



Band 38 Ant0 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				37850	38000	38150				
20	QPSK	1	0	21.41	21.58	21.40	23	0		
20	QPSK	1	49	21.53	21.56	21.50				
20	QPSK	1	99	21.49	21.53	21.50				
20	QPSK	50	24	20.53	20.60	20.47				
20	QPSK	50	24	20.58	20.55	20.53				
20	QPSK	50	50	20.57	20.57	20.58	22	1		
20	QPSK	100	0	20.53	20.54	20.48				
20	16QAM	1	0	20.44	20.47	20.49	22	1		
20	16QAM	1	49	20.60	20.65	20.64				
20	16QAM	1	99	20.57	20.59	20.49				
20	16QAM	50	0	19.52	19.54	19.47	21	2		
20	16QAM	50	24	19.60	19.60	19.53				
20	16QAM	50	50	19.57	19.57	19.57				
20	16QAM	100	0	19.55	19.55	19.49				
20	64QAM	1	0	19.39	19.37	19.42	21	2		
20	64QAM	1	49	19.58	19.63	19.64				
20	64QAM	1	99	19.45	19.53	19.51				
20	64QAM	50	0	18.53	18.54	18.47	20	3		
20	64QAM	50	24	18.61	18.60	18.52				
20	64QAM	50	50	18.59	18.58	18.58				
20	64QAM	100	0	18.55	18.57	18.48				
20	256QAM	1	0	16.43	16.45	16.46	18	5		
20	256QAM	1	49	16.69	16.72	16.42				
20	256QAM	1	99	16.46	16.58	16.56				
20	256QAM	50	0	16.58	16.54	16.46				
20	256QAM	50	24	16.37	16.27	16.54	18	5		
20	256QAM	50	50	16.84	16.59	16.55				
20	256QAM	100	0	16.55	16.47	16.45				
Channel Frequency (MHz)				37925	38000	38175	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	21.22	21.31	21.34	23	0		
15	QPSK	1	37	21.32	21.43	21.51				
15	QPSK	1	74	21.34	21.35	21.54				
15	QPSK	36	20	20.44	20.38	20.33	22	1		
15	QPSK	36	39	20.54	20.42	20.38				
15	QPSK	75	0	20.47	20.51	20.46				
15	16QAM	1	0	20.28	20.46	20.50	22	1		
15	16QAM	1	37	20.57	20.65	20.46				
15	16QAM	1	74	20.54	20.41	20.43				
15	16QAM	36	0	19.31	19.49	19.40	21	2		
15	16QAM	36	20	19.52	19.48	19.40				
15	16QAM	36	39	19.39	19.38	19.47				
15	16QAM	36	74	19.46	19.47	19.34				
15	64QAM	1	0	19.25	19.31	19.29	21	2		
15	64QAM	1	37	19.51	19.44	19.65				
15	64QAM	1	74	19.43	19.38	19.48				
15	64QAM	36	0	18.34	18.54	18.46	20	3		
15	64QAM	36	20	18.57	18.43	18.39				
15	64QAM	36	39	18.45	18.41	18.47				
15	64QAM	75	0	18.51	18.52	18.43				
15	256QAM	1	0	16.39	16.46	16.40	18	5		
15	256QAM	1	37	16.61	16.42	16.41				
15	256QAM	1	74	16.38	16.48	16.47				
15	256QAM	36	0	16.43	16.37	16.34	18	5		
15	256QAM	36	20	16.26	16.38	16.39				
15	256QAM	36	39	16.50	16.50	16.61				
15	256QAM	75	0	16.36	16.49	16.43				
Channel Frequency (MHz)				37900	38000	38300	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.28	21.37	21.24	23	0		
10	QPSK	1	25	21.36	21.57	21.34				
10	QPSK	1	49	21.33	21.33	21.41				
10	QPSK	25	0	20.53	20.56	20.37	22	1		
10	QPSK	25	12	20.54	20.60	20.49				
10	QPSK	25	25	20.39	20.49	20.57				
10	QPSK	50	0	20.41	20.48	20.47				
10	16QAM	1	0	20.33	20.48	20.42	22	1		
10	16QAM	1	25	20.53	20.49	20.48				
10	16QAM	1	49	20.38	20.37	20.31				
10	16QAM	25	0	19.40	19.56	19.36	21	2		
10	16QAM	25	12	19.50	19.50	19.39				
10	16QAM	25	25	19.44	19.38	19.36				
10	16QAM	50	0	19.43	19.48	19.43				
10	64QAM	1	0	19.37	19.37	19.26	21	2		
10	64QAM	1	25	19.56	19.51	19.42				
10	64QAM	1	49	19.45	19.41	19.33				
10	64QAM	25	0	18.54	18.50	18.30	20	3		
10	64QAM	25	12	18.56	18.42	18.52				
10	64QAM	25	25	18.59	18.52	18.48				
10	64QAM	50	0	18.42	18.55	18.34				
10	256QAM	1	0	16.45	16.48	16.30	18	5		
10	256QAM	1	25	16.40	16.45	16.48				
10	256QAM	1	49	16.37	16.33	16.31				
10	256QAM	25	0	16.52	16.51	16.35	18	5		
10	256QAM	25	12	16.37	16.34	16.27				
10	256QAM	25	25	16.49	16.46	16.54				
10	256QAM	50	0	16.39	16.48	16.28				
Channel Frequency (MHz)				3777.5	38000	38225	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	21.42	21.39	21.23	23	0		
5	QPSK	1	12	21.53	21.49	21.48				
5	QPSK	1	24	21.41	21.34	21.53				
5	QPSK	12	0	20.48	20.36	20.40	22	1		
5	QPSK	12	7	20.45	20.47	20.35				
5	QPSK	12	13	20.36	20.35	20.56				
5	QPSK	25	0	20.52	20.34	20.46				
5	16QAM	1	0	20.41	20.36	20.34	22	1		
5	16QAM	1	12	20.61	20.51	20.47				
5	16QAM	1	24	20.38	20.38	20.27				
5	16QAM	12	0	19.41	19.46	19.48	21	2		
5	16QAM	12	7	19.42	19.46	19.51				
5	16QAM	12	13	19.57	19.56	19.45				
5	16QAM	25	0	19.45	19.53	19.46				
5	64QAM	1	0	19.23	19.22	19.36	21	2		
5	64QAM	1	12	19.53	19.43	19.58				
5	64QAM	1	24	19.47	19.38	19.51				
5	64QAM	12	0	18.46	18.47	18.33	20	3		
5	64QAM	12	7	18.48	18.56	18.34				
5	64QAM	12	13	18.59	18.39	18.53				
5	64QAM	25	0	18.43	18.38	18.27				
5	256QAM	1	0	16.50	16.51	16.39	18	5		
5	256QAM	1	12	16.41	16.47	16.55				
5	256QAM	1	24	16.52	16.47	16.54				
5	256QAM	12	0	16.42	16.59	16.35	18	5		
5	256QAM	12	7	16.17	16.21	16.26				
5	256QAM	12	13	16.46	16.33	16.64				
5	256QAM	25	0	16.48	16.43	16.40				

Band 41 Ant0 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				39750	40165	40600				
20	QPSK	1	0	22.16	22.11	22.45	23	0		
20	QPSK	1	49	22.13	22.19	22.02				
20	QPSK	1	99	22.24	22.08	22.27				
20	QPSK	50	0	21.22	21.16	21.42	22	1		
20	QPSK	50	24	21.19	21.27	21.21				
20	QPSK	50	50	21.18	21.20	21.24				
20	QPSK	100	0	21.12	21.15	21.38				
20	16QAM	1	0	21.29	21.06	21.32	22	1		
20	16QAM	1	49	20.99	20.83	20.97				
20	16QAM	1	99	20.95	21.03	21.10				
20	16QAM	50	0	20.24	20.24	20.12	21	2		
20	16QAM	50	24	20.19	20.18	20.17				
20	16QAM	50	50	20.09	20.38	20.21				
20	16QAM	100	0	20.17	20.21	20.21				
20	64QAM	1	0	22.11	22.08	22.26	21	2		
20	64QAM	1	49	20.18	20.05	20.03				
20	64QAM	1	99	20.05	20.29	20.13				
20	64QAM	50	0	19.30	19.28	19.14	20	3		
20	64QAM	50	24	19.26	19.26	19.26				
20	64QAM	50	50	19.02	19.48	19.09				
20	64QAM	100	0	19.20	19.19	19.33				
20	256QAM	1	0	17.19	17.25	17.30	18	5		
20	256QAM	1	49	17.30	17.28	17.10				
20	256QAM	1	99	17.16	17.50	17.26				
20	256QAM	50	0	17.15	17.12	17.19	18	5		
20	256QAM	50	24	17.22	17.21	17.20				
20	256QAM	50	50	17.09	17.17	17.14				
20	256QAM	100	0	17.21	17.40	17.19				
Channel Frequency (MHz)				40075	40165	40600	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				2503.5	2548.3	2593				
15	QPSK	1	0	22.32	22.03	22.06	23	0		
15	QPSK	1	37	22.06	22.07	21.89				
15	QPSK	1	74	22.16	21.93	22.17				
15	QPSK	36	20	21.03	21.12	21.08	22	1		
15	QPSK	36	39	21.07	21.13	21.11				
15	QPSK	75	0	21.06	21.02	21.12				
15	16QAM	1	0	21.22	20.91	21.08	22	1		
15	16QAM	1	3							



GSM850 Ant1 DSII

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	30.16	30.52	30.53	31.00	21.16	21.52	21.53	22.00
GPRS 1 Tx slot	30.23	30.49	30.58	31.00	21.23	21.49	21.58	22.00
GPRS 2 Tx slots	27.29	27.38	27.48	28.00	21.29	21.38	21.48	22.00
GPRS 3 Tx slots	25.58	25.62	25.58	26.20	21.32	21.36	21.30	21.94
GPRS 4 Tx slots	24.04	24.21	24.17	25.00	21.04	21.21	21.17	22.00
EDGE 1 Tx slot	26.85	26.92	27.05	28.00	17.85	17.92	18.05	19.00
EDGE 2 Tx slots	24.08	24.10	24.29	24.50	18.08	18.10	18.29	18.50
EDGE 3 Tx slots	22.15	22.45	22.33	23.00	17.89	18.19	18.07	18.74
EDGE 4 Tx slots	20.69	20.92	20.90	21.50	17.69	17.92	17.90	18.50

WCDMA V Ant1 DSII

Band TX Channel	WCDMA V			Tune-up Limit (dBm)
	4132	4182	4233	
Rx Channel	4357	4407	4458	
Frequency (MHz)	826.4	838.4	850.4	
3GPP Rel 99 AMR 12.2Kbps	21.20	21.22	21.14	22.70
3GPP Rel 99 RMC 12.2Kbps	21.23	21.27	21.15	22.70
3GPP Rel 6 HSDPA Subtest-1	20.22	20.23	20.17	21.70
3GPP Rel 6 HSDPA Subtest-2	20.24	19.96	20.16	21.70
3GPP Rel 6 HSDPA Subtest-3	19.71	19.71	19.67	21.20
3GPP Rel 6 HSDPA Subtest-4	19.73	19.68	19.67	21.20
3GPP Rel 8 DC-HSDPA Subtest-1	20.23	20.16	20.27	21.70
3GPP Rel 8 DC-HSDPA Subtest-2	20.19	20.04	20.13	21.70
3GPP Rel 8 DC-HSDPA Subtest-3	19.67	19.72	19.59	21.20
3GPP Rel 8 DC-HSDPA Subtest-4	19.65	19.65	19.72	21.20
3GPP Rel 6 HSUPA Subtest-1	20.19	20.18	20.14	21.70
3GPP Rel 6 HSUPA Subtest-2	18.22	18.16	18.13	19.70
3GPP Rel 6 HSUPA Subtest-3	19.22	19.17	19.12	20.70
3GPP Rel 6 HSUPA Subtest-4	18.20	18.19	18.12	19.70
3GPP Rel 6 HSUPA Subtest-5	20.20	20.20	20.10	21.70



MINISTRY OF NATIONAL DEFENSE

Band 5 Ant1 DSH1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low (dBm)	Power Median (dBm)	Power High (dBm)	Turn-up (min)	MPE (dB)		
Channel										
Frequency (MHz)				25450	25525	25600				
10	QPSK	1	0	21.46	21.58	21.24				
10	QPSK	1	20	21.46	21.58	21.24	22.7	0		
10	QPSK	1	40	21.41	21.49	21.28				
10	QPSK	25	0	21.40	21.45	21.44				
10	QPSK	25	12	21.37	21.33	21.26	22.7	0		
10	QPSK	25	20	21.38	21.33	21.24				
10	QPSK	50	0	21.24	21.33	21.29				
10	16QAM	1	0	21.46	21.39	21.27	22.7	0		
10	16QAM	1	20	21.44	21.33	21.33				
10	16QAM	1	40	21.38	21.41	21.44				
10	16QAM	25	0	21.31	21.27	21.38				
10	16QAM	25	12	21.36	21.23	21.37	22.7	0		
10	16QAM	25	20	21.33	21.27	21.22				
10	16QAM	50	0	21.31	21.21	21.23	22.7	0		
10	16QAM	1	20	21.28	21.42	21.32				
10	16QAM	1	40	21.28	21.41	21.44				
10	16QAM	25	0	21.24	21.27	21.37				
10	16QAM	25	12	21.32	21.38	21.21	22.7	0		
10	16QAM	25	20	21.36	21.29	21.28				
10	16QAM	50	0	21.18	21.26	21.41				
10	256QAM	1	0	19.40	19.50	19.23	20.7	2		
10	256QAM	1	20	19.47	19.37	19.35				
10	256QAM	1	40	19.45	19.35	19.28				
10	256QAM	25	0	19.38	19.38	19.38				
10	256QAM	25	12	19.38	19.34	19.30	20.7	2		
10	256QAM	25	20	19.39	19.24	19.31				
10	256QAM	50	0	19.20	19.34	19.26				
Channel										
Frequency (MHz)				25615	25615	25615	Turn-up (min)	MPE (dB)		
5	QPSK	1	0	21.42	21.43	21.20				
5	QPSK	1	12	21.33	21.22	21.22	22.7	0		
5	QPSK	1	20	21.33	21.42	21.19				
5	QPSK	12	0	21.32	21.36	21.32				
5	QPSK	12	7	21.31	21.26	21.11	22.7	0		
5	QPSK	12	10	21.40	21.28	21.14				
5	QPSK	25	0	21.18	21.21	21.13				
5	16QAM	1	0	21.39	21.29	21.19	22.7	0		
5	16QAM	1	12	21.32	21.29	21.19				
5	16QAM	1	20	21.33	21.18	21.14				
5	16QAM	12	0	21.43	21.14	21.15				
5	16QAM	12	7	21.38	21.18	21.25	22.7	0		
5	16QAM	12	10	21.28	21.34	21.14				
5	16QAM	25	0	21.21	21.14	21.19				
5	16QAM	1	0	21.21	21.13	21.12	22.7	0		
5	16QAM	1	12	21.17	21.38	21.22				
5	16QAM	1	20	21.33	21.29	21.26				
5	16QAM	12	0	21.18	21.18	21.32				
5	16QAM	12	7	21.18	21.24	21.08	22.7	0		
5	16QAM	12	10	21.22	21.26	21.24				
5	16QAM	25	0	21.21	21.27	21.27				
5	256QAM	1	0	19.32	19.38	19.16				
5	256QAM	1	12	19.32	19.32	19.23	20.7	2		
5	256QAM	1	20	19.32	19.27	19.22				
5	256QAM	12	0	19.27	19.28	19.17	20.7	2		
5	256QAM	12	7	19.21	19.20	19.17				
5	256QAM	12	10	19.28	19.15	19.14				
5	256QAM	25	0	19.07	19.30	19.20				
Channel										
Frequency (MHz)				25675	25675	25675	Turn-up (min)	MPE (dB)		
3	QPSK	1	0	21.34	21.50	21.16				
3	QPSK	1	8	21.36	21.28	21.24	22.7	0		
3	QPSK	1	16	21.37	21.18	21.18				
3	QPSK	8	0	21.30	21.19	21.36				
3	QPSK	8	4	21.30	21.18	21.11	22.7	0		
3	QPSK	8	7	21.40	21.28	21.16				
3	QPSK	16	0	21.11	21.25	21.14				
3	16QAM	1	0	21.34	21.29	21.17	22.7	0		
3	16QAM	1	8	21.35	21.26	21.19				
3	16QAM	1	16	21.31	21.27	21.20	22.7	0		
3	16QAM	8	0	21.27	21.19	21.17				
3	16QAM	8	4	21.36	21.12	21.29	22.7	0		
3	16QAM	8	7	21.34	21.37	21.17				
3	16QAM	16	0	21.25	21.15	21.14				
3	16QAM	1	0	21.22	21.16	21.15	22.7	0		
3	16QAM	1	8	21.11	21.30	21.17				
3	16QAM	1	16	21.29	21.31	21.36				
3	16QAM	8	0	21.08	21.18	21.25	22.7	0		
3	16QAM	8	4	21.21	21.29	21.12				
3	16QAM	8	7	21.28	21.16	21.16	22.7	0		
3	16QAM	16	0	21.23	21.20	21.38				
3	256QAM	1	0	19.26	19.41	19.07				
3	256QAM	1	8	19.36	19.21	19.29	20.7	2		
3	256QAM	1	16	19.32	19.23	19.16				
3	256QAM	8	0	19.16	19.33	19.21	20.7	2		
3	256QAM	8	4	19.16	19.18	19.16				
3	256QAM	8	7	19.30	19.17	19.15				
3	256QAM	16	0	19.09	19.20	19.18				
Channel										
Frequency (MHz)				25697	25697	25697	Turn-up (min)	MPE (dB)		
1.4	QPSK	1	0	21.37	21.44	21.13				
1.4	QPSK	1	3	21.34	21.19	21.30	22.7	0		
1.4	QPSK	1	5	21.29	21.41	21.19				
1.4	QPSK	3	0	21.24	21.07	21.38				
1.4	QPSK	3	1	21.33	21.18	21.12	22.7	0		
1.4	QPSK	3	3	21.36	21.26	21.10				
1.4	QPSK	6	0	21.08	21.21	21.21	22.7	0		
1.4	QPSK	6	1	21.32	21.30	21.21				
1.4	16QAM	1	3	21.35	21.17	21.28	22.7	0		
1.4	16QAM	1	5	21.34	21.29	21.29				
1.4	16QAM	3	0	21.28	21.16	21.20				
1.4	16QAM	3	1	21.38	21.12	21.30	22.7	0		
1.4	16QAM	3	3	21.30	21.35	21.19				
1.4	16QAM	6	0	21.29	21.18	21.19	22.7	0		
1.4	16QAM	1	0	21.24	21.08	21.08				
1.4	16QAM	1	3	21.15	21.28	21.17				
1.4	16QAM	1	5	21.20	21.35	21.30	22.7	0		
1.4	16QAM	3	0	21.10	21.22	21.21				
1.4	16QAM	3	1	21.22	21.24	21.06				
1.4	16QAM	3	3	21.25	21.19	21.16				
1.4	16QAM	6	0	21.23	21.19	21.33	22.7	0		
1.4	256QAM	1	0	19.27	19.37	19.14				
1.4	256QAM	1	3	19.26	19.32	19.31	20.7	2		
1.4	256QAM	1	5	19.31	19.24	19.20				
1.4	256QAM	3	0	19.19	19.34	19.32				
1.4	256QAM	3	1	19.20	19.14	19.14	20.7	2		
1.4	256QAM	3	3	19.29	19.09	19.25				
1.4	256QAM	6	0	19.06	19.26	19.14	20.7	2		

Band 12 Ant1 DSH1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low (dBm)	Power Median (dBm)	Power High (dBm)	Turn-up (min)	MPE (dB)		
Channel										
Frequency (MHz)				204	207.5	211				
10	QPSK	1	0	21.41	21.50	21.47				
10	QPSK	1	20	21.36	21.44	21.44	22.7	0		
10	QPSK	1	40	21.34	21.40	21.33				
10	QPSK	25	0	21.26	21.43	21.38				
10	QPSK	25	12	21.29	21.16	21.22	22.7	0		
10	QPSK	25	20	21.40	21.24	21.21				
10	QPSK	50	0	21.24	21.26	21.28				
10	16QAM	1	0	21.27	21.35	21.27	22.7	0		
10	16QAM	1	20	21.25	21.31	21.28				
10	16QAM	1	40	21.19	21.30	21				



Band 17 Antt DS11									
BW (MHz)	Modulation	RB Size	RB Offset	Channel	Power Low	Power High	Power High	Turn-up	MFR
Channel					25700	25700	25800	(mW)	(dB)
Frequency (MHz)									
10	QPSK	1	0	21.21	21.21	21.21		22.7	0
10	QPSK	1	20	21.27	21.27	21.27			
10	QPSK	1	40	21.28	21.28	21.28			
10	QPSK	30	0	21.21	21.37	21.37			
10	QPSK	25	12	21.11	21.33	21.28		22.7	0
10	QPSK	25	0	21.18	21.25	21.25			
10	QPSK	50	0	21.18	21.25	21.11			
10	16QAM	1	0	21.36	21.22	21.15		22.7	0
10	16QAM	1	20	21.32	21.26	21.18			
10	16QAM	1	40	21.28	21.28	21.18			
10	16QAM	25	0	21.25	21.31	21.18			
10	16QAM	25	12	21.25	21.18	21.15		22.7	0
10	16QAM	25	25	21.14	21.41	21.28			
10	16QAM	50	0	21.15	21.14	21.24			
10	8QAM	1	0	21.28	21.20	21.15		22.7	0
10	8QAM	1	20	21.28	21.21	21.20			
10	8QAM	1	40	21.28	21.28	21.18			
10	8QAM	25	0	21.28	21.24	21.25			
10	8QAM	25	12	21.16	21.26	21.32		22.7	0
10	8QAM	25	25	21.17	21.32	21.25			
10	256QAM	1	0	19.11	19.43	19.13		20.7	2
10	256QAM	1	20	19.38	19.42	19.32			
10	256QAM	1	40	19.32	19.36	19.28			
10	256QAM	25	0	19.30	19.40	19.15			
10	256QAM	25	12	19.17	19.35	19.08		20.7	2
10	256QAM	25	25	19.25	19.20	19.20			
10	256QAM	50	0	19.19	19.25	19.33			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.24	21.40	21.21		22.7	0
5	QPSK	1	12	21.21	21.24	21.18			
5	QPSK	1	24	21.31	21.22	21.28			
5	QPSK	12	0	21.18	21.10	21.35			
5	QPSK	12	7	21.05	21.29	21.23		22.7	0
5	QPSK	12	13	21.33	21.29	21.28			
5	QPSK	25	0	21.25	21.10	21.14			
5	16QAM	1	0	21.36	21.14	21.08		22.7	0
5	16QAM	1	12	21.32	21.34	21.25			
5	16QAM	1	24	21.44	21.19	21.24			
5	16QAM	12	0	21.27	21.28	21.15			
5	16QAM	12	7	21.27	21.26	21.16		22.7	0
5	16QAM	12	13	21.14	21.34	21.31			
5	16QAM	25	0	21.17	21.07	21.20			
5	8QAM	1	0	21.24	21.13	21.11		22.7	0
5	8QAM	1	12	21.44	21.15	21.32			
5	8QAM	1	24	21.34	21.37	21.14			
5	8QAM	12	0	21.28	21.11	21.28			
5	8QAM	12	7	21.19	21.28	21.37		22.7	0
5	8QAM	12	13	21.14	21.31	21.28			
5	256QAM	1	0	19.05	19.44	19.07		20.7	2
5	256QAM	1	12	19.38	19.43	19.38			
5	256QAM	1	24	19.30	19.40	19.22			
5	256QAM	12	0	19.41	19.40	19.18			
5	256QAM	12	7	19.21	19.20	19.13		20.7	2
5	256QAM	12	13	19.13	19.13	19.28			
5	256QAM	25	0	19.17	19.14	19.38			

Band 26 Antt DS11									
BW (MHz)	Modulation	RB Size	RB Offset	Channel	Power Low	Power High	Power High	Turn-up	MFR
Channel					26700	26600	26600	(mW)	(dB)
Frequency (MHz)									
15	QPSK	1	0	21.19	21.38	21.22		22.7	0
15	QPSK	1	20	21.25	21.28	21.18			
15	QPSK	1	40	21.27	21.31	21.18			
15	QPSK	30	0	21.09	21.32	21.18			
15	QPSK	25	20	21.00	21.26	21.19		22.7	0
15	QPSK	25	0	21.27	21.18	21.18			
15	QPSK	50	0	21.05	21.11	21.05			
15	16QAM	1	0	21.26	21.21	21.15		22.7	0
15	16QAM	1	20	21.28	21.24	21.18			
15	16QAM	1	40	21.27	21.22	21.19			
15	16QAM	25	0	21.27	21.23	21.08			
15	16QAM	25	20	21.12	21.18	21.11		22.7	0
15	16QAM	25	50	21.09	21.28	21.08			
15	16QAM	50	0	21.03	21.19	21.18			
15	8QAM	1	0	21.16	21.18	21.05		22.7	0
15	8QAM	1	20	21.31	21.15	21.23			
15	8QAM	1	40	21.20	21.03	21.08			
15	8QAM	25	0	21.28	21.12	21.23			
15	8QAM	25	20	21.06	21.12	21.36		22.7	0
15	8QAM	25	50	21.13	21.32	21.21			
15	256QAM	1	0	19.12	19.15	19.28		20.7	2
15	256QAM	1	20	19.04	19.48	19.18			
15	256QAM	1	40	19.28	19.33	19.34		20.7	2
15	256QAM	1	74	19.28	19.27	19.28			
15	256QAM	25	0	19.38	19.44	19.18			
15	256QAM	25	20	19.18	19.24	19.14		20.7	2
15	256QAM	25	50	19.21	19.18	19.28			
15	256QAM	50	0	19.19	19.17	19.22			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.02	21.25	21.14		22.7	0
10	QPSK	1	20	21.11	21.12	21.03			
10	QPSK	1	40	21.21	21.14	21.09			
10	QPSK	25	0	21.01	21.10	21.18			
10	QPSK	25	12	20.92	21.08	21.11		22.7	0
10	QPSK	25	25	21.11	21.19	21.16			
10	QPSK	50	0	21.03	20.96	20.88			
10	16QAM	1	0	21.12	21.17	21.05		22.7	0
10	16QAM	1	25	21.28	21.28	21.04			
10	16QAM	1	50	21.22	21.13	21.01			
10	16QAM	25	0	21.18	21.18	20.95			
10	16QAM	25	12	21.04	21.08	21.08		22.7	0
10	16QAM	25	25	20.95	21.18	21.22			
10	16QAM	50	0	20.93	21.03	21.06			
10	8QAM	1	0	21.10	21.10	20.99		22.7	0
10	8QAM	1	25	21.28	20.97	21.18			
10	8QAM	1	50	21.17	21.27	21.01			
10	8QAM	25	0	21.13	21.08	21.11		22.7	0
10	8QAM	25	12	20.91	20.98	21.21			
10	8QAM	25	25	21.03	21.14	21.07			
10	8QAM	50	0	21.14	21.16	21.17			
10	256QAM	1	0	19.01	19.30	19.00		20.7	2
10	256QAM	1	25	19.35	19.31	19.34			
10	256QAM	1	50	19.27	19.39	19.24		20.7	2
10	256QAM	25	0	19.28	19.35	19.13			
10	256QAM	25	12	19.11	19.24	19.11		20.7	2
10	256QAM	25	25	19.25	19.27	19.28			
10	256QAM	50	0	19.20	19.27	19.30			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.10	21.26	21.11		22.7	0
5	QPSK	1	12	21.04	21.15	21.05			
5	QPSK	1	24	21.23	21.16	21.07			
5	QPSK	12	0	20.95	21.08	21.14			
5	QPSK	12	7	20.94	21.19	21.02		22.7	0
5	QPSK	12	13	21.12	21.14	21.13			
5	QPSK	25	0	21.01	20.93	20.87			
5	16QAM	1	0	21.18	21.13	21.05		22.7	0
5	16QAM	1	12	21.23	21.28	21.12			
5	16QAM	1	24	21.28	21.12	21.13			
5	16QAM	12	0	21.18	21.12	20.97			
5	16QAM	12	7	21.07	21.14	20.95		22.7	0
5	16QAM	12	13	21.01	21.08	21.24			
5	16QAM	25	0	20.98	21.13	21.06			
5	8QAM	1	0	21.02	21.02	20.93		22.7	0
5	8QAM	1	12	21.20	21.02	21.18			
5	8QAM	1	24	21.04	21.23	20.98			
5	8QAM	12	0	21.13	21.04	21.11			
5	8QAM	12	7	21.02	20.97	21.27		22.7	0
5	8QAM	12	13	21.00	21.20	21.13			
5	256QAM	1	0	19.03	19.41				



GSM1900 Ant3 DSI1

GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	861	910		512	861	910	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.71	29.88	29.75	30.50	20.71	20.88	20.75	21.50
GPRS 1 Tx slot	29.53	29.96	29.72	30.50	20.53	20.96	20.72	21.50
GPRS 2 Tx slots	26.47	28.94	26.67	27.50	20.47	20.94	20.67	21.50
GPRS 3 Tx slots	25.12	25.23	25.17	25.50	20.86	20.97	20.91	21.24
GPRS 4 Tx slots	23.42	23.45	23.02	24.90	20.42	20.45	20.02	21.50
EDGE 1 Tx slot	25.19	25.59	25.44	26.50	16.19	16.59	16.44	17.50
EDGE 2 Tx slots	22.26	22.62	22.21	24.00	16.26	16.62	16.21	18.00
EDGE 3 Tx slots	20.32	20.20	20.16	21.50	16.06	15.94	15.90	17.24
EDGE 4 Tx slots	19.41	19.56	19.40	20.50	16.41	16.56	16.40	17.50

WCDMA II Ant3 DSI1

WCDMA IV Ant3 DSI1

Band TX Channel	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99 AMR 12.2Kbps	24.07	24.18	24.21	25.00	24.00	24.02	24.01	25.00
3GPP Rel 99 RMC 12.2Kbps	24.03	24.25	24.18	25.00	24.03	24.05	23.99	25.00
3GPP Rel 6 HSDPA Subtest-1	23.08	23.36	23.13	24.00	23.00	22.97	23.06	24.00
3GPP Rel 6 HSDPA Subtest-2	23.04	23.16	23.24	24.00	23.14	23.08	23.10	24.00
3GPP Rel 6 HSDPA Subtest-3	22.50	22.77	22.65	23.50	22.44	22.55	22.38	23.50
3GPP Rel 6 HSDPA Subtest-4	22.48	22.62	22.75	23.50	22.49	22.43	22.37	23.50
3GPP Rel 8 DC-HSDPA Subtest-1	23.05	23.17	23.12	24.00	23.03	23.09	22.97	24.00
3GPP Rel 8 DC-HSDPA Subtest-2	23.12	23.22	23.14	24.00	23.15	23.09	22.93	24.00
3GPP Rel 8 DC-HSDPA Subtest-3	22.55	22.76	22.61	23.50	22.56	22.65	22.49	23.50
3GPP Rel 8 DC-HSDPA Subtest-4	22.52	22.75	22.64	23.50	22.52	22.54	22.58	23.50
3GPP Rel 6 HSUPA Subtest-1	23.11	23.17	23.16	24.00	23.08	23.06	22.97	24.00
3GPP Rel 6 HSUPA Subtest-2	20.92	21.22	21.26	22.00	21.11	21.09	20.88	22.00
3GPP Rel 6 HSUPA Subtest-3	21.98	22.17	22.15	23.00	22.10	21.98	21.95	23.00
3GPP Rel 6 HSUPA Subtest-4	21.10	21.15	21.26	22.00	21.07	20.96	21.09	22.00
3GPP Rel 6 HSUPA Subtest-5	23.14	23.35	23.26	24.00	23.00	22.97	23.10	24.00



Band 25 Ant3 DS1										
BW (MHz)	Modulation	RB Size	RB Offset	Start Freq (MHz)	End Freq (MHz)	Channel	Power (dBm)	Power Spectral Density (dBm/MHz)	Time Slot (ms)	APN (dB)
20	QPSK	1	0	18.44	18.48	18.46	23.5	-172.5	2.0	0
20	QPSK	1	48	18.48	18.52	18.50	23.5	-172.5	2.0	0
20	QPSK	1	96	18.52	18.56	18.54	23.5	-172.5	2.0	0
20	QPSK	1	144	18.56	18.60	18.58	23.5	-172.5	2.0	0
20	QPSK	1	192	18.60	18.64	18.62	23.5	-172.5	2.0	0
20	QPSK	1	240	18.64	18.68	18.66	23.5	-172.5	2.0	0
20	QPSK	1	288	18.68	18.72	18.70	23.5	-172.5	2.0	0
20	QPSK	1	336	18.72	18.76	18.74	23.5	-172.5	2.0	0
20	QPSK	1	384	18.76	18.80	18.78	23.5	-172.5	2.0	0
20	QPSK	1	432	18.80	18.84	18.82	23.5	-172.5	2.0	0
20	QPSK	1	480	18.84	18.88	18.86	23.5	-172.5	2.0	0
20	QPSK	1	528	18.88	18.92	18.90	23.5	-172.5	2.0	0
20	QPSK	1	576	18.92	18.96	18.94	23.5	-172.5	2.0	0
20	QPSK	1	624	18.96	19.00	18.98	23.5	-172.5	2.0	0
20	QPSK	1	672	19.00	19.04	19.02	23.5	-172.5	2.0	0
20	QPSK	1	720	19.04	19.08	19.06	23.5	-172.5	2.0	0
20	QPSK	1	768	19.08	19.12	19.10	23.5	-172.5	2.0	0
20	QPSK	1	816	19.12	19.16	19.14	23.5	-172.5	2.0	0
20	QPSK	1	864	19.16	19.20	19.18	23.5	-172.5	2.0	0
20	QPSK	1	912	19.20	19.24	19.22	23.5	-172.5	2.0	0
20	QPSK	1	960	19.24	19.28	19.26	23.5	-172.5	2.0	0
20	QPSK	1	1008	19.28	19.32	19.30	23.5	-172.5	2.0	0
20	QPSK	1	1056	19.32	19.36	19.34	23.5	-172.5	2.0	0
20	QPSK	1	1104	19.36	19.40	19.38	23.5	-172.5	2.0	0
20	QPSK	1	1152	19.40	19.44	19.42	23.5	-172.5	2.0	0
20	QPSK	1	1200	19.44	19.48	19.46	23.5	-172.5	2.0	0
20	QPSK	1	1248	19.48	19.52	19.50	23.5	-172.5	2.0	0
20	QPSK	1	1296	19.52	19.56	19.54	23.5	-172.5	2.0	0
20	QPSK	1	1344	19.56	19.60	19.58	23.5	-172.5	2.0	0
20	QPSK	1	1392	19.60	19.64	19.62	23.5	-172.5	2.0	0
20	QPSK	1	1440	19.64	19.68	19.66	23.5	-172.5	2.0	0
20	QPSK	1	1488	19.68	19.72	19.70	23.5	-172.5	2.0	0
20	QPSK	1	1536	19.72	19.76	19.74	23.5	-172.5	2.0	0
20	QPSK	1	1584	19.76	19.80	19.78	23.5	-172.5	2.0	0
20	QPSK	1	1632	19.80	19.84	19.82	23.5	-172.5	2.0	0
20	QPSK	1	1680	19.84	19.88	19.86	23.5	-172.5	2.0	0
20	QPSK	1	1728	19.88	19.92	19.90	23.5	-172.5	2.0	0
20	QPSK	1	1776	19.92	19.96	19.94	23.5	-172.5	2.0	0
20	QPSK	1	1824	19.96	20.00	19.98	23.5	-172.5	2.0	0
20	QPSK	1	1872	20.00	20.04	20.02	23.5	-172.5	2.0	0
20	QPSK	1	1920	20.04	20.08	20.06	23.5	-172.5	2.0	0
20	QPSK	1	1968	20.08	20.12	20.10	23.5	-172.5	2.0	0
20	QPSK	1	2016	20.12	20.16	20.14	23.5	-172.5	2.0	0
20	QPSK	1	2064	20.16	20.20	20.18	23.5	-172.5	2.0	0
20	QPSK	1	2112	20.20	20.24	20.22	23.5	-172.5	2.0	0
20	QPSK	1	2160	20.24	20.28	20.26	23.5	-172.5	2.0	0
20	QPSK	1	2208	20.28	20.32	20.30	23.5	-172.5	2.0	0
20	QPSK	1	2256	20.32	20.36	20.34	23.5	-172.5	2.0	0
20	QPSK	1	2304	20.36	20.40	20.38	23.5	-172.5	2.0	0
20	QPSK	1	2352	20.40	20.44	20.42	23.5	-172.5	2.0	0
20	QPSK	1	2400	20.44	20.48	20.46	23.5	-172.5	2.0	0
20	QPSK	1	2448	20.48	20.52	20.50	23.5	-172.5	2.0	0
20	QPSK	1	2496	20.52	20.56	20.54	23.5	-172.5	2.0	0
20	QPSK	1	2544	20.56	20.60	20.58	23.5	-172.5	2.0	0
20	QPSK	1	2592	20.60	20.64	20.62	23.5	-172.5	2.0	0
20	QPSK	1	2640	20.64	20.68	20.66	23.5	-172.5	2.0	0
20	QPSK	1	2688	20.68	20.72	20.70	23.5	-172.5	2.0	0
20	QPSK	1	2736	20.72	20.76	20.74	23.5	-172.5	2.0	0
20	QPSK	1	2784	20.76	20.80	20.78	23.5	-172.5	2.0	0
20	QPSK	1	2832	20.80	20.84	20.82	23.5	-172.5	2.0	0
20	QPSK	1	2880	20.84	20.88	20.86	23.5	-172.5	2.0	0
20	QPSK	1	2928	20.88	20.92	20.90	23.5	-172.5	2.0	0
20	QPSK	1	2976	20.92	20.96	20.94	23.5	-172.5	2.0	0
20	QPSK	1	3024	20.96	21.00	20.98	23.5	-172.5	2.0	0
20	QPSK	1	3072	21.00	21.04	21.02	23.5	-172.5	2.0	0
20	QPSK	1	3120	21.04	21.08	21.06	23.5	-172.5	2.0	0
20	QPSK	1	3168	21.08	21.12	21.10	23.5	-172.5	2.0	0
20	QPSK	1	3216	21.12	21.16	21.14	23.5	-172.5	2.0	0
20	QPSK	1	3264	21.16	21.20	21.18	23.5	-172.5	2.0	0
20	QPSK	1	3312	21.20	21.24	21.22	23.5	-172.5	2.0	0
20	QPSK	1	3360	21.24	21.28	21.26	23.5	-172.5	2.0	0
20	QPSK	1	3408	21.28	21.32	21.30	23.5	-172.5	2.0	0
20	QPSK	1	3456	21.32	21.36	21.34	23.5	-172.5	2.0	0
20	QPSK	1	3504	21.36	21.40	21.38	23.5	-172.5	2.0	0
20	QPSK	1	3552	21.40	21.44	21.42	23.5	-172.5	2.0	0
20	QPSK	1	3600	21.44	21.48	21.46	23.5	-172.5	2.0	0
20	QPSK	1	3648	21.48	21.52	21.50	23.5	-172.5	2.0	0
20	QPSK	1	3696	21.52	21.56	21.54	23.5	-172.5	2.0	0
20	QPSK	1	3744	21.56	21.60	21.58	23.5	-172.5	2.0	0
20	QPSK	1	3792	21.60	21.64	21.62	23.5	-172.5	2.0	0
20	QPSK	1	3840	21.64	21.68	21.66	23.5	-172.5	2.0	0
20	QPSK	1	3888	21.68	21.72	21.70	23.5	-172.5	2.0	0
20	QPSK	1	3936	21.72	21.76	21.74	23.5	-172.5	2.0	0
20	QPSK	1	3984	21.76	21.80	21.78	23.5	-172.5	2.0	0
20	QPSK	1	4032	21.80	21.84	21.82	23.5	-172.5	2.0	0
20	QPSK	1	4080	21.84	21.88	21.86	23.5	-172.5	2.0	0
20	QPSK	1	4128	21.88	21.92	21.90	23.5	-172.5	2.0	0
20	QPSK	1	4176	21.92	21.96	21.94	23.5	-172.5	2.0	0
20	QPSK	1	4224	21.96	22.00	21.98	23.5	-172.5	2.0	0
20	QPSK	1	4272	22.00	22.04	22.02	23.5	-172.5	2.0	0
20	QPSK	1	4320	22.04	22.08	22.06	23.5	-172.5	2.0	0
20	QPSK	1	4368	22.08	22.12	22.10	23.5	-172.5	2.0	0
20	QPSK	1	4416	22.12	22.16	22.14	23.5	-172.5	2.0	0
20	QPSK	1	4464	22.16	22.20	22.18	23.5	-172.5	2.0	0
20	QPSK	1	4512	22.20	22.24	22.22	23.5	-172.5	2.0	0
20	QPSK	1	4560	22.24	22.28	22.26	23.5	-172.5	2.0	0
20	QPSK	1	4608	22.28	22.32	22.30	23.5	-172.5	2.0	0
20	QPSK	1	4656	22.32	22.36	22.34	23.5	-172.5	2.0	0
20	QPSK	1	4704	22.36	22.40	22.38	23.5	-172.5	2.0	0
20	QPSK	1	4752	22.40	22.44	22.42	23.5	-172.5	2.0	0
20	QPSK	1	4800	22.44	22.48	22.46	23.5	-172.5	2.0	0
20	QPSK	1	4848	22.48	22.52	22.50	23.5	-172.5	2.0	0
20	QPSK	1	4896	22.52	22.56	22.54	23.5	-172.5	2.0	0
20	QPSK	1	4944	22.56	22.60	22.58	23.5	-172.5	2.0	0
20	QPSK	1	4992	22.60	22.64	22.62	23.5	-172.5	2.0	0
20	QPSK	1	5040	22.64	22.68	22.66	23.5	-172.5	2.0	0
20	QPSK	1	5088	22.68	22.72	22.70	23.5	-172.5	2.0	0
20	QPSK	1	5136	22.72	22.76	22.74	23.5	-172.5	2.0	0
20	QPSK	1	5184	22.76	22.80	22.78	23.5	-172.5	2.0	0
20	QPSK	1	5232	22.80	22.84	22.82	23.5	-172.5		



Band 38 Ant3 DSI1										
BW [MHz]	Modulation	Channel Frequency (MHz)	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel Frequency (MHz)					37850	38000	38150			
Channel Frequency (MHz)					2880	2905	2910			
20	QPSK	1	0	24.06	24.40	24.14		25.7	0	
20	QPSK	1	49	24.06	24.23	24.11				
20	QPSK	1	99	24.10	24.24	24.10				
20	QPSK	50	24	23.12	23.28	23.16		24.7	1	
20	QPSK	50	24	23.06	23.27	23.17				
20	QPSK	50	50	23.01	23.27	23.17				
20	QPSK	100	0	23.10	23.27	23.08				
20	16QAM	1	0	23.08	23.18	23.14		24.7	1	
20	16QAM	1	49	23.01	23.17	23.07				
20	16QAM	1	99	23.06	23.22	23.16				
20	16QAM	50	0	22.05	22.30	22.12				
20	16QAM	50	24	22.11	22.24	22.03		23.7	2	
20	16QAM	50	50	22.01	22.31	22.06				
20	16QAM	100	0	22.12	22.32	22.16				
20	64QAM	1	0	22.05	22.31	22.13		23.7	2	
20	64QAM	1	49	22.01	22.28	22.13				
20	64QAM	1	99	22.08	22.30	22.17				
20	64QAM	50	0	21.06	21.27	21.18				
20	64QAM	50	24	21.08	21.26	21.18		22.7	3	
20	64QAM	50	50	21.01	21.28	21.08				
20	64QAM	100	0	21.07	21.25	21.09				
20	256QAM	1	0	19.00	19.32	19.17		20.7	5	
20	256QAM	1	49	19.09	19.27	19.05				
20	256QAM	1	99	19.03	19.26	19.16				
20	256QAM	50	0	19.03	19.31	19.18		20.7	5	
20	256QAM	50	24	19.08	19.22	19.04				
20	256QAM	50	50	19.00	19.22	19.06				
20	256QAM	100	0	19.04	19.23	19.13				
Channel Frequency (MHz)					37850	38000	38150			
Channel Frequency (MHz)					2577.5	2595	2612.5			
15	QPSK	1	0	24.03	24.37	24.07		25.7	0	
15	QPSK	1	37	24.04	24.22	24.15				
15	QPSK	1	74	24.06	24.26	24.03		24.7	1	
15	QPSK	36	20	23.13	23.36	23.13				
15	QPSK	36	20	23.04	23.09	23.12				
15	QPSK	36	39	23.04	23.29	23.24				
15	QPSK	75	0	23.13	23.28	23.09		24.7	1	
15	16QAM	1	0	23.09	23.14	23.11		24.7	1	
15	16QAM	1	37	23.14	23.18	23.04				
15	16QAM	1	74	23.08	23.20	23.20				
15	16QAM	36	0	22.08	22.27	22.17		23.7	2	
15	16QAM	36	20	22.04	22.17	22.07				
15	16QAM	36	39	22.00	22.26	22.00				
15	16QAM	75	0	22.10	22.34	22.11		23.7	2	
15	64QAM	1	0	22.10	22.26	22.11				
15	64QAM	1	37	22.01	22.21	22.10		23.7	2	
15	64QAM	1	74	22.02	22.23	22.25				
15	64QAM	36	0	21.04	21.31	21.22		22.7	3	
15	64QAM	36	20	21.00	21.26	21.14				
15	64QAM	36	39	21.01	21.31	21.15				
15	64QAM	75	0	21.01	21.30	21.03		20.7	5	
15	256QAM	1	0	19.07	19.38	19.23				
15	256QAM	1	37	19.03	19.25	19.11				
15	256QAM	1	74	19.11	19.31	19.12		20.7	5	
15	256QAM	36	0	19.18	19.29	19.25				
15	256QAM	36	20	19.13	19.24	19.07				
15	256QAM	36	39	19.05	19.20	19.01				
15	256QAM	75	0	19.09	19.25	19.07				
Channel Frequency (MHz)					37850	38000	38150			
Channel Frequency (MHz)					2575	2595	2615			
10	QPSK	1	0	24.11	24.26	24.15		25.7	0	
10	QPSK	1	25	24.09	24.22	24.10				
10	QPSK	1	49	24.16	24.25	24.08		24.7	1	
10	QPSK	25	0	23.06	23.29	23.20				
10	QPSK	25	12	23.00	23.08	23.05				
10	QPSK	25	25	23.03	23.23	23.15				
10	QPSK	50	0	23.06	23.26	23.15		24.7	1	
10	16QAM	1	0	23.06	23.18	23.15				
10	16QAM	1	25	23.08	23.12	23.02		24.7	1	
10	16QAM	1	49	23.01	23.29	23.12				
10	16QAM	25	0	22.08	22.28	22.14		23.7	2	
10	16QAM	25	12	22.11	22.28	22.08				
10	16QAM	25	25	22.04	22.28	22.09				
10	16QAM	50	0	22.11	22.30	22.23		23.7	2	
10	64QAM	1	0	22.07	22.26	22.11				
10	64QAM	1	25	22.04	22.28	22.12		23.7	2	
10	64QAM	1	49	22.03	22.31	22.16				
10	64QAM	25	0	21.05	21.21	21.13		22.7	3	
10	64QAM	25	12	21.06	21.32	21.24				
10	64QAM	25	25	21.06	21.28	21.15				
10	64QAM	50	0	21.03	21.26	21.09		20.7	5	
10	256QAM	1	0	19.08	19.25	19.14				
10	256QAM	1	25	19.04	19.25	19.02				
10	256QAM	1	49	19.10	19.36	19.12		20.7	5	
10	256QAM	25	0	19.09	19.27	19.19				
10	256QAM	25	12	19.07	19.21	19.03				
10	256QAM	25	25	19.03	19.24	19.10				
10	256QAM	50	0	19.08	19.25	19.08				
Channel Frequency (MHz)					37850	38000	38150			
Channel Frequency (MHz)					2572.5	2595	2617.5			
5	QPSK	1	0	24.12	24.23	24.13		25.7	0	
5	QPSK	1	12	24.05	24.17	24.15				
5	QPSK	1	24	24.08	24.19	24.09		24.7	1	
5	QPSK	12	0	23.08	23.23	23.09				
5	QPSK	12	7	23.08	23.11	23.05				
5	QPSK	12	13	23.08	23.27	23.16		24.7	1	
5	QPSK	25	0	23.11	23.24	23.07				
5	16QAM	1	0	23.03	23.20	23.08		24.7	1	
5	16QAM	1	12	23.02	23.16	23.08				
5	16QAM	1	24	23.02	23.24	23.21				
5	16QAM	12	0	22.01	22.35	22.13		23.7	2	
5	16QAM	12	7	22.03	22.26	22.08				
5	16QAM	12	13	22.06	22.25	22.12				
5	16QAM	25	0	22.13	22.37	22.08		23.7	2	
5	64QAM	1	0	22.07	22.25	22.16				
5	64QAM	1	12	22.05	22.23	22.12		23.7	2	
5	64QAM	1	24	22.12	22.23	22.12				
5	64QAM	12	0	21.15	21.33	21.22		22.7	3	
5	64QAM	12	13	21.10	21.33	21.01				
5	64QAM	25	0	21.05	21.32	21.16				
5	256QAM	1	0	19.00	19.38	19.20		20.7	5	
5	256QAM	1	12	19.01	19.23	19.19				
5	256QAM	1	24	19.02	19.31	19.18				
5	256QAM	12	0	19.04	19.25	19.19				
5	256QAM	12	7	19.13	19.25	19.08		20.7	5	
5	256QAM	12	13	19.04	19.21	19.04				
5	256QAM	25	0	19.03	19.25	19.08				

Band 41 Ant3 DSI1										
BW [MHz]	Modulation	Channel Frequency (MHz)	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel Frequency (MHz)					39750	40185	40620	<th> <th> </th></th>	<th> </th>	
Channel Frequency (MHz)					2506	2549.5	2593	<th> <th> </th></th>	<th> </th>	
20	QPSK	1	0	24.23	24.19	24.41	24.32	25.7	0	
20	QPSK	1	49	24.30	24.14	24.39	24.30			
20	QPSK	1	99	24.23	24.24	24.34	24.15			
20	QPSK	50	0	23.17	23.17	23.44	23.20	24.7	1	
20	QPSK	50	24	23.21	23.24	23.32	23.14			
20	QPSK	50	50	23.36	23.18	23.39	23.33			
20	QPSK	100	0	23.27	23.17	23.42	23.33			
20	16QAM	1	0	23.23	23.18	23.37	23.18	24.7	1	
20	16QAM	1	49	23.31	23.14	23.41	23.17			
20	16QAM	1	99	23.28	23.15	23.32	23.21			
20	16QAM	50	0	22.31	22.29	22.34	22.29			
20	16QAM	50	24	22.32	22.28	22.33	22.41	23.7	2	
20	16QAM	50	50	22.32	22.14	22.31	22.17			
20	16QAM	100	0	22.16	22.23	22.47	22.23			
20	64QAM	1	0	22.31	22.18	22.30	22.26	23.7	2	
20	64QAM	1	49	22.38	22.19	22.36	22.24			
20	64QAM	1	99	22.19	22.14	22.37	22.17			
20	64QAM	50	0	21.33	21.26	21.47	21.30	22.7	3	
20	64QAM	50	24	21.29	21.30	21.40	21.37			
20	64QAM	50	50	21.32	21.39	21.39	21.21			
20	64QAM	100	0	21.21	21.32	21.35	21.24			
20	256QAM	1	0	19.33	19.27	19.53	19.31	20.7	5	
20	256QAM	1	49	19.42	19.16	19.28	19.40			
20	256QAM	1	99	19.24	19.18	19.46	19.35			



GSM1900 Ant4 DS11

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1859.2	1860	1869.8		1859.2	1860	1869.8	
Frequency (MHz)	25.88	26.12	26.22	27.00	16.88	17.12	17.22	18.00
GSM 1 Tx slot	25.88	26.12	26.22	27.00	16.88	17.12	17.22	18.00
GPRS 1 Tx slot	25.88	26.19	26.14	27.00	16.98	17.19	17.14	18.00
GPRS 2 Tx slots	22.81	22.92	22.73	23.00	16.81	16.92	16.73	17.00
GPRS 3 Tx slots	20.93	20.98	20.81	21.00	16.67	16.72	16.55	16.74
GPRS 4 Tx slots	19.96	19.66	19.92	20.00	16.96	16.66	16.92	17.00
EDGE 1 Tx slot	24.62	24.83	24.84	25.50	15.62	15.83	15.84	16.50
EDGE 2 Tx slots	21.53	21.87	21.69	22.00	15.53	15.87	15.69	16.00
EDGE 3 Tx slots	20.20	20.15	20.12	20.50	15.94	15.89	15.86	16.24
EDGE 4 Tx slots	18.47	18.34	18.45	19.00	15.47	15.34	15.45	16.00

WCDMA II Ant4 DS11

WCDMA IV Ant4 DS11

Band	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	
	9262	9400	9538		1312	1413	1519		
TX Channel	9262	9400	9538		1312	1413	1519		
Rx Channel	9662	9800	9938		1537	1638	1739		
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		
3GPP Rel 99	AMR 12.2Kbps	15.55	15.67	15.43	17.00	16.44	16.56	16.41	18.00
3GPP Rel 99	RMC 12.2Kbps	15.58	15.68	15.46	17.00	16.46	16.58	16.43	18.00
3GPP Rel 6	HSDPA Subtest-1	14.56	14.69	14.73	16.00	15.78	15.84	15.84	17.00
3GPP Rel 6	HSDPA Subtest-2	14.57	14.63	14.74	16.00	15.73	15.88	15.85	17.00
3GPP Rel 6	HSDPA Subtest-3	14.03	14.20	14.26	15.50	15.27	15.37	15.33	16.50
3GPP Rel 6	HSDPA Subtest-4	14.04	14.17	14.28	15.50	15.24	15.35	15.28	16.50
3GPP Rel 8	DC-HSDPA Subtest-1	14.59	14.69	14.74	16.00	15.89	15.91	15.82	17.00
3GPP Rel 8	DC-HSDPA Subtest-2	14.56	14.54	14.62	16.00	15.81	15.80	15.76	17.00
3GPP Rel 8	DC-HSDPA Subtest-3	14.12	14.15	14.30	15.50	15.26	15.44	15.40	16.50
3GPP Rel 8	DC-HSDPA Subtest-4	13.95	14.06	14.32	15.50	15.33	15.30	15.34	16.50
3GPP Rel 6	HSUPA Subtest-1	14.51	14.51	14.64	16.00	15.44	15.70	15.70	17.00
3GPP Rel 6	HSUPA Subtest-2	12.49	12.56	12.63	14.00	13.33	13.71	13.67	15.00
3GPP Rel 6	HSUPA Subtest-3	13.59	13.72	13.59	15.00	14.46	14.67	14.61	16.00
3GPP Rel 6	HSUPA Subtest-4	12.67	12.68	12.80	14.00	13.40	13.55	13.63	15.00
3GPP Rel 6	HSUPA Subtest-5	14.47	14.63	14.57	16.00	15.40	15.52	15.71	17.00



Band 38 Ant4 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				37850	38000	38150				
20	QPSK	1	0	18.99	19.17	19.07	20	0		
20	QPSK	1	49	19.06	18.98	19.12				
20	QPSK	1	99	19.09	19.11	19.10				
20	QPSK	50	24	18.85	18.12	19.11				
20	QPSK	50	24	19.96	18.99	18.97				
20	QPSK	50	50	19.01	19.09	19.10				
20	QPSK	100	0	18.99	19.15	19.10				
20	16QAM	1	0	19.13	19.11	19.04				
20	16QAM	1	49	18.14	19.01	19.16				
20	16QAM	1	99	19.03	19.10	19.15				
20	16QAM	50	0	18.80	18.86	18.91				
20	16QAM	50	24	18.93	18.97	19.02				
20	16QAM	50	50	18.85	18.98	18.94				
20	16QAM	100	0	18.81	18.88	18.97				
20	64QAM	1	0	18.92	19.10	19.03				
20	64QAM	1	49	18.97	19.12	19.15				
20	64QAM	1	99	18.86	19.02	19.07				
20	64QAM	50	0	18.79	18.93	18.96				
20	64QAM	50	24	18.93	18.88	18.97				
20	64QAM	50	50	18.80	18.97	18.97				
20	64QAM	100	0	18.90	18.82	18.91				
20	256QAM	1	0	18.02	18.31	18.13				
20	256QAM	1	49	18.09	18.16	18.16				
20	256QAM	50	24	18.13	18.20	18.15				
20	256QAM	50	0	18.08	18.23	18.12				
20	256QAM	50	24	17.95	17.93	18.23				
20	256QAM	50	50	18.07	18.14	18.12				
20	256QAM	100	0	17.88	18.13	18.08				
Channel Frequency (MHz)				37850	38000	38150	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				2572.5	2595	2612.5				
15	QPSK	1	0	18.92	19.08	19.02				
15	QPSK	1	37	18.93	18.94	19.08				
15	QPSK	1	74	19.05	18.99	18.96				
15	QPSK	36	20	18.78	18.82	19.06				
15	QPSK	36	39	18.88	18.98	18.93				
15	QPSK	75	0	18.91	18.85	19.09				
15	16QAM	1	0	18.98	18.95	18.91				
15	16QAM	1	37	18.97	18.87	19.11				
15	16QAM	1	74	18.90	18.94	19.00				
15	16QAM	36	0	18.65	18.79	18.87				
15	16QAM	36	20	18.82	18.87	18.86				
15	16QAM	36	39	18.79	18.94	18.83				
15	16QAM	75	0	18.85	18.76	18.81				
15	64QAM	1	0	18.83	18.92	18.89				
15	64QAM	1	37	18.93	18.96	19.05				
15	64QAM	1	74	18.77	18.98	18.97				
15	64QAM	36	0	18.71	18.72	18.79				
15	64QAM	36	20	18.78	18.82	18.83				
15	64QAM	36	39	18.84	18.82	18.87				
15	64QAM	75	0	18.82	18.71	18.75				
15	256QAM	1	0	17.99	18.24	18.07				
15	256QAM	1	37	18.03	18.08	18.01				
15	256QAM	50	24	18.09	18.94	18.01				
15	256QAM	36	0	18.00	18.14	17.98				
15	256QAM	36	20	17.92	17.84	18.10				
15	256QAM	36	39	17.99	17.98	18.04				
15	256QAM	75	0	17.80	18.08	18.04				
Channel Frequency (MHz)				37850	38000	38150	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	18.88	19.05	18.91				
10	QPSK	1	25	18.98	18.94	19.08				
10	QPSK	1	49	18.96	18.94	18.95				
10	QPSK	25	0	18.81	18.81	19.02				
10	QPSK	25	12	18.91	18.92	18.99				
10	QPSK	25	25	18.93	18.94	18.97				
10	QPSK	50	0	18.94	18.92	19.08				
10	16QAM	1	0	19.05	19.07	18.96				
10	16QAM	1	25	19.00	18.94	19.11				
10	16QAM	1	49	18.89	19.00	19.02				
10	16QAM	25	0	18.65	18.83	18.84				
10	16QAM	25	12	18.87	18.92	18.95				
10	16QAM	25	25	18.75	18.82	18.83				
10	16QAM	50	0	18.72	18.74	18.90				
10	64QAM	1	0	18.88	18.84	18.96				
10	64QAM	1	25	18.90	18.97	19.12				
10	64QAM	1	49	18.78	18.91	19.02				
10	64QAM	25	0	18.66	18.84	18.93				
10	64QAM	25	12	18.82	18.73	18.84				
10	64QAM	25	25	18.85	18.83	18.86				
10	64QAM	50	0	18.85	18.66	18.79				
10	256QAM	1	0	17.96	18.27	18.00				
10	256QAM	1	25	18.01	18.01	18.11				
10	256QAM	50	0	18.05	18.15	18.01				
10	256QAM	25	0	18.03	18.14	18.00				
10	256QAM	25	12	17.81	17.85	18.11				
10	256QAM	25	25	18.00	17.99	18.06				
10	256QAM	50	0	17.76	18.06	18.01				
Channel Frequency (MHz)				37850	38000	38150	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	18.87	19.11	18.96				
5	QPSK	1	12	18.99	18.88	18.95				
5	QPSK	1	24	18.92	18.95	18.96				
5	QPSK	12	0	18.75	18.83	19.04				
5	QPSK	12	7	18.81	18.91	18.96				
5	QPSK	12	13	18.91	19.00	19.07				
5	QPSK	25	0	18.95	18.87	19.06				
5	16QAM	1	0	19.05	19.00	19.01				
5	16QAM	1	12	19.09	18.92	19.05				
5	16QAM	1	24	19.00	19.05	18.98				
5	16QAM	12	0	18.69	18.76	18.77				
5	16QAM	12	7	18.82	18.91	18.85				
5	16QAM	12	13	18.79	18.84	18.78				
5	16QAM	25	0	18.78	18.71	18.87				
5	64QAM	1	0	18.82	18.95	19.00				
5	64QAM	1	12	18.80	19.06	19.01				
5	64QAM	1	24	18.80	18.93	18.96				
5	64QAM	12	0	18.73	18.84	18.93				
5	64QAM	12	7	18.85	18.82	18.82				
5	64QAM	12	13	18.81	18.92	18.81				
5	64QAM	25	0	18.77	18.75	18.88				
5	256QAM	1	0	17.90	18.17	18.08				
5	256QAM	1	12	17.94	18.01	18.06				
5	256QAM	1	24	18.07	18.07	18.03				
5	256QAM	12	0	17.92	18.18	18.08				
5	256QAM	12	7	17.82	17.86	18.09				
5	256QAM	12	13	17.96	17.98	18.08				
5	256QAM	25	0	17.82	17.96	17.97				

Band 41 Ant4 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				37850	40185	40600				
Channel Frequency (MHz)				2595	2549.5	2593				
20	QPSK	1	0	19.32	19.23	19.42				
20	QPSK	1	49	19.27	19.24	19.34				
20	QPSK	1	99	19.29	19.25	19.31				
20	QPSK	50	0	19.14	19.13	19.41				
20	QPSK	50	24	19.13	19.34	19.22				
20	QPSK	50	50	19.26	19.21	19.26				
20	QPSK	100	0	19.21	19.30	19.36				
20	16QAM	1	0	19.15	19.28	19.28				
20	16QAM	1	49	19.30	19.38	19.21				
20	16QAM	1	99	19.28	19.26	19.30				
20	16QAM	50	0	19.16	19.20					



Band 4 Ant5 DS11													
BV (MHz)	Modulation	RB Size	RB Offset	Power Low (dBm)	Power Mid (dBm)	Power High (dBm)	Turn-up (dBm)	MPC (dB)					
Channel													
Frequency (MHz)													
20	QPSK	6	0	18.52	18.52	18.52							
20	QPSK	1	49	18.68	18.68	18.73	20.5	0					
20	QPSK	6	0	18.52	18.52	18.52							
20	QPSK	50	0	18.53	18.57	18.63							
20	QPSK	50	24	18.53	18.52	18.63	20.5	0					
20	QPSK	50	49	18.53	18.52	18.63	20.5	0					
20	QPSK	100	0	18.54	18.67	18.56							
20	HQAM	1	49	18.64	18.52	18.68	20.5	0					
20	HQAM	1	49	18.65	18.58	18.66	20.5	0					
20	HQAM	1	99	18.67	18.70	18.70							
20	HQAM	1	49	18.61	18.59	18.52							
20	HQAM	50	24	18.64	18.51	18.57	20.5	0					
20	HQAM	50	49	18.68	18.54	18.50	20.5	0					
20	HQAM	100	0	18.58	18.50	18.57							
20	HQAM	1	0	18.60	18.57	18.58							
20	HQAM	1	49	18.52	18.59	18.58	20.5	0					
20	HQAM	1	99	18.71	18.58	18.58							
20	HQAM	50	24	18.58	18.75	18.57	20.5	0					
20	HQAM	50	49	18.62	18.54	18.58	20.5	0					
20	HQAM	100	0	18.63	18.56	18.57							
20	ZSSBAM	1	0	17.77	17.68	17.67	19.5	1					
20	ZSSBAM	1	99	17.79	17.85	17.71							
20	ZSSBAM	50	24	17.54	17.53	17.73	19.5	1					
20	ZSSBAM	50	49	17.68	17.62	17.71	19.5	1					
20	ZSSBAM	100	0	17.57	17.56	17.71							
Channel													
Frequency (MHz)													
15	QPSK	1	0	18.52	18.59	18.66							
15	QPSK	1	37	18.64	18.58	18.73	20.5	0					
15	QPSK	36	0	18.52	18.59	18.66							
15	QPSK	36	36	18.52	18.57	18.68	20.5	0					
15	QPSK	36	72	18.52	18.56	18.67	20.5	0					
15	QPSK	72	0	18.55	18.41	18.61							
15	HQAM	1	37	18.66	18.56	18.63	20.5	0					
15	HQAM	1	37	18.64	18.61	18.64	20.5	0					
15	HQAM	1	74	18.64	18.48	18.68							
15	HQAM	1	36	18.43	18.43	18.61							
15	HQAM	36	20	18.39	18.48	18.58	20.5	0					
15	HQAM	36	56	18.41	18.48	18.58	20.5	0					
15	HQAM	72	0	18.38	18.40	18.52							
15	HQAM	1	0	18.37	18.57	18.64	20.5	0					
15	HQAM	1	36	18.58	18.72	18.70	20.5	0					
15	HQAM	1	74	18.48	18.55	18.62							
15	HQAM	36	20	18.45	18.45	18.52							
15	HQAM	36	20	18.48	18.49	18.52							
15	HQAM	36	56	18.44	18.49	18.55							
15	HQAM	72	0	18.37	18.57	18.64	20.5	0					
15	HQAM	72	0	18.47	18.47	18.52							
15	ZSSBAM	1	0	17.52	17.67	17.72	19.5	1					
15	ZSSBAM	1	74	17.58	17.68	17.67							
15	ZSSBAM	36	0	17.36	17.53	17.76	19.5	1					
15	ZSSBAM	36	36	17.48	17.44	17.43							
15	ZSSBAM	36	36	17.58	17.62	17.70							
15	ZSSBAM	72	0	17.45	17.46	17.51							
Channel													
Frequency (MHz)													
10	QPSK	1	0	18.52	18.54	18.74	20.5	0					
10	QPSK	1	26	18.57	18.54	18.74	20.5	0					
10	QPSK	1	49	18.64	18.71	18.85							
10	QPSK	1	49	18.47	18.70	18.87							
10	QPSK	26	12	18.50	18.61	18.70	20.5	0					
10	HQAM	1	0	18.47	18.56	18.50							
10	HQAM	1	0	18.48	18.64	18.54							
10	HQAM	1	0	18.60	18.70	18.62	20.5	0					
10	HQAM	1	26	18.50	18.58	18.54	20.5	0					
10	HQAM	1	49	18.63	18.70	18.71							
10	HQAM	1	49	18.63	18.70	18.71							
10	HQAM	26	12	18.42	18.49	18.53	20.5	0					
10	HQAM	26	29	18.42	18.51	18.54	20.5	0					
10	HQAM	26	29	18.44	18.51	18.48							
10	HQAM	26	57	18.41	18.45	18.48							
10	HQAM	1	0	18.39	18.60	18.52	20.5	0					
10	HQAM	1	26	18.52	18.72	18.64	20.5	0					
10	HQAM	1	49	18.51	18.56	18.63							
10	HQAM	26	12	18.39	18.58	18.56	20.5	0					
10	HQAM	26	29	18.41	18.44	18.56							
10	HQAM	26	29	18.37	18.50	18.52							
10	HQAM	26	57	18.45	18.52	18.52							
10	ZSSBAM	1	0	17.30	17.72	17.64	19.5	1					
10	ZSSBAM	1	26	17.58	17.68	17.66							
10	ZSSBAM	26	0	17.35	17.50	17.79	19.5	1					
10	ZSSBAM	26	12	17.47	17.44	17.43							
10	ZSSBAM	26	26	17.57	17.69	17.67							
10	ZSSBAM	50	0	17.46	17.46	17.51							
Channel													
Frequency (MHz)													
5	QPSK	1	0	18.41	18.53	18.63							
5	QPSK	1	12	18.57	18.58	18.66	20.5	0					
5	QPSK	1	24	18.65	18.75	18.84							
5	QPSK	1	24	18.42	18.79	18.82							
5	QPSK	12	0	18.55	18.57	18.66	20.5	0					
5	QPSK	12	12	18.55	18.58	18.53							
5	HQAM	1	0	18.58	18.65	18.68	20.5	0					
5	HQAM	1	12	18.59	18.57	18.74	20.5	0					
5	HQAM	1	24	18.59	18.67	18.76							
5	HQAM	1	24	18.56	18.51	18.50							
5	HQAM	12	0	18.46	18.42	18.53	20.5	0					
5	HQAM	12	12	18.43	18.52	18.59	20.5	0					
5	HQAM	12	12	18.39	18.48	18.54	20.5	0					
5	HQAM	1	0	18.36	18.38	18.39							
5	HQAM	1	12	18.34	18.44	18.51	20.5	0					
5	HQAM	1	24	18.34	18.44	18.51	20.5	0					
5	HQAM	12	0	18.45	18.36	18.41							
5	HQAM	12	12	18.44	18.46	18.48							
5	ZSSBAM	1	0	17.40	17.68	17.67	19.5	1					
5	ZSSBAM	1	12	17.40	17.68	17.62							
5	ZSSBAM	12	0	17.35	17.53	17.77	19.5	1					
5	ZSSBAM	12	12	17.45	17.51	17.70							
5	ZSSBAM	12	12	17.55	17.62	17.70							
5	ZSSBAM	24	0	17.42	17.64	17.68							
Channel													
Frequency (MHz)													
1.4	QPSK	1	0	18.24	18.27	18.65							
1.4	QPSK	1	3	18.54	18.59	18.79	20.5	0					
1.4	QPSK	1	6	18.62	18.73	18.70	20.5	0					
1.4	QPSK	1	9	18.41	18.79	18.66							
1.4	QPSK	3	0	18.53	18.56	18.68							
1.4	QPSK	3	3										



Band 38 Ant5 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	22.18	22.27	22.06	23.5	0		
20	QPSK	1	49	22.20	22.17	22.13				
20	QPSK	1	99	22.24	22.20	22.08				
20	QPSK	50	0	22.11	22.14	22.00	23.5	0		
20	QPSK	50	24	22.10	22.02	22.07				
20	QPSK	50	50	22.13	21.99	21.97				
20	QPSK	100	0	22.00	22.12	22.01	23.5	0		
20	16QAM	1	0	22.06	22.12	21.92				
20	16QAM	1	49	22.15	22.22	22.21				
20	16QAM	1	99	22.07	22.00	21.90	22.5	1		
20	16QAM	50	0	21.21	21.17	21.11				
20	16QAM	50	24	21.26	21.16	21.17				
20	16QAM	50	50	21.24	21.13	21.06	22.5	1		
20	16QAM	100	0	21.21	21.11	21.12				
20	64QAM	1	0	21.01	21.25	21.23				
20	64QAM	1	49	21.04	21.28	21.01	22.5	1		
20	64QAM	1	99	21.07	21.03	21.07				
20	64QAM	50	0	20.20	20.25	20.10				
20	64QAM	50	24	20.26	20.14	20.16	21.5	2		
20	64QAM	50	50	20.24	20.13	20.04				
20	64QAM	100	0	20.20	20.10	20.13				
20	256QAM	1	0	18.06	18.18	18.11	19.5	4		
20	256QAM	1	49	18.10	18.10	18.02				
20	256QAM	1	99	18.19	18.30	18.13				
20	256QAM	50	0	18.03	18.20	17.92	19.5	4		
20	256QAM	50	24	18.22	18.08	18.00				
20	256QAM	50	50	18.11	18.02	18.02				
20	256QAM	100	0	18.22	18.12	18.10				
Channel				37825	38000	38175				
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	21.98	22.09	21.99	23.5	0		
15	QPSK	1	37	22.04	21.96	22.04				
15	QPSK	1	74	22.13	22.16	21.96				
15	QPSK	36	0	22.09	21.97	21.99	23.5	0		
15	QPSK	36	20	21.99	21.87	21.96				
15	QPSK	36	39	21.97	21.97	21.77				
15	QPSK	75	0	22.02	21.87	22.01	23.5	0		
15	16QAM	1	0	21.92	21.95	21.79				
15	16QAM	1	37	22.13	22.02	22.14				
15	16QAM	1	74	21.89	21.90	21.85	22.5	1		
15	16QAM	36	0	21.23	20.95	20.96				
15	16QAM	36	20	21.22	21.00	21.14				
15	16QAM	36	39	21.06	21.01	20.94	22.5	1		
15	16QAM	75	0	21.03	20.91	21.09				
15	64QAM	1	0	20.94	21.14	21.22				
15	64QAM	1	37	21.04	21.23	20.91	22.5	1		
15	64QAM	1	74	20.94	20.95	20.98				
15	64QAM	36	0	20.00	20.21	20.06				
15	64QAM	36	20	20.05	20.11	20.14	21.5	2		
15	64QAM	36	39	20.03	19.98	19.93				
15	64QAM	75	0	20.21	19.98	20.04				
15	256QAM	1	0	17.97	18.08	18.01	19.5	4		
15	256QAM	1	37	18.07	18.03	18.02				
15	256QAM	1	74	18.12	18.13	18.09				
15	256QAM	36	0	18.01	18.16	17.76	19.5	4		
15	256QAM	36	20	18.24	18.10	17.96				
15	256QAM	36	39	17.97	17.86	17.84				
15	256QAM	75	0	18.12	18.01	18.00				
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	22.08	22.12	21.98	23.5	0		
10	QPSK	1	25	22.09	22.19	22.10				
10	QPSK	1	49	22.18	22.21	22.02				
10	QPSK	25	0	22.11	22.06	21.91	23.5	0		
10	QPSK	25	12	22.11	21.99	22.02				
10	QPSK	25	25	21.94	21.84	21.92				
10	QPSK	50	0	21.93	22.01	21.95	23.5	0		
10	16QAM	1	0	22.09	22.09	21.94				
10	16QAM	1	25	21.99	22.20	22.16				
10	16QAM	1	49	21.90	21.83	21.90	22.5	1		
10	16QAM	25	0	21.13	21.15	20.98				
10	16QAM	25	12	21.26	21.11	21.17				
10	16QAM	25	25	21.03	21.02	20.93	22.5	1		
10	16QAM	50	0	21.00	20.93	21.14				
10	64QAM	1	0	20.85	21.17	21.11				
10	64QAM	1	25	20.86	21.25	20.84	22.5	1		
10	64QAM	1	49	20.99	20.97	20.95				
10	64QAM	25	0	20.12	20.14	19.94				
10	64QAM	25	12	20.19	20.11	20.00	21.5	2		
10	64QAM	25	25	20.09	20.06	19.96				
10	64QAM	50	0	20.13	20.07	20.04				
10	256QAM	1	0	17.97	18.09	17.91	19.5	4		
10	256QAM	1	25	17.91	17.99	17.98				
10	256QAM	1	49	18.16	18.08	17.97				
10	256QAM	25	0	17.82	18.10	17.72	19.5	4		
10	256QAM	25	12	18.01	18.03	17.91				
10	256QAM	25	25	18.05	17.82	17.90				
10	256QAM	50	0	18.19	18.01	18.08				
Channel				37775	38000	38225				
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	22.18	22.07	21.84	23.5	0		
5	QPSK	1	12	22.01	22.10	22.00				
5	QPSK	1	24	22.13	21.99	22.09				
5	QPSK	12	0	22.08	21.94	21.90	23.5	0		
5	QPSK	12	7	22.04	21.83	21.94				
5	QPSK	12	13	21.93	21.80	21.91				
5	QPSK	25	0	22.08	21.98	21.99	23.5	0		
5	16QAM	1	0	22.11	21.93	21.79				
5	16QAM	1	12	22.08	22.02	22.20				
5	16QAM	1	24	21.96	21.80	21.86	22.5	1		
5	16QAM	12	0	21.02	21.05	20.95				
5	16QAM	12	7	21.11	21.05	21.17				
5	16QAM	12	13	21.22	21.00	20.95	22.5	1		
5	16QAM	25	0	21.12	20.92	21.05				
5	64QAM	1	0	20.91	21.22	21.03				
5	64QAM	1	12	20.90	21.16	20.81	22.5	1		
5	64QAM	1	24	20.90	21.05	21.00				
5	64QAM	12	0	20.11	20.13	20.07				
5	64QAM	12	7	20.09	20.11	19.95	21.5	2		
5	64QAM	12	13	20.14	20.10	19.92				
5	64QAM	25	0	20.21	19.89	19.92				
5	256QAM	1	0	17.92	18.20	17.95	19.5	4		
5	256QAM	1	12	17.99	18.10	17.90				
5	256QAM	1	24	18.18	18.14	18.06				
5	256QAM	12	0	17.89	18.16	17.73	19.5	4		
5	256QAM	12	7	18.10	17.95	17.85				
5	256QAM	12	13	18.09	17.95	17.83				
5	256QAM	25	0	18.12	17.94	18.01				

Band 41 Ant5 DSI1												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620	41055	41490				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	22.28	22.18	22.39	22.22	22.13	23.5	0		
20	QPSK	1	49	22.28	22.17	22.32	22.16	22.18				
20	QPSK	1	99	22.30	22.16	22.29	22.20	22.14				
20	QPSK	50	0	22.11	22.20	22.37	22.18	22.31	23.5	0		
20	QPSK	50	24	22.19	22.11	22.15	22.24	22.14				
20	QPSK	50	50	22.35	22.17	22.10	22.15	22.13				
20	QPSK	100	0	22.28	22.15	22.38	22.19	22.17	23.5	0		
20	16QAM	1	0	22.10	22.05	22.29	22.08	22.18				
20	16QAM	1	49	22.27	22.08	22.27	22.00	22.02				
20	16QAM	1	99	22.30	22.10	22.14	22.00	22.26	22.5	1		
20	16QAM	50	0	21.15	21.12	21.30	21.15	21.46				
20	16QAM	50	24	21.24	21.00	21.10	21.29	21.04				
20	16QAM	50										



