25.22	27.0	0.0	
Channel				648334	650000	663698	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3855.02			
50	QPSK	1	1	25.31	25.33	25.28	27.0	0.0	
Channel				645000	650000	664000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3890			
40	QPSK	1	1	25.36	25.38	25.29	27.0	0.0	
Channel				647688	650000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3825.01			
30	QPSK	1	1	25.32	25.35	25.23	27.0	0.0	
Channel				647500	650000	664500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3887.5			
25	QPSK	1	1	25.28	25.37	25.18	27.0	0.0	
Channel				647334	650000	664688	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3870.02			
20	QPSK	1	1	25.28	25.44	25.21	27.0	0.0	
Channel				647188	650000	664834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3872.51			
15	QPSK	1	1	25.40	25.38	25.29	27.0	0.0	
Channel				647000	650000	665000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	25.40	25.39	25.29	27.0	0.0	



Part270 n78 Ant9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3750	3750			
Frequency (MHz)									
100	PI/2 BPSK	1	1	23.52	23.52	23.52			
100	PI/2 BPSK	1	137	23.42	23.42	23.42	24.0	0.0	
100	PI/2 BPSK	1	271	23.04	23.04	23.04			
100	PI/2 BPSK	135	0	23.09	23.09	23.09	23.5	0.5	
100	PI/2 BPSK	135	69	23.48	23.48	23.48	24.0	0.0	
100	PI/2 BPSK	135	138	22.73	22.73	22.73	23.5	0.5	
100	PI/2 BPSK	270	0	22.70	22.70	22.70			
100	QPSK	1	1	23.72	23.72	23.72			
100	QPSK	1	137	23.37	23.37	23.37	24.0	0.0	
100	QPSK	1	271	23.05	23.05	23.05			
100	QPSK	135	0	22.64	22.64	22.64	23.0	1.0	
100	QPSK	135	69	23.57	23.57	23.57	24.0	0.0	
100	QPSK	135	138	22.27	22.27	22.27	23.0	1.0	
100	QPSK	270	0	22.44	22.44	22.44			
100	16QAM	1	1	22.73	22.73	22.73	23.0	1.0	
100	16QAM	1	1	21.27	21.27	21.27	21.5	2.5	
100	256QAM	1	1	18.62	18.62	18.62	19.5	4.5	
Channel				649688	650000	650314	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1	23.54	23.60	23.50	24.0	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1	23.51	23.09	23.05	24.0	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1	23.65	23.56	23.53	24.0	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3750	3770.01			
60	QPSK	1	1	23.48	23.61	23.65	24.0	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1	23.57	23.53	23.61	24.0	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1	23.68	23.59	23.53	24.0	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3750	3785.01			
30	QPSK	1	1	23.51	23.51	23.53	24.0	0.0	
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1	23.56	23.48	23.58	24.0	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3750	3790.02			
20	QPSK	1	1	23.58	23.50	23.58	24.0	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1	23.63	23.63	23.55	24.0	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1	23.66	23.56	23.54	24.0	0.0	

Part270 n78 PC2 Ant9									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3750	3750			
Frequency (MHz)									
100	PI/2 BPSK	1	1	26.63	26.63	26.63			
100	PI/2 BPSK	1	137	26.60	26.60	26.60	27.0	0.0	
100	PI/2 BPSK	1	271	26.30	26.30	26.30			
100	PI/2 BPSK	135	0	26.18	26.18	26.18	26.5	0.5	
100	PI/2 BPSK	135	69	26.66	26.66	26.66	27.0	0.0	
100	PI/2 BPSK	135	138	26.09	26.09	26.09	26.5	0.5	
100	PI/2 BPSK	270	0	26.10	26.10	26.10			
100	QPSK	1	1	26.75	26.75	26.75			
100	QPSK	1	137	26.63	26.63	26.63	27.0	0.0	
100	QPSK	1	271	26.54	26.54	26.54			
100	QPSK	135	0	25.68	25.68	25.68	26.0	1.0	
100	QPSK	135	69	26.70	26.70	26.70	27.0	0.0	
100	QPSK	135	138	25.27	25.27	25.27	26.0	1.0	
100	QPSK	270	0	25.09	25.09	25.09			
100	16QAM	1	1	25.82	25.82	25.82	26.0	1.0	
100	16QAM	1	1	24.13	24.13	24.13	24.5	2.5	
100	256QAM	1	1	19.5	19.5	19.5	22.5	4.5	
Channel				649688	650000	650314	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1	26.56	26.63	26.66	27.0	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1	26.65	26.71	26.71	27.0	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1	26.63	26.61	26.57	27.0	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3750	3770.01			
60	QPSK	1	1	26.58	26.72	26.68	27.0	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1	26.61	26.68	26.74	27.0	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1	26.57	26.55	26.56	27.0	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3750	3785.01			
30	QPSK	1	1	26.72	26.70	26.69	27.0	0.0	
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1	26.55	26.56	26.58	27.0	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3750	3790.02			
20	QPSK	1	1	26.62	26.66	26.58	27.0	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1	26.56	26.67	26.60	27.0	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1	26.63	26.71	26.73	27.0	0.0	



Reduced Power Mode for DS12 Standalone

n5 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)	
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.			
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	Pl2 BPSK	1	1	23.04	23.13	22.99	24.0	0.0	
20	Pl2 BPSK	1	53	22.90	23.03	22.93			
20	Pl2 BPSK	1	104	23.00	23.10	22.97			
20	Pl2 BPSK	50	0	22.56	22.64	22.55	23.5	0.5	
20	Pl2 BPSK	50	29	22.82	22.98	22.85	24.0	0.0	
20	Pl2 BPSK	50	58	22.57	22.70	22.53	23.5	0.5	
20	Pl2 BPSK	100	0	22.61	22.73	22.58			
20	QPSK	1	1	23.16	23.19	23.02	24.0	0.0	
20	QPSK	1	53	22.86	23.06	22.91			
20	QPSK	1	104	23.09	23.12	23.04			
20	QPSK	50	0	22.15	22.17	22.13	23.0	1.0	
20	QPSK	50	28	23.11	23.14	23.08	24.0	0.0	
20	QPSK	50	56	22.12	22.22	22.06	23.0	1.0	
20	QPSK	100	0	22.26	22.31	22.24			
20	16QAM	1	1	22.02	22.05	21.96	23.0	1.0	
20	64QAM	1	1	20.87	21.02	20.85	21.5	2.5	
20	256QAM	1	1	18.39	18.49	18.37	19.5	4.5	
Channel				166300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				831.5	836.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	23.03	23.10	22.97	24.0	0.0	
Channel				166800	167300	168800	Tune-up limit	MPR	
Frequency (MHz)				829	836.5	844	(dBm)	(dB)	
10	QPSK	1	1	23.06	23.02	22.95	24.0	0.0	
Channel				165300	167300	169300	Tune-up limit	MPR	
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	23.09	23.04	22.85	24.0	0.0	



n41 Ant0

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	505202	518598	530998					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	23.06	23.15	23.12		
100	PI2 BPSK	1	137	23.00	23.07	22.97	24.0	0.0
100	PI2 BPSK	1	271	23.05	23.13	23.05		
100	PI2 BPSK	135	61	22.57	22.71	22.85	23.5	0.5
100	PI2 BPSK	135	69	22.87	23.04	22.94	24.0	0.0
100	PI2 BPSK	135	138	22.56	22.88	22.51	23.5	0.5
100	PI2 BPSK	270	0	22.58	22.73	22.60		
100	QPSK	1	1	23.06	23.16	23.05		
100	QPSK	1	137	22.88	23.06	22.96	24.0	0.0
100	QPSK	1	271	23.00	23.12	23.09		
100	QPSK	135	0	22.09	22.18	22.07	23.0	1.0
100	QPSK	135	69	22.99	23.13	23.02	24.0	0.0
100	QPSK	135	138	22.11	22.18	22.13	23.0	1.0
100	QPSK	270	0	22.14	22.21	22.11		
100	16QAM	1	1	21.86	22.00	21.96	23.0	1.0
100	64QAM	1	1	20.57	20.88	20.62	21.5	2.5
100	256QAM	1	1	18.36	18.54	18.37	19.5	4.5
Channel	505203	518599	530998					
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	23.05	23.07	22.99	24.0	0.0
Channel	507204	518598	529998					
Frequency (MHz)	2537.02	2592.99	2649.99					
80	QPSK	1	1	22.98	23.02	22.94	24.0	0.0
Channel	505202	518598	531000					
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	22.93	23.03	22.98	24.0	0.0
Channel	505200	518598	531998					
Frequency (MHz)	2528	2592.99	2659.99					
60	QPSK	1	1	22.92	23.14	23.02	24.0	0.0
Channel	504204	518598	530998					
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	22.93	23.06	22.85	24.0	0.0
Channel	505202	518598	531000					
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	23.07	23.11	22.89	24.0	0.0
Channel	502200	518598	534998					
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	22.95	23.10	22.85	24.0	0.0
Channel	501204	518598	530998					
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	22.94	23.04	22.99	24.0	0.0
Channel	500700	518598	534998					
Frequency (MHz)	2501.5	2592.99	2682.48					
15	QPSK	1	1	22.98	23.16	22.99	24.0	0.0
Channel	500202	518598	537000					
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	23.07	23.13	22.90	24.0	0.0



n2 DSI2 Standalone Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376000	380000			
Frequency (MHz)				1860	1860	1900			
20	PI2 BPSK	1	1	18.03	18.06	17.99			
20	PI2 BPSK	1	53	17.86	17.91	17.73	18.9	0.0	
20	PI2 BPSK	1	104	17.80	17.92	17.83			
20	PI2 BPSK	50	0	17.84	17.96	17.85	18.9	0.0	
20	PI2 BPSK	50	28	17.80	17.97	17.92	18.9	0.0	
20	PI2 BPSK	50	58	17.75	17.90	17.81	18.9	0.0	
20	PI2 BPSK	100	0	17.86	17.96	17.81			
20	QPSK	1	1	17.97	18.09	18.02			
20	QPSK	1	53	17.85	17.94	17.84	18.9	0.0	
20	QPSK	1	104	17.90	17.98	17.86			
20	QPSK	50	0	17.80	17.97	17.79	18.9	0.0	
20	QPSK	50	28	17.92	18.01	17.88	18.9	0.0	
20	QPSK	50	58	17.76	17.88	17.81	18.9	0.0	
20	QPSK	100	0	17.90	17.93	17.90			
20	16QAM	1	1	17.69	17.87	17.73	18.9	0.0	
20	16QAM	1	1	17.82	17.90	17.88	18.9	0.0	
20	256QAM	1	1	17.78	17.84	17.70	18.9	0.0	
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1857.5	1860	1902.5			
15	QPSK	1	1	17.84	17.99	17.98	18.9	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1855	1860	1905			
10	QPSK	1	1	17.94	17.90	17.91	18.9	0.0	
Channel				375500	376000	381500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1852.5	1860	1907.5			
5	QPSK	1	1	17.94	18.07	17.96	18.9	0.0	

n7 DSI2 Standalone Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				505000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI2 BPSK	1	1	15.91	15.98	15.83			
40	PI2 BPSK	1	108	15.84	15.84	15.82	16.9	0.0	
40	PI2 BPSK	1	214	15.85	15.82	15.88			
40	PI2 BPSK	108	0	15.71	15.78	15.58	16.9	0.0	
40	PI2 BPSK	108	54	15.81	15.66	15.46	16.9	0.0	
40	PI2 BPSK	108	108	15.65	15.83	15.71	16.9	0.0	
40	PI2 BPSK	216	0	15.62	15.85	15.81			
40	QPSK	1	1	15.84	16.07	16.03			
40	QPSK	1	108	15.84	15.80	15.57	16.9	0.0	
40	QPSK	1	214	15.84	15.84	15.71			
40	QPSK	108	0	15.79	15.88	15.79	16.9	0.0	
40	QPSK	108	54	15.74	15.90	15.89	16.9	0.0	
40	QPSK	108	108	15.85	15.89	15.82	16.9	0.0	
40	QPSK	216	0	15.74	15.82	15.75			
40	16QAM	1	1	15.53	15.71	15.63	16.9	0.0	
40	16QAM	1	1	15.78	15.78	15.68	16.9	0.0	
40	256QAM	1	1	15.72	15.71	15.61	16.9	0.0	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	15.78	15.98	15.87	16.9	0.0	
Channel				502000	507000	511500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2512.5	2535	2577.5			
25	QPSK	1	1	15.80	15.99	15.80	16.9	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2510	2535	2560			
20	PI2 BPSK	1	1	15.75	15.85	15.83	16.9	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2507.5	2535	2582.5			
15	QPSK	1	1	15.75	15.86	15.85	16.9	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	15.83	15.90	15.73	16.9	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2502.5	2535	2597.5			
5	QPSK	1	1	15.76	15.93	15.95	16.9	0.0	

n66 DSI2 Standalone Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				349500	349500	353000			
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	1	1	17.55	17.51	17.46			
40	PI2 BPSK	1	108	17.32	17.44	17.25	18.6	0.0	
40	PI2 BPSK	1	214	17.14	17.36	17.26			
40	PI2 BPSK	108	0	17.27	17.35	17.37	18.6	0.0	
40	PI2 BPSK	108	54	17.23	17.34	17.33	18.6	0.0	
40	PI2 BPSK	108	108	17.16	17.20	17.14	18.6	0.0	
40	PI2 BPSK	216	0	17.17	17.28	17.28			
40	QPSK	1	1	17.48	17.61	17.52			
40	QPSK	1	108	17.41	17.47	17.41	18.6	0.0	
40	QPSK	1	214	17.26	17.47	17.27			
40	QPSK	108	0	17.38	17.44	17.22	18.6	0.0	
40	QPSK	108	54	17.48	17.57	17.32	18.6	0.0	
40	QPSK	108	108	17.41	17.39	17.37	18.6	0.0	
40	QPSK	216	0	17.34	17.47	17.33			
40	16QAM	1	1	17.32	17.51	17.31	18.6	0.0	
40	16QAM	1	1	17.24	17.44	17.34	18.6	0.0	
40	256QAM	1	1	17.30	17.42	17.31	18.6	0.0	
Channel				349000	349500	353500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	17.06	17.08	16.81	18.6	0.0	
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	17.20	16.97	16.81	18.6	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	16.81	17.06	16.94	18.6	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	16.89	16.98	16.90	18.6	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	16.94	16.98	16.90	18.6	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	16.96	17.01	16.90	18.6	0.0	





n38 Default Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2590.02	2595	2599.98		
Frequency (MHz)				519304	519350	519396		
40	PI/2 BPSK	1	1	18.05	16.24	16.08		
40	PI/2 BPSK	1	53	18.01	16.09	16.09	16.7	0.0
40	PI/2 BPSK	1	104	18.05	15.99	16.02		
40	PI/2 BPSK	50	0	15.51	15.81	15.47	16.7	0.0
40	PI/2 BPSK	50	28	16.02	16.14	16.02	16.7	0.0
40	PI/2 BPSK	50	56	15.39	15.40	15.27	16.7	0.0
40	PI/2 BPSK	100	0	15.26	15.47	15.48		
40	QPSK	1	1	16.13	16.25	16.19		
40	QPSK	1	53	16.12	16.08	16.05	16.7	0.0
40	QPSK	1	104	15.88	16.17	16.03		
40	QPSK	50	0	14.99	15.08	14.88	16.7	0.0
40	QPSK	50	28	16.08	16.15	16.00	16.7	0.0
40	QPSK	50	56	14.86	14.83	14.76	16.7	0.0
40	QPSK	100	0	15.02	15.80	14.88		
40	16QAM	1	1	16.10	16.12	16.02	16.7	0.0
40	16QAM	1	1	14.81	14.95	14.77	16.7	0.0
40	256QAM	1	1	15.05	14.67	15.01	16.7	0.0
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99	16.7	0.0
30	QPSK	1	1	16.09	16.06	15.96	16.7	0.0
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2582.52	2595	2607.48	16.7	0.0
25	QPSK	1	1	16.17	16.03	16.02	16.7	0.0
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610	16.7	0.0
20	QPSK	1	1	16.10	16.08	16.10	16.7	0.0
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49	16.7	0.0
15	QPSK	1	1	16.04	16.24	16.09	16.7	0.0
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98	16.7	0.0
10	QPSK	1	1	16.09	16.06	16.05	16.7	0.0

n41 DSI2 Standalone Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2546.01	2592.99	2640		
Frequency (MHz)				509200	518998	528000		
100	PI/2 BPSK	1	1	15.97	15.99	15.91		
100	PI/2 BPSK	1	137	15.80	15.94	15.69	16.7	0.0
100	PI/2 BPSK	1	271	15.96	15.88	15.87		
100	PI/2 BPSK	135	0	15.83	15.91	15.83	16.7	0.0
100	PI/2 BPSK	135	69	15.86	15.90	15.87	16.7	0.0
100	PI/2 BPSK	135	138	15.70	15.84	15.77	16.7	0.0
100	PI/2 BPSK	270	0	15.84	15.89	15.82		
100	QPSK	1	1	15.96	15.98	15.91		
100	QPSK	1	137	15.92	15.89	15.80	16.7	0.0
100	QPSK	1	271	15.85	15.88	15.91		
100	QPSK	135	0	15.87	15.93	15.78	16.7	0.0
100	QPSK	135	69	15.92	15.96	15.85	16.7	0.0
100	QPSK	135	138	15.83	15.81	15.74	16.7	0.0
100	QPSK	270	0	15.90	15.94	15.86		
100	16QAM	1	1	15.77	15.83	15.74	16.7	0.0
100	16QAM	1	1	15.79	15.88	15.85	16.7	0.0
100	256QAM	1	1	15.86	15.87	15.75	16.7	0.0
Channel				508200	518998	528998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.99	16.7	0.0
90	QPSK	1	1	15.89	16.01	15.92	16.7	0.0
Channel				507204	518998	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2648.99	16.7	0.0
80	QPSK	1	1	15.81	16.03	15.97	16.7	0.0
Channel				506202	518998	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655	16.7	0.0
70	QPSK	1	1	15.80	15.94	15.92	16.7	0.0
Channel				505200	518998	531998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99	16.7	0.0
60	QPSK	1	1	15.93	16.04	15.94	16.7	0.0
Channel				504204	518998	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99	16.7	0.0
50	QPSK	1	1	15.81	16.01	15.94	16.7	0.0
Channel				503202	518998	533000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670	16.7	0.0
40	QPSK	1	1	15.82	15.95	15.94	16.7	0.0
Channel				502200	518998	534998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99	16.7	0.0
30	QPSK	1	1	15.92	15.93	15.97	16.7	0.0
Channel				501204	518998	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99	16.7	0.0
20	QPSK	1	1	15.89	16.07	15.89	16.7	0.0
Channel				500700	518998	536498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.15	2592.99	2684.48	16.7	0.0
15	QPSK	1	1	15.82	15.93	15.84	16.7	0.0
Channel				500202	518998	537000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685	16.7	0.0
10	QPSK	1	1	15.78	16.00	15.96	16.7	0.0



**n7 Ant2**

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	50000	50700	51000					
Frequency (MHz)	2620	2635	2650					
40	PI2 BPSK	1	1	22.22	22.26	22.20		
40	PI2 BPSK	1	108	22.13	22.23	22.11	24.0	0.0
40	PI2 BPSK	1	214	22.15	22.21	22.12		
40	PI2 BPSK	108	0	21.66	21.72	21.55	23.5	0.5
40	PI2 BPSK	108	54	22.01	22.06	22.01	24.0	0.0
40	PI2 BPSK	108	108	21.65	21.76	21.67	23.5	0.5
40	PI2 BPSK	216	0	21.69	21.79	21.69		
40	QPSK	1	1	22.17	22.32	22.22		
40	QPSK	1	108	22.18	22.24	22.16	24.0	0.0
40	QPSK	1	214	22.10	22.27	22.10		
40	QPSK	108	0	21.06	21.15	21.03	23.0	1.0
40	QPSK	108	54	22.06	22.19	22.15	24.0	0.0
40	QPSK	108	108	21.16	21.26	21.22	23.0	1.0
40	QPSK	216	0	21.11	21.33	21.23		
40	16QAM	1	1	21.12	21.17	21.14	23.0	1.0
40	16QAM	1	1	19.59	19.62	19.65	21.5	2.5
40	256QAM	1	1	17.88	17.88	17.55	19.5	4.5
Channel	50300	50700	51100					
Frequency (MHz)	2615	2635	2655					
30	QPSK	1	1	22.02	22.14	22.09	24.0	0.0
Channel	50200	50700	51150					
Frequency (MHz)	2572.5	2635	2677.5					
25	QPSK	1	1	22.09	22.27	22.10	24.0	0.0
Channel	50200	50700	51200					
Frequency (MHz)	2610	2635	2660					
20	PI2 BPSK	1	1	22.12	22.23	22.04	24.0	0.0
Channel	50150	50700	51250					
Frequency (MHz)	2607.5	2635	2662.5					
15	QPSK	1	1	22.07	22.15	22.07	24.0	0.0
Channel	50100	50700	51300					
Frequency (MHz)	2605	2635	2665					
10	QPSK	1	1	22.11	22.24	22.17	24.0	0.0
Channel	50050	50700	51350					
Frequency (MHz)	2602.5	2635	2667.5					
5	QPSK	1	1	22.15	22.22	22.19	24.0	0.0



n38 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				519304	519500	519696		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	22.20	22.24	22.11		
40	PI/2 BPSK	1	53	22.10	22.18	22.08	24.0	0.0
40	PI/2 BPSK	1	104	22.07	22.11	22.07		
40	PI/2 BPSK	50	0	21.55	21.85	21.80	23.5	0.5
40	PI/2 BPSK	50	28	22.02	22.01	22.07	24.0	0.0
40	PI/2 BPSK	50	56	22.47	22.44	22.35	23.5	0.5
40	PI/2 BPSK	100	0	22.45	22.57	22.50		
40	QPSK	1	1	22.26	22.88	22.14	24.0	0.0
40	QPSK	1	53	22.04	22.16	22.04		
40	QPSK	1	104	22.04	22.12	22.05		
40	QPSK	50	0	21.50	21.12	21.50	23.0	1.0
40	QPSK	50	28	22.17	22.21	22.10	24.0	0.0
40	QPSK	80	56	21.50	21.04	21.80	23.0	1.0
40	QPSK	100	0	21.05	21.11	21.08		
40	16QAM	1	1	21.16	21.30	21.16	23.0	1.0
40	16QAM	1	1	19.97	20.08	19.88	21.5	2.5
40	256QAM	1	1	18.01	18.08	18.08	19.5	4.5
Channel				517002	516900	533998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2585.01	2595	2604.99	24.0	0.0
30	QPSK	1	1	22.20	22.22	22.03	24.0	0.0
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR
Frequency (MHz)				2582.52	2595	2607.48	24.0	0.0
25	QPSK	1	1	22.10	22.20	22.01	24.0	0.0
Channel				516000	519000	523000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2580	2595	2610	24.0	0.0
20	QPSK	1	1	22.18	22.15	22.07	24.0	0.0
Channel				515502	519000	524998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2577.51	2595	2612.49	24.0	0.0
15	QPSK	1	1	22.19	22.12	22.09	24.0	0.0
Channel				515004	519000	528996	Tune-up limit (dBm)	MPR
Frequency (MHz)				2575.02	2595	2614.98	24.0	0.0
10	QPSK	1	1	22.08	22.10	22.11	24.0	0.0

n41 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				526202	518998	529200		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	22.86	22.94	22.91		
100	PI/2 BPSK	1	137	22.90	22.86	22.91	24.0	0.0
100	PI/2 BPSK	1	271	22.77	22.91	22.79		
100	PI/2 BPSK	135	0	22.47	22.55	22.41	23.5	0.5
100	PI/2 BPSK	135	69	22.93	22.98	22.85	24.0	0.0
100	PI/2 BPSK	135	138	22.40	22.49	22.44	23.5	0.5
100	PI/2 BPSK	270	0	22.36	22.53	22.45		
100	QPSK	1	1	22.96	23.03	22.99		
100	QPSK	1	137	22.87	23.00	22.85	24.0	0.0
100	QPSK	1	271	22.82	22.97	22.82		
100	QPSK	135	0	22.06	22.11	22.06	23.0	1.0
100	QPSK	135	69	22.93	22.97	22.91	24.0	0.0
100	QPSK	135	138	21.96	22.01	21.92	23.0	1.0
100	QPSK	270	0	21.98	22.03	21.94		
100	16QAM	1	1	21.91	22.08	21.97	23.0	1.0
100	16QAM	1	1	20.48	20.61	20.56	21.5	2.5
100	256QAM	1	1	18.48	18.52	18.48	19.5	4.5
Channel				506300	518998	530998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2541	2592.99	2644.99	24.0	0.0
90	QPSK	1	1	22.92	22.96	22.88	24.0	0.0
Channel				507204	518998	529998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2538.02	2592.99	2649.99	24.0	0.0
80	QPSK	1	1	22.90	22.89	22.96	24.0	0.0
Channel				506202	518998	531000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2531.01	2592.99	2655	24.0	0.0
70	QPSK	1	1	22.90	22.86	22.92	24.0	0.0
Channel				505200	518998	531998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2524	2592.99	2659.99	24.0	0.0
60	QPSK	1	1	22.90	22.99	22.82	24.0	0.0
Channel				504204	518998	532998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2521.02	2592.99	2664.99	24.0	0.0
50	QPSK	1	1	22.94	22.94	22.97	24.0	0.0
Channel				503202	518998	533000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2516.01	2592.99	2670	24.0	0.0
40	QPSK	1	1	22.88	22.91	22.86	24.0	0.0
Channel				502200	518998	534996	Tune-up limit (dBm)	MPR
Frequency (MHz)				2511	2592.99	2674.99	24.0	0.0
30	QPSK	1	1	22.85	22.89	22.86	24.0	0.0
Channel				501204	518998	535998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2506.02	2592.99	2679.99	24.0	0.0
20	QPSK	1	1	22.93	22.97	22.91	24.0	0.0
Channel				500700	518998	536996	Tune-up limit (dBm)	MPR
Frequency (MHz)				2503.05	2592.99	2684.98	24.0	0.0
15	QPSK	1	1	22.82	22.85	22.88	24.0	0.0
Channel				500202	518998	537000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2501.01	2592.99	2685	24.0	0.0
10	QPSK	1	1	22.88	22.90	22.81	24.0	0.0



### Part270 n77 Ant3

BW (MHz)	Modulation	RB 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	21.81	21.86	21.65		
100	PI2 BPSK	1	137	21.58	21.70	21.73		0.0
100	PI2 BPSK	1	271	21.09	21.73	21.56		
100	PI2 BPSK	135	0	21.22	21.26	21.33	22.5	0.0
100	PI2 BPSK	135	69	21.57	21.85	21.68	22.5	0.0
100	PI2 BPSK	135	138	21.27	21.40	21.28	22.5	0.0
100	PI2 BPSK	270	0	21.24	21.39	21.33		
100	QPSK	1	1	21.83	21.88	21.71		
100	QPSK	1	137	21.58	21.74	21.72	22.5	0.0
100	QPSK	1	271	21.60	21.71	21.63		
100	QPSK	135	0	20.68	20.80	20.75	22.5	0.0
100	QPSK	135	69	21.80	21.82	21.72	22.5	0.0
100	QPSK	135	138	21.56	21.65	21.60	22.5	0.0
100	QPSK	270	0	21.66	21.72	21.61		
100	16QAM	1	1	20.87	20.98	20.82	22.5	0.0
100	16QAM	1	1	19.51	19.66	19.61	21.5	1.0
100	256QAM	1	1	17.84	17.88	17.59	19.5	3.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	21.75	21.82	21.48	22.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	21.75	21.70	21.64	22.5	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	21.69	21.72	21.61	22.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	21.65	21.75	21.49	22.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	21.67	21.74	21.50	22.5	0.0
Channel								
Frequency (MHz)				647668	650000	648334		
30	QPSK	1	1	21.73	21.63	21.47	22.5	0.0
Channel								
Frequency (MHz)				647500	650000	647500		
25	QPSK	1	1	21.82	21.68	21.50	22.5	0.0
Channel								
Frequency (MHz)				647334	650000	648668		
20	QPSK	1	1	21.68	21.77	21.52	22.5	0.0
Channel								
Frequency (MHz)				647168	650000	648434		
15	QPSK	1	1	21.77	21.83	21.60	22.5	0.0
Channel								
Frequency (MHz)				647000	650000	647000		
10	QPSK	1	1	21.65	21.75	21.47	22.5	0.0

### Part270 n77 PC2 Ant3

BW (MHz)	Modulation	RB 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	24.99	25.12	25.10		
100	PI2 BPSK	1	137	24.94	25.04	25.06	25.5	0.0
100	PI2 BPSK	1	271	24.90	25.02	24.92		
100	PI2 BPSK	135	0	25.02	25.10	25.09	25.5	0.0
100	PI2 BPSK	135	69	24.90	25.09	25.00	25.5	0.0
100	PI2 BPSK	135	138	24.91	25.00	24.94	25.5	0.0
100	PI2 BPSK	270	0	24.86	25.07	25.02		
100	QPSK	1	1	25.07	25.05	25.15		
100	QPSK	1	137	24.98	25.11	25.09	25.5	0.0
100	QPSK	1	271	24.96	25.08	24.97		
100	QPSK	135	0	25.11	25.17	25.13	25.5	0.0
100	QPSK	135	69	24.97	25.18	25.05	25.5	0.0
100	QPSK	135	138	24.96	25.07	24.98	25.5	0.0
100	QPSK	270	0	24.92	25.11	25.06		
100	16QAM	1	1	25.03	25.08	25.10	25.5	0.0
100	16QAM	1	1	24.05	24.19	24.12	24.5	1.0
100	256QAM	1	1	22.05	22.19	22.14	22.5	3.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	25.07	25.09	25.08	25.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	24.92	25.15	24.97	25.5	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	24.98	25.15	25.08	25.5	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	24.92	25.02	24.94	25.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	24.88	24.99	24.90	25.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	24.89	25.12	25.00	25.5	0.0
Channel								
Frequency (MHz)				647668	650000	648334		
30	QPSK	1	1	24.83	25.05	24.80	25.5	0.0
Channel								
Frequency (MHz)				647500	650000	647500		
25	QPSK	1	1	24.89	25.05	24.99	25.5	0.0
Channel								
Frequency (MHz)				647334	650000	648668		
20	QPSK	1	1	25.07	25.09	25.08	25.5	0.0
Channel								
Frequency (MHz)				647168	650000	648434		
15	QPSK	1	1	24.98	25.12	25.00	25.5	0.0
Channel								
Frequency (MHz)				647000	650000	647000		
10	QPSK	1	1	24.90	25.03	24.90	25.5	0.0

### Part270 n78 Ant3

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		21.40			
100	PI2 BPSK	1	137		21.50		22.5	0.0
100	PI2 BPSK	1	271		21.49			
100	PI2 BPSK	135	0		21.11		22.0	0.5
100	PI2 BPSK	135	69		21.43		22.5	0.0
100	PI2 BPSK	135	138		21.12		22.0	0.5
100	PI2 BPSK	270	0		21.20			
100	QPSK	1	1		21.54			
100	QPSK	1	137		21.54		22.5	0.0
100	QPSK	1	271		21.51			
100	QPSK	135	0		20.52		21.5	1.0
100	QPSK	135	69		21.48		22.5	0.0
100	QPSK	135	138		20.52		21.5	1.0
100	QPSK	270	0		20.88			
100	16QAM	1	1		20.45		21.5	1.0
100	16QAM	1	1		20.46		21.5	1.0
100	256QAM	1	1		18.45		19.5	3.0
Channel								
Frequency (MHz)				648668	650000	649334		
90	QPSK	1	1	21.39	21.28	21.36	22.5	0.0
Channel								
Frequency (MHz)				649334	650000	650968		
80	QPSK	1	1	21.29	21.36	21.32	22.5	0.0
Channel								
Frequency (MHz)				645000	650000	651000		
70	QPSK	1	1	21.44	21.41	21.29	22.5	0.0
Channel								
Frequency (MHz)				648668	650000	651334		
60	QPSK	1	1	21.37	21.37	21.35	22.5	0.0
Channel								
Frequency (MHz)				648334	650000	651668		
50	QPSK	1	1	21.27	21.42	21.38	22.5	0.0
Channel								
Frequency (MHz)				645000	650000	652000		
40	QPSK	1	1	21.37	21.38	21.35	22.5	0.0
Channel								
Frequency (MHz)				647668	650000	652334		
30	QPSK	1	1	21.07	21.34	21.34	22.5	0.0
Channel								
Frequency (MHz)				647500	650000	652500		
25	QPSK	1	1	21.43	21.42	21.38	22.5	0.0
Channel								
Frequency (MHz)				647334	650000	652668		
20	QPSK	1	1	21.30	21.43	21.30	22.5	0.0
Channel								
Frequency (MHz)				647168	650000	652834		
15	QPSK	1	1	21.38	21.37	21.44	22.5	0.0
Channel								
Frequency (MHz)				647000	650000	653000		
10	QPSK	1	1	21.36	21.39	21.36	22.5	0.0



**Part270 n78 PC2 Ant3**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				3760	3760	3760		
Frequency (MHz)								
100	PI/2 BPSK	1	1	25.08				
100	PI/2 BPSK	1	137	24.96			25.5	0.0
100	PI/2 BPSK	1	271	24.85			25.5	0.0
100	PI/2 BPSK	135	0	25.03			25.5	0.0
100	PI/2 BPSK	135	89	25.01			25.5	0.0
100	PI/2 BPSK	135	138	24.95			25.5	0.0
100	PI/2 BPSK	270	0	24.97				
100	QPSK	1	1	25.15				
100	QPSK	1	137	25.07			25.5	0.0
100	QPSK	1	271	25.02				
100	QPSK	135	0	25.08			25.5	0.0
100	QPSK	135	89	25.14			25.5	0.0
100	QPSK	135	138	25.01			25.5	0.0
100	QPSK	270	0	25.07			25.5	0.0
100	16QAM	1	1	25.00			25.5	0.0
100	16QAM	1	1	24.13			24.5	1.0
100	256QAM	1	1	22.14			22.5	3.0
Channel				649688	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	25.01	24.99	25.01	25.5	0.0
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	24.89	25.09	24.92	25.5	0.0
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	24.91	25.06	25.04	25.5	0.0
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3750	3750.01		
60	QPSK	1	1	24.84	24.93	24.89	25.5	0.0
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	24.82	24.93	24.84	25.5	0.0
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	24.81	25.06	24.94	25.5	0.0
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	24.79	24.99	24.91	25.5	0.0
Channel				647300	650000	652000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	24.80	25.00	24.94	25.5	0.0
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	25.00	25.04	24.98	25.5	0.0
Channel				647188	650000	652834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	24.92	25.07	25.03	25.5	0.0
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	24.83	24.99	24.84	25.5	0.0



n41 DSI2 Standalone Ant4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				50202	51859	53000			
Frequency (MHz)				2540.01	2592.99	2640			
100	PI2 BPSK	1	1	17.09	17.11	18.96			
100	PI2 BPSK	1	137	16.93	17.06	17.04	18.5	0.0	
100	PI2 BPSK	1	271	16.87	17.02	18.98			
100	PI2 BPSK	135	0	16.96	17.03	18.87	18.5	0.0	
100	PI2 BPSK	135	69	16.88	16.97	16.88	18.5	0.0	
100	PI2 BPSK	135	138	16.88	16.91	18.82	18.5	0.0	
100	PI2 BPSK	270	0	16.91	16.99	16.91			
100	QPSK	1	1	17.09	17.44	17.05			
100	QPSK	1	137	16.92	17.01	18.98	18.5	0.0	
100	QPSK	1	271	16.86	16.99	16.85			
100	QPSK	135	0	17.03	17.09	17.03	18.5	0.0	
100	QPSK	135	69	16.83	17.13	16.80	18.5	0.0	
100	QPSK	135	138	16.76	16.83	16.69	18.5	0.0	
100	QPSK	270	0	16.87	17.04	16.96			
100	16QAM	1	1	16.93	17.08	16.92	18.5	0.0	
100	84QAM	1	1	17.05	17.09	16.97	18.5	0.0	
100	256QAM	1	1	16.73	16.79	16.65	18.5	0.0	
Channel				50820	51859	53998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	16.94	16.99	16.92	18.5	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2538.02	2592.99	2643.99			
80	QPSK	1	1	16.97	17.03	17.00	18.5	0.0	
Channel				508202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	16.95	17.11	16.88	18.5	0.0	
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	17.06	17.10	16.89	18.5	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	16.95	17.05	16.94	18.5	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	16.98	17.02	16.98	18.5	0.0	
Channel				502200	518598	534998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	0	16.97	17.13	16.90	18.5	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	16.93	17.06	16.94	18.5	0.0	
Channel				500700	518598	536498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.5	2592.99	2682.48			
15	QPSK	1	1	16.93	17.05	16.91	18.5	0.0	
Channel				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	17.01	17.03	16.97	18.5	0.0	



### Part270 n77 DSII Standalone Ant7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				3750	3840	3930		
Frequency (MHz)				3750	3840	3930		
100	Pl/2 BPSK	1	1	22.36	22.37	22.25		
100	Pl/2 BPSK	1	137	22.25	22.28	22.16	23.4	0.0
100	Pl/2 BPSK	1	271	22.26	22.27	22.12		
100	Pl/2 BPSK	135	0	22.23	22.34	22.22	23.4	0.0
100	Pl/2 BPSK	135	69	22.24	22.19	22.08	23.4	0.0
100	Pl/2 BPSK	135	138	22.19	22.19	22.24	23.4	0.0
100	Pl/2 BPSK	270	0	22.22	22.28	22.25		
100	QPSK	1	1	22.34	22.44	22.19		
100	QPSK	1	137	22.30	22.41	22.09	23.4	0.0
100	QPSK	1	271	22.12	22.24	22.35		
100	QPSK	135	0	22.20	22.12	22.29	23.4	0.0
100	QPSK	135	69	22.18	22.40	22.20	23.4	0.0
100	QPSK	135	138	22.05	22.20	22.12	23.4	0.0
100	QPSK	270	0	22.17	22.28	22.13		
100	16QAM	1	1	22.11	22.09	22.02	23.0	0.4
100	64QAM	1	1	21.18	21.23	20.72	21.5	1.9
100	256QAM	1	1	19.31	19.35	19.36	19.5	3.9
Channel				64968	65000	65034	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	22.30	22.35	22.24	23.4	0.0
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	22.20	22.19	22.25	23.4	0.0
Channel				649000	650000	650300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	22.29	22.25	22.21	23.4	0.0
Channel				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.03		
60	QPSK	1	1	22.18	22.25	22.23	23.4	0.0
Channel				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3955.01		
50	QPSK	1	1	22.32	22.30	22.13	23.4	0.0
Channel				648000	650000	650300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	22.15	22.19	22.28	23.4	0.0
Channel				647668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3955.01		
30	QPSK	1	1	22.10	22.32	22.07	23.4	0.0
Channel				647334	650000	650500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	22.33	22.36	22.33	23.4	0.0
Channel				647000	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	22.16	22.19	22.19	23.4	0.0
Channel				647168	650000	650834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	22.19	22.18	22.34	23.4	0.0
Channel				647000	650000	650300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	22.30	22.25	22.20	23.4	0.0

### Part270 n78 DSII Standalone Ant7

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				3750	3760	3760		
Frequency (MHz)				3750	3760	3760		
100	Pl/2 BPSK	1	1		22.30			
100	Pl/2 BPSK	1	137		22.25		23.4	0.0
100	Pl/2 BPSK	1	271		22.29			
100	Pl/2 BPSK	135	0		22.24		23.4	0.0
100	Pl/2 BPSK	135	69		22.15		23.4	0.0
100	Pl/2 BPSK	135	138		22.07		23.4	0.0
100	Pl/2 BPSK	270	0		22.25			
100	QPSK	1	1		22.37			
100	QPSK	1	137		22.27		23.4	0.0
100	QPSK	1	271		22.08			
100	QPSK	135	0		22.13		23.4	0.0
100	QPSK	135	69		22.29		23.4	0.0
100	QPSK	135	138		22.17		23.4	0.0
100	QPSK	270	0		22.31			
100	16QAM	1	1		21.94		23.0	0.4
100	64QAM	1	1		21.17		21.5	1.9
100	256QAM	1	1		19.24		19.5	3.9
Channel				64968	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3760	3765.01		
90	QPSK	1	1	22.33	22.21	22.17	23.4	0.0
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3760	3760.02		
80	QPSK	1	1	22.21	22.12	22.12	23.4	0.0
Channel				649000	650000	650300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3760	3765		
70	QPSK	1	1	22.16	22.27	22.11	23.4	0.0
Channel				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3760	3770.01		
60	QPSK	1	1	22.14	22.18	22.16	23.4	0.0
Channel				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3760	3775.02		
50	QPSK	1	1	22.30	22.22	22.11	23.4	0.0
Channel				648000	650000	650300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3760	3780		
40	QPSK	1	1	22.07	22.16	22.23	23.4	0.0
Channel				647668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3760	3785.01		
30	QPSK	1	1	22.15	22.32	22.10	23.4	0.0
Channel				647334	650000	650500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3760	3787.5		
25	QPSK	1	1	22.30	22.30	22.23	23.4	0.0
Channel				647000	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3760	3790.02		
20	QPSK	1	1	22.09	22.07	22.10	23.4	0.0
Channel				647168	650000	650834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3760	3792.51		
15	QPSK	1	1	22.08	22.03	22.28	23.4	0.0
Channel				647000	650000	650300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3760	3795		
10	QPSK	1	1	22.24	22.17	22.12	23.4	0.0



### Part270 n77 Ant8

BW (MHz)	Modulation	RB 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	23.21	22.30	23.30		
100	PI2 BPSK	1	137	22.15	22.19	22.13	24.0	0.0
100	PI2 BPSK	1	271	23.05	23.19	23.00		
100	PI2 BPSK	138	0	22.81	22.76	22.65	23.5	0.5
100	PI2 BPSK	138	69	23.18	23.23	23.07	24.0	0.0
100	PI2 BPSK	138	138	22.52	22.68	22.58	23.5	0.5
100	PI2 BPSK	270	0	22.56	22.73	22.62		
100	QPSK	1	1	23.29	23.33	23.19		
100	QPSK	1	137	23.09	23.25	23.12	24.0	0.0
100	QPSK	1	271	22.97	23.13	23.06		
100	QPSK	138	0	22.20	22.31	22.21	23.0	1.0
100	QPSK	138	69	23.22	23.25	23.22	24.0	0.0
100	QPSK	138	138	22.03	22.16	22.08	23.0	1.0
100	QPSK	270	0	22.28	22.31	21.98		
100	16QAM	1	1	22.24	22.38	22.27	23.0	1.0
100	16QAM	1	1	20.68	20.83	20.65	21.5	2.5
100	256QAM	1	1	18.45	18.59	18.56	19.5	4.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	23.13	23.18	23.07	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				649000	650000	649000		
70	QPSK	1	1	23.25	23.20	22.95	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	23.22	23.29	22.97	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	23.23	23.28	23.02	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.20	23.18	22.95	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	644334		
30	QPSK	1	1	23.15	23.20	23.03	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	644500		
25	QPSK	1	1	23.12	23.17	23.00	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	644668		
20	QPSK	1	1	23.21	23.28	23.00	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	644834		
15	QPSK	1	1	23.21	23.22	23.05	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.25	23.21	23.04	24.0	0.0