Band 42 Ant10 DSI1												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)				
Channel				42190	42500	42990						
Frequency (MHz)				3460	3500	3540						
20	QPSK	1	0	19.39	19.49	19.27	20.7	0				
20	QPSK	1	49	19.33	19.31	19.23						
20	QPSK	1	99	19.39	19.35	19.34						
20	QPSK	50	0	19.29	19.45	19.24						
20	QPSK	50	24	19.44	19.39	19.17						
20	QPSK	50	50	19.37	19.36	19.18						
20	QPSK	100	0	19.32	19.37	19.33						
20	16QAM	1	0	19.33	19.28	19.42						
20	16QAM	1	49	19.23	19.40	19.36						
20	16QAM	1	99	19.40	19.40	19.26						
20	16QAM	50	0	19.32	19.23	19.31	20.7	0				
20	16QAM	50	24	19.43	19.25	19.30						
20	16QAM	50	50	19.24	19.34	19.28						
20	16QAM	100	0	19.30	19.35	19.32						
20	64QAM	1	0	19.34	19.30	19.18						
20	64QAM	1	49	19.30	19.35	19.35						
20	64QAM	1	99	19.28	19.26	19.38						
20	64QAM	50	0	19.38	19.23	19.22						
20	64QAM	50	24	19.29	19.32	19.20						
20	64QAM	50	50	19.45	19.41	19.27						
20	64QAM	100	0	19.25	19.34	19.33	20.7	0				
20	256QAM	1	0	19.20	19.16	19.03						
20	256QAM	1	49	19.27	19.24	18.99						
20	256QAM	1	99	19.28	19.29	19.17						
20	256QAM	50	0	19.19	19.32	19.26						
20	256QAM	50	24	19.21	19.10	19.13						
20	256QAM	50	50	19.19	19.31	19.14						
20	256QAM	100	0	19.32	19.14	19.16						
Channel				42165	42500	43015						
Frequency (MHz)				3457.5	3500	3542.5			Tune-up limit (dBm)	MPR (dB)		
15	QPSK	1	0	19.24	19.32	19.19	20.7	0				
15	QPSK	1	37	19.22	19.14	19.15						
15	QPSK	1	74	19.28	19.25	19.23						
15	QPSK	36	0	19.20	19.32	19.11						
15	QPSK	36	20	19.38	19.26	19.12						
15	QPSK	36	39	19.28	19.25	19.03						
15	QPSK	75	0	19.26	19.28	19.25						
15	16QAM	1	0	19.20	19.26	19.36						
15	16QAM	1	37	19.18	19.27	19.22						
15	16QAM	1	74	19.35	19.36	19.16						
15	16QAM	36	0	19.14	19.16	19.19	20.7	0				
15	16QAM	36	20	19.27	19.15	19.20						
15	16QAM	36	39	19.13	19.30	19.11						
15	16QAM	75	0	19.24	19.30	19.22						
15	64QAM	1	0	19.31	19.22	19.05						
15	64QAM	1	37	19.21	19.22	19.30						
15	64QAM	1	74	19.25	19.22	19.26						
15	64QAM	36	0	19.34	19.14	19.08						
15	64QAM	36	20	19.22	19.21	19.12						
15	64QAM	36	39	19.42	19.39	19.17						
15	64QAM	75	0	19.20	19.20	19.25	20.7	0				
15	256QAM	1	0	19.36	19.25	19.02						
15	256QAM	1	37	19.20	19.29	19.13						
15	256QAM	1	74	19.42	19.37	19.21						
15	256QAM	36	0	19.22	19.26	19.34						
15	256QAM	36	20	19.36	19.14	19.25						
15	256QAM	36	39	19.22	19.25	19.22						
15	256QAM	75	0	19.26	19.14	19.21						
Channel				42110	42590	43040						
Frequency (MHz)				3455	3500	3545			Tune-up limit (dBm)	MPR (dB)		
10	QPSK	1	0	19.34	19.45	19.25	20.7	0				
10	QPSK	1	25	19.19	19.16	19.07						
10	QPSK	1	49	19.21	19.27	19.22						
10	QPSK	25	0	19.19	19.26	19.12						
10	QPSK	25	12	19.41	19.29	19.03						
10	QPSK	25	25	19.38	19.30	19.16						
10	QPSK	50	0	19.26	19.21	19.30						
10	16QAM	1	0	19.23	19.16	19.37						
10	16QAM	1	25	19.07	19.25	19.31						
10	16QAM	1	49	19.38	19.29	19.17						
10	16QAM	25	0	19.25	19.11	19.16	20.7	0				
10	16QAM	25	12	19.36	19.13	19.21						
10	16QAM	25	25	19.18	19.22	19.14						
10	16QAM	50	0	19.14	19.25	19.27						
10	64QAM	1	0	19.16	19.18	19.10						
10	64QAM	1	25	19.17	19.23	19.29						
10	64QAM	1	49	19.21	19.12	19.34						
10	64QAM	25	0	19.29	19.19	19.10						
10	64QAM	25	12	19.15	19.27	19.16						
10	64QAM	25	25	19.37	19.33	19.11						
10	64QAM	50	0	19.12	19.20	19.28	20.7	0				
10	256QAM	1	0	19.36	19.17	19.08						
10	256QAM	1	25	19.21	19.22	19.11						
10	256QAM	1	49	19.38	19.38	19.15						
10	256QAM	25	0	19.17	19.16	19.23						
10	256QAM	25	12	19.42	19.18	19.30						
10	256QAM	25	25	19.14	19.16	19.24						
10	256QAM	50	0	19.31	19.33	19.14						
Channel				42115	42590	43055						
Frequency (MHz)				3452.5	3500	3547.5			Tune-up limit (dBm)	MPR (dB)		
5	QPSK	1	0	19.27	19.44	19.20	20.7	0				
5	QPSK	1	12	19.15	19.18	19.09						
5	QPSK	1	24	19.32	19.22	19.17						
5	QPSK	12	0	19.14	19.24	19.20						
5	QPSK	12	7	19.36	19.33	19.12						
5	QPSK	12	13	19.30	19.33	19.04						
5	QPSK	25	0	19.26	19.29	19.23						
5	16QAM	1	0	19.27	19.15	19.32						
5	16QAM	1	12	19.20	19.24	19.18						
5	16QAM	1	24	19.34	19.23	19.16						
5	16QAM	12	0	19.25	19.09	19.20	20.7	0				
5	16QAM	12	7	19.31	19.10	19.26						
5	16QAM	12	13	19.17	19.19	19.23						
5	16QAM	25	0	19.13	19.18	19.17						
5	64QAM	1	0	19.26	19.17	19.01						
5	64QAM	1	12	19.22	19.20	19.22						
5	64QAM	1	24	19.13	19.16	19.21						
5	64QAM	12	0	19.27	19.14	19.05						
5	64QAM	12	7	19.17	19.21	19.07						
5	64QAM	12	13	19.32	19.34	19.25						
5	64QAM	25	0	19.19	19.26	19.22	20.7	0				
5	256QAM	1	0	19.31	19.17	19.07						
5	256QAM	1	12	19.08	19.26	19.18						
5	256QAM	1	24	19.29	19.26	19.06						
5	256QAM	12	0	19.19	19.21	19.21						
5	256QAM	12	7	19.27	19.26	19.20						
5	256QAM	12	13	19.18	19.21	19.07						
5	256QAM	25	0	19.15	19.14	19.20						

Band 48 Ant10 DSI1												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)				
Channel				55340	55890	56160	56640					
Frequency (MHz)				3560	3609	3641	3690					
20	QPSK	1	0	16.45	16.41	16.62	16.36	18	0			
20	QPSK	1	49	16.43	16.43	16.28	16.23					
20	QPSK	1	99	16.51	16.36	16.36	16.14					
20	QPSK	50	0	16.29	16.51	16.19	16.32					
20	QPSK	50	24	16.52	16.45	16.44	16.22					
20	QPSK	50	50	16.30	16.30	16.36	16.29					
20	QPSK	100	0	16.21	16.32	16.37	16.26					
20	16QAM	1	0	16.27	16.36	16.21	16.30					
20	16QAM	1	49	16.14	16.45	16.22	16.26					
20	16QAM	1	99	16.31	16.28	16.25	16.29					
20	16QAM	50	0	16.29	16.24	16.03	16.19	18	0			
20	16QAM	50	24	16.32	16.20	16.29	16.10					
20	16QAM	50	50	16.16	16.24	16.13	16.28					
20	16QAM	100	0	16.40	16.23	16.16	16.19					
20	64QAM	1	0	16.25	16.22	16.27	16.14					
20	64QAM	1	49	16.32	16.40	16.17	16.21					
20	64QAM	1	99	16.38	16.24	16.30	16.15					
20	64QAM	50	0	16.44	16.29	16.45	16.18					
20	64QAM	50	24	16.29	16.25	16.19	16.32					
20	64QAM	50	50	16.52	16.30	16.50	16.33					
20	64QAM	100	0	16.23	16.36	16.17	16.20	18	0			
20	256QAM	1	0	16.27	16.21	16.37	16.28					
20	256QAM	1	49	16.38	16.36	16.17	16.31					
20	256QAM	1	99	16.21	16.38	16.23	16.38					
20	256QAM	50	0	16.11	16.23	16.19	16.17					
20	256QAM	50	24	16.41	16.09	16.51	16.31					
20	256QAM	50	50	16.16	16.35	16.13	16.14					
20	256QAM	100	0	16.29	16.22	16.23	16.25					
Channel				55315	55890	56160	56645					
Frequency (MHz)				3557.5	3608	3642	3692.5			Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	0									



Band 42 Ant11 DS11												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)				
Channel				42190	42500	42990						
Frequency (MHz)				3460	3500	3540						
20	QPSK	1	0	20.82	20.86	20.83	22.5	0				
20	QPSK	1	49	20.82	20.78	20.71						
20	QPSK	1	99	20.86	20.74	20.70						
20	QPSK	50	24	19.88	19.84	19.83	21.5	1				
20	QPSK	50	24	19.71	19.77	19.71						
20	QPSK	50	50	19.55	19.73	19.61						
20	QPSK	100	0	19.78	19.80	19.77	21.5	1				
20	16QAM	1	0	19.71	19.87	20.02						
20	16QAM	1	99	19.80	19.73	19.64						
20	16QAM	1	99	19.70	19.80	19.72	20.5	2				
20	16QAM	50	0	18.64	18.63	18.62						
20	16QAM	50	24	18.75	18.79	18.66						
20	16QAM	50	50	18.62	18.76	18.72	20.5	2				
20	16QAM	100	0	19.80	19.73	19.64						
20	64QAM	1	0	18.85	18.93	18.77						
20	64QAM	1	49	18.73	18.77	18.71	20.5	2				
20	64QAM	1	99	18.72	18.80	18.71						
20	64QAM	50	0	17.69	17.84	17.54						
20	64QAM	50	24	17.74	17.83	17.73	19.5	3				
20	64QAM	50	50	17.59	17.69	17.62						
20	64QAM	100	0	17.73	17.76	17.77						
20	256QAM	1	0	15.65	15.89	15.51	17.5	5				
20	256QAM	1	49	15.63	15.69	15.63						
20	256QAM	1	99	15.62	15.80	15.79						
20	256QAM	50	0	15.63	15.59	15.58	17.5	5				
20	256QAM	50	24	15.75	15.72	15.58						
20	256QAM	50	50	15.53	15.72	15.60						
20	256QAM	100	0	15.54	15.55	15.51	Tune-up limit (dBm)	MPR (dB)				
Channel				42115	42590	43115						
Frequency (MHz)				3457.5	3500	3542.5						
15	QPSK	1	0	20.80	20.85	20.84	22.5	0				
15	QPSK	1	37	20.62	20.83	20.72						
15	QPSK	1	74	20.70	20.78	20.76						
15	QPSK	36	0	19.76	19.85	19.66	21.5	1				
15	QPSK	36	20	19.75	19.85	19.69						
15	QPSK	36	39	19.62	19.73	19.69						
15	QPSK	75	0	19.79	19.83	19.79	21.5	1				
15	16QAM	1	0	19.75	19.90	20.04						
15	16QAM	1	37	19.81	19.70	19.72						
15	16QAM	1	74	19.72	19.88	19.72	20.5	2				
15	16QAM	36	0	18.64	18.61	18.64						
15	16QAM	36	20	18.76	18.84	18.72						
15	16QAM	36	39	18.66	18.73	18.75	20.5	2				
15	16QAM	75	0	18.88	18.94	18.81						
15	64QAM	1	0	18.87	18.91	18.83						
15	64QAM	1	37	18.75	18.84	18.73	20.5	2				
15	64QAM	1	74	18.74	18.84	18.75						
15	64QAM	36	0	17.75	17.91	17.62						
15	64QAM	36	20	17.85	17.72	17.62	19.5	3				
15	64QAM	36	39	17.66	17.69	17.67						
15	64QAM	75	0	17.70	17.84	17.81						
15	256QAM	1	0	15.52	15.73	15.59	17.5	5				
15	256QAM	1	49	15.53	15.54	15.52						
15	256QAM	1	74	15.54	15.68	15.68						
15	256QAM	36	0	15.64	15.58	15.65	17.5	5				
15	256QAM	36	20	15.82	15.72	15.64						
15	256QAM	36	39	15.58	15.80	15.64						
15	256QAM	75	0	15.53	15.55	15.51	Tune-up limit (dBm)	MPR (dB)				
Channel				42110	42590	43140						
Frequency (MHz)				3455	3500	3545						
10	QPSK	1	0	20.85	20.84	20.85	22.5	0				
10	QPSK	1	25	20.60	20.83	20.78						
10	QPSK	1	49	20.65	20.77	20.74						
10	QPSK	25	0	19.69	19.83	19.63	21.5	1				
10	QPSK	25	12	19.69	19.87	19.73						
10	QPSK	25	25	19.53	19.72	19.65						
10	QPSK	50	0	19.87	19.81	19.78	21.5	1				
10	16QAM	1	0	19.75	19.91	20.06						
10	16QAM	1	25	19.84	19.71	19.63						
10	16QAM	1	49	19.72	19.78	19.77	20.5	2				
10	16QAM	25	0	18.72	18.67	18.66						
10	16QAM	25	12	18.77	18.87	18.73						
10	16QAM	25	25	18.63	18.80	18.71	20.5	2				
10	16QAM	50	0	18.85	18.86	18.77						
10	64QAM	1	0	18.91	19.01	18.80						
10	64QAM	1	25	18.71	18.82	18.79	20.5	2				
10	64QAM	1	49	18.71	18.78	18.72						
10	64QAM	25	0	17.69	17.82	17.56						
10	64QAM	25	12	17.86	17.81	17.76	19.5	3				
10	64QAM	25	25	17.66	17.71	17.65						
10	64QAM	50	0	17.73	17.76	17.82						
10	256QAM	1	0	15.62	15.92	15.59	17.5	5				
10	256QAM	1	25	15.64	15.72	15.70						
10	256QAM	1	49	15.82	15.88	15.87						
10	256QAM	25	0	15.87	15.77	15.72	17.5	5				
10	256QAM	25	12	15.94	15.89	15.72						
10	256QAM	25	25	15.76	15.93	15.84						
10	256QAM	50	0	15.71	15.75	15.64	Tune-up limit (dBm)	MPR (dB)				
Channel				42115	42590	43055						
Frequency (MHz)				3462.5	3500	3547.5						
5	QPSK	1	0	20.82	20.73	20.82	22.5	0				
5	QPSK	1	12	20.69	20.76	20.76						
5	QPSK	1	24	20.67	20.73	20.77						
5	QPSK	12	0	19.66	19.81	19.63	21.5	1				
5	QPSK	12	7	19.69	19.88	19.78						
5	QPSK	12	13	19.52	19.76	19.62						
5	QPSK	25	0	19.82	19.78	19.84	21.5	1				
5	16QAM	1	0	19.76	19.87	20.00						
5	16QAM	1	12	19.78	19.71	19.67						
5	16QAM	1	24	19.70	19.89	19.81	20.5	2				
5	16QAM	12	0	18.62	18.65	18.66						
5	16QAM	12	7	18.74	18.77	18.71						
5	16QAM	12	13	18.64	18.79	18.69	20.5	2				
5	64QAM	1	0	18.90	18.86	18.80						
5	64QAM	1	0	18.90	19.00	18.77						
5	64QAM	1	12	18.70	18.82	18.72	20.5	2				
5	64QAM	1	24	18.79	18.89	18.73						
5	64QAM	12	0	17.74	17.87	17.60						
5	64QAM	12	7	17.85	17.72	17.72	19.5	3				
5	64QAM	12	13	17.58	17.74	17.63						
5	64QAM	25	0	17.80	17.76	17.84						
5	256QAM	1	0	15.64	15.96	15.59	17.5	5				
5	256QAM	1	12	15.64	15.66	15.60						
5	256QAM	1	24	15.58	15.82	15.86						
5	256QAM	12	0	15.67	15.60	15.64	17.5	5				
5	256QAM	12	7	15.80	15.75	15.63						
5	256QAM	12	13	15.53	15.80	15.59						
5	256QAM	25	0	15.56	15.60	15.59	Tune-up limit (dBm)	MPR (dB)				

Band 48 Ant11 DS11										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55890	56160				
Frequency (MHz)				3560	3609	3641				
20	QPSK	1	0	17.56	17.57	17.66	19	0		
20	QPSK	1	49	17.63	17.54	17.35				
20	QPSK	1	99	17.54	17.45	17.58				
20	QPSK	50	24	17.47	17.51	17.62	19	0		
20	QPSK	50	24	17.49	17.59	17.55				
20	QPSK	50	50	17.33	17.37	17.60				
20	QPSK	100	0	17.37	17.35	17.61	19	0		
20	16QAM	1	0	17.33	17.51	17.35				
20	16QAM	1	49	17.31	17.60	17.37				
20	16QAM	1	99	17.36	17.30	17.34	19	0		
20	16QAM	50	0	16.58	16.59	16.61				
20	16QAM	50	24	16.59	16.44	16.30				
20	16QAM	50	50	16.55	16.58	16.53	18	1		
20	16QAM	100	0	16.48	16.57	16.61				
20	64QAM	1	0	16.52	16.45					



Band 42 Ant12 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low	Power Middle	Power High	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	21.30	21.45	21.42			
20	QPSK	1	49	21.13	21.37	21.23	23	0	
20	QPSK	1	99	21.16	21.22	21.20			
20	QPSK	50	0	20.26	20.36	20.20			
20	QPSK	50	24	20.29	20.25	20.20	22	1	
20	QPSK	50	50	20.04	20.20	20.15			
20	QPSK	100	0	20.27	20.37	20.33			
20	16QAM	1	0	20.30	20.42	20.55			
20	16QAM	1	49	20.36	20.25	20.15	22	1	
20	16QAM	1	99	20.26	20.31	20.30			
20	16QAM	50	0	19.22	19.16	19.14			
20	16QAM	50	24	19.32	19.28	19.15			
20	16QAM	50	50	19.14	19.33	19.27	21	2	
20	16QAM	100	0	19.33	19.45	19.28			
20	64QAM	1	0	19.37	19.44	19.26			
20	64QAM	1	49	19.30	19.33	19.25	21	2	
20	64QAM	1	99	19.24	19.32	19.25			
20	64QAM	50	0	18.20	18.38	18.08			
20	64QAM	50	24	18.33	18.10	18.24			
20	64QAM	50	50	18.08	18.27	18.15	20	3	
20	64QAM	100	0	18.28	18.24	18.31			
20	256QAM	1	0	16.06	16.33	16.18			
20	256QAM	1	49	16.05	16.08	16.00	18	5	
20	256QAM	1	99	16.13	16.17	16.14			
20	256QAM	50	0	16.15	16.17	16.06			
20	256QAM	50	24	16.28	16.20	16.16			
20	256QAM	50	50	16.04	16.28	16.13	18	5	
20	256QAM	100	0	16.08	16.10	16.00			
Channel				42155	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3457.5	3500	3542.5			
15	QPSK	1	0	21.15	21.37	21.30	23	0	
15	QPSK	1	37	21.03	21.29	21.07			
15	QPSK	1	74	21.03	21.12	21.07			
15	QPSK	36	0	20.11	20.14	20.03			
15	QPSK	36	20	20.13	20.27	20.13	22	1	
15	QPSK	36	39	20.15	20.31	20.23			
15	QPSK	75	0	20.15	20.24	20.22			
15	16QAM	1	0	20.19	20.26	20.40			
15	16QAM	1	37	20.20	20.15	20.00	22	1	
15	16QAM	1	74	20.12	20.16	20.21			
15	16QAM	36	0	19.12	19.08	19.01			
15	16QAM	36	20	19.24	19.14	19.04	21	2	
15	16QAM	36	39	19.18	19.17	19.14			
15	16QAM	75	0	19.25	19.28	19.16			
15	64QAM	1	0	19.22	19.31	19.09			
15	64QAM	1	37	19.16	19.22	19.13	21	2	
15	64QAM	1	74	19.13	19.14	19.11			
15	64QAM	36	0	18.03	18.28	18.21			
15	64QAM	36	20	18.19	18.21	18.18	20	3	
15	64QAM	36	39	18.20	18.17	18.02			
15	64QAM	75	0	18.19	18.12	18.23			
15	256QAM	1	0	16.22	16.48	16.26	18	5	
15	256QAM	1	37	16.17	16.19	16.15			
15	256QAM	1	74	16.27	16.06	16.23			
15	256QAM	36	0	16.27	16.22	16.23			
15	256QAM	36	20	16.35	16.35	16.32	18	5	
15	256QAM	36	39	16.12	16.37	16.23			
15	256QAM	75	0	16.19	16.27	16.16			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	21.20	21.38	21.35	23	0	
10	QPSK	1	25	21.26	21.25	21.17			
10	QPSK	1	49	21.24	21.10	21.05			
10	QPSK	25	0	20.34	20.11	20.10			
10	QPSK	25	12	20.38	20.25	20.11	22	1	
10	QPSK	25	25	20.12	20.06	20.03			
10	QPSK	50	0	20.40	20.23	20.18			
10	16QAM	1	0	20.44	20.34	20.40			
10	16QAM	1	25	20.44	20.15	20.09	22	1	
10	16QAM	1	49	20.45	20.20	20.19			
10	16QAM	25	0	19.40	19.23	19.32			
10	16QAM	25	12	19.50	19.36	19.30	21	2	
10	16QAM	25	25	19.24	19.42	19.45			
10	16QAM	50	0	19.44	19.62	19.40			
10	64QAM	1	0	19.49	19.51	19.42			
10	64QAM	1	25	19.48	19.50	19.38	21	2	
10	64QAM	1	49	19.40	19.40	19.33			
10	64QAM	25	0	18.34	18.52	18.16			
10	64QAM	25	12	18.49	18.21	18.37	20	3	
10	64QAM	25	25	18.25	18.39	18.30			
10	64QAM	50	0	18.37	18.32	18.45			
10	256QAM	1	0	16.21	16.44	16.33			
10	256QAM	1	25	16.22	16.24	16.11	18	5	
10	256QAM	1	49	16.22	16.05	16.26			
10	256QAM	25	0	16.22	16.25	16.14			
10	256QAM	25	12	16.39	16.37	16.34			
10	256QAM	25	25	16.19	16.38	16.31	18	5	
10	256QAM	50	0	16.17	16.25	16.13			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3452.5	3500	3547.5			
5	QPSK	1	0	21.13	21.33	21.30	23	0	
5	QPSK	1	12	21.31	21.19	21.07			
5	QPSK	1	24	21.28	21.04	21.14			
5	QPSK	12	0	20.42	20.17	20.10			
5	QPSK	12	7	20.43	20.29	20.11	22	1	
5	QPSK	12	13	20.20	20.08	20.08			
5	QPSK	25	0	20.40	20.27	20.18			
5	16QAM	1	0	20.41	20.32	20.43			
5	16QAM	1	12	20.54	20.14	20.41	22	1	
5	16QAM	1	24	20.40	20.20	20.15			
5	16QAM	12	0	19.29	19.10	19.03			
5	16QAM	12	7	19.41	19.15	19.08			
5	16QAM	12	13	19.24	19.18	19.14	21	2	
5	16QAM	25	0	19.52	19.38	19.21			
5	64QAM	1	0	19.51	19.29	19.12			
5	64QAM	1	12	19.40	19.18	19.11	21	2	
5	64QAM	1	24	19.34	19.23	19.18			
5	64QAM	12	0	18.38	18.57	18.20			
5	64QAM	12	7	18.43	18.21	18.34	20	3	
5	64QAM	12	13	18.16	18.39	18.32			
5	64QAM	25	0	18.41	18.42	18.42			
5	256QAM	1	0	16.14	16.46	16.34			
5	256QAM	1	12	16.20	16.23	16.15	18	5	
5	256QAM	1	24	16.25	16.08	16.29			
5	256QAM	12	0	16.34	16.15	16.25			
5	256QAM	12	7	16.39	16.35	16.31			
5	256QAM	12	13	16.17	16.38	16.30	18	5	
5	256QAM	25	0	16.17	16.20	16.08			

Band 48 Ant12 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low	Power Low Middle	Power High Middle	Power High	Tune-up limit (dBm)	MPR (dB)
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	18.89	18.81	18.85	18.61	20.5	0
20	QPSK	1	49	18.75	18.72	18.83	18.62		
20	QPSK	1	99	18.89	18.79	18.74	18.76		
20	QPSK	50	0	17.79	17.92	17.98	17.73		
20	QPSK	50	24	17.96	17.81	17.97	17.69	19.5	1
20	QPSK	50	50	17.78	17.95	17.87	17.65		
20	QPSK	100	0	17.74	17.93	17.95	17.80		
20	16QAM	1	0	17.76	17.88	17.82	17.79		
20	16QAM	1	49	17.70	17.88	17.96	17.68	19.5	1
20	16QAM	1	99	17.86	17.89	17.90	17.66		
20	16QAM	50	0	16.75	16.96	16.96	16.81		
20	16QAM	50	24	17.00	16.90	16.87	16.71	18.5	2
20	16QAM	50	50	16.69	16.89	17.03	16.69		
20	16QAM	100	0	16.75	16.79	16.81	16.65		
20	64QAM	1	0	16.84	16.76	16.87	16.72		
20	64QAM	1	49	16.72	16.91	16.81	16.79	18.5	2
20	64QAM	1	99	16.73	16.96	16.91	16.71		
20	64QAM	50	0	15.79	15.73	15.93	15.77		
20	64QAM	50	24	15.96	16.02	15.89	15.69		
20	64QAM	50	50	15.70	15.87	15.87	15.82	17.5	3
20	64QAM	100	0	15.75	15.83	15.89	15.74		
20	256QAM	1	0	13.76	13.78	13.96	13.76		
20	256QAM	1	49	13.74	13.99	13.84	13.76	15.5	5
20	256QAM	1	99	13.85	13.83	13.98	13.85		
20	256QAM	50	0	13.76	13.72	13.78	13.57		
20	256QAM	50	24	13.76	13.86	13.93	13.56		
20	256QAM	50	50	13.68	13.82	13.83	13.75	15.5	5
20	256QAM	100	0	13.75	13.81	13.79	13.71		
Channel				55315	55820	56160	56655	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	18.54	18.55	18.63	18.52	20.5	0
15	QPSK	1	37	18.66	18				



Band 42 Ant13 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				42190	42500	42990				
Channel Frequency (MHz)				3460	3500	3540				
20	QPSK	1	0	24.21	24.39	24.31	25.7	0		
20	QPSK	1	49	24.04	24.28	24.11				
20	QPSK	1	99	24.05	24.19	24.15				
20	QPSK	50	0	22.98	23.12	22.95				
20	QPSK	50	24	22.99	23.09	22.98	24.7	1		
20	QPSK	50	50	22.76	22.98	22.90				
20	QPSK	100	0	22.94	23.08	22.95				
20	16QAM	1	0	23.04	23.29	23.22				
20	16QAM	1	49	23.06	22.97	23.10	24.7	1		
20	16QAM	1	99	22.96	23.07	23.01				
20	16QAM	50	0	21.90	21.86	21.83				
20	16QAM	50	24	22.10	21.99	21.86				
20	16QAM	50	50	21.86	22.09	21.94	23.7	2		
20	16QAM	100	0	22.05	22.20	22.06				
20	64QAM	1	0	22.04	22.10	21.99				
20	64QAM	1	49	22.07	22.00	21.98	23.7	2		
20	64QAM	1	99	21.94	22.06	22.03				
20	64QAM	50	0	20.91	21.12	20.84				
20	64QAM	50	24	21.02	20.78	20.96				
20	64QAM	50	50	20.85	21.04	20.83	22.7	3		
20	64QAM	100	0	21.07	21.02	21.08				
20	256QAM	1	0	18.77	19.11	18.91				
20	256QAM	1	49	18.76	18.82	18.76	20.7	5		
20	256QAM	1	99	18.85	18.78	18.87				
20	256QAM	50	0	18.92	19.07	18.81				
20	256QAM	50	24	18.99	18.89	18.91	20.7	5		
20	256QAM	50	50	18.81	19.06	18.80				
20	256QAM	100	0	18.81	18.95	18.76				
Channel Frequency (MHz)				42190	42500	43010	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				3457.5	3500	3542.5				
15	QPSK	1	0	24.12	24.25	24.24	25.7	0		
15	QPSK	1	37	23.91	24.21	24.01				
15	QPSK	1	74	23.97	24.05	24.08				
15	QPSK	36	0	22.92	22.95	22.81	24.7	1		
15	QPSK	36	20	22.84	22.92	22.82				
15	QPSK	36	39	22.84	22.88	22.78				
15	QPSK	75	0	22.84	23.00	22.83				
15	16QAM	1	0	22.94	23.17	23.08	24.7	1		
15	16QAM	1	37	22.92	22.82	22.99				
15	16QAM	1	74	22.87	22.94	22.89				
15	16QAM	36	0	21.73	21.76	21.70				
15	16QAM	36	20	21.99	21.93	21.77	23.7	2		
15	16QAM	36	39	21.82	21.88	21.84				
15	16QAM	75	0	21.94	22.10	22.00				
15	64QAM	1	0	21.94	22.07	21.90	23.7	2		
15	64QAM	1	37	21.96	21.90	21.91				
15	64QAM	1	74	21.84	21.88	21.93				
15	64QAM	36	0	21.16	21.31	21.04				
15	64QAM	36	20	21.26	21.03	21.18	22.7	3		
15	64QAM	36	39	21.07	21.27	21.02				
15	64QAM	75	0	21.35	21.24	21.34				
15	256QAM	1	0	19.01	19.31	19.18				
15	256QAM	1	37	19.03	19.02	19.01	20.7	5		
15	256QAM	1	74	19.14	19.00	19.05				
15	256QAM	36	0	19.20	19.33	19.04				
15	256QAM	36	20	19.26	19.08	19.18	20.7	5		
15	256QAM	36	39	19.00	19.28	19.09				
15	256QAM	75	0	19.01	19.21	18.96				
Channel Frequency (MHz)				42190	42500	43100	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				3455	3500	3545				
10	QPSK	1	0	24.05	24.27	24.21	25.7	0		
10	QPSK	1	25	23.97	24.10	24.03				
10	QPSK	1	49	23.87	24.05	23.99				
10	QPSK	25	0	22.84	22.97	22.84	24.7	1		
10	QPSK	25	12	22.91	22.93	22.84				
10	QPSK	25	25	22.70	22.85	22.83				
10	QPSK	50	0	22.87	22.90	22.83				
10	16QAM	1	0	22.95	23.14	23.06	24.7	1		
10	16QAM	1	25	22.91	22.91	23.00				
10	16QAM	1	49	22.84	23.00	22.84				
10	16QAM	25	0	21.74	21.79	21.76				
10	16QAM	25	12	21.95	21.88	21.79	23.7	2		
10	16QAM	25	25	21.74	22.03	21.84				
10	16QAM	50	0	21.96	22.09	21.95				
10	64QAM	1	0	21.95	22.03	21.82	23.7	2		
10	64QAM	1	25	21.92	21.85	21.82				
10	64QAM	1	49	21.79	21.91	21.87				
10	64QAM	25	0	21.11	21.36	21.03				
10	64QAM	25	12	21.20	20.98	21.24	22.7	3		
10	64QAM	25	25	21.11	21.23	21.05				
10	64QAM	50	0	21.26	21.24	21.32				
10	256QAM	1	0	18.98	19.35	19.15				
10	256QAM	1	25	18.95	19.01	19.03	20.7	5		
10	256QAM	1	49	19.08	19.07	19.14				
10	256QAM	25	0	19.10	19.29	18.99				
10	256QAM	25	12	19.21	19.14	19.13	20.7	5		
10	256QAM	25	25	19.08	19.35	19.04				
10	256QAM	50	0	19.00	19.20	19.04				
Channel Frequency (MHz)				42190	42500	43300	Tune-up limit (dBm)	MPR (dB)		
Channel Frequency (MHz)				3452.5	3500	3547.5				
5	QPSK	1	0	24.10	24.23	24.19	25.7	0		
5	QPSK	1	12	23.92	24.22	23.98				
5	QPSK	1	24	23.92	24.05	23.97				
5	QPSK	12	0	22.86	23.03	22.78	24.7	1		
5	QPSK	12	7	22.86	23.02	22.82				
5	QPSK	12	13	22.84	22.82	22.82				
5	QPSK	25	0	22.85	22.99	22.78				
5	16QAM	1	0	22.89	23.14	23.15	24.7	1		
5	16QAM	1	12	22.91	22.86	22.98				
5	16QAM	1	24	22.87	22.89	22.83				
5	16QAM	12	0	21.88	21.87	21.85				
5	16QAM	12	7	22.13	21.95	21.88	23.7	2		
5	16QAM	12	13	21.84	22.10	21.98				
5	16QAM	25	0	22.08	22.17	22.01				
5	64QAM	1	0	22.02	22.12	21.95	23.7	2		
5	64QAM	1	12	22.10	21.98	21.97				
5	64QAM	1	24	21.94	22.09	21.97				
5	64QAM	12	0	21.12	21.32	21.11	22.7	3		
5	64QAM	12	7	21.30	20.98	21.27				
5	64QAM	12	13	21.03	21.25	21.05				
5	64QAM	25	0	21.26	21.23	21.26				
5	256QAM	1	0	19.05	19.29	19.18				
5	256QAM	1	12	18.99	19.04	18.98	20.7	5		
5	256QAM	1	24	19.13	18.97	19.05				
5	256QAM	12	0	19.14	19.35	19.03				
5	256QAM	12	7	19.18	19.13	19.12	20.7	5		
5	256QAM	12	13	19.00	19.25	19.07				
5	256QAM	25	0	19.04	19.13	18.96				

Band 48 Ant13 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel Frequency (MHz)				55340	55800	56160	56840			
Channel Frequency (MHz)				3560	3600	3641	3690			
20	QPSK	1	0	22.22	22.37	22.38	22.23	24	0	
20	QPSK	1	49	22.21	22.24	22.15	22.12			
20	QPSK	1	99	22.27	22.29	22.22	22.32			
20	QPSK	50	0	21.41	21.43	21.44	21.24	23	1	
20	QPSK	50	24	21.22	21.29	21.35	21.34			
20	QPSK	50	50	21.30	21.35	21.33	21.3			



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GMM60	Ball Average Power (dBm)			Lincap LPA	Frame-Average Power (dBm)			Tone-up LPA
	128	188	261		128	188	261	
TX Channel	128	188	261	LPA	128	188	261	LPA
Poweramp (dBm)	39.2	39.8	41.8	(dBm)	39.2	39.8	41.8	(dBm)
OMA 1 Tx Watt	32.20	32.19	32.17	33.00	23.20	23.19	23.17	24.00
OPBS 1 Tx Watt	35.15	32.00	30.11	33.00	23.19	23.00	23.11	24.00
OPBS 2 Tx Watt	29.44	29.30	29.14	30.00	23.44	23.30	23.14	24.00
OPBS 3 Tx Watt	27.04	27.41	27.33	28.00	22.78	23.19	23.07	24.24
OPBS 4 Tx Watt	29.92	29.81	29.70	27.00	22.92	22.88	22.79	24.00
EDGE 1 Tx Watt	28.05	28.11	28.03	28.00	17.05	17.11	17.03	18.00
EDGE 2 Tx Watt	21.23	21.1	21.19	21.00	11.23	11.1	11.19	12.00
EDGE 3 Tx Watt	21.55	21.28	21.35	21.00	11.29	11.00	11.09	12.14
EDGE 4 Tx Watt	20.10	19.82	19.89	21.00	17.10	16.82	16.89	18.00

WCDMA V A40 D82

Ball	WCDMA V			Tone-up LPA (dBm)	
	4192	4193	4233		
TX Channel	4192	4193	4233	LPA	
Poweramp (Watt)	851.4	859.8	868.0	(dBm)	
3GPP Rate 6	AMR 12.2kbit/s	23.88	23.00	23.80	25.00
3GPP Rate 9	RMV 12.2kbit/s	23.92	23.00	23.82	24.00
3GPP Rate 1	HS-PA Subclass 1	22.07	22.00	22.78	24.00
3GPP Rate 2	HS-PA Subclass 2	22.01	22.80	22.83	24.00
3GPP Rate 3	HS-PA Subclass 3	22.43	22.30	22.21	23.50
3GPP Rate 4	HS-PA Subclass 4	22.29	22.40	22.42	23.50
3GPP Rate 5	DC-HSPA Subclass 1	22.90	22.81	22.81	24.00
3GPP Rate 6	DC-HSPA Subclass 2	22.99	22.91	22.82	24.00
3GPP Rate 7	DC-HSPA Subclass 3	22.40	22.40	22.30	23.50
3GPP Rate 8	DC-HSPA Subclass 4	22.39	22.47	22.38	23.50
3GPP Rate 10	HS-PA Subclass 1	22.96	22.85	22.80	24.00
3GPP Rate 11	HS-PA Subclass 2	23.06	21.02	20.92	22.00
3GPP Rate 12	HS-PA Subclass 3	21.92	21.87	21.84	23.00
3GPP Rate 13	HS-PA Subclass 4	20.91	20.81	20.76	22.00
3GPP Rate 14	HS-PA Subclass 5	22.51	22.07	22.84	24.00



Band 4 AnD DS2										
SRV (MHz)	Modulation	FE Size	FE Offset	Power Low Ch. (dBm)	Power Mid Ch. (dBm)	Power High Ch. (dBm)	Time-slot (min)	APRS (MHz)	Time-slot (min)	APRS (MHz)
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.81	21.83	21.82				
20	QPSK	1	49	21.36	21.29	21.20	23	0		
20	QPSK	1	24	18.66	18.62	18.56				
20	QPSK	50	0	20.36	20.42	20.12				
20	QPSK	50	24	20.22	20.20	20.12	22	1		
20	QPSK	50	24	20.22	20.20	20.12				
20	QPSK	100	0	20.30	20.30	20.00				
20	TDMA	1	0	20.50	20.50	20.50				
20	TDMA	1	49	20.50	20.42	20.47	22	1		
20	TDMA	50	0	19.46	19.30	19.14				
20	TDMA	50	24	19.46	19.22	19.16				
20	TDMA	50	50	19.33	19.17	19.11	21	2		
20	TDMA	100	0	19.42	19.16	19.11				
20	TDMA	50	0	19.39	19.46	19.40				
20	TDMA	50	24	19.22	19.20	19.15				
20	TDMA	50	24	19.22	19.20	19.15				
20	TDMA	50	50	19.10	19.12	19.13	20	3		
20	TDMA	50	50	19.10	19.10	19.11				
20	TDMA	100	0	19.10	19.10	19.11				
20	ZBDM	1	0	18.36	18.41	18.26				
20	ZBDM	1	49	18.40	18.22	18.41	18	5		
20	ZBDM	50	0	18.36	18.36	18.37				
20	ZBDM	50	24	18.40	18.30	18.38				
20	ZBDM	50	50	18.35	18.42	18.38	18	5		
20	ZBDM	100	0	18.38	18.43	18.37				
Frequency (MHz)										
15	QPSK	1	0	21.73	21.72	21.72				
15	QPSK	1	21	21.68	21.76	21.72	23	0		
15	QPSK	1	74	21.08	21.07	21.12				
15	QPSK	30	0	20.36	20.26	20.20				
15	QPSK	30	20	20.22	20.20	20.12	22	1		
15	QPSK	30	20	20.22	20.20	20.12				
15	QPSK	75	0	20.36	20.27	20.21				
15	TDMA	1	0	20.46	20.50	20.52				
15	TDMA	1	74	20.52	20.53	20.48	22	1		
15	TDMA	30	0	19.36	19.31	19.17				
15	TDMA	30	20	19.30	19.08	19.07	21	2		
15	TDMA	30	39	19.31	19.26	19.21				
15	TDMA	75	0	19.36	19.26	19.20				
15	TDMA	75	0	19.35	19.45	19.23				
15	TDMA	1	37	19.22	19.42	19.27	21	2		
15	TDMA	74	18	19.12	19.22	19.21				
15	TDMA	30	0	18.41	18.11	18.21				
15	TDMA	30	20	18.22	18.16	18.10	20	3		
15	TDMA	30	20	18.22	18.16	18.10				
15	TDMA	75	0	18.42	18.22	18.20				
15	ZBDM	1	0	18.22	18.26	18.27				
15	ZBDM	1	37	18.26	18.26	18.27	18	5		
15	ZBDM	1	74	18.41	18.23	18.20				
15	ZBDM	30	0	18.46	18.26	18.46				
15	ZBDM	30	20	18.42	18.25	18.20				
15	ZBDM	30	39	18.35	18.24	18.29	18	5		
15	ZBDM	75	0	18.30	18.29	18.44				
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.28	21.26	21.24				
10	QPSK	1	23	21.21	21.20	21.20	23	0		
10	QPSK	1	49	21.01	21.02	21.08				
10	QPSK	20	0	20.42	20.39	20.16				
10	QPSK	20	12	20.42	20.17	20.20	22	1		
10	QPSK	20	25	20.22	20.20	20.36				
10	QPSK	75	0	20.26	20.26	20.16				
10	TDMA	1	0	20.46	20.46	20.24				
10	TDMA	1	25	20.42	20.38	20.27	22	1		
10	TDMA	1	74	20.26	20.26	20.26				
10	TDMA	20	0	19.26	19.26	19.20				
10	TDMA	20	12	19.26	19.16	19.13	21	2		
10	TDMA	20	25	19.16	19.05	19.23				
10	TDMA	75	0	19.34	19.13	19.23				
10	TDMA	1	0	18.36	18.36	18.30				
10	TDMA	1	25	18.36	18.36	18.30	21	2		
10	TDMA	20	0	18.34	18.34	18.30				
10	TDMA	20	12	18.36	18.16	18.17	20	3		
10	TDMA	20	25	18.16	18.05	18.17				
10	TDMA	50	0	18.48	18.16	18.13				
10	TDMA	50	12	18.48	18.16	18.13	18	5		
10	TDMA	50	12	18.48	18.16	18.13				
10	TDMA	50	25	18.16	18.05	18.47				
10	TDMA	75	0	18.20	18.20	18.23				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.28	21.22	21.22				
5	QPSK	1	12	21.28	21.22	21.08	23	0		
5	QPSK	1	24	21.02	21.08	21.16				
5	QPSK	10	0	20.30	20.22	20.08				
5	QPSK	12	7	20.27	20.17	20.13	22	1		
5	QPSK	15	13	20.22	20.07	20.16				
5	QPSK	20	0	20.26	20.26	20.16				
5	QPSK	1	0	20.46	20.58	20.58				
5	TDMA	1	12	20.26	20.24	20.43	22	1		
5	TDMA	1	24	20.21	20.27	20.26				
5	TDMA	12	0	19.38	19.23	19.38				
5	TDMA	12	7	19.27	19.16	19.24	21	2		
5	TDMA	12	13	19.26	19.13	19.20				
5	TDMA	20	0	18.40	18.16	18.14				
5	TDMA	1	0	18.40	18.42	18.45	21	2		
5	TDMA	1	12	18.36	18.20	18.18				
5	TDMA	1	24	18.20	18.30	18.18				
5	TDMA	12	0	18.20	18.21	18.16				
5	TDMA	12	7	18.20	18.17	18.18	20	3		
5	TDMA	12	7	18.20	18.07	18.04				
5	TDMA	12	13	18.21	18.21	18.33				
5	TDMA	20	0	18.41	18.26	18.29	18	5		
5	ZBDM	1	0	18.27	18.23	18.20				
5	ZBDM	1	12	18.41	18.26	18.21	18	5		
5	ZBDM	1	24	18.26	18.26	18.26				
5	ZBDM	12	0	18.24	18.42	18.41				
5	ZBDM	12	7	18.25	18.27	18.25				
5	ZBDM	12	13	18.25	18.22	18.25				
5	ZBDM	20	0	18.35	18.44	18.47				
Channel										
Frequency (MHz)										
3	QPSK	1	0	21.26	21.20	21.20				
3	QPSK	1	8	21.26	21.26	21.20	23	0		
3	QPSK	1	14	21.06	21.02	21.23				
3	QPSK	8	0	20.38	20.18	20.27				
3	QPSK	8	4	20.47	20.20	20.24	22	1		
3	QPSK	8	7	20.32	20.04	20.27				
3	QPSK	10	0	20.48	20.12	20.12				
3	TDMA	1	0	20.46	20.46	20.22				
3	TDMA	1	8	20.36	20.27	20.26	22	1		
3	TDMA	1	14	20.21	20.25	20.26				
3	TDMA	8	0	19.26	19.24	19.26				
3	TDMA	8	4	19.26	19.13	19.20	21	2		
3	TDMA	8	7	19.26	19.08	19.22				
3	TDMA	15	0	19.26	19.02	19.12				
3	TDMA	8	0	18.46	18.42	18.42				
3	TDMA	8	4	18.44	18.27	18.46	21	2		
3	TDMA	8	7	18.22	18.21	18.18				
3	TDMA	10	0	18.42	18.14	18.11	20	3		
3	ZBDM	1	0	18.41	18.20	18.15				
3	ZBDM	1	8	18.26	18.24	18.22	18	5		
3	ZBDM	1	14	18.43	18.40	18.20				
3	ZBDM	8	0	18.31	18.26	18.41				
3	ZBDM	8	4	18.41	18.21	18.24	18	5		
3	ZBDM	8	7	18.41	18.01	18.24				
3	ZBDM	10	0	18.37	18.42	18.42				



Band 38 Ant0 DS12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch [Freq]	Power Middle Ch [Freq]	Power High Ch [Freq]	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.52	21.53	21.54			
20	QPSK	1	49	21.53	21.56	21.59	23	0	
20	QPSK	1	99	21.49	21.53	21.59			
20	QPSK	50	24	20.58	20.55	20.53	22	1	
20	QPSK	50	74	20.54	20.57	20.58			
20	QPSK	100	0	20.53	20.54	20.48			
20	16QAM	1	0	19.46	19.47	19.46			
20	16QAM	1	49	19.50	19.55	19.54	22	1	
20	16QAM	1	99	19.56	19.55	19.56			
20	16QAM	50	0	19.52	19.54	19.47			
20	16QAM	50	24	19.50	19.50	19.53	21	2	
20	16QAM	50	74	19.57	19.57	19.57			
20	16QAM	100	0	19.55	19.55	19.49			
20	16QAM	1	0	19.59	19.57	19.42			
20	16QAM	1	49	19.58	19.63	19.64	21	2	
20	16QAM	1	99	19.65	19.63	19.61			
20	16QAM	50	0	19.53	19.54	19.47			
20	16QAM	50	24	19.52	19.50	19.51			
20	16QAM	50	74	19.59	19.58	19.58	20	3	
20	16QAM	100	0	19.58	19.57	19.48			
20	256QAM	1	0	18.43	18.45	18.36			
20	256QAM	1	49	18.59	18.72	18.42	18	5	
20	256QAM	1	99	18.45	18.58	18.56			
20	256QAM	50	0	18.58	18.54	18.46			
20	256QAM	50	24	18.54	18.47	18.54			
20	256QAM	50	74	18.64	18.59	18.55	18	5	
20	256QAM	100	0	18.50	18.47	18.42			
Channel									
Frequency (MHz)									
15	QPSK	1	0	21.72	21.71	21.72			
15	QPSK	1	37	21.32	21.43	21.51	23	0	
15	QPSK	1	74	21.35	21.45	21.54			
15	QPSK	36	0	20.44	20.38	20.33	22	1	
15	QPSK	36	36	20.54	20.42	20.38			
15	QPSK	75	0	20.47	20.31	20.26			
15	16QAM	1	0	20.38	20.48	20.50			
15	16QAM	1	37	20.57	20.65	20.46	22	1	
15	16QAM	1	74	20.54	20.41	20.43			
15	16QAM	36	0	19.31	19.49	19.40	21	2	
15	16QAM	36	36	19.39	19.38	19.47			
15	16QAM	75	0	19.29	19.47	19.40			
15	16QAM	1	0	19.29	19.31	19.29			
15	16QAM	1	37	19.31	19.44	19.40	21	2	
15	16QAM	1	74	19.41	19.38	19.40			
15	16QAM	36	0	18.34	18.54	18.46			
15	16QAM	36	36	18.37	18.43	18.39	20	3	
15	16QAM	75	0	18.45	18.41	18.47			
15	256QAM	1	0	18.51	18.52	18.51			
15	256QAM	1	0	18.39	18.46	18.40			
15	256QAM	1	37	18.38	18.48	18.47	18	5	
15	256QAM	1	74	18.38	18.48	18.47			
15	256QAM	36	0	18.43	18.37	18.34			
15	256QAM	36	36	18.39	18.38	18.39	18	5	
15	256QAM	75	0	18.50	18.50	18.41			
15	256QAM	1	0	18.50	18.49	18.43			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.29	21.37	21.34			
10	QPSK	1	25	21.36	21.31	21.24	23	0	
10	QPSK	1	49	21.33	21.33	21.41			
10	QPSK	25	0	20.53	20.56	20.37	22	1	
10	QPSK	25	12	20.54	20.60	20.49			
10	QPSK	25	25	20.39	20.49	20.57			
10	16QAM	1	0	20.33	20.48	20.42			
10	16QAM	1	49	20.38	20.37	20.31	22	1	
10	16QAM	25	0	19.40	19.56	19.46			
10	16QAM	25	12	19.45	19.41	19.36	21	2	
10	16QAM	25	25	19.44	19.38	19.36			
10	16QAM	50	0	19.43	19.48	19.43			
10	16QAM	1	0	19.37	19.37	19.26	21	2	
10	16QAM	1	25	19.56	19.51	19.42			
10	16QAM	1	49	19.45	19.41	19.33			
10	16QAM	25	0	19.42	19.42	19.36	20	3	
10	16QAM	25	12	19.58	19.42	19.32			
10	256QAM	1	0	18.46	18.48	18.30			
10	256QAM	1	25	18.40	18.45	18.48	18	5	
10	256QAM	1	49	18.37	18.33	18.31			
10	256QAM	25	0	18.52	18.51	18.36			
10	256QAM	25	12	18.37	18.34	18.27	18	5	
10	256QAM	50	0	18.39	18.46	18.38			
10	256QAM	1	0	18.39	18.48	18.38			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.42	21.39	21.23			
5	QPSK	1	16	21.53	21.49	21.48	23	0	
5	QPSK	1	24	21.41	21.34	21.53			
5	QPSK	12	7	20.45	20.47	20.35	22	1	
5	QPSK	12	14	20.56	20.36	20.36			
5	QPSK	12	21	20.41	20.38	20.34			
5	16QAM	1	0	20.61	20.51	20.47	22	1	
5	16QAM	1	24	20.38	20.38	20.27			
5	16QAM	12	7	19.42	19.46	19.51	21	2	
5	16QAM	12	14	19.41	19.46	19.46			
5	16QAM	25	0	19.45	19.53	19.46			
5	16QAM	1	0	19.23	19.22	19.36	21	2	
5	16QAM	1	12	19.46	19.43	19.36			
5	16QAM	1	24	19.47	19.38	19.51			
5	16QAM	12	0	19.46	19.47	19.33	20	3	
5	16QAM	12	7	19.48	19.56	19.34			
5	16QAM	25	0	19.59	19.39	19.53			
5	16QAM	25	0	19.43	19.38	19.27			
5	256QAM	1	0	18.50	18.41	18.36			
5	256QAM	1	12	18.41	18.47	18.35	18	5	
5	256QAM	1	24	18.52	18.47	18.44			
5	256QAM	12	0	18.42	18.59	18.35			
5	256QAM	12	7	18.17	18.21	18.26	18	5	
5	256QAM	25	0	18.46	18.33	18.04			
5	256QAM	25	0	18.48	18.43	18.40			

Band 41 Ant0 DS12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch [Freq]	Power Middle Ch [Freq]	Power High Ch [Freq]	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.08	22.08	22.08			
20	QPSK	1	49	22.13	22.19	22.02	23	0	
20	QPSK	1	99	22.26	22.06	22.27			
20	QPSK	50	0	21.12	21.16	21.16			
20	QPSK	50	24	21.19	21.27	21.21	22	1	
20	QPSK	50	74	21.18	21.18	21.26			
20	QPSK	100	0	21.12	21.16	21.18			
20	16QAM	1	0	21.26	21.27	21.26			
20	16QAM	1	49	20.89	20.83	20.87	22	1	
20	16QAM	1	99	20.95	20.92	20.94			
20	16QAM	50	0	20.34	20.34	20.34			
20	16QAM	50	24	20.10	20.16	20.17	21	2	
20	16QAM	50	74	20.07	20.38	20.21			
20	16QAM	100	0	20.17	20.24	20.21			
20	16QAM	1	0	20.11	20.08	20.22	21	2	
20	16QAM	1	49	20.18	20.00	20.03			
20	16QAM	1	99	20.05	20.20	20.13			
20	16QAM	50	0	19.40	19.28	19.14	20	3	
20	16QAM	50	24	19.02	19.48	19.07			
20	16QAM	50	74	19.02	19.48	19.07			
20	16QAM	100	0	19.20	19.10	19.33	19	5	
20	16QAM	1	0	17.19	17.25	17.29			
20	16QAM	1	49	17.50	17.28	17.10	18	5	
20	16QAM	1	99	17.16	17.01	17.06			
20	16QAM	50	0	17.15	17.12	17.19			
20	16QAM	50	24	17.02	17.29	17.05			
20	16QAM	50	74	17.09	17.17	17.14	18	5	
20	16QAM	100	0	17.21	17.40	17.19			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.02	22.02	22.02			
15	QPSK	1	37	22.09	2				



GSM1900 AHS DSS2

GSM1900 Tx Channel	Burst Average Power (dBm)			Tune-up L1st (dBm)	Frame Average Power (dBm)			Tune-up L1st (dBm)
	1892.2	1892	1892.8		1892.2	1892	1892.8	
DMB 1 Tx.wk	20.71	20.68	20.70	30.00	20.71	20.68	20.70	21.00
OPNS 1 Tx.wk	20.33	20.30	20.32	30.00	20.33	20.30	20.32	21.00
OPNS 2 Tx.wk	20.47	20.44	20.47	27.00	20.47	20.44	20.47	21.00
OPNS 3 Tx.wk	20.12	20.21	20.17	25.00	20.86	20.07	20.61	21.04
OPNS 4 Tx.wk	23.42	23.40	23.02	24.00	20.42	20.40	20.02	21.00
EDGE 1 Tx.wk	21.19	20.90	21.44	26.00	18.19	18.09	18.44	17.00
EDGE 2 Tx.wk	22.26	22.23	22.21	24.00	18.26	18.23	18.21	18.00
EDGE 3 Tx.wk	20.32	20.20	20.18	21.00	18.08	18.04	18.00	17.24
EDGE 4 Tx.wk	19.41	19.20	19.40	20.00	18.41	18.20	18.40	17.00

WCDMA 1x AHS DSS2

Band Tx Channel	WCDMA 1x			Tune-up L1st (dBm)	WCDMA 1x AHS DSS2			Tune-up L1st (dBm)	
	9802	9800	9808		1912	1418	1918		
Frequency (MHz)	1892.4	1890	1907.8	1.87	1912.4	1758.6	1758.4		
ISPP Rate (k)	21.88	21.72	21.70	23.00	21.58	21.62	21.55	23.00	
ISPP Rate 0	HEPA Subslot	21.74	21.73	21.72	23.00	21.60	21.60	23.00	
ISPP Rate 1	HECPA Subslot 1	20.69	20.73	20.69	22.00	20.67	20.65	22.00	
ISPP Rate 2	HECPA Subslot 2	20.60	20.70	20.68	22.00	20.61	20.64	22.00	
ISPP Rate 3	HECPA Subslot 3	20.20	20.24	20.14	21.00	20.15	20.11	21.00	
ISPP Rate 4	HECPA Subslot 4	20.20	20.20	20.20	21.00	20.12	20.13	20.09	21.00
ISPP Rate 5	DC-HECPA Subslot 0	20.80	20.70	20.82	22.00	20.60	20.59	22.00	
ISPP Rate 6	DC-HECPA Subslot 1	20.50	20.62	20.74	22.00	20.63	20.53	20.47	22.00
ISPP Rate 7	DC-HECPA Subslot 2	20.24	20.27	20.26	21.00	20.56	20.27	20.61	21.00
ISPP Rate 8	DC-HECPA Subslot 3	20.15	20.23	20.24	21.00	20.61	20.22	20.09	21.00
ISPP Rate 9	HECPA Subslot 0	20.81	20.70	20.73	22.00	20.62	20.67	20.55	22.00
ISPP Rate 10	HECPA Subslot 1	19.70	19.81	19.80	20.00	19.62	19.69	19.50	20.00
ISPP Rate 11	HECPA Subslot 2	19.81	19.81	19.87	21.00	19.68	19.67	19.58	21.00
ISPP Rate 12	HECPA Subslot 3	19.82	19.81	19.73	20.00	19.68	19.65	19.50	20.00
ISPP Rate 13	HECPA Subslot 4	20.80	20.80	20.70	22.00	20.60	20.70	20.60	22.00



Band 66 Ant3 DS12										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch-Freq	Power Middle Ch-Freq	Power High Ch-Freq	Time-up (min)	Spine (dB)		
Channel				133072	133072	133072				
Frequency (MHz)				1720	1745	1770				
20	QPSK	50	0	2204	2204	2207				
20	QPSK	1	48	2218	2221	2221	23	0		
20	QPSK	1	96	2221	2224	2222				
20	QPSK	50	0	2225	2225	2226				
20	QPSK	50	24	2226	2217	2224	23	0		
20	QPSK	50	50	2231	2221	2226				
20	QPSK	100	0	2229	2230	2226				
20	QPSK	1	48	2230	2214	2228	23	0		
20	QPSK	1	96	2230	2248	2215				
20	QPSK	50	0	2238	2211	2236				
20	QPSK	50	24	2241	2219	2222				
20	QPSK	50	50	2235	2236	2215	23	0		
20	QPSK	100	0	2248	2228	2215				
20	QPSK	1	0	2251	2238	2234				
20	QPSK	1	48	2238	2239	2215	23	0		
20	QPSK	1	96	2223	2231	2216				
20	QPSK	50	0	2127	2136	2126				
20	QPSK	50	24	2136	2115	2127	22	1		
20	QPSK	50	50	2139	2139	2128				
20	QPSK	100	0	2131	2131	2136				
20	QPSK	1	0	1921	1929	1910				
20	QPSK	1	48	1921	1911	1914	20	3		
20	QPSK	1	96	1929	1929	1927				
20	QPSK	50	0	1917	1942	1916				
20	QPSK	50	24	1917	1936	1931	20	3		
20	QPSK	50	50	1924	1911	1920				
20	QPSK	100	0	1936	1927	1929				
Channel				133047	133022	133007	Time-up (min)	Spine (dB)		
Frequency (MHz)				17775	17425	17275				
15	QPSK	1	0	2211	2238	2211	23	0		
15	QPSK	1	37	2207	2209	2215				
15	QPSK	1	74	2204	2223	2217				
15	QPSK	30	0	2201	2218	2216				
15	QPSK	30	20	2237	2208	2211	23	0		
15	QPSK	30	30	2224	2214	2220				
15	QPSK	75	0	2212	2215	2210				
15	QPSK	75	0	2213	2201	2233				
15	QPSK	1	37	2219	2196	2214	23	0		
15	QPSK	1	74	2228	2226	2213				
15	QPSK	30	0	2207	2207	2206				
15	QPSK	30	20	2230	2203	2214	23	0		
15	QPSK	30	30	2232	2226	2210				
15	QPSK	75	0	2207	2212	2206				
15	QPSK	1	0	2204	2234	2228				
15	QPSK	1	37	2222	2233	2202	23	0		
15	QPSK	1	74	2215	2226	2212				
15	QPSK	30	0	2122	2132	2119				
15	QPSK	30	20	2115	2111	2111	22	1		
15	QPSK	30	30	2126	2124	2116				
15	QPSK	75	0	2114	2105	2124				
15	QPSK	1	0	1935	1919	1937				
15	QPSK	1	37	1916	1905	1906	20	3		
15	QPSK	1	74	1927	1908	1908				
15	QPSK	30	0	1914	1932	1902				
15	QPSK	30	20	1912	1933	1915	20	3		
15	QPSK	30	30	1918	1920	1918				
15	QPSK	75	0	1933	1921	1921				
Channel				133022	133022	133022	Time-up (min)	Spine (dB)		
Frequency (MHz)				17115	17425	17725				
10	QPSK	1	0	2219	2238	2214				
10	QPSK	1	20	2238	2207	2204	23	0		
10	QPSK	1	40	2208	2217	2211				
10	QPSK	20	0	2208	2208	2208				
10	QPSK	20	10	2239	2207	2216	23	0		
10	QPSK	20	20	2221	2204	2208				
10	QPSK	50	0	2215	2209	2216				
10	QPSK	50	0	2216	2207	2226				
10	QPSK	1	20	2228	2209	2223	23	0		
10	QPSK	1	40	2224	2222	2199				
10	QPSK	20	0	2202	2207	2220				
10	QPSK	20	10	2237	2209	2217	23	0		
10	QPSK	20	20	2218	2230	2209				
10	QPSK	50	0	2216	2221	2196				
10	QPSK	1	0	2215	2234	2224				
10	QPSK	1	20	2229	2234	2205	23	0		
10	QPSK	1	40	2207	2218	2212				
10	QPSK	20	0	2116	2132	2116				
10	QPSK	20	10	2113	2111	2109	22	1		
10	QPSK	20	20	2121	2133	2115				
10	QPSK	50	0	2121	2118	2128				
10	QPSK	1	0	1935	1914	1932				
10	QPSK	1	20	1907	1908	1907	20	3		
10	QPSK	1	40	1927	1904	1902				
10	QPSK	20	0	1927	1932	1908				
10	QPSK	20	10	1912	1928	1919	20	3		
10	QPSK	20	20	1908	1905	1908				
10	QPSK	50	0	1934	1915	1921				
Channel				131697	133022	133047	Time-up (min)	Spine (dB)		
Frequency (MHz)				17115	17425	17725				
5	QPSK	1	0	2214	2234	2214				
5	QPSK	1	10	2196	2217	2216	23	0		
5	QPSK	1	20	2208	2216	2219				
5	QPSK	10	0	2219	2215	2215				
5	QPSK	10	7	2239	2205	2216	23	0		
5	QPSK	10	10	2216	2217	2217				
5	QPSK	20	0	2218	2202	2220				
5	QPSK	1	0	2222	2201	2234				
5	QPSK	1	10	2216	2207	2214	23	0		
5	QPSK	1	20	2212	2236	2208				
5	QPSK	10	0	2204	2219	2221				
5	QPSK	10	7	2238	2205	2206	23	0		
5	QPSK	10	10	2227	2230	2211				
5	QPSK	20	0	2203	2215	2207				
5	QPSK	1	0	2205	2225	2221				
5	QPSK	1	10	2229	2224	2203	23	0		
5	QPSK	1	20	2205	2222	2209				
5	QPSK	10	0	2115	2141	2122				
5	QPSK	10	7	2117	2106	2114	22	1		
5	QPSK	10	10	2121	2132	2117				
5	QPSK	20	0	2122	2106	2131				
5	QPSK	1	0	1936	1920	1936				
5	QPSK	1	10	1916	1927	1921	20	3		
5	QPSK	1	20	1928	1923	1929				
5	QPSK	10	0	1927	1905	1913				
5	QPSK	20	0	1927	1909	1908				
Channel				131697	133022	133047	Time-up (min)	Spine (dB)		
Frequency (MHz)				17115	17425	17725				
3	QPSK	1	0	2216	2235	2212				
3	QPSK	1	8	2210	2210	2211	23	0		
3	QPSK	1	16	2215	2215	2205				
3	QPSK	8	0	2216	2218	2216				
3	QPSK	8	4	2238	2205	2215	23	0		
3	QPSK	10	0	2204	2214	2208				
3	QPSK	1	0	2215	2202	2232				
3	QPSK	1	8	2226	2196	2217	23	0		
3	QPSK	1	16	2218	2222	2206				
3	QPSK	8	0	2209	2201	2223				
3	QPSK	8	4	2232	2215	2205	23	0		
3	QPSK	16	0	2201	2228	2212				
3	QPSK	16	0	2204	2209	2208				
3	QPSK	1	0	2216	2231	2221				
3	QPSK	1	8	2231	2221	2209	23	0		
3	QPSK	1	16	2206	2228	2201				
3	QPSK	8	0	2123	2144	2113				
3	QPSK	8	4	2114	2106	2119	22	1		
3	QPSK	8	7	2120	2124	2116				
3	QPSK	10	0	2118	2113	2121				
3	QPSK	1	0	1913	1920	1921				
3	QPSK	1	8	1914	1927	1922	20	3		
3	QPSK	1	16	1913	1920	1924				
3	QPSK	8	0	1914	1926	1914				
3	QPSK	8	4	1912	1926	1926	20	3		
3	QPSK	8	7	1909	1921	1918				
3	QPSK	10	0	1921	1916	1921				
Channel				131697	133022	133047	Time-up (min)	Spine (dB)		
Frequency (MHz)				17115	17425	17725				
1.4	QPSK	1	0	2221	2228	2213				
1.4	QPSK	1	3	2213	2216	2209	23	0		
1.4	QPSK	1	6	2221	2213	2212				
1.4	QPSK	2	0	2225	2213	2212				
1.4	QPSK	3	1	2238	2205	2219				
1.4	QPSK	3	3	2226	2213	2209				
1.4	QPSK	6	0	2208	2215	2206	23	0		
1.4	QPSK	1	0	2212	2198	2232				
1.4	QPSK	1	3	2220	2207	2225				
1.4	QPSK	1	6	2228	2202	2200	23	0		
1.4	QPSK</									



Band 38 Ant3 DS12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.21	21.21	21.21			
20	QPSK	1	49	21.24	21.11	21.18	22.7	0	
20	QPSK	5	99	21.23	21.36	21.12			
20	QPSK	5	149	21.12	21.32	21.28			
20	QPSK	50	24	21.14	21.18	21.08	22.7	0	
20	QPSK	50	74	21.16	21.02	21.02			
20	QPSK	100	0	21.00	21.13	21.06			
20	QPSK	100	49	21.03	21.16	21.06			
20	16QAM	1	49	21.21	21.09	21.07	22.7	0	
20	16QAM	5	99	21.20	21.04	21.06			
20	16QAM	50	0	21.20	21.05	21.01			
20	16QAM	50	24	21.20	20.96	21.02	22.7	0	
20	16QAM	50	74	21.20	21.07	21.04			
20	16QAM	100	0	21.13	21.13	20.97			
20	16QAM	100	49	21.16	21.05	21.09			
20	16QAM	1	49	21.04	21.24	21.05	22.7	0	
20	16QAM	5	99	21.02	21.04	21.17			
20	16QAM	50	0	21.11	21.14	21.17			
20	16QAM	50	24	21.09	21.13	21.06	22.7	0	
20	16QAM	50	74	21.09	21.03	21.06			
20	16QAM	100	0	21.10	21.16	21.16			
20	16QAM	100	49	21.22	21.02	21.02			
20	256QAM	1	49	19.22	19.18	19.21	20.7	2	
20	256QAM	5	99	19.23	19.20	19.11			
20	256QAM	50	0	19.06	19.27	19.11			
20	256QAM	50	24	19.23	19.16	19.16	20.7	2	
20	256QAM	50	74	19.26	19.02	19.12			
20	256QAM	100	0	19.01	19.19	19.03			
Channel									
Frequency (MHz)									
15	QPSK	1	0	21.22	21.32	21.22			
15	QPSK	1	37	21.14	21.24	21.14	22.7	0	
15	QPSK	5	74	21.17	21.21	20.98			
15	QPSK	36	0	21.17	20.84	21.18	22.7	0	
15	QPSK	36	39	21.12	21.11	20.90			
15	QPSK	75	0	20.94	20.99	20.94			
15	16QAM	1	74	21.27	21.07	20.92	22.7	0	
15	16QAM	1	37	21.05	20.93	20.95			
15	16QAM	5	74	21.07	20.96	21.14			
15	16QAM	36	0	21.24	21.00	21.19	22.7	0	
15	16QAM	36	39	21.19	21.11	20.98			
15	16QAM	75	0	21.05	21.03	21.06			
15	16QAM	1	0	21.01	20.98	20.97	22.7	0	
15	16QAM	1	37	20.97	21.22	20.92			
15	16QAM	1	74	21.16	21.12	21.12			
15	16QAM	36	0	20.97	20.98	21.00	22.7	0	
15	16QAM	36	39	20.94	20.93	20.98			
15	16QAM	75	0	21.02	21.03	21.03			
15	256QAM	1	0	19.16	19.27	19.18	20.7	2	
15	256QAM	5	39	19.25	19.02	19.07			
15	256QAM	36	0	19.03	19.19	19.01	20.7	2	
15	256QAM	36	39	19.24	19.37	19.00			
15	256QAM	75	0	19.24	19.07	19.04	20.7	2	
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.25	21.22	21.04			
10	QPSK	1	25	21.14	21.31	21.13	22.7	0	
10	QPSK	49	49	21.10	21.28	21.03			
10	QPSK	25	0	21.16	20.91	21.22	22.7	0	
10	QPSK	25	12	21.07	21.01	20.99			
10	QPSK	25	25	21.02	21.08	20.98			
10	QPSK	50	0	20.93	21.10	21.01			
10	16QAM	1	0	21.24	21.07	20.87	22.7	0	
10	16QAM	1	49	20.98	21.08	21.11			
10	16QAM	25	0	21.14	20.92	20.93	22.7	0	
10	16QAM	25	12	21.11	21.03	21.14			
10	16QAM	25	25	21.15	21.16	20.87			
10	16QAM	50	0	21.09	21.02	20.91			
10	16QAM	1	49	21.08	20.99	20.97	22.7	0	
10	16QAM	1	25	20.92	21.12	21.01			
10	16QAM	1	0	21.14	21.07	21.06			
10	16QAM	25	0	21.09	21.07	21.00	22.7	0	
10	16QAM	25	12	21.00	21.06	21.02			
10	16QAM	25	25	20.96	21.01	21.00			
10	256QAM	1	0	19.03	19.22	18.94	20.7	2	
10	256QAM	1	25	19.06	19.08	19.13			
10	256QAM	1	49	19.15	19.03	18.99	20.7	2	
10	256QAM	25	0	19.23	19.09	18.91			
10	256QAM	25	12	19.25	19.12	18.99	20.7	2	
10	256QAM	50	0	19.07	19.15	18.95	20.7	2	
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.15	21.27	20.99			
5	QPSK	1	16	21.19	21.00	21.14	22.7	0	
5	QPSK	1	24	21.18	21.30	21.01			
5	QPSK	12	7	21.11	21.00	21.13	22.7	0	
5	QPSK	12	13	21.04	21.16	21.06			
5	QPSK	12	19	21.05	21.03	20.99			
5	QPSK	12	25	21.02	21.03	20.90			
5	16QAM	1	0	21.28	21.03	20.89	22.7	0	
5	16QAM	1	24	21.08	21.08	21.03			
5	16QAM	12	7	21.17	20.91	21.05	22.7	0	
5	16QAM	12	13	21.15	21.12	21.01			
5	16QAM	25	0	20.92	21.03	20.92			
5	16QAM	1	0	21.11	20.90	21.03	22.7	0	
5	16QAM	1	9	21.07	21.16	21.03			
5	16QAM	1	24	21.04	21.19	21.13			
5	16QAM	12	7	21.03	21.03	21.07	22.7	0	
5	16QAM	12	7	20.96	21.08	20.94			
5	16QAM	25	0	21.03	20.93	21.00			
5	16QAM	25	0	20.98	21.01	21.04			
5	256QAM	1	0	19.07	19.21	18.94	20.7	2	
5	256QAM	12	7	18.96	19.23	19.03	20.7	2	
5	256QAM	12	7	18.94	19.05	19.06			
5	256QAM	12	13	19.10	19.03	19.07			
5	256QAM	25	0	19.03	19.14	18.96	20.7	2	

Band 41 Ant3 DS12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.08	21.08	21.08			
20	QPSK	1	49	21.10	21.03	21.10	22.7	0	
20	QPSK	5	99	21.02	21.15	21.14			
20	QPSK	5	149	20.97	21.12	21.12			
20	QPSK	50	24	20.99	20.96	21.11	22.7	0	
20	QPSK	50	74	21.02	21.02	21.15			
20	QPSK	100	0	21.04	21.06	21.01			
20	QPSK	100	49	20.98	21.16	21.05			
20	16QAM	1	49	21.09	20.95	21.15	22.7	0	
20	16QAM	5	99	21.06	21.09	21.05			
20	16QAM	50	0	20.99	21.04	21.00			
20	16QAM	50	24	20.99	20.96	21.17	22.7	0	
20	16QAM	50	74	21.07	21.10	21.05			
20	16QAM	100	0	21.19	20.95	21.12			
20	16QAM	100	49	20.99	20.98	21.17			
20	16QAM	1	49	21.11	20.94	21.07	22.7	0	
20	16QAM	5	99	21.08	21.09	21.07			
20	16QAM	50	0	21.04	21.22	21.07			
20	16QAM	50	24	21.05	21.23	21.09	22.7	0	
20	16QAM	50	74	21.05	21.20	21.21			
20	16QAM	100	0	21.19	21.01	21.30			
20	16QAM	100	49	20.91	21.09	21.05			
20	256QAM	1	49	19.14	19.00	19.08	20.7	2	
20	256QAM	5	99	19.08	19.13	19.11			
20	256QAM	50	0	19.09	19.03	19.24	20.7	2	
20	256QAM	50	24	19.02	19.05	19.05			
20	256QAM	50	74	19.17	19.15	19.19	20.7	2	
20	256QAM	100	0	19.15	19.16	19.04			
Channel									
Frequency (MHz)									
15	QPSK	1	0	21.02	20.92	21.14			
15	QPSK	1	37	21.09	20.94	21.09	22.7	0	



Band 42 Part27Q Ant12 DS12									
BW (MHz)	Modulation	RB Size	RB Offset	F _{center}	F _{min}	F _{max}	F _{center}	Turnup time (dBm)	MPR (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	2130	2146	2142	2130		
20	QPSK	1	48	2113	2137	2123	2113	22	0
20	QPSK	1	96	2096	2120	2104	2096		
20	QPSK	50	0	2026	2036	2026	2026	22	0
20	QPSK	50	24	2029	2026	2020	2029		
20	QPSK	50	48	2032	2026	2020	2032		
20	QPSK	100	0	2027	2027	2027	2027		
20	HQAM	1	0	2030	2042	2035	2030		
20	HQAM	1	48	2013	2035	2037	2013	22	0
20	HQAM	1	96	2006	2031	2035	2006		
20	HQAM	50	0	1922	1936	1934	1922	21	1
20	HQAM	50	24	1932	1928	1935	1932		
20	HQAM	50	48	1935	1928	1935	1935		
20	HQAM	100	0	1933	1945	1938	1933		
20	HQAM	1	0	1937	1944	1926	1937	21	1
20	HQAM	1	48	1920	1923	1925	1920		
20	HQAM	1	96	1924	1922	1925	1924		
20	HQAM	50	0	1820	1838	1838	1820	20	2
20	HQAM	50	24	1825	1838	1838	1825		
20	HQAM	50	48	1828	1827	1835	1828		
20	HQAM	100	0	1828	1824	1831	1828		
20	256QAM	1	0	1628	1633	1638	1628	18	4
20	256QAM	1	48	1605	1628	1634	1605		
20	256QAM	1	96	1613	1617	1634	1613		
20	256QAM	50	0	1615	1617	1636	1615		
20	256QAM	50	24	1620	1620	1636	1620		
20	256QAM	50	48	1624	1628	1633	1624		
20	256QAM	100	0	1628	1630	1630	1628		
Channel									
Frequency (MHz)									
16	QPSK	1	0	2115	2137	2130	2115		
16	QPSK	1	37	2103	2129	2107	2103	22	0
16	QPSK	1	74	2103	2112	2112	2103		
16	QPSK	36	0	2011	2014	2003	2011	22	0
16	QPSK	36	20	2013	2027	2013	2013		
16	QPSK	36	40	2015	2027	2015	2015		
16	QPSK	75	0	2015	2024	2022	2015		
16	HQAM	1	0	2019	2026	2026	2019	22	0
16	HQAM	1	39	2019	2026	2026	2019		
16	HQAM	1	74	2012	2018	2021	2012		
16	HQAM	36	0	1912	1908	1901	1912	21	1
16	HQAM	36	20	1924	1914	1904	1924		
16	HQAM	36	39	1918	1917	1916	1918		
16	HQAM	75	0	1925	1928	1916	1925		
16	HQAM	1	0	1922	1921	1909	1922	21	1
16	HQAM	1	39	1922	1922	1909	1922		
16	HQAM	1	74	1913	1914	1911	1913		
16	HQAM	36	0	1803	1828	1821	1803	20	2
16	HQAM	36	20	1818	1821	1816	1818		
16	HQAM	36	39	1820	1817	1802	1820		
16	HQAM	75	0	1819	1832	1823	1819		
16	HQAM	1	0	1822	1826	1826	1822	18	4
16	HQAM	1	37	1817	1829	1816	1817		
16	HQAM	1	74	1827	1808	1823	1827		
16	256QAM	1	0	1627	1622	1623	1627	18	4
16	256QAM	1	39	1636	1625	1625	1636		
16	256QAM	36	0	1612	1637	1623	1612		
16	256QAM	75	0	1619	1627	1616	1619		
Channel									
Frequency (MHz)									
10	QPSK	1	0	2120	2138	2130	2120		
10	QPSK	1	26	2126	2126	2117	2126	22	0
10	QPSK	1	51	2124	2110	2109	2124		
10	QPSK	25	0	2034	2011	2010	2034	22	0
10	QPSK	25	12	2030	2025	2011	2030		
10	QPSK	25	24	2032	2026	2010	2032		
10	QPSK	50	0	2040	2023	2018	2040		
10	HQAM	1	0	2044	2034	2040	2044	22	0
10	HQAM	1	20	2041	2029	2034	2041		
10	HQAM	1	40	2045	2020	2019	2045		
10	HQAM	25	0	1940	1923	1932	1940	21	1
10	HQAM	25	12	1946	1921	1927	1946		
10	HQAM	25	25	1924	1942	1945	1924		
10	HQAM	50	0	1944	1922	1940	1944		
10	HQAM	1	0	1849	1851	1842	1849	21	1
10	HQAM	1	25	1848	1850	1838	1848		
10	HQAM	1	49	1840	1840	1833	1840		
10	HQAM	25	0	1834	1852	1836	1834	20	2
10	HQAM	25	12	1836	1839	1839	1836		
10	HQAM	25	25	1825	1839	1839	1825		
10	HQAM	50	0	1837	1832	1845	1837		
10	256QAM	1	0	1621	1644	1634	1621	18	4
10	256QAM	1	25	1622	1624	1611	1622		
10	256QAM	1	49	1622	1626	1626	1622		
10	256QAM	25	0	1622	1625	1634	1622	18	4
10	256QAM	25	12	1630	1627	1634	1630		
10	256QAM	25	25	1619	1638	1631	1619		
10	256QAM	50	0	1617	1625	1613	1617		
Channel									
Frequency (MHz)									
5	QPSK	1	0	2113	2138	2130	2113		
5	QPSK	1	12	2111	2119	2107	2111	22	0
5	QPSK	1	24	2128	2104	2114	2128		
5	QPSK	12	0	2042	2017	2010	2042	22	0
5	QPSK	12	7	2043	2029	2011	2043		
5	QPSK	12	15	2020	2028	2028	2020		
5	QPSK	25	0	2040	2027	2018	2040		
5	HQAM	1	0	2041	2032	2043	2041	22	0
5	HQAM	1	12	2034	2034	2041	2034		
5	HQAM	1	24	2040	2020	2015	2040		
5	HQAM	12	0	1920	1910	1903	1920	21	1
5	HQAM	12	7	1841	1915	1908	1841		
5	HQAM	12	13	1924	1918	1914	1924		
5	HQAM	25	0	1952	1938	1921	1952		
5	HQAM	1	0	1931	1929	1912	1931	21	1
5	HQAM	1	12	1940	1938	1915	1940		
5	HQAM	1	24	1934	1923	1912	1934		
5	HQAM	12	0	1838	1827	1820	1838	20	2
5	HQAM	12	7	1843	1821	1834	1843		
5	HQAM	12	13	1816	1839	1832	1816		
5	HQAM	25	0	1841	1842	1842	1841		
5	256QAM	1	0	1614	1646	1634	1614	18	4
5	256QAM	1	12	1620	1623	1615	1620		
5	256QAM	1	24	1625	1628	1620	1625		
5	256QAM	12	0	1634	1615	1625	1634		
5	256QAM	12	7	1630	1635	1631	1630		
5	256QAM	12	13	1617	1638	1630	1617	18	4
5	256QAM	25	0	1617	1620	1608	1617		

Band 42 Part27O Ant12 DS12									
BW (MHz)	Modulation	RB Size	RB Offset	F _{center}	F _{min}	F _{max}	F _{center}	Turnup time (dBm)	MPR (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	2127	2140	2128	2127		
20	QPSK	1	48	2110	2128	2117	2110	22	0
20	QPSK	1	96	2093	2121	2112	2093		
20	QPSK	50	0	2023	2028	2027	2023		
20	QPSK	50	24	2023	2015	2018	2023		
20	QPSK	50	48	2026	2018	2021	2026		
20	QPSK	100	0	2025	2034	2023	2025		
20	HQAM	1	0	2022	2034	2043	2022	22	0
20	HQAM	1	48	2005	2027	2031	2005		
20	HQAM	1	96	2002	2018	2024	2002		
20	HQAM	50	0	1918	1905	1907	1918	21	1
20	HQAM	50	24	1920	1917	1907	1920		
20	HQAM	50	48	1923	1915	1915	1923		
20	HQAM	100	0	1922	1941	1919	1922		
20	HQAM	1	0	1931	1938	1917	1931	21	1
20	HQAM	1	48	1927	1935	1915	1927		
20	HQAM	1	96	1911	1930	1921	1911		
20	HQAM	50	0	1810	1829	1793	1810	20	2
20	HQAM	50	24	1826	1799	1810			