### Part270 n77 PC2 Ant8

BW (MHz)	Modulation	RB 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	25.04	25.03	25.13		
100	PI2 BPSK	1	137	25.04	25.01	25.00	26.5	0.0
100	PI2 BPSK	1	271	25.21	25.20	25.09		
100	PI2 BPSK	138	0	24.54	24.81	24.82	26.0	0.5
100	PI2 BPSK	138	69	25.08	25.18	25.14	26.5	0.0
100	PI2 BPSK	138	138	24.60	24.59	24.56	26.0	0.5
100	PI2 BPSK	270	0	24.55	24.63	24.74		
100	QPSK	1	1	25.22	25.25	25.03		
100	QPSK	1	137	25.16	25.21	24.98	26.5	0.0
100	QPSK	1	271	25.08	24.99	25.08		
100	QPSK	138	0	24.11	24.17	24.21	25.5	1.0
100	QPSK	138	69	25.14	25.18	25.16	26.5	0.0
100	QPSK	138	138	23.99	23.98	23.97	25.5	1.0
100	QPSK	270	0	24.25	24.26	24.15		
100	16QAM	1	1	24.19	24.47	24.49	25.5	1.0
100	16QAM	1	1	22.76	22.74	22.66	24.0	2.5
100	256QAM	1	1	20.58	20.56	20.41	22.0	4.5
Channel								
Frequency (MHz)				648668	650000	648334		
90	QPSK	1	1	25.21	25.21	24.99	26.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	25.16	25.15	24.90	26.5	0.0
Channel								
Frequency (MHz)				649000	650000	649000		
70	QPSK	1	1	24.99	24.97	25.09	26.5	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	25.17	25.10	25.03	26.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	25.01	25.24	24.86	26.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	25.01	24.93	25.10	26.5	0.0
Channel								
Frequency (MHz)				647668	650000	644334		
30	QPSK	1	1	25.20	25.18	25.01	26.5	0.0
Channel								
Frequency (MHz)				647500	650000	644500		
25	QPSK	1	1	25.05	25.05	25.11	26.5	0.0
Channel								
Frequency (MHz)				647334	650000	644668		
20	QPSK	1	1	25.16	25.16	24.94	26.5	0.0
Channel								
Frequency (MHz)				647168	650000	644834		
15	QPSK	1	1	25.18	25.04	24.96	26.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	25.23	25.17	25.02	26.5	0.0

### Part270 n78 Ant8

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		23.39		24.0	0.0
100	PI2 BPSK	1	137		23.34			
100	PI2 BPSK	1	271		23.26			
100	PI2 BPSK	138	0		22.94		23.5	0.5
100	PI2 BPSK	138	69		23.23		24.0	0.0
100	PI2 BPSK	138	138		22.80		23.5	0.5
100	PI2 BPSK	270	0		22.82			
100	QPSK	1	1		23.43			
100	QPSK	1	137		23.40		24.0	0.0
100	QPSK	1	271		23.24			
100	QPSK	138	0		22.41		23.0	1.0
100	QPSK	138	69		23.38		24.0	0.0
100	QPSK	138	138		22.28		23.0	1.0
100	QPSK	270	0		22.30			
100	16QAM	1	1		22.24		23.0	1.0
100	16QAM	1	1		21.24		21.5	2.5
100	256QAM	1	1		18.68		19.5	4.5
Channel								
Frequency (MHz)				648668	650000	648334		
90	QPSK	1	1	23.31	23.29	23.25	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	23.29	23.29	23.41	24.0	0.0
Channel								
Frequency (MHz)				649000	650000	649000		
70	QPSK	1	1	23.33	23.37	23.34	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	23.32	23.32	23.38	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	23.39	23.38	23.36	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.30	23.35	23.29	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	644334		
30	QPSK	1	1	23.39	23.32	23.40	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	644500		
25	QPSK	1	1	23.33	23.35	23.38	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	644668		
20	QPSK	1	1	23.39	23.26	23.29	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	644834		
15	QPSK	1	1	23.27	23.28	23.32	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.35	23.40	23.34	24.0	0.0





**Part270 n78 PC2 Ant8**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq 650000	Power Middle Ch / Freq 650000	Power High Ch / Freq 650000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3760	3760	3760			
100	PI2 BPSK	1	1		24.88				
100	PI2 BPSK	1	137		24.93		28.5	0.0	
100	PI2 BPSK	1	271		25.18		28.0	0.5	
100	PI2 BPSK	135	0		24.75		28.5	0.0	
100	PI2 BPSK	135	89		25.05		28.0	0.5	
100	PI2 BPSK	135	138		24.61		28.5	0.0	
100	PI2 BPSK	270	0		24.63		25.5	1.0	
100	QPSK	1	1		25.20		28.5	0.0	
100	QPSK	1	137		25.15		28.5	0.0	
100	QPSK	1	271		24.88		25.5	1.0	
100	QPSK	135	0		24.17		28.5	0.0	
100	QPSK	135	89		25.00		25.5	1.0	
100	QPSK	135	138		23.84		25.5	1.0	
100	QPSK	270	0		24.18		25.5	1.0	
100	16QAM	1	1		24.32		24.0	2.5	
100	16QAM	1	1		22.61		22.0	4.5	
100	256QAM	1	1		20.48		22.0	4.5	
Channel				649688	650000	650334			
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		25.15	25.12	24.88	28.5	0.0
Channel				649334	650000	650668			
Frequency (MHz)				3740.01	3760	3760.02			
80	QPSK	1	1		25.12	25.11	24.91	28.5	0.0
Channel				649000	650000	651000			
Frequency (MHz)				3735	3760	3765			
70	QPSK	1	1		24.83	24.85	24.93	28.5	0.0
Channel				648668	650000	651334			
Frequency (MHz)				3730.02	3760	3760.01			
60	QPSK	1	1		25.01	25.11	24.92	28.5	0.0
Channel				648334	650000	651668			
Frequency (MHz)				3725.01	3760	3775.02			
50	QPSK	1	1		24.92	25.12	24.76	28.5	0.0
Channel				648000	650000	652000			
Frequency (MHz)				3720	3760	3760			
40	QPSK	1	1		24.84	24.89	25.07	28.5	0.0
Channel				647668	650000	652334			
Frequency (MHz)				3715.02	3760	3765.01			
30	QPSK	1	1		25.14	25.17	24.95	28.5	0.0
Channel				647300	650000	652500			
Frequency (MHz)				3712.5	3760	3767.5			
25	QPSK	1	1		25.10	25.00	24.95	28.5	0.0
Channel				647334	650000	652668			
Frequency (MHz)				3710.01	3760	3760.02			
20	QPSK	1	1		24.94	24.95	25.06	28.5	0.0
Channel				647188	650000	652834			
Frequency (MHz)				3707.52	3760	3762.51			
15	QPSK	1	1		25.02	24.98	24.80	28.5	0.0
Channel				647000	650000	653000			
Frequency (MHz)				3705	3760	3765			
10	QPSK	1	1		25.05	25.10	24.95	28.5	0.0



### Part270 n77 Ant9

BW (MHz)	Modulation	RB 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	22.35	22.41	22.34		
100	PI2 BPSK	1	137	22.30	22.37	22.33	24.0	0.0
100	PI2 BPSK	1	271	22.24	22.27	22.12		
100	PI2 BPSK	135	0	22.08	22.04	21.92	23.5	0.5
100	PI2 BPSK	135	69	22.21	22.36	22.22	24.0	0.0
100	PI2 BPSK	135	138	21.69	21.67	21.55	23.5	0.5
100	PI2 BPSK	270	0	21.76	21.90	21.73		
100	QPSK	1	1	22.41	22.48	22.41		
100	QPSK	1	137	22.27	22.36	22.17	24.0	0.0
100	QPSK	1	271	22.11	22.30	22.28		
100	QPSK	135	0	21.53	21.50	21.45	23.0	1.0
100	QPSK	135	69	22.35	22.41	22.36	24.0	0.0
100	QPSK	135	138	21.36	21.38	21.21	23.0	1.0
100	QPSK	270	0	21.35	22.12	21.40		
100	16QAM	1	1	21.43	21.60	21.47	23.0	1.0
100	16QAM	1	1	20.16	20.27	20.09	21.5	2.5
100	256QAM	1	1	17.88	17.93	17.78	19.5	4.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	22.40	22.39	22.35	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	22.29	22.36	22.31	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	22.32	22.39	22.27	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	22.41	22.40	22.32	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	22.35	22.33	22.31	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	644334		
30	QPSK	1	1	22.29	22.42	22.29	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	645000		
25	QPSK	1	1	22.27	22.37	22.27	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	644668		
20	QPSK	1	1	22.34	22.37	22.25	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	644834		
15	QPSK	1	1	22.40	22.27	22.30	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	22.38	22.42	22.24	24.0	0.0

### Part270 n77 PC2 Ant9

BW (MHz)	Modulation	RB 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	25.43	25.42	25.33		
100	PI2 BPSK	1	137	25.32	25.37	25.34	27.0	0.0
100	PI2 BPSK	1	271	25.22	25.31	25.17		
100	PI2 BPSK	135	0	24.87	24.99	24.97	26.5	0.5
100	PI2 BPSK	135	69	25.33	25.42	25.37	27.0	0.0
100	PI2 BPSK	135	138	24.81	24.98	24.87	26.5	0.5
100	PI2 BPSK	270	0	24.87	24.97	24.83		
100	QPSK	1	1	25.45	25.46	25.41		
100	QPSK	1	137	25.28	25.41	25.32	27.0	0.0
100	QPSK	1	271	25.29	25.37	25.27		
100	QPSK	135	0	24.38	24.40	24.28	26.0	1.0
100	QPSK	135	69	25.43	25.45	25.41	27.0	0.0
100	QPSK	135	138	24.31	24.32	24.31	26.0	1.0
100	QPSK	270	0	24.38	24.44	24.39		
100	16QAM	1	1	24.41	24.62	24.43	26.0	1.0
100	16QAM	1	1	23.33	23.29	23.20	24.5	2.5
100	256QAM	1	1	20.88	20.91	20.80	22.5	4.5
Channel								
Frequency (MHz)				648668	650000	648334		
90	QPSK	1	1	25.40	25.44	25.22	27.0	0.0
Channel								
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	25.33	25.43	25.10	27.0	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	25.42	25.39	25.20	27.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	25.31	25.40	25.22	27.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	25.31	25.33	25.26	27.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	25.36	25.36	25.29	27.0	0.0
Channel								
Frequency (MHz)				647668	650000	644334		
30	QPSK	1	1	25.32	25.35	25.23	27.0	0.0
Channel								
Frequency (MHz)				647500	650000	645000		
25	QPSK	1	1	25.26	25.37	25.18	27.0	0.0
Channel								
Frequency (MHz)				647334	650000	644668		
20	QPSK	1	1	25.26	25.44	25.21	27.0	0.0
Channel								
Frequency (MHz)				647168	650000	644834		
15	QPSK	1	1	25.40	25.38	25.29	27.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	25.40	25.39	25.29	27.0	0.0

### Part270 n78 Ant9

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		23.52			
100	PI2 BPSK	1	137		23.42		24.0	0.0
100	PI2 BPSK	1	271		23.04			
100	PI2 BPSK	135	0		23.09		23.5	0.5
100	PI2 BPSK	135	69		23.48		24.0	0.0
100	PI2 BPSK	135	138		22.73		23.5	0.5
100	PI2 BPSK	270	0		22.70			
100	QPSK	1	1		23.72			
100	QPSK	1	137		23.37		24.0	0.0
100	QPSK	1	271		23.05			
100	QPSK	135	0		22.84		23.0	1.0
100	QPSK	135	69		23.57		24.0	0.0
100	QPSK	135	138		22.27		23.0	1.0
100	QPSK	270	0		22.44			
100	16QAM	1	1		22.73		23.0	1.0
100	16QAM	1	1		21.27		21.5	2.5
100	256QAM	1	1		18.92		19.5	4.5
Channel								
Frequency (MHz)				648668	650000	648334		
90	QPSK	1	1		23.54		24.0	0.0
Channel								
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1		23.51		24.0	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1		23.65		23.53	24.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1		23.48		23.65	24.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1		23.57		23.61	24.0
Channel								
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1		23.66		23.53	24.0
Channel								
Frequency (MHz)				647668	650000	647334		
30	QPSK	1	1		23.51		23.53	24.0
Channel								
Frequency (MHz)				647500	650000	645000		
25	QPSK	1	1		23.58		23.58	24.0
Channel								
Frequency (MHz)				647334	650000	646668		
20	QPSK	1	1		23.58		23.58	24.0
Channel								
Frequency (MHz)				647168	650000	646834		
15	QPSK	1	1		23.63		23.55	24.0
Channel								
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1		23.66		23.54	24.0



### Part270 n78 PC2 Ant9

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)
Channel				3750	3750	3750		
Frequency (MHz)								
100	PI/2 BPSK	1	1	26.63				
100	PI/2 BPSK	1	137	26.60			27.0	0.0
100	PI/2 BPSK	1	271	26.50				
100	PI/2 BPSK	135	0	26.18			28.5	0.5
100	PI/2 BPSK	135	69	26.66			27.0	0.0
100	PI/2 BPSK	135	138	26.09				
100	PI/2 BPSK	270	0	26.10				
100	QPSK	1	1	26.15				
100	QPSK	1	137	26.63			27.0	0.0
100	QPSK	1	271	26.54				
100	QPSK	135	0	25.68			28.0	1.0
100	QPSK	135	69	26.70			27.0	0.0
100	QPSK	135	138	25.57				
100	QPSK	270	0	25.69			28.0	1.0
100	16QAM	1	1	25.82			26.0	1.0
100	16QAM	1	1	24.13			24.5	2.5
100	256QAM	1	1	21.89			22.5	4.5
Channel				649668	650000	650334		
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	26.56	26.63	26.66	27.0	0.0
Channel				649334	650000	650668		
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	26.69	26.71	26.71	27.0	0.0
Channel				649000	650000	651000		
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	26.63	26.61	26.57	27.0	0.0
Channel				648668	650000	651334		
Frequency (MHz)				3730.02	3750	3730.01		
60	QPSK	1	1	26.58	26.72	26.68	27.0	0.0
Channel				648334	650000	651668		
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	26.61	26.68	26.74	27.0	0.0
Channel				648000	650000	652000		
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	26.57	26.55	26.56	27.0	0.0
Channel				647668	650000	652334		
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	26.72	26.70	26.69	27.0	0.0
Channel				647334	650000	652668		
Frequency (MHz)				3710.01	3750	3780.02		
25	QPSK	1	1	26.55	26.58	26.58	27.0	0.0
Channel				647000	650000	652999		
Frequency (MHz)				3705	3750	3795		
20	QPSK	1	1	26.62	26.66	26.58	27.0	0.0
Channel				647188	650000	652834		
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	26.56	26.67	26.60	27.0	0.0
Channel				647000	650000	653000		
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	26.63	26.71	26.73	27.0	0.0



Reduced Power Mode for DSI2 Simultaneous

n5 Ant0

Band	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				166800	167300	167800		
Frequency (MHz)				834	836.5	839		
20	PI2 BPSK	1	1	23.04	23.13	22.99	24.0	0.0
20	PI2 BPSK	1	53	22.90	23.03	22.93		
20	PI2 BPSK	1	104	23.00	23.10	22.97		
20	PI2 BPSK	50	0	22.56	22.84	22.55	23.5	0.5
20	PI2 BPSK	50	28	22.82	22.98	22.85	24.0	0.0
20	PI2 BPSK	50	56	22.57	22.70	22.53	23.5	0.5
20	PI2 BPSK	100	0	22.61	22.73	22.58		
20	QPSK	1	1	23.16	23.19	23.02		
20	QPSK	1	53	22.88	23.06	22.91	24.0	0.0
20	QPSK	1	104	23.09	23.12	23.04	23.0	1.0
20	QPSK	50	0	22.15	22.17	22.13		
20	QPSK	50	28	23.11	23.14	23.08		
20	QPSK	50	56	22.12	22.22	22.06	23.0	1.0
20	QPSK	100	0	22.28	22.31	22.24		
20	16QAM	1	1	22.02	22.05	21.98	23.0	1.0
20	64QAM	1	1	20.87	21.02	20.95	21.5	2.5
20	256QAM	1	1	18.39	18.49	18.37	19.5	4.5
Channel				165300	167300	169300	Tune-up limit	MPR
Frequency (MHz)				831.5	836.5	841.5	(dBm)	(dB)
15	QPSK	1	1	23.03	23.10	22.97	24.0	0.0
Channel				166800	167300	168800	Tune-up limit	MPR
Frequency (MHz)				829	836.5	844	(dBm)	(dB)
10	QPSK	1	1	23.05	23.02	22.95	24.0	0.0
Channel				165300	167300	169300	Tune-up limit	MPR
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)
5	QPSK	1	1	23.09	23.04	22.85	24.0	0.0



n41 Ant0

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	505202	518598	530998					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	23.06	23.15	23.12		
100	PI2 BPSK	1	137	23.00	23.07	22.97	24.0	0.0
100	PI2 BPSK	1	271	23.05	23.13	23.05		
100	PI2 BPSK	135	61	22.57	22.71	22.85	23.5	0.5
100	PI2 BPSK	135	69	22.87	23.04	22.94	24.0	0.0
100	PI2 BPSK	135	138	22.56	22.88	22.51	23.5	0.5
100	PI2 BPSK	270	0	22.58	22.73	22.60		
100	QPSK	1	1	23.06	23.16	23.05		
100	QPSK	1	137	22.88	23.06	22.96	24.0	0.0
100	QPSK	1	271	23.00	23.12	23.09		
100	QPSK	135	0	22.09	22.18	22.07	23.0	1.0
100	QPSK	135	69	22.99	23.13	23.02	24.0	0.0
100	QPSK	135	138	22.11	22.18	22.13	23.0	1.0
100	QPSK	270	0	22.14	22.21	22.11		
100	16QAM	1	1	21.86	22.00	21.96	23.0	1.0
100	64QAM	1	1	20.57	20.88	20.62	21.5	2.5
100	256QAM	1	1	18.36	18.54	18.37	19.5	4.5
Channel	505203	518599	530999	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	23.05	23.07	22.99	24.0	0.0
Channel	507204	518598	529998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2537.02	2592.99	2649.99					
80	QPSK	1	1	22.98	23.02	22.94	24.0	0.0
Channel	505202	518598	531000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	22.93	23.03	22.98	24.0	0.0
Channel	505200	518598	531998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	22.92	23.14	23.02	24.0	0.0
Channel	504204	518598	530998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	22.93	23.06	22.85	24.0	0.0
Channel	505202	518598	531000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	23.07	23.11	22.89	24.0	0.0
Channel	502200	518598	534998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	22.95	23.10	22.85	24.0	0.0
Channel	501204	518598	530998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	22.94	23.04	22.99	24.0	0.0
Channel	500700	518598	538498	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2501.5	2592.99	2682.48					
15	QPSK	1	1	22.98	23.16	22.99	24.0	0.0
Channel	500202	518598	537000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	23.07	23.13	22.90	24.0	0.0



n2 DSI2 Simultaneous Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376000	380000			
Frequency (MHz)				1860	1880	1900			
20	PI2 BPSK	1	1	16.95	16.97	16.87			
20	PI2 BPSK	1	53	16.85	16.91	16.78	17.9	0.0	
20	PI2 BPSK	1	104	16.92	16.94	16.76			
20	PI2 BPSK	50	0	16.90	16.98	16.92	17.9	0.0	
20	PI2 BPSK	50	28	16.89	16.99	16.89	17.9	0.0	
20	PI2 BPSK	50	58	16.86	16.92	16.86			
20	PI2 BPSK	100	0	16.89	16.97	16.86			
20	QPSK	1	1	16.96	17.07	17.03			
20	QPSK	1	53	16.85	17.01	16.92	17.9	0.0	
20	QPSK	1	104	16.82	16.90	16.87			
20	QPSK	50	0	17.00	17.04	17.02	17.9	0.0	
20	QPSK	50	28	16.93	17.02	16.91			
20	QPSK	50	58	16.79	16.91	16.87			
20	QPSK	100	0	16.82	16.94	16.80	17.9	0.0	
20	16QAM	1	1	16.72	16.88	16.83	17.9	0.0	
20	16QAM	1	1	16.95	16.99	16.83	17.9	0.0	
20	256QAM	1	1	16.67	16.74	16.59	17.9	0.0	
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	1	16.86	16.93	16.98	17.9	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	1	16.78	16.91	16.90	17.9	0.0	
Channel				375500	376000	381500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	1	16.80	17.02	16.87	17.9	0.0	

n7 DSI2 Simultaneous Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				502000	507000	512000			
Frequency (MHz)				2520	2535	2550			
40	PI2 BPSK	1	1	14.88	14.85	14.71			
40	PI2 BPSK	1	108	14.71	14.78	14.75	15.9	0.0	
40	PI2 BPSK	1	214	14.78	14.84	14.72			
40	PI2 BPSK	108	0	14.85	14.82	14.90	15.9	0.0	
40	PI2 BPSK	108	54	14.86	14.95	14.73	15.9	0.0	
40	PI2 BPSK	108	108	14.77	14.76	14.71			
40	PI2 BPSK	216	0	14.81	14.94	14.73			
40	QPSK	1	1	14.85	14.98	14.90			
40	QPSK	1	108	14.82	14.83	14.80	15.9	0.0	
40	QPSK	1	214	14.78	14.82	14.78			
40	QPSK	108	0	14.88	14.86	14.94	15.9	0.0	
40	QPSK	108	54	14.82	14.87	14.83	15.9	0.0	
40	QPSK	108	108	14.67	14.80	14.72			
40	QPSK	216	0	14.77	14.84	14.72	15.9	0.0	
40	16QAM	1	1	14.82	14.85	14.77	15.9	0.0	
40	16QAM	1	1	14.79	14.94	14.79	15.9	0.0	
40	256QAM	1	1	14.61	14.88	14.48	15.9	0.0	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	14.71	14.82	14.80	15.9	0.0	
Channel				502000	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	14.71	14.90	14.74	15.9	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	PI2 BPSK	1	1	14.81	14.87	14.82	15.9	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	14.83	14.84	14.87	15.9	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	14.75	14.96	14.77	15.9	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	14.79	14.88	14.83	15.9	0.0	

n66 DSI2 Simultaneous Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				346000	349000	353000			
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	1	1	16.58	16.58	16.42			
40	PI2 BPSK	1	108	16.31	16.48	16.39	17.6	0.0	
40	PI2 BPSK	1	214	16.35	16.45	16.37			
40	PI2 BPSK	108	0	16.35	16.40	16.43	17.6	0.0	
40	PI2 BPSK	108	54	16.16	16.37	16.33	17.6	0.0	
40	PI2 BPSK	108	108	16.38	16.38	16.30			
40	PI2 BPSK	216	0	16.43	16.47	16.40			
40	QPSK	1	1	16.80	16.85	16.81			
40	QPSK	1	108	16.51	16.55	16.46	17.6	0.0	
40	QPSK	1	214	16.28	16.37	16.36			
40	QPSK	108	0	16.32	16.46	16.44	17.6	0.0	
40	QPSK	108	54	16.55	16.56	16.43	17.6	0.0	
40	QPSK	108	108	16.27	16.40	16.23			
40	QPSK	216	0	16.40	16.47	16.33	17.6	0.0	
40	16QAM	1	1	16.34	16.51	16.35	17.6	0.0	
40	16QAM	1	1	16.28	16.36	16.24	17.6	0.0	
40	256QAM	1	1	16.19	16.22	16.13	17.6	0.0	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	16.52	16.43	16.49	17.6	0.0	
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	16.52	16.54	16.36	17.6	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	16.48	16.46	16.56	17.6	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	16.58	16.42	16.41	17.6	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	16.50	16.49	16.49	17.6	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	16.58	16.32	16.58	17.6	0.0	



n38 Default Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2590.02	2595	2599.98		
Frequency (MHz)				15.10	15.24	15.05		
40	PI2 BPSK	1	1	15.10	15.24	15.05		
40	PI2 BPSK	1	53	14.96	15.04	15.00	15.7	0.0
40	PI2 BPSK	1	104	14.83	15.06	15.00		
40	PI2 BPSK	50	0	14.53	14.56	14.47	15.7	0.0
40	PI2 BPSK	50	28	15.01	15.18	15.09	15.7	0.0
40	PI2 BPSK	50	56	14.34	14.44	14.40	15.7	0.0
40	PI2 BPSK	100	0	14.29	14.51	14.38		
40	QPSK	1	1	15.23	15.33	15.10		
40	QPSK	1	53	15.18	15.09	15.05	15.7	0.0
40	QPSK	1	104	15.02	15.17	14.99		
40	QPSK	50	0	13.88	14.11	13.91	15.7	0.0
40	QPSK	50	28	15.11	15.13	15.00	15.7	0.0
40	QPSK	80	56	13.85	13.87	13.80		
40	QPSK	100	0	13.98	14.07	14.02	15.7	0.0
40	16QAM	1	1	14.05	14.10	13.97	15.7	0.0
40	16QAM	1	1	13.89	14.05	13.91	15.7	0.0
40	256QAM	1	1	15.13	15.16	15.03	15.7	0.0
Channel				5170.02	5190.00	5209.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	15.18	15.09	15.05	15.7	0.0
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2582.52	2595	2607.48		
25	QPSK	1	1	15.21	15.11	14.97	15.7	0.0
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	15.12	15.05	15.09	15.7	0.0
Channel				515502	519000	52498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	15.06	15.20	15.06	15.7	0.0
Channel				515004	519000	52996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	15.03	15.11	15.16	15.7	0.0

n41 DSI2 Simultaneous Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2546.01	2592.99	2640		
Frequency (MHz)				14.49	14.60	14.54		
100	PI2 BPSK	1	1	14.49	14.60	14.54		
100	PI2 BPSK	1	137	14.53	14.27	14.47	15.7	0.0
100	PI2 BPSK	1	271	14.35	14.30	14.34		
100	PI2 BPSK	135	0	14.41	14.58	14.45	15.7	0.0
100	PI2 BPSK	135	69	14.44	14.54	14.48	15.7	0.0
100	PI2 BPSK	135	138	14.47	14.56	14.39	15.7	0.0
100	PI2 BPSK	270	0	14.38	14.51	14.35		
100	QPSK	1	1	14.63	14.38	14.57		
100	QPSK	1	137	14.51	14.65	14.57	15.7	0.0
100	QPSK	1	271	14.42	14.59	14.54		
100	QPSK	135	0	14.51	14.62	14.54	15.7	0.0
100	QPSK	135	69	14.57	14.61	14.50	15.7	0.0
100	QPSK	135	138	14.45	14.55	14.53		
100	QPSK	270	0	14.44	14.53	14.48	15.7	0.0
100	16QAM	1	1	14.51	14.61	14.59	15.7	0.0
100	16QAM	1	1	14.41	14.56	14.52	15.7	0.0
100	256QAM	1	1	14.44	14.59	14.44	15.7	0.0
Channel				509200	518998	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	14.47	14.65	14.53	15.7	0.0
Channel				507204	518998	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99		
80	QPSK	1	1	14.60	14.65	14.52	15.7	0.0
Channel				506202	518998	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	14.61	14.52	14.44	15.7	0.0
Channel				505200	518998	531998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2526	2592.99	2659.99		
60	QPSK	1	1	14.61	14.53	14.49	15.7	0.0
Channel				504204	518998	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	14.56	14.53	14.42	15.7	0.0
Channel				503202	518998	533998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	14.57	14.50	14.46	15.7	0.0
Channel				502200	518998	534998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	14.51	14.61	14.40	15.7	0.0
Channel				501204	518998	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	14.48	14.55	14.44	15.7	0.0
Channel				500700	518998	536998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.15	2592.99	2683.48		
15	QPSK	1	1	14.48	14.65	14.55	15.7	0.0
Channel				500202	518998	537000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	14.50	14.60	14.44	15.7	0.0



**n7 Ant2**

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
40	2520	2635	2650		
40	22.22	22.26	22.20		
40	22.13	22.23	22.11	24.0	0.0
40	22.15	22.21	22.12		
40	21.66	21.72	21.55	23.5	0.5
40	22.01	22.06	22.03	24.0	0.0
40	21.65	21.76	21.67	23.5	0.5
40	21.69	21.79	21.69		
40	22.17	22.32	22.22		
40	22.18	22.24	22.16	24.0	0.0
40	22.10	22.27	22.10		
40	21.06	21.15	21.12	23.0	1.0
40	22.06	22.19	22.15	24.0	0.0
40	21.16	21.26	21.22	23.0	1.0
40	21.11	21.33	21.23		
40	21.12	21.17	21.10	23.0	1.0
40	19.59	19.62	19.56	21.5	2.5
40	17.68	17.68	17.55	19.5	4.5
30	50300	50700	51000	Tune-up limit (dBm)	MPR (dB)
30	2515	2635	2655		
30	22.02	22.14	22.09	24.0	0.0
25	502600	507000	511500	Tune-up limit (dBm)	MPR (dB)
25	2572.5	2635	2677.5		
25	22.09	22.27	22.10	24.0	0.0
20	502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
20	2510	2635	2660		
20	22.12	22.23	22.04	24.0	0.0
15	501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
15	2507.5	2635	2682.5		
15	22.07	22.15	22.07	24.0	0.0
10	501000	507000	513000	Tune-up limit (dBm)	MPR (dB)
10	2505	2635	2665		
10	22.11	22.24	22.17	24.0	0.0
5	500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
5	2502.5	2635	2677.5		
5	22.15	22.22	22.19	24.0	0.0





n38 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				51904	51900	51996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	22.69	22.72	22.80		
40	PI/2 BPSK	1	53	22.60	22.66	22.58		
40	PI/2 BPSK	1	104	22.59	22.60	22.56		
40	PI/2 BPSK	50	0	22.07	22.15	22.12	23.5	0.5
40	PI/2 BPSK	50	28	22.43	22.61	22.48	24.0	0.0
40	PI/2 BPSK	50	56	21.97	22.02	21.88	23.5	0.5
40	PI/2 BPSK	100	0	21.91	22.03	22.00		
40	QPSK	1	1	22.77	22.86	22.84		
40	QPSK	1	53	22.54	22.86	22.53	24.0	0.0
40	QPSK	1	104	22.56	22.61	22.50		
40	QPSK	50	0	21.46	21.59	21.43	23.0	1.0
40	QPSK	50	28	22.59	22.69	22.59	24.0	0.0
40	QPSK	80	56	21.51	21.54	21.53	23.0	1.0
40	QPSK	100	0	21.55	21.60	21.57		
40	16QAM	1	1	21.66	21.82	21.65	23.0	1.0
40	16QAM	1	1	20.49	20.58	20.40	21.5	2.5
40	256QAM	1	1	17.59	17.67	17.63	19.5	4.5
Channel				51700	51600	52000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	22.20	22.22	22.03	24.0	0.0
Channel				51604	51900	521496	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2592.52	2595	2607.48		
25	QPSK	1	1	22.10	22.20	22.11	24.0	0.0
Channel				51600	51900	523000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	22.18	22.15	22.07	24.0	0.0
Channel				51502	51900	52498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	22.19	22.12	22.09	24.0	0.0
Channel				51504	51900	52998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	22.08	22.10	22.11	24.0	0.0

n41 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				52600	51898	52900		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	22.86	22.94	22.91		
100	PI/2 BPSK	1	137	22.90	22.86	22.91	24.0	0.0
100	PI/2 BPSK	1	271	22.77	22.91	22.79		
100	PI/2 BPSK	135	0	22.47	22.55	22.41	23.5	0.5
100	PI/2 BPSK	135	69	22.93	22.98	22.85	24.0	0.0
100	PI/2 BPSK	135	138	22.40	22.49	22.44	23.5	0.5
100	PI/2 BPSK	270	0	22.36	22.53	22.45		
100	QPSK	1	1	22.96	23.03	22.99		
100	QPSK	1	137	22.87	23.00	22.85	24.0	0.0
100	QPSK	1	271	22.82	22.97	22.82		
100	QPSK	135	0	22.06	22.11	22.06	23.0	1.0
100	QPSK	135	69	22.93	22.97	22.91	24.0	0.0
100	QPSK	135	138	21.96	22.01	21.92	23.0	1.0
100	QPSK	270	0	21.98	22.03	21.94		
100	16QAM	1	1	21.91	22.08	21.97	23.0	1.0
100	16QAM	1	1	20.48	20.61	20.56	21.5	2.5
100	256QAM	1	1	18.48	18.52	18.48	19.5	4.5
Channel				50000	51898	52000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.99		
90	QPSK	1	1	22.92	22.96	22.88	24.0	0.0
Channel				50704	51898	52998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2538.02	2592.99	2648.99		
80	QPSK	1	1	22.90	22.89	22.96	24.0	0.0
Channel				50600	51898	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	22.90	22.86	22.92	24.0	0.0
Channel				50500	51898	531998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	22.90	22.99	22.82	24.0	0.0
Channel				50400	51898	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	22.94	22.94	22.97	24.0	0.0
Channel				50300	51898	533000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	22.88	22.91	22.86	24.0	0.0
Channel				50200	51898	534998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	22.85	22.89	22.86	24.0	0.0
Channel				50100	51898	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	22.93	22.97	22.91	24.0	0.0
Channel				50000	51898	536998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2500.01	2592.99	2684.99		
15	QPSK	1	1	22.82	22.85	22.88	24.0	0.0
Channel				50000	51898	537000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	22.88	22.90	22.81	24.0	0.0



### Part270 n77 Ant3

BW (MHz)	Modulation	RB 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	21.24	21.18	21.19		
100	PI2 BPSK	1	137	21.09	21.23	21.12	21.5	0.0
100	PI2 BPSK	1	271	21.11	21.10	21.00		
100	PI2 BPSK	138	0	20.84	20.79	20.73	21.5	0.0
100	PI2 BPSK	138	69	21.10	21.24	21.14	21.5	0.0
100	PI2 BPSK	138	138	20.71	20.72	20.76	21.5	0.0
100	PI2 BPSK	270	0	20.77	20.79	20.75		
100	QPSK	1	1	21.27	21.38	21.07		
100	QPSK	1	137	21.14	21.22	21.18	21.5	0.0
100	QPSK	1	271	21.13	21.15	21.12		
100	QPSK	138	0	21.26	21.28	21.26	21.5	0.0
100	QPSK	138	69	21.25	21.37	21.38	21.5	0.0
100	QPSK	138	138	20.06	20.06	20.08	21.5	0.0
100	QPSK	270	0	20.70	21.87	20.73		
100	16QAM	1	1	19.73	19.71	19.75	21.5	0.0
100	16QAM	1	1	20.70	20.84	20.71	21.5	0.0
100	256QAM	1	1	19.75	19.07	19.10	20.0	1.5
Channel				648334	650000	663334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	20.25	20.27	19.90	21.5	0.0
Channel				649334	650000	662668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	20.12	20.23	20.09	21.5	0.0
Channel				649000	650000	663000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	20.16	20.19	20.10	21.5	0.0
Channel				648668	650000	663334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	20.16	20.16	20.11	21.5	0.0
Channel				648334	650000	663668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	20.13	20.22	20.02	21.5	0.0
Channel				648000	650000	664000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	20.24	20.28	20.06	21.5	0.0
Channel				647668	650000	664334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	20.17	20.25	19.99	21.5	0.0
Channel				647500	650000	664500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	20.08	20.22	20.08	21.5	0.0
Channel				647334	650000	664668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	20.18	20.28	20.01	21.5	0.0
Channel				647168	650000	664834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	20.18	20.22	20.11	21.5	0.0
Channel				647000	650000	665000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	20.10	20.22	20.01	21.5	0.0

### Part270 n77 PC2 Ant3

BW (MHz)	Modulation	RB 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	24.30	24.41	24.34		
100	PI2 BPSK	1	137	24.26	24.44	24.39	24.5	0.0
100	PI2 BPSK	1	271	24.27	24.38	24.23		
100	PI2 BPSK	138	0	23.85	23.99	23.83	24.5	0.0
100	PI2 BPSK	138	69	24.41	24.48	24.44	24.5	0.0
100	PI2 BPSK	138	138	23.90	23.95	23.80	24.5	0.0
100	PI2 BPSK	270	0	23.92	24.00	23.84		
100	QPSK	1	1	24.40	24.49	24.47		
100	QPSK	1	137	24.28	24.44	24.41	24.5	0.0
100	QPSK	1	271	24.30	24.39	24.29		
100	QPSK	138	0	23.31	23.43	23.32	24.5	0.0
100	QPSK	138	69	24.26	24.43	24.32	24.5	0.0
100	QPSK	138	138	23.26	23.43	23.35	24.5	0.0
100	QPSK	270	0	23.31	23.53	23.46		
100	16QAM	1	1	23.39	23.48	23.43	24.5	0.0
100	16QAM	1	1	23.41	23.47	23.41	24.5	0.0
100	256QAM	1	1	21.99	21.99	21.89	22.5	2.0
Channel				648668	650000	663334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	24.25	24.46	24.30	24.5	0.0
Channel				649334	650000	662668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	24.38	24.33	24.24	24.5	0.0
Channel				649000	650000	663000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	24.34	24.40	24.33	24.5	0.0
Channel				648668	650000	663334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	24.28	24.38	24.43	24.5	0.0
Channel				648334	650000	663668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	24.30	24.38	24.36	24.5	0.0
Channel				648000	650000	664000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	24.29	24.45	24.31	24.5	0.0
Channel				647668	650000	664334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	24.30	24.32	24.27	24.5	0.0
Channel				647500	650000	664500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	24.35	24.38	24.40	24.5	0.0
Channel				647334	650000	664668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	24.38	24.40	24.44	24.5	0.0
Channel				647168	650000	664834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	24.33	24.45	24.35	24.5	0.0
Channel				647000	650000	665000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	24.30	24.38	24.43	24.5	0.0

### Part270 n78 Ant3

BW (MHz)	Modulation	RB 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	3750	3750			
100	PI2 BPSK	1	1		20.32		21.5	0.0	
100	PI2 BPSK	1	137		20.50				
100	PI2 BPSK	1	271		20.51				
100	PI2 BPSK	138	0		20.16		21.5	0.0	
100	PI2 BPSK	138	69		20.39		21.5	0.0	
100	PI2 BPSK	138	138		20.17		21.5	0.0	
100	PI2 BPSK	270	0		20.26				
100	QPSK	1	1		20.84				
100	QPSK	1	137		20.59		21.5	0.0	
100	QPSK	1	271		20.48				
100	QPSK	138	0		19.80		21.5	0.0	
100	QPSK	138	69		20.49		21.5	0.0	
100	QPSK	138	138		20.00		21.5	0.0	
100	QPSK	270	0		20.05				
100	16QAM	1	1		20.01		21.5	0.0	
100	16QAM	1	1		19.86		21.5	0.0	
100	256QAM	1	1		17.51		19.5	2.0	
Channel				648668	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		20.38	20.26	20.44	21.5	0.0
Channel				649334	650000	660968	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1		20.29	20.36	20.25	21.5	0.0
Channel				649000	650000	661000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1		20.47	20.46	20.39	21.5	0.0
Channel				648668	650000	661334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3750	3770.01			
60	QPSK	1	1		20.41	20.45	20.34	21.5	0.0
Channel				648334	650000	661668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1		20.27	20.51	20.31	21.5	0.0
Channel				648000	650000	662000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1		20.30	20.40	20.43	21.5	0.0
Channel				647668	650000	662334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3750	3785.01			
30	QPSK	1	1		20.29	20.41	20.41	21.5	0.0
Channel				647500	650000	662500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1		20.42	20.48	20.32	21.5	0.0
Channel				647334	650000	662668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3750	3790.02			
20	QPSK	1	1		20.34	20.37	20.33	21.5</	



**Part270 n78 PC2 Ant3**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)
Channel				3760	3760	3760		
Frequency (MHz)								
100	PI/2 BPSK	1	1		24.37			
100	PI/2 BPSK	1	137		24.40		24.5	0.0
100	PI/2 BPSK	1	271		24.33		24.5	0.0
100	PI/2 BPSK	135	0		23.95		24.5	0.0
100	PI/2 BPSK	135	69		24.44		24.5	0.0
100	PI/2 BPSK	135	138		23.91		24.5	0.0
100	PI/2 BPSK	270	0		23.95			
100	QPSK	1	1		24.40			
100	QPSK	1	137		24.41		24.5	0.0
100	QPSK	1	271		24.35			
100	QPSK	135	0		23.40		24.5	0.0
100	QPSK	135	69		24.37		24.5	0.0
100	QPSK	135	138		23.39		24.5	0.0
100	QPSK	270	0		23.48		24.5	0.0
100	16QAM	1	1		23.42		24.5	0.0
100	16QAM	1	1		23.43		24.5	0.0
100	256QAM	1	1		21.95		22.5	2.0
Channel				649688	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	24.19	24.39	24.25	24.5	0.0
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	24.30	24.27	24.27	24.5	0.0
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	24.28	24.32	24.30	24.5	0.0
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3750	3750.01		
60	QPSK	1	1	24.20	24.33	24.37	24.5	0.0
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	24.25	24.33	24.30	24.5	0.0
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	24.21	24.41	24.24	24.5	0.0
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	24.23	24.23	24.30	24.5	0.0
Channel				647300	650000	652500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	24.28	24.33	24.36	24.5	0.0
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	24.30	24.31	24.35	24.5	0.0
Channel				647188	650000	652834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	24.30	24.41	24.30	24.5	0.0
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	24.23	24.29	24.35	24.5	0.0



### Part270 n77 DSI2 Simultaneous Ant3

BW (MHz)	Modulation	RB 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	20.31	20.27	20.17		
100	PI2 BPSK	1	137	20.20	20.19	20.16		0.0
100	PI2 BPSK	1	271	20.21	20.19	20.34		
100	PI2 BPSK	135	0	20.10	20.22	20.19	21.5	0.0
100	PI2 BPSK	135	69	20.20	20.21	20.11	21.5	0.0
100	PI2 BPSK	135	138	20.25	20.27	20.27	21.5	0.0
100	PI2 BPSK	270	0	20.08	20.24	20.24		
100	QPSK	1	1	20.20	20.55	20.04		
100	QPSK	1	137	20.15	20.20	20.08	21.5	0.0
100	QPSK	1	271	20.18	20.30	20.30		
100	QPSK	135	0	20.27	20.37	20.36	21.5	0.0
100	QPSK	135	69	20.29	20.35	20.22	21.5	0.0
100	QPSK	135	138	20.17	20.09	20.14	21.5	0.0
100	QPSK	270	0	20.18	20.33	20.28		
100	16QAM	1	1	19.89	19.94	19.74	21.5	0.0
100	16QAM	1	1	20.27	20.22	20.23	21.5	0.0
100	256QAM	1	1	18.55	18.59	18.63	21.5	2.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	20.16	20.24	19.88	21.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				649000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	20.14	20.26	19.92	21.5	0.0
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	20.24	20.24	20.02	21.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	20.16	20.25	19.90	21.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	20.22	20.39	20.05	21.5	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	20.21	20.33	19.93	21.5	0.0
Channel								
Frequency (MHz)				647500	650000	647500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	20.15	20.19	20.17	21.5	0.0
Channel								
Frequency (MHz)				647334	650000	646668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	20.07	20.30	19.98	21.5	0.0
Channel								
Frequency (MHz)				647168	650000	646834	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.08	20.17	19.88	21.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	20.01	20.31	20.03	21.5	0.0

### Part270 n77 PC2 DSI2 Simultaneous Ant3

BW (MHz)	Modulation	RB 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	23.22	23.33	23.28		
100	PI2 BPSK	1	137	23.23	23.16	23.20		0.0
100	PI2 BPSK	1	271	23.27	23.10	23.29		
100	PI2 BPSK	135	0	23.16	23.20	23.13	24.5	0.0
100	PI2 BPSK	135	69	23.23	23.30	23.27	24.5	0.0
100	PI2 BPSK	135	138	23.26	23.27	23.29	24.5	0.0
100	PI2 BPSK	270	0	23.13	23.17	23.16		
100	QPSK	1	1	23.28	23.38	23.10		
100	QPSK	1	137	23.22	23.30	23.11	24.5	0.0
100	QPSK	1	271	23.17	23.30	23.21		
100	QPSK	135	0	23.26	23.32	23.33	24.5	0.0
100	QPSK	135	69	23.21	23.38	23.31	24.5	0.0
100	QPSK	135	138	23.18	23.22	23.15	24.5	0.0
100	QPSK	270	0	23.18	23.27	23.25		
100	16QAM	1	1	23.04	23.10	23.02	24.5	0.0
100	16QAM	1	1	23.02	23.10	23.03	24.5	0.0
100	256QAM	1	1	21.50	21.60	21.30	22.5	2.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	23.02	23.36	23.06	24.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				649000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	23.18	23.32	23.03	24.5	0.0
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	23.13	23.22	23.08	24.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	23.10	23.27	22.95	24.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.09	23.20	22.95	24.5	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	23.02	23.30	23.05	24.5	0.0
Channel								
Frequency (MHz)				647500	650000	647500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	23.12	23.29	22.92	24.5	0.0
Channel								
Frequency (MHz)				647334	650000	646668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	23.11	23.24	23.05	24.5	0.0
Channel								
Frequency (MHz)				647168	650000	646834	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	23.19	23.30	22.99	24.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.03	23.21	22.99	24.5	0.0

### Part270 n78 DSI2 Simultaneous Ant3

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		21.86			
100	PI2 BPSK	1	137		21.92		23.0	0.0
100	PI2 BPSK	1	271		21.85			
100	PI2 BPSK	135	0		21.81		23.0	0.0
100	PI2 BPSK	135	69		21.84		23.0	0.0
100	PI2 BPSK	135	138		21.80		23.0	0.0
100	PI2 BPSK	270	0		21.90			
100	QPSK	1	1		21.95			
100	QPSK	1	137		21.85		23.0	0.0
100	QPSK	1	271		21.86			
100	QPSK	135	0		21.83		23.0	0.0
100	QPSK	135	69		21.89		23.0	0.0
100	QPSK	135	138		21.77		23.0	0.0
100	QPSK	270	0		21.82			
100	16QAM	1	1		21.75		23.0	0.0
100	16QAM	1	1		20.86		21.5	1.5
100	256QAM	1	1		18.52		19.5	3.5
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	21.87	21.88	21.80	23.0	0.0
Channel								
Frequency (MHz)				649334	650000	650968	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3750	3760.02		
Channel								
Frequency (MHz)				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	21.84	21.75	21.87	23.0	0.0
Channel								
Frequency (MHz)				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	21.77	21.82	21.89	23.0	0.0
Channel								
Frequency (MHz)				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	21.78	21.78	21.90	23.0	0.0
Channel								
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	21.81	21.87	21.82	23.0	0.0
Channel								
Frequency (MHz)				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	21.90	21.85	21.88	23.0	0.0
Channel								
Frequency (MHz)				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	21.85	21.83	21.82	23.0	0.0
Channel								
Frequency (MHz)				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	21.81	21.76	21.88	23.0	0.0
Channel								
Frequency (MHz)				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	21.75	21.83	21.90	23.0	0.0
Channel								
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	21.90	21.84	21.85	23.0	0.0



**Part270 n78 PC2 DSI2 Simultaneous Ant3**

BW [MHz]	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	24.93				
100	PI2 BPSK	1	137	24.90			28.0	0.0
100	PI2 BPSK	1	271	24.86			28.0	0.0
100	PI2 BPSK	135	0	24.80			28.0	0.0
100	PI2 BPSK	135	69	24.78			28.0	0.0
100	PI2 BPSK	135	138	24.83			28.0	0.0
100	PI2 BPSK	270	0	24.91				
100	QPSK	1	1	24.85				
100	QPSK	1	137	24.87			28.0	0.0
100	QPSK	1	271	24.78				
100	QPSK	135	0	24.82			28.0	0.0
100	QPSK	135	69	24.93			28.0	0.0
100	QPSK	135	138	24.75			28.0	0.0
100	QPSK	270	0	24.82			28.0	0.0
100	16QAM	1	1	24.83			28.0	0.0
100	16QAM	1	1	23.73			24.5	1.5
100	256QAM	1	1	21.55			22.5	3.5
Channel				649688	650000	650334		
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	24.87	24.90	24.92	28.0	0.0
Channel				649334	650000	650668		
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	24.82	24.87	24.90	28.0	0.0
Channel				649000	650000	651000		
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	24.82	24.80	24.89	28.0	0.0
Channel				648668	650000	651334		
Frequency (MHz)				3730.02	3750	3760.01		
60	QPSK	1	1	24.81	24.79	24.87	28.0	0.0
Channel				648334	650000	651668		
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	24.92	24.85	24.84	28.0	0.0
Channel				648000	650000	652000		
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	24.89	24.82	24.90	28.0	0.0
Channel				647668	650000	652334		
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	24.83	24.79	24.78	28.0	0.0
Channel				647300	650000	652500		
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	24.92	24.86	24.87	28.0	0.0
Channel				647334	650000	652668		
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	24.78	24.81	24.91	28.0	0.0
Channel				647188	650000	652834		
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	24.83	24.90	24.87	28.0	0.0
Channel				647000	650000	653000		
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	24.93	24.88	24.81	28.0	0.0



n41 DS12 Simultaneous Ant4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				592020	518598	529200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	16.06	16.10	16.01			
100	PI2 BPSK	1	137	15.99	16.07	16.03	17.5	0.0	
100	PI2 BPSK	1	271	15.86	16.02	15.98			
100	PI2 BPSK	135	0	15.98	16.08	16.06	17.5	0.0	
100	PI2 BPSK	135	69	15.78	15.96	15.85	17.5	0.0	
100	PI2 BPSK	135	138	15.70	15.85	15.77	17.5	0.0	
100	PI2 BPSK	270	0	15.84	16.01	15.87			
100	QPSK	1	1	15.93	16.48	16.08			
100	QPSK	1	137	15.95	15.99	15.95	17.5	0.0	
100	QPSK	1	271	15.80	15.97	15.80			
100	QPSK	135	0	15.98	16.05	15.89	17.5	0.0	
100	QPSK	135	69	15.94	15.99	15.89	17.5	0.0	
100	QPSK	135	138	15.76	15.91	15.84			
100	QPSK	270	0	15.87	16.03	15.87	17.5	0.0	
100	16QAM	1	1	15.99	16.08	16.05	17.5	0.0	
100	16QAM	1	1	15.97	16.02	15.86	17.5	0.0	
100	256QAM	1	1	15.83	15.88	15.75	17.5	0.0	
Channel				508200	518598	529596	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	15.84	16.09	15.90	17.5	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	15.98	15.98	15.92	17.5	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	15.75	16.03	15.88	17.5	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	15.80	15.98	16.01	17.5	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	15.78	16.01	15.97	17.5	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	15.90	16.00	15.98	17.5	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	0	15.84	16.11	15.92	17.5	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	15.88	16.05	15.95	17.5	0.0	
Channel				500700	518598	536496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.5	2592.99	2682.48			
15	QPSK	1	1	15.81	16.06	16.00	17.5	0.0	
Channel				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	15.80	16.08	16.00	17.5	0.0	



Part270 n77 DS12 Simultaneous Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)									
100	PI2 BPSK	1	1	21.30	21.22	21.17			
100	PI2 BPSK	1	137	21.15	21.24	21.11	22.4	0.0	
100	PI2 BPSK	1	271	21.22	21.08	21.07			
100	PI2 BPSK	135	0	21.28	21.28	21.21	22.4	0.0	
100	PI2 BPSK	135	69	21.27	21.33	21.14	22.4	0.0	
100	PI2 BPSK	135	138	21.21	21.29	21.20	22.4	0.0	
100	PI2 BPSK	270	0	21.31	21.23	21.28			
100	QPSK	1	1	21.38	21.40	21.13			
100	QPSK	1	137	21.21	21.28	21.08	22.4	0.0	
100	QPSK	1	271	21.23	21.23	21.17			
100	QPSK	135	0	21.18	21.20	21.13	22.4	0.0	
100	QPSK	135	69	21.19	21.38	21.25	22.4	0.0	
100	QPSK	135	138	21.23	21.17	21.16	22.4	0.0	
100	QPSK	270	0	21.21	21.27	21.18			
100	16QAM	1	1	21.20	21.18	21.23	22.4	0.0	
100	64QAM	1	1	21.22	21.31	20.88	21.5	0.5	
100	256QAM	1	1	19.41	19.35	19.40	19.5	2.5	
Channel				648988	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	21.08	21.27	21.34	22.4	0.0	
Channel				649334	656000	662668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	21.30	21.21	21.25	22.4	0.0	
Channel				649000	656000	663000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	21.30	21.19	21.20	22.4	0.0	
Channel				648668	656000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.03			
60	QPSK	1	1	21.24	21.30	21.25	22.4	0.0	
Channel				648334	656000	663668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	21.22	21.21	21.09	22.4	0.0	
Channel				648000	656000	664000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	21.24	21.24	21.14	22.4	0.0	
Channel				647668	656000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	21.27	21.21	21.14	22.4	0.0	
Channel				647500	656000	664500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	21.18	21.25	21.21	22.4	0.0	
Channel				647334	656000	664668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	21.19	21.34	21.28	22.4	0.0	
Channel				647168	656000	664834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	21.19	21.12	21.22	22.4	0.0	
Channel				647000	656000	665000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	21.21	21.27	21.35	22.4	0.0	

Part270 n78 DS12 Simultaneous Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3760	3760			
Frequency (MHz)									
100	PI2 BPSK	1	1			20.55			
100	PI2 BPSK	1	137			20.65	22.4	0.0	
100	PI2 BPSK	1	271			20.55			
100	PI2 BPSK	135	0			20.72	22.4	0.0	
100	PI2 BPSK	135	69			20.72	22.4	0.0	
100	PI2 BPSK	135	138			20.68	22.4	0.0	
100	PI2 BPSK	270	0			20.68			
100	QPSK	1	1			20.73			
100	QPSK	1	137			20.67	22.4	0.0	
100	QPSK	1	271			20.58			
100	QPSK	135	0			20.58	22.4	0.0	
100	QPSK	135	69			20.68	22.4	0.0	
100	QPSK	135	138			20.63	22.4	0.0	
100	QPSK	270	0			20.67			
100	16QAM	1	1			20.54	22.4	0.0	
100	64QAM	1	1			20.51	21.9	0.5	
100	256QAM	1	1			19.16	19.9	2.5	
Channel				648988	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3760	3765.01			
90	QPSK	1	1	20.71	20.58	20.80	22.4	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3760	3767.02			
80	QPSK	1	1	20.55	20.68	20.58	22.4	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3760	3765			
70	QPSK	1	1	20.55	20.71	20.58	22.4	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3760	3770.01			
60	QPSK	1	1	20.65	20.70	20.68	22.4	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3760	3775.02			
50	QPSK	1	1	20.85	20.61	20.84	22.4	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3760	3780			
40	QPSK	1	1	20.64	20.68	20.61	22.4	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3760	3785.01			
30	QPSK	1	1	20.64	20.69	20.58	22.4	0.0	
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3760	3787.5			
25	QPSK	1	1	20.61	20.69	20.65	22.4	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3760	3790.02			
20	QPSK	1	1	20.57	20.58	20.57	22.4	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3760	3792.51			
15	QPSK	1	1	20.61	20.67	20.67	22.4	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3760	3795			
10	QPSK	1	1	20.70	20.65	20.67	22.4	0.0	



Part270 n77 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 65000	Power Middle Ch. / Freq. 65000	Power High Ch. / Freq. 65000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)									
100	PI2 BPSK	1	1	21.34	21.41	20.77			
100	PI2 BPSK	1	137	21.17	21.39	20.77	22.4	0.0	
100	PI2 BPSK	1	271	21.24	21.12	20.87			
100	PI2 BPSK	135	0	21.22	21.35	20.81	22.4	0.0	
100	PI2 BPSK	135	69	21.07	21.32	20.86	22.4	0.0	
100	PI2 BPSK	135	138	20.96	21.15	20.84	22.4	0.0	
100	PI2 BPSK	270	0	21.22	21.22	20.67			
100	QPSK	1	1	21.28	21.43	20.79			
100	QPSK	1	137	21.24	21.30	20.88	22.4	0.0	
100	QPSK	1	271	21.15	21.17	20.83			
100	QPSK	135	0	21.15	21.27	20.75	22.4	0.0	
100	QPSK	135	69	21.34	21.39	21.00	22.4	0.0	
100	QPSK	135	138	20.95	21.11	20.70	22.4	0.0	
100	QPSK	270	0	21.25	21.27	20.84			
100	16QAM	1	1	20.91	20.90	20.48	22.4	0.0	
100	64QAM	1	1	20.51	20.52	20.54	21.5	0.5	
100	256QAM	1	1	17.75	17.83	17.81	19.5	2.0	
Channel				64868	65000	65334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	20.84	21.04	20.46	22.4	0.0	
Channel				649334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	20.90	20.95	20.99	22.4	0.0	
Channel				649000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	20.89	20.99	20.48	22.4	0.0	
Channel				648668	650000	653334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	QPSK	1	1	20.72	20.98	20.67	22.4	0.0	
Channel				648334	650000	653668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	20.76	20.93	20.48	22.4	0.0	
Channel				648000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	20.83	21.00	20.52	22.4	0.0	
Channel				647668	650000	654334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	20.91	20.89	20.48	22.4	0.0	
Channel				647500	650000	654500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	20.88	20.55	20.44	22.4	0.0	
Channel				647334	650000	654668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	20.92	20.93	20.45	22.4	0.0	
Channel				647168	650000	654834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	20.91	20.62	20.45	22.4	0.0	
Channel				647000	650000	655000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	20.69	21.06	20.45	22.4	0.0	

Part270 n78 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 65000	Power Middle Ch. / Freq. 65000	Power High Ch. / Freq. 65000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3760	3760			
Frequency (MHz)									
100	PI2 BPSK	1	1		21.72				
100	PI2 BPSK	1	137		21.65		22.4	0.0	
100	PI2 BPSK	1	271		21.49				
100	PI2 BPSK	135	0		21.38		21.9	0.5	
100	PI2 BPSK	135	69		21.74		22.4	0.0	
100	PI2 BPSK	135	138		21.63		21.9	0.5	
100	PI2 BPSK	270	0		21.43				
100	QPSK	1	1		21.78				
100	QPSK	1	137		21.52		22.4	0.0	
100	QPSK	1	271		21.42				
100	QPSK	135	0		21.34		21.4	1.0	
100	QPSK	135	69		21.78		22.4	0.0	
100	QPSK	135	138		20.78		21.4	1.0	
100	QPSK	270	0		20.89				
100	16QAM	1	1		21.14		21.4	1.0	
100	64QAM	1	1		19.05		19.9	2.5	
100	256QAM	1	1		17.41		17.9	4.5	
Channel				64868	65000	65334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3760	3765.01			
90	QPSK	1	1	21.73	21.72	21.89	22.4	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3760	3767.02			
80	QPSK	1	1	21.53	21.57	21.75	22.4	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3760	3765			
70	QPSK	1	1	21.72	21.60	21.74	22.4	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3760	3770.01			
60	QPSK	1	1	21.72	21.72	21.65	22.4	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3760	3775.02			
50	QPSK	1	1	21.71	21.59	21.69	22.4	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3760	3780			
40	QPSK	1	1	21.74	21.67	21.88	22.4	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3760	3785.01			
30	QPSK	1	1	21.69	21.75	21.63	22.4	0.0	
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3760	3787.5			
25	QPSK	1	1	21.58	21.62	21.64	22.4	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3760	3790.02			
20	QPSK	1	1	21.59	21.67	21.67	22.4	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3760	3792.51			
15	QPSK	1	1	21.73	21.65	21.70	22.4	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3760	3795			
10	QPSK	1	1	21.75	21.68	21.76	22.4	0.0	





### Part270 n77 Ant8

BW (MHz)	Modulation	RB 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	23.21	22.30	22.30		
100	PI2 BPSK	1	137	22.15	22.19	22.13	24.0	0.0
100	PI2 BPSK	1	271	23.05	23.19	23.00		
100	PI2 BPSK	138	0	22.81	22.76	22.65	23.5	0.5
100	PI2 BPSK	138	69	23.18	23.23	23.07	24.0	0.0
100	PI2 BPSK	138	138	22.52	22.68	22.58	23.5	0.5
100	PI2 BPSK	270	0	22.56	22.73	22.62		
100	QPSK	1	1	23.29	23.38	23.19		
100	QPSK	1	137	23.09	23.25	23.12	24.0	0.0
100	QPSK	1	271	22.97	23.13	23.06		
100	QPSK	138	0	22.20	22.31	22.21	23.0	1.0
100	QPSK	138	69	23.22	23.25	23.22	24.0	0.0
100	QPSK	138	138	22.03	22.18	22.08	23.0	1.0
100	QPSK	270	0	22.28	22.31	21.98		
100	16QAM	1	1	22.24	22.38	22.27	23.0	1.0
100	16QAM	1	1	20.68	20.83	20.66	21.5	2.5
100	256QAM	1	1	18.45	18.59	18.56	19.5	4.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	23.13	23.18	23.07	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	23.22	23.18	22.98	24.0	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	23.25	23.20	22.95	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	23.22	23.29	22.97	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	23.23	23.28	23.02	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.20	23.18	22.95	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	644334		
30	QPSK	1	1	23.15	23.20	23.03	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	645000		
25	QPSK	1	1	23.12	23.17	23.00	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	644668		
20	QPSK	1	1	23.21	23.28	23.00	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	644834		
15	QPSK	1	1	23.21	23.22	23.05	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.25	23.21	23.04	24.0	0.0

### Part270 n77 PC2 Ant8

BW (MHz)	Modulation	RB 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	26.26	25.23	24.56		
100	PI2 BPSK	1	137	26.17	25.15	24.54	26.5	0.0
100	PI2 BPSK	1	271	26.21	25.27	24.67		
100	PI2 BPSK	138	0	25.78	24.84	24.30	26.0	0.5
100	PI2 BPSK	138	69	26.23	25.21	24.57	26.5	0.0
100	PI2 BPSK	138	138	25.64	24.63	24.06	26.0	0.5
100	PI2 BPSK	270	0	25.70	24.77	24.24		
100	QPSK	1	1	26.32	25.26	24.62		
100	QPSK	1	137	26.28	25.26	24.53	26.5	0.0
100	QPSK	1	271	26.13	25.13	24.51		
100	QPSK	138	0	25.37	24.31	23.71	25.5	1.0
100	QPSK	138	69	26.25	25.30	24.62	26.5	0.0
100	QPSK	138	138	25.19	24.11	24.53	25.5	1.0
100	QPSK	270	0	25.24	24.32	23.75		
100	16QAM	1	1	25.40	24.48	23.83	25.5	1.0
100	16QAM	1	1	23.82	22.74	22.17	24.0	2.5
100	256QAM	1	1	21.54	20.56	20.11	22.0	4.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	26.17	25.12	24.52	26.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	26.29	25.12	24.50	26.5	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	26.15	25.13	24.53	26.5	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	26.17	25.08	24.52	26.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	26.21	25.13	24.57	26.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	26.29	25.09	24.52	26.5	0.0
Channel								
Frequency (MHz)				647668	650000	644334		
30	QPSK	1	1	26.28	25.20	24.52	26.5	0.0
Channel								
Frequency (MHz)				647500	650000	645000		
25	QPSK	1	1	26.20	25.14	24.59	26.5	0.0
Channel								
Frequency (MHz)				647334	650000	644668		
20	QPSK	1	1	26.15	25.16	24.56	26.5	0.0
Channel								
Frequency (MHz)				647168	650000	644834		
15	QPSK	1	1	26.17	25.19	24.54	26.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	26.26	25.19	24.59	26.5	0.0

### Part270 n78 Ant8

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		23.39			
100	PI2 BPSK	1	137		23.34		24.0	0.0
100	PI2 BPSK	1	271		23.26			
100	PI2 BPSK	138	0		22.94		23.5	0.5
100	PI2 BPSK	138	69		23.23		24.0	0.0
100	PI2 BPSK	138	138		22.80		23.5	0.5
100	PI2 BPSK	270	0		22.82			
100	QPSK	1	1		23.43			
100	QPSK	1	137		23.40		24.0	0.0
100	QPSK	1	271		23.24			
100	QPSK	138	0		22.41		23.0	1.0
100	QPSK	138	69		23.38		24.0	0.0
100	QPSK	138	138		22.28		23.0	1.0
100	QPSK	270	0		22.30			
100	16QAM	1	1		22.24		23.0	1.0
100	16QAM	1	1		21.24		21.5	2.5
100	256QAM	1	1		18.68		19.5	4.5
Channel								
Frequency (MHz)				648668	650000	648334		
90	QPSK	1	1	23.31	23.29	23.25	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	23.29	23.26	23.41	24.0	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	23.33	23.37	23.34	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	23.32	23.32	23.38	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	23.39	23.38	23.36	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.30	23.35	23.29	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	647334		
30	QPSK	1	1	23.39	23.32	23.40	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	647168		
25	QPSK	1	1	23.33	23.35	23.38	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	646999		
20	QPSK	1	1	23.39	23.26	23.29	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	646834		
15	QPSK	1	1	23.27	23.28	23.32	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.35	23.40	23.34	24.0	0.0



**Part270 n78 PC2 Ant8**

BW [MHz]	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)				3760	3760	3760		
100	PI2 BPSK	1	1		25.81			
100	PI2 BPSK	1	137		25.73		28.5	0.0
100	PI2 BPSK	1	271		25.23			
100	PI2 BPSK	135	0		25.38		28.0	0.5
100	PI2 BPSK	135	69		25.84		28.5	0.0
100	PI2 BPSK	135	138		25.37		28.0	0.5
100	PI2 BPSK	270	0		25.41			
100	QPSK	1	1		25.88			
100	QPSK	1	137		25.59		28.5	0.0
100	QPSK	1	271		25.21			
100	QPSK	135	0		25.31		25.5	1.0
100	QPSK	135	69		25.88		28.5	0.0
100	QPSK	135	138		25.15		25.5	1.0
100	QPSK	270	0		25.32			
100	16QAM	1	1		24.97		25.5	1.0
100	16QAM	1	1		23.63		24.0	2.5
100	256QAM	1	1		21.62		22.0	4.5
Channel				649688	650000	650334		
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	25.84	25.85	25.93	28.5	0.0
Channel				649334	650000	650668		
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	25.91	25.78	25.90	28.5	0.0
Channel				649000	650000	651000		
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	25.91	25.82	25.84	28.5	0.0
Channel				648668	650000	651334		
Frequency (MHz)				3730.02	3750	3760.01		
60	QPSK	1	1	25.90	25.88	25.87	28.5	0.0
Channel				648334	650000	651668		
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	25.80	25.91	25.88	28.5	0.0
Channel				648000	650000	652000		
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	25.93	25.82	25.91	28.5	0.0
Channel				647668	650000	652334		
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	25.92	25.91	25.81	28.5	0.0
Channel				647300	650000	652500		
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	25.81	25.82	25.85	28.5	0.0
Channel				647334	650000	652668		
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	25.88	25.92	25.89	28.5	0.0
Channel				647188	650000	652834		
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	25.79	25.93	25.87	28.5	0.0
Channel				647000	650000	653000		
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	25.93	25.88	25.81	28.5	0.0



### Part270 n77 Ant9

BW (MHz)	Modulation	RB 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	22.37	22.42	22.32		
100	PI2 BPSK	1	137	22.29	22.39	22.31	24.0	0.0
100	PI2 BPSK	1	271	22.25	22.28	22.12		
100	PI2 BPSK	135	0	22.00	22.04	21.94	23.5	0.5
100	PI2 BPSK	135	69	22.16	22.33	22.26	24.0	0.0
100	PI2 BPSK	135	138	21.86	21.69	21.55	23.5	0.5
100	PI2 BPSK	270	0	21.80	21.87	21.74		
100	QPSK	1	1	22.42	22.48	22.39		
100	QPSK	1	137	22.30	22.37	22.19	24.0	0.0
100	QPSK	1	271	22.14	22.31	22.26		
100	QPSK	135	0	21.49	21.53	21.42	23.0	1.0
100	QPSK	135	69	22.38	22.41	22.33	24.0	0.0
100	QPSK	135	138	21.33	21.36	21.25	23.0	1.0
100	QPSK	270	0	21.35	21.43	21.40		
100	16QAM	1	1	21.43	21.59	21.46	23.0	1.0
100	16QAM	1	1	20.18	20.27	20.12	21.5	2.5
100	256QAM	1	1	17.88	17.94	17.78	19.5	4.5
Channel								
Frequency (MHz)				64868	65000	66334	Tune-up limit (dBm)	MPR (dB)
Channel				3745.02	3840	3935.01		
90	QPSK	1	1	22.35	22.40	22.33	24.0	0.0
Channel								
Frequency (MHz)				64934	65000	66268	Tune-up limit (dBm)	MPR (dB)
Channel				3740.01	3840	3940.02		
80	QPSK	1	1	22.34	22.42	22.33	24.0	0.0
Channel								
Frequency (MHz)				64900	65000	66300	Tune-up limit (dBm)	MPR (dB)
Channel				3735	3840	3945		
70	QPSK	1	1	22.28	22.46	22.29	24.0	0.0
Channel								
Frequency (MHz)				64868	65000	66334	Tune-up limit (dBm)	MPR (dB)
Channel				3740.02	3840	3950.01		
60	QPSK	1	1	22.35	22.38	22.27	24.0	0.0
Channel								
Frequency (MHz)				64834	65000	66368	Tune-up limit (dBm)	MPR (dB)
Channel				3725.01	3840	3955.02		
50	QPSK	1	1	22.38	22.39	22.30	24.0	0.0
Channel								
Frequency (MHz)				64900	65000	66300	Tune-up limit (dBm)	MPR (dB)
Channel				3720	3840	3960		
40	QPSK	1	1	22.35	22.34	22.29	24.0	0.0
Channel								
Frequency (MHz)				64768	65000	66434	Tune-up limit (dBm)	MPR (dB)
Channel				3715.02	3840	3955.01		
30	QPSK	1	1	22.25	22.43	22.23	24.0	0.0
Channel								
Frequency (MHz)				64750	65000	66450	Tune-up limit (dBm)	MPR (dB)
Channel				3712.5	3840	3967.5		
25	QPSK	1	1	22.28	22.35	22.30	24.0	0.0
Channel								
Frequency (MHz)				64734	65000	66468	Tune-up limit (dBm)	MPR (dB)
Channel				3710.01	3840	3970.02		
20	QPSK	1	1	22.30	22.38	22.28	24.0	0.0
Channel								
Frequency (MHz)				64718	65000	66484	Tune-up limit (dBm)	MPR (dB)
Channel				3707.52	3840	3972.51		
15	QPSK	1	1	22.38	22.31	22.28	24.0	0.0
Channel								
Frequency (MHz)				64700	65000	66500	Tune-up limit (dBm)	MPR (dB)
Channel				3705	3840	3975		
10	QPSK	1	1	22.39	22.41	22.25	24.0	0.0

### Part270 n77 PC2 Ant9

BW (MHz)	Modulation	RB 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	25.38	25.44	25.32		
100	PI2 BPSK	1	137	25.35	25.40	25.33	27.0	0.0
100	PI2 BPSK	1	271	25.21	25.33	25.17		
100	PI2 BPSK	135	0	24.83	24.99	24.94	26.5	0.5
100	PI2 BPSK	135	69	25.35	25.41	25.38	27.0	0.0
100	PI2 BPSK	135	138	24.84	24.94	24.85	26.5	0.5
100	PI2 BPSK	270	0	24.89	24.96	24.83		
100	QPSK	1	1	25.42	25.48	25.37		
100	QPSK	1	137	25.28	25.39	25.27	27.0	0.0
100	QPSK	1	271	25.25	25.36	25.28		
100	QPSK	135	0	24.33	24.41	24.27	26.0	1.0
100	QPSK	135	69	25.39	25.45	25.41	27.0	0.0
100	QPSK	135	138	24.27	24.39	24.30	26.0	1.0
100	QPSK	270	0	24.41	24.43	24.47		
100	16QAM	1	1	24.45	24.58	24.45	26.0	1.0
100	16QAM	1	1	23.28	23.31	23.17	24.5	2.5
100	256QAM	1	1	20.89	20.94	20.78	22.5	4.5
Channel								
Frequency (MHz)				64868	65000	66334	Tune-up limit (dBm)	MPR (dB)
Channel				3745.02	3840	3935.01		
90	QPSK	1	1	25.40	25.45	25.20	27.0	0.0
Channel								
Frequency (MHz)				64934	65000	66268	Tune-up limit (dBm)	MPR (dB)
Channel				3740.01	3840	3940.02		
80	QPSK	1	1	25.28	25.44	25.10	27.0	0.0
Channel								
Frequency (MHz)				64900	65000	66300	Tune-up limit (dBm)	MPR (dB)
Channel				3735	3840	3945		
70	QPSK	1	1	25.39	25.42	25.21	27.0	0.0
Channel								
Frequency (MHz)				64868	65000	66334	Tune-up limit (dBm)	MPR (dB)
Channel				3740.02	3840	3950.01		
60	QPSK	1	1	25.27	25.40	25.22	27.0	0.0
Channel								
Frequency (MHz)				64834	65000	66368	Tune-up limit (dBm)	MPR (dB)
Channel				3725.01	3840	3955.02		
50	QPSK	1	1	25.27	25.35	25.32	27.0	0.0
Channel								
Frequency (MHz)				64900	65000	66300	Tune-up limit (dBm)	MPR (dB)
Channel				3720	3840	3960		
40	QPSK	1	1	25.37	25.38	25.28	27.0	0.0
Channel								
Frequency (MHz)				64768	65000	66434	Tune-up limit (dBm)	MPR (dB)
Channel				3715.02	3840	3955.01		
30	QPSK	1	1	25.32	25.39	25.21	27.0	0.0
Channel								
Frequency (MHz)				64750	65000	66450	Tune-up limit (dBm)	MPR (dB)
Channel				3712.5	3840	3967.5		
25	QPSK	1	1	25.25	25.38	25.22	27.0	0.0
Channel								
Frequency (MHz)				64734	65000	66468	Tune-up limit (dBm)	MPR (dB)
Channel				3710.01	3840	3970.02		
20	QPSK	1	1	25.25	25.41	25.21	27.0	0.0
Channel								
Frequency (MHz)				64718	65000	66484	Tune-up limit (dBm)	MPR (dB)
Channel				3707.52	3840	3972.51		
15	QPSK	1	1	25.37	25.38	25.30	27.0	0.0
Channel								
Frequency (MHz)				64700	65000	66500	Tune-up limit (dBm)	MPR (dB)
Channel				3705	3840	3975		
10	QPSK	1	1	25.37	25.46	25.28	27.0	0.0

### Part270 n78 Ant9

BW (MHz)	Modulation	RB 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	3750	3750			
100	PI2 BPSK	1	1		22.55				
100	PI2 BPSK	1	137		22.46		24.0	0.0	
100	PI2 BPSK	1	271		22.03				
100	PI2 BPSK	135	0		22.11		23.5	0.5	
100	PI2 BPSK	135	69		22.48		24.0	0.0	
100	PI2 BPSK	135	138		21.78		23.5	0.5	
100	PI2 BPSK	270	0		21.84				
100	QPSK	1	1		22.84				
100	QPSK	1	137		22.36		24.0	0.0	
100	QPSK	1	271		22.03				
100	QPSK	135	0		21.84		23.0	1.0	
100	QPSK	135	69		22.59		24.0	0.0	
100	QPSK	135	138		21.26		23.0	1.0	
100	QPSK	270	0		21.47				
100	16QAM	1	1		21.72		23.0	1.0	
100	16QAM	1	1		20.26		21.5	2.5	
100	256QAM	1	1		17.97		19.5	4.5	
Channel									
Frequency (MHz)				64868	65000	66334	Tune-up limit (dBm)	MPR (dB)	
Channel				3745.02	3750	3755.01			
90	QPSK	1	1		22.55	22.51	24.0	0.0	
Channel									
Frequency (MHz)				64934	65000	66068	Tune-up limit (dBm)	MPR (dB)	
Channel				3740.01	3750	3760.02			
80	QPSK	1	1		22.47	22.55	22.61	24.0	0.0
Channel									
Frequency (MHz)				64900	65000	66100	Tune-up limit (dBm)	MPR (dB)	
Channel				3735	3750	3765			
70	QPSK	1	1		22.80	22.54	22.53	24.0	0.0
Channel									
Frequency (MHz)				64868	65000	66134	Tune-up limit (dBm)	MPR (dB)	
Channel				3730.02	3750	3770.01			
60	QPSK	1	1		22.54	22.57	22.54	24.0	0.0
Channel									
Frequency (MHz)				64834	65000	66168	Tune-up limit (dBm)	MPR (dB)	
Channel				3725.01	3750	3775.02			
50	QPSK	1	1		22.58	22.53	22.61	24.0	0.0
Channel									
Frequency (MHz)				64900	65000	66200	Tune-up limit (dBm)	MPR (dB)	
Channel				3720	3750	3780			
40	QPSK	1	1		22.48	22.62	22.61	24.0	0.0
Channel									
Frequency (MHz)				64768	65000	66234	Tune-up limit (dBm)	MPR (dB)	
Channel				3715.02	3750	3785.01			
30	QPSK	1	1		22.59	22.61	22.57	24.0	0.0
Channel									
Frequency (MHz)				64750	65000	6			



**Part270 n78 PC2 Ant9**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				3760	3760	3760		
Frequency (MHz)								
100	PI2 BPSK	1	1	25.60				
100	PI2 BPSK	1	137	25.67			27.0	0.0
100	PI2 BPSK	1	271	25.61				
100	PI2 BPSK	135	0	25.18			28.5	0.5
100	PI2 BPSK	135	69	25.64			27.0	0.0
100	PI2 BPSK	135	138	25.07				
100	PI2 BPSK	270	0	25.12				
100	QPSK	1	1	25.14				
100	QPSK	1	137	25.60			27.0	0.0
100	QPSK	1	271	25.52				
100	QPSK	135	0	24.67			28.0	1.0
100	QPSK	135	69	25.71			27.0	0.0
100	QPSK	135	138	24.67				
100	QPSK	270	0	24.68			28.0	1.0
100	16QAM	1	1	24.85			26.0	1.0
100	16QAM	1	1	23.14			24.5	2.5
100	256QAM	1	1	20.62			22.5	4.5
Channel				649688	650000	650334		
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	25.57	25.62	25.63	27.0	0.0
Channel				649334	650000	650668		
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	25.69	25.68	25.69	27.0	0.0
Channel				649000	650000	651000		
Frequency (MHz)				3736	3750	3765		
70	QPSK	1	1	25.61	25.66	25.57	27.0	0.0
Channel				648668	650000	651334		
Frequency (MHz)				3730.02	3750	3730.01		
60	QPSK	1	1	25.60	25.72	25.66	27.0	0.0
Channel				648334	650000	651668		
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	25.62	25.64	25.71	27.0	0.0
Channel				648000	650000	652000		
Frequency (MHz)				3720	3750	3760		
40	QPSK	1	1	25.59	25.58	25.72	27.0	0.0
Channel				647668	650000	652334		
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	25.60	25.67	25.71	27.0	0.0
Channel				647300	650000	652500		
Frequency (MHz)				3712.5	3750	3767.5		
25	QPSK	1	1	25.58	25.60	25.58	27.0	0.0
Channel				647334	650000	652668		
Frequency (MHz)				3710.01	3750	3760.02		
20	QPSK	1	1	25.62	25.61	25.59	27.0	0.0
Channel				647188	650000	652834		
Frequency (MHz)				3707.52	3750	3762.51		
15	QPSK	1	1	25.56	25.70	25.61	27.0	0.0
Channel				647000	650000	653000		
Frequency (MHz)				3705	3750	3765		
10	QPSK	1	1	25.62	25.71	25.72	27.0	0.0



Reduced Power Mode for DS13 Standalone

n5 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				16800	16700	16780			
Frequency (MHz)				834	836.5	839			
20	PI2 BPSK	1	1	23.04	23.13	22.99			
20	PI2 BPSK	1	53	22.90	23.03	22.93	24.0	0.0	
20	PI2 BPSK	1	104	23.00	23.10	22.97			
20	PI2 BPSK	50	0	22.96	22.84	22.55	23.5	0.5	
20	PI2 BPSK	50	28	22.82	22.98	22.85	24.0	0.0	
20	PI2 BPSK	50	56	22.57	22.70	22.53			
20	PI2 BPSK	100	0	22.61	22.73	22.58	23.5	0.5	
20	QPSK	1	1	23.16	23.19	23.02			
20	QPSK	1	53	22.98	23.06	22.91	24.0	0.0	
20	QPSK	1	104	23.09	23.12	23.04			
20	QPSK	50	0	22.15	22.17	22.13	23.0	1.0	
20	QPSK	50	28	23.11	23.14	23.08	24.0	0.0	
20	QPSK	50	56	22.12	22.22	22.06			
20	QPSK	100	0	22.26	22.31	22.24	23.0	1.0	
20	16QAM	1	1	22.02	22.05	21.96	23.0	1.0	
20	16QAM	1	1	20.87	21.02	20.95	21.5	2.5	
20	256QAM	1	1	18.39	18.49	18.37	19.5	4.5	
Channel				16800	16700	16800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831.5	835.5	841.5			
15	QPSK	1	1	23.03	23.10	22.97	24.0	0.0	
Channel				16800	16700	16800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	1	23.05	23.02	22.95	24.0	0.0	
Channel				16800	16700	16800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	1	23.09	23.04	22.85	24.0	0.0	



n41 DS13 Standalone Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				59202	518598	539998			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.22	22.25	22.12			
100	PI2 BPSK	1	137	22.01	22.17	22.13	23.4	0.0	
100	PI2 BPSK	1	271	22.04	22.12	22.17			
100	PI2 BPSK	135	0	22.04	22.15	22.19	23.4	0.0	
100	PI2 BPSK	135	69	22.03	22.19	22.17	23.4	0.0	
100	PI2 BPSK	135	138	22.01	22.22	22.11	23.4	0.0	
100	PI2 BPSK	270	0	22.01	22.20	22.08			
100	QPSK	1	1	22.16	22.29	22.24			
100	QPSK	1	137	22.03	22.21	22.09	23.4	0.0	
100	QPSK	1	271	22.02	22.22	22.20			
100	QPSK	135	0	22.09	22.08	22.07	23.0	0.4	
100	QPSK	135	69	22.06	22.11	22.07	23.4	0.0	
100	QPSK	135	138	22.01	22.08	22.03	23.0	0.4	
100	QPSK	270	0	22.14	22.21	22.11			
100	16QAM	1	1	21.88	22.00	21.98	23.0	0.4	
100	16QAM	1	1	20.57	20.88	20.62	21.5	1.9	
100	256QAM	1	1	18.38	18.54	18.37	19.5	3.9	
Channel				505200	518598	539998			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	22.12	22.25	22.21	23.4	0.0	
Channel				507204	518598	539998			
Frequency (MHz)				2537.02	2592.99	2649.99			
80	QPSK	1	1	22.03	22.12	22.10	23.4	0.0	
Channel				505202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	22.00	22.22	22.18	23.4	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2528	2592.99	2659.99			
60	QPSK	1	1	22.05	22.23	22.19	23.4	0.0	
Channel				504204	518598	539998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.04	22.20	22.07	23.4	0.0	
Channel				505202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	22.02	22.15	22.18	23.4	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	0	22.01	22.24	22.22	23.4	0.0	
Channel				501204	518598	539998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	22.16	22.24	22.17	23.4	0.0	
Channel				500700	518598	538498			
Frequency (MHz)				2501.5	2592.99	2682.48			
15	QPSK	1	1	22.07	22.18	22.21	23.4	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	22.05	22.16	22.16	23.4	0.0	



### n2 Default Ant1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				1860	1860	1900		
20	PI2 BPSK	1	1	18.16	18.09	18.11		
20	PI2 BPSK	1	53	17.97	18.14	17.95	18.5	0.0
20	PI2 BPSK	1	104	17.92	17.84	17.90		
20	PI2 BPSK	50	0	17.76	17.79	17.59	18.5	0.0
20	PI2 BPSK	50	28	18.10	18.04	17.99	18.5	0.0
20	PI2 BPSK	50	58	17.58	17.73	17.64	18.5	0.0
20	PI2 BPSK	100	0	17.86	17.78	17.81		
20	QPSK	1	1	18.10	18.17	18.14		
20	QPSK	1	53	18.01	18.08	18.05	18.5	0.0
20	QPSK	1	104	17.81	18.07	17.90		
20	QPSK	50	0	17.07	17.27	17.12	18.5	0.0
20	QPSK	50	28	17.88	18.16	18.05	18.5	0.0
20	QPSK	50	58	17.20	17.24	17.16		
20	QPSK	100	0	17.16	17.46	17.19	18.5	0.0
20	16QAM	1	1	17.00	17.03	16.85	18.5	0.0
20	16QAM	1	1	17.11	17.19	17.09	18.5	0.0
20	256QAM	1	1	17.17	17.28	17.11	18.5	0.0
Channel								
Frequency (MHz)				37000	37000	38000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	18.01	17.97	18.05	18.5	0.0
Channel								
Frequency (MHz)				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	18.55	18.60	18.05	18.5	0.0
Channel								
Frequency (MHz)				375000	376000	381500	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	18.52	18.60	18.07	18.5	0.0