GSMT900 A44 DS3

Tx Channel	Burst Average Power (dBm)			Tx Channel	Frame Average Power (dBm)		
	950.2	950.3	950.8		950.2	950.3	950.8
Frequency (MHz)	1850.2	1850.3	1900.8	1850.2	1850.3	1900.8	
DMB 1 Tx (dB)	28.15	28.21	28.21	30.00	19.10	19.22	21.00
GPMS 1 Tx (dB)	28.15	28.15	28.15	20.00	19.11	19.17	21.00
GPMS 2 Tx (dB)	24.79	25.14	24.88	20.00	18.79	18.14	20.00
GPMS 3 Tx (dB)	22.34	23.23	22.89	20.00	18.68	18.96	18.43
GPMS 4 Tx (dB)	21.11	21.58	21.25	20.00	18.11	18.58	18.20
EDGE 1 Tx (dB)	23.64	23.84	23.84	22.00	14.84	14.84	14.84
EDGE 2 Tx (dB)	20.65	20.93	20.88	22.00	14.03	14.03	14.03
EDGE 3 Tx (dB)	18.88	19.25	19.21	20.00	14.00	14.99	14.85
EDGE 4 Tx (dB)	17.38	17.72	17.38	19.00	14.28	14.28	16.00

WCDMA 11 Rev 1 DS-SS

Tx Channel	WCDMA 11			WCDMA 11 Rev 1		
	950.2	950.3	950.8	1812	1813	1813
Frequency (MHz)	950.2	950.3	950.8	1812	1813	1813
HSR 12 (dB)	19.50	19.50	19.57	21.00	20.84	20.87
HSR 13 (dB)	18.50	18.50	18.50	21.00	20.84	20.87
HSR 14 (dB)	18.50	18.57	18.78	20.00	19.78	19.85
HSR 15 (dB)	18.54	18.71	18.72	20.00	19.72	19.80
HSR 16 (dB)	18.01	18.17	18.20	19.50	19.24	19.35
HSR 17 (dB)	18.01	18.17	18.26	19.50	19.28	19.32
HSR 18 (dB)	18.43	18.44	18.72	20.00	19.81	19.85
HSR 19 (dB)	18.82	18.82	18.85	20.00	19.87	19.79
HSR 20 (dB)	18.00	18.25	18.38	19.50	19.28	19.24
HSR 21 (dB)	18.48	18.61	18.51	20.00	19.47	19.73
HSR 22 (dB)	18.48	18.47	18.90	19.00	19.32	19.86
HSR 23 (dB)	17.58	17.79	17.48	19.00	18.37	18.84
HSR 24 (dB)	18.51	18.64	18.95	19.00	17.48	17.78
HSR 25 (dB)	18.52	18.43	18.69	20.00	19.48	19.88



Band 25 An4 D53										
BW (MHz)	Modulation	RB Size	FE Offset	Start Freq (MHz)	End Freq (MHz)	Channel	Power (dBm)	Time Slot (ms)	Uplink (MHz)	Downlink (MHz)
20	QPSK	5	0	18.93	19.15	20.94	21.5	0		
20	QPSK	1	48	18.93	19.15	20.94	21.5	0		
20	QPSK	5	0	20.02	20.24	21.11	21.5	0		
20	QPSK	1	48	20.02	20.24	21.11	21.5	0		
20	QPSK	50	24	20.19	19.97	20.15	21.5	0		
20	QPSK	1	48	20.19	19.97	20.15	21.5	0		
20	QPSK	100	0	20.03	20.18	20.17	21.5	0		
20	QPSK	1	0	19.96	20.22	19.91	21.5	0		
20	QPSK	1	48	19.96	20.22	19.91	21.5	0		
20	QPSK	1	96	20.18	20.04	20.18	21.5	0		
20	QPSK	1	48	19.80	19.79	19.76	21.5	0		
20	QPSK	1	48	19.80	19.79	19.76	21.5	0		
20	QPSK	50	24	19.80	19.79	19.77	21.5	0		
20	QPSK	100	0	19.80	19.80	19.76	21.5	0		
20	QPSK	1	0	19.83	19.86	19.85	21.5	0		
20	QPSK	1	48	19.83	19.86	19.85	21.5	0		
20	QPSK	1	96	19.83	19.86	19.85	21.5	0		
20	QPSK	1	48	19.83	19.86	19.85	21.5	0		
20	QPSK	50	24	19.83	19.86	19.85	21.5	0		
20	QPSK	100	0	19.83	19.86	19.85	21.5	0		
20	QPSK	1	0	18.03	18.26	18.16	18.5	2		
20	QPSK	1	48	17.98	18.27	18.10	18.5	2		
20	QPSK	1	48	18.07	18.14	18.06	18.5	2		
20	QPSK	50	24	18.28	18.20	18.28	18.5	2		
20	QPSK	100	0	18.08	18.17	18.18	18.5	2		
20	QPSK	100	0	17.87	18.20	18.18	18.5	2		
Channel										
Frequency (MHz)										
15	QPSK	1	0	19.72	20.03	19.82	21.5	0		
15	QPSK	1	48	19.60	19.97	19.83	21.5	0		
15	QPSK	1	48	19.75	19.92	19.86	21.5	0		
15	QPSK	36	0	19.78	19.86	19.86	21.5	0		
15	QPSK	36	20	20.02	19.77	19.82	21.5	0		
15	QPSK	36	20	19.91	19.84	19.85	21.5	0		
15	QPSK	75	0	19.80	20.02	19.92	21.5	0		
15	QPSK	1	0	19.78	20.00	19.72	21.5	0		
15	QPSK	1	48	19.78	20.00	19.72	21.5	0		
15	QPSK	1	96	19.78	20.00	19.72	21.5	0		
15	QPSK	1	48	19.63	19.92	19.82	21.5	0		
15	QPSK	36	20	19.84	19.82	19.84	21.5	0		
15	QPSK	36	20	19.74	19.82	19.76	21.5	0		
15	QPSK	75	0	19.81	19.88	19.81	21.5	0		
15	QPSK	1	0	19.87	19.91	19.77	21.5	0		
15	QPSK	1	48	19.87	19.91	19.77	21.5	0		
15	QPSK	36	20	19.87	19.88	19.82	21.5	0		
15	QPSK	36	20	19.86	19.86	19.86	21.5	0		
15	QPSK	75	0	19.77	19.79	19.75	21.5	0		
15	QPSK	1	0	17.81	18.06	17.98	18.5	2		
15	QPSK	1	48	17.75	18.07	17.91	18.5	2		
15	QPSK	1	96	17.75	18.07	17.91	18.5	2		
15	QPSK	36	0	17.80	17.87	17.84	18.5	2		
15	QPSK	36	20	18.04	18.12	18.08	18.5	2		
15	QPSK	36	20	17.86	17.98	17.92	18.5	2		
15	QPSK	75	0	17.88	18.02	18.00	18.5	2		
Channel										
Frequency (MHz)										
10	QPSK	1	0	18.77	19.04	18.77	21.5	0		
10	QPSK	1	48	18.65	18.93	18.66	21.5	0		
10	QPSK	1	48	18.78	18.92	18.86	21.5	0		
10	QPSK	25	0	18.87	18.98	18.92	21.5	0		
10	QPSK	12	0	18.90	19.18	19.01	21.5	0		
10	QPSK	25	20	19.84	19.84	19.76	21.5	0		
10	QPSK	50	0	19.81	20.01	20.01	21.5	0		
10	QPSK	1	0	19.76	20.02	19.71	21.5	0		
10	QPSK	1	48	19.81	19.84	19.86	21.5	0		
10	QPSK	1	48	19.80	19.80	19.80	21.5	0		
10	QPSK	20	0	19.87	19.82	19.85	21.5	0		
10	QPSK	25	12	19.82	19.82	19.74	21.5	0		
10	QPSK	25	20	19.86	19.86	19.84	21.5	0		
10	QPSK	50	0	19.86	19.77	19.82	21.5	0		
10	QPSK	1	0	19.83	19.87	19.86	21.5	0		
10	QPSK	1	48	19.86	19.84	19.76	21.5	0		
10	QPSK	40	0	19.89	19.89	19.74	21.5	0		
10	QPSK	25	0	19.83	19.84	19.74	21.5	0		
10	QPSK	25	12	19.86	19.82	19.82	21.5	0		
10	QPSK	25	20	19.71	19.85	19.87	21.5	0		
10	QPSK	50	0	19.87	19.79	19.81	21.5	0		
10	QPSK	1	0	17.82	18.00	17.80	18.5	2		
10	QPSK	50	0	17.78	17.78	17.80	18.5	2		
10	QPSK	1	48	17.86	17.82	17.86	18.5	2		
10	QPSK	25	0	17.85	17.86	17.81	18.5	2		
10	QPSK	25	12	18.02	18.05	18.05	18.5	2		
10	QPSK	25	20	17.86	18.00	17.77	18.5	2		
10	QPSK	75	0	17.77	18.06	18.06	18.5	2		
Channel										
Frequency (MHz)										
5	QPSK	1	0	18.73	18.80	18.73	21.5	0		
5	QPSK	1	12	18.63	18.92	18.81	21.5	0		
5	QPSK	1	24	18.70	18.80	18.84	21.5	0		
5	QPSK	12	0	18.84	18.86	18.86	21.5	0		
5	QPSK	12	7	20.00	19.80	19.86	21.5	0		
5	QPSK	12	13	19.83	19.86	19.76	21.5	0		
5	QPSK	25	0	19.86	19.86	19.86	21.5	0		
5	QPSK	1	0	18.72	18.88	18.75	21.5	0		
5	QPSK	1	12	18.87	18.77	18.83	21.5	0		
5	QPSK	1	24	18.83	18.78	18.86	21.5	0		
5	QPSK	12	0	18.43	18.88	18.82	21.5	0		
5	QPSK	12	7	18.87	18.82	18.74	21.5	0		
5	QPSK	12	13	18.87	18.86	18.86	21.5	0		
5	QPSK	25	0	18.81	18.87	18.84	21.5	0		
5	QPSK	1	0	18.93	18.91	18.95	21.5	0		
5	QPSK	1	12	18.78	18.88	18.73	21.5	0		
5	QPSK	1	24	18.82	18.71	18.86	21.5	0		
5	QPSK	12	0	18.80	18.89	18.75	21.5	0		
5	QPSK	12	7	18.88	18.84	18.88	21.5	0		
5	QPSK	12	13	18.71	18.86	18.80	21.5	0		
5	QPSK	25	0	18.73	18.74	18.86	21.5	0		
5	QPSK	1	0	17.80	18.14	18.00	18.5	2		
5	QPSK	1	12	17.81	18.11	17.94	18.5	2		
5	QPSK	1	24	18.06	17.82	17.90	18.5	2		
5	QPSK	12	0	17.82	18.02	18.03	18.5	2		
5	QPSK	12	7	18.13	17.82	18.06	18.5	2		
5	QPSK	12	13	17.80	17.87	17.76	18.5	2		
5	QPSK	25	0	17.82	17.88	17.87	18.5	2		
Channel										
Frequency (MHz)										
3	QPSK	1	0	18.76	20.11	18.76	21.5	0		
3	QPSK	1	8	18.58	19.91	19.80	21.5	0		
3	QPSK	1	16	18.75	19.82	19.81	21.5	0		
3	QPSK	8	0	18.78	20.07	19.91	21.5	0		
3	QPSK	8	8	20.03	19.72	19.84	21.5	0		
3	QPSK	15	0	18.86	19.88	19.85	21.5	0		
3	QPSK	15	8	18.74	20.00	19.72	21.5	0		
3	QPSK	1	0	18.80	19.79	19.89	21.5	0		
3	QPSK	1	14	20.01	19.75	19.89	21.5	0		
3	QPSK	1	28	19.40	19.90	19.95	21.5	0		
3	QPSK	8	0	18.87	19.88	19.87	21.5	0		
3	QPSK	8	8	19.84	19.88	19.80	21.5	0		
3	QPSK	8	7	18.84	19.89	19.80	21.5	0		
3	QPSK	15	0	18.83	19.88	19.8				



Band 38 Ant4 DSI3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.00	18.00	18.00			
20	QPSK	1	49	18.06	18.06	18.06	20	0	
20	QPSK	1	99	18.12	18.12	18.12			
20	QPSK	50	24	18.06	18.06	18.06	20	0	
20	QPSK	50	74	18.06	18.06	18.06			
20	QPSK	100	0	18.06	18.06	18.06			
20	16QAM	1	49	18.14	18.14	18.14	20	0	
20	16QAM	1	99	18.20	18.20	18.20			
20	16QAM	50	0	18.20	18.20	18.20			
20	16QAM	50	24	18.23	18.23	18.23	20	0	
20	16QAM	50	74	18.23	18.23	18.23			
20	16QAM	100	0	18.23	18.23	18.23			
20	64QAM	1	49	18.07	18.07	18.07	20	0	
20	64QAM	1	99	18.13	18.13	18.13			
20	64QAM	50	0	18.13	18.13	18.13			
20	64QAM	50	24	18.16	18.16	18.16	20	0	
20	64QAM	50	74	18.16	18.16	18.16			
20	64QAM	100	0	18.16	18.16	18.16			
20	256QAM	1	49	18.09	18.09	18.09	19	1	
20	256QAM	1	99	18.15	18.15	18.15			
20	256QAM	50	0	18.15	18.15	18.15			
20	256QAM	50	24	18.18	18.18	18.18	19	1	
20	256QAM	50	74	18.18	18.18	18.18			
20	256QAM	100	0	18.18	18.18	18.18			
Channel									
Frequency (MHz)									
15	QPSK	1	0	18.27	18.27	18.27			
15	QPSK	1	37	18.33	18.33	18.33	20	0	
15	QPSK	1	74	18.39	18.39	18.39			
15	QPSK	36	0	18.39	18.39	18.39	20	0	
15	QPSK	36	36	18.45	18.45	18.45			
15	QPSK	72	0	18.45	18.45	18.45			
15	16QAM	1	37	18.37	18.37	18.37	20	0	
15	16QAM	1	74	18.43	18.43	18.43			
15	16QAM	36	0	18.43	18.43	18.43	20	0	
15	16QAM	36	36	18.49	18.49	18.49			
15	16QAM	72	0	18.49	18.49	18.49			
15	64QAM	1	0	18.53	18.53	18.53	20	0	
15	64QAM	1	37	18.59	18.59	18.59			
15	64QAM	1	74	18.65	18.65	18.65			
15	64QAM	36	0	18.65	18.65	18.65	20	0	
15	64QAM	36	36	18.71	18.71	18.71			
15	64QAM	72	0	18.71	18.71	18.71			
15	256QAM	1	0	18.75	18.75	18.75	19	1	
15	256QAM	1	37	18.81	18.81	18.81			
15	256QAM	1	74	18.87	18.87	18.87			
15	256QAM	36	0	18.87	18.87	18.87	19	1	
15	256QAM	36	36	18.93	18.93	18.93			
15	256QAM	72	0	18.93	18.93	18.93			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.83	18.83	18.83			
10	QPSK	1	25	18.89	18.89	18.89	20	0	
10	QPSK	1	49	18.95	18.95	18.95			
10	QPSK	25	0	18.95	18.95	18.95	20	0	
10	QPSK	25	25	19.01	19.01	19.01			
10	QPSK	50	0	19.01	19.01	19.01			
10	16QAM	1	0	19.05	19.05	19.05	20	0	
10	16QAM	1	49	19.11	19.11	19.11			
10	16QAM	1	99	19.17	19.17	19.17			
10	16QAM	25	0	19.17	19.17	19.17	20	0	
10	16QAM	25	25	19.23	19.23	19.23			
10	16QAM	50	0	19.23	19.23	19.23			
10	64QAM	1	0	19.27	19.27	19.27	20	0	
10	64QAM	1	49	19.33	19.33	19.33			
10	64QAM	1	99	19.39	19.39	19.39			
10	64QAM	25	0	19.39	19.39	19.39	20	0	
10	64QAM	25	25	19.45	19.45	19.45			
10	64QAM	50	0	19.45	19.45	19.45			
10	256QAM	1	0	19.49	19.49	19.49	19	1	
10	256QAM	1	49	19.55	19.55	19.55			
10	256QAM	1	99	19.61	19.61	19.61			
10	256QAM	25	0	19.61	19.61	19.61	19	1	
10	256QAM	25	25	19.67	19.67	19.67			
10	256QAM	50	0	19.67	19.67	19.67			
Channel									
Frequency (MHz)									
5	QPSK	1	0	19.73	19.73	19.73			
5	QPSK	1	16	19.79	19.79	19.79	20	0	
5	QPSK	1	32	19.85	19.85	19.85			
5	QPSK	12	7	19.81	19.81	19.81	20	0	
5	QPSK	12	13	19.87	19.87	19.87			
5	QPSK	25	0	19.85	19.85	19.85	20	0	
5	QPSK	25	12	19.91	19.91	19.91			
5	16QAM	1	24	19.83	19.83	19.83	20	0	
5	16QAM	1	49	19.89	19.89	19.89			
5	16QAM	1	99	19.95	19.95	19.95			
5	16QAM	12	7	19.89	19.89	19.89	20	0	
5	16QAM	12	13	19.95	19.95	19.95			
5	16QAM	25	0	19.95	19.95	19.95	20	0	
5	64QAM	1	0	19.99	19.99	19.99	20	0	
5	64QAM	1	24	20.05	20.05	20.05			
5	64QAM	1	49	20.11	20.11	20.11			
5	64QAM	12	7	20.05	20.05	20.05	20	0	
5	64QAM	12	13	20.11	20.11	20.11			
5	64QAM	25	0	20.11	20.11	20.11			
5	256QAM	1	0	20.15	20.15	20.15	19	1	
5	256QAM	1	24	20.21	20.21	20.21			
5	256QAM	1	49	20.27	20.27	20.27			
5	256QAM	12	7	20.21	20.21	20.21	19	1	
5	256QAM	12	13	20.27	20.27	20.27			
5	256QAM	25	0	20.27	20.27	20.27			

Band 41 Ant4 DSI3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	19.00	19.00	19.00			
20	QPSK	1	49	19.07	19.07	19.07	20	0	
20	QPSK	1	99	19.13	19.13	19.13			
20	QPSK	50	24	19.13	19.13	19.13	20	0	
20	QPSK	50	74	19.19	19.19	19.19			
20	QPSK	100	0	19.19	19.19	19.19			
20	16QAM	1	49	19.15	19.15	19.15	20	0	
20	16QAM	1	99	19.21	19.21	19.21			
20	16QAM	50	0	19.21	19.21	19.21			
20	16QAM	50	24	19.26	19.26	19.26	20	0	
20	16QAM	50	74	19.32	19.32	19.32			
20	16QAM	100	0	19.32	19.32	19.32			
20	64QAM	1	49	19.19	19.19	19.19	19	1	
20	64QAM	1	99	19.25	19.25	19.25			
20	64QAM	50	0	19.25	19.25	19.25			
20	64QAM	50	24	19.30	19.30	19.30	19	1	
20	64QAM	50	74	19.36	19.36	19.36			
20	64QAM	100	0	19.36	19.36	19.36			
20	256QAM	1	49	19.23	19.23	19.23	19	1	
20	256QAM	1	99	19.29	19.29	19.29			
20	256QAM	50	0	19.29	19.29	19.29			
20	256QAM	50	24	19.34	19.34	19.34	19	1	
20	256QAM	50	74	19.40	19.40	19.40			
20	256QAM	100	0	19.40	19.40	19.40			
Channel									
Frequency (MHz)									
15	QPSK	1	0	19.27	19.27	19.27			
15	QPSK	1	37	19.33	19.33	19.33	20.00	0	
15	QPSK	1	74	19.39	19.39	19.39			
15	QPSK	36	0	19.39	19.39	19.39	20	0	
15	QPSK	36	36	19.45	19.45	19.45			
15	QPSK	72	0	19.45	19.45	19.45			
15	16QAM	1	37	19.37	19.37	19.37	20	0	
15	16QAM	1	74	19.43	19.43	19.43			
15	16QAM	36	0	19.43	19.43	19.43	20	0	
15	16QAM	36	36	19.49	19.49	19.49			
15	16QAM	72	0	19.49	19.49	19.49			
15									



Band 42 Ant10 DS3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
0	QPSK	1	0	3460	3600	3640			
20	QPSK	1	49	21.33	21.37	21.23	22.7	0	
20	QPSK	1	99	21.30	21.25	21.34			
20	QPSK	50	0	21.30	21.30	21.34			
20	QPSK	50	24	21.44	21.39	21.17	22.7	0	
20	QPSK	50	50	21.37	21.38	21.18			
20	QPSK	100	0	21.32	21.30	21.33			
20	QPSK	100	24	21.33	21.29	21.18			
20	HQAM	1	49	21.33	21.40	21.35	22.7	0	
20	HQAM	1	99	21.30	21.25	21.35			
20	HQAM	50	0	21.30	21.30	21.31			
20	HQAM	50	24	21.43	21.25	21.30	22.7	0	
20	HQAM	50	50	21.30	21.30	21.30			
20	HQAM	100	0	21.30	21.30	21.32			
20	HQAM	100	24	21.34	21.30	21.18			
20	HQAM	1	49	21.30	21.30	21.35	22.7	0	
20	HQAM	1	99	21.28	21.20	21.35			
20	HQAM	50	0	21.38	21.23	21.22			
20	HQAM	50	24	21.45	21.41	21.27	22.7	0	
20	HQAM	50	50	21.45	21.41	21.27			
20	HQAM	100	0	21.25	21.34	21.30			
20	HQAM	100	24	21.30	21.25	21.25			
20	ZSSBAM	1	49	19.37	19.34	19.21	20.7	2	
20	ZSSBAM	1	99	19.38	19.41	19.34			
20	ZSSBAM	50	0	19.38	19.47	19.33			
20	ZSSBAM	50	24	19.37	19.25	19.25			
20	ZSSBAM	50	50	19.39	19.41	19.40			
20	ZSSBAM	100	0	19.33	19.44	19.36	20.7	2	
Channel									
Frequency (MHz)									
0	QPSK	1	0	2124	2132	2142			
15	QPSK	1	27	21.22	21.14	21.15	22.7	0	
15	QPSK	1	74	21.20	21.20	21.20			
15	QPSK	36	0	21.20	21.22	21.11			
15	QPSK	36	36	21.28	21.20	21.03	22.7	0	
15	QPSK	75	0	21.26	21.26	21.26			
15	HQAM	1	0	21.20	21.20	21.26			
15	HQAM	1	27	21.18	21.27	21.22	22.7	0	
15	HQAM	1	74	21.18	21.27	21.22			
15	HQAM	36	0	21.14	21.19	21.19			
15	HQAM	36	36	21.22	21.20	21.02	22.7	0	
15	HQAM	75	0	21.13	21.20	21.11			
15	HQAM	75	27	21.21	21.20	21.09			
15	HQAM	1	0	21.31	21.22	21.05			
15	HQAM	1	27	21.21	21.22	21.30	22.7	0	
15	HQAM	1	74	21.21	21.22	21.26			
15	HQAM	36	0	21.34	21.14	21.08			
15	HQAM	36	36	21.22	21.21	21.12			
15	HQAM	75	0	21.42	21.30	21.17			
15	ZSSBAM	1	0	19.39	19.39	19.07	20.7	2	
15	ZSSBAM	1	27	19.38	19.38	19.38			
15	ZSSBAM	1	74	19.35	19.34	19.31			
15	ZSSBAM	36	0	19.31	19.43	19.31	20.7	2	
15	ZSSBAM	36	36	19.25	19.38	19.25			
15	ZSSBAM	75	0	19.30	19.34	19.34			
Channel									
Frequency (MHz)									
0	QPSK	1	0	2146	2150	2150			
10	QPSK	1	0	21.34	21.45	21.25	22.7	0	
10	QPSK	1	25	21.19	21.36	21.07			
10	QPSK	1	49	21.11	21.36	21.22			
10	QPSK	25	0	21.19	21.26	21.12	22.7	0	
10	QPSK	25	25	21.41	21.29	21.03			
10	QPSK	25	25	21.38	21.30	21.15			
10	QPSK	50	0	21.25	21.21	21.30			
10	HQAM	1	0	21.23	21.18	21.37	22.7	0	
10	HQAM	1	49	21.38	21.20	21.17			
10	HQAM	25	0	21.40	21.11	21.36			
10	HQAM	25	12	21.35	21.15	21.21	22.7	0	
10	HQAM	25	25	21.18	21.22	21.14			
10	HQAM	50	0	21.14	21.25	21.27			
10	HQAM	1	0	21.19	21.19	21.10			
10	HQAM	1	25	21.17	21.20	21.09	22.7	0	
10	HQAM	1	49	21.21	21.12	21.34			
10	HQAM	25	0	21.20	21.19	21.26			
10	HQAM	25	12	21.15	21.27	21.16	22.7	0	
10	HQAM	25	25	21.37	21.20	21.11			
10	HQAM	50	0	21.12	21.30	21.28			
10	ZSSBAM	1	0	19.40	19.31	19.28	20.7	2	
10	ZSSBAM	1	25	19.32	19.12	19.07			
10	ZSSBAM	1	49	19.22	19.30	19.29			
10	ZSSBAM	25	0	19.33	19.31	19.26	20.7	2	
10	ZSSBAM	25	12	19.30	19.30	19.18			
10	ZSSBAM	25	25	19.28	19.31	19.34			
10	ZSSBAM	50	0	19.21	19.34	19.30			
Channel									
Frequency (MHz)									
0	QPSK	1	0	2127	2144	2120			
5	QPSK	1	0	21.37	21.44	21.20	22.7	0	
5	QPSK	1	12	21.15	21.18	21.00			
5	QPSK	1	24	21.32	21.22	21.17			
5	QPSK	12	0	21.14	21.20	21.00	22.7	0	
5	QPSK	12	7	21.36	21.31	21.12			
5	QPSK	12	12	21.35	21.25	21.04			
5	QPSK	25	0	21.27	21.25	21.30			
5	HQAM	1	0	21.27	21.15	21.30	22.7	0	
5	HQAM	1	12	21.20	21.20	21.05			
5	HQAM	1	24	21.34	21.23	21.16			
5	HQAM	12	0	21.31	21.10	21.28	22.7	0	
5	HQAM	12	12	21.27	21.27	21.22			
5	HQAM	25	0	21.13	21.18	21.17			
5	HQAM	25	12	21.40	21.11	21.01	22.7	0	
5	HQAM	25	24	21.13	21.16	21.21			
5	HQAM	12	0	21.27	21.14	21.05			
5	HQAM	12	7	21.17	21.27	21.07	22.7	0	
5	HQAM	12	12	21.20	21.20	21.05			
5	HQAM	25	0	21.19	21.20	21.22			
5	ZSSBAM	1	0	19.38	19.28	19.24	20.7	2	
5	ZSSBAM	1	12	19.32	19.31	19.27			
5	ZSSBAM	1	24	19.28	19.26	19.27			
5	ZSSBAM	12	0	19.22	19.31	19.27	20.7	2	
5	ZSSBAM	12	7	19.31	19.19	19.24			
5	ZSSBAM	12	12	19.27	19.33	19.33			
5	ZSSBAM	25	0	19.17	19.31	19.29			

Band 48 Ant10 DS3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
0	QPSK	1	0	3660	3600	3641			
20	QPSK	1	49	19.33	19.34	19.35	20	0	
20	QPSK	1	99	19.37	19.40	19.30			
20	QPSK	50	0	19.35	19.35	19.34			
20	QPSK	50	24	19.42	19.37	19.39	20	0	
20	QPSK	50	50	19.38	19.34	19.37			
20	QPSK	100	0	19.33	19.35	19.40	19.33		
20	HQAM	1	49	19.32	19.35	19.31	20	0	
20	HQAM	1	99	19.28	19.41	19.32			
20	HQAM	50	0	19.29	19.24	19.19	19.27		
20	HQAM	50	24	19.44	19.24	19.25	20	0	
20	HQAM	50	50	19.35	19.31	19.35			
20	HQAM	100	0	19.36	19.30	19.36	19.34		
20	HQAM	100	24	19.38	19.28	19.28	19.16		
20	HQAM	1	49	19.35	19.32	19.41	19.33	20	0
20	HQAM	1	99	19.31	19.24	19.31			
20	HQAM	50	0	19.38	19.22	19.22	19.26		
20	HQAM	50	24	19.30	19.24	19.26			
20	HQAM	50	50	19.48	19.17	19.41	19.31	20	0
20	HQAM	100	0	19.23	19.38	19.30	19.37		
20	ZSSBAM	1	49	17.32	17.28	17.22	17.17	18	2
20	ZSSBAM	1	99	17.41	17.41	17.43	17.43		
20	ZSSBAM	50	0	17.35	17.44	17.51	17.33		
20	ZSSBAM	50	24	17.42	17.41	17.42	17.37		
20	ZSSBAM	50	50	17.34	17.38	17.46	17.37	18	



Band 42 Ant13 DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Unit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				42160	42560	42960			
20	QPSK	1	0	20.46	20.46	20.33	21.7	0	
20	QPSK	1	8	20.38	20.38	20.42			
20	QPSK	1	16	20.38	20.42	20.42			
20	QPSK	50	24	20.45	20.42	20.24	21.7	0	
20	QPSK	50	0	20.33	20.42	20.33			
20	QPSK	100	0	20.41	20.41	20.39			
20	HQDM	1	0	20.26	20.32	20.36	21.7	0	
20	HQDM	1	8	20.34	20.34	20.34			
20	HQDM	1	16	20.38	20.46	20.36			
20	HQDM	50	0	20.31	20.32	20.25	21.7	0	
20	HQDM	50	24	20.35	20.35	20.23			
20	HQDM	100	0	20.34	20.42	20.33			
20	HQDM	1	0	20.28	20.32	20.32	21.7	0	
20	HQDM	1	8	20.42	20.35	20.32			
20	HQDM	1	16	20.49	20.42	20.34			
20	HQDM	50	0	20.31	20.30	20.40	21.7	0	
20	HQDM	50	24	20.45	20.43	20.43			
20	HQDM	100	0	20.49	20.25	20.35			
20	ZSSDM	1	0	19.92	19.92	19.92	20.7	1	
20	ZSSDM	1	8	19.92	19.92	19.92			
20	ZSSDM	50	24	19.45	19.54	19.22	20.7	1	
20	ZSSDM	50	0	19.45	19.25	19.25			
20	ZSSDM	100	0	19.47	19.38	19.44	Tune-up Unit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				34714	35000	35286			
15	QPSK	1	0	20.42	20.42	20.20	21.7	0	
15	QPSK	1	8	20.18	20.22	20.20			
15	QPSK	1	16	20.16	20.20	20.30			
15	QPSK	36	0	20.16	20.38	20.21	21.7	0	
15	QPSK	36	20	20.30	20.38	20.13			
15	QPSK	75	0	20.35	20.24	20.21			
15	HQDM	1	0	20.23	20.20	20.20	21.7	0	
15	HQDM	1	8	20.35	20.41	20.35			
15	HQDM	36	0	20.42	20.42	20.12			
15	HQDM	36	20	20.31	20.20	20.21	21.7	0	
15	HQDM	36	36	20.34	20.41	20.29			
15	HQDM	75	0	20.36	20.34	20.21			
15	HQDM	75	0	20.44	20.45	20.15	21.7	0	
15	HQDM	1	0	20.28	20.27	20.19			
15	HQDM	1	8	20.38	20.35	20.26			
15	HQDM	36	0	20.18	20.18	20.33	21.7	0	
15	HQDM	36	20	20.38	20.35	20.26			
15	HQDM	36	36	20.19	20.31	20.24			
15	HQDM	75	0	20.36	20.45	20.20			
15	ZSSDM	1	0	19.45	19.45	19.45	20.7	1	
15	ZSSDM	1	8	19.14	19.18	19.32			
15	ZSSDM	1	16	19.14	19.28	19.11			
15	ZSSDM	36	0	19.18	19.40	19.11	20.7	1	
15	ZSSDM	36	20	19.25	19.45	19.25			
15	ZSSDM	36	36	19.34	19.18	19.21			
15	ZSSDM	75	0	19.28	19.28				
Channel									
Frequency (MHz)				42166	42566	42966			
10	QPSK	1	0	20.37	20.43	20.28	21.7	0	
10	QPSK	1	8	20.38	20.39	20.19			
10	QPSK	1	16	20.32	20.32	20.24			
10	QPSK	25	0	20.24	20.39	20.18	21.7	0	
10	QPSK	25	8	20.33	20.31	20.27			
10	QPSK	50	0	20.41	20.36	20.29			
10	HQDM	1	0	20.31	20.37	20.31	21.7	0	
10	HQDM	1	8	20.35	20.35	20.24			
10	HQDM	25	0	20.38	20.37	20.23			
10	HQDM	25	8	20.35	20.42	20.28	21.7	0	
10	HQDM	50	0	20.27	20.20	20.14			
10	HQDM	25	0	20.31	20.44	20.28			
10	HQDM	50	0	20.21	20.37	20.09	21.7	0	
10	HQDM	1	0	20.30	20.20	20.23			
10	HQDM	1	8	20.37	20.35	20.25			
10	HQDM	25	0	20.26	20.28	20.34	21.7	0	
10	HQDM	25	8	20.40	20.39	20.33			
10	HQDM	25	16	20.20	20.40	20.28			
10	ZSSDM	1	0	19.33	19.45	19.34	20.7	1	
10	ZSSDM	1	8	19.37	19.49	19.12			
10	ZSSDM	1	16	19.10	19.20	19.10			
10	ZSSDM	25	0	19.20	19.45	19.25	20.7	1	
10	ZSSDM	25	8	19.40	19.17	19.09			
10	ZSSDM	50	0	19.34	19.31	19.29			
Channel									
Frequency (MHz)				34815	35099	35383			
5	QPSK	1	0	20.28	20.45	20.18	21.7	0	
5	QPSK	1	8	20.33	20.33	20.30			
5	QPSK	1	16	20.33	20.30	20.30			
5	QPSK	12	0	20.23	20.40	20.21	21.7	0	
5	QPSK	12	7	20.32	20.37	20.10			
5	QPSK	12	13	20.31	20.36	20.26			
5	HQDM	1	0	20.23	20.41	20.29	21.7	0	
5	HQDM	1	8	20.27	20.20	20.33			
5	HQDM	12	0	20.47	20.44	20.09			
5	HQDM	12	7	20.27	20.37	20.39	21.7	0	
5	HQDM	25	0	20.25	20.38	20.19			
5	HQDM	1	0	20.23	20.37	20.27	21.7	0	
5	HQDM	1	8	20.27	20.18	20.22			
5	HQDM	1	16	20.43	20.30	20.18			
5	HQDM	12	7	20.42	20.33	20.25	21.7	0	
5	HQDM	12	13	20.22	20.27	20.24			
5	HQDM	25	0	20.25	20.45	20.25			
5	ZSSDM	1	0	19.40	19.47	19.24	20.7	1	
5	ZSSDM	1	8	19.15	19.10	19.14			
5	ZSSDM	1	16	19.29	19.20	19.20			
5	ZSSDM	12	0	19.23	19.41	19.06			
5	ZSSDM	12	7	19.33	19.34	19.09	20.7	1	
5	ZSSDM	12	13	19.25	19.25				
5	ZSSDM	25	0	19.39	19.25	19.41			

Band 48 Ant13 DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Unit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				3660	3660	3660			
20	QPSK	1	0	20.37	20.33	20.48	22	0	
20	QPSK	1	8	20.42	20.39	20.27			
20	QPSK	1	16	20.28	20.25	20.24			
20	QPSK	50	0	20.40	20.31	20.26	22	0	
20	QPSK	50	24	20.27	20.36	20.24			
20	QPSK	100	0	20.15	20.29	20.25	22	0	
20	HQDM	1	0	20.37	20.36	20.06	22	0	
20	HQDM	1	8	20.22	20.38	20.15			
20	HQDM	1	16	20.22	20.36	20.15			
20	HQDM	50	0	20.20	20.35	20.15	22	0	
20	HQDM	50	24	20.20	20.10	20.21			
20	HQDM	100	0	20.33	20.12	20.23	22	0	
20	HQDM	1	0	20.23	20.36	20.22			
20	HQDM	1	8	20.20	20.35	20.15	22	0	
20	HQDM	1	16	20.29	20.10	20.24			
20	HQDM	50	0	19.14	19.25	19.28	21	1	
20	HQDM	50	24	19.27	19.10	19.24			
20	HQDM	100	0	19.23	19.34	19.25			
20	HQDM	100	0	19.25	19.15	19.23			
20	ZSSDM	1	0	17.17	17.65	17.37	19	3	
20	ZSSDM	1	8	17.33	17.13	17.46			
20	ZSSDM	1	16	17.31	17.26	17.19			
20	ZSSDM	50	0	17.25	17.25	17.04	19	3	
20	ZSSDM	50	24	17.24	17.31	17.07			
20	ZSSDM	50	50	17.25	17.25	17.04			
20	ZSSDM	100	0	17.27	17.04	17.28	Tune-up Unit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				3672	3678	3684			
15	QPSK	1	0	20.37	20.29	20.29	22	0	
15	QPSK	1	8	20.47	20.37	20.27			
15	QPSK	1	16	20.36	20.36	20.22			
15	QPSK	36	0	20.35	20.45	20.26	22	0	
15	QPSK	36	20	20.35	20.45	20.26			
15	QPSK	75	0	20.10	20.28	20.35	22	0	
15	HQDM	1	0	20.25	20.25	20.25			
15									



GIMMO A40 DB4

GIMMO	Best Average Power (dBm)			Lincap LPA	Frame-Average Power (dBm)			Tone-up LPA
	128	188	261		128	188	261	
TX Channel	128	188	261	LPA	128	188	261	LPA
Poweramp (dBm)	30.2	30.8	31.8	(dBm)	30.2	30.8	31.8	(dBm)
OMA 1 Tx Watt	32.20	32.19	32.17	33.00	33.20	33.19	33.17	34.00
OPB 1 Tx Watt	35.15	32.00	30.11	33.00	23.19	23.00	23.11	24.00
OPB 2 Tx Watt	29.44	29.30	29.14	30.00	23.44	23.30	23.14	24.00
OPB 3 Tx Watt	27.04	27.41	27.33	28.00	22.78	23.19	23.07	24.24
OPB 4 Tx Watt	26.92	26.81	26.70	27.00	22.82	22.88	22.79	23.00
EDGE 1 Tx Watt	26.05	26.11	26.03	26.00	17.05	17.11	17.03	19.00
EDGE 2 Tx Watt	21.23	21.1	21.19	21.00	17.23	17.11	17.19	18.00
EDGE 3 Tx Watt	21.55	21.28	21.35	21.00	17.29	17.00	17.09	18.74
EDGE 4 Tx Watt	20.10	19.82	19.89	21.00	17.10	16.82	16.89	18.00

WCDMA V AND DB4

Best	WCDMA V			Tone-up	
	4192	4180	4203		
TX Channel	4192	4180	4203	Lincap	
Poweramp (Watt)	851.4	839.8	861.0	(dBm)	
SOPP Rate	AMR 12.2kbps	23.88	23.00	23.80	25.00
SOPP Rate	RMV 12.2kbps	23.52	23.00	23.52	24.00
SOPP Rate	HS-PA Subclass 1	22.07	22.00	22.78	24.00
SOPP Rate	HS-PA Subclass 2	22.01	22.00	22.83	24.00
SOPP Rate	HS-PA Subclass 3	22.43	22.30	22.21	23.50
SOPP Rate	HS-PA Subclass 4	22.29	22.40	22.42	23.50
SOPP Rate	DC-HSPA Subclass 1	22.90	22.81	22.81	24.00
SOPP Rate	DC-HSPA Subclass 2	22.99	22.91	22.82	24.00
SOPP Rate	DC-HSPA Subclass 3	22.40	22.40	22.30	23.50
SOPP Rate	DC-HSPA Subclass 4	22.39	22.47	22.36	23.50
SOPP Rate	HS-PA Subclass 1	22.06	22.05	22.80	24.00
SOPP Rate	HS-PA Subclass 2	22.06	21.02	22.02	22.00
SOPP Rate	HS-PA Subclass 3	21.92	21.87	21.84	23.00
SOPP Rate	HS-PA Subclass 4	20.31	20.01	20.76	22.00
SOPP Rate	HS-PA Subclass 5	22.51	22.07	22.84	24.00



Band 4 AnD DSA													
BW (MHz)	Modulation	RB Size	RB Offset	Start Time (MHz)	End Time (MHz)	Start Time (MHz)	End Time (MHz)	Turn-up (dBm)	Turn-down (dBm)	LFM (MHz)	LFM (MHz)	LFM (MHz)	LFM (MHz)
Channel													
Frequency (MHz)													
5	QPSK	5	0	2144	2145	2144	2145						
5	QPSK	5	0	2146	2147	2146	2147						
5	QPSK	5	0	2148	2149	2148	2149						
5	QPSK	5	0	2150	2151	2150	2151						
5	QPSK	5	0	2152	2153	2152	2153						
5	QPSK	5	0	2154	2155	2154	2155						
5	QPSK	5	0	2156	2157	2156	2157						
5	QPSK	5	0	2158	2159	2158	2159						
5	QPSK	5	0	2160	2161	2160	2161						
5	QPSK	5	0	2162	2163	2162	2163						
5	QPSK	5	0	2164	2165	2164	2165						
5	QPSK	5	0	2166	2167	2166	2167						
5	QPSK	5	0	2168	2169	2168	2169						
5	QPSK	5	0	2170	2171	2170	2171						
5	QPSK	5	0	2172	2173	2172	2173						
5	QPSK	5	0	2174	2175	2174	2175						
5	QPSK	5	0	2176	2177	2176	2177						
5	QPSK	5	0	2178	2179	2178	2179						
5	QPSK	5	0	2180	2181	2180	2181						
5	QPSK	5	0	2182	2183	2182	2183						
5	QPSK	5	0	2184	2185	2184	2185						
5	QPSK	5	0	2186	2187	2186	2187						
5	QPSK	5	0	2188	2189	2188	2189						
5	QPSK	5	0	2190	2191	2190	2191						
5	QPSK	5	0	2192	2193	2192	2193						
5	QPSK	5	0	2194	2195	2194	2195						
5	QPSK	5	0	2196	2197	2196	2197						
5	QPSK	5	0	2198	2199	2198	2199						
5	QPSK	5	0	2200	2201	2200	2201						
5	QPSK	5	0	2202	2203	2202	2203						
5	QPSK	5	0	2204	2205	2204	2205						
5	QPSK	5	0	2206	2207	2206	2207						
5	QPSK	5	0	2208	2209	2208	2209						
5	QPSK	5	0	2210	2211	2210	2211						
5	QPSK	5	0	2212	2213	2212	2213						
5	QPSK	5	0	2214	2215	2214	2215						
5	QPSK	5	0	2216	2217	2216	2217						
5	QPSK	5	0	2218	2219	2218	2219						
5	QPSK	5	0	2220	2221	2220	2221						
5	QPSK	5	0	2222	2223	2222	2223						
5	QPSK	5	0	2224	2225	2224	2225						
5	QPSK	5	0	2226	2227	2226	2227						
5	QPSK	5	0	2228	2229	2228	2229						
5	QPSK	5	0	2230	2231	2230	2231						
5	QPSK	5	0	2232	2233	2232	2233						
5	QPSK	5	0	2234	2235	2234	2235						
5	QPSK	5	0	2236	2237	2236	2237						
5	QPSK	5	0	2238	2239	2238	2239						
5	QPSK	5	0	2240	2241	2240	2241						
5	QPSK	5	0	2242	2243	2242	2243						
5	QPSK	5	0	2244	2245	2244	2245						
5	QPSK	5	0	2246	2247	2246	2247						
5	QPSK	5	0	2248	2249	2248	2249						
5	QPSK	5	0	2250	2251	2250	2251						
5	QPSK	5	0	2252	2253	2252	2253						
5	QPSK	5	0	2254	2255	2254	2255						
5	QPSK	5	0	2256	2257	2256	2257						
5	QPSK	5	0	2258	2259	2258	2259						
5	QPSK	5	0	2260	2261	2260	2261						
5	QPSK	5	0	2262	2263	2262	2263						
5	QPSK	5	0	2264	2265	2264	2265						
5	QPSK	5	0	2266	2267	2266	2267						
5	QPSK	5	0	2268	2269	2268	2269						
5	QPSK	5	0	2270	2271	2270	2271						
5	QPSK	5	0	2272	2273	2272	2273						
5	QPSK	5	0	2274	2275	2274	2275						
5	QPSK	5	0	2276	2277	2276	2277						
5	QPSK	5	0	2278	2279	2278	2279						
5	QPSK	5	0	2280	2281	2280	2281						
5	QPSK	5	0	2282	2283	2282	2283						
5	QPSK	5	0	2284	2285	2284	2285						
5	QPSK	5	0	2286	2287	2286	2287						
5	QPSK	5	0	2288	2289	2288	2289						
5	QPSK	5	0	2290	2291	2290	2291						
5	QPSK	5	0	2292	2293	2292	2293						
5	QPSK	5	0	2294	2295	2294	2295						
5	QPSK	5	0	2296	2297	2296	2297						
5	QPSK	5	0	2298	2299	2298	2299						
5	QPSK	5	0	2300	2301	2300	2301						
5	QPSK	5	0	2302	2303	2302	2303						
5	QPSK	5	0	2304	2305	2304	2305						
5	QPSK	5	0	2306	2307	2306	2307						
5	QPSK	5	0	2308	2309	2308	2309						
5	QPSK	5	0	2310	2311	2310	2311						
5	QPSK	5	0	2312	2313	2312	2313						
5	QPSK	5	0	2314	2315	2314	2315						
5	QPSK	5	0	2316	2317	2316	2317						
5	QPSK	5	0	2318	2319	2318	2319						
5	QPSK	5	0	2320	2321	2320	2321						
5	QPSK	5	0	2322	2323	2322	2323						
5	QPSK	5	0	2324	2325	2324	2325						
5	QPSK	5	0	2326	2327	2326	2327						
5	QPSK	5	0	2328	2329	2328	2329						
5	QPSK	5	0	2330	2331	2330	2331						
5	QPSK	5	0	2332	2333	2332	2333						
5	QPSK	5	0	2334	2335	2334	2335						
5	QPSK	5	0	2336	2337	2336	2337						
5	QPSK	5	0	2338	2339	2338	2339						
5	QPSK	5	0	2340	2341	2340	2341						
5	QPSK	5	0	2342	2343	2342	2343						
5	QPSK	5	0	2344	2345	2344	2345						
5	QPSK	5	0	2346	2347	2346	2347						
5	QPSK	5	0	2348	2349	2348	2349						
5	QPSK	5	0	2350	2351	2350	2351						
5	QPSK	5	0	2352	2353	2352	2353						
5	QPSK	5	0	2354	2355	2354	2355						
5	QPSK	5	0	2356	2357	2356	2357						
5	QPSK	5	0	2358	2359	2358	2359						
5	QPSK	5	0	2360	2361	2360	2361						
5	QPSK	5	0	2362	2363	2362	2363						
5	QPSK	5	0	2364	2365	2364	2365						
5	QPSK	5	0	2366	2367	2366	2367						
5	QPSK	5	0	2368	2369	2368	2369						
5													



Band 38 Ant0 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch [Freq]	Power Middle Ch [Freq]	Power High Ch [Freq]	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.52	21.53	21.54			
20	QPSK	1	49	21.53	21.56	21.59	23	0	
20	QPSK	1	99	21.49	21.53	21.59			
20	QPSK	50	24	20.58	20.55	20.53	22	1	
20	QPSK	50	74	20.54	20.57	20.58			
20	QPSK	100	0	20.53	20.54	20.48			
20	16QAM	1	0	19.26	19.47	19.46			
20	16QAM	1	49	19.20	19.25	19.24	22	1	
20	16QAM	1	99	19.26	19.47	19.46			
20	16QAM	50	0	19.52	19.54	19.47			
20	16QAM	50	24	19.20	19.20	19.53	21	2	
20	16QAM	50	74	19.57	19.57	19.57			
20	16QAM	100	0	19.55	19.55	19.49			
20	16QAM	1	0	19.59	19.37	19.42			
20	16QAM	1	49	19.28	19.23	19.24	21	2	
20	16QAM	1	99	19.28	19.23	19.24			
20	16QAM	50	0	19.33	19.54	19.47			
20	16QAM	50	24	19.20	19.20	19.53	20	3	
20	16QAM	50	74	19.57	19.57	19.57			
20	16QAM	100	0	19.55	19.57	19.48			
20	16QAM	1	0	19.59	19.45	19.56			
20	16QAM	1	49	19.28	19.23	19.24	18	5	
20	16QAM	1	99	19.28	19.23	19.24			
20	16QAM	50	0	19.38	19.54	19.46			
20	16QAM	50	24	19.20	19.20	19.53	18	5	
20	16QAM	50	74	19.57	19.57	19.54			
20	16QAM	100	0	19.55	19.47	19.42			
Channel									
Frequency (MHz)									
15	QPSK	1	0	21.72	21.71	21.72			
15	QPSK	1	37	21.32	21.43	21.51	23	0	
15	QPSK	1	74	21.32	21.43	21.51			
15	QPSK	36	0	20.44	20.38	20.33	22	1	
15	QPSK	36	36	20.54	20.42	20.38			
15	QPSK	72	0	20.47	20.31	20.26			
15	16QAM	1	0	20.28	19.46	19.30			
15	16QAM	1	37	20.27	20.25	20.46	22	1	
15	16QAM	1	74	20.24	20.41	20.43			
15	16QAM	36	0	19.31	19.49	19.40	21	2	
15	16QAM	36	36	19.39	19.38	19.47			
15	16QAM	72	0	19.29	19.47	19.40			
15	16QAM	1	0	19.29	19.31	19.29			
15	16QAM	1	37	19.31	19.44	19.40	21	2	
15	16QAM	1	74	19.41	19.38	19.40			
15	16QAM	36	0	18.34	18.54	18.46			
15	16QAM	36	36	18.27	18.43	18.39	20	3	
15	16QAM	36	72	18.45	18.41	18.47			
15	16QAM	72	0	18.31	18.52	18.51			
15	16QAM	1	0	18.39	18.46	18.40			
15	16QAM	1	37	18.38	18.46	18.47	18	5	
15	16QAM	1	74	18.38	18.46	18.47			
15	16QAM	36	0	18.43	18.37	18.34			
15	16QAM	36	36	18.30	18.38	18.39	18	5	
15	16QAM	36	72	18.50	18.50	18.41			
15	16QAM	72	0	18.30	18.40	18.43			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.29	21.37	21.24			
10	QPSK	1	25	21.36	21.31	21.24	23	0	
10	QPSK	1	49	21.33	21.33	21.21			
10	QPSK	25	0	20.53	20.56	20.37	22	1	
10	QPSK	25	12	20.54	20.49	20.49			
10	QPSK	25	25	20.39	20.49	20.37			
10	16QAM	1	0	20.33	20.48	20.42			
10	16QAM	1	49	20.38	20.37	20.31	22	1	
10	16QAM	25	0	19.40	19.56	19.46			
10	16QAM	25	12	19.42	19.50	19.36	21	2	
10	16QAM	25	25	19.44	19.28	19.36			
10	16QAM	50	0	19.43	19.48	19.43			
10	16QAM	1	0	19.37	19.37	19.26			
10	16QAM	1	25	19.56	19.51	19.42	21	2	
10	16QAM	1	49	19.45	19.41	19.33			
10	16QAM	25	0	19.42	19.52	19.46			
10	16QAM	25	12	19.59	19.42	19.32	20	3	
10	16QAM	25	25	19.46	19.48	19.30			
10	16QAM	50	0	19.46	19.45	19.48			
10	16QAM	1	0	19.37	19.33	19.31			
10	16QAM	1	25	19.52	19.51	19.36			
10	16QAM	25	12	19.37	19.34	19.27			
10	16QAM	25	25	19.46	19.46	19.34			
10	16QAM	50	0	19.39	19.48	19.38			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.42	21.39	21.23			
5	QPSK	1	16	21.53	21.49	21.48	23	0	
5	QPSK	1	24	21.41	21.34	21.53			
5	QPSK	12	7	20.45	20.47	20.35	22	1	
5	QPSK	12	14	20.56	20.36	20.36			
5	QPSK	12	21	20.41	20.36	20.34			
5	16QAM	1	0	20.61	20.51	20.47	22	1	
5	16QAM	1	24	20.38	20.38	20.27			
5	16QAM	12	7	19.42	19.46	19.51	21	2	
5	16QAM	12	14	19.41	19.46	19.46			
5	16QAM	24	0	19.45	19.53	19.46			
5	16QAM	1	0	19.23	19.22	19.36	21	2	
5	16QAM	1	12	19.46	19.43	19.36			
5	16QAM	1	24	19.47	19.38	19.51			
5	16QAM	12	0	19.46	19.47	19.33			
5	16QAM	12	7	19.48	19.56	19.34	20	3	
5	16QAM	12	14	19.59	19.39	19.33			
5	16QAM	24	0	19.43	19.38	19.27			
5	16QAM	1	0	19.50	19.21	19.36			
5	16QAM	1	12	19.41	19.47	19.35	18	5	
5	16QAM	1	24	19.52	19.47	19.44			
5	16QAM	12	0	19.42	19.59	19.35			
5	16QAM	12	7	19.17	19.21	19.26	18	5	
5	16QAM	12	14	19.46	19.33	19.24			
5	16QAM	24	0	19.48	19.43	19.40			

Band 41 Ant0 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch [Freq]	Power Middle Ch [Freq]	Power High Ch [Freq]	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.08	22.08	22.08			
20	QPSK	1	49	22.13	22.19	22.02	23	0	
20	QPSK	1	99	22.26	22.06	22.27			
20	QPSK	50	0	21.12	21.16	21.16			
20	QPSK	50	24	21.19	21.27	21.21	22	1	
20	QPSK	50	74	21.18	21.16	21.26			
20	QPSK	100	0	21.12	21.16	21.38	21	1	
20	16QAM	1	0	21.26	21.47	21.46			
20	16QAM	1	49	20.89	20.83	20.87	22	1	
20	16QAM	1	99	20.95	20.92	20.94			
20	16QAM	50	0	20.34	20.34	20.34	20	2	
20	16QAM	50	24	20.10	20.16	20.17			
20	16QAM	50	74	20.07	20.36	20.21	21	2	
20	16QAM	100	0	20.17	20.24	20.21			
20	16QAM	1	0	20.11	20.08	20.22	21	2	
20	16QAM	1	49	20.18	20.00	20.03			
20	16QAM	1	99	20.05	20.20	20.13			
20	16QAM	50	0	19.30	19.28	19.14	20	3	
20	16QAM	50	24	19.02	19.48	19.07			
20	16QAM	50	74	19.02	19.48	19.07			
20	16QAM	100	0	19.20	19.10	19.33	18	5	
20	16QAM	1	0	17.19	17.25	17.29			
20	16QAM	1	49	17.30	17.28	17.10	18	5	
20	16QAM	1	99	17.18	17.20	17.26			
20	16QAM	50	0	17.15	17.12	17.19			
20	16QAM	50	24	17.02	17.29	17.05	18	5	
20	16QAM	50	74	17.09	17.17	17.14			
20	16QAM	100	0	17.21	17.40	17.19			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.02	22.02	22.02			
15	QPSK	1	37	22.09	22.07	21.89			



CDMBO A41 DB4

CDMBO	Best Average Power (dBm)			Lincap LPA	Frame-Average Power (dBm)			Tune-Up LPA
	128	188	261		128	188	261	
Poweramp (dBm)	32.2	38.8	41.8	(dBm)	33.2	38.8	41.8	
CDM 1 Tx (dB)	32.28	32.48	32.50	34.00	23.28	23.48	23.50	25.00
CDM 1 Tx (W)	32.36	32.52	32.57	34.00	23.36	23.52	23.57	25.00
CDM 2 Tx (dB)	29.42	29.64	29.62	31.00	20.42	20.64	20.62	22.00
CDM 2 Tx (W)	28.37	28.42	28.18	29.20	24.11	24.18	23.92	24.94
CDM 3 Tx (dB)	28.32	28.34	28.70	29.00	23.32	23.34	23.70	25.00
EDGE 1 Tx (W)	28.17	28.35	28.28	28.00	17.17	17.38	17.28	19.00
EDGE 2 Tx (dB)	21.33	21.80	21.51	24.40	17.33	17.80	17.51	18.00
EDGE 3 Tx (dB)	21.73	21.78	21.73	23.00	17.47	17.52	17.49	18.74
EDGE 4 Tx (W)	20.48	20.55	20.51	21.00	17.48	17.55	17.51	18.00

WCDMA V. AMT DB4

Best	WCDMA V			Tune-Up	
	4192	4188	4233		
Tx Channel	4307	4407	4468	Lincap	
Poweramp (W)	80.4	88.8	88.8	(dBm)	
SOPF Rate	AMR 12.2kbps	24.53	24.58	24.51	25.70
SOPF Rate	AMR 10.2kbps	24.52	24.58	24.54	24.70
SOPF Rate	HS-PA Subclass 1	23.49	23.59	23.51	24.70
SOPF Rate	HS-PA Subclass 2	23.55	23.52	23.56	24.70
SOPF Rate	HS-PA Subclass 3	23.65	23.58	23.65	24.70
SOPF Rate	HS-PA Subclass 4	23.05	23.05	23.01	24.70
SOPF Rate	DC-HSPA Subclass 1	23.45	23.31	23.36	24.70
SOPF Rate	DC-HSPA Subclass 2	23.35	23.28	23.38	24.70
SOPF Rate	DC-HSPA Subclass 3	22.50	22.48	22.53	24.70
SOPF Rate	DC-HSPA Subclass 4	22.00	22.57	22.82	24.70
SOPF Rate	HS-PA Subclass 1	23.57	23.57	23.54	24.70
SOPF Rate	HS-PA Subclass 2	23.55	23.60	23.55	22.70
SOPF Rate	HS-PA Subclass 3	22.59	22.65	22.54	23.70
SOPF Rate	HS-PA Subclass 4	21.55	21.60	21.57	22.70
SOPF Rate	HS-PA Subclass 5	23.60	23.60	23.60	24.70



Band 5 Ant1 DS4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq.	Power Ch. / Freq.	Power Ch. / Freq.	Turn-up Time (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	23.43	23.59	23.25				
10	QPSK	1	25	23.46	23.33	23.34	24.7	0		
10	QPSK	1	49	23.43	23.43	23.28				
10	QPSK	25	0	23.40	23.47	23.25				
10	QPSK	25	25	23.36	23.20	23.26				
10	QPSK	25	25	23.43	23.34	23.27	24.7	0		
10	QPSK	50	0	23.18	23.38	23.29				
10	16QAM	1	0	23.47	23.33	23.21				
10	16QAM	1	25	23.41	23.26	23.34	24.7	0		
10	16QAM	1	49	23.43	23.25	23.34				
10	16QAM	25	0	23.45	23.27	23.30				
10	16QAM	25	12	23.39	23.27	23.43	23.7	1		
10	16QAM	25	25	23.37	23.35	23.37				
10	16QAM	50	0	22.49	22.30	22.39				
10	64QAM	1	0	22.40	22.44	22.18				
10	64QAM	1	49	22.31	22.42	22.33	23.7	1		
10	64QAM	25	0	22.31	22.42	22.33				
10	64QAM	25	12	21.42	21.49	21.32				
10	64QAM	25	12	21.40	21.39	21.34	22.7	2		
10	64QAM	25	25	21.35	21.33	21.36				
10	64QAM	50	0	21.15	21.41	21.34				
10	256QAM	1	0	19.41	19.62	19.25				
10	256QAM	1	25	19.37	19.39	19.28	20.7	4		
10	256QAM	1	49	19.44	19.35	19.32				
10	256QAM	25	0	19.54	19.56	19.48				
10	256QAM	25	12	19.43	19.39	19.27	20.7	4		
10	256QAM	25	25	19.45	19.36	19.32				
10	256QAM	50	0	19.91	19.40	19.35				
Channel										
Frequency (MHz)										
5	QPSK	1	0	23.38	23.53	23.07				
5	QPSK	1	12	23.37	23.32	23.20	24.7	0		
5	QPSK	1	24	23.35	23.31	23.24				
5	QPSK	12	0	23.35	23.23	23.24				
5	QPSK	12	7	23.32	23.21	23.23	24.7	0		
5	QPSK	12	13	23.38	23.20	23.24				
5	QPSK	25	0	23.09	23.20	23.21				
5	16QAM	1	0	23.16	23.21	23.24				
5	16QAM	1	12	23.28	23.07	23.25	24.7	0		
5	16QAM	1	24	23.24	23.21	23.28				
5	16QAM	12	0	22.44	22.44	22.16				
5	16QAM	12	7	22.27	22.21	22.41	23.7	1		
5	16QAM	12	13	22.19	22.20	22.21				
5	16QAM	25	0	23.09	23.09	23.08				
5	64QAM	1	0	22.38	22.26	21.99				
5	64QAM	1	12	22.37	22.29	22.12	23.7	1		
5	64QAM	1	24	22.25	22.33	22.16				
5	64QAM	12	0	21.25	21.27	21.17				
5	64QAM	12	7	21.40	21.21	21.24	22.7	2		
5	64QAM	12	13	21.23	21.24	21.18				
5	64QAM	25	0	21.11	21.33	21.18				
5	256QAM	1	0	19.31	19.46	19.07				
5	256QAM	1	12	19.23	19.24	19.19	20.7	4		
5	256QAM	1	24	19.32	19.21	19.24				
5	256QAM	12	0	19.37	19.50	19.29				
5	256QAM	12	7	19.35	19.20	19.17	20.7	4		
5	256QAM	12	13	19.40	19.14	19.22				
5	256QAM	25	0	19.55	19.25	19.19				
Channel										
Frequency (MHz)										
3	QPSK	1	0	23.40	23.51	23.12				
3	QPSK	1	8	23.33	23.27	23.15	24.7	0		
3	QPSK	1	14	23.30	23.27	23.18				
3	QPSK	8	0	23.45	23.18	23.37				
3	QPSK	8	4	23.36	23.20	23.08	24.7	0		
3	QPSK	8	7	23.43	23.22	23.17				
3	QPSK	15	0	23.00	23.35	23.12				
3	16QAM	1	0	23.36	23.23	23.19				
3	16QAM	1	8	23.41	23.17	23.29	24.7	0		
3	16QAM	1	14	23.38	23.25	23.27				
3	16QAM	8	0	23.30	23.21	23.28				
3	16QAM	8	4	23.34	23.24	23.32	23.7	1		
3	16QAM	8	7	22.23	22.20	22.27				
3	16QAM	15	0	22.36	22.10	22.23				
3	64QAM	1	0	22.31	22.38	21.98	23.7	1		
3	64QAM	1	8	22.25	22.26	22.24				
3	64QAM	1	14	22.22	22.26	22.30				
3	64QAM	8	0	21.35	21.32	21.28				
3	64QAM	8	4	21.32	21.29	21.19	22.7	2		
3	64QAM	8	7	21.26	21.14	21.17				
3	64QAM	15	0	21.98	21.31	21.32				
3	256QAM	1	0	19.27	19.48	19.10				
3	256QAM	1	8	19.19	19.20	19.24	20.7	4		
3	256QAM	1	14	19.31	19.28	19.17				
3	256QAM	8	0	19.43	19.37	19.41				
3	256QAM	8	4	19.34	19.26	19.23	20.7	4		
3	256QAM	8	7	19.34	19.21	19.32				
3	256QAM	15	0	19.43	19.30	19.22				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	23.30	23.48	23.39				
1.4	QPSK	1	3	23.41	23.21	23.22	24.7	0		
1.4	QPSK	1	6	23.26	23.21	23.26				
1.4	QPSK	3	0	23.42	23.27	23.28				
1.4	QPSK	3	1	23.28	23.29	23.21				
1.4	QPSK	3	3	23.39	23.30	23.30				
1.4	QPSK	6	0	23.25	23.37	23.22	24.7	0		
1.4	16QAM	1	0	23.42	23.22	23.25				
1.4	16QAM	1	3	23.24	23.40	23.37	24.7	0		
1.4	16QAM	1	6	23.32	23.23	23.25				
1.4	16QAM	3	0	23.32	23.28	23.25				
1.4	16QAM	3	1	23.29	23.21	23.33				
1.4	16QAM	3	3	23.28	23.26	23.31				
1.4	64QAM	1	0	22.27	22.45	22.14	23.7	1		
1.4	64QAM	1	3	22.27	22.52	22.42				
1.4	64QAM	1	6	22.38	22.31	22.34				
1.4	64QAM	1	9	22.32	22.25	22.19	23.7	1		
1.4	64QAM	3	0	22.42	22.31	22.29				
1.4	64QAM	3	1	22.34	22.38	22.31				
1.4	64QAM	3	3	22.31	22.30	22.29				
1.4	64QAM	6	0	21.26	21.38	21.33	22.7	2		
1.4	256QAM	1	0	19.34	19.49	19.29				
1.4	256QAM	1	3	19.40	19.40	19.26				
1.4	256QAM	1	6	19.20	19.23	19.31	20.7	4		
1.4	256QAM	3	0	19.39	19.38	19.24				
1.4	256QAM	3	1	19.30	19.26	19.28				
1.4	256QAM	3	3	19.31	19.20	19.22				
1.4	256QAM	6	0	19.22	19.39	19.17	20.7	4		

Band 12 Ant1 DS4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq.	Power Ch. / Freq.	Power Ch. / Freq.	Turn-up Time (min)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	24.38	24.47	24.45				
10	QPSK	1	25	24.36	24.14	24.38	25.7	0		
10	QPSK	1	49	24.21	24.18	24.34				
10	QPSK	25	0	23.34	23.42	23.43				
10	QPSK	25	12	23.32	23.16	23.28				
10	QPSK	25	25	23.16	23.14	23.37	24.7	1		
10	QPSK	50	0	23.41	23.43	23.42				
10	16QAM	1	0	23.31	23.44	23.41				
10	16QAM	1	25	23.34	23.11	23.24	24.7	1		
10	16QAM	1	49	23.22	23.28	23.43				
10	16QAM	25	0	23.32	23.47	22.41				
10	16QAM	25	12	23.23	22.17	22.26	23.7	2		
10	16QAM	25	25	22.33	22.23	22.47				



Band 26 Ant1 DS4															
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Total up link (dBm)	MPE (dB)							
Channel				26765	26865	26965									
Frequency (MHz)				811.5	811.5	811.5									
15	QPSK	1	0	24.27	24.41	24.31	25.7	0							
15	QPSK	1	37	24.29	24.32	24.32									
15	QPSK	1	74	24.23	24.30	24.18									
15	QPSK	36	0	23.30	23.44	23.19	24.7	1							
15	QPSK	36	36	23.24	23.34	23.22									
15	QPSK	36	72	23.24	23.36	23.24									
15	QPSK	75	0	23.26	23.36	23.23	24.7	1							
15	16QAM	1	0	23.16	23.34	23.26									
15	16QAM	1	37	23.18	23.22	23.17									
15	16QAM	1	74	23.23	23.37	23.26	23.7	2							
15	16QAM	36	0	22.17	22.32	22.26									
15	16QAM	36	36	22.24	22.42	22.28									
15	16QAM	36	72	22.16	22.31	22.26	23.7	2							
15	16QAM	75	0	22.30	22.30	22.25									
15	16QAM	1	0	22.22	22.36	22.25									
15	16QAM	1	37	22.21	22.25	22.18	23.7	2							
15	16QAM	1	74	22.21	22.34	22.28									
15	16QAM	36	0	21.28	21.33	21.24									
15	16QAM	36	20	21.17	21.38	21.27	22.7	3							
15	16QAM	36	39	21.15	21.28	21.17									
15	16QAM	75	0	21.28	21.38	21.24									
15	16QAM	1	0	19.17	19.28	19.26	20.7	5							
15	16QAM	1	37	19.25	19.44	19.23									
15	16QAM	1	74	19.22	19.33	19.24									
15	16QAM	36	0	19.29	19.34	19.20	20.7	5							
15	16QAM	36	20	19.29	19.31	19.32									
15	16QAM	36	39	19.18	19.32	19.28									
15	16QAM	75	0	19.16	19.31	19.29	25.7	0							
10	QPSK	1	0	24.21	24.32	24.30									
10	QPSK	1	25	24.23	24.31	24.28									
10	QPSK	1	49	24.26	24.28	24.15	24.7	1							
10	QPSK	25	0	23.32	23.32	23.19									
10	QPSK	25	12	23.22	23.43	23.28									
10	QPSK	25	25	23.22	23.38	23.24	23.7	2							
10	QPSK	50	0	23.27	23.36	23.27									
10	16QAM	1	0	22.29	23.34	23.17									
10	16QAM	1	25	23.15	23.23	23.17	23.7	2							
10	16QAM	1	49	23.27	23.33	23.27									
10	16QAM	25	0	22.24	22.38	22.30									
10	16QAM	25	12	22.18	22.39	22.21	22.7	3							
10	16QAM	25	25	22.15	22.26	22.13									
10	16QAM	50	0	22.33	22.23	22.29									
10	16QAM	1	0	22.17	22.35	22.30	23.7	2							
10	16QAM	1	25	22.14	22.29	22.23									
10	16QAM	1	49	22.18	22.31	22.34									
10	16QAM	25	0	21.21	21.46	21.25	22.7	3							
10	16QAM	25	12	21.16	21.46	21.24									
10	16QAM	25	25	21.16	21.20	21.11									
10	16QAM	50	0	21.28	21.38	21.30	20.7	5							
10	16QAM	1	0	19.13	19.32	19.27									
10	16QAM	1	25	19.30	19.38	19.30									
10	16QAM	1	49	19.28	19.35	19.26	20.7	5							
10	16QAM	25	0	19.35	19.33	19.16									
10	16QAM	25	12	19.31	19.26	19.30									
10	16QAM	25	25	19.10	19.28	19.27	27.05	26.65	27.05	Total up link (dBm)	MPE (dB)				
10	16QAM	50	0	19.13	19.38	19.30									
5	QPSK	1	0	24.32	24.34	24.38						25.7	0		
5	QPSK	1	12	24.27	24.30	24.32									
5	QPSK	1	24	24.26	24.25	24.11									
5	QPSK	12	0	23.36	23.37	23.14	24.7	1							
5	QPSK	12	7	23.27	23.45	23.18									
5	QPSK	12	13	23.17	23.41	23.28									
5	QPSK	25	0	23.20	23.30	23.25	24.7	1							
5	16QAM	1	0	23.13	23.38	23.17									
5	16QAM	1	12	23.23	23.19	23.11									
5	16QAM	1	24	23.28	23.31	23.25	23.7	2							
5	16QAM	12	0	22.11	22.26	22.25									
5	16QAM	12	7	22.25	22.43	22.21									
5	16QAM	12	13	22.16	22.37	22.18	23.7	2							
5	16QAM	25	0	22.25	22.23	22.24									
5	16QAM	1	0	22.28	22.43	22.30									
5	16QAM	1	12	22.21	22.36	22.17	22.7	2							
5	16QAM	1	24	22.23	22.33	22.29									
5	16QAM	12	0	21.38	21.37	21.19									
5	16QAM	12	7	21.15	21.38	21.29	22.7	3							
5	16QAM	12	13	21.21	21.26	21.16									
5	16QAM	25	0	21.29	21.37	21.25									
5	16QAM	1	0	19.19	19.23	19.28	20.7	5							
5	16QAM	1	12	19.25	19.42	19.21									
5	16QAM	1	24	19.15	19.27	19.28									
5	16QAM	12	0	19.38	19.27	19.25	20.7	5							
5	16QAM	12	7	19.25	19.36	19.28									
5	16QAM	12	13	19.20	19.28	19.20									
5	16QAM	25	0	19.14	19.30	19.26	26.705	26.655	27.025	Total up link (dBm)	MPE (dB)				
3	QPSK	1	0	24.29	24.38	24.28						25.7	0		
3	QPSK	1	8	24.26	24.27	24.31									
3	QPSK	1	14	24.27	24.36	24.16									
3	QPSK	8	0	23.30	23.43	23.18	24.7	1							
3	QPSK	8	4	23.24	23.41	23.16									
3	QPSK	8	7	23.22	23.43	23.26									
3	QPSK	15	0	23.28	23.37	23.29	24.7	1							
3	16QAM	1	0	23.13	23.33	23.19									
3	16QAM	1	8	23.17	23.23	23.24									
3	16QAM	1	14	23.25	23.38	23.32	23.7	2							
3	16QAM	8	0	22.22	22.27	22.31									
3	16QAM	8	4	22.26	22.35	22.23									
3	16QAM	8	7	22.17	22.34	22.17	23.7	2							
3	16QAM	15	0	22.21	22.33	22.21									
3	16QAM	1	0	22.19	22.35	22.27									
3	16QAM	1	8	22.27	22.28	22.26	22.7	2							
3	16QAM	1	14	22.22	22.40	22.21									
3	16QAM	8	0	21.29	21.26	21.22									
3	16QAM	8	4	21.19	21.41	21.28	22.7	3							
3	16QAM	8	7	21.19	21.28	21.17									
3	16QAM	15	0	21.34	21.41	21.25									
3	16QAM	1	0	19.15	19.25	19.31	20.7	5							
3	16QAM	1	8	19.25	19.48	19.30									
3	16QAM	1	14	19.29	19.29	19.27									
3	16QAM	8	0	19.28	19.31	19.16	20.7	5							
3	16QAM	8	4	19.27	19.38	19.30									
3	16QAM	8	7	19.23	19.28	19.21									
3	16QAM	15	0	19.15	19.33	19.23	26.657	26.655	27.033	Total up link (dBm)	MPE (dB)				
1.4	QPSK	1	0	24.33	24.28	24.31						25.7	0		
1.4	QPSK	1	3	24.14	24.32	24.32									
1.4	QPSK	1	5	24.11	24.31	24.24									
1.4	QPSK	3	0	24.26	24.28	24.36	24.7	1							
1.4	QPSK	3	1	24.25	24.12	24.29									
1.4	QPSK	3	3	24.16	24.36	24.21									
1.4	QPSK	8	0	23.34	23.40	23.33	24.7	1							
1.4	16QAM	1	0	23.15	23.35	23.31									
1.4	16QAM	1	3	23.18	23.32	23.16									
1.4	16QAM	1	5	23.28	23.32	23.33	23.7	2							
1.4	16QAM	3	0	22.22	22.16	22.24									
1.4	16QAM	3	1	23.29	23.27	23.22									
1.4	16QAM	3	3	23.28	23.36	23.24	23.7	2							
1.4	16QAM	8	0	22.27	22.33	22.34									
1.4	16QAM	1	0	22.18	22.27	22.26									
1.4	16QAM	1	3	22.33	22.35	22.25	22.7	3							
1.4	16QAM	1	5	22.22	22.22	22.34									
1.4	16QAM	3	0	22.20	22.12	22.28									
1.4	16QAM	3	1	22.20	22.28	22.17	20.7	5							
1.4	16QAM	3	3	22.33	22.35	22.27									
1.4	16QAM	8	0	21.32	21.40	21.33									
1.4	16QAM	1	0	19.31	19.32	19.32	20.7	5							
1.4	16QAM	1	3	19.19	19.31	19.28									
1.4	16QAM	1	5	19.28	19.28	19.18									
1.4	16QAM	3	0	19.31	19.34	19.30	20.7	5							
1.4	16QAM	3	1	19.28	19.17	19.21									
1.4	16QAM	3	3	19.14	19.26	19.16									
1.4	16QAM	8	0	19.29	19.32	19.36	20.7	5							



CDMA1900 AHS DSS

CDMA1900 Tx Channel	Burst Average Power (dBm)			Tx Power Limit (dBm)	Frame Average Power (dBm)			Tx Power Limit (dBm)
	1800.2	1800	1800.8		1800.2	1800	1800.8	
CDMA 1 Tx. Wn	20.71	20.80	20.79	30.00	20.71	20.80	20.79	21.00
GPS-1 Tx. Wn	20.33	20.90	20.72	30.00	20.33	20.90	20.72	21.00
GPS-2 Tx. Wn	20.47	20.94	20.87	27.00	20.47	20.94	20.87	21.00
GPS-3 Tx. Wn	20.12	20.21	20.17	25.00	20.16	20.21	20.21	21.04
GPS-4 Tx. Wn	23.42	23.46	23.02	24.00	20.42	20.45	20.02	21.00
EDGE 1 Tx. Wn	21.19	21.44	21.44	26.00	18.19	18.09	18.44	17.04
EDGE 2 Tx. Wn	22.26	22.03	22.21	24.00	18.26	18.02	18.21	18.00
EDGE 3 Tx. Wn	20.32	20.20	20.18	21.00	18.08	18.04	18.00	17.24
EDGE 4 Tx. Wn	19.41	19.20	19.40	20.00	18.41	18.06	18.40	17.00

WCDMA II AHS DSS

Band Tx Channel	WCDMA II			Tx Power Limit (dBm)	WCDMA IV			Tx Power Limit (dBm)
	9602	9600	9608		1912	1418	1918	
Frequency (MHz)	1800.4	1800	1807.8	1800	1912.4	1758.6	1758.4	
ISPP Rate	AMR 12.2kbps	24.07	24.10	24.21	25.00	24.00	24.02	24.01
ISPP Rate	AMR 9.6kbps	24.02	24.03	24.16	25.00	24.02	24.03	24.00
ISPP Rate	HS-PA Subclass 1	23.68	23.38	23.13	24.00	23.00	22.87	24.00
ISPP Rate	HS-PA Subclass 2	23.04	22.70	22.84	24.00	23.14	22.86	24.00
ISPP Rate	HS-PA Subclass 3	22.50	22.71	22.85	23.00	22.44	22.81	23.00
ISPP Rate	HS-PA Subclass 4	22.48	22.82	22.75	23.00	22.49	22.43	22.37
ISPP Rate	DC-HSPA Subclass 1	23.02	23.17	23.12	24.00	23.03	23.00	22.97
ISPP Rate	DC-HSPA Subclass 2	23.12	23.22	23.14	24.00	23.15	23.09	23.03
ISPP Rate	DC-HSPA Subclass 3	22.25	22.70	22.61	23.00	22.56	22.67	23.00
ISPP Rate	DC-HSPA Subclass 4	22.52	22.75	22.64	23.00	22.52	22.54	22.58
ISPP Rate	HS-PA Subclass 1	23.11	23.07	23.18	24.00	23.08	23.06	22.87
ISPP Rate	HS-PA Subclass 2	20.92	21.22	21.26	22.00	21.11	21.09	20.86
ISPP Rate	HS-PA Subclass 3	21.88	22.17	22.15	23.00	22.10	21.98	21.85
ISPP Rate	HS-PA Subclass 4	21.70	21.13	21.06	22.00	21.07	20.98	21.08
ISPP Rate	HS-PA Subclass 5	23.14	23.35	23.28	24.00	23.00	22.97	23.10



Band 25 Ant3 DS14

Table with columns: BV (MHz), Modulation, RB Size, RB Offset, Power Line Ch, Power Mod, Power High Ch, Power High Mod, Power High Ch, Power High Mod, Turnup (dB), MPR (dB). Contains multiple rows of channel data for various frequencies and power levels.

Band 66 Ant3 DS14

Table with columns: BV (MHz), Modulation, RB Size, RB Offset, Power Line Ch, Power Mod, Power High Ch, Power High Mod, Power High Ch, Power High Mod, Turnup (dB), MPR (dB). Contains multiple rows of channel data for various frequencies and power levels.