### n7 Default Ant1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				2520	2535	2550		
40	PI2 BPSK	1	1	18.82	18.40	18.89		
40	PI2 BPSK	1	108	18.93	18.95	18.88	19.7	0.0
40	PI2 BPSK	1	214	18.85	18.96	18.92		
40	PI2 BPSK	108	0	18.59	18.82	18.51	19.7	0.0
40	PI2 BPSK	108	54	18.98	18.96	18.90	19.7	0.0
40	PI2 BPSK	108	108	18.42	18.53	18.44	19.7	0.0
40	PI2 BPSK	216	0	18.48	18.64	18.55		
40	QPSK	1	1	18.92	18.99	18.98		
40	QPSK	1	108	18.88	18.93	18.75	19.7	0.0
40	QPSK	1	214	18.81	18.88	18.77		
40	QPSK	108	0	18.73	18.83	18.59	19.7	0.0
40	QPSK	108	54	18.89	18.92	18.87	19.7	0.0
40	QPSK	108	108	18.72	18.77	18.69	19.7	0.0
40	QPSK	216	0	18.66	18.82	18.80		
40	16QAM	1	1	18.75	18.80	18.73	19.7	0.0
40	16QAM	1	1	18.78	18.77	18.69	19.7	0.0
40	256QAM	1	1	18.42	18.30	18.48	19.2	0.5
Channel								
Frequency (MHz)				50300	50700	51100	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	18.91	18.87	18.84	19.7	0.0
Channel								
Frequency (MHz)				502000	507000	511500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	25.72	25.33	25.75	19.7	0.0
Channel								
Frequency (MHz)				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
20	PI2 BPSK	1	1	18.88	18.89	18.78	19.7	0.0
Channel								
Frequency (MHz)				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	18.85	18.94	18.91	19.7	0.0
Channel								
Frequency (MHz)				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	25.05	25.35	25.65	19.7	0.0
Channel								
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	18.85	18.88	18.79	19.7	0.0

### n66 DSI3 Standalone Ant1

BW (MHz)	Modulation	RB 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	16.76	16.79	16.75		
40	PI2 BPSK	1	108	16.71	16.90	16.89	18.2	0.0
40	PI2 BPSK	1	214	16.85	16.83	16.82		
40	PI2 BPSK	108	0	16.87	16.86	16.86	18.2	0.0
40	PI2 BPSK	108	54	16.86	16.72	16.70	18.2	0.0
40	PI2 BPSK	108	108	16.87	16.87	16.66	18.2	0.0
40	PI2 BPSK	216	0	16.84	16.86	16.59		
40	QPSK	1	1	17.02	17.06	16.89		
40	QPSK	1	108	16.85	16.90	16.79	18.2	0.0
40	QPSK	1	214	16.85	16.77	16.84		
40	QPSK	108	0	16.73	16.82	16.75	18.2	0.0
40	QPSK	108	54	16.82	16.91	16.82	18.2	0.0
40	QPSK	108	108	16.75	16.87	16.83	18.2	0.0
40	QPSK	216	0	16.70	16.88	16.76		
40	16QAM	1	1	16.72	16.75	16.57	18.2	0.0
40	16QAM	1	1	16.84	16.79	16.66	18.2	0.0
40	256QAM	1	1	16.83	16.90	16.88	18.2	0.0
Channel								
Frequency (MHz)				34500	34500	35000	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	17.25	17.45	17.65		
Channel								
Frequency (MHz)				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	16.84	17.05	16.77	18.2	0.0
Channel								
Frequency (MHz)				344000	349000	349000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	16.93	16.90	16.77	18.2	0.0
Channel								
Frequency (MHz)				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	16.97	16.82	16.72	18.2	0.0
Channel								
Frequency (MHz)				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	17.15	17.45	17.75		
Channel								
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	16.87	16.86	16.76	18.2	0.0



### n2 Default Ant2

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				1860	1880	1900		
20	PI2 BPSK	1	1	22.68	22.70	22.61		
20	PI2 BPSK	1	53	22.50	22.63	22.57	24.0	0.0
20	PI2 BPSK	1	104	22.56	22.62	22.59		
20	PI2 BPSK	50	0	22.27	22.39	22.27	23.5	0.5
20	PI2 BPSK	50	28	22.62	22.72	22.64	24.0	0.0
20	PI2 BPSK	50	58	22.13	22.28	22.16	23.5	0.5
20	PI2 BPSK	100	0	22.18	22.33	22.26		
20	QPSK	1	1	22.66	22.78	22.73		
20	QPSK	1	53	22.58	22.65	22.63	24.0	0.0
20	QPSK	1	104	22.48	22.60	22.57		
20	QPSK	50	0	21.79	21.86	21.78	23.0	1.0
20	QPSK	50	28	22.61	22.73	22.69	24.0	0.0
20	QPSK	50	58	21.61	21.70	21.64	23.0	1.0
20	QPSK	100	0	21.70	21.74	21.69		
20	16QAM	1	1	21.31	21.47	21.42	23.0	1.0
20	64QAM	1	1	20.39	20.53	20.50	21.5	2.5
20	256QAM	1	1	18.23	18.28	18.23	19.5	4.5
Channel								
Frequency (MHz)				375000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Channel				375000	376000	381000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	22.52	22.71	22.62	24.0	0.0
Channel								
Frequency (MHz)				376000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Channel				376000	376000	381000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	22.56	22.67	22.60	24.0	0.0
Channel								
Frequency (MHz)				375000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Channel				375000	376000	381000	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	22.52	22.61	22.68	24.0	0.0

### n7 DSI3 Standalone Ant2

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				505000	507000	510000		
40	PI2 BPSK	1	1	20.30	20.32	20.13		
40	PI2 BPSK	1	108	20.14	20.18	20.10	21.5	0.0
40	PI2 BPSK	1	214	20.24	20.28	20.09		
40	PI2 BPSK	108	0	20.07	20.21	20.25	21.5	0.0
40	PI2 BPSK	108	54	20.18	20.24	20.18	21.5	0.0
40	PI2 BPSK	108	108	20.16	20.22	20.16	21.5	0.0
40	PI2 BPSK	216	0	20.24	20.35	20.02		
40	QPSK	1	1	20.30	20.37	20.33		
40	QPSK	1	108	20.23	20.36	20.31	21.5	0.0
40	QPSK	1	214	20.24	20.23	20.05		
40	QPSK	108	0	20.12	20.25	20.24	20.5	1.0
40	QPSK	108	54	20.14	20.32	20.25	21.5	0.0
40	QPSK	108	108	20.05	20.15	20.28	20.5	1.0
40	QPSK	216	0	20.16	20.30	20.16		
40	16QAM	1	1	20.21	20.31	20.17	21.5	0.0
40	64QAM	1	1	20.13	20.22	20.10	21.5	0.0
40	256QAM	1	1	18.79	18.76	18.64	19.5	2.0
Channel								
Frequency (MHz)				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	20.15	20.28	20.22	21.5	0.0
Channel								
Frequency (MHz)				502000	507000	511500	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	511500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	20.23	20.29	20.30	21.5	0.0
Channel								
Frequency (MHz)				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
20	PI2 BPSK	1	1	20.28	20.27	20.22	21.5	0.0
Channel								
Frequency (MHz)				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.30	20.20	20.06	21.5	0.0
Channel								
Frequency (MHz)				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.19	20.28	20.22	21.5	0.0
Channel								
Frequency (MHz)				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	20.12	20.26	20.20	21.5	0.0

### n66 Default Ant2

BW (MHz)	Modulation	RB 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	22.59	22.83	22.51		
40	PI2 BPSK	1	108	22.47	22.56	22.49	24.0	0.0
40	PI2 BPSK	1	214	22.45	22.80	22.45		
40	PI2 BPSK	108	0	22.11	22.15	22.10	23.5	0.5
40	PI2 BPSK	108	54	22.51	22.59	22.49	24.0	0.0
40	PI2 BPSK	108	108	21.97	22.05	21.91	23.5	0.5
40	PI2 BPSK	216	0	22.09	22.11	21.99		
40	QPSK	1	1	22.71	22.76	22.64		
40	QPSK	1	108	22.43	22.53	22.41	24.0	0.0
40	QPSK	1	214	22.47	22.51	22.47		
40	QPSK	108	0	21.83	21.84	21.46	23.0	1.0
40	QPSK	108	54	22.62	22.89	22.59	24.0	0.0
40	QPSK	108	108	21.61	21.83	21.52	23.0	1.0
40	QPSK	216	0	21.81	21.88	21.57		
40	16QAM	1	1	21.76	21.87	21.81	23.0	1.0
40	64QAM	1	1	20.38	20.52	20.35	21.5	2.5
40	256QAM	1	1	17.90	18.02	17.89	19.5	4.5
Channel								
Frequency (MHz)				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)
35	QPSK	1	1	22.80	22.62	22.59	24.0	0.0
Channel								
Frequency (MHz)				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	22.55	22.68	22.54	24.0	0.0
Channel								
Frequency (MHz)				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	22.85	22.67	22.47	24.0	0.0
Channel								
Frequency (MHz)				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	22.83	22.64	22.49	24.0	0.0
Channel								
Frequency (MHz)				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	22.83	22.59	22.62	24.0	0.0
Channel								
Frequency (MHz)				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	22.80	22.62	22.61	24.0	0.0
Channel								
Frequency (MHz)				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	22.65	22.73	22.58	24.0	0.0





n38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2590.02	2595	2599.98		
Frequency (MHz)				19.61	19.64	19.51		
40	PI/2 BPSK	1	1	19.61	19.64	19.51		
40	PI/2 BPSK	1	53	19.45	19.55	19.62	20.2	0.0
40	PI/2 BPSK	1	104	19.51	19.52	19.48		
40	PI/2 BPSK	50	0	18.97	19.15	19.00	20.2	0.0
40	PI/2 BPSK	50	28	19.54	19.66	19.62	20.2	0.0
40	PI/2 BPSK	50	56	18.85	19.00	18.80	20.2	0.0
40	PI/2 BPSK	100	0	18.90	18.95	18.92		
40	QPSK	1	1	19.67	19.69	19.60		
40	QPSK	1	53	19.64	19.68	19.60	20.2	0.0
40	QPSK	1	104	19.59	19.58	19.43		
40	QPSK	50	0	18.47	18.55	18.39	20.2	0.0
40	QPSK	50	28	19.65	19.72	19.58	20.2	0.0
40	QPSK	80	56	18.33	18.48	18.31	20.2	0.0
40	QPSK	100	0	18.43	18.52	18.45		
40	16QAM	1	1	18.48	18.51	18.44	20.2	0.0
40	16QAM	1	1	18.54	18.58	18.43	20.2	0.0
40	256QAM	1	1	18.57	18.52	18.42	20.2	0.0
Channel				5170.02	5190.00	5209.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	19.63	19.53	19.60	20.2	0.0
Channel				5165.04	5190.00	5214.96	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2582.52	2595	2607.48		
25	QPSK	1	1	19.57	19.57	19.49	20.2	0.0
Channel				5160.00	5190.00	5220.00	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	19.58	19.50	19.67	20.2	0.0
Channel				5155.02	5190.00	5249.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	19.60	19.81	19.63	20.2	0.0
Channel				5150.04	5190.00	5299.96	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	19.63	19.67	19.55	20.2	0.0

n41 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2592.02	2598	2600		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	18.81	18.84	18.85		
100	PI/2 BPSK	1	137	18.82	18.90	18.65	20.2	0.0
100	PI/2 BPSK	1	271	18.69	18.85	18.71		
100	PI/2 BPSK	135	0	18.29	18.50	18.30	20.2	0.0
100	PI/2 BPSK	135	69	18.69	18.74	18.76	20.2	0.0
100	PI/2 BPSK	135	138	18.34	18.30	18.31	20.2	0.0
100	PI/2 BPSK	270	0	18.32	18.34	18.32		
100	QPSK	1	1	18.82	18.86	18.84		
100	QPSK	1	137	18.71	18.78	18.59	20.2	0.0
100	QPSK	1	271	18.68	18.67	18.65		
100	QPSK	135	0	18.55	18.56	18.54	20.2	0.0
100	QPSK	135	69	18.82	18.69	18.76	20.2	0.0
100	QPSK	135	138	18.40	18.61	18.51	20.2	0.0
100	QPSK	270	0	18.51	18.59	18.52		
100	16QAM	1	1	18.49	18.72	18.63	20.2	0.0
100	16QAM	1	1	18.24	18.47	18.38	20.0	0.2
100	256QAM	1	1	18.25	18.52	18.37	18.0	2.2
Channel				5092.00	5109.98	5209.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	18.61	18.86	18.85	20.2	0.0
Channel				5072.04	5189.98	5299.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2643.99		
80	QPSK	1	1	18.64	18.77	18.79	20.2	0.0
Channel				5062.02	5189.98	5310.00	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	18.65	18.79	18.79	20.2	0.0
Channel				5052.00	5189.98	5319.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	18.57	18.72	18.77	20.2	0.0
Channel				5042.04	5189.98	5329.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	18.69	18.85	18.82	20.2	0.0
Channel				5032.02	5189.98	5330.00	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	18.70	18.79	18.81	20.2	0.0
Channel				5022.00	5189.98	5349.96	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	18.55	18.70	18.82	20.2	0.0
Channel				5012.04	5189.98	5359.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	18.70	18.83	18.82	20.2	0.0
Channel				5007.00	5189.98	5364.96	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.05	2592.99	2683.48		
15	QPSK	1	1	18.76	18.74	18.85	20.2	0.0
Channel				5002.02	5189.98	5370.00	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	18.54	18.88	18.72	20.2	0.0



### Part270 n77 DSI3 Standalone Ant8

BW (MHz)	Modulation	RB 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	15.48	15.58	15.19		
100	PI2 BPSK	1	137	15.25	15.38	15.19		0.0
100	PI2 BPSK	1	271	15.10	15.35	15.22		
100	PI2 BPSK	135	0	15.49	15.56	15.28	16.2	0.0
100	PI2 BPSK	135	69	15.25	15.38	15.18	16.2	0.0
100	PI2 BPSK	135	138	15.09	15.35	15.22	16.2	0.0
100	PI2 BPSK	270	0	15.49	15.57	15.29		
100	QPSK	1	1	15.55	15.63	15.35		
100	QPSK	1	137	15.31	15.44	15.25	16.2	0.0
100	QPSK	1	271	15.16	15.41	15.28		
100	QPSK	135	0	15.22	15.35	15.17	16.2	0.0
100	QPSK	135	69	15.34	15.52	15.15	16.2	0.0
100	QPSK	135	138	15.42	15.44	15.26	16.2	0.0
100	QPSK	270	0	15.23	15.46	15.16		
100	16QAM	1	1	15.07	15.32	15.19	16.2	0.0
100	16QAM	1	1	15.13	15.26	15.09	16.2	0.0
100	256QAM	1	1	15.25	15.43	15.05	16.2	0.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	15.25	15.40	15.24	16.2	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	15.47	15.37	15.10	16.2	0.0
Channel								
Frequency (MHz)				649000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	15.37	15.41	15.14	16.2	0.0
Channel								
Frequency (MHz)				648668	650000	648334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	15.37	15.50	15.22	16.2	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	15.46	15.50	15.18	16.2	0.0
Channel								
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	15.39	15.43	15.18	16.2	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	15.31	15.43	15.21	16.2	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	15.29	15.33	15.19	16.2	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	15.47	15.49	15.16	16.2	0.0
Channel								
Frequency (MHz)				647168	650000	648434	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	15.43	15.44	15.17	16.2	0.0
Channel								
Frequency (MHz)				647000	650000	648000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	15.50	15.38	15.28	16.2	0.0

### Part270 n77 PC2 DSI3 Standalone Ant8

BW (MHz)	Modulation	RB 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	18.43	18.48	18.46		
100	PI2 BPSK	1	137	18.41	18.45	18.43	19.2	0.0
100	PI2 BPSK	1	271	18.35	18.40	18.38		
100	PI2 BPSK	135	0	18.32	18.37	18.34	19.2	0.0
100	PI2 BPSK	135	69	18.35	18.40	18.38	19.2	0.0
100	PI2 BPSK	135	138	18.33	18.37	18.35	19.2	0.0
100	PI2 BPSK	270	0	18.36	18.41	18.39		
100	QPSK	1	1	18.55	18.60	18.58		
100	QPSK	1	137	18.34	18.39	18.37	19.2	0.0
100	QPSK	1	271	18.32	18.36	18.34		
100	QPSK	135	0	18.25	18.31	18.29	19.2	0.0
100	QPSK	135	69	18.49	18.54	18.52	19.2	0.0
100	QPSK	135	138	18.32	18.36	18.34	19.2	0.0
100	QPSK	270	0	18.45	18.51	18.48		
100	16QAM	1	1	18.32	18.37	18.35	19.2	0.0
100	16QAM	1	1	18.30	18.34	18.32	19.2	0.0
100	256QAM	1	1	18.24	18.30	18.27	19.2	0.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	18.44	18.49	18.47	19.2	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	18.23	18.23	18.20	19.2	0.0
Channel								
Frequency (MHz)				649000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	18.21	18.25	18.23	19.2	0.0
Channel								
Frequency (MHz)				648668	650000	648334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	18.15	18.19	18.18	19.2	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	18.38	18.42	18.41	19.2	0.0
Channel								
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	18.21	18.25	18.23	19.2	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	18.34	18.39	18.37	19.2	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	18.21	18.26	18.23	19.2	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	18.42	18.47	18.45	19.2	0.0
Channel								
Frequency (MHz)				647168	650000	648434	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	18.38	18.41	18.39	19.2	0.0
Channel								
Frequency (MHz)				647000	650000	648000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	18.42	18.47	18.45	19.2	0.0

### Part270 n78 DSI3 Standalone Ant8

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		15.50			
100	PI2 BPSK	1	137		15.29		16.2	0.0
100	PI2 BPSK	1	271		15.27			
100	PI2 BPSK	135	0		15.47		16.2	0.0
100	PI2 BPSK	135	69		15.29		16.2	0.0
100	PI2 BPSK	135	138		15.25		16.2	0.0
100	PI2 BPSK	270	0		15.49			
100	QPSK	1	1		15.59			
100	QPSK	1	137		15.35		16.2	0.0
100	QPSK	1	271		15.32			
100	QPSK	135	0		15.26		16.2	0.0
100	QPSK	135	69		15.43		16.2	0.0
100	QPSK	135	138		15.36		16.2	0.0
100	QPSK	270	0		15.37			
100	16QAM	1	1		15.23		16.2	0.0
100	16QAM	1	1		15.17		16.2	0.0
100	256QAM	1	1		15.34		16.2	0.0
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	15.50	15.51	15.43	16.2	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	15.49	15.49	15.33	16.2	0.0
Channel								
Frequency (MHz)				649000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	15.54	15.38	15.55	16.2	0.0
Channel								
Frequency (MHz)				648668	650000	648334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	15.52	15.52	15.54	16.2	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	15.40	15.42	15.44	16.2	0.0
Channel								
Frequency (MHz)				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	15.47	15.54	15.47	16.2	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	15.59	15.53	15.26	16.2	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	15.58	15.55	15.40	16.2	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	15.47	15.44	15.51	16.2	0.0
Channel								
Frequency (MHz)				647168	650000	648434	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	15.48	15.46	15.52	16.2	0.0
Channel								
Frequency (MHz)				647000	650000	648000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	15.55	15.42	15.53	16.2	0.0



Part270 n78 PC2 DSI3 Standalone Ant8								
BW [MHz]	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		18.44			
100	PI2 BPSK	1	137		18.41		19.2	0.0
100	PI2 BPSK	1	271		18.36			
100	PI2 BPSK	135	0		18.32		19.2	0.0
100	PI2 BPSK	135	69		18.36		19.2	0.0
100	PI2 BPSK	135	138		18.32			
100	PI2 BPSK	270	0		18.37			
100	QPSK	1	1		18.56			
100	QPSK	1	137		18.35		19.2	0.0
100	QPSK	1	271		18.32			
100	QPSK	135	0		18.27		19.2	0.0
100	QPSK	135	69		18.50		19.2	0.0
100	QPSK	135	138		18.32			
100	QPSK	270	0		18.47		19.2	0.0
100	16QAM	1	1		18.33		19.2	0.0
100	16QAM	1	1		18.30		19.2	0.0
100	256QAM	1	1		18.25		19.2	0.0
Channel				649688	650000	650334		MPR
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	18.40	18.45	18.43	19.2	0.0
Channel				649334	650000	650668		MPR
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	18.19	18.23	18.22	19.2	0.0
Channel				649000	650000	651000		MPR
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	18.17	18.21	18.19	19.2	0.0
Channel				648668	650000	651334		MPR
Frequency (MHz)				3730.02	3750	3730.01		
60	QPSK	1	1	18.10	18.15	18.14	19.2	0.0
Channel				648334	650000	651668		MPR
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	18.34	18.38	18.37	19.2	0.0
Channel				648000	650000	652000		MPR
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	18.17	18.21	18.19	19.2	0.0
Channel				647668	650000	652334		MPR
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	18.20	18.25	18.33	19.2	0.0
Channel				647300	650000	652500		MPR
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	18.17	18.22	18.19	19.2	0.0
Channel				647334	650000	652668		MPR
Frequency (MHz)				3710.01	3750	3780.02		
20	QPSK	1	1	18.38	18.43	18.41	19.2	0.0
Channel				647188	650000	652834		MPR
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	18.32	18.37	18.35	19.2	0.0
Channel				647000	650000	653000		MPR
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	18.38	18.43	18.41	19.2	0.0



Part270 n77 DSI3 Standalone Ant9										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	20.79	20.66	20.70	21.5	0.0		
100	PI2 BPSK	1	137	20.75	20.82	20.78				
100	PI2 BPSK	1	271	20.69	20.71	20.57				
100	PI2 BPSK	135	6	20.81	20.77	20.69				
100	PI2 BPSK	135	69	20.75	20.81	20.78				
100	PI2 BPSK	135	138	20.70	20.73	20.56				
100	PI2 BPSK	270	0	20.79	20.86	20.69				
100	QPSK	1	1	20.74	20.92	20.77				
100	QPSK	1	137	20.70	20.72	20.57				
100	QPSK	1	271	20.80	20.75	20.69				
100	QPSK	135	0	20.76	20.82	20.78				
100	QPSK	135	69	20.69	20.88	20.55				
100	QPSK	135	138	20.79	20.68	20.69				
100	QPSK	270	0	20.74	20.81	20.79				
100	16QAM	1	1	20.70	20.71	20.57				
100	16QAM	1	1	20.66	20.67	20.67				
100	256QAM	1	1	18.83	18.88	18.73				
Channel										
Frequency (MHz)										
90	QPSK	1	1	20.68	20.86	20.71	21.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.54	20.60	20.51	21.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.74	20.69	20.63	21.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.70	20.76	20.72	21.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.63	20.82	20.49	21.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	20.73	20.62	20.63	21.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.69	20.75	20.73	21.5	0.0		
Channel										
Frequency (MHz)										
25	QPSK	1	1	20.72	20.67	20.61	21.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	20.66	20.84	20.49	21.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	20.65	20.73	20.71	21.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	20.72	20.67	20.62	21.5	0.0		

Part270 n77 PC2 DSI3 Standalone Ant9										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	23.68	23.73	23.64	24.5	0.0		
100	PI2 BPSK	1	137	23.63	23.70	23.50				
100	PI2 BPSK	1	271	23.56	23.55	23.54				
100	PI2 BPSK	135	6	23.48	23.58	23.48				
100	PI2 BPSK	135	69	23.82	23.68	23.57				
100	PI2 BPSK	135	138	23.52	23.54	23.51				
100	PI2 BPSK	270	0	23.59	23.66	23.51				
100	QPSK	1	1	23.67	23.76	23.71				
100	QPSK	1	137	23.58	23.75	23.67				
100	QPSK	1	271	23.43	23.62	23.45				
100	QPSK	135	0	23.55	23.59	23.59				
100	QPSK	135	69	23.63	23.72	23.51				
100	QPSK	135	138	23.55	23.60	23.61				
100	QPSK	270	0	23.60	23.74	23.57				
100	16QAM	1	1	23.44	23.60	23.49				
100	16QAM	1	1	23.41	23.56	23.49				
100	256QAM	1	1	21.75	21.80	21.69				
Channel										
Frequency (MHz)										
90	QPSK	1	1	23.59	23.68	23.63	24.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	23.49	23.67	23.50	24.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	23.53	23.66	23.49	24.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	23.54	23.85	23.43	24.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	23.35	23.54	23.37	24.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	23.47	23.51	23.51	24.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	23.59	23.67	23.62	24.5	0.0		
Channel										
Frequency (MHz)										
25	QPSK	1	1	23.54	23.63	23.41	24.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	23.51	23.64	23.49	24.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	23.34	23.52	23.36	24.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	23.46	23.50	23.48	24.5	0.0		

Part270 n78 DSI3 Standalone Ant9										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	20.80	20.80	20.80	21.5	0.0		
100	PI2 BPSK	1	137	20.76	20.76	20.76				
100	PI2 BPSK	1	271	20.85	20.85	20.85				
100	PI2 BPSK	135	0	20.71	20.71	20.71				
100	PI2 BPSK	135	69	20.78	20.78	20.78				
100	PI2 BPSK	135	138	20.87	20.87	20.87				
100	PI2 BPSK	270	0	20.80	20.80	20.80				
100	QPSK	1	1	20.86	20.86	20.86				
100	QPSK	1	137	20.86	20.86	20.86				
100	QPSK	1	271	20.69	20.69	20.69				
100	QPSK	135	0	20.76	20.76	20.76				
100	QPSK	135	69	20.81	20.81	20.81				
100	QPSK	135	138	20.82	20.82	20.82				
100	QPSK	270	0	20.75	20.75	20.75				
100	16QAM	1	1	20.64	20.64	20.64				
100	16QAM	1	1	20.80	20.80	20.80				
100	256QAM	1	1	18.82	18.82	18.82				
Channel										
Frequency (MHz)										
90	QPSK	1	1	20.59	20.77	20.82	21.5	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	20.59	20.57	20.42	21.5	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	20.81	20.67	20.63	21.5	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	20.85	20.99	20.55	21.5	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	20.54	20.73	20.40	21.5	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	20.85	20.53	20.54	21.5	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	20.60	20.66	20.64	21.5	0.0		
Channel										
Frequency (MHz)										
25	QPSK	1	1	20.82	20.58	20.52	21.5	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	20.57	20.74	20.60	21.5	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	20.58	20.64	20.62	21.5	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	20.63	20.58	20.53	21.5	0.0		



Part270 n78 PC2 DSI3 Standalone Ant9									
BW [MHz]	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)				3760	3760	3760			
100	PI2 BPSK	1	1		23.67				
100	PI2 BPSK	1	137		23.64		24.5	0.0	
100	PI2 BPSK	1	271		23.49		24.5	0.0	
100	PI2 BPSK	135	0		23.52		24.5	0.0	
100	PI2 BPSK	135	89		23.62		24.5	0.0	
100	PI2 BPSK	135	138		23.48		24.5	0.0	
100	PI2 BPSK	270	0		23.59				
100	QPSK	1	1		23.70				
100	QPSK	1	137		23.69		24.5	0.0	
100	QPSK	1	271		23.57				
100	QPSK	135	0		23.63		24.5	0.0	
100	QPSK	135	89		23.68		24.5	0.0	
100	QPSK	135	138		23.55		24.5	0.0	
100	QPSK	270	0		23.68				
100	16QAM	1	1		23.54		24.5	0.0	
100	16QAM	1	1		23.60		24.5	0.0	
100	256QAM	1	1		21.74		22.5	2.0	
Channel				649688	650000	650334		MPR (dB)	
Frequency (MHz)				3745.02	3760	3765.01			
90	QPSK	1	1		23.49	23.59	23.54	24.5	0.0
Channel				649334	650000	650668		MPR (dB)	
Frequency (MHz)				3740.01	3760	3760.02			
80	QPSK	1	1		23.40	23.59	23.49	24.5	0.0
Channel				649000	650000	651000		MPR (dB)	
Frequency (MHz)				3736	3760	3765			
70	QPSK	1	1		23.44	23.67	23.40	24.5	0.0
Channel				648668	650000	651334		MPR (dB)	
Frequency (MHz)				3730.02	3760	3760.01			
60	QPSK	1	1		23.45	23.56	23.34	24.5	0.0
Channel				648334	650000	651668		MPR (dB)	
Frequency (MHz)				3725.01	3760	3775.02			
50	QPSK	1	1		23.26	23.45	23.28	24.5	0.0
Channel				648000	650000	652000		MPR (dB)	
Frequency (MHz)				3720	3760	3760			
40	QPSK	1	1		23.38	23.42	23.42	24.5	0.0
Channel				647668	650000	652334		MPR (dB)	
Frequency (MHz)				3712.02	3760	3765.01			
30	QPSK	1	1		23.49	23.59	23.53	24.5	0.0
Channel				647500	650000	652500		MPR (dB)	
Frequency (MHz)				3712.5	3760	3767.5			
25	QPSK	1	1		23.45	23.55	23.31	24.5	0.0
Channel				647334	650000	652668		MPR (dB)	
Frequency (MHz)				3710.01	3760	3760.02			
20	QPSK	1	1		23.42	23.56	23.40	24.5	0.0
Channel				647188	650000	652834		MPR (dB)	
Frequency (MHz)				3707.52	3760	3762.51			
15	QPSK	1	1		23.25	23.43	23.27	24.5	0.0
Channel				647000	650000	653000		MPR (dB)	
Frequency (MHz)				3705	3760	3765			
10	QPSK	1	1		23.37	23.41	23.36	24.5	0.0



n38 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				51900.02	51900.0	51999.98		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	20.43	20.55	20.44		
40	PI/2 BPSK	1	53	20.45	20.48	20.36	21.1	0.0
40	PI/2 BPSK	1	104	20.30	20.39	20.36		
40	PI/2 BPSK	50	0	19.92	20.01	19.89	21.1	0.0
40	PI/2 BPSK	50	28	20.13	20.30	20.34	21.1	0.0
40	PI/2 BPSK	50	56	19.80	19.75	19.73	21.1	0.0
40	PI/2 BPSK	100	0	19.65	19.81	19.86		
40	QPSK	1	1	20.55	20.56	20.42		
40	QPSK	1	53	20.35	20.41	20.37	21.1	0.0
40	QPSK	1	104	20.32	20.43	20.22		
40	QPSK	50	0	19.23	19.41	19.26	21.1	0.0
40	QPSK	50	28	20.46	20.55	20.37	21.1	0.0
40	QPSK	50	56	19.36	19.30	19.27	21.1	0.0
40	QPSK	100	0	19.46	19.48	19.34		
40	16QAM	1	1	19.49	19.60	19.42	21.1	0.0
40	16QAM	1	1	19.33	19.39	19.33	21.1	0.0
40	256QAM	1	1	19.45	19.41	19.46	19.5	1.6
Channel				51700.02	51700.0	52099.98	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2585	2604.99		
30	QPSK	1	1	20.48	20.51	20.34	21.1	0.0
Channel				51650.4	51900.0	52149.6	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2282.52	2595	2607.48		
25	QPSK	1	1	20.43	20.43	20.48	21.1	0.0
Channel				51600.0	51900.0	52200.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	20.53	20.54	20.34	21.1	0.0
Channel				51550.2	51900.0	52499.8	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	20.52	20.34	20.32	21.1	0.0
Channel				51500.4	51900.0	52599.6	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	20.47	20.37	20.48	21.1	0.0

n41 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				52600.0	51898.0	52600.0		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	20.34	20.54	20.48		
100	PI/2 BPSK	1	137	20.42	20.41	20.44	21.1	0.0
100	PI/2 BPSK	1	271	20.28	20.47	20.27		
100	PI/2 BPSK	135	0	19.99	20.05	19.92	21.1	0.0
100	PI/2 BPSK	135	69	20.50	20.40	20.33	21.1	0.0
100	PI/2 BPSK	135	138	20.00	20.01	19.98	21.1	0.0
100	PI/2 BPSK	270	0	19.88	19.99	19.99		
100	QPSK	1	1	20.42	20.37	20.46		
100	QPSK	1	137	20.36	20.44	20.50	21.1	0.0
100	QPSK	1	271	20.37	20.39	20.24		
100	QPSK	135	0	19.66	19.67	19.61	21.1	0.0
100	QPSK	135	69	20.36	20.51	20.45	21.1	0.0
100	QPSK	135	138	19.91	19.85	19.86	21.1	0.0
100	QPSK	270	0	20.35	20.46	20.31		
100	16QAM	1	1	20.33	20.39	20.33	21.1	0.0
100	16QAM	1	1	20.42	20.56	20.46	21.1	0.0
100	256QAM	1	1	19.42	19.38	19.37	19.5	1.6
Channel				52600.0	51898.0	52600.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.99		
90	QPSK	1	1	20.10	20.16	20.11	21.1	0.0
Channel				50720.4	51898.0	52998.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2538.02	2592.99	2648.99		
80	QPSK	1	1	20.02	20.09	20.12	21.1	0.0
Channel				50600.0	51898.0	53100.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	20.14	20.15	20.04	21.1	0.0
Channel				50500.0	51898.0	53198.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	20.04	20.24	20.08	21.1	0.0
Channel				50420.4	51898.0	53298.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	20.03	20.12	20.15	21.1	0.0
Channel				50300.0	51898.0	53400.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	20.07	20.10	20.01	21.1	0.0
Channel				50220.0	51898.0	53498.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	20.45	20.34	20.20	21.1	0.0
Channel				50120.4	51898.0	53598.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	20.17	20.07	20.18	21.1	0.0
Channel				50070.0	51898.0	53698.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.05	2592.99	2684.99		
15	QPSK	1	1	20.01	20.17	19.98	21.1	0.0
Channel				50000.0	51898.0	53700.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	20.12	20.20	20.00	21.1	0.0



### Part270 n77 Ant3

BW (MHz)	Modulation	RB 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	21.99	22.10	21.97		
100	PI2 BPSK	1	137	21.88	22.00	21.86	23.1	0.0
100	PI2 BPSK	1	271	21.92	22.06	21.86		
100	PI2 BPSK	135	0	21.50	21.59	21.56	22.8	0.5
100	PI2 BPSK	135	69	21.86	22.05	21.88	23.1	0.0
100	PI2 BPSK	135	138	21.58	21.60	21.58	22.6	0.5
100	PI2 BPSK	270	0	21.49	21.81	21.58		
100	QPSK	1	1	22.06	22.18	21.92		
100	QPSK	1	137	21.98	22.08	22.06	23.1	0.0
100	QPSK	1	271	21.99	21.98	21.95		
100	QPSK	135	0	20.98	21.09	21.06	22.1	1.0
100	QPSK	135	69	21.99	22.15	22.04	23.1	0.0
100	QPSK	135	138	20.93	21.04	20.99	22.1	1.0
100	QPSK	270	0	21.11	21.19	21.18		
100	16QAM	1	1	20.69	20.74	20.59	22.1	1.0
100	16QAM	1	1	19.35	19.39	19.34	20.6	2.5
100	256QAM	1	1	17.46	17.51	17.42	18.6	4.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	22.04	22.01	21.83	23.1	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3940.02	23.1	0.0
Channel								
Frequency (MHz)				645000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	21.96	21.99	21.94	23.1	0.0
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	21.88	21.89	21.79	23.1	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	21.90	21.98	21.77	23.1	0.0
Channel								
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	22.06	22.03	21.85	23.1	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	22.13	22.07	21.79	23.1	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	21.92	21.90	21.78	23.1	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	22.10	22.02	21.84	23.1	0.0
Channel								
Frequency (MHz)				647168	650000	648434	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	21.98	22.01	21.92	23.1	0.0
Channel								
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	21.98	22.11	21.87	23.1	0.0

### Part270 n77 PC2 Ant3

BW (MHz)	Modulation	RB 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	25.68	25.78	25.74		
100	PI2 BPSK	1	137	25.65	25.82	25.79	26.1	0.0
100	PI2 BPSK	1	271	25.84	25.77	25.80		
100	PI2 BPSK	135	0	25.22	25.37	25.20	25.8	0.5
100	PI2 BPSK	135	69	25.77	25.85	25.82	26.1	0.0
100	PI2 BPSK	135	138	25.27	25.33	25.18	25.6	0.5
100	PI2 BPSK	270	0	25.29	25.39	25.24		
100	QPSK	1	1	25.76	25.88	25.84		
100	QPSK	1	137	25.87	25.82	25.80	26.1	0.0
100	QPSK	1	271	25.69	25.78	25.68		
100	QPSK	135	0	24.69	24.81	24.69	26.0	0.1
100	QPSK	135	69	25.66	25.77	25.72	26.1	0.0
100	QPSK	135	138	24.64	24.82	24.72	26.0	0.1
100	QPSK	270	0	24.71	24.90	24.83		
100	16QAM	1	1	24.77	24.85	24.79	26.0	0.1
100	16QAM	1	1	23.35	23.39	23.28	24.5	1.6
100	256QAM	1	1	20.99	21.02	20.88	22.5	3.6
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	25.82	25.82	25.69	26.1	0.0
Channel								
Frequency (MHz)				3740.01	3840	3940.02	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	25.76	25.72	25.72	26.1	0.0
Channel								
Frequency (MHz)				645000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	25.72	25.78	25.70	26.1	0.0
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	25.68	25.82	25.81	26.1	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	25.69	25.74	25.75	26.1	0.0
Channel								
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	25.85	25.81	25.70	26.1	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	25.68	25.71	25.75	26.1	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	25.73	25.78	25.79	26.1	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	25.76	25.79	25.81	26.1	0.0
Channel								
Frequency (MHz)				647168	650000	648434	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	25.73	25.85	25.74	26.1	0.0
Channel								
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	25.66	25.86	25.80	26.1	0.0

### Part270 n78 Ant3

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		22.85			
100	PI2 BPSK	1	137		22.92		23.1	0.0
100	PI2 BPSK	1	271		22.93			
100	PI2 BPSK	135	0		22.58		22.8	0.5
100	PI2 BPSK	135	69		22.95		23.1	0.0
100	PI2 BPSK	135	138		22.58		22.8	0.5
100	PI2 BPSK	270	0		22.31			
100	QPSK	1	1		22.96			
100	QPSK	1	137		22.96		23.1	0.0
100	QPSK	1	271		22.94			
100	QPSK	135	0		22.09		22.1	1.0
100	QPSK	135	69		22.91		23.1	0.0
100	QPSK	135	138		21.97		22.1	1.0
100	QPSK	270	0		22.01			
100	16QAM	1	1		22.03		22.1	1.0
100	16QAM	1	1		18.45		20.6	2.5
100	256QAM	1	1		18.52		18.6	4.5
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	22.83	22.81	22.90	23.1	0.0
Channel								
Frequency (MHz)				3740.01	3750	3760.02	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	22.93	22.88	22.82	23.1	0.0
Channel								
Frequency (MHz)				645000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	22.95	22.94	22.86	23.1	0.0
Channel								
Frequency (MHz)				648668	650000	649334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	22.88	22.90	22.90	23.1	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	22.82	22.97	22.84	23.1	0.0
Channel								
Frequency (MHz)				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	22.85	22.85	22.88	23.1	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	22.82	22.87	22.91	23.1	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	22.86	22.95	22.81	23.1	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	22.87	22.88	22.81	23.1	0.0
Channel								
Frequency (MHz)				647168	650000	648434	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	22.81	22.84	22.86	23.1	0.0
Channel								
Frequency (MHz)				3705	3750	3795	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	22.92	22.83	22.82	23.1	0.0



### Part270 n78 PC2 Ant3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)
Channel				3750	3750	3750		
Frequency (MHz)								
100	PI2 BPSK	1	1		25.80			
100	PI2 BPSK	1	137		25.79		28.1	0.0
100	PI2 BPSK	1	271		25.83		28.1	0.0
100	PI2 BPSK	135	0		25.42		28.1	0.0
100	PI2 BPSK	135	89		25.75		28.1	0.0
100	PI2 BPSK	135	138		25.25		28.1	0.0
100	PI2 BPSK	270	0		25.28			
100	QPSK	1	1		25.89			
100	QPSK	1	137		25.82		28.1	0.0
100	QPSK	1	271		25.89			
100	QPSK	135	0		24.81		28.0	0.1
100	QPSK	135	89		25.84		28.1	0.0
100	QPSK	135	138		24.71		28.0	0.1
100	QPSK	270	0		24.78			
100	16QAM	1	1		25.07		28.0	0.1
100	16QAM	1	1		23.73		24.5	1.6
100	256QAM	1	1		21.55		22.5	3.6
Channel				649688	650000	650334		
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	25.80	25.85	25.78	28.1	0.0
Channel				649334	650000	650668		
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	25.80	25.78	25.85	28.1	0.0
Channel				649000	650000	651000		
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	25.73	25.75	25.76	28.1	0.0
Channel				648668	650000	651334		
Frequency (MHz)				3730.02	3750	3730.01		
60	QPSK	1	1	25.80	25.81	25.81	28.1	0.0
Channel				648334	650000	651668		
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	25.77	25.79	25.85	28.1	0.0
Channel				648000	650000	652000		
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	25.81	25.84	25.79	28.1	0.0
Channel				647668	650000	652334		
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	25.75	25.74	25.81	28.1	0.0
Channel				647300	650000	652500		
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	25.80	25.75	25.74	28.1	0.0
Channel				647334	650000	652668		
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	25.72	25.78	25.80	28.1	0.0
Channel				647188	650000	652834		
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	25.78	25.82	25.82	28.1	0.0
Channel				647000	650000	653000		
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	25.80	25.86	25.73	28.1	0.0





n41 Ant4

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	505202	518598	530998					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	22.21	22.36	22.41	22.5	0.0
100	PI2 BPSK	1	137	22.37	22.35	22.42		
100	PI2 BPSK	1	271	22.04	22.16	22.12		
100	PI2 BPSK	135	61	21.82	21.87	21.84	22.0	0.5
100	PI2 BPSK	135	69	22.01	22.27	22.00	22.5	0.0
100	PI2 BPSK	135	138	21.94	21.87	21.80	22.0	0.5
100	PI2 BPSK	270	0	21.89	21.85	21.79		
100	QPSK	1	1	22.37	22.43	22.41	22.5	0.0
100	QPSK	1	137	22.23	22.38	22.28		
100	QPSK	1	271	22.04	22.19	22.12		
100	QPSK	135	0	21.20	21.23	21.25	21.5	1.0
100	QPSK	135	69	22.07	22.13	21.95	22.5	0.0
100	QPSK	135	138	21.36	21.28	21.13	21.5	1.0
100	QPSK	270	0	21.28	21.45	21.40		
100	16QAM	1	1	21.45	21.46	21.48	21.5	1.0
100	64QAM	1	1	19.85	19.86	19.81	20.0	2.5
100	256QAM	1	1	17.89	17.91	17.93	18.0	4.5
Channel	505203	518598	530998					
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	20.88	20.99	20.97	22.5	0.0
Channel	507204	518598	530998					
Frequency (MHz)	2536.02	2592.99	2640.99					
80	QPSK	1	1	20.87	21.02	20.99	22.5	0.0
Channel	508202	518598	531000					
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	20.89	21.07	20.89	22.5	0.0
Channel	508200	518598	531998					
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	20.99	21.03	21.03	22.5	0.0
Channel	504204	518598	530998					
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	20.88	21.09	21.00	22.5	0.0
Channel	503202	518598	531000					
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	20.91	20.96	21.02	22.5	0.0
Channel	502200	518598	534998					
Frequency (MHz)	2511	2592.99	2714.98					
30	QPSK	1	0	20.92	20.95	21.02	22.5	0.0
Channel	501204	518598	530998					
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	20.98	20.99	20.98	22.5	0.0
Channel	500700	518598	538498					
Frequency (MHz)	2501.5	2592.99	2682.48					
15	QPSK	1	1	21.00	21.09	21.03	22.5	0.0
Channel	500202	518598	537000					
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	21.00	21.00	20.96	22.5	0.0



Part270 n77 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)									
100	Pl2 BPSK	1	1	23.56	23.61	23.05			
100	Pl2 BPSK	1	137	23.44	23.56	23.03	24.0	0.0	
100	Pl2 BPSK	1	271	23.22	23.41	23.05			
100	Pl2 BPSK	135	0	23.42	23.35	23.11	23.5	0.5	
100	Pl2 BPSK	135	69	23.38	23.55	23.01	24.0	0.0	
100	Pl2 BPSK	135	138	23.28	23.35	22.91	23.5	0.5	
100	Pl2 BPSK	270	0	23.40	23.43	22.98			
100	QPSK	1	1	23.54	23.65	23.08			
100	QPSK	1	137	23.49	23.53	23.10	24.0	0.0	
100	QPSK	1	271	23.35	23.43	23.03			
100	QPSK	135	0	22.66	22.65	22.95	23.0	1.0	
100	QPSK	135	69	23.51	23.58	23.01	24.0	0.0	
100	QPSK	135	138	22.44	22.38	22.29	23.0	1.0	
100	QPSK	270	0	22.43	22.45	22.39			
100	16QAM	1	1	22.54	22.59	22.66	23.0	1.0	
100	16QAM	1	1	21.45	21.34	20.98	21.5	2.5	
100	256QAM	1	1	19.01	19.03	19.05	19.5	4.5	
Channel				649334	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	22.47	22.59	22.01	24.0	0.0	
Channel				649334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	22.50	22.60	22.03	24.0	0.0	
Channel				649000	650000	663000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	22.47	22.51	22.06	24.0	0.0	
Channel				648668	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	QPSK	1	1	22.38	22.54	22.01	24.0	0.0	
Channel				648334	650000	663668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	22.44	22.57	22.05	24.0	0.0	
Channel				647668	650000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	22.47	22.63	22.05	24.0	0.0	
Channel				647668	650000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	22.51	22.53	22.01	24.0	0.0	
Channel				647000	650000	664500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	22.49	22.60	22.05	24.0	0.0	
Channel				647334	650000	664668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	22.50	22.55	22.05	24.0	0.0	
Channel				647168	650000	664834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	22.47	22.58	22.04	24.0	0.0	
Channel				647000	650000	665000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	22.38	22.64	22.03	24.0	0.0	

Part270 n78 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3760	3760			
Frequency (MHz)									
100	Pl2 BPSK	1	1	23.56		23.56			
100	Pl2 BPSK	1	137	23.44		23.51	24.0	0.0	
100	Pl2 BPSK	1	271	23.22		23.38			
100	Pl2 BPSK	135	0	23.42		23.30	23.5	0.5	
100	Pl2 BPSK	135	69	23.38		23.50	24.0	0.0	
100	Pl2 BPSK	135	138	23.28		23.30	23.5	0.5	
100	Pl2 BPSK	270	0	23.40		23.38			
100	QPSK	1	1	23.54		23.40			
100	QPSK	1	137	23.49		23.48	24.0	0.0	
100	QPSK	1	271	23.35		23.38			
100	QPSK	135	0	22.66		22.60	23.0	1.0	
100	QPSK	135	69	23.51		23.53	23.4	0.0	
100	QPSK	135	138	22.44		22.43	23.0	1.0	
100	QPSK	270	0	22.43		22.39			
100	16QAM	1	1	22.54		22.54	23.0	1.0	
100	16QAM	1	1	21.45		21.29	21.5	2.5	
100	256QAM	1	1	19.01		18.98	19.5	4.5	
Channel				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3760	3765.01			
90	QPSK	1	1	22.66	22.67	22.82	24.0	0.0	
Channel				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3760	3760.02			
80	QPSK	1	1	22.63	22.63	22.72	24.0	0.0	
Channel				648000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3760	3765			
70	QPSK	1	1	22.68	22.61	22.74	24.0	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3760	3770.01			
60	QPSK	1	1	22.64	22.68	22.68	24.0	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3760	3775.02			
50	QPSK	1	1	22.74	22.68	22.73	24.0	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3760	3780			
40	QPSK	1	1	22.68	22.74	22.81	24.0	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3760	3785.01			
30	QPSK	1	1	22.72	22.72	22.82	24.0	0.0	
Channel				647000	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3760	3787.5			
25	QPSK	1	1	22.74	22.62	22.61	24.0	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3760	3790.02			
20	QPSK	1	1	22.74	22.60	22.59	24.0	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3760	3792.51			
15	QPSK	1	1	22.71	22.71	22.65	24.0	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3760	3795			
10	QPSK	1	1	22.67	22.73	22.68	24.0	0.0	



Reduced Power Mode for DSI3 Simultaneous&DSI7

n5 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	PI2 BPSK	1	1	23.04	23.13	22.99	24.0	0.0	
20	PI2 BPSK	1	53	22.90	23.03	22.93			
20	PI2 BPSK	1	104	23.00	23.10	22.97			
20	PI2 BPSK	50	0	22.56	22.84	22.55	23.5	0.5	
20	PI2 BPSK	50	28	22.82	22.98	22.85	24.0	0.0	
20	PI2 BPSK	50	56	22.57	22.70	22.53	23.5	0.5	
20	PI2 BPSK	100	0	22.61	22.73	22.58			
20	QPSK	1	1	23.16	23.19	23.02			
20	QPSK	1	53	22.88	23.06	22.91	24.0	0.0	
20	QPSK	1	104	23.09	23.12	23.04			
20	QPSK	50	0	22.15	22.17	22.13	23.0	1.0	
20	QPSK	50	28	23.11	23.14	23.08	24.0	0.0	
20	QPSK	50	56	22.12	22.22	22.06	23.0	1.0	
20	QPSK	100	0	22.28	22.31	22.24			
20	16QAM	1	1	22.02	22.05	21.98	23.0	1.0	
20	64QAM	1	1	20.87	21.02	20.95	21.5	2.5	
20	256QAM	1	1	18.39	18.49	18.37	19.5	4.5	
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	23.03	23.10	22.97	24.0	0.0	
Channel				166800	167300	168800	Tune-up limit (dB)	MPR (dB)	
Frequency (MHz)				820	836.5	844			
10	QPSK	1	1	23.05	23.02	22.95	24.0	0.0	
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	1	23.09	23.04	22.85	24.0	0.0	



n41 DS13 Simultaneous Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				50202	51858	53000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	19.35	19.43	19.29			
100	PI2 BPSK	1	137	19.42	19.50	19.40	20.2	0.0	
100	PI2 BPSK	1	271	19.41	19.53	19.47			
100	PI2 BPSK	135	0	19.43	19.47	19.42	20.2	0.0	
100	PI2 BPSK	135	69	19.33	19.44	19.29	20.2	0.0	
100	PI2 BPSK	135	138	19.33	19.39	19.22	20.2	0.0	
100	PI2 BPSK	270	0	19.40	19.49	19.46			
100	QPSK	1	1	19.54	19.60	19.46			
100	QPSK	1	137	19.45	19.54	19.38	20.2	0.0	
100	QPSK	1	271	19.41	19.57	19.48			
100	QPSK	135	0	19.41	19.44	19.37	20.2	0.0	
100	QPSK	135	69	19.33	19.51	19.39	20.2	0.0	
100	QPSK	135	138	19.26	19.37	19.33	20.2	0.0	
100	QPSK	270	0	19.40	19.46	19.29			
100	16QAM	1	1	19.49	19.52	19.48	20.2	0.0	
100	84QAM	1	1	19.41	19.53	19.35	20.2	0.0	
100	256QAM	1	1	18.71	18.89	18.72	19.5	0.7	
Channel				50820	51858	52998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2641	2592.99	2644.98			
90	QPSK	1	1	19.16	19.22	18.99	20.2	0.0	
Channel				507204	51858	52998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2538.02	2592.99	2649.99			
80	QPSK	1	1	19.08	19.13	18.97	20.2	0.0	
Channel				508202	51858	53100	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	19.02	19.15	18.97	20.2	0.0	
Channel				505200	51858	53198	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	19.18	19.18	18.96	20.2	0.0	
Channel				504204	51858	53298	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	19.15	19.21	18.94	20.2	0.0	
Channel				503202	51858	53400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	19.03	19.11	19.07	20.2	0.0	
Channel				502200	51858	53498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	0	19.08	19.19	19.02	20.2	0.0	
Channel				501204	51858	53598	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	19.11	19.08	19.08	20.2	0.0	
Channel				500700	51858	53698	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.5	2592.99	2682.48			
15	QPSK	1	1	19.08	19.12	19.05	20.2	0.0	
Channel				500202	51858	53700	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	19.15	19.10	18.98	20.2	0.0	



n2 DSI3 Simultaneous Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000		
Frequency (MHz)				1860	1860	1900		
20	PI2 BPSK	1	1	16.04	16.64	16.60		
20	PI2 BPSK	1	53	16.53	16.51	16.37	17.5	0.0
20	PI2 BPSK	1	104	16.44	16.57	16.37		
20	PI2 BPSK	50	0	16.49	16.53	16.45	17.5	0.0
20	PI2 BPSK	50	28	16.44	16.54	16.47	17.5	0.0
20	PI2 BPSK	50	58	16.29	16.50	16.41	17.5	0.0
20	PI2 BPSK	100	0	16.51	16.59	16.47		
20	QPSK	1	1	16.56	16.66	16.60		
20	QPSK	1	53	16.42	16.55	16.44	17.5	0.0
20	QPSK	1	104	16.46	16.64	16.41		
20	QPSK	50	0	16.40	16.56	16.30	17.5	0.0
20	QPSK	50	28	16.41	16.58	16.32	17.5	0.0
20	QPSK	50	58	16.35	16.36	16.34	17.5	0.0
20	QPSK	100	0	16.36	16.46	16.41		
20	16QAM	1	1	16.33	16.49	16.29	17.5	0.0
20	16QAM	1	1	16.45	16.43	16.42	17.5	0.0
20	256QAM	1	1	16.34	16.49	16.29	17.5	0.0
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1857.5	1860	1902.5	(dB)	(dB)
15	QPSK	1	1	16.46	16.52	16.63	17.5	0.0
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1855	1860	1905	(dB)	(dB)
10	QPSK	1	1	16.51	16.50	16.44	17.5	0.0
Channel				375500	376000	381500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1852.5	1860	1907.5	(dB)	(dB)
5	QPSK	1	1	16.52	16.63	16.61	17.5	0.0

n7 DSI3 Simultaneous Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	512000		
Frequency (MHz)				2520	2535	2550		
40	PI2 BPSK	1	1	14.36	14.46	14.43		
40	PI2 BPSK	1	108	14.27	14.40	14.27	15.5	0.0
40	PI2 BPSK	1	214	14.20	14.28	14.29		
40	PI2 BPSK	108	0	14.23	14.24	14.15	15.5	0.0
40	PI2 BPSK	108	54	14.03	14.18	13.96	15.5	0.0
40	PI2 BPSK	108	108	14.14	14.37	14.22	15.5	0.0
40	PI2 BPSK	216	0	14.18	14.34	14.32		
40	QPSK	1	1	14.45	14.48	14.42		
40	QPSK	1	108	14.24	14.34	14.15	15.5	0.0
40	QPSK	1	214	14.20	14.45	14.28		
40	QPSK	108	0	14.16	14.26	14.20	15.5	0.0
40	QPSK	108	54	14.34	14.41	14.33	15.5	0.0
40	QPSK	108	108	14.10	14.30	14.18	15.5	0.0
40	QPSK	216	0	14.16	14.34	14.24		
40	16QAM	1	1	14.07	14.16	14.05	15.5	0.0
40	16QAM	1	1	14.28	14.19	14.14	15.5	0.0
40	256QAM	1	1	14.16	14.22	14.13	15.5	0.0
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2515	2535	2555	(dB)	(dB)
30	QPSK	1	1	14.36	14.38	14.30	15.5	0.0
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR
Frequency (MHz)				2512.5	2535	2577.5	(dB)	(dB)
25	QPSK	1	1	14.28	14.38	14.42	15.5	0.0
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2510	2535	2550	(dB)	(dB)
20	PI2 BPSK	1	1	14.33	14.35	14.39	15.5	0.0
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR
Frequency (MHz)				2507.5	2535	2567.5	(dB)	(dB)
15	QPSK	1	1	14.30	14.33	14.42	15.5	0.0
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2505	2535	2565	(dB)	(dB)
10	QPSK	1	1	14.36	14.46	14.43	15.5	0.0
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR
Frequency (MHz)				2502.5	2535	2567.5	(dB)	(dB)
5	QPSK	1	1	14.20	14.28	14.29	15.5	0.0

n66 DSI3 Simultaneous Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				349500	349500	353500		
Frequency (MHz)				1740	1745	1760		
40	PI2 BPSK	1	1	15.83	15.87	15.82		
40	PI2 BPSK	1	108	15.75	15.80	15.73	17.2	0.0
40	PI2 BPSK	1	214	15.83	15.75	15.57		
40	PI2 BPSK	108	0	15.88	15.80	15.57	17.2	0.0
40	PI2 BPSK	108	54	15.64	15.76	15.76	17.2	0.0
40	PI2 BPSK	108	108	15.79	15.80	15.79	17.2	0.0
40	PI2 BPSK	216	0	15.74	15.92	15.87		
40	QPSK	1	1	15.84	15.94	15.82		
40	QPSK	1	108	15.85	15.92	15.73	17.2	0.0
40	QPSK	1	214	15.73	15.85	15.56		
40	QPSK	108	0	15.88	15.73	15.76	17.2	0.0
40	QPSK	108	54	15.72	15.88	15.73	17.2	0.0
40	QPSK	108	108	15.74	15.79	15.76	17.2	0.0
40	QPSK	216	0	15.74	15.90	15.69		
40	16QAM	1	1	15.78	15.78	15.64	17.2	0.0
40	16QAM	1	1	15.80	15.74	15.67	17.2	0.0
40	256QAM	1	1	15.83	15.82	15.69	17.2	0.0
Channel				349000	349500	353000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1735	1745	1765	(dB)	(dB)
30	QPSK	1	1	15.86	15.81	15.77	17.2	0.0
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1722.5	1745	1767.5	(dB)	(dB)
25	QPSK	1	1	15.82	15.83	15.60	17.2	0.0
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1720	1745	1770	(dB)	(dB)
20	QPSK	1	1	15.64	15.91	15.76	17.2	0.0
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1717.5	1745	1772.5	(dB)	(dB)
15	QPSK	1	1	15.80	15.85	15.73	17.2	0.0
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1715	1745	1775	(dB)	(dB)
10	QPSK	1	1	15.85	15.78	15.72	17.2	0.0
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1712.5	1745	1777.5	(dB)	(dB)
5	QPSK	1	1	15.72	15.83	15.71	17.2	0.0



n38 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				519004	519000	519096			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	15.71	15.77	15.68			
40	PI/2 BPSK	1	53	15.55	15.69	15.66	16.3	0.0	
40	PI/2 BPSK	1	104	15.60	15.66	15.59			
40	PI/2 BPSK	50	0	15.06	15.17	15.12	15.8	0.5	
40	PI/2 BPSK	50	28	15.65	15.72	15.66	16.3	0.0	
40	PI/2 BPSK	50	56	15.00	15.09	14.93	15.8	0.5	
40	PI/2 BPSK	100	0	14.94	15.12	15.04			
40	QPSK	1	1	15.79	15.83	15.74			
40	QPSK	1	53	15.70	15.73	15.63	16.3	0.0	
40	QPSK	1	104	15.64	15.71	15.61			
40	QPSK	50	0	14.53	14.63	14.45	15.3	1.0	
40	QPSK	50	28	15.73	15.77	15.65	16.3	0.0	
40	QPSK	50	56	14.40	14.55	14.36	15.3	1.0	
40	QPSK	100	0	14.58	14.65	14.56			
40	16QAM	1	1	14.61	14.68	14.53	15.3	1.0	
40	64QAM	1	1	13.32	13.48	13.35	13.8	2.5	
40	256QAM	1	1	11.12	11.25	11.19	11.6	4.5	
Channel				519102	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2593.01	2595	2604.99			
30	QPSK	1	1	15.72	15.67	15.62	16.3	0.0	
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2592.52	2595	2607.48			
25	QPSK	1	1	15.72	15.71	15.64	16.3	0.0	
Channel				516500	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	15.72	15.65	15.71	16.3	0.0	
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.51	2595	2612.49			
15	QPSK	1	1	15.70	15.77	15.70	16.3	0.0	
Channel				515004	519000	522998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	15.75	15.71	15.61	16.3	0.0	

n41 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				526002	516598	526000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	14.79	14.87	14.83			
100	PI/2 BPSK	1	137	14.76	14.86	14.72	16.3	0.0	
100	PI/2 BPSK	1	274	14.68	14.84	14.70			
100	PI/2 BPSK	135	0	14.39	14.42	14.32	16.3	0.0	
100	PI/2 BPSK	135	69	14.78	14.83	14.68	16.3	0.0	
100	PI/2 BPSK	135	138	14.52	14.35	14.31	16.3	0.0	
100	PI/2 BPSK	270	0	14.61	14.71	14.67			
100	QPSK	1	1	14.68	14.66	14.61			
100	QPSK	1	137	14.62	14.83	14.83	16.3	0.0	
100	QPSK	1	274	14.61	14.62	14.66			
100	QPSK	135	0	14.44	14.45	14.41	16.3	0.0	
100	QPSK	135	69	14.61	14.84	14.82	16.3	0.0	
100	QPSK	135	138	14.39	14.39	14.38	16.3	0.0	
100	QPSK	270	0	14.72	14.76	14.66			
100	16QAM	1	1	14.32	14.45	14.42	16.3	0.0	
100	64QAM	1	1	14.46	14.45	14.44	16.3	0.0	
100	256QAM	1	1	14.41	14.34	14.42	16.3	0.0	
Channel				526200	516598	526998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	14.36	14.46	14.43	16.3	0.0	
Channel				507204	516598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2539.02	2592.99	2649.98			
80	QPSK	1	1	14.79	14.89	14.73	16.3	0.0	
Channel				506202	516598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2631.01	2592.99	2655			
70	QPSK	1	1	14.64	14.94	14.82	16.3	0.0	
Channel				505200	516598	531998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2629	2592.99	2659.98			
60	QPSK	1	1	14.38	14.53	14.43	16.3	0.0	
Channel				604204	516598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2621.02	2592.99	2654.99			
50	QPSK	1	1	14.65	14.67	14.61	16.3	0.0	
Channel				503202	516598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	14.90	14.89	14.94	16.3	0.0	
Channel				502200	516598	534998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	14.64	14.94	14.82	16.3	0.0	
Channel				501204	516598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2508.02	2592.99	2679.99			
20	QPSK	1	1	14.66	14.75	14.88	16.3	0.0	
Channel				500700	516598	536498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	14.77	14.89	14.74	16.3	0.0	
Channel				500202	516598	537000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	14.32	14.47	14.39	16.3	0.0	



n7 DSI3 Simultaneous Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				50500	50700	51000		
Frequency (MHz)				2520	2535	2550		
40	PI2 BPSK	1	1	20.31	20.32	20.26		
40	PI2 BPSK	1	108	20.29	20.22	20.20	21.5	0.0
40	PI2 BPSK	1	214	20.22	20.26	20.29		
40	PI2 BPSK	108	0	20.23	20.19	20.22	21.5	0.0
40	PI2 BPSK	108	54	20.33	20.25	20.23	21.5	0.0
40	PI2 BPSK	108	108	20.23	20.32	20.31	21.5	0.0
40	PI2 BPSK	216	0	20.27	20.22	20.33		
40	QPSK	1	1	20.40	20.48	20.38		
40	QPSK	1	108	20.23	20.42	20.18	21.5	0.0
40	QPSK	1	214	20.25	20.22	20.27		
40	QPSK	108	0	20.20	20.27	20.28	21.5	0.0
40	QPSK	108	54	20.23	20.32	20.29	21.5	0.0
40	QPSK	108	108	20.29	20.27	20.23	21.5	0.0
40	QPSK	216	0	20.25	20.32	20.20		
40	16QAM	1	1	20.19	20.29	20.22	21.5	0.0
40	16QAM	1	1	20.14	20.23	20.14	21.5	0.0
40	256QAM	1	1	18.80	18.81	18.67	19.4	2.1
Channel				50350	50700	51100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2515	2535	2555		
30	QPSK	1	1	20.32	20.24	20.14	21.5	0.0
Channel				502600	507000	511500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2572.5	2535	2577.5		
25	QPSK	1	1	20.16	20.18	20.20	21.5	0.0
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2510	2535	2550		
20	PI2 BPSK	1	1	20.25	20.29	20.16	21.5	0.0
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	1	20.16	20.21	20.17	21.5	0.0
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	1	20.16	20.17	20.14	21.5	0.0
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	1	20.22	20.25	20.15	21.5	0.0



n38 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				519394	519500	519596			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	20.29	20.36	20.20			
40	PI/2 BPSK	1	53	20.22	20.29	20.18	21.1	0.0	
40	PI/2 BPSK	1	104	20.16	20.20	20.15			
40	PI/2 BPSK	50	0	19.84	19.78	19.88	21.1	0.0	
40	PI/2 BPSK	50	28	19.99	20.19	20.10	21.1	0.0	
40	PI/2 BPSK	50	56	20.36	20.36	20.36	21.1	0.0	
40	PI/2 BPSK	100	0	19.95	19.99	19.89			
40	QPSK	1	1	20.37	20.38	20.22			
40	QPSK	1	53	20.13	20.30	20.14	21.1	0.0	
40	QPSK	1	104	20.16	20.19	20.08			
40	QPSK	50	0	19.74	19.78	19.85	21.1	0.0	
40	QPSK	50	28	20.26	20.30	20.18	21.1	0.0	
40	QPSK	80	56	19.82	19.87	19.74			
40	QPSK	100	0	19.93	20.00	19.96	21.1	0.0	
40	16QAM	1	1	20.03	20.22	20.07	21.1	0.0	
40	16QAM	1	1	19.95	20.03	20.00	21.1	0.0	
40	256QAM	1	1	20.08	20.20	20.03	20.5	0.6	
Channel				517002	517000	523998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2585	2604.99			
30	QPSK	1	1	20.28	20.33	20.15	21.1	0.0	
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2282.52	2295	2307.48			
25	QPSK	1	1	20.27	20.30	20.04	21.1	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	20.29	20.28	20.13	21.1	0.0	
Channel				515502	519000	524998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	20.30	20.22	20.17	21.1	0.0	
Channel				515004	519000	525996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	20.20	20.18	20.24	21.1	0.0	

n41 Ant2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				526202	518998	529200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	20.35	20.46	20.43			
100	PI/2 BPSK	1	137	20.39	20.48	20.40	21.1	0.0	
100	PI/2 BPSK	1	271	20.28	20.41	20.26			
100	PI/2 BPSK	135	0	19.97	20.02	19.93	21.1	0.0	
100	PI/2 BPSK	135	69	20.43	20.47	20.38	21.1	0.0	
100	PI/2 BPSK	135	138	19.86	19.97	19.97	21.1	0.0	
100	PI/2 BPSK	270	0	19.84	20.02	19.88			
100	QPSK	1	1	20.44	20.38	20.46			
100	QPSK	1	137	20.39	20.49	20.47	21.1	0.0	
100	QPSK	1	271	20.31	20.46	20.33			
100	QPSK	135	0	19.61	19.61	19.61	21.1	0.0	
100	QPSK	135	69	20.40	20.51	20.43	21.1	0.0	
100	QPSK	135	138	19.95	20.00	19.93	21.1	0.0	
100	QPSK	270	0	20.00	20.04	19.94			
100	16QAM	1	1	19.92	20.06	19.95	21.1	0.0	
100	16QAM	1	1	19.99	20.00	19.94	21.1	0.0	
100	256QAM	1	1	19.93	20.09	19.99	20.5	0.6	
Channel				526200	518998	529198	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	19.91	19.99	19.89	21.1	0.0	
Channel				507204	518998	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2648.99			
80	QPSK	1	1	19.88	19.90	19.96	21.1	0.0	
Channel				530202	518998	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	19.92	19.90	19.92	21.1	0.0	
Channel				505200	518998	531998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2524	2592.99	2659.99			
60	QPSK	1	1	19.88	20.02	19.80	21.1	0.0	
Channel				504204	518998	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	19.92	19.93	19.84	21.1	0.0	
Channel				503202	518998	533000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	19.89	19.93	19.84	21.1	0.0	
Channel				502200	518998	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.99			
30	QPSK	1	1	19.85	20.01	19.89	21.1	0.0	
Channel				501204	518998	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	19.94	19.99	19.90	21.1	0.0	
Channel				500700	518998	536496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2503.05	2592.99	2683.48			
15	QPSK	1	1	19.81	19.85	19.89	21.1	0.0	
Channel				500202	518998	537000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	19.88	19.91	19.78	21.1	0.0	





Part270 n77 DSI3 Simultaneous Ant3									
BW (MHz)	Modulation	RB 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	20.81	20.86	20.78			
100	PI2 BPSK	1	137	20.79	20.84	20.74		0.0	
100	PI2 BPSK	1	271	20.56	20.69	20.57			
100	PI2 BPSK	135	0	20.79	20.83	20.80	21.8	0.0	
100	PI2 BPSK	135	69	20.60	20.70	20.61	21.8	0.0	
100	PI2 BPSK	135	138	20.63	20.78	20.76	21.8	0.0	
100	PI2 BPSK	270	0	20.73	20.78	20.72			
100	QPSK	1	1	20.83	20.86	20.78			
100	QPSK	1	137	20.69	20.87	20.73	21.8	0.0	
100	QPSK	1	271	20.66	20.76	20.64			
100	QPSK	135	0	20.71	20.79	20.69	21.8	0.0	
100	QPSK	135	69	20.80	20.86	20.67	21.8	0.0	
100	QPSK	135	138	20.57	20.74	20.66	21.8	0.0	
100	QPSK	270	0	20.77	20.85	20.73			
100	16QAM	1	1	20.67	20.71	20.59	21.8	0.0	
100	16QAM	1	1	20.61	20.76	20.71	21.8	0.0	
100	256QAM	1	1	19.74	19.78	19.69	21.0	0.8	
Channel									
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	20.17	20.26	20.14	21.8	0.0	
Channel									
Frequency (MHz)				649334	650000	650666	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3740.01	3840	3940.02	21.8	0.0	
Channel									
Frequency (MHz)				645000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	20.20	20.22	20.02	21.8	0.0	
Channel									
Frequency (MHz)				648668	650000	653334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	20.07	20.19	20.08	21.8	0.0	
Channel									
Frequency (MHz)				648334	650000	653668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3725.01	3840	3955.02	21.8	0.0	
Channel									
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	20.06	20.27	20.15	21.8	0.0	
Channel									
Frequency (MHz)				647668	650000	654334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	20.08	20.12	20.13	21.8	0.0	
Channel									
Frequency (MHz)				647500	650000	654500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	20.09	20.14	20.16	21.8	0.0	
Channel									
Frequency (MHz)				647334	650000	654668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	20.13	20.16	20.07	21.8	0.0	
Channel									
Frequency (MHz)				647168	650000	654834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	20.10	20.12	20.02	21.8	0.0	
Channel									
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	20.09	20.20	20.09	21.8	0.0	

Part270 n77 PC2 DSI3 Simultaneous Ant3									
BW (MHz)	Modulation	RB 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	23.36	23.39	23.28			
100	PI2 BPSK	1	137	23.35	23.38	23.32	24.8	0.0	
100	PI2 BPSK	1	271	22.99	23.12	23.09			
100	PI2 BPSK	135	0	23.29	23.36	23.28	24.8	0.0	
100	PI2 BPSK	135	69	23.00	23.15	23.12	24.8	0.0	
100	PI2 BPSK	135	138	23.26	23.32	23.21	24.8	0.0	
100	PI2 BPSK	270	0	23.12	23.20	23.04			
100	QPSK	1	1	23.34	23.72	23.38			
100	QPSK	1	137	23.25	23.35	23.22	24.8	0.0	
100	QPSK	1	271	23.21	23.31	23.26			
100	QPSK	135	0	23.24	23.33	23.21	24.8	0.0	
100	QPSK	135	69	23.36	23.62	23.24	24.8	0.0	
100	QPSK	135	138	23.14	23.28	23.11	24.8	0.0	
100	QPSK	270	0	23.24	23.60	23.16			
100	16QAM	1	1	23.19	23.26	23.20	24.8	0.0	
100	16QAM	1	1	23.35	23.39	23.28	24.8	0.0	
100	256QAM	1	1	22.01	22.02	22.01	23.3	1.5	
Channel									
Frequency (MHz)				648668	650000	653334	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	23.30	23.38	23.23	24.8	0.0	
Channel									
Frequency (MHz)				3740.01	3840	3940.02	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	23.27	23.25	23.31	24.8	0.0	
Channel									
Frequency (MHz)				645000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	23.27	23.33	23.35	24.8	0.0	
Channel									
Frequency (MHz)				648668	650000	653334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	23.31	23.38	23.20	24.8	0.0	
Channel									
Frequency (MHz)				648334	650000	653668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3725.01	3840	3955.02	24.8	0.0	
Channel									
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	23.32	23.24	23.31	24.8	0.0	
Channel									
Frequency (MHz)				647668	650000	654334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	3710.02	3840	3950.01	24.8	0.0	
Channel									
Frequency (MHz)				647500	650000	654500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	23.23	23.27	23.25	24.8	0.0	
Channel									
Frequency (MHz)				647334	650000	654668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	23.21	23.32	23.29	24.8	0.0	
Channel									
Frequency (MHz)				647168	650000	654834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3707.52	3840	3972.51	24.8	0.0	
Channel									
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	23.24	23.30	23.32	24.8	0.0	

Part270 n78 DSI3 Simultaneous Ant3									
BW (MHz)	Modulation	RB 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	3750	3750			
100	PI2 BPSK	1	1		20.36		21.8	0.0	
100	PI2 BPSK	1	137		20.33		21.8	0.0	
100	PI2 BPSK	1	271		20.25		21.8	0.0	
100	PI2 BPSK	135	0		20.38		21.8	0.0	
100	PI2 BPSK	135	69		20.31		21.8	0.0	
100	PI2 BPSK	135	138		20.32		21.8	0.0	
100	PI2 BPSK	270	0		20.27		21.8	0.0	
100	QPSK	1	1		20.43		21.8	0.0	
100	QPSK	1	137		20.40		21.8	0.0	
100	QPSK	1	271		20.29		21.8	0.0	
100	QPSK	135	0		20.29		21.8	0.0	
100	QPSK	135	69		20.39		21.8	0.0	
100	QPSK	135	138		20.32		21.8	0.0	
100	QPSK	270	0		20.35		21.8	0.0	
100	16QAM	1	1		20.29		21.8	0.0	
100	16QAM	1	1		20.29		21.8	0.0	
100	256QAM	1	1		19.52		21.0	0.8	
Channel									
Frequency (MHz)				648668	650000	653334	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	20.37	20.38	20.26	21.8	0.0	
Channel									
Frequency (MHz)				3740.01	3750	3760.02	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	20.23	20.40	20.25	21.8	0.0	
Channel									
Frequency (MHz)				645000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	20.33	20.27	20.32	21.8	0.0	
Channel									
Frequency (MHz)				648668	650000	653334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	20.35	20.25	20.29	21.8	0.0	
Channel									
Frequency (MHz)				648334	650000	653668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3725.01	3750	3775.02	21.8	0.0	
Channel									
Frequency (MHz)				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	20.33	20.38	20.32	21.8	0.0	
Channel									
Frequency (MHz)				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	20.29	20.32	20.31	21.8	0.0	
Channel									
Frequency (MHz)				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	20.27	20.29	20.26	21.8	0.0	
Channel									
Frequency (MHz)				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	20.37	20.41	20.32	21.8	0.0	
Channel									
Frequency (MHz)				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3707.52	3750	3792.51	21.8	0.0	
Channel									
Frequency (MHz)				3705	3750	3795	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	20.38	20.28	20.26	21.8	0.0	



Part270 n78 PC2 DSI3 Simultaneous Ant3									
BW (MHz)	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		23.15				
100	PI2 BPSK	1	137		23.08		24.8	0.0	
100	PI2 BPSK	1	271		22.92		24.8	0.0	
100	PI2 BPSK	135	0		23.04		24.8	0.0	
100	PI2 BPSK	135	89		23.04		24.8	0.0	
100	PI2 BPSK	135	138		22.99		24.8	0.0	
100	PI2 BPSK	270	0		22.93		24.8	0.0	
100	QPSK	1	1		23.21				
100	QPSK	1	137		23.10		24.8	0.0	
100	QPSK	1	271		22.97		24.8	0.0	
100	QPSK	135	0		23.06		24.8	0.0	
100	QPSK	135	89		23.18		24.8	0.0	
100	QPSK	135	138		23.03		24.8	0.0	
100	QPSK	270	0		23.08		24.8	0.0	
100	16QAM	1	1		22.91		24.8	0.0	
100	16QAM	1	1		22.87		24.8	0.0	
100	256QAM	1	1		21.55		23.3	1.5	
Channel				649688	650000	650334		MPR	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		23.17	23.11	23.18	24.8	0.0
Channel				649334	650000	650668		MPR	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1		23.11	23.08	23.07	24.8	0.0
Channel				649000	650000	651000		MPR	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1		23.08	23.05	23.03	24.8	0.0
Channel				648668	650000	651334		MPR	
Frequency (MHz)				3730.02	3750	3730.01			
60	QPSK	1	1		23.10	23.18	23.06	24.8	0.0
Channel				648334	650000	651668		MPR	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1		23.19	23.08	23.04	24.8	0.0
Channel				648000	650000	652000		MPR	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1		23.18	23.04	23.17	24.8	0.0
Channel				647668	650000	652334		MPR	
Frequency (MHz)				3715.02	3750	3755.01			
30	QPSK	1	1		23.19	23.09	23.14	24.8	0.0
Channel				647300	650000	652500		MPR	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1		23.10	23.13	23.16	24.8	0.0
Channel				647334	650000	652668		MPR	
Frequency (MHz)				3710.01	3750	3780.02			
20	QPSK	1	1		23.14	23.17	23.08	24.8	0.0
Channel				647188	650000	652834		MPR	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1		23.12	23.07	23.12	24.8	0.0
Channel				647000	650000	653000		MPR	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1		23.04	23.19	23.05	24.8	0.0



Part270 n77 DSI3 Simultaneous Ant7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	MPR (dB)
Channel				3750	3840	3930	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.03	23.09	22.53	
100	PI/2 BPSK	1	137	22.52	23.04	22.52	23.5
100	PI/2 BPSK	1	271	22.70	22.90	22.52	0.0
100	PI/2 BPSK	135	0	22.52	22.88	22.82	23.5
100	PI/2 BPSK	135	69	22.86	23.05	22.52	0.0
100	PI/2 BPSK	135	138	22.78	22.85	22.40	23.5
100	PI/2 BPSK	270	0	22.51	22.91	22.46	
100	QPSK	1	1	23.06	23.15	22.51	
100	QPSK	1	137	23.01	23.02	22.81	23.5
100	QPSK	1	271	22.83	22.92	22.56	
100	QPSK	135	0	22.15	22.18	22.45	23.0
100	QPSK	135	69	22.98	23.08	22.51	23.5
100	QPSK	135	138	22.08	22.30	22.33	23.0
100	QPSK	270	0	21.94	22.39	22.36	23.0
100	16QAM	1	1	22.06	22.07	22.17	23.0
100	16QAM	1	1	20.96	20.83	20.51	21.5
100	256QAM	1	1	18.49	18.52	18.57	19.5
Channel				649334	650000	650334	
Frequency (MHz)				3745.02	3840	3935.01	
90	QPSK	1	1	21.99	22.09	21.51	23.5
Channel				649334	650000	650668	
Frequency (MHz)				3740.01	3840	3940.02	
80	QPSK	1	1	22.01	22.12	21.51	23.5
Channel				649000	650000	653000	
Frequency (MHz)				3735	3840	3945	
70	QPSK	1	1	21.99	22.01	21.56	23.5
Channel				648668	650000	653334	
Frequency (MHz)				3730.02	3840	3950.01	
60	QPSK	1	1	21.88	22.05	21.51	23.5
Channel				648334	650000	653668	
Frequency (MHz)				3725.01	3840	3955.02	
50	QPSK	1	1	21.51	22.08	21.57	23.5
Channel				648000	650000	654000	
Frequency (MHz)				3720	3840	3960	
40	QPSK	1	1	21.99	22.11	21.56	23.5
Channel				647668	650000	654334	
Frequency (MHz)				3715.02	3840	3965.01	
30	QPSK	1	1	21.50	22.04	21.53	23.5
Channel				647000	650000	654500	
Frequency (MHz)				3712.5	3840	3967.5	
25	QPSK	1	1	21.98	22.07	21.55	23.5
Channel				647334	650000	654668	
Frequency (MHz)				3710.01	3840	3970.02	
20	QPSK	1	1	22.00	22.08	21.58	23.5
Channel				647188	650000	654834	
Frequency (MHz)				3707.52	3840	3972.51	
15	QPSK	1	1	21.94	22.10	21.53	23.5
Channel				647000	650000	655000	
Frequency (MHz)				3705	3840	3975	
10	QPSK	1	1	21.88	22.16	21.52	23.5

Part270 n78 DSI3 Simultaneous Ant7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	MPR (dB)
Channel				3750	3750	3750	
Frequency (MHz)				3750	3750	3750	
100	PI/2 BPSK	1	1		22.24		
100	PI/2 BPSK	1	137		22.19		23.5
100	PI/2 BPSK	1	271		22.02		0.0
100	PI/2 BPSK	135	0		21.90		23.5
100	PI/2 BPSK	135	69		22.20		0.0
100	PI/2 BPSK	135	138		21.51		23.5
100	PI/2 BPSK	270	0		21.87		
100	QPSK	1	1		22.38		
100	QPSK	1	137		22.05		23.5
100	QPSK	1	271		21.95		
100	QPSK	135	0		21.82		23.0
100	QPSK	135	69		22.23		23.5
100	QPSK	135	138		21.48		23.0
100	QPSK	270	0		22.00		23.0
100	16QAM	1	1		21.89		23.0
100	16QAM	1	1		20.68		21.5
100	256QAM	1	1		18.64		19.5
Channel				648668	650000	650334	
Frequency (MHz)				3745.02	3750	3755.01	
90	QPSK	1	1	22.10	22.08	22.07	23.5
Channel				649334	650000	650668	
Frequency (MHz)				3740.01	3750	3760.02	
80	QPSK	1	1	22.12	22.09	22.07	23.5
Channel				649000	650000	651000	
Frequency (MHz)				3735	3750	3765	
70	QPSK	1	1	22.21	22.22	22.20	23.5
Channel				648668	650000	651334	
Frequency (MHz)				3730.02	3750	3770.01	
60	QPSK	1	1	22.12	22.11	22.08	23.5
Channel				648334	650000	651668	
Frequency (MHz)				3725.01	3750	3775.02	
50	QPSK	1	1	22.21	22.23	22.25	23.5
Channel				648000	650000	652000	
Frequency (MHz)				3720	3750	3780	
40	QPSK	1	1	22.10	22.08	22.11	23.5
Channel				647668	650000	652334	
Frequency (MHz)				3715.02	3750	3785.01	
30	QPSK	1	1	22.20	22.19	22.22	23.5
Channel				647000	650000	652500	
Frequency (MHz)				3712.5	3750	3787.5	
25	QPSK	1	1	22.04	22.02	21.99	23.5
Channel				647334	650000	652668	
Frequency (MHz)				3710.01	3750	3790.02	
20	QPSK	1	1	22.18	22.18	22.16	23.5
Channel				647188	650000	652834	
Frequency (MHz)				3707.52	3750	3792.51	
15	QPSK	1	1	22.25	22.26	22.28	23.5
Channel				647000	650000	653000	
Frequency (MHz)				3705	3750	3795	
10	QPSK	1	1	22.08	22.08	22.11	23.5



Part270 n77 DSI3 Simultaneous Ant8									
BW (MHz)	Modulation	RB 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	14.36	13.49	13.49			
100	PI2 BPSK	1	137	13.47	13.30	13.28			0.0
100	PI2 BPSK	1	271	14.23	14.36	14.18			
100	PI2 BPSK	135	0	13.88	13.89	13.87	15.2	0.0	
100	PI2 BPSK	135	69	14.48	14.34	14.23	15.2	0.0	
100	PI2 BPSK	135	138	13.68	13.92	13.84	15.2	0.0	
100	PI2 BPSK	270	0	13.76	13.89	13.84			
100	QPSK	1	1	14.49	14.51	14.38			
100	QPSK	1	137	14.21	14.37	14.38	15.2	0.0	
100	QPSK	1	271	14.27	14.38	14.33			
100	QPSK	135	0	14.17	14.33	14.32	15.2	0.0	
100	QPSK	135	69	14.43	14.45	14.18	15.2	0.0	
100	QPSK	135	138	13.96	13.94	14.08	15.2	0.0	
100	QPSK	270	0	14.14	14.25	14.22			
100	16QAM	1	1	14.45	14.48	14.34	15.2	0.0	
100	16QAM	1	1	14.17	14.33	14.32	15.2	0.0	
100	256QAM	1	1	14.23	14.34	14.29	15.2	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	14.40	14.43	14.30	15.2	0.0	
Channel									
Frequency (MHz)				649334	650000	650968	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	14.13	14.29	14.29	15.2	0.0	
Channel									
Frequency (MHz)				649000	650000	650000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	14.19	14.31	14.25	15.2	0.0	
Channel									
Frequency (MHz)				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	14.09	14.25	14.24	15.2	0.0	
Channel									
Frequency (MHz)				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	14.35	14.37	14.09	15.2	0.0	
Channel									
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	13.88	13.86	14.00	15.2	0.0	
Channel									
Frequency (MHz)				647668	650000	654334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	14.06	14.20	14.14	15.2	0.0	
Channel									
Frequency (MHz)				647500	650000	654500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	14.39	14.42	14.29	15.2	0.0	
Channel									
Frequency (MHz)				647334	650000	654668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	14.08	14.24	14.23	15.2	0.0	
Channel									
Frequency (MHz)				647168	650000	654834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	14.05	14.18	14.12	15.2	0.0	
Channel									
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	14.11	14.28	14.27	15.2	0.0	