Band 38 Ant3 DS14									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch [Freq]	Power Middle Ch [Freq]	Power High Ch [Freq]	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	24.00	24.00	24.00	25.7	0	
20	QPSK	1	49	24.06	24.23	24.11	25.7	0	
20	QPSK	1	99	24.12	24.24	24.10	25.7	0	
20	QPSK	50	24	23.97	23.18	23.97	24.7	1	
20	QPSK	50	74	23.97	23.17	23.97	24.7	1	
20	QPSK	100	0	23.90	23.27	23.98	24.7	1	
20	16QAM	1	49	23.91	23.17	23.97	24.7	1	
20	16QAM	1	99	23.96	23.25	23.94	24.7	1	
20	16QAM	50	0	23.95	23.30	23.92	23.7	2	
20	16QAM	50	24	23.11	23.24	23.03	23.7	2	
20	16QAM	50	74	23.01	23.31	23.06	23.7	2	
20	16QAM	100	0	22.12	22.32	22.16	23.7	2	
20	16QAM	100	49	22.05	22.21	22.13	23.7	2	
20	16QAM	100	99	22.01	22.28	22.13	23.7	2	
20	16QAM	50	0	21.26	21.27	21.18	22.7	3	
20	16QAM	50	24	21.02	21.29	21.28	22.7	3	
20	16QAM	50	74	21.01	21.28	21.08	22.7	3	
20	16QAM	100	0	21.07	21.25	21.09	20.7	5	
20	16QAM	100	49	19.93	19.27	19.95	20.7	5	
20	16QAM	100	99	19.93	19.28	19.18	20.7	5	
20	16QAM	50	0	19.03	19.31	19.18	20.7	5	
20	16QAM	50	24	19.03	19.32	19.04	20.7	5	
20	16QAM	50	74	19.03	19.32	19.04	20.7	5	
20	16QAM	100	0	19.04	19.23	19.23	20.7	5	
Channel									
Frequency (MHz)									
15	QPSK	1	0	24.72	24.72	24.72	25.7	0	
15	QPSK	1	37	24.04	24.22	24.15	25.7	0	
15	QPSK	1	74	23.96	24.03	24.03	25.7	0	
15	QPSK	36	0	23.13	23.30	23.13	24.7	1	
15	QPSK	36	36	23.04	23.29	23.24	24.7	1	
15	QPSK	75	0	23.11	23.28	23.09	24.7	1	
15	16QAM	1	74	23.04	23.18	23.04	24.7	1	
15	16QAM	36	0	22.08	22.20	22.00	23.7	2	
15	16QAM	36	36	22.00	22.27	22.17	23.7	2	
15	16QAM	75	0	22.00	22.26	22.00	23.7	2	
15	16QAM	75	36	22.00	22.26	22.00	23.7	2	
15	16QAM	150	0	22.01	22.21	22.00	23.7	2	
15	16QAM	36	0	21.04	21.31	21.22	22.7	3	
15	16QAM	36	36	21.05	21.28	21.14	22.7	3	
15	16QAM	36	74	21.01	21.31	21.15	22.7	3	
15	16QAM	150	0	21.01	21.30	21.01	20.7	5	
15	16QAM	150	36	19.28	19.38	19.28	20.7	5	
15	16QAM	150	74	19.11	19.31	19.12	20.7	5	
15	16QAM	36	0	19.18	19.29	19.25	20.7	5	
15	16QAM	36	36	19.13	19.24	19.20	20.7	5	
15	16QAM	36	74	19.05	19.20	19.01	20.7	5	
15	16QAM	150	0	19.09	19.22	19.01	20.7	5	
Channel									
Frequency (MHz)									
10	QPSK	1	0	24.11	24.26	24.15	25.7	0	
10	QPSK	1	25	24.09	24.22	24.10	25.7	0	
10	QPSK	1	49	24.10	24.25	24.08	25.7	0	
10	QPSK	25	0	23.06	23.29	23.20	24.7	1	
10	QPSK	25	12	23.00	23.08	23.05	24.7	1	
10	QPSK	25	25	23.03	23.23	23.15	24.7	1	
10	16QAM	1	0	23.08	23.18	23.15	24.7	1	
10	16QAM	1	49	23.01	23.29	23.12	24.7	1	
10	16QAM	25	0	22.09	22.26	22.14	23.7	2	
10	16QAM	25	12	22.11	22.23	22.08	23.7	2	
10	16QAM	25	25	22.04	22.28	22.09	23.7	2	
10	16QAM	50	0	22.11	22.29	22.09	23.7	2	
10	16QAM	1	49	22.07	22.26	22.11	23.7	2	
10	16QAM	1	26	22.04	22.26	22.12	23.7	2	
10	16QAM	1	49	22.03	22.31	22.17	23.7	2	
10	16QAM	25	0	21.00	21.28	21.24	22.7	3	
10	16QAM	25	12	21.03	21.26	21.09	22.7	3	
10	16QAM	50	0	19.08	19.25	19.14	20.7	5	
10	16QAM	50	12	19.04	19.25	19.02	20.7	5	
10	16QAM	50	25	19.18	19.38	19.12	20.7	5	
10	16QAM	25	0	19.09	19.27	19.18	20.7	5	
10	16QAM	25	12	19.07	19.21	19.03	20.7	5	
10	16QAM	25	25	19.03	19.24	19.11	20.7	5	
10	16QAM	50	0	19.08	19.25	19.08	20.7	5	
Channel									
Frequency (MHz)									
5	QPSK	1	0	24.12	24.23	24.13	25.7	0	
5	QPSK	1	24	24.08	24.19	24.09	25.7	0	
5	QPSK	12	0	23.08	23.20	23.09	24.7	1	
5	QPSK	12	7	23.08	23.11	23.05	24.7	1	
5	QPSK	12	12	23.06	23.27	23.16	24.7	1	
5	QPSK	1	0	23.03	23.20	23.08	24.7	1	
5	16QAM	1	12	23.00	23.16	23.08	24.7	1	
5	16QAM	1	24	23.02	23.24	23.21	24.7	1	
5	16QAM	12	0	22.03	22.20	22.13	23.7	2	
5	16QAM	12	7	22.03	22.26	22.08	23.7	2	
5	16QAM	25	0	22.07	22.25	22.16	23.7	2	
5	16QAM	12	0	21.05	21.23	21.01	22.7	3	
5	16QAM	12	7	21.06	21.31	21.18	22.7	3	
5	16QAM	25	0	21.06	21.32	21.18	22.7	3	
5	16QAM	1	0	19.09	19.28	19.20	20.7	5	
5	16QAM	1	12	19.01	19.23	19.19	20.7	5	
5	16QAM	1	24	19.03	19.31	19.18	20.7	5	
5	16QAM	12	0	19.04	19.25	19.19	20.7	5	
5	16QAM	12	7	19.13	19.25	19.08	20.7	5	
5	16QAM	12	12	19.04	19.21	19.04	20.7	5	
5	16QAM	25	0	19.03	19.25	19.08	20.7	5	

Band 41 Ant3 DS14										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch [Freq]	Power Middle Ch [Freq]	Power High Ch [Freq]	Power High Ch [Freq]	Power High Ch [Freq]	Tune-up limit (dBm)	MPR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	24.00	24.00	24.00	24.00	24.00	25.7	0
20	QPSK	1	49	24.00	24.14	24.30	24.30	24.30	25.7	0
20	QPSK	1	99	24.02	24.24	24.34	24.30	24.30	25.7	0
20	QPSK	50	24	23.21	23.24	23.33	23.14	23.39	24.7	1
20	QPSK	50	74	23.18	23.18	23.39	23.33	23.27	24.7	1
20	QPSK	100	0	23.07	23.17	23.42	23.33	23.34	24.7	1
20	16QAM	1	49	23.23	23.18	23.39	23.18	23.20	24.7	1
20	16QAM	1	99	23.31	23.14	23.41	23.17	23.35	24.7	1
20	16QAM	50	0	22.18	22.14	22.37	22.17	22.34	23.7	2
20	16QAM	50	24	22.32	22.26	22.33	22.41	22.41	23.7	2
20	16QAM	50	74	22.32	22.31	22.31	22.17	22.27	23.7	2
20	16QAM	100	0	22.16	22.29	22.47	22.23	22.22	23.7	2
20	16QAM	100	49	22.21	22.18	22.38	22.26	22.20	23.7	2
20	16QAM	100	99	22.38	22.10	22.38	22.24	22.41	23.7	2
20	16QAM	50	0	21.83	21.28	21.47	21.30	21.34	22.7	3
20	16QAM	50	24	21.28	21.10	21.39	21.21	21.25	22.7	3
20	16QAM	50	74	21.52	21.30	21.39	21.21	21.59	22.7	3
20	16QAM	100	0	21.21	21.26	21.35	21.24	21.23	20.7	5
20	16QAM	100	49	19.42	19.18	19.28	19.40	19.45	20.7	5
20	16QAM	100	99	19.24	19.18	19.46	19.35	19.35	20.7	5
20	16QAM	50	0	19.33	19.31	19.49	19.37	19.38	20.7	5
20	16QAM	50	24	19.14	19.25	19.44	19.24	19.28	20.7	5
20	16QAM	50	74	19.30	19.23	19.30	19.40	19.31	20.7	5
20	16QAM	100	0	19.21	19.26	19.22	19.24	19.20	20.7	5
Channel										
Frequency (MHz)										
15	QPSK	1	0	24.21	24.17	24.30	24.14	24.23	26.70	0
15	QPSK	1	37	24.15	24.14	24.29	24.23	24.19	26.70	0
15	QPSK	1	74	24.04	24.06	24.03	24.16	24.07	26.70	0
15	QPSK	36	0	23.23	23.28	23.18	23.			



GSM1900 Airtel CSD4

GSM1900 Tx Channel	Burst Average Power (dBm)			Tune-up Lch (dBm)	Frame Average Power (dBm)			Tune-up Lch (dBm)
	1800.2	1800	1800.8		1800.2	1800	1800.8	
GM1-1 Tx. Wtd	26.15	28.23	28.21	30.00	19.19	19.43	19.21	21.00
GM1S-1 Tx. Wtd	25.11	26.11	25.16	28.00	18.11	18.17	18.16	20.00
GM1S-2 Tx. Wtd	24.79	25.14	24.88	26.00	18.79	19.14	18.88	20.00
GM1S-3 Tx. Wtd	22.84	23.20	22.89	24.00	18.68	18.86	18.63	19.74
GM1S-4 Tx. Wtd	21.11	21.58	21.25	23.00	18.11	18.58	18.25	20.00
EDGE-1 Tx. Wtd	21.84	23.84	23.82	25.00	14.84	14.84	14.82	16.00
EDGE-2 Tx. Wtd	20.05	20.03	20.06	22.00	14.05	14.03	14.06	16.00
EDGE-3 Tx. Wtd	18.88	19.20	19.21	20.00	14.88	14.89	14.90	16.24
EDGE-4 Tx. Wtd	17.38	17.72	17.36	19.00	14.38	14.72	14.36	16.00

WCDMA 8 Airtel CSD4

Band Tx Channel	WCDMA 8			Tune-up Lch (dBm)	WCDMA 8V			Tune-up Lch (dBm)	
	9602	9600	9608		9312	9418	9518		
Frequency (MHz)	1802.4	1800	1807.6	1800	1812.4	1810.6	1818.6		
ISPP Range	AMR 12.2kbps	22.58	22.54	22.59	24.00	22.23	22.44	22.37	24.00
ISPP Rate	HS-PA Subcar-1	21.51	21.63	21.60	23.00	21.26	21.41	21.39	24.00
ISPP Rate	HS-PA Subcar-2	21.52	21.69	21.59	23.00	21.18	21.42	21.41	23.00
ISPP Rate	HS-PA Subcar-3	21.60	21.50	21.63	23.00	21.17	21.52	21.46	23.00
ISPP Rate	HS-PA Subcar-4	21.05	21.01	21.01	22.00	20.66	20.71	20.64	22.00
ISPP Rate	HS-PA Subcar-5	21.03	21.00	21.03	22.00	20.84	20.82	20.81	22.00
ISPP Rate	DC-HSPA Subcar-1	21.83	21.50	21.70	23.00	21.90	21.83	21.90	23.00
ISPP Rate	DC-HSPA Subcar-2	21.52	21.61	21.56	23.00	21.22	21.21	21.43	23.00
ISPP Rate	DC-HSPA Subcar-3	21.06	21.00	21.11	22.00	20.66	20.67	20.68	22.00
ISPP Rate	DC-HSPA Subcar-4	21.05	21.07	21.08	22.00	20.62	20.60	20.83	22.00
ISPP Rate	HS-PA Subcar-1	21.47	21.58	21.55	23.00	21.19	21.33	21.44	23.00
ISPP Rate	HS-PA Subcar-2	19.32	19.96	19.86	21.00	19.15	19.98	19.84	21.00
ISPP Rate	HS-PA Subcar-3	20.51	20.69	20.67	22.00	20.19	20.35	20.48	22.00
ISPP Rate	HS-PA Subcar-4	19.92	19.71	19.88	21.00	19.21	19.34	19.46	21.00
ISPP Rate	HS-PA Subcar-5	21.50	21.52	21.67	23.00	21.20	21.30	21.50	23.00



Band 2 Ant4 DS14													
BW (MHz)	Modulation	RB Size	RB Offset	Frame Low	Frame High	Frame Max	Frame Min	Frame High	Frame Low	Turn-up (min)	Turn-off (min)	Turn-on (min)	Turn-off (min)
Channel		Channel		1800	1800	1800	1800	1800	1800				
20	QPSK	1	49	2278	2286	2280	2286	2280	2286	24	0		
20	QPSK	1	49	2274	2282	2276	2282	2276	2282				
20	QPSK	50	0	2181	2189	2184	2190	2184	2190	23	1		
20	QPSK	50	0	2177	2185	2180	2186	2180	2186				
20	QPSK	100	0	2181	2189	2184	2190	2184	2190				
20	QPSK	100	0	2177	2185	2180	2186	2180	2186				
20	16QAM	1	49	2187	2195	2190	2196	2190	2196	23	1		
20	16QAM	1	49	2183	2191	2186	2192	2186	2192				
20	16QAM	50	0	2078	2086	2082	2088	2082	2088	22	2		
20	16QAM	50	0	2074	2082	2076	2084	2076	2084				
20	16QAM	100	0	2078	2086	2082	2088	2082	2088				
20	16QAM	100	0	2074	2082	2076	2084	2076	2084				
20	64QAM	1	49	2087	2095	2090	2096	2090	2096	22	2		
20	64QAM	1	49	2083	2091	2086	2092	2086	2092				
20	64QAM	50	0	1978	1986	1982	1988	1982	1988	21	3		
20	64QAM	50	0	1974	1982	1976	1984	1976	1984				
20	64QAM	100	0	1978	1986	1982	1988	1982	1988				
20	64QAM	100	0	1974	1982	1976	1984	1976	1984				
20	256QAM	1	49	1780	1788	1784	1790	1784	1790	19	5		
20	256QAM	1	49	1776	1784	1778	1786	1778	1786				
20	256QAM	50	0	1774	1782	1776	1784	1776	1784				
20	256QAM	50	0	1770	1778	1772	1780	1772	1780				
20	256QAM	100	0	1774	1782	1776	1784	1776	1784				
20	256QAM	100	0	1770	1778	1772	1780	1772	1780				

Band 4 Ant4 DS14													
BW (MHz)	Modulation	RB Size	RB Offset	Frame Low	Frame High	Frame Max	Frame Min	Frame High	Frame Low	Turn-up (min)	Turn-off (min)	Turn-on (min)	Turn-off (min)
Channel		Channel		1700	1700	1700	1700	1700	1700				
20	QPSK	1	49	2302	2310	2304	2310	2304	2310	24	0		
20	QPSK	1	49	2298	2306	2296	2304	2296	2304				
20	QPSK	50	0	2201	2209	2204	2210	2204	2210	23	1		
20	QPSK	50	0	2197	2205	2196	2204	2196	2204				
20	QPSK	100	0	2201	2209	2204	2210	2204	2210				
20	QPSK	100	0	2197	2205	2196	2204	2196	2204				
20	16QAM	1	49	2206	2214	2210	2216	2210	2216	23	1		
20	16QAM	1	49	2202	2210	2206	2212	2206	2212				
20	16QAM	50	0	2107	2115	2112	2118	2112	2118	22	2		
20	16QAM	50	0	2103	2111	2106	2114	2106	2114				
20	16QAM	100	0	2107	2115	2112	2118	2112	2118				
20	16QAM	100	0	2103	2111	2106	2114	2106	2114				
20	64QAM	1	49	2008	2016	2012	2018	2012	2018	22	2		
20	64QAM	1	49	2004	2012	2006	2014	2006	2014				
20	64QAM	50	0	1909	1917	1914	1920	1914	1920	21	3		
20	64QAM	50	0	1905	1913	1908	1916	1908	1916				
20	64QAM	100	0	1909	1917	1914	1920	1914	1920				
20	64QAM	100	0	1905	1913	1908	1916	1908	1916				
20	256QAM	1	49	1809	1817	1812	1818	1812	1818	19	5		
20	256QAM	1	49	1805	1813	1806	1814	1806	1814				
20	256QAM	50	0	1706	1714	1710	1716	1710	1716				
20	256QAM	50	0	1702	1710	1704	1712	1704	1712				
20	256QAM	100	0	1706	1714	1710	1716	1710	1716				
20	256QAM	100	0	1702	1710	1704	1712	1704	1712				

Band 7 Ant4 DS14													
BW (MHz)	Modulation	RB Size	RB Offset	Frame Low	Frame High	Frame Max	Frame Min	Frame High	Frame Low	Turn-up (min)	Turn-off (min)	Turn-on (min)	Turn-off (min)
Channel		Channel		2000	2000	2000	2000	2000	2000				
20	QPSK	1	49	2322	2330	2324	2330	2324	2330	25	0		
20	QPSK	1	49	2318	2326	2320	2326	2320	2326				
20	QPSK	50	0	2221	2229	2224	2230	2224	2230	24	1		
20	QPSK	50	0	2217	2225	2220	2226	2220	2226				
20	QPSK	100	0	2221	2229	2224	2230	2224	2230				
20	QPSK	100	0	2217	2225	2220	2226	2220	2226				
20	16QAM	1	49	2226	2234	2230	2236	2230	2236	24	1		
20	16QAM	1	49	2222	2230	2226	2232	2226	2232				
20	16QAM	50	0	2127	2135	2132	2138	2132	2138	22	2		
20	16QAM	50	0	2123	2131	2128	2134	2128	2134				
20	16QAM	100	0	2127	2135	2132	2138	2132	2138				
20	16QAM	100	0	2123	2131	2128	2134	2128	2134				
20	64QAM	1	49	2028	2036	2032	2038	2032	2038	22	2		
20	64QAM	1	49	2024	2032	2026	2034	2026	2034				
20	64QAM	50	0	1929	1937	1934	1940	1934	1940	22	3		
20	64QAM	50	0	1925	1933	1928	1936	1928	1936				
20	64QAM	100	0	1929	1937	1934	1940	1934	1940				
20	64QAM	100	0	1925	1933	1928	1936	1928	1936				
20	256QAM	1	49	1829	1837	1832	1838	1832	1838	20	5		
20	256QAM	1	49	1825	1833	1828	1834	1828	1834				
20	256QAM	50	0	1730	1738	1734	1740	1734	1740				
20	256QAM	50	0	1726	1734	1728	1736	1728	1736				
20	256QAM	100	0	1730	1738	1734	1740	1734	1740				
20	256QAM	100	0	1726	1734	1728	1736	1728	1736				



Band 25 Ant4 DS14

Table with columns: BV (MHz), Modulation, RB Size, RB Offset, Power Line, Power Modem, Power High, Power Ch, Power Ch, Power Ch, Turn-on, MPR (dB). Contains multiple channel listings for various frequencies and power levels.

Band 66 Ant4 DS14

Table with columns: BV (MHz), Modulation, RB Size, RB Offset, Power Line, Power Modem, Power High, Power Ch, Power Ch, Power Ch, Turn-on, MPR (dB). Contains multiple channel listings for various frequencies and power levels.



Band 38 Ant4 DSI4										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	22.97	22.97	22.97	24	0		
20	QPSK	1	49	22.97	22.97	22.97	24	0		
20	QPSK	5	0	22.97	22.97	22.97	24	0		
20	QPSK	50	24	22.97	22.97	22.97	23	1		
20	QPSK	50	74	22.97	22.97	22.97	23	1		
20	QPSK	100	0	22.97	22.97	22.97	23	1		
20	16QAM	1	0	21.88	21.88	21.88	23	1		
20	16QAM	1	49	21.88	21.88	21.88	23	1		
20	16QAM	5	0	21.88	21.88	21.88	22	2		
20	16QAM	50	24	21.88	21.88	21.88	22	2		
20	16QAM	50	74	21.88	21.88	21.88	22	2		
20	16QAM	100	0	21.88	21.88	21.88	22	2		
20	64QAM	1	0	20.99	20.99	20.99	22	2		
20	64QAM	1	49	20.99	20.99	20.99	22	2		
20	64QAM	5	0	20.99	20.99	20.99	21	3		
20	64QAM	50	24	20.99	20.99	20.99	21	3		
20	64QAM	50	74	20.99	20.99	20.99	21	3		
20	64QAM	100	0	20.99	20.99	20.99	21	3		
20	256QAM	1	0	17.95	17.95	17.95	19	5		
20	256QAM	1	49	17.95	17.95	17.95	19	5		
20	256QAM	5	0	17.95	17.95	17.95	19	5		
20	256QAM	50	24	17.95	17.95	17.95	19	5		
20	256QAM	50	74	17.95	17.95	17.95	19	5		
20	256QAM	100	0	17.95	17.95	17.95	19	5		
Channel										
Frequency (MHz)										
15	QPSK	1	0	21.72	21.72	21.72	24	0		
15	QPSK	1	49	21.72	21.72	21.72	24	0		
15	QPSK	5	0	21.72	21.72	21.72	23	1		
15	QPSK	36	0	21.72	21.72	21.72	23	1		
15	QPSK	36	39	21.72	21.72	21.72	23	1		
15	QPSK	75	0	21.72	21.72	21.72	23	1		
15	16QAM	1	0	20.84	20.84	20.84	22	2		
15	16QAM	1	49	20.84	20.84	20.84	22	2		
15	16QAM	5	0	20.84	20.84	20.84	21	3		
15	16QAM	36	0	20.84	20.84	20.84	21	3		
15	16QAM	36	39	20.84	20.84	20.84	21	3		
15	16QAM	75	0	20.84	20.84	20.84	21	3		
15	64QAM	1	0	20.19	20.19	20.19	22	2		
15	64QAM	1	49	20.19	20.19	20.19	22	2		
15	64QAM	5	0	20.19	20.19	20.19	21	3		
15	64QAM	36	0	20.19	20.19	20.19	21	3		
15	64QAM	36	39	20.19	20.19	20.19	21	3		
15	256QAM	1	0	17.95	17.95	17.95	19	5		
15	256QAM	1	49	17.95	17.95	17.95	19	5		
15	256QAM	5	0	17.95	17.95	17.95	19	5		
15	256QAM	36	0	17.95	17.95	17.95	19	5		
15	256QAM	36	39	17.95	17.95	17.95	19	5		
15	256QAM	75	0	17.95	17.95	17.95	19	5		
Channel										
Frequency (MHz)										
10	QPSK	1	0	23.00	23.00	23.00	24	0		
10	QPSK	1	25	23.00	23.00	23.00	24	0		
10	QPSK	5	0	23.00	23.00	23.00	23	1		
10	QPSK	25	0	23.00	23.00	23.00	23	1		
10	QPSK	25	25	23.00	23.00	23.00	23	1		
10	QPSK	50	0	23.00	23.00	23.00	23	1		
10	16QAM	1	0	21.88	21.88	21.88	23	1		
10	16QAM	1	49	21.88	21.88	21.88	23	1		
10	16QAM	5	0	21.88	21.88	21.88	22	2		
10	16QAM	25	0	21.88	21.88	21.88	22	2		
10	16QAM	25	25	21.88	21.88	21.88	22	2		
10	16QAM	50	0	21.88	21.88	21.88	22	2		
10	64QAM	1	0	21.04	21.04	21.04	22	2		
10	64QAM	1	49	21.04	21.04	21.04	22	2		
10	64QAM	5	0	21.04	21.04	21.04	21	3		
10	64QAM	25	0	21.04	21.04	21.04	21	3		
10	64QAM	25	25	21.04	21.04	21.04	21	3		
10	256QAM	1	0	17.95	17.95	17.95	19	5		
10	256QAM	1	49	17.95	17.95	17.95	19	5		
10	256QAM	5	0	17.95	17.95	17.95	19	5		
10	256QAM	25	0	17.95	17.95	17.95	19	5		
10	256QAM	25	25	17.95	17.95	17.95	19	5		
10	256QAM	50	0	17.95	17.95	17.95	19	5		
Channel										
Frequency (MHz)										
5	QPSK	1	0	23.00	23.00	23.00	24	0		
5	QPSK	1	24	23.00	23.00	23.00	24	0		
5	QPSK	12	0	23.00	23.00	23.00	23	1		
5	QPSK	12	7	23.00	23.00	23.00	23	1		
5	QPSK	12	12	23.00	23.00	23.00	23	1		
5	QPSK	12	17	23.00	23.00	23.00	23	1		
5	QPSK	12	22	23.00	23.00	23.00	23	1		
5	QPSK	12	27	23.00	23.00	23.00	23	1		
5	QPSK	12	32	23.00	23.00	23.00	23	1		
5	QPSK	12	37	23.00	23.00	23.00	23	1		
5	QPSK	12	42	23.00	23.00	23.00	23	1		
5	QPSK	12	47	23.00	23.00	23.00	23	1		
5	QPSK	12	52	23.00	23.00	23.00	23	1		
5	QPSK	12	57	23.00	23.00	23.00	23	1		
5	QPSK	12	62	23.00	23.00	23.00	23	1		
5	QPSK	12	67	23.00	23.00	23.00	23	1		
5	QPSK	12	72	23.00	23.00	23.00	23	1		
5	QPSK	12	77	23.00	23.00	23.00	23	1		
5	QPSK	12	82	23.00	23.00	23.00	23	1		
5	QPSK	12	87	23.00	23.00	23.00	23	1		
5	QPSK	12	92	23.00	23.00	23.00	23	1		
5	QPSK	12	97	23.00	23.00	23.00	23	1		
5	QPSK	12	102	23.00	23.00	23.00	23	1		
5	QPSK	12	107	23.00	23.00	23.00	23	1		
5	QPSK	12	112	23.00	23.00	23.00	23	1		
5	QPSK	12	117	23.00	23.00	23.00	23	1		
5	QPSK	12	122	23.00	23.00	23.00	23	1		
5	QPSK	12	127	23.00	23.00	23.00	23	1		
5	QPSK	12	132	23.00	23.00	23.00	23	1		
5	QPSK	12	137	23.00	23.00	23.00	23	1		
5	QPSK	12	142	23.00	23.00	23.00	23	1		
5	QPSK	12	147	23.00	23.00	23.00	23	1		
5	QPSK	12	152	23.00	23.00	23.00	23	1		
5	QPSK	12	157	23.00	23.00	23.00	23	1		
5	QPSK	12	162	23.00	23.00	23.00	23	1		
5	QPSK	12	167	23.00	23.00	23.00	23	1		
5	QPSK	12	172	23.00	23.00	23.00	23	1		
5	QPSK	12	177	23.00	23.00	23.00	23	1		
5	QPSK	12	182	23.00	23.00	23.00	23	1		
5	QPSK	12	187	23.00	23.00	23.00	23	1		
5	QPSK	12	192	23.00	23.00	23.00	23	1		
5	QPSK	12	197	23.00	23.00	23.00	23	1		
5	QPSK	12	202	23.00	23.00	23.00	23	1		
5	QPSK	12	207	23.00	23.00	23.00	23	1		
5	QPSK	12	212	23.00	23.00	23.00	23	1		
5	QPSK	12	217	23.00	23.00	23.00	23	1		
5	QPSK	12	222	23.00	23.00	23.00	23	1		
5	QPSK	12	227	23.00	23.00	23.00	23	1		
5	QPSK	12	232	23.00	23.00	23.00	23	1		
5	QPSK	12	237	23.00	23.00	23.00	23	1		
5	QPSK	12	242	23.00	23.00	23.00	23	1		
5	QPSK	12	247	23.00	23.00	23.00	23	1		
5	QPSK	12	252	23.00	23.00	23.00	23	1		



Band 4 Ant5 DS1A										
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	20.76	20.90	20.85				
20	QPSK	1	49	20.83	20.90	20.85	22.5	0		
20	QPSK	1	99	20.83	20.90	20.85				
20	QPSK	50	0	20.69	20.83	20.70				
20	QPSK	50	24	20.72	20.83	20.78	22.5	0		
20	QPSK	50	50	20.82	20.78	20.88				
20	QPSK	100	0	20.74	20.82	20.78				
20	16QAM	100	0	20.79	20.82	20.74				
20	16QAM	1	49	20.81	20.78	20.88	22.5	0		
20	16QAM	1	99	20.85	20.80	20.85				
20	16QAM	50	0	20.93	20.84	20.88				
20	16QAM	50	24	20.71	20.88	20.79	22.5	0		
20	16QAM	50	50	20.83	20.79	20.82				
20	16QAM	100	0	20.83	20.80	20.81				
20	16QAM	1	0	20.69	20.83	20.76				
20	84QAM	1	49	20.74	20.85	20.82	22.5	0		
20	84QAM	1	99	20.72	20.85	20.85				
20	84QAM	50	0	19.93	19.84	19.89				
20	84QAM	50	24	19.83	19.79	19.74	21.5	1		
20	84QAM	50	50	19.83	19.84	19.77				
20	256QAM	1	0	17.85	17.86	17.86				
20	256QAM	1	49	18.01	17.78	17.83	19.5	3		
20	256QAM	1	99	17.88	17.74	17.79				
20	256QAM	50	0	17.86	17.87	17.81				
20	256QAM	50	24	17.78	17.77	17.85	19.5	3		
20	256QAM	50	50	17.84	17.77	17.84				
20	256QAM	100	0	17.86	17.78	17.81				
Channel										
Frequency (MHz)										
15	QPSK	1	0	20.76	20.80	20.83				
15	QPSK	1	37	20.88	20.80	20.83	22.5	0		
15	QPSK	1	74	20.83	20.81	20.72				
15	QPSK	36	0	20.67	20.81	20.80				
15	QPSK	36	20	20.68	20.73	20.67	22.5	0		
15	QPSK	36	39	20.60	20.56	20.60				
15	QPSK	75	0	20.72	20.78	20.81				
15	16QAM	1	0	20.75	20.86	20.81				
15	16QAM	1	37	20.83	20.59	20.68	22.5	0		
15	16QAM	1	74	20.76	20.79	20.75				
15	16QAM	36	0	20.77	20.83	20.75				
15	16QAM	36	20	20.59	20.55	20.68	22.5	0		
15	16QAM	36	39	20.67	20.81	20.81				
15	16QAM	75	0	20.67	20.58	20.63				
15	84QAM	1	0	20.57	20.70	20.64	22.5	0		
15	84QAM	1	37	20.82	20.68	20.68				
15	84QAM	1	74	20.70	20.65	20.71				
15	84QAM	36	0	19.89	19.74	19.83	21.5	1		
15	84QAM	36	39	19.87	19.87	19.88				
15	84QAM	36	39	19.69	19.55	19.53				
15	84QAM	75	0	19.84	19.68	19.73				
15	256QAM	1	0	17.86	17.86	17.86				
15	256QAM	1	37	17.95	17.72	17.89	19.5	3		
15	256QAM	1	74	17.81	17.73	17.89				
15	256QAM	36	0	17.86	17.84	17.81				
15	256QAM	36	20	17.72	17.87	17.86	19.5	3		
15	256QAM	36	39	17.86	17.80	17.86				
15	256QAM	75	0	17.86	17.86	17.86				
Channel										
Frequency (MHz)										
10	QPSK	1	0	20.60	20.75	20.65				
10	QPSK	1	25	20.76	20.65	20.71	22.5	0		
10	QPSK	1	49	20.84	20.84	20.76				
10	QPSK	1	74	20.87	20.87	20.87				
10	QPSK	25	12	20.72	20.70	20.74	22.5	0		
10	QPSK	25	25	20.74	20.56	20.69				
10	QPSK	25	39	20.75	20.68	20.71				
10	16QAM	1	0	20.70	20.78	20.85				
10	16QAM	1	26	20.82	20.57	20.72	22.5	0		
10	16QAM	1	49	20.88	20.79	20.81				
10	16QAM	25	0	20.73	20.70	20.73				
10	16QAM	25	12	20.59	20.60	20.64	22.5	0		
10	16QAM	25	25	20.65	20.78	20.81				
10	16QAM	50	0	20.69	20.52	20.69				
10	84QAM	1	0	20.58	20.62	20.62	22.5	0		
10	84QAM	1	26	20.87	20.68	20.68				
10	84QAM	1	49	20.63	20.65	20.62				
10	84QAM	25	0	19.89	19.85	19.73	21.5	1		
10	84QAM	25	12	19.78	19.78	19.81				
10	84QAM	25	25	19.70	19.69	19.56				
10	84QAM	50	0	19.86	19.84	19.63				
10	256QAM	1	0	17.86	17.86	17.86				
10	256QAM	1	26	17.89	17.72	17.92	19.5	3		
10	256QAM	1	49	17.75	17.58	17.70				
10	256QAM	1	74	17.86	17.84	17.81				
10	256QAM	25	12	17.74	17.69	17.84	19.5	3		
10	256QAM	25	25	17.51	17.59	17.51				
10	256QAM	50	0	17.58	17.51	17.51				
Channel										
Frequency (MHz)										
5	QPSK	1	0	20.55	20.75	20.65				
5	QPSK	1	12	20.89	20.71	20.75	22.5	0		
5	QPSK	1	24	20.77	20.80	20.81				
5	QPSK	12	0	20.67	20.67	20.67				
5	QPSK	12	7	20.53	20.53	20.71	22.5	0		
5	QPSK	12	13	20.74	20.65	20.67				
5	QPSK	25	0	20.68	20.74	20.73				
5	16QAM	1	0	20.78	20.71	20.78				
5	16QAM	1	12	20.88	20.69	20.74	22.5	0		
5	16QAM	1	24	20.65	20.68	20.68				
5	16QAM	12	0	20.75	20.74	20.85				
5	16QAM	12	7	20.67	20.59	20.72	22.5	0		
5	16QAM	12	13	20.56	20.68	20.68				
5	16QAM	25	0	20.56	20.50	20.70				
5	84QAM	1	0	20.54	20.67	20.75	22.5	0		
5	84QAM	1	12	20.54	20.70	20.70				
5	84QAM	1	24	20.56	20.50	20.84				
5	84QAM	12	0	19.89	19.82	19.78	21.5	1		
5	84QAM	12	7	19.75	19.89	19.88				
5	84QAM	12	13	19.60	19.81	19.87				
5	84QAM	25	0	19.77	19.83	19.79				
5	256QAM	1	0	17.87	17.87	17.87				
5	256QAM	1	12	17.86	17.63	17.78	19.5	3		
5	256QAM	1	24	17.70	17.55	17.70				
5	256QAM	12	0	17.88	17.88	17.81				
5	256QAM	12	7	17.84	17.71	17.81	19.5	3		
5	256QAM	12	13	17.80	17.78	17.86				
5	256QAM	25	0	17.67	17.50	17.54				
Channel										
Frequency (MHz)										
3	QPSK	1	0	20.75	20.72	20.71				
3	QPSK	1	8	20.72	20.71	20.67	22.5	0		
3	QPSK	1	14	20.91	20.85	20.76				
3	QPSK	8	0	20.89	20.88	20.79				
3	QPSK	8	4	20.68	20.71	20.61	22.5	0		
3	QPSK	8	7	20.71	20.68	20.64				
3	QPSK	15	0	20.72	20.72	20.80				
3	16QAM	1	0	20.73	20.67	20.84	22.5	0		
3	16QAM	1	8	20.74	20.88	20.70				
3	16QAM	1	14	20.84	20.70	20.68				
3	16QAM	8	0	20.84	20.74	20.70				
3	16QAM	8	4	20.59	20.67	20.66	22.5	0		
3	16QAM	15	0	20.68	20.69	20.81				
3	16QAM	15	0	20.53	20.67	20.68				
3	84QAM	1	0	20.62	20.62	20.60	22.5	0		
3	84QAM	1	8	20.62	20					



Band 38 Ant5 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.08	21.17	21.26	22.5	0		
20	QPSK	1	49	21.10	21.07	21.03				
20	QPSK	50	0	21.14	21.15	21.16				
20	QPSK	50	24	21.00	20.92	20.97	22.5	0		
20	16QAM	1	0	20.99	21.02	21.05	22.5	0		
20	16QAM	1	49	21.08	21.12	21.11				
20	16QAM	1	99	20.97	20.95	20.93				
20	16QAM	50	0	21.21	21.17	21.11	22.5	0		
20	16QAM	50	24	21.08	21.16	21.17				
20	16QAM	50	50	21.24	21.13	21.06	22.5	0		
20	16QAM	100	0	21.01	21.14	21.15				
20	16QAM	100	49	21.04	21.28	21.01	22.5	0		
20	16QAM	100	99	21.07	21.03	21.07				
20	16QAM	50	0	20.20	20.25	20.10	21.5	1		
20	16QAM	50	24	20.26	20.14	20.16				
20	16QAM	50	50	20.24	20.13	20.04	21.5	1		
20	16QAM	100	0	20.20	20.10	20.13				
20	16QAM	100	49	18.08	18.18	18.11				
20	16QAM	100	99	18.14	18.10	18.02	19.5	3		
20	256QAM	1	0	18.19	18.30	18.13				
20	256QAM	50	0	17.99	18.07	17.96				
20	256QAM	50	24	18.22	18.08	18.00	19.5	3		
20	256QAM	50	50	18.11	18.02	18.02				
20	256QAM	100	0	18.22	18.13	18.04				
Channel										
Frequency (MHz)										
15	QPSK	1	0	20.77	20.95	21.25	22.5	0		
15	QPSK	1	37	20.94	20.86	20.84				
15	QPSK	1	74	21.03	21.06	20.96				
15	QPSK	1	49	20.98	20.87	20.89				
15	QPSK	36	20	20.89	20.77	20.86	22.5	0		
15	QPSK	36	39	20.87	20.82	20.84				
15	QPSK	75	0	20.92	20.77	20.91				
15	16QAM	1	0	20.82	20.85	20.89	22.5	0		
15	16QAM	1	37	21.03	21.02	21.04				
15	16QAM	1	74	20.79	20.80	20.75				
15	16QAM	36	0	21.23	20.95	20.96	22.5	0		
15	16QAM	36	39	21.22	21.00	21.14				
15	16QAM	36	59	21.06	21.01	20.94				
15	16QAM	75	0	21.03	20.91	21.09				
15	16QAM	75	49	20.94	21.14	21.22	22.5	0		
15	16QAM	1	37	21.04	21.23	20.91				
15	16QAM	1	74	20.94	20.99	20.96				
15	16QAM	36	0	20.90	20.21	20.96	21.5	1		
15	16QAM	36	20	20.85	20.11	20.14				
15	16QAM	36	39	20.88	20.98	20.98				
15	16QAM	75	0	20.21	19.98	20.04				
15	256QAM	1	0	17.97	18.08	18.01	19.5	3		
15	256QAM	1	37	18.03	18.03	18.02				
15	256QAM	1	74	18.12	18.13	18.09				
15	256QAM	36	0	18.01	18.16	17.76				
15	256QAM	36	20	18.24	18.09	18.09				
15	256QAM	36	39	17.97	17.86	17.84				
15	256QAM	75	0	18.12	18.01	18.00	19.5	3		
Channel										
Frequency (MHz)										
10	QPSK	1	0	20.98	21.02	21.06	22.5	0		
10	QPSK	1	25	20.99	21.09	21.00				
10	QPSK	1	49	21.08	21.11	20.92				
10	QPSK	1	74	21.01	20.96	20.81				
10	QPSK	25	12	21.01	20.89	20.92	22.5	0		
10	QPSK	25	25	20.84	20.74	20.82				
10	16QAM	1	0	20.83	20.81	20.86	22.5	0		
10	16QAM	1	0	20.99	20.99	20.84				
10	16QAM	1	25	20.89	21.10	21.06				
10	16QAM	1	49	20.96	20.73	20.89				
10	16QAM	25	0	21.13	21.15	20.98	22.5	0		
10	16QAM	25	12	21.26	21.11	21.17				
10	16QAM	25	25	21.03	21.02	20.93	22.5	0		
10	16QAM	50	0	21.00	20.93	21.14				
10	16QAM	50	0	20.88	21.17	21.11				
10	16QAM	1	25	20.89	21.26	20.94	22.5	0		
10	16QAM	1	49	20.99	20.97	20.95				
10	16QAM	25	0	20.12	20.14	19.04	21.5	1		
10	16QAM	25	12	20.19	20.11	20.00				
10	16QAM	25	25	20.00	20.08	19.96				
10	16QAM	50	0	20.13	20.07	20.04				
10	256QAM	1	0	17.97	17.99	17.91	19.5	3		
10	256QAM	1	25	17.91	17.99	17.98				
10	256QAM	1	49	18.16	18.06	17.97				
10	256QAM	25	0	17.82	18.10	17.72				
10	256QAM	25	12	18.01	18.03	17.94				
10	256QAM	25	25	18.05	17.92	17.90	19.5	3		
10	256QAM	50	0	18.19	18.01	18.08				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.08	20.97	20.74	22.5	0		
5	QPSK	1	19	21.01	21.00	20.90				
5	QPSK	1	24	21.03	20.89	20.99				
5	QPSK	12	0	20.99	20.84	20.86	22.5	0		
5	QPSK	12	7	20.94	20.73	20.84				
5	QPSK	12	19	20.83	20.70	20.81				
5	QPSK	25	0	20.98	20.89	20.89				
5	16QAM	1	0	21.01	20.83	20.89	22.5	0		
5	16QAM	1	12	20.98	20.92	21.10				
5	16QAM	1	24	20.86	20.70	20.76				
5	16QAM	12	0	21.02	21.05	20.95	22.5	0		
5	16QAM	12	7	21.11	21.05	21.17				
5	16QAM	12	19	21.22	21.00	20.96				
5	16QAM	25	0	21.12	20.92	21.05				
5	16QAM	1	0	20.91	21.22	21.03	22.5	0		
5	16QAM	1	12	20.90	21.16	20.81				
5	16QAM	1	24	20.90	21.05	21.00				
5	16QAM	12	0	20.11	20.13	20.07	21.5	1		
5	16QAM	12	7	20.00	20.11	19.95				
5	16QAM	12	19	20.14	20.10	19.92				
5	256QAM	1	0	17.92	18.20	17.95	19.5	3		
5	256QAM	1	12	17.99	18.10	17.90				
5	256QAM	1	24	18.18	18.14	18.06				
5	256QAM	12	0	17.89	18.16	17.73				
5	256QAM	12	7	18.10	17.85	17.85	19.5	3		
5	256QAM	12	19	18.09	17.95	17.83				
5	256QAM	25	0	18.12	17.94	18.01				

Band 41 Ant5 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.20	21.25	21.29	22.5	0		
20	QPSK	1	49	21.28	21.06	21.33	21.24	21.21		
20	QPSK	1	99	21.38	21.29	21.29	21.31	21.20		
20	QPSK	50	0	21.04	21.21	21.25	21.07	21.34		
20	QPSK	50	24	21.07	21.07	21.25	21.17	21.24	22.5	0
20	QPSK	50	49	21.30	21.25	21.08	21.34	21.03		
20	QPSK	100	0	21.28	21.13	21.34	21.19	21.24		
20	16QAM	1	0	21.01	20.95	21.91	21.11	21.15	22.5	0
20	16QAM	1	49	21.33	21.24	21.27	20.96	21.04		
20	16QAM	1	99	21.29	21.08	21.03	20.92	21.16		
20	16QAM	50	0	21.04	21.11	21.34	21.07	21.18	22.5	0
20	16QAM	50	24	21.07	21.00	21.23	21.05	21.15		
20	16QAM	50	50	21.32	21.17	21.20	21.11	21.08	22.5	0
20	16QAM	100	0	21.29	21.00	21.23	21.20	21.01		
20	16QAM	100	49	21.05	21.01	21.32	21.04	21.05		
20	16QAM	100	99	21.18	21.08	21.17	21.02	21.13	22.5	0
20	16QAM	50	0	20.32	20.18	20.25	20.05	20.07	21.5	1
20	16QAM	50	24	20.08	20.08	20.27	20.12	20.17		
20	16QAM	50	50	20.08	20.08	20.27	20.12	20.17		
20	16QAM	100	0	20.19	19.98	20.26	20.12	20.09	21.5	1
20	16QAM	100	49	18.13	18.14	18.30	18.09	18.19		
20	16QAM	100	99	18.18	18.02	18.28	18.25	18.32	19.5	3
20	256QAM	1	0	18.43	18.21	18.25	18.37	17.99		
20	256QAM	50	0	17.99	18.17	18.09	18.11	18.00		
20	256QAM	50	24	18.16	18.06	18.27	18.13	18.24	19.5	3
20	256QAM	50	50	18.32	18.19	18.00	18.31	18.06		
20	256QAM	100	0	18.32	18.13	18.04	18.34	18.04		
Channel										
Frequency (MHz)										
16	QPSK	1	0	20.25	21.23	21.23	20.13	20.13	22.5	0
16	QPSK	1	37	21.14	20.92	21.30	20.86	21.04		
16	QPSK	1	74	21.17	20.99	21.02	21.00	21.00		
16	QPSK	36	0	20.98	20.95	21.09	20.90	21.24	22.5	0
16	QPSK	36	20	20.99						



Band 42 Ant10 DSA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
Channel									
Frequency (MHz)	Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
20	QPSK	1	0	24.32	24.32	24.32	25.7	0	
20	QPSK	1	49	24.33	24.41	24.30			
20	QPSK	1	99	24.36	24.29	24.34			
20	QPSK	50	0	23.31	23.36	23.34	24.7	1	
20	QPSK	50	24	23.39	23.38	23.35			
20	QPSK	50	49	23.35	23.41	23.33			
20	QPSK	100	0	23.40	23.44	23.44			
20	QPSK	100	24	23.38	23.43	23.33			
20	HQAM	1	49	23.45	23.33	23.35	24.7	1	
20	HQAM	1	99	23.44	23.40	23.35			
20	HQAM	50	0	22.35	22.33	22.22			
20	HQAM	50	24	22.36	22.45	22.37	23.7	2	
20	HQAM	50	49	22.37	22.45	22.36			
20	HQAM	100	0	22.46	22.54	22.41			
20	HQAM	100	24	22.54	22.65	22.45			
20	HQAM	1	49	22.59	22.40	22.38	23.7	2	
20	HQAM	1	99	21.41	21.50	21.45			
20	HQAM	50	0	21.32	21.49	21.25			
20	HQAM	50	24	21.47	21.50	21.45			
20	HQAM	50	49	21.53	21.37	21.26	22.7	3	
20	HQAM	100	0	21.43	21.42	21.43			
20	HQAM	100	24	21.35	21.38	21.35			
20	ZSSM	1	49	19.19	19.25	19.09	20.7	5	
20	ZSSM	1	99	19.21	19.21	19.24			
20	ZSSM	50	0	19.25	19.23	19.27			
20	ZSSM	50	24	19.26	19.25	19.25			
20	ZSSM	50	49	19.19	19.22	19.21	20.7	5	
20	ZSSM	100	0	19.15	19.22	19.14			
Channel									
Frequency (MHz)	Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
15	QPSK	1	0	24.32	24.32	24.31	25.7	0	
15	QPSK	1	37	24.27	24.20	24.22			
15	QPSK	1	74	24.30	24.30	24.30			
15	QPSK	36	0	23.39	23.29	23.25	24.7	1	
15	QPSK	36	36	23.35	23.23	23.21			
15	QPSK	72	0	23.39	23.37	23.39			
15	QPSK	72	36	23.32	23.42	23.34			
15	HQAM	1	37	23.44	23.26	23.31	24.7	1	
15	HQAM	1	74	23.35	23.38	23.36			
15	HQAM	36	0	22.15	22.13	22.15			
15	HQAM	36	36	22.16	22.28	22.22	23.7	2	
15	HQAM	72	0	22.16	22.28	22.22			
15	HQAM	72	36	22.38	22.58	22.40			
15	HQAM	1	37	22.37	22.41	22.39	23.7	3	
15	HQAM	1	74	22.32	22.35	22.32			
15	HQAM	36	0	21.22	21.46	21.12			
15	HQAM	36	36	21.41	21.38	21.38	22.7	2	
15	HQAM	72	0	21.20	21.27	21.07			
15	HQAM	72	36	21.21	21.25	21.25			
15	ZSSM	1	0	19.14	19.13	19.03	20.7	5	
15	ZSSM	1	37	19.14	19.13	19.03			
15	ZSSM	1	74	19.04	19.20	19.22			
15	ZSSM	36	0	19.19	19.14	19.23			
15	ZSSM	36	36	19.02	19.21	19.21	20.7	5	
15	ZSSM	72	0	19.15	19.20	19.13			
15	ZSSM	72	36	19.15	19.20	19.13			
Channel									
Frequency (MHz)	Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
10	QPSK	1	0	24.35	24.45	24.48	25.7	0	
10	QPSK	1	25	24.16	24.21	24.26			
10	QPSK	1	49	24.16	24.22	24.33			
10	QPSK	25	0	23.18	23.24	23.11	24.7	1	
10	QPSK	25	25	23.20	23.24	23.20			
10	QPSK	25	49	23.01	23.29	23.21			
10	QPSK	50	0	23.25	23.43	23.30			
10	HQAM	1	0	23.18	23.48	23.50	24.7	1	
10	HQAM	1	49	23.38	23.34	23.35			
10	HQAM	25	0	22.18	22.24	22.17			
10	HQAM	25	25	22.15	22.34	22.27	23.7	2	
10	HQAM	50	0	22.28	22.44	22.29			
10	HQAM	50	25	22.54	22.62	22.48			
10	HQAM	1	49	22.29	22.21	22.26	23.7	2	
10	HQAM	25	0	21.21	21.34	21.17			
10	HQAM	25	25	21.20	21.29	21.09	22.7	3	
10	HQAM	50	0	21.00	21.26	21.26			
10	ZSSM	1	0	19.17	19.21	19.21	20.7	5	
10	ZSSM	1	25	19.20	19.20	19.24			
10	ZSSM	1	49	19.03	19.20	19.25			
10	ZSSM	25	0	19.21	19.20	19.21			
10	ZSSM	25	25	19.26	19.42	19.14	20.7	5	
10	ZSSM	50	0	19.15	19.17	19.05			
10	ZSSM	50	25	19.15	19.17	19.05			
Channel									
Frequency (MHz)	Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
5	QPSK	1	0	24.46	24.49	24.55	25.7	0	
5	QPSK	1	14	24.24	24.29	24.22			
5	QPSK	12	0	23.23	23.29	23.05	24.7	1	
5	QPSK	12	12	23.22	23.40	23.29			
5	QPSK	25	0	23.25	23.29	23.21			
5	QPSK	25	12	23.28	23.26	23.25			
5	HQAM	1	0	23.18	23.26	23.25	24.7	1	
5	HQAM	1	12	23.23	23.29	23.27			
5	HQAM	12	0	22.33	22.45	22.33	23.7	2	
5	HQAM	12	12	22.27	22.50	22.37			
5	HQAM	25	0	22.59	22.42	22.30			
5	HQAM	25	12	22.40	22.41	22.37			
5	HQAM	1	12	21.39	21.45	21.08	22.7	3	
5	HQAM	12	0	21.37	21.20	21.40			
5	HQAM	12	12	21.39	21.30	21.06			
5	HQAM	25	0	21.34	21.34	21.29			
5	HQAM	25	12	21.29	21.29	21.06			
5	ZSSM	1	14	19.23	19.19	19.17	20.7	5	
5	ZSSM	1	24	19.03	19.24	19.18			
5	ZSSM	12	0	19.23	19.22	19.29			
5	ZSSM	12	12	19.24	19.15	19.19	20.7	5	
5	ZSSM	25	0	19.14	19.27	19.13			

Band 48 Ant10 DSA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
Channel									
Frequency (MHz)	Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
20	QPSK	1	0	21.62	21.62	21.62	23	0	
20	QPSK	1	49	21.65	21.62	21.63			
20	QPSK	1	99	21.55	21.54	21.56			
20	QPSK	50	0	20.55	20.54	20.54	22	1	
20	QPSK	50	24	20.61	20.66	20.67			
20	QPSK	50	49	20.54	20.61	20.59			
20	QPSK	100	0	20.53	20.60	20.60			
20	QPSK	100	24	20.59	20.71	20.61			
20	HQAM	1	49	20.55	20.54	20.70	22	1	
20	HQAM	1	99	20.52	20.54	20.60			
20	HQAM	50	0	19.54	19.67	19.65			
20	HQAM	50	24	19.71	19.72	19.75	21	2	
20	HQAM	50	49	19.65	19.61	19.58			
20	HQAM	100	0	19.55	19.70	19.69	19.44		
20	HQAM	100	24	19.37	19.70	19.59			
20	HQAM	1	49	19.51	19.60	19.69	21	2	
20	HQAM	1	99	19.52	19.45	19.27			
20	HQAM	50	0	18.59	18.59	18.57	18.81		
20	HQAM	50	24	18.52	18.58	18.52			
20	HQAM	50	49	18.38	18.52	18.45	20	3	
20	HQAM	100	0	18.50	18.71	18.66	18.48		
20	HQAM	100	24	18.59	18.68	18.59			
20	ZSSM	1	49	18.75	18.71	18.71	18.53	18	5
20	ZSSM	1	99	18.51	18.66	18.56			
20	ZSSM	50	0	18.49	18.65	18.57	18.43		
20	ZSSM	50	24	18.52	18.64	18.52			
20	ZSSM	50	49	18.44	18.57	18.55	18.53	18	5
20	ZSSM	100	0	18.56	18.62	18.62	18.41		
20	ZSSM								



Band 42 Ant11 DS4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
0	0	0	0	3495	3500	3540			
20	QPSK	1	0	20.82	20.85	20.92	22.5	0	
20	QPSK	1	49	20.82	20.78	20.71			
20	QPSK	1	99	20.80	20.74	20.70			
20	QPSK	50	24	19.15	19.77	19.71	21.5	1	
20	QPSK	50	50	19.52	19.81	19.87			
20	QPSK	100	0	19.79	19.80	19.77			
20	HQAM	1	0	19.71	19.81	19.71	21.5	1	
20	HQAM	1	49	19.80	19.73	19.64			
20	HQAM	1	99	19.81	19.80	19.72			
20	HQAM	50	0	18.64	18.63	18.62	20.5	2	
20	HQAM	50	24	18.76	18.78	18.80			
20	HQAM	50	50	18.82	18.78	18.82			
20	HQAM	100	0	18.83	18.87	18.79			
20	HQAM	1	0	18.85	18.80	18.77	20.5	2	
20	HQAM	1	49	18.73	18.77	18.71			
20	HQAM	1	99	18.72	18.68	18.74			
20	HQAM	50	0	17.89	17.84	17.74	19.5	3	
20	HQAM	50	24	17.85	17.80	17.73			
20	HQAM	50	50	17.55	17.59	17.62			
20	HQAM	100	0	17.73	17.76	17.77			
20	JSSAM	1	0	15.85	15.80	15.83	17.5	5	
20	JSSAM	1	49	15.83	15.69	15.83			
20	JSSAM	1	99	15.84	15.80	15.79			
20	JSSAM	50	0	15.83	15.69	15.68	17.5	5	
20	JSSAM	50	24	15.83	15.69	15.69			
20	JSSAM	50	50	15.83	15.72	15.80			
20	JSSAM	100	0	15.84	15.80	15.81			
Channel									
Frequency (MHz)									
15	QPSK	1	0	20.82	20.85	20.92	22.5	0	
15	QPSK	1	27	20.82	20.83	20.72			
15	QPSK	1	54	20.81	20.80	20.72			
15	QPSK	36	0	19.78	19.83	19.66	21.5	1	
15	QPSK	36	36	19.62	19.73	19.69			
15	QPSK	75	0	19.79	19.85	19.79			
15	HQAM	1	0	19.72	19.80	19.64	21.5	1	
15	HQAM	1	27	19.81	19.79	19.72			
15	HQAM	1	54	19.72	19.81	19.72			
15	HQAM	36	0	18.64	18.63	18.64	20.5	2	
15	HQAM	36	36	18.66	18.73	18.75			
15	HQAM	1	0	18.67	18.67	18.83			
15	HQAM	1	27	18.70	18.64	18.72	20.5	2	
15	HQAM	1	54	18.65	18.64	18.74			
15	HQAM	36	0	17.75	17.91	17.82	19.5	3	
15	HQAM	36	36	17.85	17.82	17.87			
15	HQAM	36	54	17.89	17.80	17.87			
15	JSSAM	1	0	15.82	15.73	15.59	17.5	5	
15	JSSAM	1	27	15.82	15.74	15.69			
15	JSSAM	1	54	15.84	15.68	15.68			
15	JSSAM	36	0	15.84	15.68	15.68	17.5	5	
15	JSSAM	36	36	15.83	15.60	15.64			
15	JSSAM	36	54	15.83	15.60	15.61			
Channel									
Frequency (MHz)									
10	QPSK	1	0	20.85	20.84	20.85	22.5	0	
10	QPSK	1	25	20.80	20.80	20.78			
10	QPSK	1	49	20.85	20.86	20.74			
10	QPSK	25	0	19.69	19.83	19.83	21.5	1	
10	QPSK	25	25	19.69	19.87	19.73			
10	QPSK	50	0	19.83	19.72	19.85			
10	HQAM	1	0	19.75	19.81	20.05	21.5	1	
10	HQAM	1	49	19.72	19.78	19.77			
10	HQAM	1	99	19.72	19.84	19.79			
10	HQAM	25	0	18.72	18.86	18.96	20.5	2	
10	HQAM	25	12	18.62	18.80	18.71			
10	HQAM	25	25	18.63	18.80	18.71			
10	HQAM	50	0	18.89	18.80	19.77			
10	HQAM	1	0	18.91	19.07	19.80	20.5	2	
10	HQAM	1	25	18.71	18.82	18.79			
10	HQAM	1	49	18.71	18.78	18.72			
10	HQAM	25	0	17.89	17.82	17.82	19.5	3	
10	HQAM	25	12	17.89	17.87	17.76			
10	HQAM	25	25	17.80	17.71	17.80			
10	HQAM	50	0	17.73	17.76	17.82			
10	JSSAM	1	0	15.82	15.62	15.59	17.5	5	
10	JSSAM	1	25	15.84	15.72	15.70			
10	JSSAM	1	49	15.82	15.69	15.87			
10	JSSAM	25	0	15.81	15.67	15.72	17.5	5	
10	JSSAM	25	12	15.84	15.62	15.72			
10	JSSAM	25	25	15.83	15.60	15.64			
10	JSSAM	50	0	15.71	15.75	15.84			
Channel									
Frequency (MHz)									
5	QPSK	1	0	20.85	20.73	20.82	22.5	0	
5	QPSK	1	24	20.87	20.73	20.77			
5	QPSK	12	0	19.89	19.81	19.60	21.5	1	
5	QPSK	12	7	19.69	19.88	19.78			
5	QPSK	25	0	19.82	19.76	19.86			
5	QPSK	25	12	19.78	19.87	20.00	21.5	1	
5	HQAM	1	0	19.76	19.87	19.87			
5	HQAM	1	24	19.70	19.89	19.81	21.5	1	
5	HQAM	12	0	18.85	18.65	18.60	20.5	2	
5	HQAM	12	7	18.74	18.77	18.71			
5	HQAM	25	0	18.80	18.80	18.80			
5	HQAM	1	0	18.80	18.60	18.77	20.5	2	
5	HQAM	1	12	18.74	18.70	18.72			
5	HQAM	1	24	18.79	18.89	18.79			
5	HQAM	12	0	17.74	17.87	17.80	19.5	3	
5	HQAM	12	7	17.85	17.72	17.72			
5	HQAM	25	0	17.89	17.78	17.84			
5	JSSAM	1	0	15.84	15.69	15.69	17.5	5	
5	JSSAM	1	24	15.80	15.62	15.86			
5	JSSAM	12	0	15.87	15.60	15.84			
5	JSSAM	12	7	15.80	15.70	15.83	17.5	5	
5	JSSAM	12	21	15.83	15.60	15.69			
5	JSSAM	25	0	15.89	15.60	15.69			

Band 48 Ant11 DS4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
0	0	0	0	3660	3600	3641			
20	QPSK	1	0	36.50	36.60	36.60	20	0	
20	QPSK	1	49	36.30	36.45	36.30			
20	QPSK	1	99	36.20	36.20	36.40			
20	QPSK	50	24	34.25	34.25	34.25	19	1	
20	QPSK	50	50	34.25	34.25	34.25			
20	QPSK	100	0	34.27	34.25	34.25			
20	HQAM	1	0	34.24	34.25	34.25	19	1	
20	HQAM	1	49	34.14	34.20	34.24			
20	HQAM	1	99	34.14	34.20	34.24			
20	HQAM	50	0	34.03	34.23	34.14	18	2	
20	HQAM	50	24	34.28	34.20	34.20			
20	HQAM	50	50	34.25	34.25	34.25			
20	HQAM	100	0	34.14	34.12	34.15	18	2	
20	HQAM	1	0	34.24	34.28	34.28			
20	HQAM	1	49	34.05	34.15	34.20	18	2	
20	HQAM	1	99	34.11	34.16	34.21			
20	HQAM	50	0	34.09	34.15	34.14	17	3	
20	HQAM	50	24	34.24	34.20	34.20			
20	HQAM	50	50	34.25	34.25	34.25			
20	HQAM	100	0	34.07	34.22	34.21			
20	JSSAM	1	0	33.24	33.38	33.38	15	5	
20	JSSAM	1	49	33.25	33.38	33.45			
20	JSSAM	1	99	33.29	33.38	33.37			
20	JSSAM	50	0	33.19	33.36	33.21	15	5	
20	JSSAM	50	24	33.19	33.36	33.21			
20	JSSAM	50	50	33.15	33.33	33.33			
20	JSSAM	100	0	33.24	33.29	33.41			
Channel									
Frequency (MHz)									
15	QPSK	1	0	36.50	36.40	36.40	20	0	
15	QPSK	1	27	36.38	36.39	36.38			
15	QPSK	1	54	36.33	36.42	36.39			
15	QPSK	36	0	34.16	34.24	34.28	19	1	
15	QPSK	36	36	34.14	34.28	34.28			
15	QPSK	75	0	34.05	34.12	34.32			
15	HQAM	1	0	34.13	34.18	34.18	19	1	
15	HQAM	1	27	34.03	34.15	34.28			
15	HQAM	1	54	34.22	34.25	34.29			
15	HQAM	36	0	34.03	34.32	34.29	18	2	
15	HQAM	36	36	34.10	34.30	34.21			
15	HQAM	36	54	34.10	34.38	34.29			
15	HQAM	75	0	34.13	34.30	34.18			
15	HQAM	1	0	34.22	34.30	34.14	18	2	
15	HQAM	1	27	34.13	34.30	34.18			
15	HQAM	1	54	34.28	34.30	34.31			
15	HQAM	36	0	34.12	34.11	34.10	17	3	
15	HQAM	36	27	34.03	34.28	34.29			
15	HQAM	36	54	34.21	34.24	34.16			
15	HQAM	75	0	34.15	34.15	34.15			
Channel									
Frequency (MHz)									
10	QPSK	1	0	36.50	36.60	36.60	20	0	
10	QPSK	1	25	36.30	36.25	36.25			
10	QPSK	1	49	36.34	36.30	36.30			
10	QPSK	25	0	34.13	34.20	34.18	17	0	
10	QPSK	25	12	34.25	34.24	34.29			



Band 42 Ant12 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Start Freq (MHz)	End Freq (MHz)	Channel BW (MHz)	Subcarrier Spacing (kHz)	Guard Band (MHz)	Time-slot	MFR (dB)
Channel										
Frequency (MHz)				42150	42600	450	1500	0		
20	QPSK	1	0	21.30	21.45	21.42			23	0
20	QPSK	1	49	21.13	21.27	21.23				
20	QPSK	1	99	21.00	21.12	21.06				
20	QPSK	50	0	20.26	20.38	20.20			22	1
20	QPSK	50	24	20.29	20.25	20.20				
20	QPSK	50	0	20.16	20.16	20.16				
20	QPSK	100	0	20.27	20.37	20.33				
20	HQAM	1	0	20.30	20.42	20.55			22	1
20	HQAM	1	49	20.26	20.26	20.17				
20	HQAM	1	99	20.26	20.31	20.30				
20	HQAM	50	0	19.22	19.16	19.14			21	2
20	HQAM	50	24	19.32	19.28	19.15				
20	HQAM	50	0	19.14	19.23	19.27				
20	HQAM	100	0	19.33	19.45	19.28				
20	HQAM	1	0	19.37	19.44	19.28			21	2
20	HQAM	1	49	19.36	19.36	19.30				
20	HQAM	1	99	19.24	19.32	19.25				
20	HQAM	50	0	18.20	18.38	18.08			20	3
20	HQAM	50	24	18.33	18.10	18.24				
20	HQAM	50	0	18.08	18.27	18.15				
20	HQAM	100	0	18.28	18.24	18.31				
20	ZSSBAM	1	0	18.06	18.33	18.18			18	5
20	ZSSBAM	1	49	18.05	18.20	18.00				
20	ZSSBAM	1	99	18.13	18.17	18.14				
20	ZSSBAM	50	0	18.15	18.17	18.06				
20	ZSSBAM	50	24	18.28	18.26	18.16				
20	ZSSBAM	50	0	18.04	18.28	18.13			18	5
20	ZSSBAM	100	0	18.08	18.10	18.00				
Channel										
Frequency (MHz)				3457.5	3500	3424.5				
15	QPSK	1	0	21.15	21.37	21.30			23	0
15	QPSK	1	27	21.03	21.26	21.07				
15	QPSK	1	44	21.03	21.12	21.07				
15	QPSK	36	0	20.11	20.14	20.03			22	1
15	QPSK	36	20	20.13	20.27	20.13				
15	QPSK	36	39	20.13	20.23	20.22				
15	QPSK	75	0	20.15	20.24	20.22				
15	HQAM	1	0	20.19	20.26	20.40			22	1
15	HQAM	1	37	20.20	20.26	20.20				
15	HQAM	1	74	20.12	20.18	20.21				
15	HQAM	36	0	19.12	19.09	19.01			21	2
15	HQAM	36	20	19.24	19.14	19.04				
15	HQAM	36	39	19.18	19.17	19.14				
15	HQAM	75	0	19.25	19.28	19.16				
15	HQAM	1	0	19.22	19.31	19.09			21	2
15	HQAM	1	37	19.18	19.23	19.18				
15	HQAM	1	74	19.13	19.14	19.11				
15	HQAM	36	0	18.03	18.20	18.21			20	3
15	HQAM	36	20	18.19	18.21	18.18				
15	HQAM	36	39	18.20	18.17	18.02				
15	HQAM	75	0	18.19	18.12	18.23				
15	ZSSBAM	1	0	18.02	18.44	18.26			18	5
15	ZSSBAM	1	49	18.17	18.10	18.15				
15	ZSSBAM	1	99	18.27	18.06	18.23				
15	ZSSBAM	36	0	18.27	18.22	18.23			18	5
15	ZSSBAM	36	20	18.25	18.26	18.22				
15	ZSSBAM	36	39	18.12	18.37	18.23				
15	ZSSBAM	75	0	18.19	18.27	18.18				
Channel										
Frequency (MHz)				3457.5	3500	3424.5				
10	QPSK	1	0	21.20	21.38	21.35			23	0
10	QPSK	1	29	21.26	21.26	21.17				
10	QPSK	1	49	21.34	21.10	21.05				
10	QPSK	25	0	20.34	20.11	20.10			22	1
10	QPSK	25	12	20.38	20.25	20.11				
10	QPSK	25	25	20.17	20.06	20.03				
10	QPSK	50	0	20.40	20.33	20.18				
10	HQAM	1	0	20.44	20.34	20.40			22	1
10	HQAM	1	49	20.45	20.20	20.19				
10	HQAM	25	0	19.40	19.23	19.32			21	2
10	HQAM	25	12	19.40	19.26	19.26				
10	HQAM	25	25	19.24	19.42	19.45				
10	HQAM	50	0	19.44	19.62	19.40				
10	HQAM	1	0	19.49	19.51	19.42			21	2
10	HQAM	1	25	19.49	19.50	19.38				
10	HQAM	1	49	19.40	19.40	19.33				
10	HQAM	25	0	18.34	18.52	18.16			20	3
10	HQAM	25	12	18.49	18.21	18.37				
10	HQAM	25	25	18.25	18.30	18.30				
10	HQAM	50	0	18.37	18.52	18.45				
10	ZSSBAM	1	0	18.01	18.44	18.23			18	5
10	ZSSBAM	1	25	18.52	18.34	18.11				
10	ZSSBAM	1	49	18.22	18.05	18.26				
10	ZSSBAM	25	0	18.22	18.25	18.14			18	5
10	ZSSBAM	25	12	18.29	18.27	18.24				
10	ZSSBAM	25	25	18.19	18.38	18.31				
10	ZSSBAM	50	0	18.17	18.25	18.13				
Channel										
Frequency (MHz)				3457.5	3500	3424.5				
5	QPSK	1	0	21.13	21.33	21.30			23	0
5	QPSK	1	12	21.31	21.10	21.07				
5	QPSK	1	34	21.28	21.04	21.14				
5	QPSK	12	0	20.42	20.17	20.10			22	1
5	QPSK	12	7	20.43	20.20	20.11				
5	QPSK	12	13	20.20	20.09	20.08				
5	QPSK	25	0	20.40	20.27	20.18				
5	HQAM	1	0	20.41	20.32	20.43			22	1
5	HQAM	1	32	20.34	20.14	20.41				
5	HQAM	12	0	19.29	19.10	19.03			21	2
5	HQAM	12	7	19.41	19.15	19.08				
5	HQAM	12	13	19.24	19.18	19.14				
5	HQAM	25	0	19.52	19.38	19.21				
5	HQAM	1	0	19.51	19.25	19.12			21	2
5	HQAM	1	12	19.49	19.18	19.11				
5	HQAM	1	24	19.34	19.23	19.18				
5	HQAM	12	0	18.38	18.57	18.20			20	3
5	HQAM	12	7	18.43	18.21	18.34				
5	HQAM	12	13	18.16	18.39	18.32				
5	HQAM	25	0	18.41	18.42	18.42				
5	ZSSBAM	1	0	18.14	18.46	18.34			18	5
5	ZSSBAM	1	12	18.20	18.23	18.15				
5	ZSSBAM	1	24	18.25	18.09	18.29				
5	ZSSBAM	12	0	18.36	18.15	18.26			18	5
5	ZSSBAM	12	7	18.59	18.35	18.31				
5	ZSSBAM	12	13	18.17	18.38	18.30				
5	ZSSBAM	25	0	18.17	18.20	18.08				

Band 48 Ant12 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Start Freq (MHz)	End Freq (MHz)	Channel BW (MHz)	Subcarrier Spacing (kHz)	Guard Band (MHz)	Time-slot	MFR (dB)
Channel										
Frequency (MHz)				3500	3600	3600	1500	0		
20	QPSK	1	0	18.69	18.72	18.65			20.5	0
20	QPSK	1	49	18.75	18.72	18.63				
20	QPSK	1	99	18.86	18.78	18.74				
20	QPSK	50	0	17.79	17.88	17.90			19.5	1
20	QPSK	50	24	17.86	17.81	17.84				
20	QPSK	50	0	17.78	17.85	17.87				
20	QPSK	100	0	17.74	17.79	17.83				
20	HQAM	1	0	17.78	17.88	17.82			19.5	1
20	HQAM	1	49	17.76	17.86	17.82				
20	HQAM	1	99	17.86	17.89	17.90				
20	HQAM	50	0	16.75	16.96	16.96			18.5	2
20	HQAM	50	24	17.00	16.90	16.87				
20	HQAM	50	0	16.80	16.80	17.03				
20	HQAM	100	0	16.75	16.79	16.81				



Band 42 Ant13 DS4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
0	QPSK	1	0	24.00	24.00	24.00	25.7	0	
0	QPSK	1	49	24.04	24.04	24.11			
0	QPSK	1	99	24.08	24.10	24.10			
0	QPSK	50	0	22.90	23.10	23.90	24.7	1	
0	QPSK	50	24	22.99	23.09	23.98			
0	QPSK	50	49	22.97	22.98	23.92			
0	QPSK	100	0	22.84	23.00	23.95			
0	QPSK	100	24	22.95	23.00	23.92			
0	QPSK	100	49	22.98	22.97	23.10	24.7	1	
0	QPSK	100	74	22.94	22.95	23.90			
0	QPSK	100	99	22.96	22.96	23.85			
0	QPSK	50	0	21.00	21.00	21.03	23.7	2	
0	QPSK	50	24	21.00	21.00	21.00			
0	QPSK	50	49	21.00	21.00	21.00			
0	QPSK	100	0	22.05	22.00	22.05			
0	QPSK	100	24	22.00	22.10	21.99			
0	QPSK	100	49	22.07	22.00	21.98	23.7	2	
0	QPSK	100	74	22.00	22.00	21.99			
0	QPSK	50	0	20.91	21.12	20.84	22.7	3	
0	QPSK	50	24	20.91	20.90	20.88			
0	QPSK	50	49	20.85	21.04	20.83			
0	QPSK	100	0	21.07	21.02	21.08			
0	QPSK	100	24	21.00	21.00	21.00			
0	QPSK	100	49	21.05	21.02	21.05	20.7	5	
0	QPSK	100	74	21.00	21.00	21.00			
0	QPSK	100	99	21.00	21.00	21.00			
0	QPSK	50	0	18.82	19.07	18.81	20.7	5	
0	QPSK	50	24	18.85	18.82	18.87			
0	QPSK	50	49	18.82	19.07	18.81			
0	QPSK	100	0	18.85	18.82	18.87			
0	QPSK	100	24	18.81	18.82	18.82			
0	QPSK	100	49	18.81	18.82	18.82			
0	QPSK	100	74	18.81	18.82	18.82			
0	QPSK	100	99	18.81	18.82	18.82			
Channel									
Frequency (MHz)									
0	QPSK	1	0	24.12	24.20	24.24	25.7	0	
0	QPSK	1	24	23.97	24.21	24.01			
0	QPSK	1	49	24.00	24.00	24.00			
0	QPSK	36	0	22.82	22.85	22.81	24.7	1	
0	QPSK	36	24	22.82	22.85	22.81			
0	QPSK	36	49	22.84	22.85	22.78			
0	QPSK	75	0	22.84	22.85	22.81	24.7	1	
0	QPSK	75	24	22.82	22.85	22.82			
0	QPSK	75	49	22.82	22.85	22.82			
0	QPSK	144	0	21.73	21.78	21.70	23.7	2	
0	QPSK	144	24	21.72	21.80	21.84			
0	QPSK	144	49	21.74	21.78	21.70			
0	QPSK	144	74	21.74	21.78	21.70	22.7	3	
0	QPSK	144	99	21.74	21.78	21.70			
0	QPSK	288	0	21.16	21.20	21.21	20.7	5	
0	QPSK	288	24	21.16	21.20	21.21			
0	QPSK	288	49	21.16	21.20	21.21			
0	QPSK	288	74	21.16	21.20	21.21			
0	QPSK	288	99	21.16	21.20	21.21			
0	QPSK	576	0	19.01	19.31	19.18	20.7	5	
0	QPSK	576	24	19.14	19.30	19.05			
0	QPSK	576	49	19.20	19.33	19.04			
0	QPSK	576	74	19.26	19.30	19.18			
0	QPSK	576	99	19.00	19.28	19.10			
0	QPSK	576	124	19.21	19.27	19.16			
Channel									
Frequency (MHz)									
0	QPSK	1	0	24.05	24.21	24.21	25.7	0	
0	QPSK	1	25	23.97	24.16	24.10			
0	QPSK	1	49	24.00	24.00	24.00			
0	QPSK	25	0	22.84	22.97	22.84	24.7	1	
0	QPSK	25	25	22.81	22.95	22.84			
0	QPSK	50	0	22.87	22.85	22.83	24.7	1	
0	QPSK	50	24	22.87	22.85	22.83			
0	QPSK	50	49	22.84	22.85	22.84			
0	QPSK	100	0	21.16	21.16	21.16	23.7	2	
0	QPSK	100	24	21.16	21.16	21.16			
0	QPSK	100	49	21.16	21.16	21.16			
0	QPSK	200	0	21.06	21.06	21.06	22.7	2	
0	QPSK	200	24	21.06	21.06	21.06			
0	QPSK	200	49	21.06	21.06	21.06			
0	QPSK	400	0	21.00	21.00	21.00	22.7	3	
0	QPSK	400	24	21.00	21.00	21.00			
0	QPSK	400	49	21.00	21.00	21.00			
0	QPSK	800	0	18.98	19.28	19.15	20.7	5	
0	QPSK	800	24	19.00	19.25	19.00			
0	QPSK	800	49	18.98	19.07	19.14			
0	QPSK	800	74	19.00	19.25	19.00			
0	QPSK	800	99	18.92	19.14	19.13	20.7	5	
0	QPSK	800	124	19.00	19.25	19.04			
0	QPSK	800	149	18.95	19.25	19.04			
Channel									
Frequency (MHz)									
0	QPSK	1	0	24.10	24.23	24.19	25.7	0	
0	QPSK	1	14	23.92	24.20	23.97			
0	QPSK	12	0	22.86	22.82	22.82	24.7	1	
0	QPSK	12	10	22.85	22.85	22.85			
0	QPSK	12	24	22.85	22.85	22.85			
0	QPSK	24	0	22.89	22.74	22.15	24.7	1	
0	QPSK	24	12	22.91	22.85	22.88			
0	QPSK	48	0	22.87	22.89	22.83	23.7	2	
0	QPSK	48	12	22.13	21.85	21.88			
0	QPSK	48	24	22.13	21.85	21.88			
0	QPSK	96	0	22.02	22.12	21.99	23.7	2	
0	QPSK	96	12	22.02	22.12	21.99			
0	QPSK	192	0	21.84	22.00	21.97	22.7	3	
0	QPSK	192	12	21.12	21.32	21.13			
0	QPSK	192	24	21.00	20.80	21.27			
0	QPSK	384	0	21.28	21.23	21.26	20.7	5	
0	QPSK	384	12	19.00	19.04	19.05			
0	QPSK	384	24	19.00	19.04	19.05			
0	QPSK	384	36	19.00	19.04	19.05			
0	QPSK	384	48	19.00	19.04	19.05			
0	QPSK	384	60	19.00	19.04	19.05			
0	QPSK	384	72	19.00	19.04	19.05			
0	QPSK	384	84	19.00	19.04	19.05			
0	QPSK	384	96	19.00	19.04	19.05			
0	QPSK	384	108	19.00	19.04	19.05			
0	QPSK	384	120	19.00	19.04	19.05			
0	QPSK	384	132	19.00	19.04	19.05			
0	QPSK	384	144	19.00	19.04	19.05			
0	QPSK	384	156	19.00	19.04	19.05			
0	QPSK	384	168	19.00	19.04	19.05			
0	QPSK	384	180	19.00	19.04	19.05			
0	QPSK	384	192	19.00	19.04	19.05			
0	QPSK	384	204	19.00	19.04	19.05			
0	QPSK	384	216	19.00	19.04	19.05			
0	QPSK	384	228	19.00	19.04	19.05			
0	QPSK	384	240	19.00	19.04	19.05			
0	QPSK	384	252	19.00	19.04	19.05			
0	QPSK	384	264	19.00	19.04	19.05			
0	QPSK	384	276	19.00	19.04	19.05			
0	QPSK	384	288	19.00	19.04	19.05			
0	QPSK	384	300	19.00	19.04	19.05			
0	QPSK	384	312	19.00	19.04	19.05			
0	QPSK	384	324	19.00	19.04	19.05			
0	QPSK	384	336	19.00	19.04	19.05			
0	QPSK	384	348	19.00	19.04	19.05			
0	QPSK	384	360	19.00	19.04	19.05			
0	QPSK	384	372	19.00	19.04	19.05			
0	QPSK	384	384	19.00	19.04	19.05			

Band 48 Ant13 DS4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Int. (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
0	QPSK	1	0	22.22	22.24	22.15	24	0	
0	QPSK	1	49	22.21					



GIMMO A40 DBS

GIMMO	Best Average Power (dBm)			Lincap LPA	Frame-Average Power (dBm)			Tune-Up LPA
	128	188	261		128	188	261	
TX Channel	128	188	261	LPA	128	188	261	LPA
Poweramp (dBm)	30.2	30.8	31.8	(dBm)	30.2	30.8	31.8	(dBm)
CRM 1 Tx Watt	32.20	32.19	32.17	33.00	33.20	33.19	33.17	34.00
CRM 1 Tx Watt	33.15	32.00	32.11	33.00	33.15	32.00	33.11	34.00
CRM 2 Tx Watt	29.44	29.30	29.14	30.00	29.44	29.30	29.14	30.00
CRM 3 Tx Watt	27.04	27.43	27.33	28.00	27.78	28.15	28.07	28.24
CRM 4 Tx Watt	26.92	26.81	26.70	27.00	27.82	27.88	27.79	28.00
EDGE 1 Tx Watt	28.05	28.11	28.03	28.00	27.05	27.11	27.03	28.00
EDGE 2 Tx Watt	25.23	25.11	25.19	24.00	25.23	25.11	25.19	26.00
EDGE 3 Tx Watt	21.55	21.28	21.35	21.00	21.29	21.00	21.09	21.74
EDGE 4 Tx Watt	20.10	19.82	19.89	21.00	17.19	16.82	16.89	18.00

WCDMA V A40 DBS

Best	WCDMA V			Tune-Up
	4192	4180	4233	
TX Channel	4192	4180	4233	Lincap
Rx Channel	4307	4407	4468	LPA
Poweramp (Watt)	80.4	80.8	80.0	(dBm)
SOPF Rate	AMR 12.2kbps	23.88	23.00	23.80
SOPF Rate	AMR 12.2kbps	23.92	23.00	23.80
SOPF Rate	HS-PA Subclass 1	22.07	22.00	22.78
SOPF Rate	HS-PA Subclass 2	22.01	22.80	22.83
SOPF Rate	HS-PA Subclass 3	22.43	22.30	22.21
SOPF Rate	HS-PA Subclass 4	22.29	22.40	22.42
SOPF Rate	DC-HSPA Subclass 1	22.90	22.81	22.81
SOPF Rate	DC-HSPA Subclass 2	22.99	22.91	22.82
SOPF Rate	DC-HSPA Subclass 3	22.40	22.40	22.30
SOPF Rate	DC-HSPA Subclass 4	22.39	22.47	22.36
SOPF Rate	HS-PA Subclass 1	22.96	22.85	22.80
SOPF Rate	HS-PA Subclass 2	23.06	21.02	20.92
SOPF Rate	HS-PA Subclass 3	21.92	21.87	21.84
SOPF Rate	HS-PA Subclass 4	20.91	20.81	20.76
SOPF Rate	HS-PA Subclass 5	22.51	22.07	22.84