Part270 n77 PC2 DSI3 Simultaneous Ant8									
BW (MHz)	Modulation	RB 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	16.90	17.03	16.88			
100	PI2 BPSK	1	137	16.83	17.07	16.94	18.2	0.0	
100	PI2 BPSK	1	271	16.80	17.03	16.77			
100	PI2 BPSK	135	0	16.36	16.54	16.43	18.2	0.0	
100	PI2 BPSK	135	69	16.92	17.11	17.05	18.2	0.0	
100	PI2 BPSK	135	138	16.48	16.55	16.38	18.2	0.0	
100	PI2 BPSK	270	0	16.44	16.64	16.41			
100	QPSK	1	1	17.02	17.88	17.00			
100	QPSK	1	137	16.88	16.98	17.08	18.2	0.0	
100	QPSK	1	271	16.81	17.04	16.85			
100	QPSK	135	0	16.70	16.77	16.69	18.2	0.0	
100	QPSK	135	69	17.43	17.80	17.48	18.2	0.0	
100	QPSK	135	138	16.75	16.87	16.68	18.2	0.0	
100	QPSK	270	0	16.83	16.95	16.82			
100	16QAM	1	1	16.88	16.71	16.84	18.2	0.0	
100	16QAM	1	1	16.67	16.95	16.87	18.2	0.0	
100	256QAM	1	1	16.84	16.75	16.74	18.2	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	16.83	17.07	16.90	18.2	0.0	
Channel									
Frequency (MHz)				649334	650000	650968	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	16.92	16.87	16.90	18.2	0.0	
Channel									
Frequency (MHz)				649000	650000	650000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	16.89	16.99	16.96	18.2	0.0	
Channel									
Frequency (MHz)				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	16.85	17.01	17.08	18.2	0.0	
Channel									
Frequency (MHz)				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	16.83	16.97	17.00	18.2	0.0	
Channel									
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	16.80	16.97	16.97	18.2	0.0	
Channel									
Frequency (MHz)				647668	650000	654334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	16.84	16.90	16.83	18.2	0.0	
Channel									
Frequency (MHz)				647500	650000	654500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	16.97	16.95	16.97	18.2	0.0	
Channel									
Frequency (MHz)				647334	650000	654668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	16.89	16.99	16.98	18.2	0.0	
Channel									
Frequency (MHz)				647168	650000	654834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	16.89	16.97	17.02	18.2	0.0	
Channel									
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	16.88	17.05	16.98	18.2	0.0	

Part270 n78 DSI3 Simultaneous Ant8									
BW (MHz)	Modulation	RB 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	3750	3750			
100	PI2 BPSK	1	1		13.40				
100	PI2 BPSK	1	137		13.22		15.2	0.0	
100	PI2 BPSK	1	271		14.27				
100	PI2 BPSK	135	0		13.80		15.2	0.0	
100	PI2 BPSK	135	69		14.25		15.2	0.0	
100	PI2 BPSK	135	138		13.83		15.2	0.0	
100	PI2 BPSK	270	0		13.80				
100	QPSK	1	1		14.45				
100	QPSK	1	137		14.28		15.2	0.0	
100	QPSK	1	271		14.28				
100	QPSK	135	0		14.25		15.2	0.0	
100	QPSK	135	69		14.35		15.2	0.0	
100	QPSK	135	138		13.85		15.2	0.0	
100	QPSK	270	0		14.15				
100	16QAM	1	1		14.39		15.2	0.0	
100	16QAM	1	1		14.24		15.2	0.0	
100	256QAM	1	1		14.25		15.2	0.0	
Channel									
Frequency (MHz)				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	14.27	14.28	14.27	15.2	0.0	
Channel									
Frequency (MHz)				649334	650000	650968	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	14.20	14.24	14.22	15.2	0.0	
Channel									
Frequency (MHz)				649000	650000	650000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	14.21	14.18	14.20	15.2	0.0	
Channel									
Frequency (MHz)				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	13.84	13.83	13.80	15.2	0.0	
Channel									
Frequency (MHz)				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	14.17	14.13	14.12	15.2	0.0	
Channel									
Frequency (MHz)				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	14.30	14.28	14.33	15.2	0.0	
Channel									
Frequency (MHz)				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	14.13	14.16	14.15	15.2	0.0	
Channel									
Frequency (MHz)				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	14.29	14.33	14.33	15.2	0.0	
Channel									
Frequency (MHz)				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	14.43	14.40	14.24	15.2	0.0	
Channel									
Frequency (MHz)				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	14.29	14.34	14.29	15.2	0.0	
Channel									
Frequency (MHz)				3705	3750	3795	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	14.14	14.15	14.18	15.2	0.0	



Part270 n78 PC2 DSI3 Simultaneous Ant8									
BW (MHz)	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	PI/2 BPSK	1	1		16.98				
100	PI/2 BPSK	1	137		16.92		18.2	0.0	
100	PI/2 BPSK	1	271		16.41		18.2	0.0	
100	PI/2 BPSK	135	0		16.56		18.2	0.0	
100	PI/2 BPSK	135	69		17.03		18.2	0.0	
100	PI/2 BPSK	135	138		16.56		18.2	0.0	
100	PI/2 BPSK	270	0		16.62				
100	QPSK	1	1		17.16				
100	QPSK	1	137		16.81		18.2	0.0	
100	QPSK	1	271		16.43				
100	QPSK	135	0		16.49		18.2	0.0	
100	QPSK	135	69		17.09		18.2	0.0	
100	QPSK	135	138		16.37		18.2	0.0	
100	QPSK	270	0		16.52				
100	16QAM	1	1		17.10		18.2	0.0	
100	16QAM	1	1		16.35		18.2	0.0	
100	256QAM	1	1		16.54		18.2	0.0	
Channel				649668	650000	650334		MPR	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		16.71	16.68	16.68	18.2	0.0
Channel				649334	650000	650668		MPR	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1		16.61	16.60	16.54	18.2	0.0
Channel				649000	650000	651000		MPR	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1		16.73	16.74	16.71	18.2	0.0
Channel				648668	650000	651334		MPR	
Frequency (MHz)				3730.02	3750	3730.01			
60	QPSK	1	1		16.87	16.90	16.88	18.2	0.0
Channel				648334	650000	651668		MPR	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1		16.50	16.68	16.90	18.2	0.0
Channel				648000	650000	652000		MPR	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1		16.77	16.80	16.77	18.2	0.0
Channel				647668	650000	652334		MPR	
Frequency (MHz)				3715.02	3750	3765.01			
30	QPSK	1	1		16.24	16.23	16.26	18.2	0.0
Channel				647300	650000	652500		MPR	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1		16.70	16.66	16.69	18.2	0.0
Channel				647334	650000	652668		MPR	
Frequency (MHz)				3710.01	3750	3790.02			
20	QPSK	1	1		16.63	16.61	16.64	18.2	0.0
Channel				647188	650000	652834		MPR	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1		16.27	16.25	16.26	18.2	0.0
Channel				647000	650000	653000		MPR	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1		16.34	16.31	16.29	18.2	0.0



Part270 n77 DSI3 Simultaneous Ant9									
BW (MHz)	Modulation	RB 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	17.02	17.07	18.98			
100	PI2 BPSK	1	137	16.87	16.97	18.86		0.0	
100	PI2 BPSK	1	271	16.93	16.99	18.84			
100	PI2 BPSK	135	0	17.01	17.08	17.03	17.9	0.0	
100	PI2 BPSK	135	69	16.84	17.04	16.96	17.9	0.0	
100	PI2 BPSK	135	138	16.83	16.99	18.93	17.9	0.0	
100	PI2 BPSK	270	0	17.04	17.09	18.97			
100	QPSK	1	1	17.04	17.09	18.97			
100	QPSK	1	137	17.06	17.06	17.00	17.9	0.0	
100	QPSK	1	271	16.93	17.02	16.87			
100	QPSK	135	0	16.98	17.07	18.96	17.9	0.0	
100	QPSK	135	69	17.00	17.11	17.05	17.9	0.0	
100	QPSK	135	138	16.82	16.91	18.86	17.9	0.0	
100	QPSK	270	0	16.86	17.05	16.81	17.9	0.0	
100	16QAM	1	1	16.95	17.04	16.92	17.9	0.0	
100	64QAM	1	1	17.03	17.05	18.80	17.9	0.0	
100	256QAM	1	1	16.90	17.00	18.94	17.9	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	16.93	16.88	16.94	17.9	0.0	
Channel									
Frequency (MHz)				649334	650000	662668	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	17.04	17.00	18.83	17.9	0.0	
Channel									
Frequency (MHz)				645000	650000	663000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	16.95	16.95	18.45	17.9	0.0	
Channel									
Frequency (MHz)				646668	650000	663334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	16.90	17.02	16.76	17.9	0.0	
Channel									
Frequency (MHz)				648334	650000	663668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	16.87	17.08	16.85	17.9	0.0	
Channel									
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	17.03	16.99	16.80	17.9	0.0	
Channel									
Frequency (MHz)				647668	650000	664334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	16.92	16.97	16.77	17.9	0.0	
Channel									
Frequency (MHz)				647500	650000	664500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	16.96	17.03	16.85	17.9	0.0	
Channel									
Frequency (MHz)				647334	650000	664668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	16.88	16.94	16.87	17.9	0.0	
Channel									
Frequency (MHz)				647168	650000	664834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	16.91	16.95	16.83	17.9	0.0	
Channel									
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	16.90	17.04	16.87	17.9	0.0	

Part270 n77 PC2 DSI3 Simultaneous Ant9									
BW (MHz)	Modulation	RB 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	19.94	20.01	20.03			
100	PI2 BPSK	1	137	19.94	19.98	19.84	20.9	0.0	
100	PI2 BPSK	1	271	19.81	19.94	19.77			
100	PI2 BPSK	135	0	19.97	19.97	19.86	20.9	0.0	
100	PI2 BPSK	135	69	19.84	19.95	19.85	20.9	0.0	
100	PI2 BPSK	135	138	19.79	19.82	19.72	20.9	0.0	
100	PI2 BPSK	270	0	19.93	20.00	19.85			
100	QPSK	1	1	19.94	20.11	19.97			
100	QPSK	1	137	19.81	19.82	19.91	20.9	0.0	
100	QPSK	1	271	19.85	19.92	19.79			
100	QPSK	135	0	19.87	19.95	19.77	20.9	0.0	
100	QPSK	135	69	19.89	19.92	19.82	20.9	0.0	
100	QPSK	135	138	19.85	19.77	19.83	20.9	0.0	
100	QPSK	270	0	19.76	19.85	19.74	20.9	0.0	
100	16QAM	1	1	19.84	20.00	19.87	20.9	0.0	
100	64QAM	1	1	19.69	19.75	19.69	20.9	0.0	
100	256QAM	1	1	19.79	19.81	19.72	20.9	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	19.81	19.93	19.88	20.9	0.0	
Channel									
Frequency (MHz)				649334	650000	662668	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	19.89	19.96	19.84	20.9	0.0	
Channel									
Frequency (MHz)				645000	650000	663000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	19.76	19.89	19.81	20.9	0.0	
Channel									
Frequency (MHz)				646668	650000	663334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	19.79	19.93	19.78	20.9	0.0	
Channel									
Frequency (MHz)				648334	650000	663668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	19.82	19.95	19.85	20.9	0.0	
Channel									
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	19.82	19.89	19.81	20.9	0.0	
Channel									
Frequency (MHz)				647668	650000	664334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	19.77	20.03	19.70	20.9	0.0	
Channel									
Frequency (MHz)				647500	650000	664500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	19.78	19.98	19.88	20.9	0.0	
Channel									
Frequency (MHz)				647334	650000	664668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	19.81	19.98	19.79	20.9	0.0	
Channel									
Frequency (MHz)				647168	650000	664834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	19.80	19.92	19.85	20.9	0.0	
Channel									
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	19.74	20.04	19.81	20.9	0.0	

Part270 n78 DSI3 Simultaneous Ant9									
BW (MHz)	Modulation	RB 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	3750	3750			
100	PI2 BPSK	1	1	16.57	16.59	16.59			
100	PI2 BPSK	1	137	16.54	16.53	16.42	17.9	0.0	
100	PI2 BPSK	1	271	16.41	16.51	16.45			
100	PI2 BPSK	135	0	16.87	16.58	16.86	17.9	0.0	
100	PI2 BPSK	135	69	16.44	16.65	16.54	17.9	0.0	
100	PI2 BPSK	135	138	16.41	16.48	16.45	17.9	0.0	
100	PI2 BPSK	270	0	16.57	16.88	16.59			
100	QPSK	1	1	16.80	16.71	16.56			
100	QPSK	1	137	16.55	16.58	16.58	17.9	0.0	
100	QPSK	1	271	16.56	16.65	16.45			
100	QPSK	135	0	16.82	16.86	16.82	17.9	0.0	
100	QPSK	135	69	16.64	16.70	16.88	17.9	0.0	
100	QPSK	135	138	16.35	16.49	16.43	17.9	0.0	
100	QPSK	270	0	16.49	16.51	16.45	17.9	0.0	
100	16QAM	1	1	16.83	16.68	16.38	17.9	0.0	
100	64QAM	1	1	16.43	16.39	16.40	17.9	0.0	
100	256QAM	1	1	16.48	16.82	16.59	17.9	0.0	
Channel									
Frequency (MHz)				3745.02	3750	3755.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	16.57	16.66	16.41	17.9	0.0	
Channel									
Frequency (MHz)				649334	650000	659968	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	16.53	16.55	16.42	17.9	0.0	
Channel									
Frequency (MHz)				645000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	16.48	16.62	16.49	17.9	0.0	
Channel									
Frequency (MHz)				646668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	16.49	16.83	16.44	17.9	0.0	
Channel									
Frequency (MHz)				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	16.48	16.88	16.39	17.9	0.0	
Channel									
Frequency (MHz)				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	16.50	16.82	16.39	17.9	0.0	
Channel									
Frequency (MHz)				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	16.51	16.55	16.43	17.9	0.0	
Channel									
Frequency (MHz)				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	16.57	16.84	16.50	17.9	0.0	
Channel									
Frequency (MHz)				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	16.56	16.57	16.50	17.9	0.0	
Channel									
Frequency (MHz)				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	16.52	16.58	16.39	17.9	0.0	
Channel									
Frequency (MHz)				3705	3750	3795	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	16.57	16.60	16.50	17.9	0.0	



**Part270 n78 PC2 DSI3 Simultaneous Ant9**

BW (MHz)	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	PI/2 BPSK	1	1	20.59	20.69	20.66		
100	PI/2 BPSK	1	137	20.53	20.50	20.41	20.9	0.0
100	PI/2 BPSK	1	271	20.35	20.37	20.46		
100	PI/2 BPSK	135	0	20.64	20.55	20.83	20.9	0.0
100	PI/2 BPSK	135	69	20.45	20.72	20.59	20.9	0.0
100	PI/2 BPSK	135	138	20.45	20.46	20.44	20.9	0.0
100	PI/2 BPSK	270	0	20.57	20.65	20.54		
100	QPSK	1	1	20.66	20.76	20.73		
100	QPSK	1	137	20.59	20.52	20.83	20.9	0.0
100	QPSK	1	271	20.57	20.69	20.48		
100	QPSK	135	0	20.54	20.69	20.81	20.9	0.0
100	QPSK	135	69	20.57	20.73	20.70	20.9	0.0
100	QPSK	135	138	20.40	20.50	20.42		
100	QPSK	270	0	20.50	20.59	20.48	20.9	0.0
100	16QAM	1	1	20.67	20.63	20.36	20.9	0.0
100	16QAM	1	1	20.50	20.35	20.43	20.9	0.0
100	256QAM	1	1	20.47	20.58	20.54	20.9	0.0
Channel				648968	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	20.62	20.66	20.61	20.9	0.0
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	20.52	20.63	20.56	20.9	0.0
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	20.53	20.59	20.70	20.9	0.0
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3750	3730.01		
60	QPSK	1	1	20.61	20.62	20.84	20.9	0.0
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	20.57	20.58	20.70	20.9	0.0
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	20.58	20.62	20.64	20.9	0.0
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	20.65	20.72	20.67	20.9	0.0
Channel				647000	650000	652000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	20.58	20.67	20.65	20.9	0.0
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3750	3780.02		
20	QPSK	1	1	20.66	20.70	20.57	20.9	0.0
Channel				647188	650000	652834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	20.65	20.60	20.70	20.9	0.0
Channel				647000	650000	652000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	20.50	20.61	20.58	20.9	0.0



n41 Ant4

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	505202	518598	532000					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	16.67	16.80	16.72		
100	PI2 BPSK	1	137	16.80	16.76	16.76	18.2	0.0
100	PI2 BPSK	1	271	16.46	16.59	16.47		
100	PI2 BPSK	135	61	16.28	16.30	16.25	18.2	0.0
100	PI2 BPSK	135	69	16.44	16.57	16.46	18.2	0.0
100	PI2 BPSK	135	138	16.28	16.34	16.28	18.2	0.0
100	PI2 BPSK	270	0	16.35	16.48	16.34		
100	QPSK	1	1	16.72	16.96	16.76		
100	QPSK	1	137	16.66	16.77	16.65	18.2	0.0
100	QPSK	1	271	16.52	16.63	16.47		
100	QPSK	135	0	16.32	16.47	16.33	18.2	0.0
100	QPSK	135	69	16.76	16.79	16.71	18.2	0.0
100	QPSK	135	138	16.76	16.69	16.70		
100	QPSK	270	0	16.68	16.78	16.69	18.2	0.0
100	16QAM	1	1	16.38	16.39	16.39	18.2	0.0
100	16QAM	1	1	16.39	16.49	16.44	18.2	0.0
100	256QAM	1	1	16.40	16.41	16.35	18.0	0.2
Channel	505203	518598	532000					
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	16.28	16.40	16.37	18.2	0.0
Channel	507204	518598	529998					
Frequency (MHz)	2532.02	2592.99	2649.99					
80	QPSK	1	1	16.27	16.42	16.37	18.2	0.0
Channel	508202	518598	531000					
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	16.29	16.48	16.28	18.2	0.0
Channel	508200	518598	531998					
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	16.40	16.44	16.44	18.2	0.0
Channel	504204	518598	532998					
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	16.28	16.49	16.41	18.2	0.0
Channel	503202	518598	534000					
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	16.32	16.37	16.41	18.2	0.0
Channel	502200	518598	534998					
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	16.32	16.35	16.42	18.2	0.0
Channel	501204	518598	535998					
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	16.37	16.40	16.38	18.2	0.0
Channel	500700	518598	536498					
Frequency (MHz)	2501.5	2592.99	2682.48					
15	QPSK	1	1	16.40	16.49	16.42	18.2	0.0
Channel	500202	518598	537000					
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	16.39	16.40	16.35	18.2	0.0





Reduced Power Mode for DSI 4

n5 Ant0								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				166800	167300	167800		
Frequency (MHz)				834	836.5	839		
20	PI2 BPSK	1	1	23.04	23.13	22.99		
20	PI2 BPSK	1	53	22.90	23.03	22.93	24.0	0.0
20	PI2 BPSK	1	104	23.00	23.10	22.97		
20	PI2 BPSK	50	0	22.56	22.64	22.55	23.5	0.5
20	PI2 BPSK	50	28	22.82	22.88	22.85	24.0	0.0
20	PI2 BPSK	50	56	22.57	22.70	22.53		
20	PI2 BPSK	100	0	22.61	22.73	22.58	23.5	0.5
20	QPSK	1	1	23.16	23.19	23.02		
20	QPSK	1	53	22.88	23.06	22.91	24.0	0.0
20	QPSK	1	104	23.09	23.12	23.04		
20	QPSK	50	0	22.15	22.17	22.13	23.0	1.0
20	QPSK	50	28	23.11	23.14	23.06	24.0	0.0
20	QPSK	50	56	22.12	22.22	22.06		
20	QPSK	100	0	22.28	22.31	22.24	23.0	1.0
20	16QAM	1	1	22.02	22.05	21.96	23.0	1.0
20	84QAM	1	1	20.87	21.02	20.95	21.5	2.5
20	256QAM	1	1	18.39	18.49	18.37	19.5	4.5
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	836.5	841.5		
15	QPSK	1	1	23.03	23.10	22.97	24.0	0.0
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				839	836.5	844		
10	QPSK	1	1	23.05	23.02	22.95	24.0	0.0
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	1	23.09	23.04	22.85	24.0	0.0



n41 Ant0

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	59202	51859	52999					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	23.06	23.15	23.12		
100	PI2 BPSK	1	137	23.00	23.07	22.97	24.0	0.0
100	PI2 BPSK	1	271	23.05	23.13	23.05		
100	PI2 BPSK	135	61	22.57	22.71	22.85	23.5	0.5
100	PI2 BPSK	135	69	22.87	23.04	22.94	24.0	0.0
100	PI2 BPSK	135	138	22.56	22.88	22.51	23.5	0.5
100	PI2 BPSK	270	0	22.58	22.73	22.60		
100	QPSK	1	1	23.06	23.16	23.05		
100	QPSK	1	137	22.88	23.06	22.96	24.0	0.0
100	QPSK	1	271	23.00	23.12	23.09		
100	QPSK	135	0	22.09	22.18	22.07	23.0	1.0
100	QPSK	135	69	22.99	23.13	23.02	24.0	0.0
100	QPSK	135	138	22.11	22.18	22.13	23.0	1.0
100	QPSK	270	0	22.14	22.21	22.11		
100	16QAM	1	1	21.86	22.00	21.96	23.0	1.0
100	64QAM	1	1	20.57	20.88	20.62	21.5	2.5
100	256QAM	1	1	18.36	18.54	18.37	19.5	4.5
Channel	505202	51859	53998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	23.05	23.07	22.99	24.0	0.0
Channel	507204	51859	52998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2538.02	2592.99	2649.99					
80	QPSK	1	1	22.98	23.02	22.94	24.0	0.0
Channel	505202	51859	53100	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	22.93	23.03	22.98	24.0	0.0
Channel	505200	51859	53198	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2528	2592.99	2659.99					
60	QPSK	1	1	22.92	23.14	23.02	24.0	0.0
Channel	504204	51859	53998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	22.93	23.06	22.85	24.0	0.0
Channel	505202	51859	53100	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	23.07	23.11	22.89	24.0	0.0
Channel	502200	51859	53498	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	22.95	23.10	22.85	24.0	0.0
Channel	501204	51859	53998	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	22.94	23.04	22.99	24.0	0.0
Channel	500700	51859	53848	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2503.5	2592.99	2682.48					
15	QPSK	1	1	22.98	23.16	22.99	24.0	0.0
Channel	500202	51859	53700	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	23.07	23.13	22.90	24.0	0.0



n2 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376000	380000			
Frequency (MHz)				1860	1860	1900			
20	PI2 BPSK	1	1	23.01	23.63	23.55			
20	PI2 BPSK	1	53	23.50	23.59	23.52	24.0	0.0	
20	PI2 BPSK	1	104	23.39	23.42	23.32			
20	PI2 BPSK	50	0	23.21	23.24	23.12	23.5	0.5	
20	PI2 BPSK	50	28	23.57	23.61	23.49	24.0	0.0	
20	PI2 BPSK	50	58	23.04	23.19	23.11	23.5	0.5	
20	PI2 BPSK	100	0	23.14	23.22	23.18			
20	QPSK	1	1	23.58	23.66	23.63			
20	QPSK	1	53	23.57	23.62	23.50	24.0	0.0	
20	QPSK	1	104	23.38	23.55	23.48			
20	QPSK	50	0	22.80	22.72	22.54	23.0	1.0	
20	QPSK	50	28	23.54	23.61	23.50	24.0	0.0	
20	QPSK	50	58	22.82	22.87	22.84	23.0	1.0	
20	QPSK	100	0	22.87	22.74	22.62			
20	16QAM	1	1	22.49	22.55	22.40	23.0	1.0	
20	16QAM	1	1	21.26	21.33	21.18	21.5	2.5	
20	256QAM	1	1	18.88	18.98	18.93	19.5	4.5	
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1857.5	1860	1902.5			
15	QPSK	1	1	23.48	23.50	23.55	24.0	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1855	1860	1905			
10	QPSK	1	1	23.43	23.49	23.60	24.0	0.0	
Channel				375500	376000	381500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1852.5	1860	1907.5			
5	QPSK	1	1	23.43	23.53	23.54	24.0	0.0	

n7 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				505000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI2 BPSK	1	1	23.18	23.25	23.21			
40	PI2 BPSK	1	108	23.20	23.30	23.17	24.0	0.0	
40	PI2 BPSK	1	214	23.22	23.28	23.21			
40	PI2 BPSK	108	0	22.82	22.89	22.82	23.5	0.5	
40	PI2 BPSK	108	54	23.24	23.33	23.24	24.0	0.0	
40	PI2 BPSK	108	108	22.75	22.88	22.73	23.5	0.5	
40	PI2 BPSK	216	0	22.77	22.91	22.79			
40	QPSK	1	1	23.27	23.34	23.31			
40	QPSK	1	108	23.12	23.27	23.09	24.0	0.0	
40	QPSK	1	214	23.19	23.24	23.06			
40	QPSK	108	0	22.20	22.32	22.24	23.0	1.0	
40	QPSK	108	54	23.20	23.29	23.27	24.0	0.0	
40	QPSK	108	108	22.22	22.38	22.25	23.0	1.0	
40	QPSK	216	0	22.30	22.35	22.34			
40	16QAM	1	1	22.22	22.27	22.18	23.0	1.0	
40	16QAM	1	1	20.90	20.90	20.87	21.5	2.5	
40	256QAM	1	1	18.73	18.75	18.58	19.5	4.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	23.21	23.20	23.19	24.0	0.0	
Channel				502000	507000	511500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2512.5	2535	2577.5			
25	QPSK	1	1	23.10	23.18	23.14	24.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	23.20	23.28	23.15	24.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	23.18	23.29	23.14	24.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	23.13	23.32	23.17	24.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	23.11	23.22	23.14	24.0	0.0	

n66 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				346000	349000	353000			
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	1	1	23.30	23.40	23.23			
40	PI2 BPSK	1	108	23.32	23.34	23.21	24.0	0.0	
40	PI2 BPSK	1	214	23.17	23.28	23.13			
40	PI2 BPSK	108	0	22.77	22.94	22.91	23.5	0.5	
40	PI2 BPSK	108	54	23.20	23.33	23.26	24.0	0.0	
40	PI2 BPSK	108	108	22.71	22.87	22.73	23.5	0.5	
40	PI2 BPSK	216	0	22.73	22.89	22.73			
40	QPSK	1	1	23.41	23.49	23.46			
40	QPSK	1	108	23.30	23.37	23.32	24.0	0.0	
40	QPSK	1	214	23.17	23.32	23.18			
40	QPSK	108	0	22.35	22.42	22.38	23.0	1.0	
40	QPSK	108	54	23.39	23.47	23.42	24.0	0.0	
40	QPSK	108	108	22.34	22.39	22.27	23.0	1.0	
40	QPSK	216	0	22.37	22.44	22.41			
40	16QAM	1	1	22.44	22.51	22.34	23.0	1.0	
40	16QAM	1	1	21.01	21.03	20.85	21.5	2.5	
40	256QAM	1	1	18.94	19.08	18.98	19.5	4.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	23.39	23.35	23.29	24.0	0.0	
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	23.28	23.45	23.34	24.0	0.0	
Channel				344000	349000	344000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	23.29	23.44	23.25	24.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	23.28	23.41	23.32	24.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	23.30	23.38	23.35	24.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	23.35	23.31	23.37	24.0	0.0	



n38 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				519394	519500	519596		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	23.05	23.16	23.11		
40	PI/2 BPSK	1	53	23.01	23.12	22.97	24.0	0.0
40	PI/2 BPSK	1	104	22.94	23.07	22.94		
40	PI/2 BPSK	50	0	22.54	22.89	22.58	23.5	0.5
40	PI/2 BPSK	50	28	23.01	23.09	22.94	24.0	0.0
40	PI/2 BPSK	50	56	22.57	22.81	22.45	23.5	0.5
40	PI/2 BPSK	100	0	22.48	22.65	22.55		
40	QPSK	1	1	23.09	23.22	23.16		
40	QPSK	1	53	22.94	23.08	22.90	24.0	0.0
40	QPSK	1	104	23.01	23.10	22.98		
40	QPSK	50	0	22.10	22.13	22.08	23.0	1.0
40	QPSK	50	28	23.12	23.17	23.03	24.0	0.0
40	QPSK	80	56	21.90	22.08	22.00	23.0	1.0
40	QPSK	100	0	22.12	22.15	22.05		
40	16QAM	1	1	22.00	22.14	22.10	23.0	1.0
40	16QAM	1	1	20.49	20.68	20.63	21.5	2.5
40	256QAM	1	1	18.44	18.62	18.48	19.5	4.5
Channel				517002	516900	520398	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2585	2604.99		
30	QPSK	1	1	23.16	23.12	23.08	24.0	0.0
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2582.52	2595	2607.48		
25	QPSK	1	1	23.17	23.15	23.09	24.0	0.0
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	23.17	23.10	23.15	24.0	0.0
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	23.16	23.21	23.16	24.0	0.0
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	23.21	23.17	23.06	24.0	0.0

n41 Ant1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				526202	518598	526200		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	23.08	23.18	23.12		
100	PI/2 BPSK	1	137	23.04	23.15	22.99	24.0	0.0
100	PI/2 BPSK	1	271	22.95	23.10	22.97		
100	PI/2 BPSK	135	0	22.56	22.71	22.81	23.5	0.5
100	PI/2 BPSK	135	69	23.04	23.11	22.97	24.0	0.0
100	PI/2 BPSK	135	138	22.58	22.63	22.47	23.5	0.5
100	PI/2 BPSK	270	0	22.51	22.67	22.57		
100	QPSK	1	1	23.08	23.24	23.16		
100	QPSK	1	137	22.96	23.08	22.92	24.0	0.0
100	QPSK	1	271	23.03	23.13	23.00		
100	QPSK	135	0	22.13	22.16	22.10	23.0	1.0
100	QPSK	135	69	23.14	23.18	23.05	24.0	0.0
100	QPSK	135	138	21.92	22.09	22.01	23.0	1.0
100	QPSK	270	0	22.13	22.16	22.08		
100	16QAM	1	1	22.02	22.16	22.11	23.0	1.0
100	16QAM	1	1	20.52	20.69	20.66	21.5	2.5
100	256QAM	1	1	18.47	18.64	18.51	19.5	4.5
Channel				506300	518598	526398	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.99		
90	QPSK	1	1	22.94	23.21	23.11	24.0	0.0
Channel				507204	518598	529898	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2538.02	2592.99	2648.99		
80	QPSK	1	1	22.90	23.10	23.03	24.0	0.0
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	23.00	23.12	23.13	24.0	0.0
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	22.93	23.06	23.06	24.0	0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	22.91	23.17	23.06	24.0	0.0
Channel				503202	518598	533000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	23.01	23.20	23.06	24.0	0.0
Channel				502200	518598	534998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	22.85	23.07	23.06	24.0	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	23.00	23.15	23.15	24.0	0.0
Channel				500700	518598	536498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.05	2592.99	2684.98		
15	QPSK	1	1	23.00	23.08	23.06	24.0	0.0
Channel				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	22.89	23.14	23.01	24.0	0.0



### n7 Ant2

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	50500	50700	51000					
Frequency (MHz)	2620	2635	2650					
40	PI2 BPSK	1	1	23.20	23.18	23.12		
40	PI2 BPSK	1	108	23.18	23.23	23.10	24.0	0.0
40	PI2 BPSK	1	214	23.23	23.14	23.07		
40	PI2 BPSK	108	0	22.51	22.83	22.85	23.5	0.5
40	PI2 BPSK	108	54	22.82	23.14	23.13	24.0	0.0
40	PI2 BPSK	108	108	22.88	22.74	22.81	23.5	0.5
40	PI2 BPSK	216	0	22.81	22.74	22.81		
40	QPSK	1	1	23.06	23.30	23.28		
40	QPSK	1	108	23.24	23.19	23.08	24.0	0.0
40	QPSK	1	214	23.05	23.19	23.17		
40	QPSK	108	0	22.06	22.08	22.14	23.0	1.0
40	QPSK	108	54	23.03	23.29	23.21	24.0	0.0
40	QPSK	108	108	22.17	22.25	22.27	23.0	1.0
40	QPSK	216	0	22.02	22.31	22.30		
40	16QAM	1	1	22.16	22.25	22.17	23.0	1.0
40	84QAM	1	1	20.49	20.83	20.69	21.5	2.5
40	256QAM	1	1	18.82	18.72	18.88	19.5	4.5
Channel	50300	50700	51100	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2615	2635	2655					
30	QPSK	1	1	23.06	23.26	23.19	24.0	0.0
Channel	50200	50700	51150	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2572.5	2635	2677.5					
25	QPSK	1	1	23.01	23.10	23.12	24.0	0.0
Channel	50200	50700	51200	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2610	2635	2660					
20	PI2 BPSK	1	1	23.25	23.09	23.12	24.0	0.0
Channel	50150	50700	51250	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2607.5	2635	2662.5					
15	QPSK	1	1	23.01	23.19	23.24	24.0	0.0
Channel	50100	50700	51300	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2605	2635	2665					
10	QPSK	1	1	22.97	23.10	23.02	24.0	0.0
Channel	50050	50700	51350	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)	2592.5	2635	2677.5					
5	QPSK	1	1	23.20	23.10	23.05	24.0	0.0



n38 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				519394	519500	519596		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	22.69	22.72	22.80		
40	PI/2 BPSK	1	53	22.60	22.66	22.58		
40	PI/2 BPSK	1	104	22.59	22.60	22.56		
40	PI/2 BPSK	50	0	22.07	22.15	22.12	23.5	0.5
40	PI/2 BPSK	50	28	22.43	22.61	22.48	24.0	0.0
40	PI/2 BPSK	50	56	21.97	22.02	21.88	23.5	0.5
40	PI/2 BPSK	100	0	21.91	22.03	22.00		
40	QPSK	1	1	22.77	22.86	22.84		
40	QPSK	1	53	22.54	22.66	22.53	24.0	0.0
40	QPSK	1	104	22.56	22.61	22.50		
40	QPSK	50	0	21.46	21.59	21.43	23.0	1.0
40	QPSK	50	28	22.59	22.69	22.59	24.0	0.0
40	QPSK	80	56	21.51	21.54	21.53	23.0	1.0
40	QPSK	100	0	21.55	21.60	21.57		
40	16QAM	1	1	21.66	21.82	21.65	23.0	1.0
40	16QAM	1	1	20.49	20.58	20.40	21.5	2.5
40	256QAM	1	1	17.59	17.67	17.63	19.5	4.5
Channel				517002	516900	520398	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.91	2595	2604.99		
30	QPSK	1	1	22.20	22.22	22.03	24.0	0.0
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2592.52	2595	2607.48		
25	QPSK	1	1	22.10	22.20	22.11	24.0	0.0
Channel				516000	519000	523000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	22.18	22.15	22.07	24.0	0.0
Channel				515502	519000	524998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	22.19	22.12	22.09	24.0	0.0
Channel				515004	519000	525996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	22.08	22.10	22.11	24.0	0.0

n41 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				526202	518598	529200		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	22.86	22.94	22.91		
100	PI/2 BPSK	1	137	22.90	22.86	22.91	24.0	0.0
100	PI/2 BPSK	1	271	22.77	22.91	22.79		
100	PI/2 BPSK	135	0	22.47	22.55	22.41	23.5	0.5
100	PI/2 BPSK	135	69	22.93	22.98	22.85	24.0	0.0
100	PI/2 BPSK	135	138	22.40	22.49	22.44	23.5	0.5
100	PI/2 BPSK	270	0	22.36	22.53	22.45		
100	QPSK	1	1	22.96	23.03	22.99		
100	QPSK	1	137	22.87	23.00	22.85	24.0	0.0
100	QPSK	1	271	22.82	22.97	22.82		
100	QPSK	135	0	22.06	22.11	22.06	23.0	1.0
100	QPSK	135	69	22.93	22.97	22.91	24.0	0.0
100	QPSK	135	138	21.96	22.01	21.92	23.0	1.0
100	QPSK	270	0	21.98	22.03	21.94		
100	16QAM	1	1	21.91	22.08	21.97	23.0	1.0
100	16QAM	1	1	20.48	20.61	20.56	21.5	2.5
100	256QAM	1	1	18.48	18.52	18.46	19.5	4.5
Channel				506300	518598	520398	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.99		
90	QPSK	1	1	22.92	22.96	22.88	24.0	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2538.02	2592.99	2649.99		
80	QPSK	1	1	22.90	22.89	22.96	24.0	0.0
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	22.90	22.86	22.92	24.0	0.0
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	22.90	22.99	22.82	24.0	0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	22.94	22.94	22.97	24.0	0.0
Channel				503202	518598	533000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	22.88	22.91	22.86	24.0	0.0
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	22.85	22.89	22.86	24.0	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	22.93	22.97	22.91	24.0	0.0
Channel				500700	518598	536496	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.05	2592.99	2684.98		
15	QPSK	1	1	22.82	22.85	22.88	24.0	0.0
Channel				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	22.88	22.90	22.81	24.0	0.0



### Part270 n77 Ant3

BW (MHz)	Modulation	RB 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	22.75	22.80	22.80	24.0	0.0
100	PI2 BPSK	1	137	22.84	22.75	22.68		
100	PI2 BPSK	1	271	22.87	22.71	22.59		
100	PI2 BPSK	138	0	22.16	22.30	22.26	23.5	0.5
100	PI2 BPSK	138	69	22.61	22.77	22.70	24.0	0.0
100	PI2 BPSK	138	138	22.24	22.32	22.29	23.5	0.5
100	PI2 BPSK	270	0	22.26	22.37	22.35		
100	QPSK	1	1	22.79	22.81	22.84		
100	QPSK	1	137	22.66	22.79	22.69	24.0	0.0
100	QPSK	1	271	22.67	22.74	22.66		
100	QPSK	138	0	21.87	21.82	21.80	23.0	1.0
100	QPSK	138	69	22.83	22.78	22.71	24.0	0.0
100	QPSK	138	138	21.86	21.78	21.86	23.0	1.0
100	QPSK	270	0	21.76	21.82	21.81		
100	16QAM	1	1	21.37	21.48	21.32	23.0	1.0
100	16QAM	1	1	20.01	20.16	20.11	21.5	2.5
100	256QAM	1	1	18.14	18.18	18.09	19.5	4.5
Channel								
Frequency (MHz)				649334	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	22.74	22.74	22.47	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	22.55	22.69	22.59	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	22.73	22.64	22.61	24.0	0.0
Channel								
Frequency (MHz)				649668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	22.83	22.65	22.58	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	22.82	22.72	22.50	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	22.74	22.77	22.57	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3955.01		
30	QPSK	1	1	22.75	22.70	22.49	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	650500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	22.86	22.67	22.56	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	22.73	22.71	22.47	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	650834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	22.73	22.75	22.60	24.0	0.0
Channel								
Frequency (MHz)				647000	650000	650500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	22.67	22.78	22.52	24.0	0.0

### Part270 n77 PC2 Ant3

BW (MHz)	Modulation	RB 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	25.68	25.78	25.74	27.0	0.0
100	PI2 BPSK	1	137	25.65	25.82	25.79		
100	PI2 BPSK	1	271	25.64	25.77	25.80		
100	PI2 BPSK	138	0	25.22	25.37	25.20	26.5	0.5
100	PI2 BPSK	138	69	25.77	25.85	25.82	27.0	0.0
100	PI2 BPSK	138	138	25.27	25.33	25.18	26.5	0.5
100	PI2 BPSK	270	0	25.29	25.39	25.24		
100	QPSK	1	1	25.76	25.88	25.84		
100	QPSK	1	137	25.67	25.82	25.80	27.0	0.0
100	QPSK	1	271	25.69	25.78	25.68		
100	QPSK	138	0	24.69	24.81	24.69	26.0	1.0
100	QPSK	138	69	25.66	25.77	25.72	27.0	0.0
100	QPSK	138	138	24.64	24.82	24.72	26.0	1.0
100	QPSK	270	0	24.71	24.90	24.83		
100	16QAM	1	1	24.77	24.85	24.79	26.0	1.0
100	16QAM	1	1	23.35	23.39	23.28	24.5	2.5
100	256QAM	1	1	20.99	21.02	20.88	22.5	4.5
Channel								
Frequency (MHz)				649668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	25.82	25.82	25.69	27.0	0.0
Channel								
Frequency (MHz)				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	25.76	25.72	25.72	27.0	0.0
Channel								
Frequency (MHz)				649334	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	25.72	25.78	25.70	27.0	0.0
Channel								
Frequency (MHz)				649668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	25.68	25.77	25.81	27.0	0.0
Channel								
Frequency (MHz)				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	25.69	25.74	25.75	27.0	0.0
Channel								
Frequency (MHz)				647668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	25.85	25.81	25.70	27.0	0.0
Channel								
Frequency (MHz)				647668	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3955.01		
30	QPSK	1	1	25.68	25.71	25.75	27.0	0.0
Channel								
Frequency (MHz)				647500	650000	650500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	25.73	25.78	25.79	27.0	0.0
Channel								
Frequency (MHz)				647334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	25.76	25.79	25.81	27.0	0.0
Channel								
Frequency (MHz)				647168	650000	650834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	25.73	25.85	25.74	27.0	0.0
Channel								
Frequency (MHz)				647000	650000	650500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	25.66	25.86	25.80	27.0	0.0

### Part270 n78 Ant3

BW (MHz)	Modulation	RB 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	3750	3750			
100	PI2 BPSK	1	1		22.90		24.0	0.0	
100	PI2 BPSK	1	137		22.97				
100	PI2 BPSK	1	271		22.97				
100	PI2 BPSK	138	0		22.59		23.5	0.5	
100	PI2 BPSK	138	69		22.92		24.0	0.0	
100	PI2 BPSK	138	138		22.84		23.5	0.5	
100	PI2 BPSK	270	0		22.89				
100	QPSK	1	1		23.06				
100	QPSK	1	137		23.04		24.0	0.0	
100	QPSK	1	271		23.00				
100	QPSK	138	0		22.03		23.0	1.0	
100	QPSK	138	69		23.01		24.0	0.0	
100	QPSK	138	138		22.03		23.0	1.0	
100	QPSK	270	0		22.19				
100	16QAM	1	1		21.92		23.0	1.0	
100	16QAM	1	1		20.97		21.5	2.5	
100	256QAM	1	1		18.93		19.5	4.5	
Channel									
Frequency (MHz)				649668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		22.88	22.75	22.84	24.0	0.0
Channel									
Frequency (MHz)				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1		22.82	22.84	22.82	24.0	0.0
Channel									
Frequency (MHz)				649334	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1		22.98	23.01	22.80	24.0	0.0
Channel									
Frequency (MHz)				649668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3750	3770.01			
60	QPSK	1	1		22.85	22.87	22.88	24.0	0.0
Channel									
Frequency (MHz)				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1		22.78	22.86	22.86	24.0	0.0
Channel									
Frequency (MHz)				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1		22.84	22.85	22.86	24.0	0.0
Channel									
Frequency (MHz)				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3750	3785.01			



**Part270 n78 PC2 Ant3**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				3760	3760	3760		
Frequency (MHz)								
100	PI2 BPSK	1	1	25.80				
100	PI2 BPSK	1	137	25.79			27.0	0.0
100	PI2 BPSK	1	271	25.83				
100	PI2 BPSK	135	0	25.42			28.5	0.5
100	PI2 BPSK	135	69	25.75			27.0	0.0
100	PI2 BPSK	135	138	25.25			28.5	0.5
100	PI2 BPSK	270	0	25.28				
100	QPSK	1	1	25.86				
100	QPSK	1	137	25.82			27.0	0.0
100	QPSK	1	271	25.69				
100	QPSK	135	0	24.91			28.0	1.0
100	QPSK	135	69	25.84			27.0	0.0
100	QPSK	135	138	24.71			28.0	1.0
100	QPSK	270	0	24.78				
100	16QAM	1	1	25.07			28.0	1.0
100	16QAM	1	1	23.73			24.5	2.5
100	256QAM	1	1	21.65			22.5	4.5
Channel				649688	650000	650334		
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	25.80	25.85	25.78	27.0	0.0
Channel				649334	650000	650668		
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	25.80	25.78	25.85	27.0	0.0
Channel				649000	650000	651000		
Frequency (MHz)				3735	#VALUE!	3765		
70	QPSK	1	1	25.73	25.75	25.76	27.0	0.0
Channel				648668	650000	651334		
Frequency (MHz)				3730.02	3750	3730.01		
60	QPSK	1	1	25.80	25.81	25.81	27.0	0.0
Channel				648334	650000	651668		
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	25.77	25.79	25.85	27.0	0.0
Channel				648000	650000	652000		
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	25.81	25.84	25.79	27.0	0.0
Channel				647668	650000	652334		
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	25.75	25.74	25.81	27.0	0.0
Channel				647500	650000	652500		
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	25.80	25.75	25.74	27.0	0.0
Channel				647334	650000	652668		
Frequency (MHz)				3710.01	3750	3780.02		
20	QPSK	1	1	25.72	25.78	25.80	27.0	0.0
Channel				647188	650000	652834		
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	25.78	25.82	25.82	27.0	0.0
Channel				647000	650000	653000		
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	25.80	25.66	25.73	27.0	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	59202	51858	52900					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	20.97	21.10	21.02	22.5	0.0
100	PI2 BPSK	1	137	21.11	21.06	21.07		
100	PI2 BPSK	1	271	20.79	20.88	20.77	22.0	0.5
100	PI2 BPSK	135	0	20.46	20.59	20.55		
100	PI2 BPSK	135	69	20.74	20.88	20.76	22.5	0.0
100	PI2 BPSK	135	138	20.58	20.84	20.55		
100	PI2 BPSK	270	0	20.66	20.79	20.63	22.0	0.5
100	QPSK	1	1	21.02	21.12	21.08		
100	QPSK	1	137	20.95	21.07	20.96	22.5	0.0
100	QPSK	1	271	20.81	20.93	20.76		
100	QPSK	135	0	20.63	20.77	20.62	21.5	1.0
100	QPSK	135	69	21.07	21.09	21.00		
100	QPSK	135	138	20.32	20.38	20.25	21.5	1.0
100	QPSK	270	0	20.33	20.48	20.45		
100	16QAM	1	1	20.19	20.29	20.18	21.5	1.0
100	64QAM	1	1	19.56	19.73	19.66	20.0	2.5
100	256QAM	1	1	17.71	17.79	17.75	18.0	4.5
Channel	50520	51858	52998					
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	20.88	20.99	20.97	22.5	0.0
Channel	507204	518598	529998					
Frequency (MHz)	2536.02	2592.99	2649.99					
80	QPSK	1	1	20.87	21.02	20.99	22.5	0.0
Channel	505202	518598	531000					
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	20.89	21.07	20.89	22.5	0.0
Channel	505200	518598	531998					
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	20.99	21.03	21.03	22.5	0.0
Channel	504204	518598	532998					
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	20.88	21.09	21.00	22.5	0.0
Channel	502202	518598	534000					
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	20.91	20.96	21.02	22.5	0.0
Channel	502200	518598	534998					
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	20.92	20.95	21.02	22.5	0.0
Channel	501204	518598	535998					
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	20.98	20.99	20.98	22.5	0.0
Channel	500700	518598	536998					
Frequency (MHz)	2501.5	2592.99	2682.98					
15	QPSK	1	1	21.00	21.09	21.03	22.5	0.0
Channel	500202	518598	537000					
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	21.00	21.00	20.96	22.5	0.0



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)									
100	Pl/2 BPSK	1	1	23.56	23.61	23.05			
100	Pl/2 BPSK	1	137	23.44	23.56	23.03	24.0	0.0	
100	Pl/2 BPSK	1	271	23.22	23.41	23.05			
100	Pl/2 BPSK	135	0	23.42	23.35	23.11	23.5	0.5	
100	Pl/2 BPSK	135	69	23.38	23.55	23.01	24.0	0.0	
100	Pl/2 BPSK	135	138	23.28	23.35	22.91	23.5	0.5	
100	Pl/2 BPSK	270	0	23.40	23.43	22.98			
100	QPSK	1	1	23.54	23.65	23.08			
100	QPSK	1	137	23.49	23.53	23.10	24.0	0.0	
100	QPSK	1	271	23.35	23.43	23.03			
100	QPSK	135	0	22.66	22.65	22.95	23.0	1.0	
100	QPSK	135	69	23.51	23.58	23.01	24.0	0.0	
100	QPSK	135	138	22.44	22.38	22.29	23.0	1.0	
100	QPSK	270	0	22.43	22.45	22.39			
100	16QAM	1	1	22.54	22.59	22.66	23.0	1.0	
100	64QAM	1	1	21.45	21.34	20.98	21.5	2.5	
100	256QAM	1	1	19.01	19.03	19.05	19.5	4.5	
Channel				649334	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	22.47	22.59	22.01	24.0	0.0	
Channel				649334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	22.50	22.60	22.03	24.0	0.0	
Channel				649000	650000	663000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	22.47	22.51	22.06	24.0	0.0	
Channel				648668	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	QPSK	1	1	22.38	22.54	22.01	24.0	0.0	
Channel				648334	650000	663668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	22.44	22.57	22.05	24.0	0.0	
Channel				647668	650000	664000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	22.47	22.63	22.05	24.0	0.0	
Channel				647668	650000	664334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	22.51	22.53	22.01	24.0	0.0	
Channel				647500	650000	664500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	22.49	22.60	22.05	24.0	0.0	
Channel				647334	650000	664668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	22.50	22.55	22.05	24.0	0.0	
Channel				647168	650000	664834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	22.47	22.58	22.04	24.0	0.0	
Channel				647000	650000	665000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	22.38	22.64	22.03	24.0	0.0	

Part270 n78 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3760	3760			
Frequency (MHz)									
100	Pl/2 BPSK	1	1		23.56				
100	Pl/2 BPSK	1	137		23.51		24.0	0.0	
100	Pl/2 BPSK	1	271		23.38				
100	Pl/2 BPSK	135	0		23.30		23.5	0.5	
100	Pl/2 BPSK	135	69		23.50		24.0	0.0	
100	Pl/2 BPSK	135	138		23.30		23.5	0.5	
100	Pl/2 BPSK	270	0		23.38				
100	QPSK	1	1		23.40				
100	QPSK	1	137		23.48		24.0	0.0	
100	QPSK	1	271		23.38				
100	QPSK	135	0		22.60		23.0	1.0	
100	QPSK	135	69		23.53		24.0	0.0	
100	QPSK	135	138		22.43		23.0	1.0	
100	QPSK	270	0		22.39				
100	16QAM	1	1		22.54		23.0	1.0	
100	64QAM	1	1		21.29		21.5	2.5	
100	256QAM	1	1		18.98		19.5	4.5	
Channel				649668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3760	3765.01			
90	QPSK	1	1		22.66	22.67	22.82	24.0	0.0
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3760	3760.02			
80	QPSK	1	1		22.63	22.63	22.72	24.0	0.0
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3760	3765			
70	QPSK	1	1		22.68	22.61	22.74	24.0	0.0
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3760	3770.01			
60	QPSK	1	1		22.64	22.68	22.68	24.0	0.0
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3760	3775.02			
50	QPSK	1	1		22.74	22.68	22.73	24.0	0.0
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3760	3780			
40	QPSK	1	1		22.68	22.74	22.81	24.0	0.0
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3760	3785.01			
30	QPSK	1	1		22.72	22.72	22.82	24.0	0.0
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3760	3787.5			
25	QPSK	1	1		22.74	22.62	22.81	24.0	0.0
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3760	3790.02			
20	QPSK	1	1		22.74	22.60	22.69	24.0	0.0
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3760	3792.51			
15	QPSK	1	1		22.71	22.71	22.65	24.0	0.0
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3760	3795			
10	QPSK	1	1		22.67	22.73	22.68	24.0	0.0



### Part270 n77 Ant8

BW (MHz)	Modulation	RB 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	23.21	23.30	23.30		
100	PI2 BPSK	1	137	23.15	23.19	23.13	24.0	0.0
100	PI2 BPSK	1	271	23.05	23.15	23.00		
100	PI2 BPSK	135	0	22.81	22.75	22.65	23.5	0.5
100	PI2 BPSK	135	69	23.18	23.23	23.07	24.0	0.0
100	PI2 BPSK	135	138	22.52	22.68	22.58	23.0	0.5
100	PI2 BPSK	270	0	22.56	22.73	22.62		
100	QPSK	1	1	23.29	23.33	23.19		
100	QPSK	1	137	23.09	23.25	23.12	24.0	0.0
100	QPSK	1	271	22.97	23.13	23.06		
100	QPSK	135	0	22.20	22.31	22.21	23.0	1.0
100	QPSK	135	69	23.22	23.25	23.22	24.0	0.0
100	QPSK	135	138	22.03	22.16	22.08	23.0	1.0
100	QPSK	270	0	22.28	22.31	21.98		
100	16QAM	1	1	22.24	22.38	22.27	23.0	1.0
100	16QAM	1	1	20.68	20.83	20.65	21.5	2.5
100	256QAM	1	1	18.45	18.59	18.56	19.5	4.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	23.13	23.18	23.07	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	23.22	23.15	22.98	24.0	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	23.25	23.20	22.95	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	649334		
60	QPSK	1	1	23.22	23.25	22.97	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	23.23	23.28	23.02	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.20	23.18	22.95	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	648334		
30	QPSK	1	1	23.15	23.20	23.03	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	648500		
25	QPSK	1	1	23.12	23.17	23.00	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	648668		
20	QPSK	1	1	23.21	23.28	23.00	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	648434		
15	QPSK	1	1	23.21	23.22	23.05	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.25	23.21	23.04	24.0	0.0

### Part270 n77 PC2 Ant8

BW (MHz)	Modulation	RB 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	25.27	25.23	24.56		
100	PI2 BPSK	1	137	25.16	25.15	24.54	26.5	0.0
100	PI2 BPSK	1	271	25.17	25.27	24.67		
100	PI2 BPSK	135	0	24.81	24.84	24.30	26.0	0.5
100	PI2 BPSK	135	69	25.25	25.21	24.57	26.5	0.0
100	PI2 BPSK	135	138	24.63	24.63	24.06	26.0	0.5
100	PI2 BPSK	270	0	24.72	24.77	24.24		
100	QPSK	1	1	25.26	25.35	24.62		
100	QPSK	1	137	25.33	25.26	24.53	26.5	0.0
100	QPSK	1	271	25.09	25.13	24.51		
100	QPSK	135	0	24.41	24.31	23.71	25.5	1.0
100	QPSK	135	69	25.22	25.30	24.62	26.5	0.0
100	QPSK	135	138	24.17	24.11	24.25	25.5	1.0
100	QPSK	270	0	24.23	24.32	23.75		
100	16QAM	1	1	24.44	24.48	23.83	25.5	1.0
100	16QAM	1	1	22.81	22.74	22.17	24.0	2.5
100	256QAM	1	1	20.53	20.56	20.11	22.0	4.5
Channel								
Frequency (MHz)				648668	650000	649334		
90	QPSK	1	1	25.20	25.12	24.52	26.5	0.0
Channel								
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	25.33	25.12	24.50	26.5	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	25.17	25.13	24.53	26.5	0.0
Channel								
Frequency (MHz)				648668	650000	649334		
60	QPSK	1	1	25.15	25.08	24.52	26.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	25.18	25.13	24.57	26.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	25.33	25.09	24.52	26.5	0.0
Channel								
Frequency (MHz)				647668	650000	648334		
30	QPSK	1	1	25.27	25.20	24.52	26.5	0.0
Channel								
Frequency (MHz)				647500	650000	648500		
25	QPSK	1	1	25.21	25.14	24.59	26.5	0.0
Channel								
Frequency (MHz)				647334	650000	648668		
20	QPSK	1	1	25.11	25.16	24.56	26.5	0.0
Channel								
Frequency (MHz)				647168	650000	648434		
15	QPSK	1	1	25.14	25.19	24.54	26.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	25.27	25.19	24.59	26.5	0.0

### Part270 n78 Ant8

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		23.36			
100	PI2 BPSK	1	137		23.34		24.0	0.0
100	PI2 BPSK	1	271		23.26			
100	PI2 BPSK	135	0		22.94		23.5	0.5
100	PI2 BPSK	135	69		23.23		24.0	0.0
100	PI2 BPSK	135	138		22.80		23.5	0.5
100	PI2 BPSK	270	0		22.82			
100	QPSK	1	1		23.43			
100	QPSK	1	137		23.40		24.0	0.0
100	QPSK	1	271		23.24			
100	QPSK	135	0		22.41		23.0	1.0
100	QPSK	135	69		23.38		24.0	0.0
100	QPSK	135	138		22.28		23.0	1.0
100	QPSK	270	0		22.30			
100	16QAM	1	1		22.24		23.0	1.0
100	16QAM	1	1		21.24		21.5	2.5
100	256QAM	1	1		18.68		19.5	4.5
Channel								
Frequency (MHz)				648668	650000	649334		
90	QPSK	1	1	23.31	23.29	23.25	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	650668		
80	QPSK	1	1	23.29	23.26	22.41	24.0	0.0
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	23.33	23.37	23.34	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	651334		
60	QPSK	1	1	23.32	23.32	23.30	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	651668		
50	QPSK	1	1	23.39	23.38	23.36	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.30	23.35	23.29	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	652334		
30	QPSK	1	1	23.39	23.32	23.40	24.0	0.0
Channel								
Frequency (MHz)				647500	650000	652500		
25	QPSK	1	1	23.33	23.35	23.38	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	652668		
20	QPSK	1	1	23.39	23.26	23.29	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	652834		
15	QPSK	1	1	23.27	23.28	23.32	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.35	23.40	23.34	24.0	0.0



**Part270 n78 PC2 Ant8**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)
Channel				3760	3760	3760		
Frequency (MHz)								
100	PI/2 BPSK	1	1		25.81			
100	PI/2 BPSK	1	137		25.73		28.5	0.0
100	PI/2 BPSK	1	271		25.23			
100	PI/2 BPSK	135	0		25.38		28.0	0.5
100	PI/2 BPSK	135	89		25.84		28.5	0.0
100	PI/2 BPSK	135	138		25.37		28.0	0.5
100	PI/2 BPSK	270	0		25.41			
100	QPSK	1	1		25.88			
100	QPSK	1	137		25.59		28.5	0.0
100	QPSK	1	271		25.21			
100	QPSK	135	0		25.31		25.5	1.0
100	QPSK	135	89		25.88		28.5	0.0
100	QPSK	135	138		25.15		25.5	1.0
100	QPSK	270	0		25.32			
100	16QAM	1	1		24.97		25.5	1.0
100	16QAM	1	1		23.83		24.0	2.5
100	256QAM	1	1		21.52		22.0	4.5
Channel				649688	650000	650334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	25.84	25.85	25.93	28.5	0.0
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	25.91	25.78	25.90	28.5	0.0
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	25.91	25.82	25.84	28.5	0.0
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3750	3750.01		
60	QPSK	1	1	25.90	25.88	25.87	28.5	0.0
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	25.80	25.91	25.88	28.5	0.0
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	25.93	25.82	25.91	28.5	0.0
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	25.92	25.91	25.81	28.5	0.0
Channel				647300	650000	652500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	25.81	25.82	25.85	28.5	0.0
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	25.88	25.92	25.89	28.5	0.0
Channel				647188	650000	652834	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	25.79	25.93	25.87	28.5	0.0
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	25.93	25.88	25.81	28.5	0.0



### Part270 n77 Ant9

BW (MHz)	Modulation	RB 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	20.49	20.50	20.51		
100	PI2 BPSK	1	137	20.43	20.51	20.49		0.0
100	PI2 BPSK	1	271	20.42	20.42	20.42		
100	PI2 BPSK	138	0	20.35	20.48	20.48	21.5	0.0
100	PI2 BPSK	138	69	20.44	20.41	20.46	21.5	0.0
100	PI2 BPSK	138	138	20.38	20.40	20.43	21.5	0.0
100	PI2 BPSK	270	0	20.46	20.43	20.45		
100	QPSK	1	1	20.55	20.62	20.62		
100	QPSK	1	137	20.42	20.46	20.41	21.5	0.0
100	QPSK	1	271	20.37	20.48	20.47		
100	QPSK	138	0	20.39	20.39	20.37	21.5	0.0
100	QPSK	138	69	20.54	20.61	20.55	21.5	0.0
100	QPSK	138	138	20.37	20.46	20.41	21.5	0.0
100	QPSK	270	0	20.50	20.60	20.53		
100	16QAM	1	1	20.39	20.41	20.43	21.5	0.0
100	16QAM	1	1	20.32	20.35	20.31	21.5	0.0
100	256QAM	1	1	18.42	18.55	18.51	19.5	2.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	20.44	20.51	20.52	21.5	0.0
Channel								
Frequency (MHz)				649334	650000	662668		
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				649000	650000	663000		
70	QPSK	1	1	20.39	20.48	20.44	21.5	0.0
Channel								
Frequency (MHz)				648668	650000	663334		
60	QPSK	1	1	20.51	20.43	20.48	21.5	0.0
Channel								
Frequency (MHz)				648334	650000	663668		
50	QPSK	1	1	3725.01	3840	3955.02		
Channel								
Frequency (MHz)				20.36	20.37	20.47	21.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	20.42	20.36	20.43	21.5	0.0
Channel								
Frequency (MHz)				647668	650000	664334		
30	QPSK	1	1	3710.02	3840	3990.01		
Channel								
Frequency (MHz)				647500	650000	664500		
25	QPSK	1	1	20.46	20.40	20.44	21.5	0.0
Channel								
Frequency (MHz)				647334	650000	664668		
20	QPSK	1	1	20.37	20.48	20.44	21.5	0.0
Channel								
Frequency (MHz)				647168	650000	664834		
15	QPSK	1	1	3707.52	3840	3972.51		
Channel								
Frequency (MHz)				20.34	20.36	20.42	21.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	20.54	20.57	20.45	21.5	0.0

### Part270 n77 PC2 Ant9

BW (MHz)	Modulation	RB 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	24.01	23.93	23.87		
100	PI2 BPSK	1	137	23.79	23.92	23.85	24.5	0.0
100	PI2 BPSK	1	271	23.88	23.88	23.78		
100	PI2 BPSK	138	0	23.92	23.98	23.91	24.5	0.0
100	PI2 BPSK	138	69	23.80	23.90	23.84	24.5	0.0
100	PI2 BPSK	138	138	23.85	23.84	23.87	24.5	0.0
100	PI2 BPSK	270	0	23.74	23.86	23.85		
100	QPSK	1	1	23.96	24.10	23.91		
100	QPSK	1	137	23.79	23.93	23.85	24.5	0.0
100	QPSK	1	271	23.86	23.89	23.85		
100	QPSK	138	0	23.94	23.95	23.88	24.5	0.0
100	QPSK	138	69	23.80	23.90	23.83	24.5	0.0
100	QPSK	138	138	23.76	23.88	23.86	24.5	0.0
100	QPSK	270	0	23.87	23.93	23.90		
100	16QAM	1	1	23.72	23.86	23.81	24.5	0.0
100	16QAM	1	1	23.87	23.87	23.85	24.5	0.0
100	256QAM	1	1	21.77	21.94	21.84	22.5	2.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	23.71	23.88	23.82	24.5	0.0
Channel								
Frequency (MHz)				649334	650000	662668		
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				649000	650000	663000		
70	QPSK	1	1	23.72	23.92	23.84	24.5	0.0
Channel								
Frequency (MHz)				648668	650000	663334		
60	QPSK	1	1	23.70	23.86	23.77	24.5	0.0
Channel								
Frequency (MHz)				648334	650000	663668		
50	QPSK	1	1	3725.01	3840	3955.02		
Channel								
Frequency (MHz)				23.86	23.90	23.87	24.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	23.83	23.76	23.85	24.5	0.0
Channel								
Frequency (MHz)				647668	650000	664334		
30	QPSK	1	1	3710.02	3840	3990.01		
Channel								
Frequency (MHz)				647500	650000	664500		
25	QPSK	1	1	23.76	23.87	23.81	24.5	0.0
Channel								
Frequency (MHz)				647334	650000	664668		
20	QPSK	1	1	23.87	23.85	23.79	24.5	0.0
Channel								
Frequency (MHz)				647168	650000	664834		
15	QPSK	1	1	3707.52	3840	3972.51		
Channel								
Frequency (MHz)				23.71	23.92	23.80	24.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	23.72	23.87	23.86	24.5	0.0

### Part270 n78 Ant9

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1	20.48			21.5	0.0
100	PI2 BPSK	1	137	20.43				
100	PI2 BPSK	1	271	20.39				
100	PI2 BPSK	138	0	20.48			21.5	0.0
100	PI2 BPSK	138	69	20.33			21.5	0.0
100	PI2 BPSK	138	138	20.38			21.5	0.0
100	PI2 BPSK	270	0	20.45				
100	QPSK	1	1	20.52				
100	QPSK	1	137	20.46			21.5	0.0
100	QPSK	1	271	20.50				
100	QPSK	138	0	20.40			21.5	0.0
100	QPSK	138	69	20.61			21.5	0.0
100	QPSK	138	138	20.43			21.5	0.0
100	QPSK	270	0	20.55				
100	16QAM	1	1	20.38			21.5	0.0
100	16QAM	1	1	20.33			21.5	0.0
100	256QAM	1	1	18.50			19.5	2.0
Channel								
Frequency (MHz)				648668	650000	663334		
90	QPSK	1	1	20.45	20.51	20.45	21.5	0.0
Channel								
Frequency (MHz)				649334	650000	660968		
80	QPSK	1	1	20.29	20.36	20.38	21.5	0.0
Channel								
Frequency (MHz)				649000	650000	661000		
70	QPSK	1	1	20.38	20.48	20.37	21.5	0.0
Channel								
Frequency (MHz)				648668	650000	661334		
60	QPSK	1	1	20.50	20.43	20.43	21.5	0.0
Channel								
Frequency (MHz)				648334	650000	661668		
50	QPSK	1	1	20.34	20.32	20.49	21.5	0.0
Channel								
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	20.44	20.34	20.44	21.5	0.0
Channel								
Frequency (MHz)				647668	650000	662334		
30	QPSK	1	1	20.47	20.41	20.43	21.5	0.0
Channel								
Frequency (MHz)				647500	650000	662500		
25	QPSK	1	1	20.39	20.28	20.39	21.5	0.0
Channel								
Frequency (MHz)				647334	650000	662668		
20	QPSK	1	1	20.31	20.45	20.38	21.5	0.0
Channel								
Frequency (MHz)				647168	650000	662834		
15	QPSK	1	1	3707.52	3750	3792.51		
Channel								
Frequency (MHz)				20.32	20.26	20.41	21.5	0.0
Channel								
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	20.48	20.55	20.39	21.5	0.0



**Part270 n78 PC2 Ant9**

BW [MHz]	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		23.89				
100	PI2 BPSK	1	137		23.89		24.5	0.0	
100	PI2 BPSK	1	271		23.88		24.5	0.0	
100	PI2 BPSK	135	0		23.91		24.5	0.0	
100	PI2 BPSK	135	69		23.85		24.5	0.0	
100	PI2 BPSK	135	138		23.78		24.5	0.0	
100	PI2 BPSK	270	0		23.79				
100	QPSK	1	1		24.02				
100	QPSK	1	137		23.91		24.5	0.0	
100	QPSK	1	271		23.84				
100	QPSK	135	0		23.98		24.5	0.0	
100	QPSK	135	69		23.90		24.5	0.0	
100	QPSK	135	138		23.86		24.5	0.0	
100	QPSK	270	0		23.93				
100	16QAM	1	1		23.81		24.5	0.0	
100	16QAM	1	1		23.81		24.5	0.0	
100	256QAM	1	1		21.91		22.5	2.0	
Channel				649688	650000	650334		MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		23.72	23.85	23.75	24.5	0.0
Channel				649334	650000	650668		MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1		23.81	23.83	23.77	24.5	0.0
Channel				649000	650000	651000		MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1		23.70	23.86	23.86	24.5	0.0
Channel				648668	650000	651334		MPR (dB)	
Frequency (MHz)				3730.02	3750	3750.01			
60	QPSK	1	1		23.72	23.87	23.70	24.5	0.0
Channel				648334	650000	651668		MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1		23.87	23.87	23.84	24.5	0.0
Channel				648000	650000	652000		MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1		23.78	23.77	23.85	24.5	0.0
Channel				647668	650000	652334		MPR (dB)	
Frequency (MHz)				3715.02	3750	3765.01			
30	QPSK	1	1		23.84	23.74	23.73	24.5	0.0
Channel				647300	650000	652500		MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1		23.70	23.84	23.78	24.5	0.0
Channel				647334	650000	652668		MPR (dB)	
Frequency (MHz)				3710.01	3750	3780.02			
20	QPSK	1	1		23.84	23.81	23.74	24.5	0.0
Channel				647188	650000	652834		MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1		23.66	23.90	23.78	24.5	0.0
Channel				647000	650000	653000		MPR (dB)	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1		23.70	23.88	23.83	24.5	0.0



Reduced Power Mode for DSI6

n5 DSI6 Ant0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				165800	167300	167900			
Frequency (MHz)				834	836.5	839			
20	PI2 BPSK	1	1	23.04	23.13	22.99			
20	PI2 BPSK	1	53	22.90	23.03	22.93	24.0	0.0	
20	PI2 BPSK	1	104	23.00	23.10	22.97			
20	PI2 BPSK	50	0	22.56	22.64	22.55	23.5	0.5	
20	PI2 BPSK	50	28	22.82	22.98	22.85	24.0	0.0	
20	PI2 BPSK	50	56	22.57	22.70	22.53			
20	PI2 BPSK	100	0	22.61	22.73	22.58	23.5	0.5	
20	QPSK	1	1	23.16	23.19	23.02			
20	QPSK	1	53	22.88	23.06	22.91	24.0	0.0	
20	QPSK	1	104	23.09	23.12	23.04			
20	QPSK	50	0	22.15	22.17	22.13	23.0	1.0	
20	QPSK	50	28	23.11	23.14	23.08	24.0	0.0	
20	QPSK	50	56	22.12	22.22	22.06	23.0	1.0	
20	QPSK	100	0	22.28	22.31	22.24			
20	16QAM	1	1	22.02	22.05	21.98	23.0	1.0	
20	64QAM	1	1	20.87	21.02	20.95	21.5	2.5	
20	256QAM	1	1	18.39	18.49	18.37	19.5	4.5	
Channel				165300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				831.5	836.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	23.03	23.10	22.97	24.0	0.0	
Channel				165800	167300	168800	Tune-up limit	MPR	
Frequency (MHz)				833	836.5	844	(dBm)	(dB)	
10	QPSK	1	1	23.05	23.02	22.95	24.0	0.0	
Channel				165300	167300	169300	Tune-up limit	MPR	
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	23.09	23.04	22.85	24.0	0.0	



**n41 DSI6 Ant0**

Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel	505202	518598	532000					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	19.17	19.38	19.27	20.5	0.0
100	PI2 BPSK	1	137	19.40	19.41	19.38		
100	PI2 BPSK	1	271	19.23	19.32	19.39		
100	PI2 BPSK	135	61	19.39	19.44	19.28	20.5	0.0
100	PI2 BPSK	135	69	19.17	19.34	19.16	20.5	0.0
100	PI2 BPSK	135	138	19.26	19.38	19.14	20.5	0.0
100	PI2 BPSK	270	0	19.34	19.40	19.33		
100	QPSK	1	1	19.38	19.47	19.48	20.5	0.0
100	QPSK	1	137	19.42	19.38	19.30		
100	QPSK	1	271	19.27	19.42	19.33		
100	QPSK	135	0	19.30	19.37	19.27	20.5	0.0
100	QPSK	135	69	19.22	19.39	19.27	20.5	0.0
100	QPSK	135	138	19.19	19.32	19.20	20.5	0.0
100	QPSK	270	0	19.28	19.36	19.12		
100	16QAM	1	1	19.37	19.30	19.37	20.5	0.0
100	64QAM	1	1	19.29	19.37	19.28	20.5	0.0
100	256QAM	1	1	18.38	18.54	18.37	19.5	1.0
Channel	505203	518598	532000					
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	19.40	19.31	19.11	20.5	0.0
Channel	507204	518598	529998					
Frequency (MHz)	2536.02	2592.99	2649.99					
80	QPSK	1	1	19.17	19.26	19.11	20.5	0.0
Channel	508202	518598	531000					
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	19.17	19.31	19.08	20.5	0.0
Channel	505200	518598	531998					
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	19.38	19.32	19.11	20.5	0.0
Channel	504204	518598	532998					
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	19.21	19.27	19.13	20.5	0.0
Channel	503202	518598	534000					
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	19.08	19.23	19.31	20.5	0.0
Channel	502200	518598	534998					
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	19.29	19.32	19.25	20.5	0.0
Channel	501204	518598	535998					
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	19.34	19.23	19.15	20.5	0.0
Channel	500700	518598	536498					
Frequency (MHz)	2501.5	2592.99	2682.48					
15	QPSK	1	1	19.29	19.21	19.28	20.5	0.0
Channel	500202	518598	537000					
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	19.35	19.20	19.12	20.5	0.0





### n2 DS16 Ant1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				1860	1860	1900		
20	PI2 BPSK	1	1	20.31	20.36	20.16		
20	PI2 BPSK	1	53	20.29	20.24	20.15	21.5	0.0
20	PI2 BPSK	1	164	20.03	20.13	20.05		
20	PI2 BPSK	50	0	20.24	20.26	20.34	21.5	0.0
20	PI2 BPSK	50	28	20.14	20.25	20.12	21.5	0.0
20	PI2 BPSK	50	58	20.03	20.18	19.98	21.5	0.0
20	PI2 BPSK	100	0	20.27	20.35	20.32		
20	QPSK	1	1	20.17	20.46	20.21		
20	QPSK	1	53	20.02	20.12	19.94	21.5	0.0
20	QPSK	1	104	20.38	20.32	20.24		
20	QPSK	50	0	20.26	20.39	20.19	21.5	0.0
20	QPSK	50	28	20.32	20.35	20.21	21.5	0.0
20	QPSK	50	58	20.22	20.24	20.16	21.5	0.0
20	QPSK	100	0	20.15	20.30	20.28		
20	16QAM	1	1	20.14	20.09	20.01	21.5	0.0
20	16QAM	1	1	20.06	20.04	20.16	21.5	0.0
20	256QAM	1	1	18.78	18.95	18.76	19.5	2.0
Channel								
Frequency (MHz)				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Channel				375000	376000	381000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.17	20.11	20.10	21.5	0.0
Channel								
Frequency (MHz)				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Channel				375000	376000	381000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.28	20.29	20.30	21.5	0.0
Channel								
Frequency (MHz)				375500	376000	381500	Tune-up limit (dBm)	MPR (dB)
Channel				375500	376000	381500	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	20.22	20.30	20.16	21.5	0.0

### n7 DS16 Ant1

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				2520	2535	2550		
40	PI2 BPSK	1	1	19.24	19.22	19.23		
40	PI2 BPSK	1	108	19.17	19.32	19.24	20.8	0.0
40	PI2 BPSK	1	214	19.08	19.07	19.08		
40	PI2 BPSK	108	0	19.16	19.36	19.22	20.8	0.0
40	PI2 BPSK	108	54	19.20	19.14	19.19	20.8	0.0
40	PI2 BPSK	108	108	19.10	19.02	18.93	20.8	0.0
40	PI2 BPSK	216	0	19.19	19.35	19.11		
40	QPSK	1	1	19.16	19.44	19.25		
40	QPSK	1	108	19.09	19.02	18.97	20.8	0.0
40	QPSK	1	214	19.27	19.38	19.14		
40	QPSK	108	0	19.17	19.15	19.09	20.8	0.0
40	QPSK	108	54	19.26	19.39	19.35	20.8	0.0
40	QPSK	108	108	19.20	19.21	19.11	20.8	0.0
40	QPSK	216	0	19.16	19.30	19.11		
40	16QAM	1	1	19.25	19.28	19.10	20.8	0.0
40	16QAM	1	1	19.21	19.24	19.20	20.8	0.0
40	256QAM	1	1	18.73	18.90	18.72	19.5	1.3
Channel								
Frequency (MHz)				504000	507000	510000	Tune-up limit (dBm)	MPR (dB)
Channel				503000	507000	510000	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	19.02	19.05	19.04	20.8	0.0
Channel								
Frequency (MHz)				502000	507000	510000	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	510000	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	19.10	19.98	18.85	20.9	0.0
Channel								
Frequency (MHz)				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
20	PI2 BPSK	1	1	19.13	19.25	19.25	20.8	0.0
Channel								
Frequency (MHz)				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	19.06	19.38	19.13	20.8	0.0
Channel								
Frequency (MHz)				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	19.13	19.12	19.22	20.9	0.0
Channel								
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)	MPR (dB)
Channel				2502.5	2535	2567.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	19.28	19.11	19.12	20.8	0.0

### n66 DS16 Ant1

BW (MHz)	Modulation	RB 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	20.90	21.03	20.83		
40	PI2 BPSK	1	108	20.77	21.00	20.89	21.8	0.0
40	PI2 BPSK	1	214	20.87	20.81	20.74		
40	PI2 BPSK	108	0	20.83	20.97	20.78	21.8	0.0
40	PI2 BPSK	108	54	20.90	20.95	20.72	21.8	0.0
40	PI2 BPSK	108	108	20.84	20.96	20.86	21.8	0.0
40	PI2 BPSK	216	0	20.78	20.93	20.75		
40	QPSK	1	1	21.02	21.06	20.93		
40	QPSK	1	108	20.93	20.91	20.73	21.8	0.0
40	QPSK	1	214	20.86	20.95	20.89		
40	QPSK	108	0	20.80	20.86	20.76	21.8	0.0
40	QPSK	108	54	20.77	20.91	20.74	21.8	0.0
40	QPSK	108	108	20.87	20.89	20.75	21.8	0.0
40	QPSK	216	0	20.81	20.92	20.84		
40	16QAM	1	1	20.88	20.91	20.75	21.8	0.0
40	16QAM	1	1	21.01	21.03	20.85	21.5	0.3
40	256QAM	1	1	18.72	18.93	18.75	19.5	2.3
Channel								
Frequency (MHz)				346000	349000	352000	Tune-up limit (dBm)	MPR (dB)
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	20.75	20.73	20.61	21.8	0.0
Channel								
Frequency (MHz)				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	20.70	20.72	20.70	21.8	0.0
Channel								
Frequency (MHz)				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	20.80	20.81	20.66	21.8	0.0
Channel								
Frequency (MHz)				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.70	20.82	20.74	21.8	0.0
Channel								
Frequency (MHz)				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.74	20.78	20.74	21.8	0.0
Channel								
Frequency (MHz)				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	1	20.82	20.84	20.64	21.8	0.0



n38 DSI6 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				519394	519500	519596			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	19.37	19.37	19.24			
40	PI/2 BPSK	1	53	19.25	19.22	18.99	20.6	0.0	
40	PI/2 BPSK	1	104	19.13	19.25	19.03			
40	PI/2 BPSK	50	0	19.32	19.25	19.26	20.6	0.0	
40	PI/2 BPSK	50	28	19.01	19.16	19.08	20.6	0.0	
40	PI/2 BPSK	50	56	19.07	19.28	19.33	20.6	0.0	
40	PI/2 BPSK	100	0	19.12	19.24	19.26			
40	QPSK	1	1	19.28	19.35	19.25			
40	QPSK	1	53	19.07	19.22	19.05	20.6	0.0	
40	QPSK	1	104	19.21	19.16	19.32			
40	QPSK	50	0	19.33	19.18	19.24	20.6	0.0	
40	QPSK	50	28	19.17	19.41	19.01	20.6	0.0	
40	QPSK	80	56	19.11	19.16	19.28	20.6	0.0	
40	QPSK	100	0	19.16	19.22	19.13			
40	16QAM	1	1	18.92	19.19	18.97	20.6	0.0	
40	16QAM	1	1	19.00	19.18	19.16	20.6	0.0	
40	256QAM	1	1	18.09	18.22	18.20	19.5	1.1	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	19.15	19.21	19.00	20.6	0.0	
Channel				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2582.52	2595	2607.48			
25	QPSK	1	1	19.17	19.19	19.26	20.6	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	19.03	19.17	19.04	20.6	0.0	
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	19.23	19.18	19.25	20.6	0.0	
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	19.24	19.20	19.32	20.6	0.0	

n41 DSI6 Ant1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				526202	518998	529000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	19.38	19.38	19.39			
100	PI/2 BPSK	1	137	19.24	19.24	18.98	20.6	0.0	
100	PI/2 BPSK	1	271	19.24	19.35	19.21			
100	PI/2 BPSK	135	0	19.36	19.42	19.28	20.6	0.0	
100	PI/2 BPSK	135	69	19.15	19.34	19.14	20.6	0.0	
100	PI/2 BPSK	135	138	19.24	19.33	19.33	20.6	0.0	
100	PI/2 BPSK	270	0	19.19	19.38	19.30			
100	QPSK	1	1	19.34	19.31	19.40			
100	QPSK	1	137	19.20	19.30	19.11	20.6	0.0	
100	QPSK	1	271	19.23	19.33	19.34			
100	QPSK	135	0	19.35	19.26	19.31	20.6	0.0	
100	QPSK	135	69	19.18	19.44	19.07	20.6	0.0	
100	QPSK	135	138	19.20	19.15	19.33	20.6	0.0	
100	QPSK	270	0	19.31	19.38	19.30			
100	16QAM	1	1	19.02	19.22	18.95	20.6	0.0	
100	16QAM	1	1	19.16	19.34	19.30	20.6	0.0	
100	256QAM	1	1	18.19	18.35	18.22	19.5	1.1	
Channel				508300	518998	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.99			
90	QPSK	1	1	19.23	19.32	19.23	20.6	0.0	
Channel				507204	518998	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2538.02	2592.99	2648.99			
80	QPSK	1	1	19.09	19.22	19.06	20.6	0.0	
Channel				506202	518998	521000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	19.24	19.20	19.22	20.6	0.0	
Channel				505200	518998	521998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2524	2592.99	2659.99			
60	QPSK	1	1	19.07	19.15	19.30	20.6	0.0	
Channel				504204	518998	522998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	19.06	19.24	18.95	20.6	0.0	
Channel				503202	518998	523000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	19.21	19.15	19.22	20.6	0.0	
Channel				502200	518998	524996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.99			
30	QPSK	1	1	19.13	19.23	19.27	20.6	0.0	
Channel				501204	518998	525998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	19.12	19.27	19.30	20.6	0.0	
Channel				500700	518998	526496	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2503.05	2592.99	2684.98			
15	QPSK	1	1	19.22	19.28	18.96	20.6	0.0	
Channel				500202	518998	527000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	19.27	19.25	19.26	20.6	0.0	





n38 DSI6 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				519394	519500	519596		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	20.73	20.83	20.74		
40	PI/2 BPSK	1	53	20.53	20.88	20.79	22.1	0.0
40	PI/2 BPSK	1	104	20.43	20.74	20.59		
40	PI/2 BPSK	50	0	20.53	20.51	20.51	22.1	0.0
40	PI/2 BPSK	50	28	20.74	20.76	20.79	22.1	0.0
40	PI/2 BPSK	50	56	20.67	20.64	20.75	22.1	0.0
40	PI/2 BPSK	100	0	20.51	20.70	20.53		
40	QPSK	1	1	20.81	20.98	20.95		
40	QPSK	1	53	20.68	20.88	20.95	22.1	0.0
40	QPSK	1	104	20.71	20.81	20.63		
40	QPSK	50	0	20.77	20.73	20.78	22.1	0.0
40	QPSK	50	28	20.75	20.88	20.88	22.1	0.0
40	QPSK	50	56	20.65	20.67	20.81		
40	QPSK	100	0	20.59	20.72	20.50	22.1	0.0
40	16QAM	1	1	20.81	20.50	20.67	22.1	0.0
40	16QAM	1	1	20.18	20.31	20.23	21.5	0.6
40	256QAM	1	1	18.15	18.22	18.15	19.5	2.6
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	20.63	20.75	20.92	22.1	0.0
Channel				516504	519000	521498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2582.52	2595	2607.48		
25	QPSK	1	1	20.07	20.79	20.58	22.1	0.0
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	20.68	20.79	20.88	22.1	0.0
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	QPSK	1	1	20.65	20.82	20.56	22.1	0.0
Channel				515004	519000	522998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	QPSK	1	1	20.64	20.82	20.79	22.1	0.0

n41 DSI6 Ant2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				526292	518998	529200		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	20.87	20.84	20.82		
100	PI/2 BPSK	1	137	20.62	20.85	20.88	22.1	0.0
100	PI/2 BPSK	1	271	20.57	20.75	20.71		
100	PI/2 BPSK	135	0	20.83	20.65	20.87	22.1	0.0
100	PI/2 BPSK	135	69	20.88	20.92	20.96	22.1	0.0
100	PI/2 BPSK	135	138	20.70	20.68	20.80	22.1	0.0
100	PI/2 BPSK	270	0	20.62	20.74	20.64		
100	QPSK	1	1	20.87	21.04	20.99		
100	QPSK	1	137	20.79	20.88	20.85	22.1	0.0
100	QPSK	1	271	20.73	20.89	20.74		
100	QPSK	135	0	20.80	20.82	20.79	22.1	0.0
100	QPSK	135	69	20.91	20.97	20.95	22.1	0.0
100	QPSK	135	138	20.70	20.74	20.87		
100	QPSK	270	0	20.64	20.84	20.87	22.1	0.0
100	16QAM	1	1	20.83	20.68	20.72	22.1	0.0
100	16QAM	1	1	20.25	20.32	20.25	21.5	0.6
100	256QAM	1	1	18.28	18.33	18.28	19.5	2.6
Channel				506300	518998	520998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.99		
90	QPSK	1	1	20.58	20.77	20.94	22.1	0.0
Channel				507204	518998	520998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2538.02	2592.99	2648.99		
80	QPSK	1	1	20.57	20.68	20.62	22.1	0.0
Channel				506202	518998	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	20.72	20.71	20.81	22.1	0.0
Channel				505200	518998	531998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2524	2592.99	2659.99		
60	QPSK	1	1	20.67	20.71	20.59	22.1	0.0
Channel				504204	518998	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	20.55	20.80	20.77	22.1	0.0
Channel				503202	518998	533000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	20.63	20.82	20.88	22.1	0.0
Channel				502200	518998	534998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.99		
30	QPSK	1	1	20.52	20.67	20.54	22.1	0.0
Channel				501204	518998	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	20.73	20.71	20.76	22.1	0.0
Channel				500700	518998	536498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.05	2592.99	2684.98		
15	QPSK	1	1	20.64	20.68	20.63	22.1	0.0
Channel				500202	518998	537000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.01	2592.99	2685		
10	QPSK	1	1	20.46	20.72	20.76	22.1	0.0