Band 4 AnD DSIS											
SRV (MHz)	Multiplex	FE Size	FE Ch. Offset	Power Low (W)	Power Mid (W)	Power High (W)	Turn-on (min)	Turn-off (min)	LPIS (dB)	LPIS (dB)	LPIS (dB)
Channel											
20	QPSK	1	0	21.91	21.91	21.92					
20	QPSK	1	48	21.96	21.96	21.97			23	0	
20	QPSK	1	96	22.01	22.01	22.02					
20	QPSK	32	0	20.29	20.29	20.30					
20	QPSK	32	24	20.32	20.32	20.33			22	1	
20	QPSK	32	48	20.35	20.35	20.36					
20	QPSK	32	72	20.38	20.38	20.39					
20	QPSK	32	96	20.41	20.41	20.42					
20	QPSK	32	120	20.44	20.44	20.45					
20	QPSK	32	144	20.47	20.47	20.48					
20	QPSK	32	168	20.50	20.50	20.51					
20	QPSK	32	192	20.53	20.53	20.54					
20	QPSK	32	216	20.56	20.56	20.57					
20	QPSK	32	240	20.59	20.59	20.60					
20	QPSK	32	264	20.62	20.62	20.63					
20	QPSK	32	288	20.65	20.65	20.66					
20	QPSK	32	312	20.68	20.68	20.69					
20	QPSK	32	336	20.71	20.71	20.72					
20	QPSK	32	360	20.74	20.74	20.75					
20	QPSK	32	384	20.77	20.77	20.78					
20	QPSK	32	408	20.80	20.80	20.81					
20	QPSK	32	432	20.83	20.83	20.84					
20	QPSK	32	456	20.86	20.86	20.87					
20	QPSK	32	480	20.89	20.89	20.90					
20	QPSK	32	504	20.92	20.92	20.93					
20	QPSK	32	528	20.95	20.95	20.96					
20	QPSK	32	552	20.98	20.98	20.99					
20	QPSK	32	576	21.01	21.01	21.02					
20	QPSK	32	600	21.04	21.04	21.05					
20	QPSK	32	624	21.07	21.07	21.08					
20	QPSK	32	648	21.10	21.10	21.11					
20	QPSK	32	672	21.13	21.13	21.14					
20	QPSK	32	696	21.16	21.16	21.17					
20	QPSK	32	720	21.19	21.19	21.20					
20	QPSK	32	744	21.22	21.22	21.23					
20	QPSK	32	768	21.25	21.25	21.26					
20	QPSK	32	792	21.28	21.28	21.29					
20	QPSK	32	816	21.31	21.31	21.32					
20	QPSK	32	840	21.34	21.34	21.35					
20	QPSK	32	864	21.37	21.37	21.38					
20	QPSK	32	888	21.40	21.40	21.41					
20	QPSK	32	912	21.43	21.43	21.44					
20	QPSK	32	936	21.46	21.46	21.47					
20	QPSK	32	960	21.49	21.49	21.50					
20	QPSK	32	984	21.52	21.52	21.53					
20	QPSK	32	1008	21.55	21.55	21.56					
20	QPSK	32	1032	21.58	21.58	21.59					
20	QPSK	32	1056	21.61	21.61	21.62					
20	QPSK	32	1080	21.64	21.64	21.65					
20	QPSK	32	1104	21.67	21.67	21.68					
20	QPSK	32	1128	21.70	21.70	21.71					
20	QPSK	32	1152	21.73	21.73	21.74					
20	QPSK	32	1176	21.76	21.76	21.77					
20	QPSK	32	1200	21.79	21.79	21.80					
20	QPSK	32	1224	21.82	21.82	21.83					
20	QPSK	32	1248	21.85	21.85	21.86					
20	QPSK	32	1272	21.88	21.88	21.89					
20	QPSK	32	1296	21.91	21.91	21.92					
20	QPSK	32	1320	21.94	21.94	21.95					
20	QPSK	32	1344	21.97	21.97	21.98					
20	QPSK	32	1368	22.00	22.00	22.01					
20	QPSK	32	1392	22.03	22.03	22.04					
20	QPSK	32	1416	22.06	22.06	22.07					
20	QPSK	32	1440	22.09	22.09	22.10					
20	QPSK	32	1464	22.12	22.12	22.13					
20	QPSK	32	1488	22.15	22.15	22.16					
20	QPSK	32	1512	22.18	22.18	22.19					
20	QPSK	32	1536	22.21	22.21	22.22					
20	QPSK	32	1560	22.24	22.24	22.25					
20	QPSK	32	1584	22.27	22.27	22.28					
20	QPSK	32	1608	22.30	22.30	22.31					
20	QPSK	32	1632	22.33	22.33	22.34					
20	QPSK	32	1656	22.36	22.36	22.37					
20	QPSK	32	1680	22.39	22.39	22.40					
20	QPSK	32	1704	22.42	22.42	22.43					
20	QPSK	32	1728	22.45	22.45	22.46					
20	QPSK	32	1752	22.48	22.48	22.49					
20	QPSK	32	1776	22.51	22.51	22.52					
20	QPSK	32	1800	22.54	22.54	22.55					
20	QPSK	32	1824	22.57	22.57	22.58					
20	QPSK	32	1848	22.60	22.60	22.61					
20	QPSK	32	1872	22.63	22.63	22.64					
20	QPSK	32	1896	22.66	22.66	22.67					
20	QPSK	32	1920	22.69	22.69	22.70					
20	QPSK	32	1944	22.72	22.72	22.73					
20	QPSK	32	1968	22.75	22.75	22.76					
20	QPSK	32	1992	22.78	22.78	22.79					
20	QPSK	32	2016	22.81	22.81	22.82					
20	QPSK	32	2040	22.84	22.84	22.85					
20	QPSK	32	2064	22.87	22.87	22.88					
20	QPSK	32	2088	22.90	22.90	22.91					
20	QPSK	32	2112	22.93	22.93	22.94					
20	QPSK	32	2136	22.96	22.96	22.97					
20	QPSK	32	2160	22.99	22.99	23.00					
20	QPSK	32	2184	23.02	23.02	23.03					
20	QPSK	32	2208	23.05	23.05	23.06					
20	QPSK	32	2232	23.08	23.08	23.09					
20	QPSK	32	2256	23.11	23.11	23.12					
20	QPSK	32	2280	23.14	23.14	23.15					
20	QPSK	32	2304	23.17	23.17	23.18					
20	QPSK	32	2328	23.20	23.20	23.21					
20	QPSK	32	2352	23.23	23.23	23.24					
20	QPSK	32	2376	23.26	23.26	23.27					
20	QPSK	32	2400	23.29	23.29	23.30					
20	QPSK	32	2424	23.32	23.32	23.33					
20	QPSK	32	2448	23.35	23.35	23.36					
20	QPSK	32	2472	23.38	23.38	23.39					
20	QPSK	32	2496	23.41	23.41	23.42					
20	QPSK	32	2520	23.44	23.44	23.45					
20	QPSK	32	2544	23.47	23.47	23.48					
20	QPSK	32	2568	23.50	23.50	23.51					
20	QPSK	32	2592	23.53	23.53	23.54					
20	QPSK	32	2616	23.56	23.56	23.57					
20	QPSK	32	2640	23.59	23.59	23.60					
20	QPSK	32	2664	23.62	23.62	23.63					
20	QPSK	32	2688	23.65	23.65	23.66					
20	QPSK	32	2712	23.68	23.68	23.69					
20	QPSK	32	2736	23.71	23.71	23.72					
20	QPSK	32	2760	23.74	23.74	23.75					
20	QPSK	32	2784	23.77	23.77	23.78					
20	QPSK	32	2808	23.80	23.80	23.81					
20	QPSK	32	2832	23.83	23.83	23.84				</	



Band 13 AntD DSIS												
SR (MHz)	Modulation	FE Size	FE Offset	Power Low (dBm)	Power High (dBm)	Power Max (dBm)	Time-up (min)	APRS (MHz)	SR (MHz)	Modulation	FE Size	FE Offset
Channel												
10	QPSK	1	0	24.05	24.07	24.10						
10	QPSK	1	25	24.20	24.14	24.23	25.5	0				
10	QPSK	1	40	24.35	24.33	24.36						
10	QPSK	25	0	23.16	23.30	23.36						
10	QPSK	25	12	23.08	23.17	23.25			24.5	1		
10	QPSK	25	25	23.00	23.04	23.18						
10	QPSK	50	0	23.15	23.17	23.15						
10	QPSK	1	0	23.01	23.02	23.15						
10	QPSK	1	25	23.00	23.01	23.15	24.5	1				
10	QPSK	1	40	23.12	23.21	23.26						
10	QPSK	25	0	23.07	23.13	23.05						
10	QPSK	25	12	23.00	23.06	23.19	25.5	2				
10	QPSK	25	25	23.06	23.13	23.16						
10	QPSK	50	0	23.07	23.07	23.16						
10	QPSK	1	25	23.17	23.22	23.16	25.5	2				
10	QPSK	1	40	23.10	23.11	23.08						
10	QPSK	25	0	23.12	23.14	23.19						
10	QPSK	25	12	23.25	23.22	23.20	25.5	3				
10	QPSK	25	25	23.18	23.24	23.23						
10	QPSK	50	0	23.12	23.10	23.12						
10	QPSK	1	0	18.12	18.14	18.26	20.5	5				
10	QPSK	1	25	18.20	18.20	18.16						
10	QPSK	1	40	18.10	18.12	18.12						
10	QPSK	25	0	18.05	18.16	18.17						
10	QPSK	25	12	18.04	18.16	18.20						
10	QPSK	25	25	18.04	18.16	18.16						
10	QPSK	50	0	18.10	18.24	18.24						
Channel												
Frequency (MHz)				23.00	23.00	23.00	Time-up (min)	APRS (MHz)				
Channel				77.00	78.00	78.50						
5	QPSK	1	0	24.20	24.20	24.20						
5	QPSK	1	12	24.16	24.17	24.20	25.5	0				
5	QPSK	1	24	24.14	24.15	24.14						
5	QPSK	12	0	23.32	23.38	23.32						
5	QPSK	25	0	23.28	23.27	23.28						
5	QPSK	25	12	23.24	23.19	23.24	24.5	1				
5	QPSK	25	25	23.26	23.31	23.35						
5	QPSK	50	0	23.28	23.28	23.28						
5	QPSK	1	24	23.21	23.20	23.20	24.5	1				
5	QPSK	1	24	23.25	23.20	23.20						
5	QPSK	12	0	23.06	23.07	23.07	25.5	2				
5	QPSK	12	12	23.01	23.09	23.07						
5	QPSK	25	0	23.00	23.06	23.06						
5	QPSK	25	12	23.04	23.07	23.10	25.5	2				
5	QPSK	25	25	23.08	23.18	23.19						
5	QPSK	50	0	23.18	23.16	23.16						
5	QPSK	1	12	23.26	23.24	23.16	25.5	3				
5	QPSK	1	12	23.22	23.21	23.21						
5	QPSK	1	24	23.22	23.13	23.11						
5	QPSK	1	0	18.06	18.17	18.27	20.5	5				
5	QPSK	1	12	18.00	18.11	18.21						
5	QPSK	1	24	18.12	18.28	18.25						
5	QPSK	12	0	18.12	18.16	18.26						
5	QPSK	12	12	18.02	18.16	18.26						
5	QPSK	25	0	18.14	18.25	18.25						
5	QPSK	25	12	18.10	18.26	18.25	20.5	5				
5	QPSK	25	25	18.12	18.25	18.25						
5	QPSK	50	0	18.10	18.26	18.27						
Channel												
Frequency (MHz)				18.00	18.00	18.00	Time-up (min)	APRS (MHz)				
Channel				20.00	20.00	20.00						

Band 17 AntD DSIS												
SR (MHz)	Modulation	FE Size	FE Offset	Power Low (dBm)	Power High (dBm)	Power Max (dBm)	Time-up (min)	APRS (MHz)	SR (MHz)	Modulation	FE Size	FE Offset
Channel												
10	QPSK	1	0	24.05	24.07	24.10						
10	QPSK	1	25	24.20	24.14	24.23	25.5	0				
10	QPSK	1	40	24.35	24.33	24.36						
10	QPSK	25	0	23.16	23.30	23.36						
10	QPSK	25	12	23.08	23.17	23.25			24.5	1		
10	QPSK	25	25	23.00	23.04	23.18						
10	QPSK	50	0	23.15	23.17	23.15						
10	QPSK	1	0	23.01	23.02	23.15						
10	QPSK	1	25	23.00	23.01	23.15	24.5	1				
10	QPSK	1	40	23.12	23.21	23.26						
10	QPSK	25	0	23.07	23.13	23.05						
10	QPSK	25	12	23.00	23.06	23.19	25.5	2				
10	QPSK	25	25	23.06	23.13	23.16						
10	QPSK	50	0	23.07	23.07	23.16						
10	QPSK	1	25	23.17	23.22	23.16	25.5	2				
10	QPSK	1	40	23.10	23.11	23.08						
10	QPSK	25	0	23.12	23.14	23.19						
10	QPSK	25	12	23.25	23.22	23.20	25.5	3				
10	QPSK	25	25	23.18	23.24	23.23						
10	QPSK	50	0	23.12	23.10	23.12						
10	QPSK	1	0	18.12	18.14	18.26	20.5	5				
10	QPSK	1	25	18.20	18.20	18.16						
10	QPSK	1	40	18.10	18.12	18.12						
10	QPSK	25	0	18.05	18.16	18.17						
10	QPSK	25	12	18.04	18.16	18.20						
10	QPSK	25	25	18.04	18.16	18.16						
10	QPSK	50	0	18.10	18.24	18.24						
Channel												
Frequency (MHz)				23.00	23.00	23.00	Time-up (min)	APRS (MHz)				
Channel				78.50	79.50	79.50						
5	QPSK	1	0	24.20	24.20	24.11	25.5	0				
5	QPSK	1	12	24.16	24.17	24.16						
5	QPSK	1	24	24.14	24.15	24.15						
5	QPSK	12	0	23.30	23.30	23.26						
5	QPSK	25	0	23.28	23.27	23.28						
5	QPSK	25	12	23.24	23.19	23.23	24.5	1				
5	QPSK	25	25	23.26	23.31	23.35						
5	QPSK	50	0	23.28	23.28	23.28						
5	QPSK	1	24	23.21	23.20	23.20	24.5	1				
5	QPSK	1	24	23.25	23.20	23.20						
5	QPSK	12	0	23.06	23.07	23.07	25.5	2				
5	QPSK	12	12	23.01	23.09	23.07						
5	QPSK	25	0	23.00	23.06	23.06						
5	QPSK	25	12	23.04	23.07	23.10	25.5	2				
5	QPSK	25	25	23.08	23.18	23.19						
5	QPSK	50	0	23.18	23.16	23.16						
5	QPSK	1	12	23.26	23.24	23.16	25.5	3				
5	QPSK	1	12	23.22	23.21	23.21						
5	QPSK	1	24	23.22	23.13	23.11						
5	QPSK	1	0	18.06	18.17	18.27	20.5	5				
5	QPSK	1	12	18.00	18.11	18.21						
5	QPSK	1	24	18.12	18.28	18.25						
5	QPSK	12	0	18.12	18.16	18.26						
5	QPSK	12	12	18.02	18.16	18.26						
5	QPSK	25	0	18.14	18.25	18.25						
5	QPSK	25	12	18.10	18.26	18.25	20.5	5				
5	QPSK	25	25	18.12	18.25	18.25						
5	QPSK	50	0	18.10	18							



Band 38 Ant0 DSIS									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.22	21.31	21.34			
20	QPSK	1	49	21.53	21.56	21.59	23	0	
20	QPSK	1	99	21.49	21.53	21.59			
20	QPSK	5	0	20.53	20.55	20.57			
20	QPSK	50	24	20.58	20.55	20.53	22	1	
20	QPSK	50	74	20.54	20.57	20.58			
20	QPSK	100	0	20.53	20.54	20.48			
20	HQAM	1	0	19.26	19.47	19.48			
20	HQAM	1	49	19.20	19.25	19.24	22	1	
20	HQAM	1	99	19.26	19.47	19.48			
20	HQAM	50	0	19.52	19.54	19.47			
20	HQAM	50	24	19.20	19.20	19.53	21	2	
20	HQAM	50	74	19.57	19.57	19.57			
20	HQAM	100	0	19.55	19.55	19.49			
20	HQAM	1	0	19.59	19.37	19.42			
20	HQAM	1	49	19.28	19.83	19.84	21	2	
20	HQAM	1	99	19.45	19.53	19.51			
20	HQAM	50	0	19.33	19.54	19.47			
20	HQAM	50	24	19.20	19.20	19.53	20	3	
20	HQAM	50	74	19.55	19.55	19.55			
20	HQAM	100	0	19.52	19.57	19.48			
20	SSQAM	1	0	18.59	18.45	18.56	18	5	
20	SSQAM	1	49	18.59	18.72	18.42			
20	SSQAM	1	99	18.45	18.53	18.56			
20	SSQAM	50	0	18.58	18.54	18.46			
20	SSQAM	50	24	18.52	18.27	18.54			
20	SSQAM	50	74	18.52	18.52	18.52			
20	SSQAM	100	0	18.54	18.59	18.55	18	5	
20	SSQAM	100	0	18.50	18.47	18.42			
Channel									
Frequency (MHz)									
15	QPSK	1	0	21.72	21.81	21.74			
15	QPSK	1	37	21.32	21.43	21.51	23	0	
15	QPSK	1	74	21.32	21.43	21.51			
15	QPSK	36	0	20.44	20.38	20.33			
15	QPSK	36	36	20.54	20.42	20.38	22	1	
15	QPSK	36	72	20.44	20.38	20.38			
15	HQAM	1	0	20.27	20.65	20.46			
15	HQAM	1	74	20.54	20.41	20.43	22	1	
15	HQAM	36	0	19.31	19.49	19.49	21	2	
15	HQAM	36	36	19.39	19.38	19.47			
15	HQAM	36	72	19.45	19.47	19.47			
15	HQAM	1	0	19.29	19.31	19.29	21	2	
15	HQAM	1	37	19.31	19.44	19.45			
15	HQAM	36	0	18.34	18.54	18.46	20	3	
15	HQAM	36	36	18.37	18.43	18.39			
15	HQAM	36	72	18.45	18.41	18.47			
15	HQAM	1	0	18.51	18.52	18.51			
15	SSQAM	1	0	18.39	18.46	18.42	18	5	
15	SSQAM	1	37	18.38	18.46	18.47			
15	SSQAM	36	0	18.43	18.37	18.34	18	5	
15	SSQAM	36	36	18.39	18.38	18.39			
15	SSQAM	36	72	18.50	18.50	18.51			
15	SSQAM	100	0	18.39	18.49	18.43			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.29	21.37	21.24			
10	QPSK	1	25	21.36	21.31	21.24	23	0	
10	QPSK	1	49	21.33	21.33	21.41			
10	QPSK	25	0	20.53	20.56	20.57			
10	QPSK	25	12	20.54	20.50	20.49	22	1	
10	QPSK	25	25	20.39	20.49	20.57			
10	HQAM	1	0	20.33	20.48	20.42			
10	HQAM	1	49	20.38	20.37	20.31	22	1	
10	HQAM	25	0	19.40	19.56	19.46			
10	HQAM	25	12	19.45	19.45	19.39	21	2	
10	HQAM	25	25	19.44	19.38	19.36			
10	HQAM	50	0	19.43	19.48	19.43			
10	HQAM	1	0	19.37	19.37	19.26	21	2	
10	HQAM	1	25	19.56	19.51	19.42			
10	HQAM	1	49	19.45	19.41	19.33			
10	HQAM	25	0	19.42	19.42	19.42	20	3	
10	HQAM	25	12	19.59	19.42	19.32			
10	HQAM	25	25	19.40	19.48	19.30			
10	SSQAM	1	0	18.46	18.48	18.30	18	5	
10	SSQAM	1	25	18.46	18.45	18.48			
10	SSQAM	1	49	18.37	18.33	18.31			
10	SSQAM	25	0	18.52	18.51	18.36			
10	SSQAM	25	12	18.37	18.34	18.27	18	5	
10	SSQAM	25	25	18.46	18.46	18.34			
10	SSQAM	50	0	18.39	18.48	18.38			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.42	21.39	21.23			
5	QPSK	1	16	21.53	21.49	21.44	23	0	
5	QPSK	1	24	21.41	21.34	21.53			
5	QPSK	12	0	20.45	20.47	20.35			
5	QPSK	12	7	20.45	20.47	20.35	22	1	
5	QPSK	12	14	20.35	20.36	20.36			
5	QPSK	12	21	20.41	20.38	20.34			
5	HQAM	1	0	20.61	20.51	20.47	22	1	
5	HQAM	1	24	20.38	20.38	20.27			
5	HQAM	12	0	19.42	19.46	19.51	21	2	
5	HQAM	12	12	19.47	19.47	19.46			
5	HQAM	12	24	19.45	19.53	19.46			
5	HQAM	1	0	19.23	19.22	19.36	21	2	
5	HQAM	1	24	19.47	19.38	19.51			
5	HQAM	12	0	19.46	19.47	19.33	20	3	
5	HQAM	12	7	19.48	19.56	19.34			
5	HQAM	12	14	19.59	19.39	19.33			
5	HQAM	25	0	18.43	18.38	18.27			
5	SSQAM	1	0	18.50	18.41	18.36	18	5	
5	SSQAM	1	12	18.41	18.47	18.35			
5	SSQAM	1	24	18.52	18.47	18.44			
5	SSQAM	12	0	18.42	18.59	18.35			
5	SSQAM	12	12	18.17	18.21	18.26	18	5	
5	SSQAM	12	24	18.46	18.33	18.44			
5	SSQAM	25	0	18.48	18.43	18.40			

Band 41 Ant0 DSIS										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	22.00	22.00	22.00	22.00	22.00		
20	QPSK	1	49	22.13	22.19	22.02	22.17	22.35	23	0
20	QPSK	1	99	22.26	22.06	22.27	22.13	22.34		
20	QPSK	5	0	21.12	21.16	21.16	21.16	21.34		
20	QPSK	50	24	21.19	21.27	21.21	21.16	21.25	22	1
20	QPSK	50	74	21.18	21.18	21.20	21.24	21.42		
20	QPSK	100	0	21.12	21.15	21.38	21.14	21.38		
20	HQAM	1	0	21.26	21.47	21.47	21.20	21.25		
20	HQAM	1	49	20.89	20.83	20.87	21.18	21.30	22	1
20	HQAM	1	99	20.85	20.29	20.38	20.16	20.28		
20	HQAM	50	0	20.34	20.24	20.24	20.12	20.47		
20	HQAM	50	24	20.10	20.16	20.17	20.18	20.47	21	2
20	HQAM	50	74	20.07	20.35	20.21	20.25	20.42		
20	HQAM	100	0	20.17	20.24	20.21	20.09	20.39		
20	HQAM	1	0	20.11	20.08	20.22	20.11	20.30	21	2
20	HQAM	1	49	20.18	20.05	20.03	20.18	20.43		
20	HQAM	1	99	20.05	20.29	20.13	20.14	20.28		
20	HQAM	50	0	19.30	19.28	18.14	19.68	19.43	20	3
20	HQAM	50	24	19.02	19.48	19.07	18.16	19.41		
20	HQAM	50	74	19.02	19.48	19.07	18.16	19.41		
20	HQAM	100	0	19.20	19.10	19.33	19.12	19.47		
20	SSQAM	1	0	17.19	17.50	17.29	17.20	17.40	18	5
20	SSQAM	1	49	17.50	17.28	17.10	17.19	17.35		
20	SSQAM	1	99	17.18	17.50	17.26	17.20	17.41		
20	SSQAM	50	0	17.15	17.12	17.19	17.10	17.42		
20	SSQAM	50	24	17.22	17.29	17.55	17.50	17.25		
20	SSQAM	50	74	17.09	17.17	17.14	17.10			



GBM50 A41 DBS

DBS	Burst Average Power (dBm)			Time-up Limit		
	18	18	20	18	18	20
Frequency (MHz)	324.2	324.4	324.6	324.2	324.4	324.6
OPRS 1 Tx watt	20.16	20.20	20.13	21.00	21.00	21.00
OPRS 2 Tx watt	21.29	21.20	21.48	21.29	21.38	21.48
OPRS 3 Tx watt	23.56	23.62	23.56	23.52	23.59	23.64
OPRS 4 Tx watt	24.04	24.11	24.27	24.00	24.11	24.27
EDOC 1 Tx watt	20.80	20.80	21.00	21.00	21.00	21.00
EDOC 2 Tx watt	24.08	24.10	24.29	24.00	24.10	24.29
EDOC 3 Tx watt	27.18	27.42	27.33	27.00	27.19	27.07
EDOC 4 Tx watt	25.09	25.02	25.00	25.00	25.00	25.00

WCDMA V A41 DBS

Burst	WCDMA V			Time-up Limit (dBm)
	412	412	423	
Frequency (MHz)	424.4	424.4	424.8	
SCPP Rate 1	21.20	21.20	21.14	22.70
SCPP Rate 2	21.23	21.27	21.15	22.70
SCPP Rate 3	20.22	20.21	20.17	21.70
SCPP Rate 4	20.24	20.20	20.16	21.70
SCPP Rate 5	19.71	19.71	19.67	21.70
SCPP Rate 6	19.72	19.68	19.67	21.70
SCPP Rate 7	20.23	20.18	20.27	21.70
SCPP Rate 8	20.10	20.04	20.11	21.70
SCPP Rate 9	19.67	19.72	19.59	21.20
SCPP Rate 10	19.55	19.6	19.72	21.20
SCPP Rate 11	20.19	20.18	20.14	21.70
SCPP Rate 12	18.22	18.10	18.13	19.70
SCPP Rate 13	19.22	19.17	19.12	20.70
SCPP Rate 14	18.20	18.10	18.12	19.70
SCPP Rate 15	20.20	20.20	20.10	21.70



Band 5 Ant1 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./Freq. 20450	Power Ch./Freq. 20525	Power Ch./Freq. 20600	Tune-up (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.46	21.34	21.24				
10	QPSK	1	25	21.47	21.34	21.36	22.7	0		
10	QPSK	1	49	21.41	21.49	21.26				
10	QPSK	25	0	21.40	21.45	21.44				
10	QPSK	25	12	21.37	21.33	21.25	22.7	0		
10	QPSK	25	25	21.39	21.39	21.34				
10	QPSK	50	0	21.24	21.33	21.29				
10	16QAM	1	0	21.46	21.39	21.27				
10	16QAM	1	25	21.44	21.33	21.33	22.7	0		
10	16QAM	1	49	21.39	21.34	21.34				
10	16QAM	25	0	21.51	21.27	21.28				
10	16QAM	25	12	21.50	21.23	21.37	22.7	0		
10	16QAM	25	25	21.38	21.45	21.26				
10	16QAM	50	0	21.39	21.27	21.22				
10	64QAM	1	0	21.31	21.21	21.23				
10	64QAM	1	25	21.26	21.42	21.32	22.7	0		
10	64QAM	1	49	21.39	21.41	21.44				
10	64QAM	25	0	21.24	21.27	21.37				
10	64QAM	25	12	21.30	21.26	21.21	22.7	0		
10	64QAM	25	25	21.38	21.29	21.28				
10	64QAM	50	0	21.34	21.32	21.41				
10	256QAM	1	0	19.49	19.88	19.23				
10	256QAM	1	25	19.47	19.37	19.35	20.7	2		
10	256QAM	1	49	19.45	19.35	19.28				
10	256QAM	25	0	19.30	19.43	19.36				
10	256QAM	25	12	19.28	19.34	19.30	20.7	2		
10	256QAM	25	25	19.39	19.24	19.31				
10	256QAM	50	0	19.39	19.34	19.38				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.42	21.43	21.20				
5	QPSK	1	12	21.33	21.23	21.22	22.7	0		
5	QPSK	1	24	21.37	21.42	21.19				
5	QPSK	12	0	21.32	21.66	21.32				
5	QPSK	12	7	21.31	21.25	21.11				
5	QPSK	12	13	21.40	21.28	21.12	22.7	0		
5	QPSK	25	0	21.19	21.21	21.13				
5	16QAM	1	0	21.39	21.29	21.19				
5	16QAM	1	12	21.37	21.21	21.19	22.7	0		
5	16QAM	1	24	21.23	21.28	21.27				
5	16QAM	12	0	21.43	21.14	21.15				
5	16QAM	12	7	21.38	21.18	21.25	22.7	0		
5	16QAM	12	13	21.28	21.34	21.14				
5	16QAM	25	0	21.29	21.21	21.19				
5	64QAM	1	0	21.21	21.13	21.12				
5	64QAM	1	12	21.17	21.26	21.22	22.7	0		
5	64QAM	1	24	21.33	21.29	21.29				
5	64QAM	12	0	21.19	21.19	21.32				
5	64QAM	12	7	21.18	21.24	21.06	22.7	0		
5	64QAM	12	13	21.27	21.21	21.34				
5	64QAM	25	0	21.21	21.27	21.27				
5	256QAM	1	0	19.32	19.36	19.13				
5	256QAM	1	12	19.32	19.32	19.21	20.7	2		
5	256QAM	1	24	19.32	19.27	19.22				
5	256QAM	12	0	19.29	19.24	19.19				
5	256QAM	12	7	19.21	19.20	19.17	20.7	2		
5	256QAM	12	13	19.28	19.15	19.19				
5	256QAM	25	0	19.07	19.30	19.20				
Channel										
Frequency (MHz)										
3	QPSK	1	0	21.34	21.03	21.16				
3	QPSK	1	8	21.36	21.28	21.24	22.7	0		
3	QPSK	1	14	21.30	21.39	21.18				
3	QPSK	8	0	21.35	21.35	21.36				
3	QPSK	8	4	21.30	21.18	21.11	22.7	0		
3	QPSK	8	8	21.40	21.28	21.16				
3	QPSK	15	0	21.11	21.25	21.16				
3	16QAM	1	0	21.34	21.28	21.17				
3	16QAM	1	8	21.35	21.26	21.19	22.7	0		
3	16QAM	1	14	21.31	21.27	21.20				
3	16QAM	8	0	21.27	21.19	21.17				
3	16QAM	8	4	21.28	21.13	21.16	22.7	0		
3	16QAM	8	8	21.36	21.13	21.29				
3	16QAM	8	7	21.34	21.37	21.17				
3	16QAM	15	0	21.25	21.15	21.14				
3	64QAM	1	0	21.23	21.16	21.15				
3	64QAM	1	8	21.11	21.20	21.17	22.7	0		
3	64QAM	1	14	21.29	21.11	21.30				
3	64QAM	8	0	21.15	21.03	21.22				
3	64QAM	8	4	21.22	21.20	21.08	22.7	0		
3	64QAM	8	7	21.11	21.10	21.12				
3	64QAM	15	0	21.12	21.20	21.28				
3	256QAM	1	0	19.28	19.24	19.06				
3	256QAM	1	8	19.19	19.16	19.21	20.7	2		
3	256QAM	1	14	19.19	19.13	19.00				
3	256QAM	8	0	19.08	19.21	19.15				
3	256QAM	8	4	19.10	19.17	19.05	20.7	2		
3	256QAM	8	7	19.10	19.15	19.07				
3	256QAM	15	0	19.05	19.06	19.30				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	21.38	21.49	21.35				
1.4	QPSK	1	3	21.22	21.40	21.23				
1.4	QPSK	1	5	21.16	21.33	21.16	22.7	0		
1.4	QPSK	3	0	21.21	21.13	21.23				
1.4	QPSK	3	3	21.34	21.13	21.12				
1.4	QPSK	3	3	21.31	21.15	21.03				
1.4	QPSK	6	0	21.28	21.20	21.21	22.7	0		
1.4	16QAM	1	0	21.14	21.21	21.16				
1.4	16QAM	1	3	21.22	21.26	21.23				
1.4	16QAM	1	5	21.13	21.13	21.03	22.7	0		
1.4	16QAM	3	0	21.25	21.06	21.03				
1.4	16QAM	3	1	21.22	21.07	21.18				
1.4	16QAM	3	3	21.22	21.28	21.05				
1.4	16QAM	6	0	21.14	21.10	21.26	22.7	0		
1.4	16QAM	6	1	21.01	21.15	20.98				
1.4	16QAM	6	3	21.40	21.23	21.11				
1.4	64QAM	1	0	21.21	21.25	21.19				
1.4	64QAM	3	0	21.06	20.88	21.27	22.7	0		
1.4	64QAM	3	1	21.07	21.17	21.03				
1.4	64QAM	3	21.4	21.16	21.16					
1.4	64QAM	6	0	21.13	21.20	21.26	22.7	0		
1.4	256QAM	1	0	19.12	19.31	19.09				
1.4	256QAM	1	3	19.17	19.15	19.11				
1.4	256QAM	1	5	19.14	19.08	19.03	20.7	2		
1.4	256QAM	3	0	19.11	19.17	19.13				
1.4	256QAM	3	1	19.09	19.03	19.15	21.2			
1.4	256QAM	3	3	19.06	19.12	19.06				
1.4	256QAM	6	0	19.03	19.06	19.05	20.7	2		

Band 12 Ant1 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./Freq. 23065	Power Ch./Freq. 23095	Power Ch./Freq. 23130	Tune-up (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.41	21.55	21.47				
10	QPSK	1	25	21.36	21.42	21.32	22.7	0		
10	QPSK	1	49	21.34	21.40	21.33				
10	QPSK	25	0	21.28	21.43	21.39				
10	QPSK	25	12	21.25	21.16	21.22	22.7	0		
10	QPSK	25	25	21.40	21.34	21.21				
10	QPSK	50	0	21.24	21.29	21.28				
10	16QAM	1	0	21.27	21.35	21.27				
10	16QAM	1	25	21.25	21.31	21.28	22.7	0		
10	16QAM	1	49	21.19	21.30	21.18				
10	16QAM	25	0	21.23	21.16	21.10				
10	16QAM	25	12	21.31	21.18	21.20	22.7	0		
10	16QAM	25	25	21.27	21.44	21.11				
10	16QAM	50	0	21.26	21.23	21.38				
10	64QAM	1	0	21.17	21.29	21.14				
10	64QAM	1	25	21.46	21.29	21.24	22.7	0		
10	64QAM	1	49	21.29	21.30	21.29				
10	64QAM	25	0	21.19	21.10	21.35				
10	64QAM	25	12	21.24	21.26	21.11	22.7	0		
10	64QAM	25	25	21.23	21.26	21.29				
10	64QAM	50	0	21.28	21.24	21.38				
10	256QAM	1	0	19.29	19.37	19.19				
10	256QAM	1	25	19.27	19.28	19.25	20.7	2		
10	256QAM	1	49	19.30	19.20	19.16				
10	256QAM	25	0	19.24	19.28	19.19				
10	256QAM	25	12	19.25	19.21	19.20	20.7	2		
10	256QAM	25	25	19.19	19.23	19.12				
10	256QAM	50	0	19.09	19.18	19.07				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.24	21.43	21.30				
5	QPSK	1	12	21.33	21.28	21.18	22.7	0		
5	QPSK	1	24	21.36	21.42	21.19				



Band 26 Ant1 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Level Ch. Freq	Power Level Ch. Freq	Power Level Ch. Freq	Tune-up freq (dBm)	MPR (dB)		
Channel				26765	26865	26965				
Frequency (MHz)				819	831.5	844				
15	QPSK	1	0	21.19	21.38	21.25				
15	QPSK	1	37	21.20	21.28	21.19		22.7		0
15	QPSK	1	74	21.27	21.31	21.16				
15	QPSK	36	0	21.09	21.32	21.16				
15	QPSK	36	20	21.09	21.25	21.19		22.7		0
15	QPSK	36	39	21.27	21.18	21.16				
15	QPSK	75	0	21.05	21.11	21.05				
15	16QAM	1	0	21.28	21.21	21.15				
15	16QAM	1	37	21.28	21.34	21.19		22.7		0
15	16QAM	1	74	21.27	21.22	21.19				
15	16QAM	36	0	21.27	21.25	21.08				
15	16QAM	36	20	21.12	21.18	21.11		22.7		0
15	16QAM	36	39	21.09	21.23	21.31				
15	16QAM	75	0	21.05	21.19	21.19				
15	64QAM	1	0	21.16	21.18	21.05				
15	64QAM	1	37	21.37	21.15	21.23		22.7		0
15	64QAM	1	74	21.29	21.37	21.06				
15	64QAM	36	0	21.28	21.12	21.23				
15	64QAM	36	20	21.08	21.12	21.30		22.7		0
15	64QAM	36	39	21.13	21.32	21.21				
15	64QAM	75	0	21.22	21.21	21.26				
15	256QAM	1	0	19.38	19.35	19.39				
15	256QAM	1	37	19.25	19.23	19.26		20.7		2
15	256QAM	1	74	19.33	19.43	19.36				
15	256QAM	36	0	19.32	19.22	19.28				
15	256QAM	36	20	19.19	19.27	19.29		20.7		2
15	256QAM	36	39	19.15	19.17	19.12				
15	256QAM	75	0	19.24	19.24	19.19				
Channel				26740	26865	26990				
Frequency (MHz)				819	831.5	844				
10	QPSK	1	0	21.02	21.25	21.14				
10	QPSK	1	25	21.11	21.12	21.03		22.7		0
10	QPSK	1	49	21.21	21.14	21.09				
10	QPSK	25	0	21.03	21.10	21.16				
10	QPSK	25	12	20.92	21.08	21.11		22.7		0
10	QPSK	25	25	21.17	21.15	21.15				
10	QPSK	50	0	21.03	20.96	20.88				
10	16QAM	1	0	21.12	21.17	21.00				
10	16QAM	1	25	21.28	21.26	21.04		22.7		0
10	16QAM	1	49	21.22	21.13	21.01				
10	16QAM	25	0	21.18	21.16	20.96				
10	16QAM	25	12	21.04	21.08	21.08		22.7		0
10	16QAM	25	25	20.95	21.18	21.22				
10	16QAM	50	0	20.93	21.03	21.06				
10	64QAM	1	0	21.10	21.10	20.90				
10	64QAM	1	25	21.28	20.97	21.16		22.7		0
10	64QAM	1	49	21.17	21.27	21.01				
10	64QAM	25	0	21.13	21.09	21.11				
10	64QAM	25	12	20.97	20.98	21.21		22.7		0
10	64QAM	25	25	21.03	21.14	21.07				
10	64QAM	50	0	21.14	21.16	21.17				
10	256QAM	1	0	19.34	19.42	19.38				
10	256QAM	1	25	19.35	19.24	19.37		20.7		2
10	256QAM	1	49	19.35	19.37	19.37				
10	256QAM	25	0	19.22	19.27	19.28				
10	256QAM	25	12	19.25	19.29	19.21		20.7		2
10	256QAM	25	25	19.24	19.11	19.15				
10	256QAM	50	0	19.18	19.12	19.10				
Channel				26715	26865	27015				
Frequency (MHz)				819.5	831.5	843.5				
5	QPSK	1	0	21.10	21.26	21.11				
5	QPSK	1	12	21.04	21.15	21.05		22.7		0
5	QPSK	1	24	21.23	21.18	21.07				
5	QPSK	12	0	20.95	21.08	21.14				
5	QPSK	12	7	20.94	21.19	21.02		22.7		0
5	QPSK	12	13	21.12	21.14	21.13				
5	QPSK	25	0	21.07	20.93	20.87				
5	16QAM	1	0	21.16	21.13	21.05				
5	16QAM	1	12	21.25	21.28	21.12		22.7		0
5	16QAM	1	24	21.26	21.12	21.13				
5	16QAM	12	0	21.15	21.12	20.87				
5	16QAM	12	7	21.07	21.14	20.96		22.7		0
5	16QAM	12	13	21.01	21.06	21.24				
5	16QAM	25	0	20.98	21.13	21.06				
5	64QAM	1	0	21.08	21.10	20.93				
5	64QAM	1	12	21.20	21.02	21.18		22.7		0
5	64QAM	1	24	21.08	21.23	20.96				
5	64QAM	12	0	21.13	21.04	21.11				
5	64QAM	12	7	21.02	20.97	21.27		22.7		0
5	64QAM	12	13	21.00	21.20	21.13				
5	64QAM	25	0	21.19	21.07	21.09				
5	256QAM	1	0	19.36	19.46	19.40				
5	256QAM	1	12	19.25	19.24	19.26		20.7		2
5	256QAM	1	24	19.40	19.39	19.30				
5	256QAM	12	0	19.30	19.25	19.19				
5	256QAM	12	7	19.19	19.28	19.28		20.7		2
5	256QAM	12	13	19.11	19.15	19.18				
5	256QAM	25	0	19.17	19.17	19.24				
Channel				26715	26865	27022				
Frequency (MHz)				815.5	831.5	847.5				
3	QPSK	1	0	21.06	21.30	21.18				
3	QPSK	1	8	21.09	21.14	21.16		22.7		0
3	QPSK	1	14	21.20	21.16	21.12				
3	QPSK	8	0	21.08	21.06	21.26				
3	QPSK	8	4	20.98	21.08	21.10		22.7		0
3	QPSK	8	7	21.17	21.13	21.09				
3	QPSK	15	0	21.00	20.99	20.88				
3	16QAM	1	0	21.13	21.10	21.08				
3	16QAM	1	8	21.17	21.22	21.12		22.7		0
3	16QAM	1	14	21.28	21.07	21.10				
3	16QAM	8	0	21.13	21.16	20.97				
3	16QAM	8	4	20.96	21.15	21.08		22.7		0
3	16QAM	8	7	21.02	21.09	21.21				
3	16QAM	15	0	20.96	21.09	21.15				
3	64QAM	1	0	21.08	21.11	20.90				
3	64QAM	1	8	21.15	21.11	21.14		22.7		0
3	64QAM	1	14	21.14	21.29	20.95				
3	64QAM	8	0	21.23	20.95	21.06				
3	64QAM	8	4	20.98	21.06	21.24		22.7		0
3	64QAM	8	7	21.08	21.16	21.06				
3	64QAM	15	0	21.10	21.07	21.14				
3	256QAM	1	0	19.36	19.46	19.36				
3	256QAM	1	8	19.29	19.24	19.37		20.7		2
3	256QAM	1	14	19.44	19.38	19.33				
3	256QAM	8	0	19.32	19.31	19.20				
3	256QAM	8	4	19.29	19.30	19.26		20.7		2
3	256QAM	8	7	19.21	19.25	19.17				
3	256QAM	15	0	19.09	19.21	19.23				
Channel				26697	26865	27033				
Frequency (MHz)				814.7	831.5	848.3				
1.4	QPSK	1	0	21.16	21.33	21.11				
1.4	QPSK	1	3	21.03	21.10	21.09		22.7		0
1.4	QPSK	1	5	21.15	21.28	21.02				
1.4	QPSK	3	0	20.99	21.04	21.36				
1.4	QPSK	3	1	20.91	21.18	21.15				
1.4	QPSK	3	3	21.17	21.11	21.12		22.7		0
1.4	QPSK	8	0	21.00	20.97	20.97				
1.4	16QAM	1	0	21.14	21.08	21.12				
1.4	16QAM	1	3	21.14	21.30	21.07				
1.4	16QAM	1	5	21.25	21.15	21.05		22.7		0
1.4	16QAM	3	0	21.24	21.17	20.91				
1.4	16QAM	3	1	21.05	21.07	21.02				
1.4	16QAM	3	3	21.07	21.10	21.14				
1.4	16QAM	8	0	20.94	21.02	21.14		22.7		0
1.4	64QAM	1	0	21.03	21.13	20.89				
1.4	64QAM	1	3	21.19	21.05	21.16				
1.4	64QAM	1	5	21.07	21.28	20.96		22.7		0
1.4	64QAM	3	0	21.26	21.10	21.16				
1.4	64QAM	3	1	21.03	20.94	21.20				
1.4	64QAM	3	3	20.99	21.22	21.13				
1.4	64QAM	8	0	21.13	21.15	21.23		22.7		0
1.4	256QAM	1	0	19.41	19.42	19.43				
1.4	256QAM	1	3	19.30	19.28	19.36				
1.4	256QAM	1	5	19.31	19.30	19.25		20.7		2
1.4	256QAM	3	0	19.29	19.26	19.25				
1.4	256QAM	3	1	19.21	19.28	19.22				
1.4	256QAM	3	3	19.19	19.22	19.16				
1.4	256QAM	8	0	19.20	19.20	19.13		20.7		2



GSM1900 Airc DSS

GSM1900 Tx Channel	Burst Average Power (dBm)			Tune-up L1P (dBm)	Frame Average Power (dBm)			Tune-up L1P (dBm)
	1892.2	1892	1892.8		1892.2	1892	1892.8	
DMB 1 Tx.wk	20.71	20.68	20.70	20.50	20.71	20.68	20.70	21.00
OPRS 1 Tx.wk	20.33	20.30	20.32	20.50	20.33	20.30	20.32	21.00
OPRS 2 Tx.wk	20.47	20.44	20.47	21.00	20.47	20.44	20.47	21.00
OPRS 3 Tx.wk	20.12	20.21	20.17	20.50	20.86	20.07	20.61	21.04
OPRS 4 Tx.wk	23.42	23.40	23.02	24.00	20.42	20.40	20.02	21.00
EDGE 1 Tx.wk	21.19	20.90	21.44	20.50	18.19	18.09	18.44	17.00
EDGE 2 Tx.wk	22.26	22.23	22.21	24.00	18.26	18.02	18.21	18.00
EDGE 3 Tx.wk	20.32	20.20	20.18	21.00	18.08	18.04	18.00	17.24
EDGE 4 Tx.wk	19.41	19.20	19.40	20.00	18.41	18.56	18.40	17.00

WCDMA 1x Airc DSS

Band Tx Channel	WCDMA 1x			Tune-up L1P (dBm)	WCDMA 1x Airc DSS			Tune-up L1P (dBm)
	9602	9600	9608		1912	1418	1918	
Frequency (MHz)	1892.2	1890	1907.8	1.87	1912	1758.6	1758.6	
ISPP Rate	AMR 12.2kbit	21.80	21.72	21.70	23.00	21.58	21.62	21.50
ISPP Rate	HS-PA Subclass 1	21.74	21.73	21.72	21.00	21.60	21.60	21.00
ISPP Rate	HS-PA Subclass 2	20.69	20.73	20.68	22.00	20.87	20.86	22.00
ISPP Rate	HS-PA Subclass 3	20.60	20.70	20.68	22.00	20.81	20.84	22.00
ISPP Rate	HS-PA Subclass 4	20.20	20.24	20.14	21.00	20.15	20.11	21.00
ISPP Rate	HS-PA Subclass 5	20.20	20.20	20.20	21.00	20.12	20.13	20.09
ISPP Rate	DC-HSPA Subclass 1	20.80	20.70	20.82	22.00	20.60	20.59	22.00
ISPP Rate	DC-HSPA Subclass 2	20.50	20.82	20.74	22.00	20.83	20.53	22.00
ISPP Rate	DC-HSPA Subclass 3	20.24	20.27	20.26	21.00	20.56	20.27	21.00
ISPP Rate	DC-HSPA Subclass 4	20.15	20.33	20.24	21.00	20.61	20.22	21.00
ISPP Rate	HS-PA Subclass 1	20.81	20.70	20.73	22.00	20.62	20.67	22.00
ISPP Rate	HS-PA Subclass 2	19.70	19.81	19.80	20.00	19.82	19.80	19.00
ISPP Rate	HS-PA Subclass 3	19.81	19.81	19.87	21.00	19.68	19.67	19.58
ISPP Rate	HS-PA Subclass 4	19.80	19.81	19.73	20.00	19.68	19.65	20.00
ISPP Rate	HS-PA Subclass 5	20.80	20.80	20.70	22.00	20.60	20.70	20.60



Band 25 Ant3 DSIS										
BW (MHz)	Modulation	FS Size	FS Offset	Low Ch. Freq. (MHz)	High Ch. Freq. (MHz)	Peak High Rate (Mbps)	Turn-up time (min)	MTN (dB)		
Channel										
Frequency (MHz)	FS Size	FS Offset	Low Ch. Freq. (MHz)	High Ch. Freq. (MHz)	Peak High Rate (Mbps)	Turn-up time (min)	MTN (dB)			
20	QPSK	1	0	21.85	21.85	22.00				
20	QPSK	1	45	21.90	21.90	21.98	22.5	0		
20	QPSK	1	90	21.91	21.91	21.98				
20	QPSK	50	0	21.94	21.94	21.98				
20	QPSK	50	24	21.92	21.95	21.99	22.5	0		
20	QPSK	50	50	21.93	21.91	21.73				
20	QPSK	100	0	21.96	21.96	21.90				
20	QPSK	100	0	21.97	21.97	22.07				
20	16QAM	1	45	22.07	21.79	21.91	22.5	0		
20	16QAM	1	90	21.96	22.03	21.94				
20	16QAM	50	0	21.96	21.96	21.96				
20	16QAM	50	24	22.11	21.94	21.96	22.5	0		
20	16QAM	50	50	21.96	22.02	21.94				
20	16QAM	100	0	21.94	21.94	21.94				
20	16QAM	100	0	21.95	22.15	21.95				
20	16QAM	1	45	22.05	22.04	21.85	22.5	0		
20	16QAM	1	90	22.00	22.05	21.85				
20	16QAM	50	0	22.00	21.99	22.02				
20	16QAM	50	24	22.05	20.91	20.98	21.5	1		
20	16QAM	50	50	21.98	20.84	20.89				
20	16QAM	100	0	20.97	20.96	20.94				
20	16QAM	1	0	18.90	18.22	18.83				
20	16QAM	1	45	18.90	18.88	18.89	19.5	3		
20	16QAM	50	0	18.90	18.88	18.89				
20	16QAM	50	24	18.88	18.88	18.89	19.5	3		
20	16QAM	50	50	18.88	18.88	18.89				
20	16QAM	100	0	18.90	18.88	18.89				
20	16QAM	100	0	18.90	18.88	18.89				
Channel										
Frequency (MHz)	FS Size	FS Offset	Low Ch. Freq. (MHz)	High Ch. Freq. (MHz)	Peak High Rate (Mbps)	Turn-up time (min)	MTN (dB)			
15	QPSK	1	0	22.02	22.02	22.13	22.5	0		
15	QPSK	1	37	22.08	22.19	22.12				
15	QPSK	1	74	22.12	22.18	22.04				
15	QPSK	50	0	22.17	22.17	22.21				
15	QPSK	50	20	22.27	22.13	22.25	22.5	0		
15	QPSK	50	38	22.28	22.19	21.95				
15	QPSK	75	0	22.11	22.17	22.24				
15	16QAM	1	0	22.27	21.98	22.24	22.5	0		
15	16QAM	1	74	22.15	22.25	22.13				
15	16QAM	50	0	22.16	22.22	22.24				
15	16QAM	50	20	22.28	22.11	22.21	22.5	0		
15	16QAM	50	38	22.27	22.28	22.07				
15	16QAM	75	0	22.16	22.13	22.13				
15	16QAM	1	0	22.12	22.28	22.15				
15	16QAM	1	37	22.22	22.33	22.07	22.5	0		
15	16QAM	1	74	22.15	22.24	22.09				
15	16QAM	50	0	21.92	21.92	22.12				
15	16QAM	50	20	21.11	21.11	21.14	21.5	1		
15	16QAM	50	38	21.26	21.14	21.20				
15	16QAM	75	0	21.27	21.40	21.12				
15	16QAM	1	0	18.88	18.13	18.51				
15	16QAM	1	37	18.86	18.88	18.87	19.5	3		
15	16QAM	14	0	18.90	18.88	18.87				
15	16QAM	36	0	18.94	18.93	18.90				
15	16QAM	36	20	18.92	18.14	18.90	19.5	3		
15	16QAM	36	38	18.88	18.88	18.87				
15	16QAM	75	0	18.98	18.91	18.89				
Channel										
Frequency (MHz)	FS Size	FS Offset	Low Ch. Freq. (MHz)	High Ch. Freq. (MHz)	Peak High Rate (Mbps)	Turn-up time (min)	MTN (dB)			
10	QPSK	1	0	22.14	22.17	22.12	22.5	0		
10	QPSK	1	25	22.11	22.12	22.27				
10	QPSK	1	45	22.08	22.08	22.14				
10	QPSK	25	0	22.09	22.09	22.18				
10	QPSK	25	12	22.07	22.00	22.15	22.5	0		
10	QPSK	25	25	22.18	22.17	22.02				
10	QPSK	50	0	22.24	22.24	22.40				
10	QPSK	50	3	22.09	22.01	22.22				
10	16QAM	1	25	22.21	21.98	22.17	22.5	0		
10	16QAM	1	45	22.19	22.25	21.99				
10	16QAM	25	0	22.16	22.01	22.22				
10	16QAM	25	12	22.27	22.15	22.25	22.5	0		
10	16QAM	25	25	22.22	22.29	22.11				
10	16QAM	50	0	22.07	22.06	22.04				
10	16QAM	1	0	22.19	22.27	22.24				
10	16QAM	1	25	22.20	22.30	22.21	22.5	0		
10	16QAM	1	45	22.24	22.27	22.11				
10	16QAM	25	0	21.17	21.48	21.19				
10	16QAM	25	12	21.24	21.18	21.14	21.5	1		
10	16QAM	25	25	21.26	21.13	21.24				
10	16QAM	50	0	21.12	21.12	21.13				
10	16QAM	1	0	18.91	18.15	18.90				
10	16QAM	1	25	18.90	18.83	18.91	19.5	3		
10	16QAM	45	0	18.92	18.81	18.88				
10	16QAM	25	0	18.91	18.82	18.86				
10	16QAM	25	12	18.88	18.13	18.97	19.5	3		
10	16QAM	25	25	18.98	18.88	18.88				
10	16QAM	50	0	18.93	18.85	18.84				
Channel										
Frequency (MHz)	FS Size	FS Offset	Low Ch. Freq. (MHz)	High Ch. Freq. (MHz)	Peak High Rate (Mbps)	Turn-up time (min)	MTN (dB)			
5	QPSK	1	0	22.11	22.20	22.25	22.5	0		
5	QPSK	1	12	22.10	22.23	22.18				
5	QPSK	1	24	22.09	22.10	22.10				
5	QPSK	12	0	22.04	22.14	22.15				
5	QPSK	12	7	22.41	22.07	22.14	22.5	0		
5	QPSK	12	13	22.23	22.11	21.99				
5	QPSK	25	0	22.07	22.06	22.24				
5	16QAM	1	0	22.26	22.08	22.25	22.5	0		
5	16QAM	1	12	22.25	22.08	22.16				
5	16QAM	12	0	22.09	22.20	22.01				
5	16QAM	12	7	22.31	22.15	22.12	22.5	0		
5	16QAM	12	13	22.19	22.22	22.05				
5	16QAM	25	0	22.08	22.12	22.04				
5	16QAM	1	0	22.18	22.28	22.28				
5	16QAM	1	12	22.28	22.31	22.09	22.5	0		
5	16QAM	24	0	22.09	22.07	22.19				
5	16QAM	12	0	21.17	21.43	21.18				
5	16QAM	12	7	21.19	21.07	21.22	21.5	1		
5	16QAM	12	13	21.26	21.08	21.14				
5	16QAM	25	0	21.20	21.07	21.06				
5	16QAM	1	0	18.87	18.14	18.89				
5	16QAM	1	12	18.87	18.86	18.89	19.5	3		
5	16QAM	24	0	18.91	18.88	18.84				
5	16QAM	12	0	18.84	18.80	18.93				
5	16QAM	12	7	18.89	18.24	18.96	19.5	3		
5	16QAM	12	13	18.90	18.88	18.88				
5	16QAM	25	0	18.13	18.84	18.87				
Channel										
Frequency (MHz)	FS Size	FS Offset	Low Ch. Freq. (MHz)	High Ch. Freq. (MHz)	Peak High Rate (Mbps)	Turn-up time (min)	MTN (dB)			
3	QPSK	1	0	22.06	22.31	22.20	22.5	0		
3	QPSK	1	8	22.12	22.21	22.14				
3	QPSK	1	16	22.09	22.06	22.06				
3	QPSK	8	0	22.21	22.22	22.22				
3	QPSK	8	4	22.42	22.01	22.05	22.5	0		
3	QPSK	8	7	22.25	22.07	21.95				
3	QPSK	15	0	22.13	22.22	22.27				
3	16QAM	1	0	22.25	21.94	22.24	22.5	0		
3	16QAM	1	8	22.26	22.22	22.20				
3	16QAM	12	0	22.07	22.26	22.24				
3	16QAM	8	0	22.02	22.08	22.21				
3	16QAM	8	4	22.33	22.14	22.23	22.5	0		
3	16QAM	8	7	22.21	22.20	22.09				
3	16QAM	15	0	22.19	22.27	22.04				
3	16QAM	1	0	22.18	22.28	22.21				
3	16QAM	14	0	22.22	22.26	22.29	22.5	0		
3	16QAM	8	0	21.23	21.44	21.11				
3	16QAM	8	4	21.14	21.15	21.20	21.5	1		
3	16QAM	8	7	21.26	21.08	21.06				
3	16QAM	15	0	21.24	21.12	21.21				
3	16QAM	1	0	18.81	18.18	18.99				
3	16QAM	1	8	18.86	18.88	18.86	19.5	3		
3	16QAM	11	0	18.93	18.88	18.88				
3	16QAM	8	0	18.88	18.83	18.88				
3	16QAM	8	4	18.89	18.22	18.85	19.5	3		
3	16QAM	8	7	18.98	18.88	18.88				
3	16QAM	15	0	18.91	18.91	18.92				
Channel										
Frequency (MHz)	FS Size	FS Offset	Low Ch. Freq. (MHz)	High Ch. Freq. (MHz)	Peak High Rate (Mbps)	Turn-up time (min)	MTN (dB)			
1.4	QPSK	1	0	22.11	22.26	22.17				
1.4	QPSK	1	3	22.18	22.15	22.16				
1.4	QPSK	1	6	22.16	22.08	22.11	22.5	0		
1.4	QPSK	3	0	22.29	22.22	22.11				
1.4	QPSK	3								



Band 38 Ant3 DSIS									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.21	21.21	21.21			
20	QPSK	1	49	21.24	21.11	21.18	22.7	0	
20	QPSK	5	0	21.22	21.26	21.12			
20	QPSK	5	49	21.12	21.22	21.28			
20	QPSK	50	24	21.14	21.18	21.08	22.7	0	
20	QPSK	50	74	21.16	21.02	21.02			
20	QPSK	100	0	21.00	21.13	21.06			
20	QPSK	100	49	21.16	21.16	21.06			
20	16QAM	1	49	21.21	21.09	21.07	22.7	0	
20	16QAM	5	0	21.20	21.05	21.05			
20	16QAM	50	0	21.20	21.05	21.01			
20	16QAM	50	24	21.20	20.96	21.02	22.7	0	
20	16QAM	50	74	21.20	21.07	21.04			
20	16QAM	100	0	21.13	21.13	20.97			
20	16QAM	100	49	21.16	21.05	21.09			
20	16QAM	1	49	21.04	21.24	21.05	22.7	0	
20	16QAM	5	0	21.11	21.14	21.17			
20	16QAM	50	0	21.09	21.03	21.06	22.7	0	
20	16QAM	50	50	21.09	21.03	21.06			
20	16QAM	100	0	21.10	21.16	21.16			
20	16QAM	100	49	21.22	21.02	21.02			
20	256QAM	1	49	19.22	19.18	19.21	20.7	2	
20	256QAM	5	0	19.20	19.20	19.11			
20	256QAM	50	0	19.06	19.27	19.11			
20	256QAM	50	24	19.23	19.16	19.16			
20	256QAM	50	74	19.26	19.02	19.12			
20	256QAM	100	0	19.01	19.19	19.03			
Channel									
Frequency (MHz)									
15	QPSK	1	0	21.22	21.22	21.22			
15	QPSK	1	37	21.14	21.24	21.14	22.7	0	
15	QPSK	5	0	21.17	21.21	21.17			
15	QPSK	5	49	21.17	20.84	21.18			
15	QPSK	36	0	21.12	21.11	20.90	22.7	0	
15	QPSK	36	39	21.12	21.11	20.90			
15	16QAM	75	0	20.94	20.99	20.94			
15	16QAM	75	49	21.27	21.07	20.92			
15	16QAM	1	37	21.05	20.93	20.95	22.7	0	
15	16QAM	1	74	21.07	20.96	21.14			
15	16QAM	36	0	21.24	21.00	21.19			
15	16QAM	36	39	21.19	21.11	20.98	22.7	0	
15	16QAM	75	0	21.05	21.03	21.06			
15	16QAM	75	49	21.01	20.88	20.97			
15	16QAM	1	37	20.89	21.22	20.92	22.7	0	
15	16QAM	1	74	21.16	21.12	21.12			
15	16QAM	36	0	20.97	20.98	21.00			
15	16QAM	36	39	20.94	20.93	20.98	22.7	0	
15	256QAM	1	0	19.05	19.05	19.05			
15	256QAM	1	0	19.16	19.27	19.18			
15	256QAM	1	74	19.20	19.02	19.07	20.7	2	
15	256QAM	36	0	19.03	19.19	19.01			
15	256QAM	36	39	19.24	19.07	19.09	20.7	2	
15	256QAM	36	39	19.24	18.87	19.00			
15	256QAM	75	0	19.00	19.00	19.04			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.20	21.22	21.04			
10	QPSK	1	25	21.14	21.01	21.13	22.7	0	
10	QPSK	5	0	21.10	21.28	21.00			
10	QPSK	25	0	21.16	20.81	21.22			
10	QPSK	25	12	21.07	21.01	20.99	22.7	0	
10	QPSK	25	25	21.02	21.08	20.88			
10	QPSK	50	0	21.03	21.10	21.01			
10	16QAM	1	0	21.24	21.07	20.87	22.7	0	
10	16QAM	1	49	20.98	21.08	21.11			
10	16QAM	25	0	21.14	20.92	20.93			
10	16QAM	25	12	21.11	20.83	21.14	22.7	0	
10	16QAM	25	25	21.15	21.16	20.87			
10	16QAM	50	0	21.09	21.02	20.81			
10	16QAM	1	49	21.08	20.99	20.97	22.7	0	
10	16QAM	1	26	20.92	21.12	21.01			
10	16QAM	1	49	21.14	21.07	21.06			
10	16QAM	25	0	21.09	21.00	21.00	22.7	0	
10	16QAM	25	12	21.00	21.06	21.02			
10	256QAM	1	0	19.03	19.22	19.04			
10	256QAM	1	26	19.06	19.08	19.13	20.7	2	
10	256QAM	1	49	19.15	19.03	19.09			
10	256QAM	25	0	19.03	19.11	19.01			
10	256QAM	25	12	19.25	19.12	19.09	20.7	2	
10	256QAM	25	0	19.07	19.15	19.05			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.15	21.27	20.99			
5	QPSK	1	16	21.19	21.00	21.14	22.7	0	
5	QPSK	1	24	21.18	21.26	21.01			
5	QPSK	12	0	21.11	21.05	21.13	22.7	0	
5	QPSK	12	7	21.11	21.00	21.13			
5	QPSK	12	13	21.04	21.16	21.06			
5	QPSK	12	19	21.05	21.03	20.89			
5	16QAM	1	0	21.28	21.03	20.89	22.7	0	
5	16QAM	1	12	21.12	21.03	21.00			
5	16QAM	1	24	21.08	21.08	21.03			
5	16QAM	12	0	21.22	20.95	20.95	22.7	0	
5	16QAM	12	7	21.17	20.91	21.05			
5	16QAM	12	13	21.15	21.12	21.01			
5	16QAM	25	0	20.92	21.03	20.82			
5	16QAM	1	0	21.11	20.90	21.03	22.7	0	
5	16QAM	1	12	21.09	21.16	21.03			
5	16QAM	1	24	21.04	21.19	21.13			
5	16QAM	12	0	21.03	21.03	21.07	22.7	0	
5	16QAM	12	7	20.96	21.08	20.94			
5	16QAM	25	0	21.03	20.93	21.00			
5	16QAM	25	0	20.98	21.01	21.04			
5	256QAM	1	0	19.07	19.21	19.04			
5	256QAM	1	12	19.17	19.15	19.11	20.7	2	
5	256QAM	1	24	19.17	19.03	19.06			
5	256QAM	12	0	19.06	19.23	19.03			
5	256QAM	12	7	19.04	19.05	19.09	20.7	2	
5	256QAM	12	13	19.10	19.03	19.07			
5	256QAM	25	0	19.03	19.14	19.06			

Band 41 Ant3 DSIS										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MFR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.08	21.08	21.08				
20	QPSK	1	49	21.10	21.03	21.10	22.7	0		
20	QPSK	5	0	21.02	21.15	21.14	21.10	21.12		
20	QPSK	5	49	20.97	21.10	21.10	21.02	21.10		
20	QPSK	50	24	20.99	20.96	21.11	21.07	21.16	22.7	0
20	QPSK	50	74	21.02	21.02	20.92	21.15	20.98		
20	QPSK	100	0	21.04	21.06	21.01	21.13	21.15		
20	QPSK	100	49	20.98	21.16	21.06	21.05	21.05		
20	16QAM	1	49	21.09	20.95	21.15	20.93	20.93	22.7	0
20	16QAM	5	0	21.06	21.09	21.06	21.05	21.05		
20	16QAM	50	0	20.99	21.04	21.00	20.97	21.03		
20	16QAM	50	24	20.99	20.96	21.17	21.13	20.88	22.7	0
20	16QAM	50	74	21.07	21.10	21.05	21.02	21.02		
20	16QAM	100	0	21.19	20.95	21.12	21.14	20.97		
20	16QAM	100	49	20.99	20.98	21.17	20.95	20.94	22.7	0
20	16QAM	1	49	21.11	20.94	21.07	20.93	21.11		
20	16QAM	5	0	21.04	21.22	21.07	20.96	21.22		
20	16QAM	50	0	21.05	21.20	21.05	21.05	21.20	22.7	0
20	16QAM	50	50	21.05	21.20	21.21	21.15	21.15		
20	16QAM	100	0	21.19	21.01	21.30	21.13	21.10		
20	16QAM	100	49	19.91	19.99	19.99	19.96	19.99	20.7	2
20	16QAM	1	49	19.14	19.50	19.28	19.15	19.24		
20	16QAM	5	0	19.08	19.12	19.11	19.08	19.14		



GSMD900_Ant4 IS15

Beam	Band Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	812	861	870		812	861	870	
TX Channel	1999.2	1999.2	1999.8	1999.2	1999.2	1999.2	1999.8	
Frequency MHz	25.88	26.12	26.22	27.00	18.88	17.12	17.22	
GSMD 1 Tx limit	25.88	26.12	26.14	27.00	18.88	17.12	17.22	
OPRR 0 Tx limit	22.81	22.92	22.73	23.00	18.81	18.92	18.73	
OPRR 3 Tx limit	20.33	20.36	20.81	21.00	16.33	16.36	16.81	
OPRR 4 Tx limit	19.39	19.49	19.23	20.00	16.39	16.68	16.92	
EDGE 1 Tx limit	24.62	24.83	24.84	25.50	19.62	19.83	19.84	
EDGE 2 Tx limit	21.53	21.87	21.69	22.00	16.53	16.87	16.69	
EDGE 3 Tx limit	20.20	20.19	20.12	20.50	15.80	15.89	15.86	
EDGE 4 Tx limit	18.47	18.36	18.42	19.00	14.47	14.34	14.42	

WCDMA IV Ant4 DSS

Beam	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
	9962	9960	9968		1912	1913	1918	
TX Channel	9962	9960	9968	9962	1912	1913	1918	
Frequency MHz	9962.4	9960.0	9968.0	9962.4	1912.0	1913.0	1918.0	
SCPP Rail 00	AMR 12 kbps	15.59	15.87	15.43	17.00	16.44	16.58	
SCPP Rail 01	RNC TX 20kps	15.58	15.87	15.46	17.00	16.46	16.58	
SCPP Rail 8	HSPA Subcar-1	14.69	14.83	14.73	16.00	15.78	15.84	
SCPP Rail 8	HSPA Subcar-2	14.67	14.83	14.74	16.00	15.73	15.88	
SCPP Rail 8	HSPA Subcar-3	14.63	14.40	14.26	15.50	15.27	15.37	
SCPP Rail 8	HSPA Subcar-4	14.64	14.17	14.29	15.50	15.24	15.28	
SCPP Rail 8	DC-HSPA Subcar-1	14.59	14.58	14.71	16.00	15.46	15.61	
SCPP Rail 8	DC-HSPA Subcar-2	14.58	14.54	14.61	16.00	15.51	15.78	
SCPP Rail 8	DC-HSPA Subcar-3	14.12	14.19	14.30	15.50	15.26	15.44	
SCPP Rail 8	DC-HSPA Subcar-4	13.95	14.08	14.32	15.50	15.30	15.24	
SCPP Rail 8	HSPA Subcar-1	14.51	14.51	14.61	16.00	15.40	15.70	
SCPP Rail 8	HSPA Subcar-2	12.89	12.96	12.63	14.00	13.33	13.77	
SCPP Rail 8	HSPA Subcar-3	13.89	13.72	13.59	15.00	14.48	14.81	
SCPP Rail 8	HSPA Subcar-4	12.67	12.88	12.69	14.00	13.40	13.89	
SCPP Rail 8	HSPA Subcar-5	14.47	14.63	14.63	16.00	15.40	15.71	



Band 25 Ant4 DSS1

Table with columns: BV (MHz), Modulation, RB Size, RB Offset, Low Line Ch. (MHz), High Line Ch. (MHz), Modulation, Power High (dBm), Power Low (dBm), Turn-on time (sec), and APN (dB). Contains multiple channel listings for various frequencies and power levels.

Band 66 Ant4 DSS1

Table with columns: BV (MHz), Modulation, RB Size, RB Offset, Low Line Ch. (MHz), High Line Ch. (MHz), Modulation, Power High (dBm), Power Low (dBm), Turn-on time (sec), and APN (dB). Contains multiple channel listings for various frequencies and power levels.