### Part270 n77 Ant3

BW (MHz)	Modulation	RB 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	22.75	22.80	22.80	24.0	0.0
100	PI2 BPSK	1	137	22.84	22.75	22.68		
100	PI2 BPSK	1	271	22.87	22.71	22.59		
100	PI2 BPSK	138	0	22.16	22.30	22.26	23.5	0.5
100	PI2 BPSK	138	69	22.61	22.77	22.70	24.0	0.0
100	PI2 BPSK	138	138	22.24	22.32	22.29	23.5	0.5
100	PI2 BPSK	270	0	22.26	22.37	22.35		
100	QPSK	1	1	22.79	22.81	22.84		
100	QPSK	1	137	22.86	22.79	22.69	24.0	0.0
100	QPSK	1	271	22.67	22.74	22.66		
100	QPSK	138	0	21.87	21.82	21.80	23.0	1.0
100	QPSK	138	69	22.83	22.78	22.71	24.0	0.0
100	QPSK	138	138	21.86	21.78	21.86	23.0	1.0
100	QPSK	270	0	21.76	21.82	21.81		
100	16QAM	1	1	21.37	21.48	21.32	23.0	1.0
100	16QAM	1	1	20.01	20.16	20.11	21.5	2.5
100	256QAM	1	1	18.14	18.18	18.09	19.5	4.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	22.74	22.74	22.47	24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	22.73	22.64	22.61	24.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	22.83	22.85	22.58	24.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	3725.01	3840	3955.02		
Channel								
Frequency (MHz)				22.82	22.72	22.50	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	22.74	22.77	22.57	24.0	0.0
Channel								
Frequency (MHz)				647668	650000	648334		
30	QPSK	1	1	3710.02	3840	3950.01		
Channel								
Frequency (MHz)				647500	650000	647500		
25	QPSK	1	1	22.86	22.67	22.56	24.0	0.0
Channel								
Frequency (MHz)				647334	650000	648668		
20	QPSK	1	1	22.73	22.71	22.47	24.0	0.0
Channel								
Frequency (MHz)				647168	650000	648434		
15	QPSK	1	1	3707.52	3840	3972.51		
Channel								
Frequency (MHz)				22.73	22.75	22.60	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	22.67	22.78	22.52	24.0	0.0

### Part270 n77 PC2 Ant3

BW (MHz)	Modulation	RB 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	25.68	25.78	25.74	27.0	0.0
100	PI2 BPSK	1	137	25.65	25.82	25.79		
100	PI2 BPSK	1	271	25.84	25.77	25.80		
100	PI2 BPSK	138	0	25.22	25.37	25.20	26.5	0.5
100	PI2 BPSK	138	69	25.77	25.85	25.82	27.0	0.0
100	PI2 BPSK	138	138	25.27	25.33	25.18	26.5	0.5
100	PI2 BPSK	270	0	25.29	25.39	25.24		
100	QPSK	1	1	25.76	25.88	25.84		
100	QPSK	1	137	25.87	25.82	25.80	27.0	0.0
100	QPSK	1	271	25.69	25.78	25.68		
100	QPSK	138	0	24.69	24.81	24.69	26.0	1.0
100	QPSK	138	69	25.66	25.77	25.72	27.0	0.0
100	QPSK	138	138	24.64	24.82	24.72	26.0	1.0
100	QPSK	270	0	24.71	24.90	24.83		
100	16QAM	1	1	24.77	24.85	24.79	26.0	1.0
100	16QAM	1	1	23.35	23.39	23.28	24.5	2.5
100	256QAM	1	1	20.99	21.02	20.88	22.5	4.5
Channel								
Frequency (MHz)				648668	650000	648334		
90	QPSK	1	1	25.82	25.82	25.69	27.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1	3740.01	3840	3940.02		
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1	25.72	25.78	25.70	27.0	0.0
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1	25.68	25.77	25.81	27.0	0.0
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1	3725.01	3840	3955.02		
Channel								
Frequency (MHz)				25.69	25.74	25.75	27.0	0.0
Channel								
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	25.85	25.81	25.70	27.0	0.0
Channel								
Frequency (MHz)				647668	650000	648334		
30	QPSK	1	1	3710.02	3840	3950.01		
Channel								
Frequency (MHz)				647500	650000	647500		
25	QPSK	1	1	25.73	25.78	25.79	27.0	0.0
Channel								
Frequency (MHz)				647334	650000	648668		
20	QPSK	1	1	25.76	25.79	25.81	27.0	0.0
Channel								
Frequency (MHz)				647168	650000	648434		
15	QPSK	1	1	3707.52	3840	3972.51		
Channel								
Frequency (MHz)				25.73	25.85	25.74	27.0	0.0
Channel								
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	25.66	25.86	25.80	27.0	0.0

### Part270 n78 Ant3

BW (MHz)	Modulation	RB 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	3750	3750		
100	PI2 BPSK	1	1		22.90		24.0	0.0
100	PI2 BPSK	1	137		22.97			
100	PI2 BPSK	1	271		22.97			
100	PI2 BPSK	138	0		22.59		23.5	0.5
100	PI2 BPSK	138	69		22.92		24.0	0.0
100	PI2 BPSK	138	138		22.84		23.5	0.5
100	PI2 BPSK	270	0		22.89			
100	QPSK	1	1		23.06			
100	QPSK	1	137		23.04		24.0	0.0
100	QPSK	1	271		23.00			
100	QPSK	138	0		22.03		23.0	1.0
100	QPSK	138	69		23.01		24.0	0.0
100	QPSK	138	138		22.03		23.0	1.0
100	QPSK	270	0		22.19			
100	16QAM	1	1		21.92		23.0	1.0
100	16QAM	1	1		20.97		21.5	2.5
100	256QAM	1	1		18.93		19.5	4.5
Channel								
Frequency (MHz)				648668	650000	648334		
90	QPSK	1	1		22.88		24.0	0.0
Channel								
Frequency (MHz)				649334	650000	649668		
80	QPSK	1	1		3740.01		3750	0.2
Channel								
Frequency (MHz)				645000	650000	645000		
70	QPSK	1	1		22.98		23.01	22.80
Channel								
Frequency (MHz)				648668	650000	648334		
60	QPSK	1	1		22.85		22.87	22.88
Channel								
Frequency (MHz)				648334	650000	648668		
50	QPSK	1	1		3725.01		3750	0.2
Channel								
Frequency (MHz)				22.78	22.88	22.86	24.0	0.0
Channel								
Frequency (MHz)				3720	3840	3780		
40	QPSK	1	1		22.84		22.85	22.86
Channel								
Frequency (MHz)				647668	650000	648334		
30	QPSK	1	1		3710.02		3750	0.1
Channel								
Frequency (MHz)				647500	650000	647500		
25	QPSK	1	1		22.91		23.02	22.90
Channel								
Frequency (MHz)				647334	650000	648668		
20	QPSK	1	1		22.83		22.91	22.83
Channel								
Frequency (MHz)				647168	650000	648434		
15	QPSK	1	1		3707.52		3750	0.2
Channel								
Frequency (MHz)				22.88	22.87	22.94	24.0	0.0
Channel								
Frequency (MHz)				3705	3840	3795		
10	QPSK	1	1		22.87		22.91	22.84



**Part270 n78 PC2 Ant3**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				3750	3750	3750		
Frequency (MHz)								
100	PI2 BPSK	1	1	25.80				
100	PI2 BPSK	1	137	25.79			27.0	0.0
100	PI2 BPSK	1	271	25.83				
100	PI2 BPSK	135	0	25.42			28.5	0.5
100	PI2 BPSK	135	69	25.75			27.0	0.0
100	PI2 BPSK	135	138	25.25			28.5	0.5
100	PI2 BPSK	270	0	25.28				
100	QPSK	1	1	25.86				
100	QPSK	1	137	25.82			27.0	0.0
100	QPSK	1	271	25.69				
100	QPSK	135	0	24.91			28.0	1.0
100	QPSK	135	69	25.84			27.0	0.0
100	QPSK	135	138	24.71			28.0	1.0
100	QPSK	270	0	24.78				
100	16QAM	1	1	25.07			28.0	1.0
100	16QAM	1	1	23.73			24.5	2.5
100	256QAM	1	1	21.55			22.5	4.5
Channel				649688	650000	650334		
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	25.80	25.85	25.78	27.0	0.0
Channel				649334	650000	650668		
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	25.80	25.78	25.85	27.0	0.0
Channel				649000	650000	651000		
Frequency (MHz)				3735	#VALUE!	3765		
70	QPSK	1	1	25.73	25.75	25.76	27.0	0.0
Channel				648668	650000	651334		
Frequency (MHz)				3730.02	3750	3730.01		
60	QPSK	1	1	25.80	25.81	25.81	27.0	0.0
Channel				648334	650000	651668		
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	25.77	25.79	25.85	27.0	0.0
Channel				648000	650000	652000		
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	25.81	25.84	25.79	27.0	0.0
Channel				647668	650000	652334		
Frequency (MHz)				3715.02	3750	3765.01		
30	QPSK	1	1	25.75	25.74	25.81	27.0	0.0
Channel				647500	650000	652500		
Frequency (MHz)				3712.5	3750	3787.5		
25	QPSK	1	1	25.80	25.75	25.74	27.0	0.0
Channel				647334	650000	652668		
Frequency (MHz)				3710.01	3750	3780.02		
20	QPSK	1	1	25.72	25.78	25.80	27.0	0.0
Channel				647188	650000	652834		
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	25.78	25.82	25.82	27.0	0.0
Channel				647000	650000	653000		
Frequency (MHz)				3705	3750	3795		
10	QPSK	1	1	25.80	25.66	25.73	27.0	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	59292	518598	529299					
Frequency (MHz)	2546.01	2592.99	2640					
100	PI2 BPSK	1	1	20.18	20.32	20.17	21.6	0.0
100	PI2 BPSK	1	137	20.14	20.40	20.25		
100	PI2 BPSK	1	271	20.04	20.16	20.07	21.6	0.0
100	PI2 BPSK	135	61	20.15	20.32	20.34		
100	PI2 BPSK	135	69	20.25	20.28	20.33	21.6	0.0
100	PI2 BPSK	135	138	20.00	20.19	20.01		
100	PI2 BPSK	270	0	20.11	20.31	20.28	21.6	0.0
100	QPSK	1	1	20.25	20.42	20.28		
100	QPSK	1	137	20.24	20.36	20.29	21.5	0.1
100	QPSK	1	271	20.08	20.16	20.05		
100	QPSK	135	0	20.10	20.31	20.24	21.6	0.0
100	QPSK	135	69	20.17	20.40	20.27		
100	QPSK	135	138	20.08	20.36	20.19	21.5	0.1
100	QPSK	270	0	20.10	20.16	20.12		
100	16QAM	1	1	20.00	20.04	19.95	21.5	0.1
100	84QAM	1	1	18.64	18.91	18.70		
100	256QAM	1	1	16.80	16.78	16.70	18.0	3.6
Channel	508203	518598	529596					
Frequency (MHz)	2541	2592.99	2644.98					
90	QPSK	1	1	20.22	20.30	20.21	21.6	0.0
Channel	507204	518598	529998					
Frequency (MHz)	2537.02	2592.99	2649.99					
80	QPSK	1	1	20.18	20.27	20.22	21.6	0.0
Channel	506202	518598	531000					
Frequency (MHz)	2531.01	2592.99	2655					
70	QPSK	1	1	20.08	20.08	20.19	21.6	0.0
Channel	505200	518598	531998					
Frequency (MHz)	2526	2592.99	2659.99					
60	QPSK	1	1	20.10	20.31	20.13	21.6	0.0
Channel	504204	518598	532998					
Frequency (MHz)	2521.02	2592.99	2664.99					
50	QPSK	1	1	20.19	20.21	20.25	21.6	0.0
Channel	503202	518598	534000					
Frequency (MHz)	2516.01	2592.99	2670					
40	QPSK	1	1	20.03	20.29	20.07	21.6	0.0
Channel	502200	518598	534998					
Frequency (MHz)	2511	2592.99	2674.98					
30	QPSK	1	0	20.08	20.38	20.15	21.5	0.0
Channel	501204	518598	535998					
Frequency (MHz)	2506.02	2592.99	2679.99					
20	QPSK	1	1	20.03	20.07	20.14	21.6	0.0
Channel	500700	518598	536998					
Frequency (MHz)	2501.5	2592.99	2682.98					
15	QPSK	1	1	20.03	20.19	20.31	21.6	0.0
Channel	500202	518598	537000					
Frequency (MHz)	2501.01	2592.99	2685					
10	QPSK	1	1	20.28	20.18	20.26	21.6	0.0



Part270 n77 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3840	3930			
Frequency (MHz)									
100	Pl2 BPSK	1	1	23.56	23.61	23.05			
100	Pl2 BPSK	1	137	23.44	23.58	23.03	24.0	0.0	
100	Pl2 BPSK	1	271	23.22	23.41	23.05			
100	Pl2 BPSK	135	0	23.42	23.35	23.11	23.5	0.5	
100	Pl2 BPSK	135	69	23.38	23.55	23.01	24.0	0.0	
100	Pl2 BPSK	135	138	23.28	23.35	22.91	23.5	0.5	
100	Pl2 BPSK	270	0	23.40	23.43	22.98			
100	QPSK	1	1	23.54	23.65	23.08			
100	QPSK	1	137	23.49	23.53	23.10	24.0	0.0	
100	QPSK	1	271	23.35	23.43	23.03			
100	QPSK	135	0	22.66	22.65	22.95	23.0	1.0	
100	QPSK	135	69	23.51	23.58	23.01	24.0	0.0	
100	QPSK	135	138	22.57	22.67	22.92			
100	QPSK	270	0	22.43	23.45	22.94	24.0	1.0	
100	16QAM	1	1	22.54	22.59	22.68	23.0	1.0	
100	16QAM	1	1	21.45	21.34	20.98	21.5	2.5	
100	256QAM	1	1	19.01	19.03	19.05	19.5	4.5	
Channel				648968	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	22.47	22.59	22.01	24.0	0.0	
Channel				649334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	22.50	22.60	22.03	24.0	0.0	
Channel				649000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	22.47	22.51	22.06	24.0	0.0	
Channel				648668	650000	653334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	QPSK	1	1	22.38	22.54	22.01	24.0	0.0	
Channel				648334	650000	653668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	22.44	22.57	22.05	24.0	0.0	
Channel				648000	650000	654000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	22.47	22.63	22.05	24.0	0.0	
Channel				647668	650000	654334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	22.51	22.53	22.01	24.0	0.0	
Channel				647500	650000	654500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	22.49	22.60	22.05	24.0	0.0	
Channel				647334	650000	654668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	22.50	22.55	22.05	24.0	0.0	
Channel				647168	650000	654834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	22.47	22.58	22.04	24.0	0.0	
Channel				647000	650000	655000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	22.38	22.64	22.03	24.0	0.0	

Part270 n78 Ant7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 655000	Power High Ch. / Freq. 660000	Tune-up limit (dBm)	MPR (dB)	
Channel				3750	3760	3760			
Frequency (MHz)									
100	Pl2 BPSK	1	1		22.74				
100	Pl2 BPSK	1	137		22.69		24.0	0.0	
100	Pl2 BPSK	1	271		22.83				
100	Pl2 BPSK	135	0		22.39		23.5	0.5	
100	Pl2 BPSK	135	69		22.71		24.0	0.0	
100	Pl2 BPSK	135	138		22.01		23.5	0.5	
100	Pl2 BPSK	270	0		22.40				
100	QPSK	1	1		22.77				
100	QPSK	1	137		22.57		24.0	0.0	
100	QPSK	1	271		22.47				
100	QPSK	135	0		22.31		23.0	1.0	
100	QPSK	135	69		22.74		24.0	0.0	
100	QPSK	135	138		21.45		23.0	1.0	
100	QPSK	270	0		22.52				
100	16QAM	1	1		22.19		23.0	1.0	
100	16QAM	1	1		21.14		21.5	2.5	
100	256QAM	1	1		19.16		19.5	4.5	
Channel				648968	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3760	3765.01			
90	QPSK	1	1	22.66	22.67	22.82	24.0	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3760	3767.02			
80	QPSK	1	1	22.63	22.69	22.72	24.0	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3760	3765			
70	QPSK	1	1	22.68	22.61	22.74	24.0	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3760	3770.01			
60	QPSK	1	1	22.64	22.68	22.68	24.0	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3760	3775.02			
50	QPSK	1	1	22.74	22.68	22.73	24.0	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3760	3780			
40	QPSK	1	1	22.68	22.74	22.81	24.0	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3760	3785.01			
30	QPSK	1	1	22.72	22.72	22.82	24.0	0.0	
Channel				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3712.5	3760	3787.5			
25	QPSK	1	1	22.74	22.62	22.81	24.0	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3760	3790.02			
20	QPSK	1	1	22.74	22.60	22.59	24.0	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3760	3792.51			
15	QPSK	1	1	22.71	22.71	22.65	24.0	0.0	
Channel				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3760	3795			
10	QPSK	1	1	22.67	22.73	22.68	24.0	0.0	





### Part270 n77 Ant8

BW (MHz)	Modulation	RB 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	20.89	20.80	20.80		
100	PI2 BPSK	1	137	20.73	20.82	20.79		0.0
100	PI2 BPSK	1	271	20.89	20.78	20.84		
100	PI2 BPSK	138	0	20.76	20.81	20.57	22.5	0.0
100	PI2 BPSK	138	69	20.63	20.71	20.79	22.5	0.0
100	PI2 BPSK	138	138	20.70	20.74	20.59	22.5	0.0
100	PI2 BPSK	270	0	20.72	20.76	20.58		
100	QPSK	1	1	20.74	20.69	20.81		
100	QPSK	1	137	20.93	20.74	20.76	22.5	0.0
100	QPSK	1	271	20.72	20.70	20.67		
100	QPSK	138	0	20.84	20.69	20.66	22.5	0.0
100	QPSK	138	69	20.90	20.94	20.83	22.5	0.0
100	QPSK	138	138	20.76	20.82	20.75	22.5	0.0
100	QPSK	270	0	20.74	20.85	20.84		
100	16QAM	1	1	20.68	20.75	20.66	22.5	0.0
100	16QAM	1	1	19.74	20.08	19.87	21.5	1.0
100	256QAM	1	1	17.88	18.11	17.80	19.5	3.0
Channel								
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	20.84	20.75	20.71	22.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3940.02	22.5	0.0
Channel								
Frequency (MHz)				649000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	20.73	20.71	20.69	22.5	0.0
Channel								
Frequency (MHz)				648668	650000	648334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	20.81	20.76	20.73	22.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	20.74	20.88	20.75	22.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	20.56	20.70	20.78	22.5	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	20.73	20.74	20.69	22.5	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	20.77	20.71	20.64	22.5	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	20.66	20.76	20.79	22.5	0.0
Channel								
Frequency (MHz)				647168	650000	648484	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.71	20.72	20.67	22.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.81	20.75	20.71	22.5	0.0

### Part270 n77 PC2 Ant8

BW (MHz)	Modulation	RB 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	24.19	24.27	23.80		
100	PI2 BPSK	1	137	24.27	24.25	24.26	25.5	0.0
100	PI2 BPSK	1	271	24.27	24.16	24.31		
100	PI2 BPSK	138	0	24.16	24.29	23.82	25.5	0.0
100	PI2 BPSK	138	69	24.29	24.28	24.25	25.5	0.0
100	PI2 BPSK	138	138	24.26	24.10	24.24	25.5	0.0
100	PI2 BPSK	270	0	24.22	24.20	24.24		
100	QPSK	1	1	24.26	24.36	23.61		
100	QPSK	1	137	24.32	24.29	23.53	25.5	0.0
100	QPSK	1	271	24.06	24.09	23.54		
100	QPSK	138	0	24.19	24.25	23.63	25.5	0.0
100	QPSK	138	69	24.25	24.29	24.28	25.5	0.0
100	QPSK	138	138	24.24	24.17	24.21	25.5	0.0
100	QPSK	270	0	24.22	24.26	23.54		
100	16QAM	1	1	24.28	24.17	24.29	25.5	0.0
100	16QAM	1	1	22.72	22.80	22.67	24.0	1.5
100	256QAM	1	1	20.76	20.78	20.71	22.0	3.5
Channel								
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	24.14	24.25	24.19	25.5	0.0
Channel								
Frequency (MHz)				649334	650000	649668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3840	3940.02	25.5	0.0
Channel								
Frequency (MHz)				649000	650000	649000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	24.12	24.29	23.99	25.5	0.0
Channel								
Frequency (MHz)				648668	650000	648334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	24.22	24.28	24.24	25.5	0.0
Channel								
Frequency (MHz)				648334	650000	648668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	24.23	24.12	24.24	25.5	0.0
Channel								
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	24.31	24.25	24.18	25.5	0.0
Channel								
Frequency (MHz)				647668	650000	648334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	24.28	24.11	24.25	25.5	0.0
Channel								
Frequency (MHz)				647500	650000	648500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	24.23	24.21	24.25	25.5	0.0
Channel								
Frequency (MHz)				647334	650000	648668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	24.22	24.30	24.25	25.5	0.0
Channel								
Frequency (MHz)				647168	650000	648484	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	24.30	24.28	24.23	25.5	0.0
Channel								
Frequency (MHz)				3705	3840	3975	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	24.21	24.05	24.17	25.5	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)				3750	3750	3750		
100	PI2 BPSK	1	1	20.85	20.86	20.73		
100	PI2 BPSK	1	137	20.59	20.70	20.80	22.5	0.0
100	PI2 BPSK	1	271	20.79	20.87	20.59		
100	PI2 BPSK	138	0	20.84	20.77	20.54	22.5	0.0
100	PI2 BPSK	138	69	20.66	20.62	20.76	22.5	0.0
100	PI2 BPSK	138	138	20.58	20.72	20.55	22.5	0.0
100	PI2 BPSK	270	0	20.74	20.85	20.57		
100	QPSK	1	1	20.74	20.93	20.81		
100	QPSK	1	137	20.92	20.80	20.73	22.5	0.0
100	QPSK	1	271	20.67	20.59	20.67		
100	QPSK	138	0	20.78	20.72	20.61	22.5	0.0
100	QPSK	138	69	20.79	20.82	20.81	22.5	0.0
100	QPSK	138	138	20.70	20.71	20.61	22.5	0.0
100	QPSK	270	0	20.84	20.84	20.77		
100	16QAM	1	1	20.54	20.63	20.55	22.5	0.0
100	16QAM	1	1	19.75	20.07	19.74	21.5	1.0
100	256QAM	1	1	17.54	18.08	17.79	19.5	3.0
Channel								
Frequency (MHz)				3745.02	3750	3755.01	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	20.83	20.71	20.70	22.5	0.0
Channel								
Frequency (MHz)				649334	650000	650968	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	3740.01	3750	3760.02	22.5	0.0
Channel								
Frequency (MHz)				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	20.73	20.73	20.70	22.5	0.0
Channel								
Frequency (MHz)				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	20.78	20.75	20.72	22.5	0.0
Channel								
Frequency (MHz)				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	20.75	20.86	20.69	22.5	0.0
Channel								
Frequency (MHz)				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	20.54	20.66	20.75	22.5	0.0
Channel								
Frequency (MHz)				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	20.70	20.68	20.67	22.5	0.0
Channel								
Frequency (MHz)				647500	650000	652500	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	20.73	20.71	20.57	22.5	0.0
Channel								
Frequency (MHz)				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	20.66	20.76	20.71	22.5	0.0
Channel								
Frequency (MHz)				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.72	20.71	20.61	22.5	0.0
Channel								
Frequency (MHz)				3705	3750	3795	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.81	20.68	20.68	22.5	0.0



**Part270 n78 PC2 Ant8**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 650000	Power High Ch. / Freq. 650000	Tune-up limit (dBm)	MPR (dB)	
Channel				3760	3760	3760			
Frequency (MHz)									
100	PI2 BPSK	1	1		24.24				
100	PI2 BPSK	1	137		24.24		25.5	0.0	
100	PI2 BPSK	1	271		24.08		25.5	0.0	
100	PI2 BPSK	135	0		24.22		25.5	0.0	
100	PI2 BPSK	135	69		24.20		25.5	0.0	
100	PI2 BPSK	135	138		24.04		25.5	0.0	
100	PI2 BPSK	270	0		24.17				
100	QPSK	1	1		24.32				
100	QPSK	1	137		24.30		25.5	0.0	
100	QPSK	1	271		24.03				
100	QPSK	135	0		24.25		25.5	0.0	
100	QPSK	135	69		24.23		25.5	0.0	
100	QPSK	135	138		24.10		25.5	0.0	
100	QPSK	270	0		24.21				
100	16QAM	1	1		24.11		25.5	0.0	
100	16QAM	1	1		22.78		24.0	1.5	
100	256QAM	1	1		20.74		22.0	3.5	
Channel				649688	650000	650334		MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		24.08	24.22	24.17	25.5	0.0
Channel				649334	650000	650668		MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1		24.29	24.20	24.21	25.5	0.0
Channel				649000	650000	651000		MPR (dB)	
Frequency (MHz)				3736	3760	3765			
70	QPSK	1	1		24.04	24.31	23.97	25.5	0.0
Channel				648668	650000	651334		MPR (dB)	
Frequency (MHz)				3730.02	3750	3730.01			
60	QPSK	1	1		24.19	24.24	24.22	25.5	0.0
Channel				648334	650000	651668		MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1		24.22	24.05	24.18	25.5	0.0
Channel				648000	650000	652000		MPR (dB)	
Frequency (MHz)				3720	3750	3760			
40	QPSK	1	1		24.23	24.26	24.17	25.5	0.0
Channel				647668	650000	652334		MPR (dB)	
Frequency (MHz)				3715.02	3750	3745.01			
30	QPSK	1	1		24.21	24.12	24.21	25.5	0.0
Channel				647300	650000	652000		MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1		24.18	24.14	24.27	25.5	0.0
Channel				647334	650000	652668		MPR (dB)	
Frequency (MHz)				3710.01	3750	3760.02			
20	QPSK	1	1		24.21	24.24	24.21	25.5	0.0
Channel				647188	650000	652834		MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1		24.29	24.24	24.22	25.5	0.0
Channel				647000	650000	653000		MPR (dB)	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1		24.18	23.99	24.09	25.5	0.0



### Part270 n77 Ant9

BW (MHz)	Modulation	RB 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	20.49	20.50	20.51	21.5	0.0
100	PI2 BPSK	1	137	20.43	20.51	20.49		
100	PI2 BPSK	1	271	20.42	20.42	20.42		
100	PI2 BPSK	138	0	20.35	20.48	20.48		
100	PI2 BPSK	138	69	20.44	20.41	20.46		
100	PI2 BPSK	138	138	20.38	20.40	20.43		
100	PI2 BPSK	270	0	20.46	20.43	20.45		
100	QPSK	1	1	20.55	20.62	20.62		
100	QPSK	1	137	20.42	20.46	20.41		
100	QPSK	1	271	20.37	20.48	20.47		
100	QPSK	138	0	20.39	20.39	20.37		
100	QPSK	138	69	20.54	20.61	20.55		
100	QPSK	138	138	20.37	20.46	20.41		
100	QPSK	270	0	20.50	20.60	20.53		
100	16QAM	1	1	20.39	20.41	20.43		
100	16QAM	1	1	20.32	20.35	20.31		
100	256QAM	1	1	18.42	18.55	18.51		
Channel								
Frequency (MHz)								
90	QPSK	1	1	20.44	20.51	20.52	21.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.37	20.38	20.41	21.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	20.39	20.48	20.44	21.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	20.51	20.43	20.48	21.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	20.38	20.37	20.47	21.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	20.42	20.36	20.43	21.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	20.43	20.36	20.39	21.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	20.46	20.40	20.44	21.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	20.37	20.48	20.44	21.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	20.34	20.36	20.42	21.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	20.54	20.57	20.45	21.5	0.0

### Part270 n77 PC2 Ant9

BW (MHz)	Modulation	RB 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	24.01	23.93	23.87	24.5	0.0
100	PI2 BPSK	1	137	23.79	23.92	23.83		
100	PI2 BPSK	1	271	23.88	23.88	23.78		
100	PI2 BPSK	138	0	23.92	23.98	23.91		
100	PI2 BPSK	138	69	23.80	23.90	23.84		
100	PI2 BPSK	138	138	23.85	23.84	23.87		
100	PI2 BPSK	270	0	23.74	23.86	23.85		
100	QPSK	1	1	23.98	24.10	23.91		
100	QPSK	1	137	23.78	23.93	23.85		
100	QPSK	1	271	23.88	23.89	23.85		
100	QPSK	138	0	23.94	23.95	23.88		
100	QPSK	138	69	23.80	23.90	23.83		
100	QPSK	138	138	23.76	23.88	23.86		
100	QPSK	270	0	23.87	23.93	23.90		
100	16QAM	1	1	23.72	23.86	23.81		
100	16QAM	1	1	23.87	23.87	23.85		
100	256QAM	1	1	21.77	21.94	21.84		
Channel								
Frequency (MHz)								
90	QPSK	1	1	23.71	23.88	23.82	24.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	23.80	23.81	23.70	24.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.72	23.92	23.84	24.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.70	23.86	23.77	24.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	23.88	23.90	23.87	24.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	23.83	23.76	23.85	24.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.85	23.80	23.70	24.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	23.76	23.87	23.81	24.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.87	23.85	23.79	24.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.71	23.92	23.80	24.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.72	23.87	23.86	24.5	0.0

### Part270 n78 Ant9

BW (MHz)	Modulation	RB 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	20.48	20.48	20.48	21.5	0.0
100	PI2 BPSK	1	137	20.43	20.43	20.43		
100	PI2 BPSK	1	271	20.39	20.39	20.39		
100	PI2 BPSK	138	0	20.48	20.48	20.48		
100	PI2 BPSK	138	69	20.33	20.33	20.33		
100	PI2 BPSK	138	138	20.38	20.38	20.38		
100	PI2 BPSK	270	0	20.45	20.45	20.45		
100	QPSK	1	1	20.52	20.52	20.52		
100	QPSK	1	137	20.46	20.46	20.46		
100	QPSK	1	271	20.50	20.50	20.50		
100	QPSK	138	0	20.40	20.40	20.40		
100	QPSK	138	69	20.61	20.61	20.61		
100	QPSK	138	138	20.43	20.43	20.43		
100	QPSK	270	0	20.55	20.55	20.55		
100	16QAM	1	1	20.38	20.38	20.38		
100	16QAM	1	1	20.33	20.33	20.33		
100	256QAM	1	1	18.50	18.50	18.50		
Channel								
Frequency (MHz)								
90	QPSK	1	1	20.45	20.51	20.45	21.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	20.29	20.36	20.38	21.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	20.38	20.48	20.37	21.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	20.50	20.43	20.43	21.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	20.34	20.32	20.49	21.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	20.44	20.34	20.44	21.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	20.47	20.41	20.43	21.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	20.39	20.28	20.39	21.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	20.31	20.45	20.38	21.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	20.32	20.26	20.41	21.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	20.48	20.55	20.39	21.5	0.0



**Part270 n78 PC2 Ant9**

BW [MHz]	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		23.89				
100	PI2 BPSK	1	137		23.89		24.5	0.0	
100	PI2 BPSK	1	271		23.88		24.5	0.0	
100	PI2 BPSK	135	0		23.91		24.5	0.0	
100	PI2 BPSK	135	89		23.85		24.5	0.0	
100	PI2 BPSK	135	138		23.78		24.5	0.0	
100	PI2 BPSK	270	0		23.79				
100	QPSK	1	1		24.02				
100	QPSK	1	137		23.91		24.5	0.0	
100	QPSK	1	271		23.84				
100	QPSK	135	0		23.98		24.5	0.0	
100	QPSK	135	89		23.90		24.5	0.0	
100	QPSK	135	138		23.86		24.5	0.0	
100	QPSK	270	0		23.93				
100	16QAM	1	1		23.81		24.5	0.0	
100	16QAM	1	1		23.81		24.5	0.0	
100	256QAM	1	1		21.91		22.5	2.0	
Channel				649688	650000	650334		MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1		23.72	23.85	23.75	24.5	0.0
Channel				649334	650000	650668		MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1		23.81	23.83	23.77	24.5	0.0
Channel				649000	650000	651000		MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1		23.70	23.86	23.86	24.5	0.0
Channel				648668	650000	651334		MPR (dB)	
Frequency (MHz)				3730.02	3750	3750.01			
60	QPSK	1	1		23.72	23.87	23.70	24.5	0.0
Channel				648334	650000	651668		MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1		23.87	23.87	23.84	24.5	0.0
Channel				648000	650000	652000		MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1		23.78	23.77	23.85	24.5	0.0
Channel				647668	650000	652334		MPR (dB)	
Frequency (MHz)				3715.02	3750	3765.01			
30	QPSK	1	1		23.84	23.74	23.73	24.5	0.0
Channel				647300	650000	652500		MPR (dB)	
Frequency (MHz)				3712.5	3750	3787.5			
25	QPSK	1	1		23.70	23.84	23.78	24.5	0.0
Channel				647334	650000	652668		MPR (dB)	
Frequency (MHz)				3710.01	3750	3780.02			
20	QPSK	1	1		23.84	23.81	23.74	24.5	0.0
Channel				647188	650000	652834		MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			
15	QPSK	1	1		23.66	23.90	23.78	24.5	0.0
Channel				647000	650000	653000		MPR (dB)	
Frequency (MHz)				3705	3750	3795			
10	QPSK	1	1		23.70	23.88	23.83	24.5	0.0



WiFi&Bluetooth

Art 4-6		Full power&Body-worn for Standalone				Head for Standalone		Head for Simultaneous DBS only&Body-worn for Simultaneous WWAN+non-DBS		Head for Simultaneous WWAN+non-DBS&Body-worn for Simultaneous WWAN+non-DBS		Head for Simultaneous WWAN+non-DBS		Body-worn for Simultaneous DBS only		Hotspot for Simultaneous WWAN+non-DBS&Body-worn for Simultaneous WWAN+non-DBS		Hotspot for Simultaneous WWAN+non-DBS		Extremity for Simultaneous DBS only		Extremity for Simultaneous WWAN+non-DBS				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %			
2.4GHz WLAN	802.11b 9Mbps	1	2412	23.84	23.50	20.85	22.50	18.77	20.50	15.75	17.50	12.80	14.50	21.78	23.50	16.29	18.00	14.27	16.00	22.82	24.50	19.81	21.50	97.86		
		6	2437	21.72	22.00	20.32	22.00	18.35	20.00	15.37	17.00	12.34	14.00	21.42	23.00	15.95	17.50	14.01	16.00	22.38	24.00	19.39	21.00			
		11	2462	20.37	23.50	20.73	20.50	18.79	20.50	15.78	17.50	12.81	14.50	21.75	23.50	16.28	18.00	14.23	16.00	22.74	24.50	19.71	21.50			
	802.11g 9Mbps	1	2412	23.18	22.50	20.66	22.50	20.50	17.50	20.50	17.50	14.50	14.50	21.75	22.50	18.00	16.00	16.00	16.00	16.00	16.00	22.50	24.50	21.50	99.45	
		6	2437	22.64	24.00	20.80	22.50	20.50	17.50	20.50	17.50	14.50	14.50	21.75	23.50	18.00	16.00	16.00	16.00	16.00	16.00	23.50	24.50	21.50		
		10	2462	21.94	23.50	20.55	22.50	20.50	17.50	20.50	17.50	14.50	14.50	21.75	23.00	18.00	16.00	16.00	16.00	16.00	16.00	23.00	24.50	21.50		
	802.11n+HT20 MCS0	1	2412	17.11	18.50	17.11	18.50	18.50	18.50	17.50	17.50	14.50	14.50	18.50	18.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	100.00	
		2	2412	16.82	18.00	18.00	18.00	18.00	18.00	17.50	17.50	14.50	14.50	18.00	18.00	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
		3	2417	22.28	23.50	22.50	22.50	20.50	20.50	17.50	17.50	14.50	14.50	18.50	18.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
		4	2437	22.65	24.00	22.50	22.50	20.50	20.50	17.50	17.50	14.50	14.50	18.50	18.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		16.00
		5	2452	21.90	23.50	20.50	22.50	20.50	17.50	20.50	17.50	14.50	14.50	18.50	18.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		16.00
		6	2437	15.13	16.50	16.50	16.50	16.50	16.50	16.50	16.50	14.50	14.50	16.50	16.50	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		16.00
7		2452	17.76	18.50	18.50	18.50	18.50	18.50	17.50	17.50	14.50	14.50	18.50	18.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
8		2437	17.88	19.50	19.50	19.50	19.50	19.50	17.50	17.50	14.50	14.50	19.50	19.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
9		2452	15.55	17.00	17.00	17.00	17.00	17.00	17.00	17.00	14.50	14.50	17.00	17.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
10		2457	15.18	16.50	16.50	16.50	16.50	16.50	16.50	16.50	14.50	14.50	16.50	16.50	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
11		2462	15.13	16.50	16.50	16.50	16.50	16.50	16.50	16.50	14.50	14.50	16.50	16.50	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
12		2457	17.81	19.50	19.50	19.50	19.50	19.50	19.50	19.50	14.50	14.50	19.50	19.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
802.11n+HE40 MCS0	3	2437	18.08	19.50	19.50	19.50	19.50	19.50	19.50	14.50	14.50	19.50	19.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	100.00		
	6	2437	18.08	19.50	19.50	19.50	19.50	19.50	19.50	14.50	14.50	19.50	19.50	18.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00			
	9	2452	15.70	16.50	16.50	16.50	16.50	16.50	16.50	16.50	14.50	14.50	16.50	16.50	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00			

Note: The 2.4GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode.

Art 5-7		Full power&Extremity for Standalone				Head for Standalone&Body-worn for Simultaneous DBS only		Head for Simultaneous DBS only&Hotspot for Simultaneous WWAN+non-DBS&Body-worn for Simultaneous WWAN+non-DBS		Head for Simultaneous WWAN+non-DBS&Body-worn for Simultaneous WWAN+non-DBS		Head for Simultaneous WWAN+non-DBS		Body-worn for Simultaneous DBS only		Body-worn for Simultaneous WWAN+non-DBS		Body-worn for Simultaneous WWAN+non-DBS		Hotspot for Simultaneous WWAN+non-DBS		Duty Cycle %			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %		
5.2GHz WLAN	802.11a 9Mbps	36	5180	20.72	21.50	20.00	17.00	15.00	12.00	12.00	12.00	12.00	21.50	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	99.25	
		40	5200	21.68	23.00	20.00	17.00	15.00	12.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00		14.00
		44	5220	20.64	21.50	20.00	17.00	15.00	12.00	12.00	12.00	12.00	21.50	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00		14.00
	802.11n+HT20 MCS0	48	5240	21.22	23.00	20.00	17.00	15.00	12.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	100.00
		36	5180	19.65	20.50	20.00	17.00	15.00	12.00	12.00	12.00	20.50	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
		40	5200	20.67	22.00	20.00	17.00	15.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
	802.11n+HT40 MCS0	44	5220	20.80	22.00	20.00	17.00	15.00	12.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	100.00
		48	5240	20.72	22.00	20.00	17.00	15.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
		36	5180	17.27	18.50	17.27	18.50	17.00	17.00	15.00	12.00	12.00	17.27	18.50	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
	802.11ac VHT20 MCS0	48	5200	21.26	22.50	19.15	20.00	17.00	15.00	12.00	12.00	12.00	20.70	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	100.00
		36	5180	19.70	21.00	20.00	17.00	15.00	12.00	12.00	12.00	21.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
		40	5200	20.72	22.00	20.00	17.00	15.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
	802.11ac VHT40 MCS0	44	5220	20.65	22.00	20.00	17.00	15.00	12.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	100.00
		48	5240	20.75	22.00	20.00	17.00	15.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
		36	5180	17.30	19.00	18.00	17.00	15.00	12.00	12.00	12.00	19.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
	802.11ac VHT80 MCS0	46	5200	21.29	22.50	20.00	17.00	15.00	12.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	100.00
		42	5210	17.14	18.50	18.50	18.50	16.18	17.00	14.15	15.00	11.17	12.00	18.50	16.21	17.00	13.19	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
		36	5180	19.75	21.00	20.00	17.00	15.00	12.00	12.00	12.00	12.00	21.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
	802.11ax+HE20 MCS0	40	5200	20.75	22.00	20.00	17.00	15.00	12.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	100.00
		44	5220	20.89	22.00	20.00	17.00	15.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
		48	5240	20.78	22.00	20.00	17.00	15.00	12.00	12.00	12.00	22.00	17.00	14.00	14.00	14.00	14.0								





**BT BR/EDR Art 4**

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	12.72	13.77	11.81
	CH 39	2441	13.92	13.56	13.40
	CH 78	2480	12.82	11.61	11.70
Tune-up Limit			14.50	14.00	14.00

**BT BR/EDR Art 6**

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	12.76	11.41	11.19
	CH 39	2441	13.85	11.58	11.60
	CH 78	2480	13.19	11.32	11.00
Tune-up Limit			14.50	12.00	12.00

**BLE\_1M Art 4**

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402		12.36	
	CH 19	2440		13.97	
	CH 39	2480		12.49	
Tune-up Limit				14.00	

**BLE\_1M Art 6**

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402		12.97	
	CH 19	2440		13.40	
	CH 39	2480		12.78	
Tune-up Limit				14.00	

**BLE\_2M Art 4**

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402		12.44	
	CH 19	2440		13.79	
	CH 39	2480		12.73	
Tune-up Limit				14.00	

**BLE\_2M Art 6**

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402		12.85	
	CH 19	2440		13.44	
	CH 39	2480		12.89	
Tune-up Limit				14.00	