Band 38 Ant4 DSI5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.00	18.00	18.00			
20	QPSK	1	49	18.06	18.06	18.06	20	0	
20	QPSK	1	99	18.12	18.12	18.12			
20	QPSK	50	24	18.06	18.06	18.06	20	0	
20	QPSK	50	74	18.06	18.06	18.06			
20	QPSK	100	0	18.06	18.06	18.06			
20	16QAM	1	49	18.14	18.14	18.14	20	0	
20	16QAM	50	0	18.00	18.00	18.00			
20	16QAM	50	24	18.03	18.03	18.03	20	0	
20	16QAM	50	74	18.03	18.03	18.03			
20	16QAM	100	0	18.03	18.03	18.03			
20	64QAM	1	49	18.07	18.07	18.07	20	0	
20	64QAM	50	0	18.00	18.00	18.00			
20	64QAM	50	24	18.03	18.03	18.03	20	0	
20	64QAM	50	74	18.03	18.03	18.03			
20	64QAM	100	0	18.03	18.03	18.03			
20	256QAM	1	49	18.03	18.03	18.03	19	1	
20	256QAM	50	0	18.00	18.00	18.00			
20	256QAM	50	24	18.03	18.03	18.03	19	1	
20	256QAM	50	74	18.03	18.03	18.03			
20	256QAM	100	0	18.03	18.03	18.03			
Channel									
Frequency (MHz)									
15	QPSK	1	0	18.00	18.00	18.00			
15	QPSK	1	37	18.03	18.03	18.03	20	0	
15	QPSK	1	74	18.06	18.06	18.06			
15	QPSK	36	0	18.00	18.00	18.00	20	0	
15	QPSK	36	36	18.03	18.03	18.03			
15	QPSK	36	72	18.06	18.06	18.06			
15	16QAM	1	0	18.00	18.00	18.00			
15	16QAM	1	37	18.03	18.03	18.03	20	0	
15	16QAM	1	74	18.06	18.06	18.06			
15	16QAM	36	0	18.00	18.00	18.00	20	0	
15	16QAM	36	36	18.03	18.03	18.03			
15	16QAM	36	72	18.06	18.06	18.06			
15	64QAM	1	0	18.00	18.00	18.00			
15	64QAM	1	37	18.03	18.03	18.03	19	1	
15	64QAM	1	74	18.06	18.06	18.06			
15	64QAM	36	0	18.00	18.00	18.00	19	1	
15	64QAM	36	36	18.03	18.03	18.03			
15	64QAM	36	72	18.06	18.06	18.06			
15	256QAM	1	0	18.00	18.00	18.00			
15	256QAM	1	37	18.03	18.03	18.03	19	1	
15	256QAM	1	74	18.06	18.06	18.06			
15	256QAM	36	0	18.00	18.00	18.00	19	1	
15	256QAM	36	36	18.03	18.03	18.03			
15	256QAM	36	72	18.06	18.06	18.06			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.00	18.00	18.00			
10	QPSK	1	25	18.03	18.03	18.03	20	0	
10	QPSK	1	49	18.06	18.06	18.06			
10	QPSK	25	0	18.00	18.00	18.00	20	0	
10	QPSK	25	25	18.03	18.03	18.03			
10	QPSK	25	49	18.06	18.06	18.06			
10	16QAM	1	0	18.00	18.00	18.00			
10	16QAM	1	49	18.03	18.03	18.03	20	0	
10	16QAM	25	0	18.00	18.00	18.00			
10	16QAM	25	25	18.03	18.03	18.03	20	0	
10	16QAM	25	49	18.06	18.06	18.06			
10	64QAM	1	0	18.00	18.00	18.00			
10	64QAM	1	49	18.03	18.03	18.03	20	0	
10	64QAM	25	0	18.00	18.00	18.00			
10	64QAM	25	25	18.03	18.03	18.03	20	0	
10	64QAM	25	49	18.06	18.06	18.06			
10	256QAM	1	0	18.00	18.00	18.00			
10	256QAM	1	49	18.03	18.03	18.03	19	1	
10	256QAM	25	0	18.00	18.00	18.00			
10	256QAM	25	25	18.03	18.03	18.03	19	1	
10	256QAM	25	49	18.06	18.06	18.06			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.00	18.00	18.00			
5	QPSK	1	16	18.03	18.03	18.03	20	0	
5	QPSK	1	32	18.06	18.06	18.06			
5	QPSK	12	7	18.03	18.03	18.03	20	0	
5	QPSK	12	19	18.06	18.06	18.06			
5	QPSK	12	31	18.09	18.09	18.09			
5	QPSK	12	43	18.12	18.12	18.12			
5	16QAM	1	0	18.00	18.00	18.00			
5	16QAM	1	16	18.03	18.03	18.03	20	0	
5	16QAM	1	32	18.06	18.06	18.06			
5	16QAM	12	7	18.03	18.03	18.03	20	0	
5	16QAM	12	19	18.06	18.06	18.06			
5	16QAM	12	31	18.09	18.09	18.09			
5	16QAM	12	43	18.12	18.12	18.12			
5	64QAM	1	0	18.00	18.00	18.00			
5	64QAM	1	16	18.03	18.03	18.03	20	0	
5	64QAM	1	32	18.06	18.06	18.06			
5	64QAM	12	7	18.03	18.03	18.03	20	0	
5	64QAM	12	19	18.06	18.06	18.06			
5	64QAM	12	31	18.09	18.09	18.09			
5	64QAM	12	43	18.12	18.12	18.12			
5	256QAM	1	0	18.00	18.00	18.00			
5	256QAM	1	16	18.03	18.03	18.03	19	1	
5	256QAM	1	32	18.06	18.06	18.06			
5	256QAM	12	7	18.03	18.03	18.03	19	1	
5	256QAM	12	19	18.06	18.06	18.06			
5	256QAM	12	31	18.09	18.09	18.09			
5	256QAM	12	43	18.12	18.12	18.12			

Band 41 Ant4 DSI5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	19.00	19.00	19.00			
20	QPSK	1	49	19.07	19.07	19.07	20	0	
20	QPSK	1	99	19.14	19.14	19.14			
20	QPSK	50	24	19.07	19.07	19.07	20	0	
20	QPSK	50	74	19.07	19.07	19.07			
20	QPSK	100	0	19.07	19.07	19.07			
20	16QAM	1	49	19.15	19.15	19.15	20	0	
20	16QAM	50	0	19.00	19.00	19.00			
20	16QAM	50	24	19.03	19.03	19.03	20	0	
20	16QAM	50	74	19.03	19.03	19.03			
20	16QAM	100	0	19.03	19.03	19.03			
20	64QAM	1	49	19.19	19.19	19.19	20	0	
20	64QAM	50	0	19.00	19.00	19.00			
20	64QAM	50	24	19.03	19.03	19.03	20	0	
20	64QAM	50	74	19.03	19.03	19.03			
20	64QAM	100	0	19.03	19.03	19.03			
20	256QAM	1	49	19.20	19.20	19.20	19	1	
20	256QAM	50	0	19.00	19.00	19.00			
20	256QAM	50	24	19.03	19.03	19.03	19	1	
20	256QAM	50	74	19.03	19.03	19.03			
20	256QAM	100	0	19.03	19.03	19.03			
Channel									
Frequency (MHz)									
15	QPSK	1	0	19.00	19.00	19.00			
15	QPSK	1	37	19.07	19.07	19.07	20	0	
15	QPSK	1	74	19.14	19.14	19.14			
15	QPSK	36	0	19.00	19.00	19.00	20	0	
15	QPSK	36	36	19.03	19.03	19.03			
15	QPSK	36	72	19.06	19.06	19.06			
15	16QAM	1	0	19.00	19.00	19.00			
15	16QAM	1	37	19.03	19.03	19.03	20	0	
15	16QAM	1	74	19.06	19.06	19.06			
15	16QAM	36	0	19.00	19.00	19.00	20	0	
15	16QAM	36	36	19.03	19.03	19.03			
15	16QAM	36	72	19.06	19.06	19.06			
15	64QAM	1	0	19.00	19.00	19.00			
15	64QAM	1	37	19.03	19.03	19.03	19	1	
15	64QAM	1	74	19.06	19.06	19.06			
15	64QAM	36	0	19.00	19.00	19.00	19	1	
1									



Band 4 Ant5 DSIS										
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	18.77	18.97	18.96	20.5	0		
20	QPSK	1	49	18.87	18.96	18.96				
20	QPSK	1	99	18.87	18.96	18.96				
20	QPSK	50	0	18.69	18.97	18.97				
20	QPSK	50	24	18.78	18.97	18.97				
20	QPSK	50	50	18.75	18.96	18.79				
20	QPSK	100	0	18.74	18.98	18.90				
20	QPSK	100	0	18.87	18.97	18.90				
20	16QAM	1	49	18.88	18.90	18.89	20.5	0		
20	16QAM	50	0	18.54	18.71	18.77				
20	16QAM	50	24	18.67	18.70	18.79	20.5	0		
20	16QAM	50	50	18.63	18.74	18.81				
20	16QAM	100	0	18.62	18.66	18.75				
20	84QAM	1	0	18.63	18.79	18.82				
20	84QAM	1	49	18.75	18.90	18.91	20.5	0		
20	84QAM	50	0	18.71	18.90	18.82				
20	84QAM	50	24	18.64	18.68	18.78				
20	84QAM	50	50	18.67	18.70	18.75	20.5	0		
20	84QAM	100	0	18.64	18.67	18.73				
20	256QAM	1	49	17.76	17.99	17.88				
20	256QAM	1	99	17.83	17.88	18.00	19.5	1		
20	256QAM	1	99	17.78	18.07	17.90				
20	256QAM	50	0	17.82	17.97	17.98				
20	256QAM	50	24	17.74	17.71	18.02				
20	256QAM	50	50	17.81	17.88	17.97	19.5	1		
20	256QAM	100	0	17.85	17.85	17.95				
Channel										
Frequency (MHz)										
15	QPSK	1	0	18.76	18.86	18.83	20.5	0		
15	QPSK	1	37	18.82	18.92	18.92				
15	QPSK	1	74	18.86	18.93	18.91				
15	QPSK	36	0	18.60	18.67	18.67				
15	QPSK	36	25	18.64	18.79	18.73				
15	QPSK	36	39	18.65	18.67	18.83	20.5	0		
15	QPSK	75	0	18.72	18.70	18.82				
15	16QAM	1	0	18.80	18.84	18.84	20.5	0		
15	16QAM	1	37	18.83	18.70	18.78				
15	16QAM	1	74	18.87	18.78	18.78				
15	16QAM	36	0	18.50	18.71	18.58				
15	16QAM	36	20	18.62	18.52	18.69	20.5	0		
15	16QAM	36	29	18.67	18.59	18.62				
15	16QAM	75	0	18.50	18.53	18.62				
15	84QAM	1	0	18.58	18.70	18.71	20.5	0		
15	84QAM	1	37	18.61	18.67	18.67				
15	84QAM	1	74	18.65	18.65	18.67				
15	84QAM	36	0	18.54	18.55	18.71	20.5	0		
15	84QAM	36	20	18.57	18.58	18.62				
15	84QAM	36	39	18.50	18.55	18.55				
15	84QAM	75	0	18.64	18.58	18.74				
15	256QAM	1	0	17.56	17.56	17.56				
15	256QAM	1	37	17.65	17.72	17.59	19.5	1		
15	256QAM	1	74	17.68	18.01	17.91				
15	256QAM	36	0	17.68	17.70	17.93				
15	256QAM	36	20	17.58	17.70	17.93	19.5	1		
15	256QAM	36	39	17.74	17.77	17.82				
15	256QAM	75	0	17.53	17.53	17.58				
Channel										
Frequency (MHz)										
10	QPSK	1	0	18.75	18.75	17.60	20.5	0		
10	QPSK	1	25	18.65	18.81	18.92				
10	QPSK	1	49	18.85	18.89	18.80				
10	QPSK	12	0	18.61	18.73	18.84	20.5	0		
10	QPSK	25	12	18.61	18.73	18.88				
10	QPSK	25	25	18.75	18.85	18.89				
10	16QAM	1	0	18.70	18.70	18.89	20.5	0		
10	16QAM	1	24	18.77	18.72	18.72				
10	16QAM	25	0	18.63	18.65	18.63				
10	16QAM	25	12	18.67	18.71	18.74	20.5	0		
10	16QAM	50	0	18.67	18.64	18.69				
10	84QAM	1	0	18.65	18.65	18.65	20.5	0		
10	84QAM	1	49	18.69	18.64	18.63				
10	84QAM	25	0	18.56	18.62	18.66				
10	84QAM	25	12	18.74	18.74	18.76	20.5	0		
10	84QAM	50	0	18.61	18.56	18.59				
10	256QAM	1	28	17.69	17.69	17.67	19.5	1		
10	256QAM	1	49	17.75	17.89	17.78				
10	256QAM	12	0	17.68	17.64	18.04				
10	256QAM	25	12	17.68	17.70	17.75	19.5	1		
10	256QAM	25	25	17.62	17.75	17.66				
10	256QAM	50	0	17.52	17.71	17.71				
Channel										
Frequency (MHz)										
5	QPSK	1	0	18.59	18.81	18.76	20.5	0		
5	QPSK	1	24	18.83	18.79	18.77				
5	QPSK	12	0	18.61	18.66	18.66				
5	QPSK	12	7	18.78	18.68	18.79	20.5	0		
5	QPSK	12	13	18.58	18.68	18.92				
5	QPSK	25	0	18.69	18.69	18.69				
5	16QAM	1	0	18.74	18.74	18.90	20.5	0		
5	16QAM	1	24	18.75	18.75	18.71				
5	16QAM	12	0	18.74	18.74	18.96	20.5	0		
5	16QAM	12	7	18.63	18.65	18.65				
5	16QAM	12	13	18.72	18.61	18.83				
5	16QAM	25	0	18.67	18.66	18.60				
5	84QAM	1	0	18.54	18.67	18.65	20.5	0		
5	84QAM	1	12	18.67	18.74	18.72				
5	84QAM	1	24	18.61	18.56	18.56				
5	84QAM	12	0	18.55	18.62	18.78	20.5	0		
5	84QAM	12	7	18.65	18.57	18.78				
5	84QAM	12	13	18.53	18.60	18.82				
5	84QAM	25	0	18.65	18.61	18.52				
5	256QAM	1	0	17.65	17.65	17.68				
5	256QAM	1	12	17.67	17.69	17.67	19.5	1		
5	256QAM	1	24	17.78	17.95	17.86				
5	256QAM	12	0	17.60	17.59	17.84				
5	256QAM	12	7	17.65	17.70	17.80	19.5	1		
5	256QAM	12	13	17.52	17.69	17.75				
5	256QAM	50	0	17.58	17.73	17.83				
Channel										
Frequency (MHz)										
3	QPSK	1	0	18.69	18.87	18.89	20.5	0		
3	QPSK	1	8	18.72	18.68	18.94				
3	QPSK	1	14	18.83	18.79	18.84				
3	QPSK	8	0	18.52	18.61	18.75	20.5	0		
3	QPSK	8	4	18.77	18.75	18.70				
3	QPSK	8	7	18.72	18.79	18.84	20.5	0		
3	QPSK	8	15	18.23	18.68	18.79				
3	16QAM	1	0	18.75	18.74	18.68	20.5	0		
3	16QAM	1	8	18.81	18.71	18.73				
3	16QAM	1	16	18.85	18.87	18.88				
3	16QAM	8	0	18.70	18.67	18.58	20.5	0		
3	16QAM	8	4	18.52	18.62	18.62				
3	16QAM	8	7	18.66	18.74	18.78				
3	84QAM	1	0	18.60	18.62	18.63	20.5	0		
3	84QAM	1	8	18.65	18.69	18.90				
3	84QAM	1	14	18.71	18.70	18.74				
3	84QAM	8	0	18.61	18.54	18.75	20.5	0		
3	84QAM	8	4	18.50	18.57	18.87				
3	84QAM	8	7	18.70	18.62	18.72				
3	256QAM	1	0	17.59	17.64	17.64				
3	256QAM	1	8	17.62	17.68	17.68	19.5	1		
3	256QAM	1	16	17.60	17.66	17.67				
3	256QAM	8	0	17.68	17.55	17.89				
3	256QAM	8	4	17.71	17.79	17.86	19.5	1		
3	256QAM	8	7							



Band 38 Ant5 DS15										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)										
20	QPSK	1	0	22.18	22.21	22.20	22.20	22.5	0	
20	QPSK	1	49	22.20	22.17	22.13	22.13	22.5	0	
20	QPSK	50	0	22.18	22.22	22.20	22.20	22.5	0	
20	QPSK	50	24	22.15	22.02	22.07	22.07	22.5	0	
20	QPSK	100	0	22.00	22.12	22.01	22.01	22.5	0	
20	16QAM	1	0	22.09	22.12	21.99	21.99	22.5	0	
20	16QAM	1	49	21.98	21.99	21.97	21.97	22.5	0	
20	16QAM	1	99	22.07	22.05	21.90	21.90	22.5	0	
20	16QAM	50	0	21.21	21.17	21.11	21.11	22.5	0	
20	16QAM	50	24	21.26	21.16	21.17	21.17	22.5	0	
20	16QAM	100	0	21.24	21.13	21.06	21.06	22.5	0	
20	16QAM	100	0	21.21	21.14	21.05	21.05	22.5	0	
20	16QAM	100	24	21.24	21.28	21.01	21.01	22.5	0	
20	16QAM	1	99	21.07	21.03	21.07	21.07	22.5	0	
20	16QAM	50	0	20.20	20.25	20.10	20.10	21.5	1	
20	16QAM	50	24	20.26	20.14	20.16	20.16	21.5	1	
20	16QAM	100	0	20.24	20.13	20.04	20.04	21.5	1	
20	16QAM	100	0	20.20	20.10	20.13	20.13	21.5	1	
20	256QAM	1	0	18.08	18.18	18.11	18.11	19.5	3	
20	256QAM	1	49	18.18	18.10	18.02	18.02	19.5	3	
20	256QAM	1	99	18.19	18.30	18.13	18.13	19.5	3	
20	256QAM	50	0	17.97	18.07	17.96	17.96	19.5	3	
20	256QAM	50	24	18.22	18.08	18.00	18.00	19.5	3	
20	256QAM	100	0	18.11	18.02	18.02	18.02	19.5	3	
20	256QAM	100	0	18.22	18.13	18.04	18.04	19.5	3	
Channel										
Frequency (MHz)										
15	QPSK	1	0	21.72	21.69	21.73	21.73	22.5	0	
15	QPSK	1	37	22.04	21.86	22.04	22.04	22.5	0	
15	QPSK	1	74	22.13	22.16	21.96	21.96	22.5	0	
15	QPSK	1	111	22.02	21.87	21.99	21.99	22.5	0	
15	QPSK	36	20	21.99	21.87	21.96	21.96	22.5	0	
15	QPSK	36	39	21.97	21.87	21.97	21.97	22.5	0	
15	QPSK	75	0	22.00	21.87	22.01	22.01	22.5	0	
15	16QAM	1	0	21.92	21.85	21.79	21.79	22.5	0	
15	16QAM	1	37	21.93	21.82	21.84	21.84	22.5	0	
15	16QAM	1	74	21.89	21.90	21.85	21.85	22.5	0	
15	16QAM	36	0	21.23	20.95	20.96	20.96	22.5	0	
15	16QAM	36	39	21.22	21.00	21.14	21.14	22.5	0	
15	16QAM	36	59	21.06	21.01	20.94	20.94	22.5	0	
15	16QAM	75	0	21.03	20.91	21.09	21.09	22.5	0	
15	16QAM	1	0	20.94	21.14	21.02	21.02	22.5	0	
15	16QAM	1	37	21.04	21.23	20.91	20.91	22.5	0	
15	16QAM	1	74	20.94	20.99	20.96	20.96	22.5	0	
15	16QAM	36	0	20.00	20.21	20.06	20.06	21.5	1	
15	16QAM	36	20	20.05	20.11	20.14	20.14	21.5	1	
15	16QAM	36	39	20.02	20.06	20.06	20.06	21.5	1	
15	16QAM	75	0	20.21	19.98	20.04	20.04	21.5	1	
15	256QAM	1	0	17.97	18.08	18.01	18.01	19.5	3	
15	256QAM	1	37	18.03	18.03	18.02	18.02	19.5	3	
15	256QAM	1	74	18.12	18.13	18.09	18.09	19.5	3	
15	256QAM	36	0	18.01	18.16	17.76	17.76	19.5	3	
15	256QAM	36	20	18.24	18.09	18.02	18.02	19.5	3	
15	256QAM	36	39	17.97	17.86	17.84	17.84	19.5	3	
15	256QAM	75	0	18.12	18.01	18.00	18.00	19.5	3	
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.08	22.09	22.10	22.10	22.5	0	
10	QPSK	1	25	22.09	22.19	22.10	22.10	22.5	0	
10	QPSK	1	49	22.18	22.21	22.02	22.02	22.5	0	
10	QPSK	1	74	22.11	22.06	22.06	22.06	22.5	0	
10	QPSK	25	12	22.11	21.99	22.02	22.02	22.5	0	
10	QPSK	25	25	21.94	21.84	21.92	21.92	22.5	0	
10	16QAM	1	0	22.08	22.09	21.84	21.84	22.5	0	
10	16QAM	1	25	21.96	22.20	22.16	22.16	22.5	0	
10	16QAM	1	49	21.90	21.83	21.90	21.90	22.5	0	
10	16QAM	25	0	21.13	21.15	20.98	20.98	22.5	0	
10	16QAM	25	19	21.26	21.11	21.17	21.17	22.5	0	
10	16QAM	25	26	21.03	21.02	20.93	20.93	22.5	0	
10	16QAM	50	0	21.00	20.93	21.14	21.14	22.5	0	
10	16QAM	1	0	20.88	21.17	21.11	21.11	22.5	0	
10	16QAM	1	25	20.89	20.97	20.95	20.95	22.5	0	
10	16QAM	25	0	20.12	20.14	19.94	19.94	21.5	1	
10	16QAM	25	12	20.19	20.11	20.00	20.00	21.5	1	
10	16QAM	25	25	20.00	20.08	19.96	19.96	21.5	1	
10	16QAM	50	0	20.13	20.07	20.04	20.04	21.5	1	
10	256QAM	1	0	17.97	17.99	17.91	17.91	19.5	3	
10	256QAM	1	25	17.91	17.99	17.98	17.98	19.5	3	
10	256QAM	1	49	18.16	18.06	17.97	17.97	19.5	3	
10	256QAM	25	0	17.82	18.10	17.72	17.72	19.5	3	
10	256QAM	25	12	18.01	18.03	17.94	17.94	19.5	3	
10	256QAM	25	25	18.05	17.92	17.90	17.90	19.5	3	
10	256QAM	50	0	18.19	18.01	18.08	18.08	19.5	3	

Band 41 Ant5 DS15										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.20	21.24	21.24	21.24	22.5	0	
20	QPSK	1	49	21.28	21.08	21.33	21.24	22.5	0	
20	QPSK	1	99	21.38	21.29	21.29	21.31	22.5	0	
20	QPSK	50	0	21.04	21.21	21.25	21.07	22.5	0	
20	QPSK	50	24	21.07	21.07	21.25	21.17	22.5	0	
20	QPSK	100	0	21.20	21.22	21.24	21.20	22.5	0	
20	QPSK	100	0	21.28	21.13	21.34	21.19	22.5	0	
20	16QAM	1	0	21.01	20.95	21.91	21.11	22.5	0	
20	16QAM	1	49	21.33	21.24	21.27	20.96	22.5	0	
20	16QAM	1	99	21.29	21.08	21.03	20.92	22.5	0	
20	16QAM	50	0	21.04	21.11	21.34	21.07	22.5	0	
20	16QAM	50	24	21.07	21.00	21.23	21.05	22.5	0	
20	16QAM	100	0	21.02	21.17	21.20	21.11	22.5	0	
20	16QAM	100	0	21.29	21.07	21.23	21.20	22.5	0	
20	16QAM	1	0	21.05	21.01	21.32	21.04	22.5	0	
20	16QAM	1	49	21.18	21.08	21.17	21.02	22.5	0	
20	16QAM	1	99	21.11	21.17	21.22	21.19	22.5	0	
20	16QAM	50	0	19.99	20.02	20.23	19.99	21.5	1	
20	16QAM	50	24	20.06	20.08	20.27	20.12	21.5	1	
20	16QAM	100	0	20.32	20.18	20.25	20.05	21.5	1	
20	16QAM	100	0	20.19	19.98	20.26	20.12	21.5	1	
20	256QAM	1	0	18.13	18.14	18.30	18.09	19.5	3	
20	256QAM	1	49	18.18	18.02	18.29	18.25	19.5	3	
20	256QAM	1	99	18.43	18.21	18.25	18.37	19.5	3	
20	256QAM	50	0	17.97	18.07	18.09	18.11	19.5	3	
20	256QAM	50	24	18.16	18.06	18.27	18.13	19.5	3	
20	256QAM	100	0	18.32	18.19	18.00	18.31	19.5	3	
20	256QAM	100	0	18.22	18.13	18.04	18.04	19.5	3	
Channel										
Frequency (MHz)										
16	QPSK	1	0	20.25	21.23	21.23	21.13	22.5	0	
16	QPSK	1	37	21.14	20.92	21.30	20.88	22.5	0	
16	QPSK	1	74	21.17	20.99	21.02	21.00	22.5	0	
16	QPSK	36	0	20.98	20.95	21.09	20.90	22.5	0	
16	QPSK	36	20	20.99	20.91	21.09	21.02	22.5	0	
16	QPSK	36	39	20.98	20.95	21.09	21.00	22.5	0	
16	QPSK	75	0	21.21	21.06	21.19	21.00	22.5	0	
16	16QAM	1	0	20.84	20.71	21.11	21.02	22.5	0	
16	16QAM	1	37	21.16	20.92	21.21	21.02	22.5	0	
16	16QAM	1	74	21.00	20.84	20.85	20.79	22.5	0	
16	16QAM	36	0	20.81	21.04	21.31	20.87	22.5	0	
16	16QAM	36	39	20.87	20.90	20.98	20.81	22.5	0	
16	16QAM	36	59	21.15	20.94	21.15	20.97	22.5	0	
16	16QAM	75	0	21.21	20.87	21.19	21.08	22.5	0	
16	16QAM	1	0	20.80	20.85	21.09	20.80	22.5	0	
16	16QAM	1	37	21.12	20.98	21.15	20.85	22.5	0	
16	16QAM	1	74	21.05	21.10	21.30	20.88	22.5	0	
16	16QAM	36	0	20.85	20.82	20.90	20.19	22.5	0	
16	16QAM	36	20	20.91	20.86	20.17	20.08	22.5	0	
16	16QAM	36	39	20.						



Band 42 Ant10 DSIS									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)	
Channel									
	Frequency (MHz)			42160	42560	43000			
20	QPSK	1	0	19.39	19.41	19.27	20.7	0	
20	QPSK	1	89	19.33	19.31	19.23			
20	QPSK	1	99	19.39	19.35	19.34			
20	QPSK	50	0	19.26	19.26	19.24			
20	QPSK	50	24	19.44	19.39	19.17	20.7	0	
20	QPSK	50	0	19.32	19.31	19.33			
20	QPSK	100	0	19.32	19.31	19.33			
20	HQDM	1	0	19.32	19.26	19.42			
20	HQDM	1	89	19.33	19.32	19.31	20.7	0	
20	HQDM	1	99	19.40	19.40	19.26			
20	HQDM	50	0	19.32	19.25	19.31			
20	HQDM	50	24	19.43	19.25	19.30	20.7	0	
20	HQDM	50	0	19.26	19.26	19.24			
20	HQDM	100	0	19.32	19.32	19.32			
20	HQDM	1	0	19.32	19.26	19.32			
20	HQDM	1	48	19.35	19.32	19.35	20.7	0	
20	HQDM	1	99	19.38	19.26	19.38			
20	HQDM	50	0	19.32	19.25	19.27			
20	HQDM	50	24	19.49	19.32	19.20	20.7	0	
20	HQDM	50	0	19.26	19.25	19.27			
20	HQDM	100	0	19.25	19.34	19.33			
20	ZSSVM	1	0	19.25	19.25	19.25			
20	ZSSVM	1	48	19.27	19.24	19.28	20.7	0	
20	ZSSVM	1	99	19.25	19.25	19.17			
20	ZSSVM	50	0	19.25	19.25	19.25			
20	ZSSVM	50	24	19.41	19.16	19.13	20.7	0	
20	ZSSVM	50	0	19.19	19.31	19.14			
20	ZSSVM	100	0	19.32	19.14	19.18			
Channel									
	Frequency (MHz)			34714	3500	3542			
15	QPSK	1	0	19.21	19.22	19.19	20.7	0	
15	QPSK	1	37	19.22	19.14	19.15			
15	QPSK	1	74	19.21	19.22	19.21			
15	QPSK	36	0	19.20	19.25	19.11			
15	QPSK	36	20	19.38	19.26	19.12	20.7	0	
15	QPSK	36	0	19.21	19.22	19.23			
15	QPSK	75	0	19.20	19.20	19.25			
15	HQDM	1	0	19.21	19.22	19.22			
15	HQDM	1	37	19.18	19.27	19.22	20.7	0	
15	HQDM	1	74	19.21	19.22	19.22			
15	HQDM	36	0	19.14	19.18	19.19			
15	HQDM	36	20	19.27	19.15	19.20	20.7	0	
15	HQDM	36	0	19.21	19.22	19.22			
15	HQDM	75	0	19.24	19.20	19.22			
15	HQDM	1	0	19.21	19.22	19.22			
15	HQDM	1	37	19.21	19.22	19.20	20.7	0	
15	HQDM	1	74	19.21	19.22	19.22			
15	HQDM	36	0	19.24	19.14	19.08			
15	HQDM	36	20	19.22	19.22	19.22	20.7	0	
15	HQDM	36	0	19.42	19.33	19.17			
15	HQDM	75	0	19.20	19.25	19.25			
15	ZSSVM	1	0	19.20	19.20	19.20			
15	ZSSVM	1	37	19.20	19.29	19.13	20.7	0	
15	ZSSVM	1	74	19.21	19.22	19.21			
15	ZSSVM	36	0	19.22	19.20	19.24			
15	ZSSVM	36	20	19.22	19.22	19.22	20.7	0	
15	ZSSVM	36	0	19.22	19.22	19.22			
15	ZSSVM	75	0	19.22	19.22	19.22			
Channel									
	Frequency (MHz)			42166	42566	43006			
10	QPSK	1	0	19.34	19.42	19.25	20.7	0	
10	QPSK	1	25	19.19	19.16	19.07			
10	QPSK	1	49	19.21	19.22	19.22			
10	QPSK	25	0	19.19	19.20	19.12			
10	QPSK	25	25	19.38	19.30	19.18	20.7	0	
10	QPSK	50	0	19.26	19.21	19.30			
10	HQDM	1	0	19.21	19.16	19.21			
10	HQDM	1	25	19.07	19.25	19.31	20.7	0	
10	HQDM	1	49	19.28	19.20	19.17			
10	HQDM	25	0	19.25	19.11	19.18			
10	HQDM	25	25	19.38	19.13	19.21	20.7	0	
10	HQDM	25	26	19.18	19.22	19.14			
10	HQDM	50	0	19.24	19.22	19.27			
10	HQDM	1	0	19.15	19.18	19.10			
10	HQDM	1	25	19.17	19.21	19.20	20.7	0	
10	HQDM	1	49	19.21	19.15	19.24			
10	HQDM	25	0	19.29	19.19	19.10			
10	HQDM	25	25	19.15	19.27	19.18	20.7	0	
10	HQDM	25	26	19.37	19.33	19.11			
10	HQDM	50	0	19.21	19.20	19.30			
10	ZSSVM	1	0	19.38	19.17	19.08			
10	ZSSVM	1	25	19.17	19.16	19.23	20.7	0	
10	ZSSVM	1	49	19.42	19.15	19.20			
10	ZSSVM	25	0	19.14	19.18	19.24			
10	ZSSVM	50	0	19.31	19.31	19.14			
Channel									
	Frequency (MHz)			34676	3500	3542			
15	QPSK	1	0	19.27	19.44	19.20	20.7	0	
15	QPSK	1	12	19.31	19.16	19.27			
15	QPSK	1	24	19.32	19.32	19.17			
15	QPSK	12	0	19.14	19.24	19.20			
15	QPSK	12	7	19.36	19.31	19.12	20.7	0	
15	QPSK	12	13	19.30	19.33	19.24			
15	QPSK	25	0	19.26	19.21	19.23			
15	HQDM	1	0	19.27	19.19	19.32			
15	HQDM	1	12	19.20	19.24	19.26	20.7	0	
15	HQDM	1	24	19.34	19.23	19.18			
15	HQDM	12	0	19.25	19.06	19.20			
15	HQDM	12	13	19.17	19.19	19.23	20.7	0	
15	HQDM	25	0	19.13	19.15	19.17			
15	HQDM	1	0	19.28	19.17	19.01			
15	HQDM	1	12	19.27	19.21	19.21	20.7	0	
15	HQDM	1	24	19.13	19.18	19.21			
15	HQDM	12	0	19.27	19.21	19.07			
15	HQDM	12	13	19.12	19.24	19.25	20.7	0	
15	ZSSVM	1	0	19.31	19.17	19.07			
15	ZSSVM	1	12	19.08	19.20	19.18	20.7	0	
15	ZSSVM	1	24	19.29	19.20	19.08			
15	ZSSVM	12	0	19.19	19.21	19.21			
15	ZSSVM	12	7	19.27	19.20	19.20	20.7	0	
15	ZSSVM	12	13	19.18	19.27	19.07			
15	ZSSVM	25	0	19.15	19.14	19.20			

Band 48 Ant10 DSIS									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MPR (dB)	
Channel									
	Frequency (MHz)			3460	3600	3640			
20	QPSK	1	0	18.45	18.41	18.02	18.36		
20	QPSK	1	99	18.43	18.43	18.29	18.29	18	0
20	QPSK	1	99	18.51	18.38	18.38	18.34		
20	QPSK	50	0	18.32	18.34	18.38			
20	QPSK	50	24	18.52	18.45	18.44	18.22		
20	QPSK	100	0	18.32	18.34	18.38			
20	QPSK	100	0	18.21	18.27	18.26			
20	HQDM	1	0	18.27	18.26	18.21	18.20		
20	HQDM	1	99	18.14	18.45	18.32	18.26	18	0
20	HQDM	1	99	18.31	18.28	18.25	18.29		
20	HQDM	50	0	18.29	18.24	18.30	18.18		
20	HQDM	50	24	18.52	18.20	18.20	18.10		
20	HQDM	100	0	18.16	18.24	18.21	18.28	18	0
20	HQDM	100	0	18.40	18.23	18.18	18.19		
20	HQDM	1	0	18.24	18.25	18.23	18.16		
20	HQDM	1	48	18.32	18.40	18.17	18.21	18	0
20	HQDM	1	99	18.38	18.24	18.20	18.18		
20	HQDM	50	0	18.44	18.29	18.25	18.28		
20	HQDM	50	24	18.23	18.25	18.19	18.33	18	0
20	HQDM	50	0	18.22	18.30	18.20	18.33		
20	HQDM	100	0	18.23	18.38	18.17	18.20		
20	ZSSVM	1	0	18.27	18.21	18.27	18.28		
20	ZSSVM	1	48	18.38	18.26	18.17	18.31	18	0
20									



Band 42 Ant11 DSIS									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MFR (dB)	
Channel									
	Frequency (MHz)			42160	42560	42960			
20	QPSK	1	0	20.82	20.82	20.83	22.5	0	
20	QPSK	1	89	20.82	20.82	20.71			
20	QPSK	1	99	20.86	20.74	20.70			
20	QPSK	50	0	18.83	18.83	18.72	21.5	1	
20	QPSK	50	24	18.71	18.77	18.71			
20	QPSK	100	0	18.78	18.82	18.72			
20	QPSK	100	9	18.71	18.81	18.72			
20	HQDM	1	0	18.82	18.82	18.84	21.5	1	
20	HQDM	1	99	18.70	18.80	18.72			
20	HQDM	50	0	18.84	18.82	18.82			
20	HQDM	50	24	18.70	18.70	18.86	20.5	2	
20	HQDM	100	0	18.82	18.78	18.72			
20	HQDM	100	9	18.83	18.87	18.78			
20	HQDM	1	48	18.71	18.77	18.71	20.5	2	
20	HQDM	1	99	18.72	18.80	18.71			
20	HQDM	50	0	17.89	17.89	17.82			
20	HQDM	50	24	17.78	17.83	17.73	19.5	3	
20	HQDM	100	0	17.73	17.78	17.77			
20	ZSSDM	1	48	15.83	15.89	15.83	17.5	5	
20	ZSSDM	1	99	15.83	15.89	15.79			
20	ZSSDM	50	0	15.83	15.79	15.88	17.5	5	
20	ZSSDM	50	24	15.75	15.72	15.88			
20	ZSSDM	100	0	15.84	15.85	15.81			
Channel									
	Frequency (MHz)			347.4	350.0	352.6	Time-up limit (dBm) <td>MFR (dB)</td> <td></td>	MFR (dB)	
15	QPSK	1	0	20.83	20.83	20.84	22.5	0	
15	QPSK	1	87	20.82	20.83	20.72			
15	QPSK	1	74	20.70	20.78	20.78			
15	QPSK	36	0	18.82	18.78	18.86	21.5	1	
15	QPSK	36	20	18.75	18.85	18.89			
15	QPSK	75	0	18.79	18.83	18.79			
15	HQDM	1	17	18.81	18.79	18.72	21.5	1	
15	HQDM	1	74	18.82	18.82	18.82			
15	HQDM	36	0	18.84	18.81	18.84	20.5	2	
15	HQDM	36	20	18.76	18.84	18.72			
15	HQDM	75	0	18.89	18.84	18.81			
15	HQDM	1	48	18.87	18.83	18.83	20.5	2	
15	HQDM	1	97	18.70	18.84	18.73			
15	HQDM	1	74	18.71	18.78	18.78			
15	HQDM	36	0	17.75	17.81	17.82			
15	HQDM	36	20	17.72	17.78	17.78	19.5	3	
15	HQDM	75	0	17.85	17.85	17.87			
15	HQDM	1	17	17.70	17.84	17.81			
15	ZSSDM	1	17	15.83	15.84	15.82	17.5	5	
15	ZSSDM	1	74	15.84	15.88	15.82			
15	ZSSDM	36	0	15.84	15.89	15.85			
15	ZSSDM	36	20	15.83	15.82	15.84	17.5	5	
15	ZSSDM	75	0	15.84	15.84	15.84			
Channel									
	Frequency (MHz)			42160	42560	42960	Time-up limit (dBm) <td>MFR (dB)</td> <td></td>	MFR (dB)	
10	QPSK	1	0	20.85	20.84	20.85	22.5	0	
10	QPSK	1	25	20.80	20.83	20.78			
10	QPSK	1	12	20.87	20.78	20.77			
10	QPSK	25	0	18.89	18.83	18.83	21.5	1	
10	QPSK	25	25	18.83	18.72	18.85			
10	QPSK	50	0	18.87	18.81	18.78			
10	QPSK	50	12	18.75	18.78	18.75	21.5	1	
10	HQDM	1	25	18.84	18.71	18.83			
10	HQDM	1	48	18.72	18.78	18.77	20.5	2	
10	HQDM	25	0	18.72	18.87	18.86			
10	HQDM	25	25	18.83	18.80	18.71			
10	HQDM	50	0	18.87	18.80	18.73	20.5	2	
10	HQDM	50	12	18.71	18.82	18.79			
10	HQDM	1	48	18.71	18.78	18.72			
10	HQDM	25	0	17.89	17.82	17.85	19.5	3	
10	HQDM	25	25	17.86	17.71	17.85			
10	HQDM	50	0	18.85	18.71	18.82			
10	ZSSDM	1	0	15.82	15.82	15.89	17.5	5	
10	ZSSDM	1	48	15.82	15.82	15.87			
10	ZSSDM	25	0	15.87	15.77	15.72			
10	ZSSDM	25	25	15.84	15.88	15.72	17.5	5	
10	ZSSDM	50	0	15.71	15.75	15.84			
Channel									
	Frequency (MHz)			347.4	350.0	352.6	Time-up limit (dBm) <td>MFR (dB)</td> <td></td>	MFR (dB)	
5	QPSK	1	0	20.82	20.73	20.82	22.5	0	
5	QPSK	1	12	20.87	20.78	20.77			
5	QPSK	1	24	20.87	20.73	20.77			
5	QPSK	12	0	18.86	18.81	18.83	21.5	1	
5	QPSK	12	7	18.89	18.88	18.78			
5	QPSK	12	13	18.82	18.78	18.82			
5	HQDM	1	0	18.78	18.87	18.80	21.5	1	
5	HQDM	1	12	18.85	18.71	18.84			
5	HQDM	1	24	18.70	18.85	18.81			
5	HQDM	12	0	18.82	18.85	18.86	20.5	2	
5	HQDM	12	13	18.84	18.79	18.89			
5	HQDM	25	0	18.80	18.85	18.80			
5	HQDM	1	0	18.80	18.80	18.77	20.5	2	
5	HQDM	1	12	18.71	18.87	18.80			
5	HQDM	1	24	18.79	18.89	18.73			
5	HQDM	12	0	17.80	17.74	17.83	19.5	3	
5	HQDM	12	13	17.80	17.75	17.84			
5	ZSSDM	1	0	15.84	15.86	15.89	17.5	5	
5	ZSSDM	1	12	15.84	15.86	15.89			
5	ZSSDM	1	24	15.89	15.82	15.89			
5	ZSSDM	12	0	15.87	15.80	15.84			
5	ZSSDM	12	7	15.89	15.73	15.83	17.5	5	
5	ZSSDM	12	13	15.81	15.82	15.89			
5	ZSSDM	25	0	15.86	15.80	15.89			

Band 48 Ant11 DSIS									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MFR (dB)	
Channel									
	Frequency (MHz)			3690	3690	3690			
20	QPSK	1	0	17.86	17.87	17.88	17.42		
20	QPSK	1	99	17.83	17.84	17.89	19	0	
20	QPSK	1	99	17.84	17.85	17.88			
20	QPSK	50	0	17.47	17.51	17.40			
20	QPSK	50	24	17.49	17.59	17.58	19	0	
20	QPSK	100	0	17.37	17.38	17.41			
20	HQDM	1	0	17.31	17.31	17.36	17.41		
20	HQDM	1	99	17.31	17.30	17.30			
20	HQDM	1	99	17.38	17.38	17.34	19	0	
20	HQDM	50	0	18.58	18.59	18.61			
20	HQDM	50	24	18.59	18.44	18.50	18	1	
20	HQDM	100	0	18.42	18.47	18.51			
20	HQDM	100	9	18.52	18.55	18.52			
20	HQDM	1	48	18.45	18.38	18.50	18	1	
20	HQDM	1	99	18.35	18.52	18.38	18.41		
20	HQDM	50	0	18.51	18.54	18.50			
20	HQDM	50	24	18.51	18.52	18.53	17	2	
20	HQDM	100	0	18.48	18.72	18.71			
20	HQDM	100	9	18.48	18.52	18.51			
20	ZSSDM	1	48	13.45	13.85	13.42	15	4	
20	ZSSDM	1	99	13.45	13.85	13.39			
20	ZSSDM	50	0	13.40	13.83	13.44	15	4	
20	ZSSDM	50	24	13.78	13.84	13.48			
20	ZSSDM	100	0	13.32	13.44	13.52	15	4	
20	ZSSDM	100	9	13.40	13.64	13.59			
Channel									
	Frequency (MHz)			3690	3690	3690	Time-up limit (dBm) <td>MFR (dB)</td> <td></td>	MFR (dB)	
15	QPSK	1	0	17.84	17.80	17.82	17.42		
15	QPSK	1	37	17.83	17.38	17.38	19	0	
15	QPSK	1	74	17.46	17.41	17.41			
15	QPSK	1	74	17.47	17.50	17.40			
15	QPSK	36	20	17.48	17.52	17.35	17.06		
15	QPSK	36	0	17.29	17.47	17.46	19	0	
15	QPSK	75	0	17.23	17.24	17.46	17.21		
15	HQDM	1	17	17.17	17.47	17.46	17.42		
15	HQDM	1	37	17.19	17.60	17.37	17.31	19	0
15	HQDM	1	74	17.17	17.46	17.46			
15	HQDM	36	0	18.56	18.51	18.61			



Band 42 Ant12 DSIS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
BW (MHz)	Modulation	RB Size	RB Offset	PRB1	PRB2	PRB3	PRB4	PRB5	PRB6	PRB7	PRB8	PRB9	PRB10	PRB11	PRB12	PRB13	PRB14	PRB15	PRB16	PRB17	PRB18	PRB19	PRB20	PRB21	PRB22	PRB23	PRB24	PRB25	PRB26	PRB27	PRB28	PRB29	PRB30	PRB31	PRB32	PRB33	PRB34	PRB35	PRB36	PRB37	PRB38	PRB39	PRB40	PRB41	PRB42	PRB43	PRB44	PRB45	PRB46	PRB47	PRB48	PRB49	PRB50	PRB51	PRB52	PRB53	PRB54	PRB55	PRB56	PRB57	PRB58	PRB59	PRB60	PRB61	PRB62	PRB63	PRB64	PRB65	PRB66	PRB67	PRB68	PRB69	PRB70	PRB71	PRB72	PRB73	PRB74	PRB75	PRB76	PRB77	PRB78	PRB79	PRB80	PRB81	PRB82	PRB83	PRB84	PRB85	PRB86	PRB87	PRB88	PRB89	PRB90	PRB91	PRB92	PRB93	PRB94	PRB95	PRB96	PRB97	PRB98	PRB99	PRB100	PRB101	PRB102	PRB103	PRB104	PRB105	PRB106	PRB107	PRB108	PRB109	PRB110	PRB111	PRB112	PRB113	PRB114	PRB115	PRB116	PRB117	PRB118	PRB119	PRB120	PRB121	PRB122	PRB123	PRB124	PRB125	PRB126	PRB127	PRB128	PRB129	PRB130	PRB131	PRB132	PRB133	PRB134	PRB135	PRB136	PRB137	PRB138	PRB139	PRB140	PRB141	PRB142	PRB143	PRB144	PRB145	PRB146	PRB147	PRB148	PRB149	PRB150	PRB151	PRB152	PRB153	PRB154	PRB155	PRB156	PRB157	PRB158	PRB159	PRB160	PRB161	PRB162	PRB163	PRB164	PRB165	PRB166	PRB167	PRB168	PRB169	PRB170	PRB171	PRB172	PRB173	PRB174	PRB175	PRB176	PRB177	PRB178	PRB179	PRB180	PRB181	PRB182	PRB183	PRB184	PRB185	PRB186	PRB187	PRB188	PRB189	PRB190	PRB191	PRB192	PRB193	PRB194	PRB195	PRB196	PRB197	PRB198	PRB199	PRB200	PRB201	PRB202	PRB203	PRB204	PRB205	PRB206	PRB207	PRB208	PRB209	PRB210	PRB211	PRB212	PRB213	PRB214	PRB215	PRB216	PRB217	PRB218	PRB219	PRB220	PRB221	PRB222	PRB223	PRB224	PRB225	PRB226	PRB227	PRB228	PRB229	PRB230	PRB231	PRB232	PRB233	PRB234	PRB235	PRB236	PRB237	PRB238	PRB239	PRB240	PRB241	PRB242	PRB243	PRB244	PRB245	PRB246	PRB247	PRB248	PRB249	PRB250	PRB251	PRB252	PRB253	PRB254	PRB255	PRB256	PRB257	PRB258	PRB259	PRB260	PRB261	PRB262	PRB263	PRB264	PRB265	PRB266	PRB267	PRB268	PRB269	PRB270	PRB271	PRB272	PRB273	PRB274	PRB275	PRB276	PRB277	PRB278	PRB279	PRB280	PRB281	PRB282	PRB283	PRB284	PRB285	PRB286	PRB287	PRB288	PRB289	PRB290	PRB291	PRB292	PRB293	PRB294	PRB295	PRB296	PRB297	PRB298	PRB299	PRB300	PRB301	PRB302	PRB303	PRB304	PRB305	PRB306	PRB307	PRB308	PRB309	PRB310	PRB311	PRB312	PRB313	PRB314	PRB315	PRB316	PRB317	PRB318	PRB319	PRB320	PRB321	PRB322	PRB323	PRB324	PRB325	PRB326	PRB327	PRB328	PRB329	PRB330	PRB331	PRB332	PRB333	PRB334	PRB335	PRB336	PRB337	PRB338	PRB339	PRB340	PRB341	PRB342	PRB343	PRB344	PRB345	PRB346	PRB347	PRB348	PRB349	PRB350	PRB351	PRB352	PRB353	PRB354	PRB355	PRB356	PRB357	PRB358	PRB359	PRB360	PRB361	PRB362	PRB363	PRB364	PRB365	PRB366	PRB367	PRB368	PRB369	PRB370	PRB371	PRB372	PRB373	PRB374	PRB375	PRB376	PRB377	PRB378	PRB379	PRB380	PRB381	PRB382	PRB383	PRB384	PRB385	PRB386	PRB387	PRB388	PRB389	PRB390	PRB391	PRB392	PRB393	PRB394	PRB395	PRB396	PRB397	PRB398	PRB399	PRB400	PRB401	PRB402	PRB403	PRB404	PRB405	PRB406	PRB407	PRB408	PRB409	PRB410	PRB411	PRB412	PRB413	PRB414	PRB415	PRB416	PRB417	PRB418	PRB419	PRB420	PRB421	PRB422	PRB423	PRB424	PRB425	PRB426	PRB427	PRB428	PRB429	PRB430	PRB431	PRB432	PRB433	PRB434	PRB435	PRB436	PRB437	PRB438	PRB439	PRB440	PRB441	PRB442	PRB443	PRB444	PRB445	PRB446	PRB447	PRB448	PRB449	PRB450	PRB451	PRB452	PRB453	PRB454	PRB455	PRB456	PRB457	PRB458	PRB459	PRB460	PRB461	PRB462	PRB463	PRB464	PRB465	PRB466	PRB467	PRB468	PRB469	PRB470	PRB471	PRB472	PRB473	PRB474	PRB475	PRB476	PRB477	PRB478	PRB479	PRB480	PRB481	PRB482	PRB483	PRB484	PRB485	PRB486	PRB487	PRB488	PRB489	PRB490	PRB491	PRB492	PRB493	PRB494	PRB495	PRB496	PRB497	PRB498	PRB499	PRB500	PRB501	PRB502	PRB503	PRB504	PRB505	PRB506	PRB507	PRB508	PRB509	PRB510	PRB511	PRB512	PRB513	PRB514	PRB515	PRB516	PRB517	PRB518	PRB519	PRB520	PRB521	PRB522	PRB523	PRB524	PRB525	PRB526	PRB527	PRB528	PRB529	PRB530	PRB531	PRB532	PRB533	PRB534	PRB535	PRB536	PRB537	PRB538	PRB539	PRB540	PRB541	PRB542	PRB543	PRB544	PRB545	PRB546	PRB547	PRB548	PRB549	PRB550	PRB551	PRB552	PRB553	PRB554	PRB555	PRB556	PRB557	PRB558	PRB559	PRB560	PRB561	PRB562	PRB563	PRB564	PRB565	PRB566	PRB567	PRB568	PRB569	PRB570	PRB571	PRB572	PRB573	PRB574	PRB575	PRB576	PRB577	PRB578	PRB579	PRB580	PRB581	PRB582	PRB583	PRB584	PRB585	PRB586	PRB587	PRB588	PRB589	PRB590	PRB591	PRB592	PRB593	PRB594	PRB595	PRB596	PRB597	PRB598	PRB599	PRB600	PRB601	PRB602	PRB603	PRB604	PRB605	PRB606	PRB607	PRB608	PRB609	PRB610	PRB611	PRB612	PRB613	PRB614	PRB615	PRB616	PRB617	PRB618	PRB619	PRB620	PRB621	PRB622	PRB623	PRB624	PRB625	PRB626	PRB627	PRB628	PRB629	PRB630	PRB631	PRB632	PRB633	PRB634	PRB635	PRB636	PRB637	PRB638	PRB639	PRB640	PRB641	PRB642	PRB643	PRB644	PRB645	PRB646	PRB647	PRB648	PRB649	PRB650	PRB651	PRB652	PRB653	PRB654	PRB655	PRB656	PRB657	PRB658	PRB659	PRB660	PRB661	PRB662	PRB663	PRB664	PRB665	PRB666	PRB667	PRB668	PRB669	PRB670	PRB671	PRB672	PRB673	PRB674	PRB675	PRB676	PRB677	PRB678	PRB679	PRB680	PRB681	PRB682	PRB683	PRB684	PRB685	PRB686	PRB687	PRB688	PRB689	PRB690	PRB691	PRB692	PRB693	PRB694	PRB695	PRB696	PRB697	PRB698	PRB699	PRB700	PRB701	PRB702	PRB703	PRB704	PRB705	PRB706	PRB707	PRB708	PRB709	PRB710	PRB711	PRB712	PRB713	PRB714	PRB715	PRB716	PRB717	PRB718	PRB719	PRB720	PRB721	PRB722	PRB723	PRB724	PRB725	PRB726	PRB727	PRB728	PRB729	PRB730	PRB731	PRB732	PRB733	PRB734	PRB735	PRB736	PRB737	PRB738	PRB739	PRB740	PRB741	PRB742	PRB743	PRB744	PRB745	PRB746	PRB747	PRB748	PRB749	PRB750	PRB751	PRB752	PRB753	PRB754	PRB755	PRB756	PRB757	PRB758	PRB759	PRB760	PRB761	PRB762	PRB763	PRB764	PRB765	PRB766	PRB767	PRB768	PRB769	PRB770	PRB771	PRB772	PRB773	PRB774	PRB775	PRB776	PRB777	PRB778	PRB779	PRB780	PRB781	PRB782	PRB783	PRB784	PRB785	PRB786	PRB787	PRB788	PRB789	PRB790	PRB791	PRB792	PRB793	PRB794	PRB795	PRB796	PRB797	PRB798	PRB799	PRB800	PRB801	PRB802	PRB803	PRB804	PRB805	PRB806	PRB807	PRB808	PRB809	PRB810	PRB811	PRB812	PRB813	PRB814	PRB815	PRB816	PRB817	PRB818	PRB819	PRB820	PRB821	PRB822	PRB823	PRB824	PRB825	PRB826	PRB827	PRB828	PRB829	PRB830	PRB831	PRB832	PRB833	PRB834	PRB835	PRB836	PRB837	PRB838	PRB839	PRB840	PRB841	PRB842	PRB843	PRB844	PRB845	PRB846	PRB847	PRB848	PRB849	PRB850	PRB851	PRB852	PRB853	PRB854	PRB855	PRB856	PRB857	PRB858	PRB859	PRB860	PRB861	PRB862	PRB863	PRB864	PRB865	PRB866	PRB867	PRB868	PRB869	PRB870	PRB871	PRB872	PRB873	PRB874	PRB875	PRB876	PRB877	PRB878	PRB879	PRB880	PRB881	PRB882	PRB883	PRB884	PRB885	PRB886	PRB887	PRB888	PRB889	PRB890	PRB891	PRB892	PRB893	PRB894	PRB895	PRB896	PRB897	PRB898	PRB899	PRB900	PRB901	PRB902	PRB903	PRB904	PRB905	PRB906	PRB907	PRB908	PRB909	PRB910	PRB911	PRB912	PRB913	PRB914	PRB915	PRB916	PRB917	PRB918	PRB919	PRB920	PRB921	PRB922	PRB923	PRB924	PRB925	PRB926	PRB927	PRB928	PRB929	PRB930	PRB931	PRB932	PRB933	PRB934	PRB935	PRB936	PRB937	PRB938	PRB939	PRB940	PRB941	PRB942	PRB943	PRB944	PRB945	PRB946	PRB947	PRB948	PRB949	PRB950	PRB951	PRB952	PRB953	PRB954	PRB955	PRB956	PRB957	PRB958	PRB959	PRB960	PRB961	PRB962	PRB963	PRB964	PRB965	PRB966	PRB967	PRB968	PRB969	PRB970	PRB971	PRB972	PRB973	PRB974	PRB975	PRB976	PRB977	PRB978	PRB979	PRB980	PRB981	PRB982	PRB983	PRB984	PRB985	PRB986	PRB987	PRB988	PRB989	PRB990	PRB991	PRB992	PRB993	PRB994	PRB995	PRB996	PRB997	PRB998	PRB999	PRB1000
Channel											42150	42500	43000	43500	44000	44500	45000	45500	46000	46500	47000	47500	48000	48500	49000	49500	50000	50500	51000	51500	52000	52500	53000	53500	54000	54500	55000	55500	56000	56500	57000	57500	58000	58500	59000	59500	60000	60500	61000	61500	62000	62500	63000	63500	64000	64500	65000	65500	66000	66500	67000	67500	68000	68500	69000	69500	70000	70500	71000	71500	72000	72500	73000	73500	74000	74500	75000	75500	76000	76500	77000	77500	78000	78500	79000	79500	80000	80500	81000	81500	82000	82500	83000	83500	84000	84500	85000	85500	86000	86500	87000	87500	88000	88500	89000	89500	90000	90500	91000	91500	92000	92500	93000	93500	94000	94500	95000	95500	96000	96500	97000	97500	98000	98500	99000	99500	100000	100500	101000	101500	10200																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								



Band 42 Ant13 DS15									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Unit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				42160	42560	42960			
20	QPSK	1	0	20.46	20.46	20.33	21.7	0	
20	QPSK	1	89	20.38	20.46	20.33			
20	QPSK	50	24	20.45	20.42	20.24	21.7	0	
20	QPSK	100	0	20.41	20.41	20.30			
20	HQDM	1	0	20.26	20.22	20.36	21.7	0	
20	HQDM	1	89	20.31	20.30	20.29			
20	HQDM	50	24	20.35	20.30	20.23	21.7	0	
20	HQDM	100	0	20.34	20.42	20.33			
20	HQDM	1	48	20.42	20.35	20.32	21.7	0	
20	HQDM	1	99	20.49	20.42	20.34			
20	HQDM	50	24	20.31	20.30	20.29	21.7	0	
20	HQDM	100	0	20.49	20.25	20.35			
20	ZSSDM	1	48	19.82	19.27	18.18	20.7	1	
20	ZSSDM	1	99	19.85	19.25	18.24			
20	ZSSDM	50	24	19.45	19.54	19.22	20.7	1	
20	ZSSDM	100	0	19.47	19.38	19.44			
Channel									
Frequency (MHz)				34714	35000	35286			
15	QPSK	1	0	20.42	20.43	20.30	21.7	0	
15	QPSK	1	87	20.18	20.22	20.20			
15	QPSK	36	20	20.30	20.30	20.30	21.7	0	
15	QPSK	72	0	20.32	20.31	20.21			
15	HQDM	1	17	20.35	20.41	20.35	21.7	0	
15	HQDM	1	71	20.22	20.20	20.20			
15	HQDM	36	0	20.42	20.42	20.12	21.7	0	
15	HQDM	36	20	20.31	20.20	20.21			
15	HQDM	36	20	20.31	20.20	20.20	21.7	0	
15	HQDM	75	0	20.36	20.34	20.21			
15	HQDM	1	48	20.44	20.42	20.15	21.7	0	
15	HQDM	1	97	20.28	20.27	20.19			
15	HQDM	36	20	20.31	20.20	20.20	21.7	0	
15	HQDM	36	0	20.18	20.18	20.33			
15	HQDM	36	20	20.30	20.20	20.20	21.7	0	
15	HQDM	75	0	20.36	20.45	20.20			
15	ZSSDM	1	27	19.14	19.19	19.02	20.7	1	
15	ZSSDM	1	74	19.24	19.25	19.05			
15	ZSSDM	36	0	19.19	19.40	19.11	20.7	1	
15	ZSSDM	36	20	19.25	19.45	19.05			
15	ZSSDM	36	20	19.24	19.19	19.21	20.7	1	
15	ZSSDM	75	0	19.24	19.24	19.24			
Channel									
Frequency (MHz)				42166	42566	42966			
10	QPSK	1	0	20.37	20.43	20.28	21.7	0	
10	QPSK	1	25	20.38	20.39	20.19			
10	QPSK	25	0	20.34	20.39	20.18	21.7	0	
10	QPSK	50	0	20.32	20.31	20.27			
10	QPSK	50	0	20.41	20.36	20.29	21.7	0	
10	HQDM	1	25	20.38	20.37	20.23	21.7	0	
10	HQDM	1	49	20.35	20.30	20.29			
10	HQDM	25	0	20.38	20.42	20.08	21.7	0	
10	HQDM	50	0	20.27	20.20	20.14			
10	HQDM	25	26	20.31	20.44	20.28	21.7	0	
10	HQDM	50	0	20.21	20.37	20.09			
10	HQDM	1	26	20.30	20.20	20.23	21.7	0	
10	HQDM	1	49	20.37	20.35	20.25			
10	HQDM	25	0	20.26	20.28	20.34	21.7	0	
10	HQDM	25	26	20.40	20.39	20.33			
10	HQDM	25	26	20.20	20.40	20.28	21.7	0	
10	ZSSDM	1	0	19.37	19.49	19.12	20.7	1	
10	ZSSDM	1	25	19.38	19.22	19.16			
10	ZSSDM	1	49	19.27	19.31	19.23	20.7	1	
10	ZSSDM	25	0	19.10	19.20	19.10			
10	ZSSDM	25	26	19.20	19.45	19.26	20.7	1	
10	ZSSDM	25	25	19.40	19.17	19.09			
10	ZSSDM	50	0	19.24	19.31	19.29			
Channel									
Frequency (MHz)				34675	34960	35245			
5	QPSK	1	0	20.28	20.45	20.18	21.7	0	
5	QPSK	1	12	20.31	20.18	20.30			
5	QPSK	1	24	20.33	20.30	20.30	21.7	0	
5	QPSK	12	0	20.23	20.40	20.21			
5	QPSK	12	7	20.32	20.37	20.10	21.7	0	
5	QPSK	12	13	20.31	20.36	20.26			
5	HQDM	1	0	20.12	20.19	20.25	21.7	0	
5	HQDM	1	11	20.23	20.41	20.29			
5	HQDM	1	24	20.27	20.20	20.33	21.7	0	
5	HQDM	12	0	20.47	20.44	20.09			
5	HQDM	12	13	20.27	20.37	20.39	21.7	0	
5	HQDM	25	0	20.25	20.30	20.19			
5	HQDM	1	0	20.23	20.37	20.07	21.7	0	
5	HQDM	1	24	20.33	20.30	20.18			
5	HQDM	12	7	20.42	20.33	20.25	21.7	0	
5	HQDM	12	13	20.22	20.27	20.24			
5	HQDM	25	0	20.25	20.45	20.25	21.7	0	
5	ZSSDM	1	0	19.40	19.47	19.24	20.7	1	
5	ZSSDM	1	12	19.15	19.10	19.14			
5	ZSSDM	1	24	19.20	19.20	19.20	20.7	1	
5	ZSSDM	12	0	19.23	19.41	19.06			
5	ZSSDM	12	7	19.33	19.34	19.09	20.7	1	
5	ZSSDM	12	13	19.25	19.27	19.19			
5	ZSSDM	25	0	19.30	19.25	19.41			

Band 48 Ant13 DS15									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up Unit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)				34675	34960	35245			
20	QPSK	1	0	20.37	20.33	20.48	22	0	
20	QPSK	1	99	20.42	20.39	20.27			
20	QPSK	1	99	20.28	20.25	20.24	22	0	
20	QPSK	50	0	20.40	20.31	20.20			
20	QPSK	50	24	20.27	20.36	20.24	22	0	
20	QPSK	100	0	20.15	20.29	20.25	22	0	
20	HQDM	1	0	20.37	20.36	20.00	22	0	
20	HQDM	1	99	20.22	20.36	20.15	22	0	
20	HQDM	50	0	20.20	20.35	20.15	22	0	
20	HQDM	50	24	20.20	20.10	20.24	22	0	
20	HQDM	100	0	20.33	20.12	20.23	22	0	
20	HQDM	1	49	20.20	20.35	20.15	22	0	
20	HQDM	1	99	20.29	20.10	20.24	22	0	
20	HQDM	50	0	19.14	19.25	19.08	21	1	
20	HQDM	50	24	19.27	19.10	19.24	21	1	
20	HQDM	100	0	19.25	19.15	19.23	21	1	
20	ZSSDM	1	49	17.33	17.13	17.40	19	3	
20	ZSSDM	1	99	17.31	17.26	17.19			
20	ZSSDM	50	0	17.25	17.25	17.15	19	3	
20	ZSSDM	50	24	17.24	17.31	17.07	19	3	
20	ZSSDM	50	50	17.25	17.25	17.04			
20	ZSSDM	100	0	17.27	17.04	17.28	19	3	
Channel									
Frequency (MHz)				34675	34960	35245			
15	QPSK	1	0	20.37	20.33	20.27	22	0	
15	QPSK	1	37	20.47	20.37	20.27	22	0	
15	QPSK	1	71	20.30	20.30	20.22			
15	QPSK	36	0	20.46	20.27	20.12	22	0	
15	QPSK	36	20	20.35	20.45	20.20	22	0	
15	QPSK	72	0	20.10	20.28	20.35	22	0	
15	HQDM	1	17	20.35	20.41	20.35	22	0	
15	HQDM	1	71	20.22	20.20	20.20			
15	HQDM	36	0	20.30	20.31	20.21	22	0	
15	HQDM	36	20	20.33	20.08	20.46	22	0	
15	HQDM	36	20	20.17	20.17	20.19	22	0	
15	HQDM	75	0	20.29	20.13	20.12	22	0	
15	HQDM	1	48	20.11	20.31	20.04	22	0	
15	HQDM	1	97	20.30	20.41	20.12	22	0	
15	HQDM	36	0	19.19	19.14	19.15	21	1	
15	HQDM	36	0	19.12	19.30	19.05	19	3	
15	HQDM	36	20	19.22	19.22	19.22	21	1	
15	HQDM	36	20	19.21	19.15	19.20	19	3	
15	HQDM	75	0	19.27	19.25	19.44	19	3	
15	ZSSDM	1	27	17.41	17.08	17.43	19	3	
15	ZSSDM	1	74	17.34					



Band 42 Part270 Ant10 DS11										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
	Frequency (MHz)			43190	43340	43590				
20	QPSK	1	0	19.31	19.45	19.15				
20	QPSK	1	49	19.27	19.25	19.18				
20	QPSK	1	99	19.33	19.22	19.25	20.7	0		
20	QPSK	50	0	19.11	19.37	19.15				
20	QPSK	50	24	19.38	19.36	19.10				
20	QPSK	50	50	19.30	19.28	19.11	20.7	0		
20	QPSK	100	0	19.26	19.31	19.21				
20	16QAM	1	0	19.20	19.22	19.36				
20	16QAM	1	49	19.19	19.28	19.27	20.7	0		
20	16QAM	1	99	19.33	19.27	19.21				
20	16QAM	50	0	19.18	19.14	19.26				
20	16QAM	50	24	19.29	19.29	19.24				
20	16QAM	50	50	19.16	19.30	19.18	20.7	0		
20	16QAM	100	0	19.27	19.24	19.25				
20	64QAM	1	0	19.13	19.21	19.15				
20	64QAM	1	49	19.23	19.29	19.28	20.7	0		
20	64QAM	1	99	19.14	19.14	19.31				
20	64QAM	50	0	19.33	19.27	19.10				
20	64QAM	50	24	19.25	19.27	19.16				
20	64QAM	50	50	19.43	19.38	19.14	20.7	0		
20	64QAM	100	0	19.19	19.32	19.30				
20	256QAM	1	0	19.17	19.07	18.88				
20	256QAM	1	49	19.14	19.19	18.82	20.7	0		
20	256QAM	1	99	19.22	19.18	19.04				
20	256QAM	50	0	19.05	19.27	19.20				
20	256QAM	50	24	19.15	19.07	18.89	20.7	0		
20	256QAM	50	50	19.12	19.05	18.86				
20	256QAM	100	0	19.20	19.08	19.07				
Channel										
	Frequency (MHz)			43165	43340	43515				
15	QPSK	1	0	19.36	19.35	19.13				
15	QPSK	1	37	19.24	19.20	19.19	20.7	0		
15	QPSK	1	74	19.37	19.31	19.28				
15	QPSK	36	0	19.12	19.31	19.15				
15	QPSK	36	20	19.33	19.32	19.10	20.7	0		
15	QPSK	36	39	19.27	19.28	19.12				
15	QPSK	75	0	19.19	19.28	19.26				
15	16QAM	1	0	19.27	19.23	19.32				
15	16QAM	1	37	19.14	19.30	19.28				
15	16QAM	1	74	19.35	19.27	19.30	20.7	0		
15	16QAM	36	0	19.28	19.16	19.24				
15	16QAM	36	20	19.38	19.15	19.26				
15	16QAM	36	20	19.13	19.20	19.25	20.7	0		
15	16QAM	75	0	19.22	19.27	19.30				
15	64QAM	1	0	19.26	19.17	19.10				
15	64QAM	1	37	19.24	19.20	19.31	20.7	0		
15	64QAM	1	74	19.22	19.14	19.25				
15	64QAM	36	0	19.34	19.12	19.12				
15	64QAM	36	20	19.17	19.28	19.28	20.7	0		
15	64QAM	36	39	19.30	19.27	19.24				
15	64QAM	75	0	19.16	19.27	19.21				
15	256QAM	1	0	19.08	19.08	18.97				
15	256QAM	1	37	19.18	19.19	18.87	20.7	0		
15	256QAM	1	74	19.18	19.26	19.15				
15	256QAM	36	0	19.10	19.20	19.20				
15	256QAM	36	20	19.10	19.08	18.88	20.7	0		
15	256QAM	36	39	19.16	19.17	19.06				
15	256QAM	75	0	19.25	19.29	19.26				
Channel										
	Frequency (MHz)			43140	43340	43540				
10	QPSK	1	0	24.37	24.35	24.35				
10	QPSK	1	25	24.18	24.20	24.12	20.7	0		
10	QPSK	1	49	24.37	24.28	24.27				
10	QPSK	25	0	24.19	24.22	24.14				
10	QPSK	25	12	24.32	24.24	24.13	20.7	0		
10	QPSK	25	25	24.24	24.24	24.10				
10	QPSK	25	25	24.32	24.24	24.08				
10	QPSK	50	0	24.18	24.34	24.19				
10	16QAM	1	0	24.11	24.20	24.22				
10	16QAM	1	25	24.20	24.31	24.22	20.7	0		
10	16QAM	1	49	24.37	24.36	24.12				
10	16QAM	25	0	24.19	24.24	24.19				
10	16QAM	25	12	24.41	24.16	24.16	20.7	0		
10	16QAM	25	25	24.16	24.19	24.23				
10	64QAM	1	0	24.21	24.30	24.22				
10	64QAM	1	25	24.25	24.24	24.14	20.7	0		
10	64QAM	1	49	24.15	24.16	24.34				
10	64QAM	25	0	24.30	24.09	24.08				
10	64QAM	25	12	24.14	24.29	24.11	20.7	0		
10	64QAM	25	25	24.11	24.38	24.25				
10	64QAM	50	0	24.23	24.31	24.26				
10	256QAM	1	0	19.39	19.42	19.14				
10	256QAM	1	25	19.27	19.15	19.11	20.7	2		
10	256QAM	1	49	19.31	19.28	19.28				
10	256QAM	25	0	19.32	19.35	19.26				
10	256QAM	25	12	19.29	19.27	19.13	20.7	2		
10	256QAM	25	25	19.35	19.31	19.35				
10	256QAM	50	0	19.28	19.37	19.27				
Channel										
	Frequency (MHz)			43115	43340	43565				
5	QPSK	1	0	24.35	24.35	24.35				
5	QPSK	1	12	24.25	24.27	24.16	20.7	0		
5	QPSK	12	0	24.30	24.21	24.28				
5	QPSK	12	7	24.37	24.27	24.04	20.7	0		
5	QPSK	12	13	24.34	24.29	24.09				
5	QPSK	25	0	24.27	24.34	24.31				
5	16QAM	1	0	24.20	24.26	24.30				
5	16QAM	1	12	24.09	24.31	24.32	20.7	0		
5	16QAM	1	24	24.29	24.30	24.12				
5	16QAM	12	0	24.19	24.16	24.24				
5	16QAM	12	7	24.31	24.14	24.23	20.7	0		
5	16QAM	12	13	24.14	24.28	24.14				
5	16QAM	25	0	24.28	24.27	24.20				
5	64QAM	1	0	24.19	24.20	24.05				
5	64QAM	1	12	24.16	24.33	24.25	20.7	0		
5	64QAM	1	24	24.14	24.16	24.35				
5	64QAM	12	0	24.25	24.12	24.19	20.7	0		
5	64QAM	12	7	24.25	24.17	24.18				
5	64QAM	12	13	24.31	24.29	24.20				
5	64QAM	25	0	24.18	24.25	24.22				
5	256QAM	1	0	19.37	19.41	19.18				
5	256QAM	1	12	19.32	19.18	19.08	20.7	2		
5	256QAM	1	24	19.38	19.32	19.21				
5	256QAM	12	0	19.29	19.38	19.20				
5	256QAM	12	7	19.31	19.20	19.12	20.7	2		
5	256QAM	12	13	19.31	19.27	19.32				
5	256QAM	25	0	19.25	19.29	19.30				

Band 42 Part270 Ant10 DS13										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
	Frequency (MHz)			43180	43340	43500				
20	QPSK	1	0	21.28	21.47	21.23				
20	QPSK	1	49	21.21	21.16	21.29				
20	QPSK	1	99	21.27	21.27	21.22	22.7	0		
20	QPSK	50	0	21.11	21.41	21.12				
20	QPSK	50	24	21.29	21.34	21.04				
20	QPSK	50	50	21.26	21.31	21.11	22.7	0		
20	QPSK	100	0	21.18	21.32	21.19				
20	16QAM	1	0	21.25	21.22	24.30				
20	16QAM	1	49	21.17	21.36	24.26	22.7	0		
20	16QAM	1	99	21.35	21.34	24.15				



Band 42 Part27O Ant10 DSI5

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				43190	43340	43490		
Frequency (MHz)				3560	3575	3590		
20	QPSK	1	0	19.31	19.45	19.15		
20	QPSK	1	49	19.27	19.23	19.16	20.7	0
20	QPSK	1	99	19.33	19.22	19.25		
20	QPSK	50	0	19.11	19.37	19.15		
20	QPSK	50	24	19.35	19.36	19.10	20.7	0
20	QPSK	50	50	19.30	19.24	19.11		
20	QPSK	100	0	19.26	19.31	19.21		
20	16QAM	1	0	19.20	19.22	19.36		
20	16QAM	1	49	19.19	19.34	19.27	20.7	0
20	16QAM	1	99	19.33	19.27	19.21		
20	16QAM	50	0	19.16	19.14	19.26		
20	16QAM	50	24	19.39	19.19	19.24	20.7	0
20	16QAM	50	50	19.16	19.30	19.18		
20	16QAM	100	0	19.27	19.24	19.25		
20	64QAM	1	0	19.22	19.18	19.15		
20	64QAM	1	49	19.23	19.29	19.28	20.7	0
20	64QAM	1	99	19.14	19.14	19.31		
20	64QAM	50	0	19.33	19.12	19.10		
20	64QAM	50	24	19.25	19.27	19.16	20.7	0
20	64QAM	50	50	19.43	19.38	19.14		
20	64QAM	100	0	19.13	19.31	19.30		
20	256QAM	1	0	19.17	19.07	19.88		
20	256QAM	1	49	19.14	19.19	19.92	20.7	0
20	256QAM	1	99	19.22	19.18	19.04		
20	256QAM	50	0	19.05	19.27	19.20		
20	256QAM	50	24	19.15	19.07	19.99	20.7	0
20	256QAM	50	50	19.15	19.24	19.04		
20	256QAM	100	0	19.20	19.08	19.07		
Channel				43165	43340	43515		
Frequency (MHz)				3574.5	3585	3595.5		
15	QPSK	1	0	19.36	19.35	19.13		
15	QPSK	1	37	19.24	19.20	19.19	20.7	0
15	QPSK	1	74	19.37	19.21	19.28		
15	QPSK	36	0	19.12	19.40	19.13		
15	QPSK	36	20	19.33	19.32	19.10	20.7	0
15	QPSK	36	39	19.27	19.28	19.12		
15	QPSK	75	0	19.19	19.32	19.29		
15	16QAM	1	0	19.27	19.23	19.32		
15	16QAM	1	37	19.14	19.30	19.28	20.7	0
15	16QAM	1	74	19.35	19.37	19.17		
15	16QAM	36	0	19.28	19.18	19.24		
15	16QAM	36	20	19.38	19.15	19.26	20.7	0
15	16QAM	36	39	19.13	19.31	19.16		
15	16QAM	75	0	19.22	19.27	19.30		
15	64QAM	1	0	19.26	19.17	19.10		
15	64QAM	1	37	19.24	19.14	19.25	20.7	0
15	64QAM	1	74	19.22	19.14	19.25		
15	64QAM	36	0	19.34	19.12	19.12		
15	64QAM	36	20	19.17	19.21	19.08	20.7	0
15	64QAM	36	39	19.30	19.27	19.24		
15	64QAM	75	0	19.16	19.27	19.21		
15	256QAM	1	0	19.08	19.05	19.86		
15	256QAM	1	37	19.18	19.19	19.87	20.7	0
15	256QAM	1	74	19.18	19.26	19.15		
15	256QAM	36	0	19.10	19.19	19.16		
15	256QAM	36	20	19.10	19.08	19.98	20.7	0
15	256QAM	36	39	19.16	19.17	19.06		
15	256QAM	75	0	19.25	19.30	19.11		
Channel				43140	43340	43540		
Frequency (MHz)				3554	3575	3595		
10	QPSK	1	0	19.35	19.43	19.16		
10	QPSK	1	25	19.18	19.20	19.12	20.7	0
10	QPSK	1	49	19.37	19.28	19.27		
10	QPSK	25	0	19.24	19.33	19.17		
10	QPSK	25	12	19.39	19.29	19.12	20.7	0
10	QPSK	25	25	19.24	19.22	19.08		
10	QPSK	50	0	19.24	19.29	19.19		
10	16QAM	1	0	19.22	19.29	19.31		
10	16QAM	1	25	19.14	19.32	19.22	20.7	0
10	16QAM	1	49	19.29	19.37	19.13		
10	16QAM	25	0	19.29	19.12	19.28		
10	16QAM	25	12	19.31	19.19	19.24	20.7	0
10	16QAM	25	25	19.15	19.23	19.16		
10	16QAM	50	0	19.19	19.23	19.23		
10	64QAM	1	0	19.32	19.16	19.12		
10	64QAM	1	25	19.21	19.21	19.28	20.7	0
10	64QAM	1	49	19.22	19.21	19.36		
10	64QAM	25	0	19.27	19.10	19.13		
10	64QAM	25	12	19.21	19.20	19.11	20.7	0
10	64QAM	25	25	19.41	19.29	19.24		
10	64QAM	50	0	19.19	19.23	19.22		
10	256QAM	1	0	19.06	19.12	19.91		
10	256QAM	1	25	19.21	19.19	19.84	20.7	0
10	256QAM	1	49	19.22	19.15	19.05		
10	256QAM	25	0	19.06	19.17	19.16		
10	256QAM	25	12	19.25	19.08	19.98	20.7	0
10	256QAM	25	25	19.14	19.18	19.01		
10	256QAM	50	0	19.27	19.05	19.05		
Channel				43115	43360	43595		
Frequency (MHz)				3524.5	3575	3597.5		
5	QPSK	1	0	19.25	19.44	19.12		
5	QPSK	1	12	19.21	19.22	19.20	20.7	0
5	QPSK	1	24	19.36	19.30	19.23		
5	QPSK	12	0	19.21	19.35	19.16		
5	QPSK	12	7	19.41	19.33	19.10	20.7	0
5	QPSK	12	13	19.25	19.22	19.04		
5	QPSK	25	0	19.21	19.22	19.21		
5	16QAM	1	0	19.30	19.18	19.27		
5	16QAM	1	12	19.09	19.29	19.25	20.7	0
5	16QAM	1	24	19.26	19.33	19.15		
5	16QAM	12	0	19.19	19.09	19.23		
5	16QAM	12	7	19.40	19.22	19.23	20.7	0
5	16QAM	12	13	19.18	19.20	19.18		
5	16QAM	25	0	19.20	19.30	19.22		
5	64QAM	1	0	19.20	19.15	19.06		
5	64QAM	1	12	19.27	19.33	19.32	20.7	0
5	64QAM	1	24	19.17	19.12	19.26		
5	64QAM	12	0	19.32	19.20	19.16		
5	64QAM	12	7	19.26	19.19	19.07	20.7	0
5	64QAM	12	13	19.41	19.37	19.18		
5	64QAM	25	0	19.14	19.27	19.30		
5	256QAM	1	0	19.13	19.03	19.89		
5	256QAM	1	12	19.17	19.18	19.92	20.7	0
5	256QAM	1	24	19.15	19.21	19.06		
5	256QAM	12	0	19.06	19.25	19.17		
5	256QAM	12	7	19.12	19.96	19.04	20.7	0
5	256QAM	12	13	19.12	19.21	19.11		
5	256QAM	25	0	19.26	19.04	19.03		



Band 42 Part270 Ant11 DS11														
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)						
Channel														
Frequency (MHz)														
20	QPSK	1	0	20.76	20.82	20.79	22.5	0						
20	QPSK	1	49	20.53	20.70	20.59								
20	QPSK	1	99	20.56	20.68	20.56								
20	QPSK	50	0	19.54	19.81	19.50	21.5	1						
20	QPSK	50	24	19.66	19.63	19.61								
20	QPSK	50	50	19.46	19.21	19.55								
20	QPSK	100	0	19.73	19.75	19.73	21.5	1						
20	16QAM	1	0	19.84	19.74	19.96								
20	16QAM	1	49	19.72	19.21	19.56								
20	16QAM	1	99	19.58	19.75	19.61	20.5	2						
20	16QAM	50	0	18.54	18.49	18.49								
20	16QAM	50	24	18.20	18.29	18.54								
20	16QAM	50	50	18.58	18.69	18.58	20.5	2						
20	16QAM	100	0	18.73	18.85	18.66								
20	16QAM	100	0	18.74	18.83	18.66								
20	16QAM	1	49	18.60	18.65	18.58	20.5	2						
20	16QAM	1	99	18.66	18.75	18.67								
20	16QAM	50	0	17.54	17.72	17.49								
20	16QAM	50	24	17.67	17.51	17.59	19.5	3						
20	16QAM	50	50	17.55	17.58	17.48								
20	16QAM	100	0	17.65	17.62	17.74								
20	256QAM	1	0	15.54	15.81	15.47	17.5	5						
20	256QAM	1	49	15.58	15.63	15.60								
20	256QAM	1	99	15.53	15.65	15.76								
20	256QAM	50	0	15.61	15.48	15.48	17.5	5						
20	256QAM	50	24	15.68	15.58	15.45								
20	256QAM	50	50	15.42	15.53	15.42								
20	256QAM	100	0	15.40	15.53	15.42	17.5	5						
Channel														
Frequency (MHz)														
15	QPSK	1	0	20.75	20.80	20.76	22.5	0						
15	QPSK	1	37	20.55	20.72	20.57								
15	QPSK	1	74	20.58	20.66	20.66								
15	QPSK	36	0	19.87	19.70	19.60	21.5	1						
15	QPSK	36	20	19.56	19.73	19.59								
15	QPSK	36	39	19.52	19.60	19.58								
15	QPSK	75	0	19.70	19.68	19.72	21.5	1						
15	16QAM	1	0	19.57	19.81	19.91								
15	16QAM	1	37	19.76	19.68	19.55								
15	16QAM	1	74	19.65	19.75	19.65	20.5	2						
15	16QAM	36	0	18.55	18.50	18.55								
15	16QAM	36	20	18.71	18.71	18.62								
15	16QAM	36	39	18.59	18.92	19.00	20.5	2						
15	16QAM	75	0	18.77	18.73	18.66								
15	16QAM	1	0	18.72	18.86	18.69								
15	16QAM	1	37	18.68	18.76	18.67	20.5	2						
15	16QAM	1	74	18.61	18.76	18.67								
15	16QAM	36	0	17.80	17.69	17.40								
15	16QAM	36	20	17.72	17.72	17.65	19.5	3						
15	16QAM	36	39	17.45	17.58	17.55								
15	16QAM	75	0	17.66	17.65	17.65								
15	256QAM	1	0	15.51	15.61	15.51	17.5	5						
15	256QAM	1	37	15.49	15.64	15.54								
15	256QAM	1	74	15.57	15.69	15.75								
15	256QAM	36	0	15.55	15.66	15.52	17.5	5						
15	256QAM	36	20	15.62	15.67	15.52								
15	256QAM	36	39	15.42	15.63	15.48								
15	256QAM	75	0	15.45	15.46	15.42	17.5	5						
Channel														
Frequency (MHz)														
10	QPSK	1	0	20.70	20.85	20.78	22.5	0						
10	QPSK	1	25	20.55	20.65	20.57								
10	QPSK	1	49	20.59	20.61	20.64								
10	QPSK	25	0	19.99	19.77	19.58	21.5	1						
10	QPSK	25	12	19.65	19.71	19.61								
10	QPSK	25	25	19.41	19.60	19.51								
10	QPSK	50	0	19.69	19.69	19.72	21.5	1						
10	QPSK	50	12	19.56	19.75	19.56								
10	QPSK	50	25	19.86	19.69	19.61								
10	16QAM	1	0	19.61	19.70	19.63	21.5	1						
10	16QAM	1	25	19.53	19.66	19.60								
10	16QAM	1	49	19.61	19.69	19.63								
10	16QAM	25	0	18.53	18.60	18.60	20.5	2						
10	16QAM	25	12	18.89	18.70	18.52								
10	16QAM	25	25	18.51	18.82	18.63								
10	16QAM	50	0	18.73	18.92	18.66	20.5	2						
10	16QAM	50	12	18.76	18.86	18.75								
10	16QAM	50	25	18.69	18.67	18.61								
10	16QAM	1	49	18.67	18.77	18.67	19.5	3						
10	16QAM	25	0	17.82	17.82	17.52								
10	16QAM	25	12	17.68	17.49	17.65								
10	16QAM	25	25	17.52	17.56	17.48	17.5	5						
10	16QAM	50	0	17.84	17.66	17.63								
10	256QAM	1	0	15.55	15.80	15.46								
10	256QAM	1	25	15.56	15.59	15.51	17.5	5						
10	256QAM	1	49	15.55	15.67	15.57								
10	256QAM	25	0	15.58	15.51	15.51								
10	256QAM	25	12	15.65	15.66	15.50	17.5	5						
10	256QAM	25	25	15.38	15.69	15.52								
10	256QAM	50	0	15.45	15.43	15.47								
Channel														
Frequency (MHz)														
5	QPSK	1	0	20.72	20.72	20.77	22.5	0						
5	QPSK	1	12	20.54	20.71	20.66								
5	QPSK	1	24	20.57	20.60	20.67								
5	QPSK	12	0	19.59	19.74	19.59	21.5	1						
5	QPSK	12	7	19.65	19.71	19.69								
5	QPSK	12	13	19.45	19.63	19.46								
5	QPSK	25	0	19.65	19.76	19.64	21.5	1						
5	16QAM	1	0	19.62	19.85	19.98								
5	16QAM	1	12	19.77	19.60	19.51								
5	16QAM	1	24	19.66	19.68	19.63	20.5	2						
5	16QAM	12	0	18.54	18.58	18.52								
5	16QAM	12	7	18.64	18.68	18.61								
5	16QAM	12	13	18.60	18.62	18.67	20.5	2						
5	16QAM	25	0	18.81	18.84	18.72								
5	16QAM	25	7	18.74	18.76	18.73								
5	16QAM	1	12	18.58	18.68	18.57	19.5	3						
5	16QAM	1	24	18.65	18.72	18.67								
5	16QAM	12	0	17.56	17.77	17.49								
5	16QAM	12	7	17.74	17.58	17.59	17.5	5						
5	16QAM	12	13	17.52	17.55	17.49								
5	16QAM	25	0	17.63	17.67	17.65								
5	256QAM	1	0	15.56	15.84	15.41	17.5	5						
5	256QAM	1	12	15.60	15.62	15.53								
5	256QAM	1	24	15.50	15.73	15.69								
5	256QAM	12	0	15.60	15.55	15.50	17.5	5						
5	256QAM	12	7	15.72	15.65	15.52								
5	256QAM	12	13	15.45	15.66	15.46								
5	256QAM	25	0	15.46	15.50	15.36	17.5	5						
Channel														
Frequency (MHz)														
5	QPSK	1	0	20.72	20.72	20.77	22.5	0						
5	QPSK	1	12	20.54	20.71	20.66								
5	QPSK	1	24	20.57	20.60	20.67								
5	QPSK	12	0	19.59	19.74	19.59	21.5	1						
5	QPSK	12	7	19.65	19.71	19.69								
5	QPSK	12	13	19.45	19.63	19.46								
5	QPSK	25	0	19.65	19.76	19.64	21.5	1						
5	16QAM	1	0	19.62	19.85	19.98								
5	16QAM	1	12	19.77	19.60	19.51								
5	16QAM	1	24	19.66	19.68	19.63	20.5	2						
5	16QAM	12	0	18.54	18.58	18.52								
5	16QAM	12	7	18.64	18.68	18.61								
5	16QAM	12	13	18.60	18.62	18.67	20.5	2						
5	16QAM	25	0	18.81	18.84	18.72								
5	16QAM	25	7	18.74	18.76	18.73								
5	16QAM	1	12	18.58	18.68	18.57	19.5	3						
5	16QAM	1	24	18.65	18.72	18.67								
5	16QAM	12	0	17.56	17.77	17.49								
5	16QAM	12	7	17.74	17.58	17.59	17.5	5						
5	16QAM	12	13	17.52	17.55	17.49								
5	16QAM	25	0	17.63	17.67	17.65								
5	256QAM	1	0	15.56	15.84	15.41	17.5	5						
5	256QAM	1	12	15.60	15.62	15.53								
5	256QAM	1	24	15.50	15.73	15.69								
5	256QAM	12	0	15.60	15.55	15								



Band 42 Part270 Ant12 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.27	21.40	21.28				
20	QPSK	1	49	21.10	21.28	21.17			23	0
20	QPSK	1	99	21.07	21.07	21.12				
20	QPSK	50	0	20.23	20.28	20.07				
20	QPSK	50	24	20.23	20.15	20.18				
20	QPSK	50	50	20.02	20.15	20.01			22	1
20	QPSK	100	0	20.25	20.34	20.23				
20	16QAM	1	0	20.22	20.34	20.43				
20	16QAM	1	49	20.26	20.20	20.14			22	1
20	16QAM	1	99	20.22	20.16	20.24				
20	16QAM	50	0	19.18	19.05	19.09				
20	16QAM	50	24	19.20	19.17	19.07				
20	16QAM	50	50	19.05	19.18	19.16			21	2
20	16QAM	100	0	19.22	19.41	19.19				
20	64QAM	1	0	19.31	19.38	19.17				
20	64QAM	1	49	19.27	19.25	19.15			21	2
20	64QAM	1	99	19.11	19.30	19.21				
20	64QAM	50	0	18.10	18.29	17.93				
20	64QAM	50	24	18.25	17.99	18.10				
20	64QAM	50	50	18.01	18.22	18.00			20	3
20	64QAM	100	0	18.15	18.10	18.21				
20	256QAM	1	0	15.91	16.28	16.14				
20	256QAM	1	49	16.25	16.02	15.94			18	5
20	256QAM	1	99	16.08	16.14	16.11				
20	256QAM	50	0	16.05	16.14	16.13				
20	256QAM	50	24	16.24	16.12	16.11				
20	256QAM	50	50	15.96	16.13	16.10			18	5
20	256QAM	100	0	16.03	16.01	16.00				
Channel										
Frequency (MHz)										
15	QPSK	1	0	21.16	21.35	21.38				
15	QPSK	1	37	21.05	21.25	21.16			23	0
15	QPSK	1	74	21.10	21.12	21.12				
15	QPSK	36	0	20.18	20.31	20.16				
15	QPSK	36	20	20.22	20.15	20.05				
15	QPSK	36	39	19.97	20.18	20.01			22	1
15	QPSK	75	0	20.13	20.29	20.23				
15	16QAM	1	0	20.18	20.29	20.50				
15	16QAM	1	37	20.23	20.19	20.07			22	1
15	16QAM	1	74	20.12	20.29	20.15				
15	16QAM	36	0	19.14	19.13	19.03				
15	16QAM	36	20	19.26	19.20	19.10				
15	16QAM	36	39	19.10	19.18	19.21			21	2
15	16QAM	75	0	19.27	19.37	19.22				
15	64QAM	1	0	19.25	19.42	19.16				
15	64QAM	1	37	19.21	19.19	19.19			21	2
15	64QAM	1	74	19.09	19.09	19.09				
15	64QAM	36	0	18.11	18.27	18.00				
15	64QAM	36	20	18.22	17.96	18.11				
15	64QAM	36	39	17.97	18.15	18.04			20	3
15	64QAM	75	0	18.16	18.12	18.23				
15	256QAM	1	0	15.94	16.28	16.14				
15	256QAM	1	37	16.01	15.97	15.95			18	5
15	256QAM	1	74	15.99	16.24	16.05				
15	256QAM	36	0	16.10	16.12	15.95				
15	256QAM	36	20	16.14	16.07	16.04				
15	256QAM	36	39	15.94	16.24	16.09			18	5
15	256QAM	75	0	15.94	15.96	15.95				
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.18	21.37	21.35				
10	QPSK	1	25	21.11	21.27	21.20			23	0
10	QPSK	1	49	21.10	21.14	21.09				
10	QPSK	25	0	20.13	20.22	20.16				
10	QPSK	25	12	20.25	20.19	20.08				
10	QPSK	25	25	19.98	20.09	20.05			22	1
10	QPSK	50	0	20.17	20.23	20.29				
10	16QAM	1	0	20.26	20.32	20.43				
10	16QAM	1	25	20.23	20.22	20.04			22	1
10	16QAM	1	49	20.18	20.20	20.27				
10	16QAM	25	0	19.09	19.11	19.11				
10	16QAM	25	12	19.25	19.19	19.07				
10	16QAM	25	25	19.06	19.31	19.16			21	2
10	16QAM	50	0	19.27	19.40	19.16				
10	64QAM	1	0	19.25	19.34	19.05				
10	64QAM	1	25	19.17	19.20	19.16			21	2
10	64QAM	1	49	19.13	19.24	19.15				
10	64QAM	25	0	18.06	18.28	17.98				
10	64QAM	25	12	18.29	18.01	18.11				
10	64QAM	25	25	17.94	18.17	18.04			20	3
10	64QAM	50	0	18.21	18.12	18.25				
10	256QAM	1	0	15.92	16.26	16.04				
10	256QAM	1	25	15.92	16.05	15.94			18	5
10	256QAM	1	49	16.10	16.02	16.10				
10	256QAM	25	0	16.02	16.12	16.03				
10	256QAM	25	12	16.21	16.16	16.02				
10	256QAM	25	25	15.94	16.15	16.11			18	5
10	256QAM	50	0	15.96	16.07	15.94				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.24	21.40	21.29				
5	QPSK	1	12	21.01	21.23	21.17			23	0
5	QPSK	1	24	21.11	21.09	21.15				
5	QPSK	12	0	20.20	20.22	20.16				
5	QPSK	12	7	20.26	20.16	20.07				
5	QPSK	12	13	19.91	20.12	20.02			22	1
5	QPSK	25	0	20.16	20.29	20.21				
5	16QAM	1	0	20.25	20.35	20.43				
5	16QAM	1	12	20.30	20.11	20.14			22	1
5	16QAM	1	24	20.12	20.20	20.20				
5	16QAM	12	0	19.11	19.01	19.10				
5	16QAM	12	7	19.29	19.23	19.05				
5	16QAM	12	13	19.02	19.26	19.17			21	2
5	16QAM	25	0	19.18	19.34	19.24				
5	64QAM	1	0	19.27	19.35	19.12				
5	64QAM	1	12	19.28	19.21	19.15			21	2
5	64QAM	1	24	19.20	19.24	19.11				
5	64QAM	12	0	18.11	18.31	18.02				
5	64QAM	12	7	18.27	18.02	18.19				
5	64QAM	12	13	17.93	18.16	18.02			20	3
5	64QAM	25	0	18.14	18.11	18.28				
5	256QAM	1	0	15.93	16.26	16.11				
5	256QAM	1	12	15.95	15.93	15.93			18	5
5	256QAM	1	24	16.03	16.06	16.02				
5	256QAM	12	0	16.09	16.03	15.97				
5	256QAM	12	7	16.23	16.11	16.09				
5	256QAM	12	13	15.98	16.15	16.11			18	5
5	256QAM	25	0	15.96	16.02	15.90				

Band 42 Part270 Ant12 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.27	21.40	21.28				
20	QPSK	1	49	21.10	21.28	21.17			23	0
20	QPSK	1	99	21.07	21.07	21.12				
20	QPSK	50	0	20.23	20.28	20.07				
20	QPSK	50	24	20.23	20.15	20.18				
20	QPSK	50	50	20.02	20.15	20.01			22	1
20	QPSK	100	0	20.25	20.34	20.23				
20	16QAM	1	0	20.22	20.34	20.43				
20	16QAM	1	49	20.26	20.20	20.14			22	1
20	16QAM	1	99	20.22	20.16	20.24				
20	16QAM	50	0	19.18	19.05	19.09				
20	16QAM	50	24	19.20	19.17	19.07				
20	16QAM	50	50	19.05	19.18	19.16			21	2



Band 42 Part270 Ant13 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
				43100	43340	43580				
				3560	3575	3590				
20	QPSK	1	0	24.17	24.33	24.22				
20	QPSK	1	49	23.99	24.18	23.87	25.7	0		
20	QPSK	1	99	23.95	24.09	24.09				
20	QPSK	50	0	22.95	23.08	22.83				
20	QPSK	50	24	22.87	22.97	22.85	24.7	1		
20	QPSK	50	50	22.84	22.95	22.81				
20	QPSK	100	0	22.82	22.95	22.91				
20	16QAM	1	0	22.98	23.25	23.11	24.7	1		
20	16QAM	49	0	23.05	23.05	23.00				
20	16QAM	1	99	22.86	23.01	22.86				
20	16QAM	50	0	21.82	21.75	21.73				
20	16QAM	50	24	21.98	21.89	21.85	23.7	2		
20	16QAM	50	50	21.71	21.95	21.88				
20	16QAM	100	0	21.83	22.11	22.02				
20	64QAM	1	0	21.87	22.05	21.85				
20	64QAM	1	49	22.00	21.89	21.84	23.7	2		
20	64QAM	1	99	21.83	21.96	21.98				
20	64QAM	50	0	20.80	21.05	20.71				
20	64QAM	50	24	20.91	20.84	20.85	22.7	3		
20	64QAM	50	50	20.83	20.96	20.74				
20	64QAM	100	0	20.92	20.75	21.04				
20	256QAM	1	0	18.70	19.02	18.77	20.7	5		
20	256QAM	1	49	18.73	18.77	18.63				
20	256QAM	1	99	18.74	18.67	18.77				
20	256QAM	50	0	18.89	18.99	18.76	20.7	5		
20	256QAM	50	24	18.81	18.78	18.77				
20	256QAM	50	50	18.68	18.95	18.69				
20	256QAM	100	0	18.75	18.81	18.68				
Channel										
				43165	43340	43515				
				3565	3575	3595				
15	QPSK	1	0	24.08	24.26	24.27				
15	QPSK	1	37	23.94	24.18	24.06	25.7	0		
15	QPSK	1	74	23.91	24.07	24.10				
15	QPSK	36	0	22.91	22.91	22.83				
15	QPSK	36	20	22.91	22.95	22.83	24.7	1		
15	QPSK	36	39	22.82	22.95	22.79				
15	QPSK	75	0	22.81	23.05	22.91				
15	16QAM	1	0	22.96	23.24	23.17	24.7	1		
15	16QAM	1	37	22.93	22.83	23.07				
15	16QAM	1	74	22.82	22.95	22.97				
15	16QAM	36	0	21.77	21.77	21.81				
15	16QAM	36	20	22.05	21.84	21.75	23.7	2		
15	16QAM	36	39	21.75	21.85	21.87				
15	16QAM	75	0	22.02	22.14	21.92				
15	64QAM	1	0	21.97	22.12	21.84				
15	64QAM	1	37	21.98	21.85	21.85	23.7	2		
15	64QAM	1	74	21.81	21.95	21.90				
15	64QAM	36	0	20.84	21.10	20.77				
15	64QAM	36	20	20.98	20.98	20.88	22.7	3		
15	64QAM	36	39	20.82	20.97	20.73				
15	64QAM	75	0	21.01	20.94	20.85				
15	256QAM	1	0	18.67	18.78	18.63	20.7	5		
15	256QAM	1	37	18.62	18.78	18.63				
15	256QAM	1	74	18.77	18.66	18.75				
15	256QAM	36	0	18.79	18.61	18.76	20.7	5		
15	256QAM	36	20	18.96	18.86	18.78				
15	256QAM	36	39	18.74	18.01	18.77				
15	256QAM	75	0	18.78	18.78	18.62				
Channel										
				43140	43340	43540				
				3555	3575	3595				
10	QPSK	1	0	24.14	24.30	24.20				
10	QPSK	1	25	24.00	24.18	23.99	25.7	0		
10	QPSK	1	49	24.00	24.06	24.05				
10	QPSK	25	0	22.85	23.06	22.83				
10	QPSK	25	12	22.84	22.94	22.80	24.7	1		
10	QPSK	25	25	22.70	22.87	22.85				
10	QPSK	50	0	22.84	23.01	22.82				
10	QPSK	50	12	22.89	22.95	22.80				
10	16QAM	1	0	23.01	23.21	23.08	24.7	1		
10	16QAM	1	49	22.88	23.00	22.90				
10	16QAM	1	99	22.81	23.00	22.87				
10	16QAM	25	12	22.07	21.97	21.81	23.7	2		
10	16QAM	25	25	21.75	21.99	21.79				
10	16QAM	50	0	22.00	22.08	22.01				
10	64QAM	1	0	21.99	22.10	21.85				
10	64QAM	1	25	22.00	21.97	21.89	23.7	2		
10	64QAM	1	49	21.85	22.00	21.89				
10	64QAM	25	0	20.78	21.03	20.79				
10	64QAM	25	12	20.93	20.84	20.91	22.7	3		
10	64QAM	25	25	20.77	20.97	20.72				
10	64QAM	50	0	21.02	20.97	21.00				
10	256QAM	1	0	18.74	18.93	18.80	20.7	5		
10	256QAM	1	25	18.62	18.73	18.74				
10	256QAM	1	49	18.81	18.74	18.85				
10	256QAM	25	0	18.86	18.93	18.72	20.7	5		
10	256QAM	25	12	18.84	18.77	18.63				
10	256QAM	25	25	18.74	18.69	18.69				
10	256QAM	50	0	18.71	18.90	18.65				
Channel										
				43115	43340	43555				
				3552.5	3575	3597.5				
5	QPSK	1	0	24.15	24.33	24.20				
5	QPSK	1	12	23.99	24.19	23.87	25.7	0		
5	QPSK	1	24	23.92	24.07	24.02				
5	QPSK	12	0	22.91	23.03	22.84				
5	QPSK	12	7	22.84	22.98	22.87	24.7	1		
5	QPSK	12	13	22.88	22.94	22.80				
5	QPSK	25	0	22.89	22.98	22.81				
5	16QAM	1	0	23.00	23.16	22.80	24.7	1		
5	16QAM	1	24	22.97	23.01	22.88				
5	16QAM	12	0	21.84	21.81	21.76				
5	16QAM	12	7	21.97	21.85	21.76	23.7	2		
5	16QAM	12	13	21.82	22.01	21.81				
5	16QAM	25	0	21.94	22.08	21.97				
5	64QAM	1	0	22.08	22.14	21.85				
5	64QAM	1	12	22.01	21.86	21.93	23.7	2		
5	64QAM	1	24	21.91	21.99	21.95				
5	64QAM	12	0	20.85	21.02	20.81				
5	64QAM	12	7	21.00	20.72	20.87	22.7	3		
5	64QAM	12	13	20.80	20.92	20.75				
5	64QAM	25	0	20.99	20.98	20.87				
5	256QAM	1	0	18.74	19.07	18.66	20.7	5		
5	256QAM	1	12	18.69	18.74	18.66				
5	256QAM	1	24	18.92	18.84	18.80				
5	256QAM	12	0	18.88	18.99	18.73	20.7	5		
5	256QAM	12	7	18.93	18.84	18.81				
5	256QAM	12	13	18.67	19.03	18.67				
5	256QAM	25	0	18.68	18.86	18.63				

Band 42 Part270 Ant13 DS13										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
				43180	43340	43500				
				3560	3575	3590				
20	QPSK	1	0	20.32	20.50	20.23	21.7	0		
20	QPSK	1	49	20.27	20.26	20.18				
20	QPSK	1	99	20.36	20.28	20.29				
20	QPSK	50	0	20.21	20.37	20.25				
20	QPSK	50	24	20.31	20.28	20.29	21.7	0		
20	QPSK	50	50	20.35	20.25	20.21				
20	QPSK	100	0	20.38	20.24	20.30				
20	16									



Band 42 Part27O Ant13 DSI5

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				43190	43340	43490		
Frequency (MHz)				3550	3575	3590		
20	QPSK	1	0	20.32	20.50	20.23	21.7	0
20	QPSK	1	49	20.27	20.28	20.18		
20	QPSK	1	99	20.36	20.28	20.29		
20	QPSK	50	0	20.21	20.37	20.25		
20	QPSK	50	24	20.31	20.28	20.09	21.7	0
20	QPSK	50	50	20.36	20.25	20.21		
20	QPSK	100	0	20.38	20.34	20.30		
20	16QAM	1	0	20.17	20.22	20.26	21.7	0
20	16QAM	1	49	20.38	20.41	20.35		
20	16QAM	1	99	20.32	20.41	20.25		
20	16QAM	50	0	20.38	20.38	20.13		
20	16QAM	50	24	20.27	20.25	20.19	21.7	0
20	16QAM	50	50	20.34	20.42	20.40		
20	16QAM	100	0	20.27	20.30	20.28		
20	64QAM	1	0	20.31	20.38	20.16		
20	64QAM	1	49	20.35	20.11	20.19	21.7	0
20	64QAM	1	99	20.47	20.30	20.26		
20	64QAM	50	0	20.29	20.19	20.31		
20	64QAM	50	24	20.34	20.30	20.29		
20	64QAM	50	50	20.23	20.41	20.31	21.7	0
20	64QAM	100	0	20.42	20.45	20.27		
20	256QAM	1	0	19.45	19.42	19.25		
20	256QAM	1	49	19.26	19.14	19.03	20.7	1
20	256QAM	1	99	19.25	19.28	19.35		
20	256QAM	50	0	19.21	19.42	19.16		
20	256QAM	50	24	19.32	19.48	19.15	20.7	1
20	256QAM	50	50	19.32	19.13	19.20		
20	256QAM	100	0	19.40	19.34	19.30		
Channel				43185	43340	43515		
Frequency (MHz)				3575.5	3591	3597.5		
15	QPSK	1	0	20.32	20.47	20.20	21.7	0
15	QPSK	1	37	20.31	20.28	20.10		
15	QPSK	1	74	20.34	20.34	20.28		
15	QPSK	36	0	20.15	20.41	20.28		
15	QPSK	36	20	20.33	20.40	20.13	21.7	0
15	QPSK	36	36	20.37	20.20	20.25		
15	QPSK	15	0	20.26	20.39	20.25		
15	16QAM	1	0	20.18	20.29	20.28	21.7	0
15	16QAM	1	37	20.32	20.34	20.30		
15	16QAM	1	74	20.27	20.37	20.28		
15	16QAM	36	0	20.43	20.45	20.16		
15	16QAM	36	20	20.30	20.29	20.14	21.7	0
15	16QAM	36	36	20.34	20.38	20.32		
15	16QAM	75	0	20.27	20.31	20.28		
15	64QAM	1	0	20.25	20.35	20.15		
15	64QAM	1	37	20.27	20.18	20.15	21.7	0
15	64QAM	1	74	20.44	20.37	20.21		
15	64QAM	36	0	20.19	20.27	20.33		
15	64QAM	36	20	20.38	20.29	20.37	21.7	0
15	64QAM	36	36	20.25	20.39	20.28		
15	64QAM	75	0	20.40	20.47	20.20		
15	256QAM	1	0	19.41	19.34	19.26		
15	256QAM	1	37	19.17	19.19	19.05	20.7	1
15	256QAM	1	74	19.21	19.30	19.28		
15	256QAM	36	0	19.31	19.30	19.15		
15	256QAM	36	20	19.34	19.47	19.18	20.7	1
15	256QAM	36	36	19.34	19.13	19.22		
15	256QAM	75	0	19.37	19.25	19.42		
Channel				43140	43340	43540		
Frequency (MHz)				3554	3575	3595		
10	QPSK	1	0	20.35	20.50	20.29	21.7	0
10	QPSK	1	25	20.22	20.22	20.19		
10	QPSK	1	49	20.33	20.30	20.39		
10	QPSK	25	0	20.18	20.43	20.24		
10	QPSK	25	12	20.34	20.30	20.11	21.7	0
10	QPSK	25	25	20.44	20.22	20.27		
10	QPSK	50	0	20.35	20.41	20.34		
10	16QAM	1	0	20.20	20.29	20.28	21.7	0
10	16QAM	1	25	20.37	20.40	20.26		
10	16QAM	1	49	20.26	20.32	20.30		
10	16QAM	25	0	20.40	20.41	20.21		
10	16QAM	25	12	20.30	20.23	20.14	21.7	0
10	16QAM	25	25	20.32	20.34	20.38		
10	16QAM	50	0	20.22	20.33	20.30		
10	64QAM	1	0	20.30	20.45	20.12		
10	64QAM	1	25	20.30	20.23	20.20	21.7	0
10	64QAM	1	49	20.42	20.39	20.21		
10	64QAM	25	0	20.18	20.23	20.26		
10	64QAM	25	12	20.30	20.29	20.40	21.7	0
10	64QAM	25	25	20.19	20.41	20.30		
10	64QAM	50	0	20.45	20.43	20.24		
10	256QAM	1	0	19.48	19.46	19.24		
10	256QAM	1	25	19.25	19.24	19.11	20.7	1
10	256QAM	1	49	19.28	19.34	19.28		
10	256QAM	25	0	19.25	19.39	19.16		
10	256QAM	25	12	19.38	19.27	19.19	20.7	1
10	256QAM	25	25	19.38	19.22	19.14		
10	256QAM	50	0	19.35	19.29	19.33		
Channel				43115	43360	43565		
Frequency (MHz)				3552.5	3575	3597.5		
5	QPSK	1	0	20.32	20.45	20.30	21.7	0
5	QPSK	1	12	20.31	20.22	20.19		
5	QPSK	1	24	20.23	20.36	20.31		
5	QPSK	12	0	20.13	20.46	20.22		
5	QPSK	12	7	20.36	20.28	20.21	21.7	0
5	QPSK	12	13	20.38	20.19	20.26		
5	QPSK	25	0	20.27	20.42	20.34		
5	16QAM	1	0	20.20	20.19	20.21	21.7	0
5	16QAM	1	12	20.39	20.42	20.36		
5	16QAM	1	24	20.30	20.42	20.34		
5	16QAM	12	0	20.38	20.42	20.21		
5	16QAM	12	7	20.23	20.30	20.20	21.7	0
5	16QAM	12	13	20.29	20.37	20.38		
5	16QAM	25	0	20.23	20.34	20.30		
5	64QAM	1	0	20.24	20.36	20.16		
5	64QAM	1	12	20.37	20.22	20.28	21.7	0
5	64QAM	1	24	20.41	20.37	20.21		
5	64QAM	12	0	20.28	20.21	20.38		
5	64QAM	12	7	20.38	20.31	20.30	21.7	0
5	64QAM	12	13	20.21	20.35	20.37		
5	64QAM	25	0	20.45	20.43	20.20		
5	256QAM	1	0	19.41	19.43	19.14		
5	256QAM	1	12	19.30	19.19	19.07	20.7	1
5	256QAM	1	24	19.24	19.30	19.28		
5	256QAM	12	0	19.28	19.51	19.11		
5	256QAM	12	7	19.38	19.43	19.19	20.7	1
5	256QAM	12	13	19.35	19.20	19.10		
5	256QAM	25	0	19.32	19.35	19.34		



Uplink CA Power

Ant 0 Default Power		DS11&4									
CA_7c											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	99	1	0	1	0	21.03	22.50	
21100	21298	QPSK	1	0	1	99	1	0	21.11	22.50	
21350	21152	QPSK	1	0	1	99	1	0	20.98	22.50	
20850	21048	QPSK	1	49	50	0	1	0	20.16	21.50	
21100	21298	QPSK	50	0	1	49	1	0	20.21	21.50	
21350	21152	QPSK	50	0	1	49	1	0	20.26	21.50	

Ant 0 Default Power		DS11&4&5									
CA_38C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	1	0	1	0	21.16	23.00	
37901	38099	QPSK	1	0	1	99	1	0	21.34	23.00	
38150	37952	QPSK	1	0	1	99	1	0	21.25	23.00	
37850	38048	QPSK	1	49	50	0	1	0	20.36	22.00	
37901	38099	QPSK	50	0	1	49	1	0	20.41	22.00	
38150	37952	QPSK	50	0	1	49	1	0	20.30	22.00	

Ant 3 Default Power		DS11&4									
CA_7c											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	99	1	0	1	0	23.94	25.50	
21100	21298	QPSK	1	0	1	99	1	0	24.00	25.50	
21350	21152	QPSK	1	0	1	99	1	0	23.89	25.50	
20850	21048	QPSK	1	49	50	0	1	0	23.02	24.50	
21100	21298	QPSK	50	0	1	49	1	0	23.11	24.50	
21350	21152	QPSK	50	0	1	49	1	0	23.01	24.50	

Ant 3 Default Power		DS11&4									
CA_38C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	1	0	1	0	24.17	25.70	
37901	38099	QPSK	1	0	1	99	1	0	24.07	25.70	
38150	37952	QPSK	1	0	1	99	1	0	24.02	25.70	
37850	38048	QPSK	1	49	50	0	1	0	23.27	24.70	
37901	38099	QPSK	50	0	1	49	1	0	23.32	24.70	
38150	37952	QPSK	50	0	1	49	1	0	23.18	24.70	

Ant 4 Default Power		DS14									
CA_7c											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	99	1	0	1	0	23.18	25.00	
21100	21298	QPSK	1	0	1	99	1	0	23.33	25.00	
21350	21152	QPSK	1	0	1	99	1	0	23.05	25.00	
20850	21048	QPSK	1	49	50	0	1	0	22.26	24.00	
21100	21298	QPSK	50	0	1	49	1	0	22.48	24.00	
21350	21152	QPSK	50	0	1	49	1	0	22.17	24.00	

Ant 4 Default Power		DS14									
CA_38C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	1	0	1	0	22.69	24.00	
37901	38099	QPSK	1	0	1	99	1	0	22.74	24.00	
38150	37952	QPSK	1	0	1	99	1	0	22.70	24.00	
37850	38048	QPSK	1	49	50	0	1	0	22.67	23.00	
37901	38099	QPSK	50	0	1	49	1	0	22.72	23.00	
38150	37952	QPSK	50	0	1	49	1	0	22.63	23.00	

Ant 5 Default Power		DS14									
CA_7c											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	99	1	0	1	0	22.64	24.50	
21100	21298	QPSK	1	0	1	99	1	0	22.70	24.50	
21350	21152	QPSK	1	0	1	99	1	0	22.59	24.50	
20850	21048	QPSK	1	49	50	0	1	0	21.72	23.50	
21100	21298	QPSK	50	0	1	49	1	0	21.81	23.50	
21350	21152	QPSK	50	0	1	49	1	0	21.71	23.50	

Ant 5 Default Power		DS14									
CA_38C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	1	0	1	0	22.69	24.50	
37901	38099	QPSK	1	0	1	99	1	0	22.74	24.50	
38150	37952	QPSK	1	0	1	99	1	0	22.70	24.50	
37850	38048	QPSK	1	49	50	0	1	0	22.67	24.50	
37901	38099	QPSK	50	0	1	49	1	0	22.72	24.50	
38150	37952	QPSK	50	0	1	49	1	0	22.63	24.50	

Ant 0 Down power		DS15									
CA_7c											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	99	1	0	1	0	17.72	19.50	
21100	21298	QPSK	1	0	1	99	1	0	18.00	19.50	
21350	21152	QPSK	1	0	1	99	1	0	17.74	19.50	
20850	21048	QPSK	1	49	50	0	1	0	17.73	19.50	
21100	21298	QPSK	50	0	1	49	1	0	17.95	19.50	
21350	21152	QPSK	50	0	1	49	1	0	17.92	19.50	

Ant 3 Down power		DS15									
CA_38C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	1	0	1	0	20.83	22.70	
37901	38099	QPSK	1	0	1	99	1	0	21	22.70	
38150	37952	QPSK	1	0	1	99	1	0	20.73	22.70	
37850	38048	QPSK	1	49	50	0	1	0	20.81	22.70	
37901	38099	QPSK	50	0	1	49	1	0	21	22.70	
38150	37952	QPSK	50	0	1	49	1	0	21.13	22.70	

Ant 3 Down power		DS15									
CA_7c											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	99	1	0	1	0	19.20	20.50	
21100	21298	QPSK	1	0	1	99	1	0	19.26	20.50	
21350	21152	QPSK	1	0	1	99	1	0	19.18	20.50	
20850	21048	QPSK	1	49	50	0	1	0	19.21	20.50	
21100	21298	QPSK	50	0	1	49	1	0	19.25	20.50	
21350	21152	QPSK	50	0	1	49	1	0	19.18	20.50	

Ant 4 Down power		DS11&3&5									
CA_38C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	1	0	1	0	18.02	20.00	
37901	38099	QPSK	1	0	1	99	1	0	18.30	20.00	
38150	37952	QPSK	1	0	1	99	1	0	18.04	20.00	
37850	38048	QPSK	1	49	50	0	1	0	18.03	20.00	
37901	38099	QPSK	50	0	1	49	1	0	18.25	20.00	
38150	37952	QPSK	50	0	1	49	1	0	18.22	20.00	

Ant 4 Down power		DS11&3&5									
CA_7c											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	99	1	0	1	0	17.05	19.00	
21100	21298	QPSK	1	0	1	99	1	0	17.13	19.00	
21350	21152	QPSK	1	0	1	99	1	0	17.00	19.00	
20850	21048	QPSK	1	49	50	0	1	0	17.13	19.00	
21100	21298	QPSK	50	0	1	49	1	0	17.05	19.00	
21350	21152	QPSK	50	0	1	49	1	0	17.10	19.00	

Ant 5 Down power		DS11									
CA_38C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		total RB Size	MPR Level	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	1	0	1	0	22.05	23.50	
37901	38099	QPSK	1	0	1	99	1	0	22.21	23.50	
38150	37952	QPSK	1	0	1	99	1	0	22.08	23.50	
37850	38048	QPSK	1	49	50	0	1	0	21.86	23.50	
37901	38099	QPSK	50	0	1	49	1	0	21.96	23.50	
38150	37952	QPSK	50	0	1	49	1	0	21.85	23.50	



Ant 10 Default Power		DS14									
CA_42C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Measured Power	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
42190	42388	QPSK	1	99	1	0	1	0	24.02	25.70	
42590	42788	QPSK	1	0	1	99	1	0	24.07	25.70	
42990	42792	QPSK	1	0	1	99	1	0	24.03	25.70	
42190	42388	QPSK	1	49	50	0	1	0	23.26	24.70	
42590	42788	QPSK	50	0	1	49	1	0	23.27	24.70	
42990	42792	QPSK	50	0	1	49	1	0	23.09	24.70	

Ant 11 Default Power		DS11&45									
CA_42C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Measured Power	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
42190	42388	QPSK	1	99	1	0	1	0	20.56	22.50	
42590	42788	QPSK	1	0	1	99	1	0	20.76	22.50	
42990	42792	QPSK	1	0	1	99	1	0	20.56	22.50	
42190	42388	QPSK	1	49	50	0	1	0	20.12	21.50	
42590	42788	QPSK	50	0	1	49	1	0	20.26	21.50	
42990	42792	QPSK	50	0	1	49	1	0	20.25	21.50	

Ant 12 Default Power		DS11&45									
CA_42C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Measured Power	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
42190	42388	QPSK	1	99	1	0	1	0	20.83	23.00	
42590	42788	QPSK	1	0	1	99	1	0	21	23.00	
42990	42792	QPSK	1	0	1	99	1	0	20.73	23.00	
42190	42388	QPSK	1	49	50	0	1	0	20	22.00	
42590	42788	QPSK	50	0	1	49	1	0	20.11	22.00	
42990	42792	QPSK	50	0	1	49	1	0	20.13	22.00	

Ant 13 Default Power		DS11&4									
CA_42C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Measured Power	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
42190	42388	QPSK	1	99	1	0	1	0	24.17	25.70	
42590	42788	QPSK	1	0	1	99	1	0	24.07	25.70	
42990	42792	QPSK	1	0	1	99	1	0	24.02	25.70	
42190	42388	QPSK	1	49	50	0	1	0	23.27	24.70	
42590	42788	QPSK	50	0	1	49	1	0	23.32	24.70	
42990	42792	QPSK	50	0	1	49	1	0	23.18	24.70	

Ant 10 Down power		DS11&5									
CA_42C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Measured Power	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
42190	42388	QPSK	1	99	1	0	1	0	19.16	20.70	
42590	42788	QPSK	1	0	1	99	1	0	19.25	20.70	
42990	42792	QPSK	1	0	1	99	1	0	19.16	20.70	
42190	42388	QPSK	1	49	50	0	1	0	19.16	20.70	
42590	42788	QPSK	50	0	1	49	1	0	19.22	20.70	
42990	42792	QPSK	50	0	1	49	1	0	19.14	20.70	

Ant 10 Down power		DS13									
CA_42C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Measured Power	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
42190	42388	QPSK	1	99	1	0	1	0	21.16	22.70	
42590	42788	QPSK	1	0	1	99	1	0	21.25	22.70	
42990	42792	QPSK	1	0	1	99	1	0	21.16	22.70	
42190	42388	QPSK	1	49	50	0	1	0	21.16	22.70	
42590	42788	QPSK	50	0	1	49	1	0	21.22	22.70	
42990	42792	QPSK	50	0	1	49	1	0	21.14	22.70	

Ant 13 Down power		DS13&5									
CA_42C											
Combination 20MHz+20MHz (1RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Measured Power	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset					
42190	42388	QPSK	1	99	1	0	1	0	20.16	21.70	
42590	42788	QPSK	1	0	1	99	1	0	20.25	21.70	
42990	42792	QPSK	1	0	1	99	1	0	20.16	21.70	
42190	42388	QPSK	1	49	50	0	1	0	20.16	21.70	
42590	42788	QPSK	50	0	1	49	1	0	20.22	21.70	
42990	42792	QPSK	50	0	1	49	1	0	20.14	21.70	



DL CA Power

2CA DL

CA List	PCC										SCC				Power	
	LTE	BW	BW	UL	UL	Mod.	UL#	UL	LTE	BW	DL	DL	Tx. Power (dBm)	Tx. Power (dBm)		
	Band	Ant	(MHz)	Freq. (MHz)	Channel		RB	Offset	Band	(MHz)	Freq. (MHz)	Channel				
CA_2C	Band 2	Ant3	20M	1880	18900	QPSK	1	0	Band 2	20M	1979.8	1098	24.17	24.35		
	Band 2	Ant4	20M	1880	18900	QPSK	1	0	Band 2	20M	1979.8	1098	22.83	23.05		
CA_7A_42A	Band 7	Ant0	20M	2535	21100	QPSK	1	0	Band 42	20M	3575	43340	21.34	21.57		
	Band 7	Ant3	20M	2535	21100	QPSK	1	0	Band 42	20M	3575	43340	24.30	24.46		
	Band 7	Ant4	20M	2535	21100	QPSK	1	0	Band 42	20M	3575	43340	23.31	23.50		
	Band 7	Ant5	20M	2535	21100	QPSK	1	0	Band 42	20M	3575	43340	22.96	23.16		
	Band 42	Ant10	20M	3575	43340	QPSK	1	0	Band 7	20M	2655	3100	24.33	24.57		
	Band 42	Ant11	20M	3575	43340	QPSK	1	0	Band 7	20M	2655	3100	20.70	20.86		
	Band 42	Ant12	20M	3575	43340	QPSK	1	0	Band 7	20M	2655	3100	21.21	21.45		
	Band 42	Ant13	20M	3575	43340	QPSK	1	0	Band 7	20M	2655	3100	24.22	24.39		
CA_38C	Band 38	Ant0	20M	2595	38000	QPSK	1	0	Band 38	20M	2614.8	38198	21.38	21.58		
	Band 38	Ant3	20M	2595	38000	QPSK	1	0	Band 38	20M	2614.8	38198	24.16	24.40		
	Band 38	Ant4	20M	2595	38000	QPSK	1	0	Band 38	20M	2614.8	38198	22.87	23.08		
	Band 38	Ant5	20M	2595	38000	QPSK	1	0	Band 38	20M	2614.8	38198	23.03	23.24		
CA_41C	Band 41	Ant0	20M	2593	40620	QPSK	1	0	Band 41	20M	2612.8	40818	22.19	22.38		
	Band 41	Ant3	20M	2593	40620	QPSK	1	0	Band 41	20M	2612.8	40818	24.23	24.41		
	Band 41	Ant4	20M	2593	40620	QPSK	1	0	Band 41	20M	2612.8	40818	22.92	23.10		
CA_2A_66A	Band 2	Ant3	20M	1880	18900	QPSK	1	0	Band 66	20M	2145	66786	24.14	24.35		
	Band 2	Ant4	20M	1880	18900	QPSK	1	0	Band 66	20M	2145	66786	22.84	23.05		
	Band 66	Ant0	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	21.30	21.49		
	Band 66	Ant3	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	24.37	24.61		
	Band 66	Ant4	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	22.95	23.14		
	Band 66	Ant5	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	22.65	22.85		
CA_42C	Band 42	Ant10	20M	3575	43340	QPSK	1	0	Band 42	20M	3594.8	43538	24.40	24.57		
	Band 42	Ant11	20M	3575	43340	QPSK	1	0	Band 42	20M	3594.8	43538	20.66	20.86		
	Band 42	Ant12	20M	3575	43340	QPSK	1	0	Band 42	20M	3594.8	43538	21.22	21.45		
CA_5A_41A	Band 42	Ant13	20M	3575	43340	QPSK	1	0	Band 42	20M	3594.8	43538	24.17	24.39		
	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 41	20M	40620	2593	24.16	24.31		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 41	20M	2593	40620	24.23	24.38		
	Band 41	Ant0	20M	2593	40620	QPSK	1	0	Band 5	10M	881.5	2525	22.22	22.38		
	Band 41	Ant3	20M	2593	40620	QPSK	1	0	Band 5	10M	881.5	2525	24.24	24.41		
CA_4A_48A	Band 41	Ant4	20M	2593	40620	QPSK	1	0	Band 5	10M	881.5	2525	22.90	23.10		
	Band 41	Ant5	20M	2593	40620	QPSK	1	0	Band 5	10M	881.5	2525	23.06	23.27		
	Band 4	Ant0	20M	1732.5	20175	QPSK	1	0	Band 48	20M	3641	56150	21.20	21.43		
	Band 4	Ant3	20M	1732.5	20175	QPSK	1	0	Band 48	20M	3641	56150	24.30	24.45		
	Band 4	Ant4	20M	1732.5	20175	QPSK	1	0	Band 48	20M	3641	56150	22.86	23.08		
	Band 4	Ant5	20M	1732.5	20175	QPSK	1	0	Band 48	20M	3641	56150	22.59	22.83		
	Band 48	Ant10	20M	3641	56150	QPSK	1	0	Band 4	20M	2132.5	2175	21.64	21.77		
	Band 48	Ant11	20M	3641	56150	QPSK	1	0	Band 4	20M	2132.5	2175	18.25	18.49		
CA_5A_48A	Band 48	Ant12	20M	3641	56150	QPSK	1	0	Band 4	20M	2132.5	2175	18.64	18.85		
	Band 48	Ant13	20M	3641	56150	QPSK	1	0	Band 4	20M	2132.5	2175	22.18	22.38		
	Band 5	Ant0	10M	836.5	20525	QPSK	1	0	Band 48	20M	3641	56150	24.10	24.31		
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0	Band 48	20M	3641	56150	24.20	24.38		
	Band 48	Ant10	20M	3641	56150	QPSK	1	0	Band 5	10M	881.5	2525	21.54	21.77		
CA_12A_48A	Band 48	Ant11	20M	3641	56150	QPSK	1	0	Band 5	10M	881.5	2525	18.28	18.49		
	Band 48	Ant12	20M	3641	56150	QPSK	1	0	Band 5	10M	881.5	2525	18.61	18.85		
	Band 48	Ant13	20M	3641	56150	QPSK	1	0	Band 5	10M	881.5	2525	22.22	22.38		
	Band 12	Ant0	10M	707.5	23095	QPSK	1	0	Band 48	20M	3641	56150	24.13	24.37		
	Band 12	Ant1	10M	707.5	23095	QPSK	1	0	Band 48	20M	3641	56150	24.32	24.47		
	Band 48	Ant10	20M	3641	56150	QPSK	1	0	Band 12	10M	737.5	5095	21.54	21.77		
CA_41A_48A	Band 48	Ant11	20M	3641	56150	QPSK	1	0	Band 12	10M	737.5	5095	18.27	18.49		
	Band 48	Ant12	20M	3641	56150	QPSK	1	0	Band 12	10M	737.5	5095	18.69	18.85		
	Band 48	Ant13	20M	3641	56150	QPSK	1	0	Band 12	10M	737.5	5095	22.15	22.38		
	Band 41	Ant0	20M	2593	40620	QPSK	1	0	Band 48	20M	3641	56150	22.19	22.38		
	Band 41	Ant3	20M	2593	40620	QPSK	1	0	Band 48	20M	3641	56150	24.20	24.41		
	Band 41	Ant4	20M	2593	40620	QPSK	1	0	Band 48	20M	3641	56150	22.94	23.10		
	Band 41	Ant5	20M	2593	40620	QPSK	1	0	Band 48	20M	3641	56150	23.03	23.27		
CA_48A_48A	Band 48	Ant10	20M	3641	56150	QPSK	1	0	Band 41	20M	2593	40620	21.58	21.77		
	Band 48	Ant11	20M	3641	56150	QPSK	1	0	Band 41	20M	2593	40620	18.28	18.49		
	Band 48	Ant12	20M	3641	56150	QPSK	1	0	Band 41	20M	2593	40620	18.65	18.85		
	Band 48	Ant13	20M	3641	56150	QPSK	1	0	Band 41	20M	2593	40620	22.18	22.38		
	Band 48	Ant10	20M	3641	56150	QPSK	1	0	Band 48	5M	3552.5	55265	21.55	21.77		
CA_48A_66A	Band 48	Ant11	20M	3641	56150	QPSK	1	0	Band 48	5M	3552.5	55265	18.25	18.49		
	Band 48	Ant12	20M	3641	56150	QPSK	1	0	Band 48	5M	3552.5	55265	18.64	18.85		
	Band 48	Ant13	20M	3641	56150	QPSK	1	0	Band 48	5M	3552.5	55265	22.16	22.38		
	Band 48	Ant10	20M	3641	56150	QPSK	1	0	Band 66	20M	2145	66786	21.60	21.77		
	Band 48	Ant11	20M	3641	56150	QPSK	1	0	Band 66	20M	2145	66786	18.33	18.49		
	Band 48	Ant12	20M	3641	56150	QPSK	1	0	Band 66	20M	2145	66786	18.62	18.85		
CA_66B	Band 48	Ant13	20M	3641	56150	QPSK	1	0	Band 66	20M	2145	66786	22.14	22.38		
	Band 66	Ant0	20M	1745	132322	QPSK	1	0	Band 48	20M	3641	56150	21.30	21.49		
	Band 66	Ant3	20M	1745	132322	QPSK	1	0	Band 48	20M	3641	56150	24.37	24.61		
	Band 66	Ant4	20M	1745	132322	QPSK	1	0	Band 48	20M	3641	56150	22.94	23.14		
	Band 66	Ant5	20M	1745	132322	QPSK	1	0	Band 48	20M	3641	56150	22.70	22.85		
CA_66C	Band 66	Ant0	15M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	21.32	21.49		
	Band 66	Ant3	15M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	24.55	24.61		
	Band 66	Ant4	15M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	23.01	23.14		
	Band 66	Ant5	15M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	22.73	22.85		
CA_66C	Band 66	Ant0	20M	1745	132322	QPSK	1	0	Band 66	20M	2174.8	67084	21.34	21.49		
	Band 66	Ant4	20M	1745	132322	QPSK	1	0	Band 66	20M	2174.8	67084	24.54	24.61		
	Band 66	Ant0	20M	1745	132322	QPSK	1	0	Band 66	20M	2174.8	67084	23.01	23.14		
Band 66	Ant4	20M	1745	132322	QPSK	1	0	Band 66	20M	2174.8	67084	22.72	22.85			



3CA DL

3CA List	PCC					SCC1				SCC2				Power	
	LTE	BW	BW	UL	UL	LTE	BW	DL	DL	LTE	BW	DL	DL	With CA	Without CA
	Band	Ant	(MHz)	Freq (MHz)	Channel	Band	(MHz)	Freq (MHz)	Channel	Band	(MHz)	Freq (MHz)	Channel	Tx. Power (dBm)	Tx. Power (dBm)
CA_2A_4A_5A	Band 2	Ant3	20M	1880	18900	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	24.18	24.35
	Band 2	Ant4	20M	1880	18900	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	22.85	23.05
	Band 4	Ant0	20M	1732.5	20175	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.25	21.43
	Band 4	Ant3	20M	1732.5	20175	Band 2	20M	1960	900	Band 5	10M	881.5	2525	24.30	24.45
	Band 4	Ant4	20M	1732.5	20175	Band 2	20M	1960	900	Band 5	10M	881.5	2525	22.92	23.08
	Band 4	Ant5	20M	1732.5	20175	Band 2	20M	1960	900	Band 5	10M	881.5	2525	22.62	22.83
	Band 5	Ant0	10M	836.5	20525	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	24.14	24.31
	Band 5	Ant11	10M	836.5	20525	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	24.26	24.38
	Band 2	Ant3	20M	1880	18900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	24.2	24.35
	Band 2	Ant4	20M	1880	18900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	22.88	23.05
CA_2A_4A_7A	Band 4	Ant0	20M	1732.5	20175	Band 2	20M	1960	900	Band 7	20M	2655	3100	21.31	21.43
	Band 4	Ant3	20M	1732.5	20175	Band 2	20M	1960	900	Band 7	20M	2655	3100	24.28	24.45
	Band 4	Ant4	20M	1732.5	20175	Band 2	20M	1960	900	Band 7	20M	2655	3100	22.94	23.08
	Band 4	Ant5	20M	1732.5	20175	Band 2	20M	1960	900	Band 7	20M	2655	3100	22.61	22.83
	Band 7	Ant0	20M	2535	21100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	21.35	21.57
	Band 7	Ant3	20M	2535	21100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	24.29	24.46
	Band 7	Ant4	20M	2535	21100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	23.29	23.50
	Band 7	Ant5	20M	2535	21100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	23	23.16
	Band 2	Ant3	20M	1880	18900	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	24	24.35
	Band 2	Ant4	20M	1880	18900	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	22.89	23.05
CA_2A_7A_7A	Band 7	Ant0	20M	2535	21100	Band 7	5M	2687.5	3425	Band 2	20M	1960	900	21.42	21.57
	Band 7	Ant3	20M	2535	21100	Band 7	5M	2687.5	3425	Band 2	20M	1960	900	24.27	24.46
	Band 7	Ant4	20M	2535	21100	Band 7	5M	2687.5	3425	Band 2	20M	1960	900	23.3	23.50
	Band 7	Ant5	20M	2535	21100	Band 7	5M	2687.5	3425	Band 2	20M	1960	900	23	23.16
	Band 2	Ant3	20M	1880	18900	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.15	24.35
	Band 2	Ant4	20M	1880	18900	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	22.91	23.05
	Band 7	Ant0	20M	2535	21100	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	21.42	21.57
	Band 7	Ant3	20M	2535	21100	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	24.29	24.46
	Band 7	Ant4	20M	2535	21100	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	23.28	23.50
	Band 7	Ant5	20M	2535	21100	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	23.03	23.16
CA_2A_7C	Band 4	Ant0	20M	1732.5	20175	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	21.22	21.43
	Band 4	Ant3	20M	1732.5	20175	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.27	24.45
	Band 4	Ant4	20M	1732.5	20175	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	22.93	23.08
	Band 4	Ant5	20M	1732.5	20175	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	22.68	22.83
	Band 7	Ant0	20M	2535	21100	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	21.42	21.57
	Band 7	Ant3	20M	2535	21100	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	24.34	24.46
	Band 7	Ant4	20M	2535	21100	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	23.35	23.50
	Band 7	Ant5	20M	2535	21100	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	22.95	23.16
	Band 5	Ant0	10M	836.5	20525	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	24.13	24.31
	Band 5	Ant11	10M	836.5	20525	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	24.21	24.38
CA_5A_7A_7A	Band 7	Ant0	20M	2535	21100	Band 7	5M	2687.5	3425	Band 5	10M	881.5	2525	21.33	21.57
	Band 7	Ant3	20M	2535	21100	Band 7	5M	2687.5	3425	Band 5	10M	881.5	2525	24.26	24.46
	Band 7	Ant4	20M	2535	21100	Band 7	5M	2687.5	3425	Band 5	10M	881.5	2525	23.27	23.50
	Band 7	Ant5	20M	2535	21100	Band 7	5M	2687.5	3425	Band 5	10M	881.5	2525	22.99	23.16
	Band 5	Ant0	10M	836.5	20525	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.11	24.31
	Band 5	Ant11	10M	836.5	20525	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.21	24.38
	Band 7	Ant0	20M	2535	21100	Band 7	20M	2674.8	3298	Band 5	10M	881.5	2525	21.37	21.57
	Band 7	Ant3	20M	2535	21100	Band 7	20M	2674.8	3298	Band 5	10M	881.5	2525	24.28	24.46
	Band 7	Ant4	20M	2535	21100	Band 7	20M	2674.8	3298	Band 5	10M	881.5	2525	23.37	23.50
	Band 7	Ant5	20M	2535	21100	Band 7	20M	2674.8	3298	Band 5	10M	881.5	2525	22.98	23.16
CA_5A_7A_66A	Band 5	Ant0	10M	836.5	20525	Band 7	20M	2655	3100	Band 66	20M	2145	66786	24.1	24.31
	Band 5	Ant11	10M	836.5	20525	Band 7	20M	2655	3100	Band 66	20M	2145	66786	24.21	24.38
	Band 7	Ant0	20M	2535	21100	Band 5	10M	881.5	2525	Band 66	20M	2145	66786	21.42	21.57
	Band 7	Ant3	20M	2535	21100	Band 5	10M	881.5	2525	Band 66	20M	2145	66786	24.25	24.46
	Band 7	Ant4	20M	2535	21100	Band 5	10M	881.5	2525	Band 66	20M	2145	66786	23.33	23.50
	Band 7	Ant5	20M	2535	21100	Band 5	10M	881.5	2525	Band 66	20M	2145	66786	23.02	23.16
	Band 66	Ant0	20M	1745	132322	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	21.29	21.49
	Band 66	Ant3	20M	1745	132322	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	24.47	24.61
	Band 66	Ant4	20M	1745	132322	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	23.01	23.14
	Band 66	Ant5	20M	1745	132322	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	22.65	22.85
CA_5A_66A_66A	Band 5	Ant0	10M	836.5	20525	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	24.12	24.31
	Band 5	Ant11	10M	836.5	20525	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	24.2	24.38
	Band 66	Ant0	20M	1745	132322	Band 66	5M	2177.5	67111	Band 5	10M	881.5	2525	21.3	21.49
	Band 66	Ant3	20M	1745	132322	Band 66	5M	2177.5	67111	Band 5	10M	881.5	2525	24.47	24.61
	Band 66	Ant4	20M	1745	132322	Band 66	5M	2177.5	67111	Band 5	10M	881.5	2525	22.94	23.14
	Band 66	Ant5	20M	1745	132322	Band 66	5M	2177.5	67111	Band 5	10M	881.5	2525	22.66	22.85
	Band 7	Ant0	20M	2535	21100	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	21.37	21.57
	Band 7	Ant3	20M	2535	21100	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	24.29	24.46
	Band 7	Ant4	20M	2535	21100	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	23.3	23.50
	Band 7	Ant5	20M	2535	21100	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	23.02	23.16
CA_5A_66A_66A	Band 66	Ant0	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	21.31	21.49
	Band 66	Ant3	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	24.47	24.61
	Band 66	Ant4	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	23.01	23.14
	Band 66	Ant5	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	22.65	22.85
	Band 12	Ant0	10M	707.5	23095	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	24.15	24.37
	Band 12	Ant11	10M	707.5	23095	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	24.27	24.47
	Band 66	Ant0	20M												



3CA DL

3CA List	PCC					SCC1				SCC2				Power	
	LTE	BW	BW	UL	UL	LTE	BW	DL	DL	LTE	BW	DL	DL	With CA	Without CA
	Band	Ant	(MHz)	Freq	Channel	Band	(MHz)	Freq	Channel	Band	(MHz)	Freq	Channel	Tx. Power	Tx. Power
				(MHz)				(MHz)				(MHz)			(dBm)
CA_5A_7A_66A	Band 7	Ant7	20M	2535	21100	Band 5	10M	881.5	2525	Band 66	20M	2145	66786	23.28	23.28



4CA DL

Configure	PCC					SCC1				SCC2				SCC3				Power	
	LTE	BW	BW	UL	UL	LTE	BW	DL	DL	LTE	BW	DL	DL	LTE	BW	DL	DL	With CA	Without CA
	Band	Ant	(MHz)	Freq. (MHz)	Channel	Band	(MHz)	Freq. (MHz)	Channel	Band	(MHz)	Freq. (MHz)	Channel	Band	(MHz)	Freq. (MHz)	Channel	Tx. Power (dBm)	Tx. Power (dBm)
CA_7C-66A-66A	Band 7	Ant7	20M	2535	21100	Band 7	20M	2574.8	3298	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	23.19	23.28



4CA DL

Configure	PCC				SCC1				SCC2				SCC3				Power		
	LTE	BW	BW	UL	UL	LTE	BW	DL	DL	LTE	BW	DL	DL	LTE	BW	DL	DL	With CA	Without CA
	Band	Ant	(MHz)	Freq (MHz)	Channel	Band	(MHz)	Freq (MHz)	Channel	Band	(MHz)	Freq (MHz)	Channel	Band	(MHz)	Freq (MHz)	Channel	Tx Power (dBm)	Tx Power (dBm)
CA_7C-66A-66A	Band 7	Ant0	20M	2535	21100	Band 7	20M	2674.8	3298	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	21.35	21.57
	Band 7	Ant3	20M	2535	21100	Band 7	20M	2674.8	3298	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	24.34	24.46
	Band 7	Ant4	20M	2535	21100	Band 7	20M	2674.8	3298	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	23.32	23.50
	Band 7	Ant5	20M	2535	21100	Band 7	20M	2674.8	3298	Band 66	20M	2145	66786	Band 66	5M	2177.5	67111	23.02	23.16
	Band 66	Ant0	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	21.29	21.49
	Band 66	Ant3	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.41	24.61
	Band 66	Ant4	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	22.95	23.14
	Band 66	Ant5	20M	1745	132322	Band 66	5M	2177.5	67111	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	22.65	22.85



Full Power level/Default Power level for 5G NR

n5 Ant0 Default									
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				165800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	PI/2 BPSK	1	1	24.38	24.42	24.45	25.5	0.0	
20	PI/2 BPSK	1	53	24.24	24.41	24.39			
20	PI/2 BPSK	1	104	24.41	24.35	24.43			
20	PI/2 BPSK	50	0	23.97	23.90	23.98	25.0	0.5	
20	PI/2 BPSK	50	28	24.26	24.37	24.32	25.5	0.0	
20	PI/2 BPSK	50	56	23.85	23.81	23.79	25.0	0.5	
20	PI/2 BPSK	100	0	23.83	23.93	23.84			
20	QPSK	1	1	24.39	24.46	24.37			
20	QPSK	1	53	24.43	24.39	24.28	25.5	0.0	
20	QPSK	1	104	24.33	24.38	24.40			
20	QPSK	50	0	23.44	23.38	23.34	24.5	1.0	
20	QPSK	50	28	24.44	24.45	24.44	25.5	0.0	
20	QPSK	50	56	23.25	23.26	23.33	24.5	1.0	
20	QPSK	100	0	23.25	23.38	23.35			
20	16QAM	1	1	23.58	23.54	23.47			
20	64QAM	1	1	22.10	22.04	22.01	23.0	2.5	
20	256QAM	1	1	20.00	19.89	19.92	21.0	4.5	
Channel				168300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	24.33	24.31	24.40	25.5	0.0	
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	1	24.32	24.21	24.24	25.5	0.0	
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	1	24.28	24.31	24.32	25.5	0.0	

n7 Ant0 Default									
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				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	22.89	22.84	22.88	24.5	0.0	
40	PI/2 BPSK	1	108	22.89	22.95	22.86			
40	PI/2 BPSK	1	214	22.88	22.88	23.00			
40	PI/2 BPSK	108	0	22.24	22.32	22.24	24.0	0.5	
40	PI/2 BPSK	108	54	22.84	22.79	22.87	24.5	0.0	
40	PI/2 BPSK	108	108	22.37	22.36	22.28	24.0	0.5	
40	PI/2 BPSK	216	0	22.32	22.30	22.33			
40	QPSK	1	1	22.97	23.03	22.91			
40	QPSK	1	108	22.88	22.89	22.79	24.5	0.0	
40	QPSK	1	214	23.02	22.94	23.02			
40	QPSK	108	0	21.85	21.85	21.87	23.5	1.0	
40	QPSK	108	54	22.74	22.84	22.80	24.5	0.0	
40	QPSK	108	108	21.78	21.86	21.79	23.0	1.0	
40	QPSK	216	0	21.78	21.83	21.72			
40	16QAM	1	1	21.76	21.81	21.90			
40	64QAM	1	1	20.52	20.51	20.55	22.0	2.5	
40	256QAM	1	1	18.34	18.36	18.28	20.0	4.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	22.88	22.91	22.91	24.5	0.0	
Channel				502600	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	22.77	22.87	22.76	24.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	22.80	22.91	22.89	24.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	22.78	22.99	22.88	24.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	22.82	23.03	22.92	24.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	22.80	22.97	22.89	24.5	0.0	



n66 Ant0 Default								
BW [MHz]	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	352000		
Frequency (MHz)				1730	1745	1760		
40	PV2 BPSK	1	1	22.84	22.94	22.87		
40	PV2 BPSK	1	108	22.90	22.89	22.77	24.5	0.0
40	PV2 BPSK	1	214	22.98	22.97	22.91		
40	PV2 BPSK	108	0	22.43	22.41	22.37	24.0	0.5
40	PV2 BPSK	108	54	22.76	22.83	22.71	24.5	0.0
40	PV2 BPSK	108	108	22.43	22.39	22.36	24.0	0.5
40	PV2 BPSK	216	0	22.42	22.33	22.39		
40	QPSK	1	1	22.84	22.99	22.94		
40	QPSK	1	108	22.82	22.89	22.96	24.5	0.0
40	QPSK	1	214	22.91	22.93	22.91		
40	QPSK	108	0	21.84	21.89	21.95	23.5	1.0
40	QPSK	108	54	22.88	22.91	22.86	24.5	0.0
40	QPSK	108	108	21.81	21.92	21.81		
40	QPSK	216	0	21.73	21.89	21.83	23.5	1.0
40	16QAM	1	1	22.22	22.12	22.15	23.5	1.0
40	64QAM	1	1	20.47	20.53	20.49	22.0	2.5
40	256QAM	1	1	18.42	18.35	18.24	20.0	4.5
Channel				345000	349000	353000	Tune-up limit	MPR
Frequency (MHz)				1725	1745	1765	(dBm)	(dB)
30	QPSK	1	1	22.66	22.74	22.82	24.5	0.0
Channel				344000	349000	354000	Tune-up limit	MPR
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)
20	QPSK	1	1	22.67	22.89	22.83	24.5	0.0
Channel				343500	349000	354500	Tune-up limit	MPR
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)
15	QPSK	1	1	22.63	22.77	22.85	24.5	0.0
Channel				343000	349000	355000	Tune-up limit	MPR
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)
10	QPSK	1	1	22.73	22.87	22.77	24.5	0.0
Channel				342500	349000	355500	Tune-up limit	MPR
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)
5	QPSK	1	1	22.70	22.87	22.78	24.5	0.0



n38 Ant0 Default									
BW [MHz]	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	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	21.25	21.28	21.21			
40	PI/2 BPSK	1	53	20.33	20.36	20.43	23.0	0.0	
40	PI/2 BPSK	1	104	19.04	19.12	19.20			
40	PI/2 BPSK	50	0	20.55	20.49	20.58	22.5	0.5	
40	PI/2 BPSK	50	28	20.45	20.39	20.37	23.0	0.0	
40	PI/2 BPSK	50	56	19.06	19.13	19.05			
40	PI/2 BPSK	100	0	19.87	19.90	19.87	22.5	0.5	
40	QPSK	1	1	21.19	21.30	21.25			
40	QPSK	1	53	19.78	19.84	19.82	23.0	0.0	
40	QPSK	1	104	19.08	19.14	19.07			
40	QPSK	50	0	19.81	19.77	19.82	22.0	1.0	
40	QPSK	50	28	19.98	20.00	19.91	23.0	0.0	
40	QPSK	50	56	18.48	18.53	18.55			
40	QPSK	100	0	19.27	19.33	19.29	22.0	1.0	
40	16QAM	1	1	20.12	20.17	20.11	22.0	1.0	
40	64QAM	1	1	18.96	19.02	19.04	20.5	2.5	
40	256QAM	1	1	16.89	16.93	16.91	18.5	4.5	
Channel				517002	519000	520998			
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	21.19	21.19	21.21	23.0	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	21.20	21.18	21.19	23.0	0.0	
Channel				515502	519000	522498			
Frequency (MHz)				2577.51	2595	2612.49			
15	PI/2 BPSK	1	1	21.05	21.18	21.13	23.0	0.0	
Channel				516004	519000	522996			
Frequency (MHz)				2575.02	2595	2614.98			
10	PI/2 BPSK	1	1	21.08	21.12	21.15	23.0	0.0	

n41 Ant0 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	19.66	19.61	19.75			
100	PI/2 BPSK	1	137	21.73	21.79	21.59	23.0	0.0	
100	PI/2 BPSK	1	271	21.67	21.64	21.83			
100	PI/2 BPSK	135	0	21.58	21.62	21.65	22.5	0.5	
100	PI/2 BPSK	135	69	21.45	21.67	21.66	23.0	0.0	
100	PI/2 BPSK	135	138	20.68	20.68	20.69			
100	PI/2 BPSK	270	0	21.35	21.37	21.50			
100	QPSK	1	1	21.80	21.88	21.72			
100	QPSK	1	137	21.50	21.77	21.42	23.0	0.0	
100	QPSK	1	271	21.85	21.62	21.84			
100	QPSK	135	0	21.80	21.66	21.80	22.0	1.0	
100	QPSK	135	69	21.62	21.86	21.62	23.0	0.0	
100	QPSK	135	138	20.63	20.72	20.61			
100	QPSK	270	0	21.20	21.46	21.45	22.0	1.0	
100	16QAM	1	1	20.05	20.06	20.06	22.0	1.0	
100	64QAM	1	1	19.98	19.96	19.86	20.5	2.5	
100	256QAM	1	1	18.65	18.57	18.65	18.5	4.5	
Channel				508200	518598	528996			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	21.69	21.62	21.49	23.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	21.50	21.74	21.53	23.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	21.58	21.58	21.41	23.0	0.0	
Channel				505200	518598	531996			
Frequency (MHz)				2526	2592.99	2659.98			
60	QPSK	1	1	21.52	21.64	21.46	23.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	21.55	21.79	21.42	23.0	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	21.60	21.65	21.63	23.0	0.0	
Channel				502200	518598	534996			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	21.59	21.75	21.52	23.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	21.56	21.75	21.52	23.0	0.0	



n5 Ant1 Default								
BW [MHz]	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	PI/2 BPSK	1	1	24.52	24.61	24.48		
20	PI/2 BPSK	1	53	24.52	24.58	24.48	25.7	0.0
20	PI/2 BPSK	1	104	24.40	24.54	24.49		
20	PI/2 BPSK	50	0	24.03	24.09	24.03	25.2	0.5
20	PI/2 BPSK	50	28	24.49	24.56	24.44	25.7	0.0
20	PI/2 BPSK	50	56	23.89	24.03	23.91		
20	PI/2 BPSK	100	0	23.92	24.06	23.99	25.2	0.5
20	QPSK	1	1	24.54	24.64	24.56		
20	QPSK	1	53	24.46	24.53	24.40	25.7	0.0
20	QPSK	1	104	24.43	24.49	24.34		
20	QPSK	50	0	23.54	23.69	23.65	24.7	1.0
20	QPSK	50	28	24.46	24.51	24.37	25.7	0.0
20	QPSK	50	56	23.52	23.57	23.53	24.7	1.0
20	QPSK	100	0	23.52	23.63	23.50		
20	16QAM	1	1	23.46	23.49	23.39	24.7	1.0
20	64QAM	1	1	22.13	22.21	22.13	23.2	2.5
20	256QAM	1	1	20.06	20.11	19.98	21.2	4.5
Channel				166300	167300	168300		
Frequency (MHz)				831.5	836.5	841.5		
15	QPSK	1	1	24.41	24.58	24.47	25.7	0.0
Channel				165800	167300	168800		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	1	24.47	24.60	24.48	25.7	0.0
Channel				165300	167300	169300		
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	1	24.43	24.57	24.44	25.7	0.0



n7 Ant3 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	22.35	22.47	22.43			
40	PI/2 BPSK	1	108	22.50	22.50	22.42	24.0	0.0	
40	PI/2 BPSK	1	214	22.46	22.46	22.34			
40	PI/2 BPSK	108	0	21.88	21.96	21.95	23.5	0.5	
40	PI/2 BPSK	108	54	22.40	22.36	22.41	24.0	0.0	
40	PI/2 BPSK	108	108	22.06	21.95	22.05			
40	PI/2 BPSK	216	0	21.98	21.88	21.77	23.5	0.5	
40	QPSK	1	1	22.38	22.53	22.43			
40	QPSK	1	108	22.50	22.47	22.45	24.0	0.0	
40	QPSK	1	214	22.48	22.51	22.49			
40	QPSK	108	0	21.49	21.42	21.41	23.0	1.0	
40	QPSK	108	54	22.38	22.46	22.38	24.0	0.0	
40	QPSK	108	108	21.36	21.44	21.39			
40	QPSK	216	0	21.38	21.46	21.39	23.0	1.0	
40	16QAM	1	1	21.66	21.67	21.58	23.0	1.0	
40	64QAM	1	1	20.02	20.12	20.10	21.5	2.5	
40	256QAM	1	1	17.79	17.87	17.98	19.5	4.5	
Channel				503000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555	24.0	0.0	
30	QPSK	1	1	22.42	22.47	22.39	24.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5	24.0	0.0	
25	QPSK	1	1	22.40	22.46	22.38	24.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560	24.0	0.0	
20	QPSK	1	1	22.50	22.52	22.47	24.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5	24.0	0.0	
15	QPSK	1	1	22.46	22.39	22.37	24.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565	24.0	0.0	
10	QPSK	1	1	22.33	22.41	22.35	24.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5	24.0	0.0	
5	QPSK	1	1	22.40	22.50	22.35	24.0	0.0	

n66 Ant3 Default									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	22.54	22.57	22.57			
40	PI/2 BPSK	1	108	22.34	22.43	22.41	24.0	0.0	
40	PI/2 BPSK	1	214	22.49	22.49	22.37			
40	PI/2 BPSK	108	0	21.88	21.98	21.88	23.5	0.5	
40	PI/2 BPSK	108	54	22.45	22.44	22.51	24.0	0.0	
40	PI/2 BPSK	108	108	21.94	22.00	21.97			
40	PI/2 BPSK	216	0	21.93	21.94	21.99	23.5	0.5	
40	QPSK	1	1	22.48	22.58	22.50			
40	QPSK	1	108	22.49	22.54	22.41	24.0	0.0	
40	QPSK	1	214	22.34	22.45	22.52			
40	QPSK	108	0	21.39	21.48	21.53	23.0	1.0	
40	QPSK	108	54	22.41	22.54	22.48	24.0	0.0	
40	QPSK	108	108	21.63	21.55	21.61			
40	QPSK	216	0	21.36	21.45	21.38	23.0	1.0	
40	16QAM	1	1	21.63	21.72	21.76	23.0	1.0	
40	64QAM	1	1	20.29	20.23	20.17	21.5	2.5	
40	256QAM	1	1	18.00	17.93	18.03	19.5	4.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765	24.0	0.0	
30	QPSK	1	1	22.40	22.36	22.46	24.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770	24.0	0.0	
20	QPSK	1	1	22.26	22.53	22.39	24.0	0.0	
Channel				343000	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5	24.0	0.0	
15	QPSK	1	1	22.37	22.51	22.44	24.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775	24.0	0.0	
10	QPSK	1	1	22.25	22.34	22.36	24.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5	24.0	0.0	
5	QPSK	1	1	22.30	22.37	22.48	24.0	0.0	



n38 Ant3 Default									
BW [MHz]	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	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	22.19	22.29	22.34	24.0	0.0	
40	PI/2 BPSK	1	53	22.28	22.30	22.25			
40	PI/2 BPSK	1	104	22.16	22.22	22.11			
40	PI/2 BPSK	50	0	21.87	21.80	21.81	23.5	0.5	
40	PI/2 BPSK	50	28	22.18	22.28	22.23	24.0	0.0	
40	PI/2 BPSK	50	56	21.85	21.75	21.86	23.5	0.5	
40	PI/2 BPSK	100	0	21.69	21.72	21.82			
40	QPSK	1	1	22.29	22.36	22.34	24.0	0.0	
40	QPSK	1	53	22.17	22.24	22.16			
40	QPSK	1	104	22.27	22.20	22.30			
40	QPSK	50	0	21.34	21.27	21.35	23.0	1.0	
40	QPSK	50	28	22.31	22.32	22.27	24.0	0.0	
40	QPSK	50	56	21.31	21.24	21.34	23.0	1.0	
40	QPSK	100	0	21.19	21.25	21.13			
40	16QAM	1	1	21.47	21.35	21.30	23.0	1.0	
40	64QAM	1	1	19.83	19.86	19.90	21.5	2.5	
40	256QAM	1	1	17.72	17.68	17.79	19.5	4.5	
Channel				517002	519000	520998	Tune-up limit	MPR	
Frequency (MHz)				2585.01	2595	2604.99	24.0	0.0	
30	QPSK	1	1	22.01	22.31	22.18	24.0	0.0	
Channel				516000	519000	522000	Tune-up limit	MPR	
Frequency (MHz)				2580	2595	2610	24.0	0.0	
20	QPSK	1	1	22.21	22.16	22.19	24.0	0.0	
Channel				515502	519000	522498	Tune-up limit	MPR	
Frequency (MHz)				2577.51	2595	2612.49	24.0	0.0	
15	PI/2 BPSK	1	1	22.12	22.25	22.23	24.0	0.0	
Channel				516004	519000	522996	Tune-up limit	MPR	
Frequency (MHz)				2575.02	2595	2614.98	24.0	0.0	
10	PI/2 BPSK	1	1	22.17	22.23	22.17	24.0	0.0	

n41 Ant3 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	22.24	22.34	22.29	24.0	0.0	
100	PI/2 BPSK	1	137	22.24	22.29	22.30			
100	PI/2 BPSK	1	271	22.34	22.41	22.32			
100	PI/2 BPSK	135	0	21.92	21.82	21.71	23.5	0.5	
100	PI/2 BPSK	135	69	22.15	22.22	22.10	24.0	0.0	
100	PI/2 BPSK	135	138	21.75	21.85	21.79	23.5	0.5	
100	PI/2 BPSK	270	0	21.63	21.74	21.84			
100	QPSK	1	1	22.40	22.42	22.27	24.0	0.0	
100	QPSK	1	137	22.38	22.37	22.27			
100	QPSK	1	271	22.37	22.36	22.36			
100	QPSK	135	0	21.43	21.54	21.56	23.0	1.0	
100	QPSK	135	69	22.38	22.40	22.24	24.0	0.0	
100	QPSK	135	138	21.64	21.62	21.88	23.0	1.0	
100	QPSK	270	0	21.54	21.56	21.48			
100	16QAM	1	1	21.40	21.49	21.50	23.0	1.0	
100	64QAM	1	1	19.97	20.04	20.02	21.5	2.5	
100	256QAM	1	1	18.14	18.14	18.23	19.5	4.5	
Channel				508200	518598	528996	Tune-up limit	MPR	
Frequency (MHz)				2541	2592.99	2644.98	24.0	0.0	
90	QPSK	1	1	22.10	22.29	22.16	24.0	0.0	
Channel				507204	518598	529998	Tune-up limit	MPR	
Frequency (MHz)				2536.02	2592.99	2649.99	24.0	0.0	
80	QPSK	1	1	22.03	22.22	22.17	24.0	0.0	
Channel				506202	518598	531000	Tune-up limit	MPR	
Frequency (MHz)				2531.01	2592.99	2655	24.0	0.0	
70	QPSK	1	1	22.14	22.21	22.09	24.0	0.0	
Channel				505200	518598	531996	Tune-up limit	MPR	
Frequency (MHz)				2526	2592.99	2659.98	24.0	0.0	
60	QPSK	1	1	22.10	22.31	22.14	24.0	0.0	
Channel				504204	518598	532998	Tune-up limit	MPR	
Frequency (MHz)				2521.02	2592.99	2664.99	24.0	0.0	
50	QPSK	1	1	22.06	22.22	22.30	24.0	0.0	
Channel				503202	518598	534000	Tune-up limit	MPR	
Frequency (MHz)				2516.01	2592.99	2670	24.0	0.0	
40	QPSK	1	1	22.17	22.28	22.16	24.0	0.0	
Channel				502200	518598	534996	Tune-up limit	MPR	
Frequency (MHz)				2511	2592.99	2674.98	24.0	0.0	
30	QPSK	1	1	22.24	22.22	22.22	24.0	0.0	
Channel				501204	518598	535998	Tune-up limit	MPR	
Frequency (MHz)				2506.02	2592.99	2678.99	24.0	0.0	
20	QPSK	1	1	22.24	22.18	22.25	24.0	0.0	



n7 Ant4 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	24.69	24.65	24.67			
40	PI/2 BPSK	1	108	24.64	24.59	24.64	25.5	0.0	
40	PI/2 BPSK	1	214	24.68	24.67	24.57			
40	PI/2 BPSK	108	0	24.14	24.15	24.21	25.0	0.5	
40	PI/2 BPSK	108	54	24.43	24.55	24.44	25.5	0.0	
40	PI/2 BPSK	108	108	24.03	24.09	24.19	25.0	0.5	
40	PI/2 BPSK	216	0	24.13	24.12	24.17			
40	QPSK	1	1	24.66	24.72	24.66			
40	QPSK	1	108	24.71	24.65	24.58	25.5	0.0	
40	QPSK	1	214	24.54	24.64	24.53			
40	QPSK	108	0	23.58	23.60	23.61	24.5	1.0	
40	QPSK	108	54	24.51	24.57	24.56	25.5	0.0	
40	QPSK	108	108	23.71	23.61	23.57	24.5	1.0	
40	QPSK	216	0	23.50	23.69	23.58			
40	16QAM	1	1	23.77	23.85	23.91	24.5	1.0	
40	64QAM	1	1	22.22	22.31	22.21	23.0	2.5	
40	256QAM	1	1	20.26	20.15	20.04	21.0	4.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555	25.5	0.0	
30	QPSK	1	1	24.60	24.68	24.65	25.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5	25.5	0.0	
25	QPSK	1	1	24.70	24.51	24.62	25.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560	25.5	0.0	
20	QPSK	1	1	24.71	24.69	24.56	25.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5	25.5	0.0	
15	QPSK	1	1	24.64	24.65	24.58	25.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565	25.5	0.0	
10	QPSK	1	1	24.63	24.68	24.67	25.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5	25.5	0.0	
5	QPSK	1	1	24.64	24.54	24.66	25.5	0.0	

n66 Ant4 Default									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	24.32	24.36	24.31			
40	PI/2 BPSK	1	108	24.39	24.41	24.33	25.5	0.0	
40	PI/2 BPSK	1	214	24.26	24.33	24.25			
40	PI/2 BPSK	108	0	23.95	23.88	23.90	25.0	0.5	
40	PI/2 BPSK	108	54	24.30	24.41	24.37	25.5	0.0	
40	PI/2 BPSK	108	108	23.76	23.88	23.82	25.0	0.5	
40	PI/2 BPSK	216	0	23.61	23.52	23.42			
40	QPSK	1	1	24.45	24.47	24.41			
40	QPSK	1	108	24.38	24.46	24.43	25.5	0.0	
40	QPSK	1	214	24.39	24.31	24.38			
40	QPSK	108	0	23.42	23.36	23.40	24.5	1.0	
40	QPSK	108	54	24.17	24.25	24.14	25.5	0.0	
40	QPSK	108	108	23.26	23.36	23.31	24.5	1.0	
40	QPSK	216	0	23.37	23.41	23.35			
40	16QAM	1	1	23.47	23.42	23.47	24.5	1.0	
40	64QAM	1	1	22.05	22.04	22.15	23.0	2.5	
40	256QAM	1	1	19.80	19.89	19.94	21.0	4.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765	25.5	0.0	
30	QPSK	1	1	24.36	24.29	24.36	25.5	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770	25.5	0.0	
20	QPSK	1	1	24.39	24.27	24.28	25.5	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5	25.5	0.0	
15	QPSK	1	1	24.35	24.39	24.28	25.5	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775	25.5	0.0	
10	QPSK	1	1	24.32	24.27	24.32	25.5	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5	25.5	0.0	
5	QPSK	1	1	24.44	24.35	24.20	25.5	0.0	



n38 Ant4 Default									
BW [MHz]	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	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	24.25	24.29	24.35			
40	PI/2 BPSK	1	53	24.40	24.37	24.38	25.5	0.0	
40	PI/2 BPSK	1	104	24.31	24.39	24.36			
40	PI/2 BPSK	50	0	23.81	23.83	23.86	25.0	0.5	
40	PI/2 BPSK	50	28	24.27	24.27	24.31	25.5	0.0	
40	PI/2 BPSK	50	56	23.76	23.82	23.89	25.0	0.5	
40	PI/2 BPSK	100	0	23.93	23.85	23.86			
40	QPSK	1	1	24.23	24.41	24.35			
40	QPSK	1	53	24.38	24.39	24.36	25.5	0.0	
40	QPSK	1	104	24.34	24.35	24.37			
40	QPSK	50	0	23.45	23.34	23.39	24.5	1.0	
40	QPSK	50	28	24.32	24.38	24.30	25.5	0.0	
40	QPSK	50	56	23.35	23.27	23.33	24.5	1.0	
40	QPSK	100	0	24.22	24.29	23.20			
40	16QAM	1	1	23.40	23.28	23.28	24.5	1.0	
40	64QAM	1	1	21.83	21.91	22.03	23.0	2.5	
40	256QAM	1	1	20.01	20.04	19.99	21.0	4.5	
Channel				517002	519000	520998			
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	24.36	24.33	24.30	25.5	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	24.20	24.30	24.34	25.5	0.0	
Channel				515502	519000	522498			
Frequency (MHz)				2577.51	2595	2612.49			
15	PI/2 BPSK	1	1	24.13	24.26	24.16	25.5	0.0	
Channel				516004	519000	522996			
Frequency (MHz)				2575.02	2595	2614.98			
10	PI/2 BPSK	1	1	24.04	24.23	24.20	25.5	0.0	

n41 Ant4 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	24.38	24.29	24.38			
100	PI/2 BPSK	1	137	24.31	24.34	24.35	25.5	0.0	
100	PI/2 BPSK	1	271	24.43	24.37	24.41			
100	PI/2 BPSK	135	0	23.77	23.89	23.82	25.0	0.5	
100	PI/2 BPSK	135	69	24.33	24.43	24.37	25.5	0.0	
100	PI/2 BPSK	135	138	24.01	23.96	23.91	25.0	0.5	
100	PI/2 BPSK	270	0	23.76	23.83	23.72			
100	QPSK	1	1	24.25	24.48	24.28			
100	QPSK	1	137	24.37	24.39	24.35	25.5	0.0	
100	QPSK	1	271	24.29	24.39	24.37			
100	QPSK	135	0	23.40	23.30	23.26	24.5	1.0	
100	QPSK	135	69	24.37	24.44	24.41	25.5	0.0	
100	QPSK	135	138	23.34	23.45	23.41	24.5	1.0	
100	QPSK	270	0	23.40	23.41	23.36			
100	16QAM	1	1	23.00	22.99	22.96	24.5	1.0	
100	64QAM	1	1	22.22	22.10	22.21	23.0	2.5	
100	256QAM	1	1	19.73	19.82	19.91	21.0	4.5	
Channel				508200	518598	528996			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	24.34	24.27	24.34	25.5	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	24.25	24.30	24.17	25.5	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	24.37	24.41	24.32	25.5	0.0	
Channel				505200	518598	531996			
Frequency (MHz)				2526	2592.99	2659.98			
60	QPSK	1	1	24.25	24.20	24.31	25.5	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	24.29	24.24	24.22	25.5	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	24.23	24.28	24.21	25.5	0.0	
Channel				502200	518598	534996			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	24.39	24.27	24.34	25.5	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	24.30	24.27	24.32	25.5	0.0	



n7 Ant5 DS11 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	21.31	21.29	21.27			
40	PI/2 BPSK	1	108	21.22	21.25	21.20	23.0	0.0	
40	PI/2 BPSK	1	214	21.26	21.24	21.23			
40	PI/2 BPSK	108	0	20.67	20.73	20.79	22.5	0.5	
40	PI/2 BPSK	108	54	21.16	21.21	21.29	23.0	0.0	
40	PI/2 BPSK	108	108	20.82	20.74	20.75			
40	PI/2 BPSK	216	0	20.66	20.77	20.82	22.5	0.5	
40	QPSK	1	1	21.34	21.36	21.28			
40	QPSK	1	108	21.32	21.26	21.23	23.0	0.0	
40	QPSK	1	214	21.19	21.22	21.17			
40	QPSK	108	0	20.24	20.31	20.38	22.0	1.0	
40	QPSK	108	54	21.06	21.18	21.16	23.0	0.0	
40	QPSK	108	108	20.13	20.18	20.25			
40	QPSK	216	0	20.19	20.22	20.10	22.0	1.0	
40	16QAM	1	1	20.59	20.51	20.62	22.0	1.0	
40	64QAM	1	1	18.82	18.94	19.03	20.5	2.5	
40	256QAM	1	1	16.84	16.74	16.63	18.5	4.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	21.12	21.06	21.13	23.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	21.02	21.18	21.03	23.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	21.08	21.12	21.10	23.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	21.23	21.22	21.04	#REF!	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	21.08	21.08	21.06	23.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	21.22	21.22	21.04	23.0	0.0	

n66 Ant5 Default									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	20.51	20.50	20.62			
40	PI/2 BPSK	1	108	20.41	20.45	20.57	22.0	0.0	
40	PI/2 BPSK	1	214	20.51	20.52	20.40			
40	PI/2 BPSK	108	0	20.06	19.97	20.00	21.5	0.5	
40	PI/2 BPSK	108	54	20.38	20.47	20.51	22.0	0.0	
40	PI/2 BPSK	108	108	19.95	20.02	19.95			
40	PI/2 BPSK	216	0	20.06	19.94	19.86	21.5	0.5	
40	QPSK	1	1	20.54	20.64	20.53			
40	QPSK	1	108	20.49	20.45	20.35	22.0	0.0	
40	QPSK	1	214	20.52	20.49	20.55			
40	QPSK	108	0	19.48	19.52	19.51	21.0	1.0	
40	QPSK	108	54	20.41	20.48	20.46	22.0	0.0	
40	QPSK	108	108	19.81	19.51	19.43			
40	QPSK	216	0	19.45	19.54	19.43	21.0	1.0	
40	16QAM	1	1	19.71	19.62	19.66	21.0	1.0	
40	64QAM	1	1	18.08	18.09	17.97	19.5	2.5	
40	256QAM	1	1	15.95	15.89	15.89	17.5	4.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	20.33	20.27	20.41	22.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	20.22	20.30	20.36	22.0	0.0	
Channel				343000	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	20.40	20.39	20.55	22.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	20.28	20.46	20.54	22.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	20.42	20.34	20.55	22.0	0.0	



n38 Ant5 Default									
BW [MHz]	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	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	22.85	22.81	22.79	24.5	0.0	
40	PI/2 BPSK	1	53	22.57	22.69	22.59			
40	PI/2 BPSK	1	104	22.71	22.80	22.68			
40	PI/2 BPSK	50	0	22.30	22.32	22.34	24.0	0.5	
40	PI/2 BPSK	50	28	22.69	22.67	22.59	24.5	0.0	
40	PI/2 BPSK	50	56	22.10	22.20	22.19	24.0	0.5	
40	PI/2 BPSK	100	0	22.41	22.29	22.21			
40	QPSK	1	1	22.78	22.89	22.82	24.5	0.0	
40	QPSK	1	53	22.83	22.77	22.68			
40	QPSK	1	104	22.85	22.79	22.80			
40	QPSK	50	0	21.60	21.70	21.65	23.5	1.0	
40	QPSK	50	28	22.61	22.73	22.69	24.5	0.0	
40	QPSK	50	56	21.75	21.84	21.67			
40	QPSK	100	0	21.71	21.79	21.61	23.5	1.0	
40	16QAM	1	1	22.01	22.12	22.07	23.5	1.0	
40	64QAM	1	1	20.55	20.52	20.64	22.0	2.5	
40	256QAM	1	1	18.30	18.32	18.38	20.0	4.5	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99	24.5	0.0	
30	QPSK	1	1	22.62	22.80	22.72	24.5	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610	24.5	0.0	
20	QPSK	1	1	22.58	22.63	22.78	24.5	0.0	
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49	24.5	0.0	
15	PI/2 BPSK	1	1	22.62	22.75	22.70	24.5	0.0	
Channel				516004	519000	522996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98	24.5	0.0	
10	PI/2 BPSK	1	1	22.60	22.77	22.64	24.5	0.0	

n41 Ant5 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	22.82	22.94	22.80	24.5	0.0	
100	PI/2 BPSK	1	137	22.81	22.88	22.93			
100	PI/2 BPSK	1	271	22.76	22.87	22.87			
100	PI/2 BPSK	135	0	22.42	22.45	22.54	24.0	0.5	
100	PI/2 BPSK	135	69	22.82	22.83	22.74	24.5	0.0	
100	PI/2 BPSK	135	138	22.28	22.34	22.46	24.0	0.5	
100	PI/2 BPSK	270	0	22.18	22.26	22.34			
100	QPSK	1	1	22.90	22.95	22.82	24.5	0.0	
100	QPSK	1	137	22.93	22.83	22.91			
100	QPSK	1	271	22.93	22.87	22.84			
100	QPSK	135	0	21.94	21.83	21.93	23.5	1.0	
100	QPSK	135	69	22.64	22.74	22.72	24.5	0.0	
100	QPSK	135	138	21.83	21.80	21.88	23.5	1.0	
100	QPSK	270	0	21.68	21.74	21.70			
100	16QAM	1	1	21.89	21.88	21.77	23.5	1.0	
100	64QAM	1	1	20.63	20.65	20.56	22.0	2.5	
100	256QAM	1	1	18.45	18.43	18.44	20.0	4.5	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	24.5	0.0	
90	QPSK	1	1	22.85	22.89	22.84	24.5	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2649.99	24.5	0.0	
80	QPSK	1	1	22.86	22.81	22.91	24.5	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655	24.5	0.0	
70	QPSK	1	1	22.91	22.94	22.85	24.5	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98	24.5	0.0	
60	QPSK	1	1	22.86	22.80	22.87	24.5	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	24.5	0.0	
50	QPSK	1	1	22.86	22.73	22.84	24.5	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670	24.5	0.0	
40	QPSK	1	1	22.84	22.94	22.81	24.5	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98	24.5	0.0	
30	QPSK	1	1	22.83	22.78	22.94	24.5	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99	24.5	0.0	
20	QPSK	1	1	22.89	22.81	22.90	24.5	0.0	



Par27Q n77 Ant10 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	2444	2454	2451			
100	PI2 BPSK	1	137	2455	2456	2439	25.7	0.0	
100	PI2 BPSK	1	271	2446	2438	2427			
100	PI2 BPSK	135	0	2352	2386	2394	25.2	0.5	
100	PI2 BPSK	135	69	2438	2444	2441	25.7	0.0	
100	PI2 BPSK	135	138	2388	2383	2395	25.2	0.5	
100	PI2 BPSK	270	0	2379	2388	2394			
100	QPSK	1	1	2450	2457	2443			
100	QPSK	1	137	2455	2444	2432	25.7	0.0	
100	QPSK	1	271	2441	2439	2443			
100	QPSK	135	0	2329	2330	2322	24.7	1.0	
100	QPSK	135	69	2438	2440	2436	25.7	0.0	
100	QPSK	135	138	2338	2331	2333	24.7	1.0	
100	QPSK	270	0	2326	2326	2317			
100	16QAM	1	1	2380	2388	2384	24.7	1.0	
100	16QAM	1	1	2212	2214	2220	23.2	2.5	
100	25QAM	1	1	1985	1992	1994	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	2441	2433	2435	23.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	2440	2450	2435	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	2451	2432	2435	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	2444	2447	2441	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	2450	2444	2437	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2450	2450	2443	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2451	2447	2443	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	2380	2453	2433	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2443	2453	2443	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2453	2453	2442	25.7	0.0	

Part27Q n77 Ant10 Default									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	2444					
100	PI2 BPSK	1	137	2455	2452	2439	25.7	0.0	
100	PI2 BPSK	1	271	2441	2434				
100	PI2 BPSK	135	0	2391	2391				
100	PI2 BPSK	135	69	2445	2445		25.7	0.0	
100	PI2 BPSK	135	138	2387	2387		25.2	0.5	
100	PI2 BPSK	270	0	2386	2386				
100	QPSK	1	1	2439					
100	QPSK	1	137	2440			25.7	0.0	
100	QPSK	1	271	2437					
100	QPSK	135	0	2331					
100	QPSK	135	69	2436			25.7	0.0	
100	QPSK	135	138	2332			24.7	1.0	
100	QPSK	270	0	2323					
100	16QAM	1	1	2389			24.7	1.0	
100	16QAM	1	1	2286			23.2	2.5	
100	25QAM	1	1	1996			21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	2439	2459	2442	23.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	2443	2447	2438	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	2433	2439	2427	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	2433	2452	2441	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	2432	2455	2426	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2450	2448	2424	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2440	2441	2437	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	2450	2454	2432	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2442	2437	2424	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2444	2445	2433	25.7	0.0	

Part27Q n78 Ant10 Default PC3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	2444					
100	PI2 BPSK	1	137	2455	2452	2439	25.7	0.0	
100	PI2 BPSK	1	271	2440	2430				
100	PI2 BPSK	135	0	2436	2436		25.7	0.0	
100	PI2 BPSK	135	69	2437	2437		25.7	0.0	
100	PI2 BPSK	135	138	2428	2428		25.7	0.0	
100	PI2 BPSK	270	0	2428	2428				
100	QPSK	1	1	2446					
100	QPSK	1	137	2441			25.7	0.0	
100	QPSK	1	271	2436					
100	QPSK	135	0	2428			25.7	0.0	
100	QPSK	135	69	2438			25.7	0.0	
100	QPSK	135	138	2428			25.7	0.0	
100	QPSK	270	0	2427					
100	16QAM	1	1	2435			25.7	0.0	
100	16QAM	1	1	2359			24.7	1.0	
100	25QAM	1	1	2132			22.7	3.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	2422	2438	2421	23.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	2422	2434	2421	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	2418	2444	2427	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	2424	2424	2423	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	2418	2427	2437	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	2427	2442	2434	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	2423	2432	2438	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	2420	2429	2440	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	2427	2431	2439	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	2422	2429	2435	25.7	0.0	



Part27Q n78 Ant10 Default PC3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.30	3500.01				
100	PI2 BPSK	1	137	25.28			25.7	0.0	
100	PI2 BPSK	1	271	25.08					
100	PI2 BPSK	135	0	25.22				0.0	
100	PI2 BPSK	135	69	25.22					
100	PI2 BPSK	135	138	25.08					
100	PI2 BPSK	270	0	25.03			25.7	0.0	
100	QPSK	1	1	25.35					
100	QPSK	1	137	25.18			25.7	0.0	
100	QPSK	1	271	25.08					
100	QPSK	135	0	25.06					
100	QPSK	135	69	25.18				0.0	
100	QPSK	135	138	24.98					
100	QPSK	270	0	25.12			25.7	0.0	
100	16QAM	1	1	25.25					
100	16QAM	1	1	24.36			24.7	1.0	
100	256QAM	1	1	22.12			22.7	3.0	
Channel									
Frequency (MHz)									
80	QPSK	1	123	23.02	2520	2522	23.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	25.10	25.18	25.12	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	25.03	25.15	25.08	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	25.10	25.28	25.19	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	25.13	25.33	25.13	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	25.10	25.19	25.22	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	25.02	25.24	25.13	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	25.10	25.17	25.21	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	24.97	25.18	25.07	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	25.12	25.30	25.20	25.7	0.0	

Part27Q n78 Ant10 Default PC2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.00	3750				
100	PI2 BPSK	1	137	26.03			27.0	0.0	
100	PI2 BPSK	1	271	25.95					
100	PI2 BPSK	135	0	25.49			26.5	0.5	
100	PI2 BPSK	135	69	25.98			27.0	0.0	
100	PI2 BPSK	135	138	25.44			26.5	0.5	
100	PI2 BPSK	270	0	25.42					
100	QPSK	1	1	26.09					
100	QPSK	1	137	26.05			27.0	0.0	
100	QPSK	1	271	25.90					
100	QPSK	135	0	25.00			27.0	0.0	
100	QPSK	135	69	25.98			27.0	0.0	
100	QPSK	135	138	24.98					
100	QPSK	270	0	24.93			27.0	0.0	
100	16QAM	1	1	25.25			26.0	1.0	
100	16QAM	1	1	23.45			24.5	2.5	
100	256QAM	1	1	21.42			22.5	4.5	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.81	26.04	25.87	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.79	25.92	25.88	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.87	25.90	25.96	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.98	26.03	26.04	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.81	25.97	25.99	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.89	25.98	25.97	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.80	25.98	25.92	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.90	25.90	25.96	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.91	25.94	26.03	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.03	26.03	26.01	27.0	0.0	

Part27Q n78 Ant10 Default PC2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.64	3500.01				
100	PI2 BPSK	1	137	26.79			27.0	0.0	
100	PI2 BPSK	1	271	26.68					
100	PI2 BPSK	135	0	26.28			27.0	0.0	
100	PI2 BPSK	135	69	26.72			27.0	0.0	
100	PI2 BPSK	135	138	26.15			23.5	3.5	
100	PI2 BPSK	270	0	26.07			26.5	0.5	
100	QPSK	1	1	26.63			27.0	0.0	
100	QPSK	1	137	26.80					
100	QPSK	1	271	26.65					
100	QPSK	135	0	25.78					
100	QPSK	135	69	26.67			27.0	0.0	
100	QPSK	135	138	25.58			23.5	3.5	
100	QPSK	270	0	25.73			26.5	0.5	
100	16QAM	1	1	25.89			26.0	1.0	
100	16QAM	1	1	24.41			24.5	2.5	
100	256QAM	1	1	22.13			22.5	4.5	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.75	26.67	26.68	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.73	26.80	26.83	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.73	26.87	26.88	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.59	26.77	26.88	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.69	26.76	26.84	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.82	26.88	26.98	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.82	26.80	26.80	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.74	26.63	26.80	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.77	26.80	26.88	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.79	26.81	26.73	27.0	0.0	



Par270 n77 Ant11 Default									
BW (MHz)	Modulation	RB 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	24.09	24.12	24.01			
100	PI2 BPSK	1	137	24.06	24.06	24.02	25.7	0.0	
100	PI2 BPSK	1	271	24.03	24.10	24.00			
100	PI2 BPSK	135	0	23.80	23.80	23.59	25.2	0.5	
100	PI2 BPSK	135	69	24.12	24.11	23.98	25.7	0.0	
100	PI2 BPSK	135	138	23.80	23.49	23.45	25.2	0.5	
100	PI2 BPSK	270	0	23.50	23.48	23.53			
100	QPSK	1	1	24.08	24.17	23.95			
100	QPSK	1	137	24.04	23.98	23.91	25.7	0.0	
100	QPSK	1	271	24.11	24.08	24.01			
100	QPSK	135	0	22.96	23.08	23.17	24.7	1.0	
100	QPSK	135	69	23.88	24.01	23.94	25.7	0.0	
100	QPSK	135	138	23.05	23.02	22.95	24.7	1.0	
100	QPSK	270	0	22.93	22.97	22.94			
100	16QAM	1	1	23.39	23.33	23.38	24.7	1.0	
100	16QAM	1	1	21.86	21.78	21.80	23.2	2.5	
100	16QAM	1	1	19.03	19.05	19.01	21.2	4.5	
Channel									
Frequency (MHz)				64968	65000	65034	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	24.15	24.04	24.05	25.7	0.0	
Channel									
Frequency (MHz)				64934	65000	65068	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	24.00	24.06	23.96	25.7	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3945	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	24.12	24.06	24.01	25.7	0.0	
Channel									
Frequency (MHz)				64968	65000	65034	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	24.06	24.13	24.02	25.7	0.0	
Channel									
Frequency (MHz)				64834	65000	65068	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	24.04	24.07	23.81	25.7	0.0	
Channel									
Frequency (MHz)				3720	3840	3960	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	24.11	24.00	23.90	25.7	0.0	
Channel									
Frequency (MHz)				3715.02	3840	3965.01	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	24.01	24.05	23.98	25.7	0.0	
Channel									
Frequency (MHz)				3710.01	3840	3970.02	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	24.10	23.85	23.83	25.7	0.0	
Channel									
Frequency (MHz)				64768	65000	64834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	24.12	24.08	23.94	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	24.00	24.12	23.95	25.7	0.0	

Par270 n77 Ant11 Default									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3660.01					
100	PI2 BPSK	1	1	24.55					
100	PI2 BPSK	1	137	24.38			25.7	0.0	
100	PI2 BPSK	1	271	24.42					
100	PI2 BPSK	135	0	23.92			25.7	0.0	
100	PI2 BPSK	135	69	24.54					
100	PI2 BPSK	135	138	23.98			25.2	0.5	
100	PI2 BPSK	270	0	23.98					
100	QPSK	1	1	24.60					
100	QPSK	1	137	24.30			25.7	0.0	
100	QPSK	1	271	24.57					
100	QPSK	135	0	23.48			25.7	0.0	
100	QPSK	135	69	24.97					
100	QPSK	135	138	23.42			24.7	1.0	
100	QPSK	270	0	23.42					
100	16QAM	1	1	23.72			24.7	1.0	
100	16QAM	1	1	22.16			23.2	2.5	
100	16QAM	1	1	19.91			21.2	4.5	
Channel									
Frequency (MHz)				63900	63934	63968	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	24.25	24.58	24.21	25.7	0.0	
Channel									
Frequency (MHz)				63968	63934	64000	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	24.27	24.42	24.21	25.7	0.0	
Channel									
Frequency (MHz)				3480.02	3500.01	3510	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	24.39	24.50	24.22	25.7	0.0	
Channel									
Frequency (MHz)				63900	63934	63968	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	24.40	24.57	24.19	25.7	0.0	
Channel									
Frequency (MHz)				63168	63934	65000	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	24.50	24.47	24.24	25.7	0.0	
Channel									
Frequency (MHz)				63134	63934	63934	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	24.01	24.54	24.21	25.7	0.0	
Channel									
Frequency (MHz)				3485	3500.01	3506.02	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	24.25	24.52	24.21	25.7	0.0	
Channel									
Frequency (MHz)				63968	63934	63900	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	24.28	24.53	24.24	25.7	0.0	
Channel									
Frequency (MHz)				63000	63934	63968	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	24.30	24.58	24.22	25.7	0.0	
Channel									
Frequency (MHz)				63034	63934	63934	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	24.29	24.58	24.27	25.7	0.0	

Par270 n78 Ant11 Default PC3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3750					
100	PI2 BPSK	1	1	24.09					
100	PI2 BPSK	1	137	24.06			25.7	0.0	
100	PI2 BPSK	1	271	24.06					
100	PI2 BPSK	135	0	23.99			25.2	0.5	
100	PI2 BPSK	135	69	24.02			25.7	0.0	
100	PI2 BPSK	135	138	24.00			25.2	0.5	
100	PI2 BPSK	270	0	23.98					
100	QPSK	1	1	24.10					
100	QPSK	1	137	24.08			25.7	0.0	
100	QPSK	1	271	24.08					
100	QPSK	135	0	23.53			24.7	1.0	
100	QPSK	135	69	24.94			25.7	0.0	
100	QPSK	135	138	23.34			24.7	1.0	
100	QPSK	270	0	23.46					
100	16QAM	1	1	23.72			24.7	1.0	
100	16QAM	1	1	22.24			23.2	2.5	
100	16QAM	1	1	19.97			21.2	4.5	
Channel									
Frequency (MHz)				64968	65000	65034	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	24.04	23.97	23.95	25.7	0.0	
Channel									
Frequency (MHz)				3743.01	3750	3760.02	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	23.97	23.97	23.88	25.7	0.0	
Channel									
Frequency (MHz)				3735	3750	3765	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	24.08	24.06	23.87	25.7	0.0	
Channel									
Frequency (MHz)				64968	65000	65034	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	23.88	24.02	24.03	25.7	0.0	
Channel									
Frequency (MHz)				64834	65000	65168	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	24.00	23.98	23.98	25.7	0.0	
Channel									
Frequency (MHz)				3720	3750	3780	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	24.08	24.08	24.00	25.7	0.0	
Channel									
Frequency (MHz)				3715.02	3750	3765.01	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	24.08	24.07	23.98	25.7	0.0	
Channel									
Frequency (MHz)				64734	65000	65068	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	23.87	24.00	23.96	25.7	0.0	
Channel									
Frequency (MHz)				64768	65000	65034	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	23.93	24.04	23.91	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	24.05	24.04	23.88	25.7	0.0	



Part27Q n78 Ant11 Default PC3									
BW [MHz]	Modulation	RB 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	24.00	3500.01				
100	PI2 BPSK	1	137	23.99	23.99		25.7	0.0	
100	PI2 BPSK	1	271	23.95					
100	PI2 BPSK	135	0	23.92					
100	PI2 BPSK	135	69	24.01	34.01		25.2	0.0	
100	PI2 BPSK	135	138	23.94					
100	PI2 BPSK	270	0	23.82			25.7	0.0	
100	QPSK	1	1	23.95					
100	QPSK	1	137	24.02			25.7	0.0	
100	QPSK	1	271	23.99					
100	QPSK	135	0	23.49					
100	QPSK	135	69	23.80			24.7	0.0	
100	QPSK	135	138	23.90					
100	QPSK	270	0	23.35			25.7	0.0	
100	16QAM	1	1	23.69			24.7	0.0	
100	16QAM	1	1	22.14			23.2	1.0	
100	256QAM	1	1	18.92			21.2	3.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.89	23.85	23.83	23.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.89	23.85	23.83	23.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.99	23.90	23.86	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.98	23.86	23.93	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.02	23.91	23.88	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.94	23.84	23.84	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.00	23.82	23.86	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.92	23.87	23.92	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.93	23.89	23.88	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.00	23.88	23.87	25.7	0.0	

Part27Q n78 Ant11 Default PC2									
BW [MHz]	Modulation	RB 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	24.99	3750				
100	PI2 BPSK	1	137	25.13			27.0	0.0	
100	PI2 BPSK	1	271	24.98					
100	PI2 BPSK	135	0	24.58			26.5	0.5	
100	PI2 BPSK	135	69	25.09	35.09		27.0	0.0	
100	PI2 BPSK	135	138	24.37			26.5	0.5	
100	PI2 BPSK	270	0	24.45					
100	QPSK	1	1	25.28					
100	QPSK	1	137	25.10			27.0	0.0	
100	QPSK	1	271	25.08					
100	QPSK	135	0	24.04			26.0	1.0	
100	QPSK	135	69	25.10			27.0	0.0	
100	QPSK	135	138	23.88			26.0	1.0	
100	QPSK	270	0	23.89					
100	16QAM	1	1	24.20			26.0	1.0	
100	16QAM	1	1	22.45			24.5	2.5	
100	256QAM	1	1	20.37			22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.01	25.08	25.12	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.09	25.18	25.22	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.13	25.20	25.17	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.03	25.10	25.10	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.07	25.14	25.19	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.24	25.07	25.14	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.08	25.01	25.17	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.15	25.02	25.18	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.18	25.22	25.23	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.10	25.19	25.20	27.0	0.0	

Part27Q n78 Ant11 Default PC2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.35	3500				
100	PI2 BPSK	1	137	25.29			27.0	0.0	
100	PI2 BPSK	1	271	25.20					
100	PI2 BPSK	135	0	25.18					
100	PI2 BPSK	135	69	25.25	35.25		27.0	0.0	
100	PI2 BPSK	135	138	25.18					
100	PI2 BPSK	270	0	25.11			26.5	0.5	
100	QPSK	1	1	25.37					
100	QPSK	1	137	25.29			27.0	0.0	
100	QPSK	1	271	25.21					
100	QPSK	135	0	24.77					
100	QPSK	135	69	24.94			27.0	0.0	
100	QPSK	135	138	24.62					
100	QPSK	270	0	24.67			26.0	1.0	
100	16QAM	1	1	24.96			26.0	1.0	
100	16QAM	1	1	24.44			24.5	2.5	
100	256QAM	1	1	21.25			22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.20	25.19	25.24	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.22	25.23	25.18	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.22	25.34	25.25	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.13	25.17	25.25	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.15	25.23	25.27	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.15	25.22	25.22	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.11	25.22	25.19	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.23	25.29	25.15	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.15	25.29	25.25	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.17	25.22	25.25	27.0	0.0	



Part270 n77 Ant12 Default									
BW (MHz)	Modulation	RB 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	24.09	24.12	24.14			
100	PI2 BPSK	1	137	24.10	24.18	24.21	25.7	0.0	
100	PI2 BPSK	1	271	23.96	24.10	24.13			
100	PI2 BPSK	135	0	23.80	23.85	23.87	25.2	0.5	
100	PI2 BPSK	135	69	24.12	24.07	24.08	25.7	0.0	
100	PI2 BPSK	135	138	23.58	23.54	23.55	25.2	0.5	
100	PI2 BPSK	270	0	23.60	23.49	23.53			
100	QPSK	1	1	24.17	24.22	24.16			
100	QPSK	1	137	24.15	24.14	24.10	25.7	0.0	
100	QPSK	1	271	24.11	24.19	24.07			
100	QPSK	135	0	23.06	23.00	23.02	24.7	1.0	
100	QPSK	135	69	24.02	24.08	24.01	25.7	0.0	
100	QPSK	135	138	23.15	23.05	23.01	24.7	1.0	
100	QPSK	270	0	22.88	22.95	22.85			
100	16QAM	1	1	23.37	23.29	23.33	24.7	1.0	
100	16QAM	1	1	21.99	21.88	21.86	23.2	2.5	
100	256QAM	1	1	19.50	19.84	19.87	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.98	24.02	24.14	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.03	24.04	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.87	24.05	24.10	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.01	23.90	23.98	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.98	24.12	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.93	24.08	23.90	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.98	24.02	24.00	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.10	24.00	24.02	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.97	24.09	24.15	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.98	24.05	24.00	25.7	0.0	

Part27Q n77 Ant12 Default									
BW (MHz)	Modulation	RB 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			24.40			
100	PI2 BPSK	1	137			24.50	25.7	0.0	
100	PI2 BPSK	1	271			24.35			
100	PI2 BPSK	135	0			23.82	25.7	0.0	
100	PI2 BPSK	135	69			24.41			
100	PI2 BPSK	135	138			23.85	25.2	0.5	
100	PI2 BPSK	270	0			23.73			
100	QPSK	1	1			24.57	25.7	0.0	
100	QPSK	1	137			24.47			
100	QPSK	1	271			24.45			
100	QPSK	135	0			23.33	25.7	0.0	
100	QPSK	135	69			24.40			
100	QPSK	135	138			23.33	24.7	1.0	
100	QPSK	270	0			23.29			
100	16QAM	1	1			23.55	24.7	1.0	
100	16QAM	1	1			22.16	23.2	2.5	
100	256QAM	1	1			19.89	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.40	24.55	24.38	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.03	24.48	24.33	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.37	24.52	24.38	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.31	24.50	24.43	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.54	24.54	24.35	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.39	24.53	24.43	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.41	24.52	24.40	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.41	24.53	24.35	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.41	24.53	24.42	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.54	24.43	24.41	25.7	0.0	

Part27O n78 Ant12 Default PC3									
BW (MHz)	Modulation	RB 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			24.28			
100	PI2 BPSK	1	137			24.30	25.7	0.0	
100	PI2 BPSK	1	271			24.16			
100	PI2 BPSK	135	0			23.71	25.2	0.5	
100	PI2 BPSK	135	69			24.24	25.7	0.0	
100	PI2 BPSK	135	138			23.87	25.2	0.5	
100	PI2 BPSK	270	0			23.80			
100	QPSK	1	1			24.32			
100	QPSK	1	137			24.18	25.7	0.0	
100	QPSK	1	271			24.13			
100	QPSK	135	0			23.13	24.7	1.0	
100	QPSK	135	69			24.21	25.7	0.0	
100	QPSK	135	138			23.05	24.7	1.0	
100	QPSK	270	0			23.12			
100	16QAM	1	1			23.45	24.7	1.0	
100	16QAM	1	1			21.86	23.2	2.5	
100	256QAM	1	1			19.87	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.20	24.27	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.07	24.09	24.10	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.12	24.26	24.02	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.28	24.09	23.97	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.55	24.04	24.07	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.11	24.08	24.08	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.14	24.05	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.10	24.24	24.00	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.20	24.25	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.17	24.25	23.95	25.7	0.0	



Part27Q 78 Ant12 Default PC3

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								
Frequency (MHz)								
100	PI2 BPSK	1	1	24.79	24.80	24.81		
100	PI2 BPSK	1	137	24.80	24.80	24.80	25.7	0.0
100	PI2 BPSK	1	271	24.80	24.80	24.80		
100	PI2 BPSK	135	0	24.30	24.30	24.30	25.7	0.0
100	PI2 BPSK	135	69	24.72	24.72	24.72		
100	PI2 BPSK	135	138	24.26	24.26	24.26		
100	PI2 BPSK	270	0	24.25	24.25	24.25	25.2	0.5
100	QPSK	1	1	24.86	24.86	24.86		
100	QPSK	1	137	24.84	24.84	24.84	25.7	0.0
100	QPSK	1	271	24.76	24.76	24.76		
100	QPSK	135	0	23.71	23.71	23.71		
100	QPSK	135	69	24.79	24.79	24.79	25.7	0.0
100	QPSK	135	138	23.00	23.00	23.00		
100	QPSK	270	0	23.74	23.74	23.74	24.7	1.0
100	16QAM	1	1	24.01	24.01	24.01	24.7	1.0
100	16QAM	1	1	22.81	22.81	22.81	23.2	2.5
100	256QAM	1	1	23.33	23.33	23.33	21.2	4.5
Channel								
Frequency (MHz)								
90	QPSK	1	123	24.73	24.85	24.83	25.1	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	109	24.73	24.87	24.89	25.7	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	95	24.70	24.91	24.87	25.7	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	81	24.74	24.87	24.80	25.7	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	67	24.69	24.92	24.82	25.7	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	53	24.73	24.87	24.80	25.7	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	39	24.74	24.90	24.83	25.7	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	26	24.70	24.91	24.87	25.7	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	19	24.76	24.91	24.87	25.7	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	12	24.74	24.85	24.84	25.7	0.0

Part27Q n78 Ant12 PC2 Default

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								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.34	25.34	25.34		
100	PI2 BPSK	1	137	25.41	25.41	25.41	27.0	0.0
100	PI2 BPSK	1	271	25.29	25.29	25.29	23.5	3.5
100	PI2 BPSK	135	0	24.83	24.83	24.83	27.0	0.0
100	PI2 BPSK	135	69	25.31	25.31	25.31	23.5	3.5
100	PI2 BPSK	135	138	24.73	24.73	24.73	23.5	3.5
100	PI2 BPSK	270	0	24.67	24.67	24.67	26.5	0.5
100	QPSK	1	1	25.45	25.45	25.45	27.0	0.0
100	QPSK	1	137	25.32	25.32	25.32	23.5	3.5
100	QPSK	1	271	25.26	25.26	25.26	23.5	3.5
100	QPSK	135	0	24.21	24.21	24.21	27.0	0.0
100	QPSK	135	69	25.31	25.31	25.31	23.5	3.5
100	QPSK	135	138	24.16	24.16	24.16	23.5	3.5
100	QPSK	270	0	24.17	24.17	24.17	26.5	0.5
100	16QAM	1	1	24.56	24.56	24.56	26.0	1.0
100	16QAM	1	1	23.06	23.06	23.06	24.5	2.5
100	256QAM	1	1	20.74	20.74	20.74	22.2	4.5
Channel								
Frequency (MHz)								
90	QPSK	1	123	25.26	25.44	25.21	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	109	25.27	25.37	25.29	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	95	23.75	23.90	23.85	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	81	25.30	25.42	25.27	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	67	24.8334	25.0000	25.1668	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	53	25.35	25.34	25.29	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	39	23.7152	23.90	23.8151	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	26	25.27	25.40	25.23	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	19	25.33	25.41	25.20	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	12	23.27	25.41	23.27	27.0	0.0

Part27Q 78 Ant12 PC2 Default

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								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.33	25.33	25.33		
100	PI2 BPSK	1	137	25.40	25.40	25.40	27.0	0.0
100	PI2 BPSK	1	271	25.27	25.27	25.27	23.5	3.5
100	PI2 BPSK	135	0	25.80	25.80	25.80	27.0	0.0
100	PI2 BPSK	135	69	25.27	25.27	25.27	23.5	3.5
100	PI2 BPSK	135	138	25.75	25.75	25.75	23.5	3.5
100	PI2 BPSK	270	0	25.72	25.72	25.72	26.5	0.5
100	QPSK	1	1	26.41	26.41	26.41	27.0	0.0
100	QPSK	1	137	25.37	25.37	25.37	23.5	3.5
100	QPSK	1	271	25.26	25.26	25.26	23.5	3.5
100	QPSK	135	0	25.10	25.10	25.10	27.0	0.0
100	QPSK	135	69	26.31	26.31	26.31	23.5	3.5
100	QPSK	135	138	25.13	25.13	25.13	23.5	3.5
100	QPSK	270	0	25.21	25.21	25.21	26.5	0.5
100	16QAM	1	1	25.53	25.53	25.53	26.0	1.0
100	16QAM	1	1	24.08	24.08	24.08	24.5	2.5
100	256QAM	1	1	21.79	21.79	21.79	22.5	4.5
Channel								
Frequency (MHz)								
90	QPSK	1	123	25.32	25.32	25.32	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	109	26.30	26.39	26.24	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	95	24.85.01	25.00.01	25.15.01	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	81	26.22	26.37	26.14	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	67	26.26	26.36	26.20	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	53	26.35	26.35	26.35	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	39	26.30	26.33	26.16	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	26	26.23	26.37	26.18	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	19	26.28	26.34	26.14	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	12	26.26	26.33	26.17	27.0	0.0



Part270 n77 Ant13 Default							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
100	Pl2 BPSK	1	1	24.10	24.19	24.11	
100	Pl2 BPSK	1	137	24.01	24.19	24.17	25.7
100	Pl2 BPSK	1	271	23.94	24.06	24.06	
100	Pl2 BPSK	135	0	23.55	23.61	23.52	25.2
100	Pl2 BPSK	135	69	23.96	24.08	23.98	25.7
100	Pl2 BPSK	135	138	23.49	23.45	23.56	25.2
100	Pl2 BPSK	270	0	23.50	23.52	23.56	25.2
100	QPSK	1	1	24.10	24.16	23.98	
100	QPSK	1	137	24.11	24.03	24.11	25.7
100	QPSK	1	271	23.99	24.05	24.07	
100	QPSK	135	0	23.21	23.10	23.03	24.7
100	QPSK	135	69	23.94	24.07	23.98	25.7
100	QPSK	135	138	23.00	22.91	22.95	24.7
100	QPSK	270	0	22.96	22.98	22.92	24.7
100	16QAM	1	1	23.43	23.41	23.42	24.7
100	16QAM	1	1	21.85	21.80	21.84	23.2
100	256QAM	1	1	19.06	19.02	19.02	4.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	24.01	24.16	23.98	25.7
Channel							
Frequency (MHz)							
80	QPSK	1	1	23.93	24.08	23.90	25.7
Channel							
Frequency (MHz)							
70	QPSK	1	1	23.93	24.01	24.05	25.7
Channel							
Frequency (MHz)							
60	QPSK	1	1	24.10	24.03	24.01	25.7
Channel							
Frequency (MHz)							
50	QPSK	1	1	23.93	24.14	23.98	25.7
Channel							
Frequency (MHz)							
40	QPSK	1	1	23.97	23.98	24.07	25.7
Channel							
Frequency (MHz)							
30	QPSK	1	1	24.06	24.19	23.90	25.7
Channel							
Frequency (MHz)							
20	QPSK	1	1	23.93	24.19	23.93	25.7
Channel							
Frequency (MHz)							
15	QPSK	1	1	24.05	24.06	24.12	25.7
Channel							
Frequency (MHz)							
10	QPSK	1	1	24.04	24.09	24.11	25.7

Part27Q n77 Ant13 Default							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
100	Pl2 BPSK	1	1	24.54			
100	Pl2 BPSK	1	137	24.55			25.7
100	Pl2 BPSK	1	271	24.46			
100	Pl2 BPSK	135	0	23.97			25.7
100	Pl2 BPSK	135	69	24.11			25.2
100	Pl2 BPSK	135	138	23.84			25.2
100	Pl2 BPSK	270	0	23.98			25.2
100	QPSK	1	1	24.56			
100	QPSK	1	137	24.54			25.7
100	QPSK	1	271	24.40			
100	QPSK	135	0	23.54			25.7
100	QPSK	135	69	24.44			24.7
100	QPSK	135	138	23.35			24.7
100	QPSK	270	0	23.35			24.7
100	16QAM	1	1	23.80			24.7
100	16QAM	1	1	22.23			23.2
100	256QAM	1	1	20.04			4.5
Channel							
Frequency (MHz)							
90	QPSK	1	123	24.44	24.59	24.27	25.7
Channel							
Frequency (MHz)							
80	QPSK	1	109	24.46	24.56	24.42	25.7
Channel							
Frequency (MHz)							
70	QPSK	1	95	24.45	24.54	24.35	25.7
Channel							
Frequency (MHz)							
60	QPSK	1	81	24.49	24.60	24.38	25.7
Channel							
Frequency (MHz)							
50	QPSK	1	67	24.42	24.54	24.43	25.7
Channel							
Frequency (MHz)							
40	QPSK	1	53	24.42	24.59	24.49	25.7
Channel							
Frequency (MHz)							
30	QPSK	1	39	24.46	24.55	24.38	25.7
Channel							
Frequency (MHz)							
20	QPSK	1	26	24.40	24.59	24.39	25.7
Channel							
Frequency (MHz)							
15	QPSK	1	19	24.48	24.59	24.44	25.7
Channel							
Frequency (MHz)							
10	QPSK	1	12	24.45	24.56	24.36	25.7

Part27O n78 Ant13 Default PC3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
100	Pl2 BPSK	1	1	24.11			
100	Pl2 BPSK	1	137	24.21			25.7
100	Pl2 BPSK	1	271	24.07			
100	Pl2 BPSK	135	0	23.62			25.2
100	Pl2 BPSK	135	69	24.07			25.7
100	Pl2 BPSK	135	138	23.34			25.2
100	Pl2 BPSK	270	0	23.48			25.2
100	QPSK	1	1	24.26			
100	QPSK	1	137	24.23			25.7
100	QPSK	1	271	24.05			
100	QPSK	135	0	23.02			24.7
100	QPSK	135	69	24.08			25.7
100	QPSK	135	138	22.83			24.7
100	QPSK	270	0	22.92			24.7
100	16QAM	1	1	22.86			24.7
100	16QAM	1	1	21.86			23.2
100	256QAM	1	1	19.51			4.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	24.12	24.23	24.13	25.7
Channel							
Frequency (MHz)							
80	QPSK	1	1	24.00	24.09	24.08	25.7
Channel							
Frequency (MHz)							
70	QPSK	1	1	24.09	24.22	24.17	25.7
Channel							
Frequency (MHz)							
60	QPSK	1	1	24.17	24.07	24.06	25.7
Channel							
Frequency (MHz)							
50	QPSK	1	1	24.00	24.03	24.19	25.7
Channel							
Frequency (MHz)							
40	QPSK	1	1	24.20	24.04	24.10	25.7
Channel							
Frequency (MHz)							
30	QPSK	1	1	23.98	24.08	24.13	25.7
Channel							
Frequency (MHz)							
20	QPSK	1	1	24.04	24.14	24.13	25.7
Channel							
Frequency (MHz)							
15	QPSK	1	1	24.20	24.01	24.05	25.7
Channel							
Frequency (MHz)							
10	QPSK	1	1	24.08	24.22	24.24	25.7



Part27Q n78 Ant13 Default PC3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	24.43	3500.01	3500.01			
100	Pl2 BPSK	1	137	24.51	3500.01	3500.01	25.7	0.0	
100	Pl2 BPSK	1	271	24.13	3500.01	3500.01			
100	Pl2 BPSK	135	0	23.98	3500.01	3500.01	25.7	0.0	
100	Pl2 BPSK	135	69	24.46	3500.01	3500.01			
100	Pl2 BPSK	135	138	23.85	3500.01	3500.01			
100	Pl2 BPSK	270	0	23.99	3500.01	3500.01	25.2	0.5	
100	QPSK	1	1	24.56	3500.01	3500.01			
100	QPSK	1	137	24.54	3500.01	3500.01	25.7	0.0	
100	QPSK	1	271	24.40	3500.01	3500.01			
100	QPSK	135	0	23.54	3500.01	3500.01			
100	QPSK	135	69	24.44	3500.01	3500.01	25.7	0.0	
100	QPSK	135	138	23.35	3500.01	3500.01			
100	QPSK	270	0	23.35	3500.01	3500.01	24.7	1.0	
100	16QAM	1	1	23.80	3500.01	3500.01	24.7	1.0	
100	16QAM	1	1	22.23	3500.01	3500.01	23.2	2.5	
100	16QAM	1	1	21.2	3500.01	3500.01	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	123	24.41	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	24.46	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	24.45	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	24.49	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	24.42	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	24.42	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	24.46	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	24.40	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	24.48	6300.01	6300.01	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	24.45	6300.01	6300.01	25.7	0.0	

Part27Q n78 Ant13 Default PC2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	26.34	6500.01	6500.01			
100	Pl2 BPSK	1	137	26.25	6500.01	6500.01	27.0	0.0	
100	Pl2 BPSK	1	271	26.34	6500.01	6500.01			
100	Pl2 BPSK	135	0	25.83	6500.01	6500.01	26.5	0.5	
100	Pl2 BPSK	135	69	26.24	6500.01	6500.01	27.0	0.0	
100	Pl2 BPSK	135	138	25.62	6500.01	6500.01	26.5	0.5	
100	Pl2 BPSK	270	0	25.71	6500.01	6500.01			
100	QPSK	1	1	26.41	6500.01	6500.01	27.0	0.0	
100	QPSK	1	137	26.26	6500.01	6500.01	27.0	0.0	
100	QPSK	1	271	26.30	6500.01	6500.01			
100	QPSK	135	0	25.52	6500.01	6500.01	26.0	1.0	
100	QPSK	135	69	26.09	6500.01	6500.01	27.0	0.0	
100	QPSK	135	138	26.01	6500.01	6500.01	26.0	1.0	
100	QPSK	270	0	25.00	6500.01	6500.01	26.0	1.0	
100	16QAM	1	1	25.20	6500.01	6500.01	26.0	1.0	
100	16QAM	1	1	23.87	6500.01	6500.01	24.5	2.5	
100	16QAM	1	1	21.85	6500.01	6500.01	21.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	27.02	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.28	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.28	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.28	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.25	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.29	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.19	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.24	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.20	6499.99	6499.99	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.30	6499.99	6499.99	27.0	0.0	

Part27Q n78 Ant13 Default PC2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	26.29	6500.01	6500.01			
100	Pl2 BPSK	1	137	26.36	6500.01	6500.01	27.0	0.0	
100	Pl2 BPSK	1	271	26.22	6500.01	6500.01			
100	Pl2 BPSK	135	0	25.78	6500.01	6500.01	27.0	0.0	
100	Pl2 BPSK	135	69	26.25	6500.01	6500.01			
100	Pl2 BPSK	135	138	25.48	6500.01	6500.01	26.5	0.5	
100	Pl2 BPSK	270	0	25.70	6500.01	6500.01			
100	QPSK	1	1	26.51	6500.01	6500.01	27.0	0.0	
100	QPSK	1	137	26.43	6500.01	6500.01	27.0	0.0	
100	QPSK	1	271	26.30	6500.01	6500.01			
100	QPSK	135	0	25.25	6500.01	6500.01	27.0	0.0	
100	QPSK	135	69	26.23	6500.01	6500.01	27.0	0.0	
100	QPSK	135	138	25.88	6500.01	6500.01	26.0	1.0	
100	QPSK	270	0	25.77	6500.01	6500.01	26.0	1.0	
100	16QAM	1	1	25.08	6500.01	6500.01	26.0	1.0	
100	16QAM	1	1	23.89	6500.01	6500.01	24.5	2.5	
100	16QAM	1	1	21.89	6500.01	6500.01	21.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	123	26.17	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	26.21	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	26.18	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	26.20	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	26.21	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	26.24	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	26.20	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	26.19	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	26.15	6300.01	6300.01	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	26.15	6300.01	6300.01	27.0	0.0	



Reduced power level for 5G NR

n5 Ant0 DSI1									
BW [MHz]	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	24.38	24.42	24.45			
20	PI2 BPSK	1	53	24.24	24.41	24.39	25.5	0.0	
20	PI2 BPSK	1	104	24.41	24.35	24.43			
20	PI2 BPSK	50	0	23.97	23.90	23.98	25.0	0.5	
20	PI2 BPSK	50	28	24.26	24.37	24.32	25.5	0.0	
20	PI2 BPSK	50	56	23.85	23.81	23.79			
20	PI2 BPSK	100	0	23.83	23.93	23.84	25.0	0.5	
20	QPSK	1	1	24.39	24.45	24.37			
20	QPSK	1	53	24.43	24.39	24.40	25.5	0.0	
20	QPSK	1	104	24.33	24.38	24.40			
20	QPSK	50	0	23.44	23.38	23.34	24.5	1.0	
20	QPSK	50	28	24.44	24.45	24.44	25.5	0.0	
20	QPSK	50	56	23.25	23.26	23.33	24.5	1.0	
20	QPSK	100	0	23.25	23.38	23.35	24.5	1.0	
20	16QAM	1	1	23.58	23.54	23.47	24.5	1.0	
20	16QAM	1	1	22.10	22.04	22.01	23.0	2.5	
20	256QAM	1	1	20.00	19.89	19.92	21.0	4.5	
Channel				168300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	24.33	24.31	24.40	25.5	0.0	
Channel				169500	167300	169500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	1	24.32	24.21	24.24	25.5	0.0	
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				826.5	836.5	844.5			
5	QPSK	1	1	24.28	24.31	24.32	25.5	0.0	

n7 Ant0 DSI1									
BW [MHz]	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	22.89	22.84	22.88			
40	PI2 BPSK	1	108	22.89	22.95	22.86	24.5	0.0	
40	PI2 BPSK	1	214	22.98	22.98	23.00			
40	PI2 BPSK	108	0	22.24	22.32	22.24	24.0	0.5	
40	PI2 BPSK	108	54	22.84	22.79	22.87	24.5	0.0	
40	PI2 BPSK	108	108	22.37	22.36	22.28			
40	PI2 BPSK	216	0	22.32	22.30	22.33	24.0	0.5	
40	QPSK	1	1	22.97	23.03	22.91			
40	QPSK	1	108	22.88	22.89	22.79	24.5	0.0	
40	QPSK	1	214	23.02	22.94	23.02			
40	QPSK	108	0	21.85	21.85	21.87	23.5	1.0	
40	QPSK	108	54	22.74	22.84	22.80	24.5	0.0	
40	QPSK	108	108	21.78	21.86	21.79	23.0	1.0	
40	QPSK	216	0	21.78	21.83	21.72	23.0	1.0	
40	16QAM	1	1	21.78	21.81	21.90	23.5	1.0	
40	16QAM	1	1	20.52	20.51	20.55	22.0	2.5	
40	256QAM	1	1	18.34	18.36	18.28	20.0	4.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	22.98	22.97	22.91	24.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	22.77	22.87	22.78	24.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	22.80	22.91	22.89	24.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	22.78	22.89	22.85	24.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	22.82	23.03	22.92	24.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	22.80	22.97	22.85	24.5	0.0	

n66 Ant0 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				345000	345000	350000			
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	1	1	22.84	22.94	22.87			
40	PI2 BPSK	1	108	22.90	22.89	22.77	24.5	0.0	
40	PI2 BPSK	1	214	22.98	22.97	22.91			
40	PI2 BPSK	108	0	22.43	22.41	22.37	24.0	0.5	
40	PI2 BPSK	108	54	22.76	22.83	22.71	24.5	0.0	
40	PI2 BPSK	108	108	22.43	22.39	22.36			
40	PI2 BPSK	216	0	22.42	22.33	22.38	24.0	0.5	
40	QPSK	1	1	22.84	22.99	22.94			
40	QPSK	1	108	22.82	22.89	22.96	24.5	0.0	
40	QPSK	1	214	22.91	22.93	22.91			
40	QPSK	108	0	21.84	21.89	21.95	23.5	1.0	
40	QPSK	108	54	22.86	22.91	22.86	24.5	0.0	
40	QPSK	108	108	21.81	21.92	21.81	23.5	1.0	
40	QPSK	216	0	21.73	21.86	21.83	23.5	1.0	
40	16QAM	1	1	22.22	22.12	22.15	23.5	1.0	
40	16QAM	1	1	20.47	20.53	20.49	22.0	2.5	
40	256QAM	1	1	18.42	18.35	18.24	20.0	4.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	22.98	22.74	22.82	24.5	0.0	
Channel				345000	345000	350000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	22.87	22.89	22.83	24.5	0.0	
Channel				345000	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	22.83	22.77	22.85	24.5	0.0	
Channel				345000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	22.73	22.87	22.77	24.5	0.0	
Channel				342500	345000	350000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	22.70	22.87	22.78	24.5	0.0	



n38 Ant0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				518004	519000	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	21.25	21.28	21.21		
40	PI/2 BPSK	1	53	20.33	20.36	20.43	23.0	0.0
40	PI/2 BPSK	1	104	19.04	19.12	19.20		
40	PI/2 BPSK	50	0	20.55	20.49	20.58	22.5	0.5
40	PI/2 BPSK	50	28	20.45	20.39	20.37	23.0	0.0
40	PI/2 BPSK	50	56	19.06	19.13	19.05		
40	PI/2 BPSK	100	0	19.87	19.90	19.87	22.5	0.5
40	QPSK	1	1	21.19	21.30	21.25		
40	QPSK	1	53	19.78	19.84	19.82	23.0	0.0
40	QPSK	1	104	19.08	19.14	19.07		
40	QPSK	50	0	19.81	19.77	19.82	22.0	1.0
40	QPSK	50	28	19.98	20.00	19.91	23.0	0.0
40	QPSK	50	56	18.48	18.53	18.55		
40	QPSK	100	0	19.27	19.33	19.29	22.0	1.0
40	16QAM	1	1	20.12	20.17	20.11	22.0	1.0
40	64QAM	1	1	18.96	19.02	19.04	20.5	2.5
40	256QAM	1	1	16.89	16.93	16.91	18.5	4.5
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	21.19	21.19	21.21	23.0	0.0
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	21.20	21.18	21.19	23.0	0.0
Channel				515502	518000	522498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2571.51	2595	2612.49		
15	PI/2 BPSK	1	1	21.08	21.16	21.08	23.0	0.0
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	PI/2 BPSK	1	1	21.08	21.15	21.13	23.0	0.0

n41 Ant0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	19.66	19.81	19.75		
100	PI/2 BPSK	1	137	21.73	21.79	21.59	23.0	0.0
100	PI/2 BPSK	1	271	21.67	21.64	21.83		
100	PI/2 BPSK	135	0	21.58	21.62	21.65	22.5	0.5
100	PI/2 BPSK	135	69	21.45	21.67	21.66	23.0	0.0
100	PI/2 BPSK	135	138	20.68	20.58	20.69		
100	PI/2 BPSK	270	0	21.35	21.37	21.50	22.5	0.5
100	QPSK	1	1	21.60	21.88	21.26		
100	QPSK	1	137	21.80	21.58	21.72	23.0	0.0
100	QPSK	1	271	21.85	21.62	21.84		
100	QPSK	135	0	21.90	21.66	21.80	22.0	1.0
100	QPSK	135	69	21.62	21.86	21.62	23.0	0.0
100	QPSK	135	138	20.63	20.72	20.61		
100	QPSK	270	0	21.20	21.46	21.45	22.0	1.0
100	16QAM	1	1	20.05	20.06	20.06	22.0	1.0
100	64QAM	1	1	19.98	19.96	19.86	20.5	2.5
100	256QAM	1	1	18.65	18.57	18.65	18.5	4.5
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	21.69	21.62	21.49	23.0	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99		
80	QPSK	1	1	21.50	21.74	21.53	23.0	0.0
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	21.58	21.58	21.41	23.0	0.0
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2526	2592.99	2659.98		
60	QPSK	1	1	21.52	21.64	21.46	23.0	0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	21.55	21.79	21.42	23.0	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	21.60	21.65	21.63	23.0	0.0
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	21.59	21.75	21.52	23.0	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	21.56	21.75	21.52	23.0	0.0



n5 Ant1 DSI1								
BW [MHz]	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	PI/2 BPSK	1	1	21.25	21.28	21.27		
20	PI/2 BPSK	1	53	21.30	21.21	21.14	22.7	0.0
20	PI/2 BPSK	1	104	21.11	21.18	21.18		
20	PI/2 BPSK	50	0	21.36	21.25	21.19	22.7	0.0
20	PI/2 BPSK	50	28	21.22	21.19	21.23	22.7	0.0
20	PI/2 BPSK	50	56	21.14	21.16	21.18		
20	PI/2 BPSK	100	0	21.11	21.20	21.16	22.7	0.0
20	QPSK	1	1	21.23	21.41	21.12		
20	QPSK	1	53	21.24	21.18	21.07	22.7	0.0
20	QPSK	1	104	21.17	21.13	21.15		
20	QPSK	50	0	21.15	21.18	21.18	22.7	0.0
20	QPSK	50	28	21.07	21.21	21.11	22.7	0.0
20	QPSK	50	56	21.12	21.20	21.10		
20	QPSK	100	0	21.15	21.22	21.13	22.7	0.0
20	16QAM	1	1	21.20	21.13	21.24	22.7	0.0
20	64QAM	1	1	21.36	21.19	21.29	22.7	0.0
20	256QAM	1	1	19.83	19.85	19.92	21.2	1.5
Channel				166300	167300	168300		
Frequency (MHz)				831.5	836.5	841.5		
15	QPSK	1	1	21.07	21.36	21.03	22.7	0.0
Channel				165800	167300	168800		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	1	21.15	21.39	21.02	22.7	0.0
Channel				165300	167300	169300		
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	1	21.16	21.32	20.94	22.7	0.0



n7 Ant3 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	22.35	22.47	22.43			
40	PI/2 BPSK	1	108	22.50	22.50	22.42	24.0	0.0	
40	PI/2 BPSK	1	214	22.46	22.46	22.34			
40	PI/2 BPSK	108	0	21.88	21.96	21.95	23.5	0.5	
40	PI/2 BPSK	108	54	22.40	22.36	22.41	24.0	0.0	
40	PI/2 BPSK	108	108	22.06	21.95	22.05			
40	PI/2 BPSK	216	0	21.98	21.88	21.77	23.5	0.5	
40	QPSK	1	1	22.38	22.53	22.43			
40	QPSK	1	108	22.50	22.47	22.45	24.0	0.0	
40	QPSK	1	214	22.48	22.51	22.49			
40	QPSK	108	0	21.49	21.42	21.41	23.0	1.0	
40	QPSK	108	54	22.38	22.46	22.38	24.0	0.0	
40	QPSK	108	108	21.36	21.44	21.39			
40	QPSK	216	0	21.38	21.46	21.39	23.0	1.0	
40	16QAM	1	1	21.66	21.67	21.58	23.0	1.0	
40	64QAM	1	1	20.02	20.12	20.10	21.5	2.5	
40	256QAM	1	1	17.79	17.87	17.98	19.5	4.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555	24.0	0.0	
30	QPSK	1	1	22.42	22.47	22.39	24.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5	24.0	0.0	
25	QPSK	1	1	22.40	22.46	22.38	24.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560	24.0	0.0	
20	QPSK	1	1	22.50	22.52	22.47	24.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5	24.0	0.0	
15	QPSK	1	1	22.46	22.39	22.37	24.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565	24.0	0.0	
10	QPSK	1	1	22.33	22.41	22.35	24.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5	24.0	0.0	
5	QPSK	1	1	22.40	22.50	22.35	24.0	0.0	

n66 Ant3 DSI1									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	22.54	22.57	22.57			
40	PI/2 BPSK	1	108	22.34	22.43	22.41	24.0	0.0	
40	PI/2 BPSK	1	214	22.49	22.49	22.37			
40	PI/2 BPSK	108	0	21.88	21.98	21.88	23.5	0.5	
40	PI/2 BPSK	108	54	22.45	22.44	22.51	24.0	0.0	
40	PI/2 BPSK	108	108	21.94	22.00	21.97			
40	PI/2 BPSK	216	0	21.93	21.94	21.99	23.5	0.5	
40	QPSK	1	1	22.48	22.58	22.50			
40	QPSK	1	108	22.49	22.54	22.41	24.0	0.0	
40	QPSK	1	214	22.34	22.45	22.52			
40	QPSK	108	0	21.39	21.48	21.53	23.0	1.0	
40	QPSK	108	54	22.41	22.54	22.48	24.0	0.0	
40	QPSK	108	108	21.63	21.55	21.61			
40	QPSK	216	0	21.36	21.45	21.38	23.0	1.0	
40	16QAM	1	1	21.63	21.72	21.76	23.0	1.0	
40	64QAM	1	1	20.29	20.23	20.17	21.5	2.5	
40	256QAM	1	1	18.00	17.93	18.03	19.5	4.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765	24.0	0.0	
30	QPSK	1	1	22.40	22.36	22.46	24.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770	24.0	0.0	
20	QPSK	1	1	22.26	22.53	22.39	24.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5	24.0	0.0	
15	QPSK	1	1	22.37	22.51	22.44	24.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775	24.0	0.0	
10	QPSK	1	1	22.25	22.34	22.36	24.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5	24.0	0.0	
5	QPSK	1	1	22.30	22.37	22.48	24.0	0.0	



n38 Ant3 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				518004	519000	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	22.39	22.49	22.54		
40	PI/2 BPSK	1	53	22.48	22.50	22.45	24.0	0.0
40	PI/2 BPSK	1	104	22.38	22.42	22.31		
40	PI/2 BPSK	50	0	22.07	22.00	22.01	23.5	0.5
40	PI/2 BPSK	50	28	22.38	22.48	22.43	24.0	0.0
40	PI/2 BPSK	50	56	22.05	21.95	22.06		
40	PI/2 BPSK	100	0	21.89	21.92	22.02	23.5	0.5
40	QPSK	1	1	22.49	22.56	22.54		
40	QPSK	1	53	22.37	22.44	22.36	24.0	0.0
40	QPSK	1	104	22.47	22.40	22.50		
40	QPSK	50	0	21.54	21.47	21.55	23.0	1.0
40	QPSK	50	28	22.51	22.52	22.47	24.0	0.0
40	QPSK	50	56	21.51	21.44	21.54		
40	QPSK	100	0	21.39	21.45	21.33	23.0	1.0
40	16QAM	1	1	21.67	21.55	21.50	23.0	1.0
40	64QAM	1	1	20.03	20.06	20.10	21.5	2.5
40	256QAM	1	1	17.92	17.88	17.99	19.5	4.5
Channel				517002	519000	520998		
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	22.21	22.51	22.38	24.0	0.0
Channel				516000	519000	522000		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	22.41	22.36	22.39	24.0	0.0
Channel				515002	518000	522498		
Frequency (MHz)				2571.51	2595	2612.49		
15	PI/2 BPSK	1	1	22.33	22.38	22.38	24.0	0.0
Channel				515004	519000	523996		
Frequency (MHz)				2575.02	2595	2614.98		
10	PI/2 BPSK	1	1	22.28	22.32	22.31	24.0	0.0

n41 Ant3 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	22.24	22.34	22.29		
100	PI/2 BPSK	1	137	22.24	22.29	22.30	24.0	0.0
100	PI/2 BPSK	1	271	22.34	22.41	22.32		
100	PI/2 BPSK	135	0	21.92	21.82	21.71	23.5	0.5
100	PI/2 BPSK	135	69	22.15	22.22	22.10	24.0	0.0
100	PI/2 BPSK	135	138	21.75	21.85	21.79		
100	PI/2 BPSK	270	0	21.63	21.74	21.84	23.5	0.5
100	QPSK	1	1	22.40	22.42	22.27		
100	QPSK	1	137	22.38	22.37	22.27	24.0	0.0
100	QPSK	1	271	22.37	22.38	22.36		
100	QPSK	135	0	21.43	21.54	21.66	23.0	1.0
100	QPSK	135	69	22.38	22.40	22.24	24.0	0.0
100	QPSK	135	138	21.64	21.62	21.69		
100	QPSK	270	0	21.54	21.56	21.48	23.0	1.0
100	16QAM	1	1	21.40	21.49	21.50	23.0	1.0
100	64QAM	1	1	19.97	20.04	20.02	21.5	2.5
100	256QAM	1	1	18.14	18.14	18.23	19.5	4.5
Channel				508200	518598	528996		
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	22.10	22.29	22.16	24.0	0.0
Channel				507204	518598	529998		
Frequency (MHz)				2536.02	2592.99	2649.99		
80	QPSK	1	1	22.03	22.22	22.17	24.0	0.0
Channel				506202	518598	531000		
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	22.14	22.21	22.09	24.0	0.0
Channel				505200	518598	531996		
Frequency (MHz)				2526	2592.99	2659.98		
60	QPSK	1	1	22.10	22.31	22.14	24.0	0.0
Channel				504204	518598	532998		
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	22.06	22.22	22.30	24.0	0.0
Channel				503202	518598	534000		
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	22.17	22.28	22.16	24.0	0.0
Channel				502200	518598	534996		
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	22.24	22.22	22.22	24.0	0.0
Channel				501204	518598	535998		
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	22.24	22.18	22.25	24.0	0.0



n7 Ant4 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	16.67	16.71	16.73			
40	PI/2 BPSK	1	108	16.71	16.75	16.82	17.5	0.0	
40	PI/2 BPSK	1	214	16.75	16.68	16.64			
40	PI/2 BPSK	108	0	16.81	16.70	16.62	17.5	0.0	
40	PI/2 BPSK	108	54	16.77	16.74	16.62	17.5	0.0	
40	PI/2 BPSK	108	108	16.68	16.73	16.76	17.5	0.0	
40	PI/2 BPSK	216	0	16.64	16.68	16.57			
40	QPSK	1	1	16.84	16.85	16.68			
40	QPSK	1	108	16.84	16.80	16.75	17.5	0.0	
40	QPSK	1	214	16.65	16.69	16.75			
40	QPSK	108	0	16.70	16.73	16.74	17.5	0.0	
40	QPSK	108	54	16.72	16.78	16.73	17.5	0.0	
40	QPSK	108	108	16.69	16.68	16.75			
40	QPSK	216	0	16.54	16.67	16.65	17.5	0.0	
40	16QAM	1	1	16.61	16.63	16.60	17.5	0.0	
40	64QAM	1	1	16.75	16.68	16.77	17.5	0.0	
40	256QAM	1	1	16.76	16.81	16.76	17.5	0.0	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	16.79	16.70	16.49	17.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	16.65	16.66	16.60	17.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	16.83	16.76	16.67	17.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	16.80	16.78	16.70	17.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	16.82	16.82	16.66	17.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	16.66	16.69	16.62	17.5	0.0	

n66 Ant4 DSI									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	18.46	18.41	18.52			
40	PI/2 BPSK	1	108	18.29	18.34	18.23	19.5	0.0	
40	PI/2 BPSK	1	214	18.30	18.32	18.31			
40	PI/2 BPSK	108	0	18.43	18.38	18.30	19.5	0.0	
40	PI/2 BPSK	108	54	18.40	18.30	18.27	19.5	0.0	
40	PI/2 BPSK	108	108	18.27	18.34	18.38			
40	PI/2 BPSK	216	0	18.33	18.38	18.46	19.5	0.0	
40	QPSK	1	1	18.39	18.53	18.41			
40	QPSK	1	108	18.33	18.42	18.40	19.5	0.0	
40	QPSK	1	214	18.43	18.37	18.41			
40	QPSK	108	0	18.25	18.30	18.41	19.5	0.0	
40	QPSK	108	54	18.36	18.44	18.30	19.5	0.0	
40	QPSK	108	108	18.29	18.33	18.39			
40	QPSK	216	0	18.33	18.51	18.40	19.5	0.0	
40	16QAM	1	1	18.18	18.28	18.39	19.5	0.0	
40	64QAM	1	1	18.44	18.45	18.49	19.5	0.0	
40	256QAM	1	1	18.37	18.38	18.27	19.5	0.0	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	18.29	18.44	18.33	19.5	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	18.19	18.41	18.20	19.5	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	18.19	18.31	18.33	19.5	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	18.25	18.31	18.23	19.5	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	18.27	18.37	18.29	19.5	0.0	



n38 Ant4_DSI1								
BW [MHz]	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	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	18.75	18.86	18.90		
40	PI/2 BPSK	1	53	18.73	18.79	18.81	19.5	0.0
40	PI/2 BPSK	1	104	18.74	18.86	18.88		
40	PI/2 BPSK	50	0	18.86	18.82	18.85	19.5	0.0
40	PI/2 BPSK	50	28	18.75	18.74	18.81	19.5	0.0
40	PI/2 BPSK	50	56	18.91	18.87	18.78	19.5	0.0
40	PI/2 BPSK	100	0	18.85	18.82	18.81		
40	QPSK	1	1	18.95	19.03	18.97		
40	QPSK	1	53	18.78	18.87	18.92	19.5	0.0
40	QPSK	1	104	18.96	18.95	19.02		
40	QPSK	50	0	18.76	18.84	18.78	19.5	0.0
40	QPSK	50	28	18.86	18.88	18.73	19.5	0.0
40	QPSK	50	56	18.81	18.79	18.80	19.5	0.0
40	QPSK	100	0	18.75	18.77	18.73	19.5	0.0
40	16QAM	1	1	18.82	18.81	18.76	19.5	0.0
40	64QAM	1	1	19.00	18.90	18.83	19.5	0.0
40	256QAM	1	1	18.91	18.82	18.77	19.5	0.0
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	18.93	19.00	18.79	19.5	0.0
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	18.76	18.82	18.95	19.5	0.0
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.51	2595	2612.49		
15	PI/2 BPSK	1	1	18.78	18.89	18.80	19.5	0.0
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575.02	2595	2614.98		
10	PI/2 BPSK	1	1	18.72	18.87	18.74	19.5	0.0

n41 Ant4_DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	19.45	19.50	19.46		
100	PI/2 BPSK	1	137	19.68	19.62	19.64	20.5	0.0
100	PI/2 BPSK	1	271	19.63	19.64	19.65		
100	PI/2 BPSK	135	0	19.51	19.60	19.68	20.5	0.0
100	PI/2 BPSK	135	69	19.57	19.63	19.71	20.5	0.0
100	PI/2 BPSK	135	138	19.58	19.59	19.66	20.5	0.0
100	PI/2 BPSK	270	0	19.63	19.61	19.65		
100	QPSK	1	1	19.63	19.72	19.52		
100	QPSK	1	137	19.65	19.70	17.69	20.5	0.0
100	QPSK	1	271	19.65	19.66	19.56		
100	QPSK	135	0	19.62	19.64	19.67	20.5	0.0
100	QPSK	135	69	19.61	19.71	19.61	20.5	0.0
100	QPSK	135	138	19.68	19.80	19.63	20.5	0.0
100	QPSK	270	0	19.56	19.68	19.54	20.5	0.0
100	16QAM	1	1	19.58	19.47	19.59	20.5	0.0
100	64QAM	1	1	19.59	19.68	19.66	20.5	0.0
100	256QAM	1	1	19.47	19.50	19.48	20.5	0.0
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	19.61	19.55	19.67	20.5	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99		
80	QPSK	1	1	19.49	19.59	19.51	20.5	0.0
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	19.49	19.69	19.61	20.5	0.0
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2526	2592.99	2659.98		
60	QPSK	1	1	19.43	19.89	19.50	20.5	0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	19.58	19.70	19.62	20.5	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	19.43	19.57	19.65	20.5	0.0
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	19.46	19.63	19.38	20.5	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	19.59	19.65	19.49	20.5	0.0



n7 Ant5 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	20.31	20.29	20.27			
40	PI/2 BPSK	1	108	20.22	20.25	20.20	22.0	0.0	
40	PI/2 BPSK	1	214	20.26	20.24	20.23			
40	PI/2 BPSK	108	0	20.17	20.23	20.29	22.0	0.0	
40	PI/2 BPSK	108	54	20.16	20.21	20.29	22.0	0.0	
40	PI/2 BPSK	108	108	20.32	20.24	20.25			
40	PI/2 BPSK	216	0	20.16	20.27	20.32	22.0	0.0	
40	QPSK	1	1	20.54	20.56	20.48			
40	QPSK	1	108	20.32	20.26	20.23	22.0	0.0	
40	QPSK	1	214	20.19	20.22	20.17			
40	QPSK	108	0	20.31	20.32	20.27	22.0	0.0	
40	QPSK	108	54	20.06	20.18	20.16	22.0	0.0	
40	QPSK	108	108	20.13	20.18	20.25			
40	QPSK	216	0	20.19	20.22	20.10	22.0	0.0	
40	16QAM	1	1	20.49	20.51	20.42	22.0	0.0	
40	64QAM	1	1	18.82	18.94	19.03	20.5	1.5	
40	256QAM	1	1	16.84	16.74	16.63	18.5	3.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	20.12	20.06	20.13	22.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	20.02	20.18	20.03	22.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	20.08	20.12	20.19	22.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	20.23	20.22	20.04	#REF!	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	20.08	20.08	20.06	22.0	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	20.22	20.04	22.0	0.0	

n66 Ant5 DSI1									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	17.63	17.68	17.60			
40	PI/2 BPSK	1	108	17.65	17.66	17.66	19.0	0.0	
40	PI/2 BPSK	1	214	17.65	17.68	17.67			
40	PI/2 BPSK	108	0	17.48	17.59	17.67	19.0	0.0	
40	PI/2 BPSK	108	54	17.64	17.66	17.69	19.0	0.0	
40	PI/2 BPSK	108	108	17.60	17.67	17.62			
40	PI/2 BPSK	216	0	17.77	17.69	17.70	19.0	0.0	
40	QPSK	1	1	17.78	17.81	17.74			
40	QPSK	1	108	17.74	17.80	17.70	19.0	0.0	
40	QPSK	1	214	17.57	17.66	17.77			
40	QPSK	108	0	17.59	17.66	17.60	19.0	0.0	
40	QPSK	108	54	17.71	17.79	17.65	19.0	0.0	
40	QPSK	108	108	17.71	17.75	17.65			
40	QPSK	216	0	17.64	17.68	17.58	19.0	0.0	
40	16QAM	1	1	17.74	17.71	17.68	19.0	0.0	
40	64QAM	1	1	17.77	17.71	17.67	19.0	0.0	
40	256QAM	1	1	16.10	16.04	16.13	17.5	1.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	17.74	17.77	17.68	19.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	17.68	17.71	17.72	19.0	0.0	
Channel				343000	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	17.65	17.72	17.67	19.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	17.67	17.66	17.64	19.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	17.74	17.67	17.67	19.0	0.0	



n38 Ant5 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	22.09	22.19	22.23			
40	PI/2 BPSK	1	53	22.01	22.12	22.09	23.5	0.0	
40	PI/2 BPSK	1	104	22.04	22.15	22.26			
40	PI/2 BPSK	50	0	22.11	22.06	22.00	23.0	0.5	
40	PI/2 BPSK	50	28	22.10	22.10	22.00	23.5	0.0	
40	PI/2 BPSK	50	56	22.20	22.20	22.22			
40	PI/2 BPSK	100	0	22.25	22.23	22.28	23.0	0.5	
40	QPSK	1	1	22.21	22.29	22.15			
40	QPSK	1	53	22.24	22.26	22.17	23.5	0.0	
40	QPSK	1	104	22.12	22.23	22.26			
40	QPSK	50	0	22.22	22.12	22.24	22.5	1.0	
40	QPSK	50	28	22.03	22.27	22.13	23.5	0.0	
40	QPSK	50	56	22.06	22.17	22.24			
40	QPSK	100	0	22.20	22.25	22.20	22.5	1.0	
40	16QAM	1	1	22.14	22.11	22.22	22.5	1.0	
40	64QAM	1	1	20.52	20.59	20.59	21.0	2.5	
40	256QAM	1	1	18.59	18.58	18.47	19.0	4.5	
Channel				517002	519000	520998			
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	22.11	22.25	22.05	23.5	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	22.19	22.23	22.03	23.5	0.0	
Channel				515002	519000	522498			
Frequency (MHz)				2571.51	2595	2612.49			
15	PI/2 BPSK	1	1	22.08	22.13	21.99	23.5	0.0	
Channel				515004	519000	522996			
Frequency (MHz)				2575.02	2595	2614.98			
10	PI/2 BPSK	1	1	22.05	22.14	21.98	23.5	0.0	

n41 Ant5 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	22.82	22.94	22.80			
100	PI/2 BPSK	1	137	22.81	22.88	22.93			
100	PI/2 BPSK	1	271	22.76	22.87	22.87			
100	PI/2 BPSK	135	0	22.42	22.45	22.54	24.5	0.5	
100	PI/2 BPSK	135	69	22.82	22.83	22.74	24.5	0.0	
100	PI/2 BPSK	135	138	22.28	22.34	22.46			
100	PI/2 BPSK	270	0	22.18	22.26	22.34	24.0	0.5	
100	QPSK	1	1	22.90	22.95	22.82			
100	QPSK	1	137	22.93	22.83	22.91			
100	QPSK	1	271	22.93	22.87	22.84			
100	QPSK	135	0	21.94	21.83	21.83	23.5	1.0	
100	QPSK	135	69	22.64	22.74	22.72	24.5	0.0	
100	QPSK	135	138	21.83	21.80	21.88			
100	QPSK	270	0	21.68	21.74	21.70	23.5	1.0	
100	16QAM	1	1	21.89	21.88	21.77	23.5	1.0	
100	64QAM	1	1	20.83	20.85	20.56	22.0	2.5	
100	256QAM	1	1	18.45	18.43	18.44	20.0	4.5	
Channel				508200	518598	528996			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	22.85	22.89	22.84	24.5	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	22.86	22.81	22.91	24.5	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	22.91	22.94	22.85	24.5	0.0	
Channel				505200	518598	531996			
Frequency (MHz)				2526	2592.99	2659.98			
60	QPSK	1	1	22.86	22.80	22.87	24.5	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.86	22.73	22.84	24.5	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	22.84	22.94	22.81	24.5	0.0	
Channel				502200	518598	534996			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	22.83	22.78	22.94	24.5	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	22.89	22.81	22.90	24.5	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	3840	3930		
100	PI2 BPSK	1	1	16.15	16.15	16.09		
100	PI2 BPSK	1	137	15.91	15.91	15.86	17.7	0.0
100	PI2 BPSK	1	271	15.98	15.98	16.01		
100	PI2 BPSK	135	0	15.00	15.99	15.98	17.7	0.0
100	PI2 BPSK	135	69	16.04	16.04	15.98	17.7	0.0
100	PI2 BPSK	135	138	16.14	16.13	16.02	17.7	0.0
100	PI2 BPSK	270	0	16.06	16.05	15.94		
100	QPSK	1	1	15.90	16.17	15.91		
100	QPSK	1	137	16.05	15.94	16.07	17.7	0.0
100	QPSK	1	271	16.04	16.12	16.16		
100	QPSK	135	0	16.05	16.04	15.99	17.7	0.0
100	QPSK	135	69	16.07	16.10	16.07	17.7	0.0
100	QPSK	135	138	16.00	16.04	16.01		
100	QPSK	270	0	15.77	15.82	15.76	17.7	0.0
100	16QAM	1	1	16.12	16.11	16.13	17.7	0.0
100	16QAM	1	1	16.01	16.03	15.91	17.7	0.0
100	256QAM	1	1	16.05	16.01	16.08	17.7	0.0
Channel								
Frequency (MHz)				64968	65000	65234	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	16.15	16.03	15.67	17.7	0.0
Channel								
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	15.94	15.95	16.10	17.7	0.0
Channel								
Frequency (MHz)				64900	65000	65300	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3725	3840	3945		
70	QPSK	1	1	15.98	16.01	16.05	17.7	0.0
Channel								
Frequency (MHz)				64868	65000	65334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	16.01	15.99	16.04	17.7	0.0
Channel								
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	15.96	16.12	15.99	17.7	0.0
Channel								
Frequency (MHz)				64800	65000	65400	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3723	3840	3960		
40	QPSK	1	1	15.97	16.08	15.88	17.7	0.0
Channel								
Frequency (MHz)				64768	65000	65434	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	15.94	15.95	15.99	17.7	0.0
Channel								
Frequency (MHz)				64734	65000	65498	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	16.16	16.01	16.09	17.7	0.0
Channel								
Frequency (MHz)				647168	65000	654834	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3707.52	3840	3975.51		
15	QPSK	1	1	16.01	16.07	15.93	17.7	0.0
Channel								
Frequency (MHz)				647000	65000	655000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	15.94	16.00	15.98	17.7	0.0

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Part27Q n77 Ant10 DS11

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./ Freq	Power Middle Ch./ Freq	Power High Ch./ Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				633334				
Frequency (MHz)				3500.01				
100	PI2 BPSK	1	1	16.15	16.15			
100	PI2 BPSK	1	137	16.31	16.31		17.7	0.0
100	PI2 BPSK	1	271	16.34	16.34			
100	PI2 BPSK	135	0	16.41	16.41			
100	PI2 BPSK	135	69	16.42	16.42		17.7	0.0
100	PI2 BPSK	135	138	16.50	16.50			
100	PI2 BPSK	270	0	16.45	16.45		17.7	0.0
100	QPSK	1	1	16.35	16.35			
100	QPSK	1	137	16.30	16.30		17.7	0.0
100	QPSK	1	271	16.52	16.52			
100	QPSK	135	0	16.40	16.40		17.7	0.0
100	QPSK	135	69	16.49	16.49			
100	QPSK	135	138	16.39	16.39			
100	QPSK	270	0	16.21	16.21		17.7	0.0
100	16QAM	1	1	16.48	16.48		17.7	0.0
100	16QAM	1	1	16.44	16.44		17.7	0.0
100	256QAM	1	1	16.40	16.40		17.7	0.0
Channel								
Frequency (MHz)				633000	633334	633668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3485	3500.01	3505.02		
90	QPSK	1	123	16.29	16.53	16.27	17.7	0.0
Channel								
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	109	16.38	16.49	16.38	17.7	0.0
Channel								
Frequency (MHz)				632334	633334	634334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3468.01	3500.01	3518.01		
70	QPSK	1	95	16.38	16.44	16.33	17.7	0.0
Channel								
Frequency (MHz)				632000	633334	634668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3440	3500.01	3520.02		
60	QPSK	1	81	16.32	16.52	16.27	17.7	0.0
Channel								
Frequency (MHz)				631668	633334	635000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
50	QPSK	1	67	16.32	16.50	16.36	17.7	0.0
Channel								
Frequency (MHz)				631334	633334	635334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	53	16.32	16.47	16.34	17.7	0.0
Channel								
Frequency (MHz)				631000	633334	635668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	QPSK	1	39	16.39	16.51	16.29	17.7	0.0
Channel								
Frequency (MHz)				630668	633334	636000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	26	16.29	16.54	16.35	17.7	0.0
Channel								
Frequency (MHz)				630500	633334	636168	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3457.5	3500.01	3542.52		
15	QPSK	1	19	16.30	16.49	16.34	17.7	0.0
Channel								
Frequency (MHz)				630334	633334	636334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
10	QPSK	1	12	16.34	16.51	16.35	17.7	0.0

Part270 n78 Ant10 DS11 PC2&3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./ Freq	Power Middle Ch./ Freq	Power High Ch./ Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3750				
100	PI2 BPSK	1	1	16.73	16.73		18.0	0.0
100	PI2 BPSK	1	137	16.72	16.72			
100	PI2 BPSK	1	271	16.75	16.75		18.0	0.0
100	PI2 BPSK	135	0	16.74	16.74			
100	PI2 BPSK	135	69	16.67	16.67		18.0	0.0
100	PI2 BPSK	135	138	16.86	16.86		18.0	0.0
100	PI2 BPSK	270	0	16.84	16.84		18.0	0.0
100	QPSK	1	1	16.83	16.83			
100	QPSK	1	137	16.85	16.85		18.0	0.0
100	QPSK	1	271	16.82	16.82			
100	QPSK	135	0	16.72	16.72		18.0	0.0
100	QPSK	135	69	16.82	16.82			
100	QPSK	135	138	16.67	16.67		18.0	0.0
100	QPSK	270	0	16.76	16.76		18.0	0.0
100	16QAM	1	1	16.79	16.79		18.0	0.0
100	16QAM	1	1	16.74	16.74		18.0	0.0
100	256QAM	1	1	16.65	16.65		18.0	0.0
Channel								
Frequency (MHz)				64868	65000	650334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	16.62	16.64	16.71	18.0	0.0
Channel								
Frequency (MHz)				64934	65000	65066	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	16.66	16.63	16.79	18.0	0.0
Channel								
Frequency (MHz)				649000	650000	651000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3725	3750	3765		
70	QPSK	1	1	16.81	16.66	16.83	18.0	0.0
Channel								
Frequency (MHz)				64868	65000	651334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3730.02	3750	3770.01		
60	QPSK	1	1	16.61	16.59	16.81	18.0	0.0
Channel								
Frequency (MHz)				64934	65000	651668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	16.74	16.83	16.72	18.0	0.0
Channel								
Frequency (MHz)				648000	650000	652000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3723	3750	3783		
40	QPSK	1	1	16.84	16.72	16.71	18.0	0.0
Channel								
Frequency (MHz)				64768	65000	652334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3715.02	3750	3785.01		
30	QPSK	1	1	16.65	16.63	16.73	18.0	0.0
Channel								
Frequency (MHz)				64934	65000	652668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	16.71	16.53	16.75	18.0	0.0
Channel								
Frequency (MHz)				647168	650000	652834	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	16.63	16.55	16.71	18.0	0.0
Channel								
Frequency (MHz)				647000	650000	653000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3705				



Part27Q n78 Ant10 DSI1 PC2&3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				63334				
Frequency (MHz)				3500.01				
100	PI2 BPSK	1	1		17.77		18.0	0.0
100	PI2 BPSK	1	137		17.73			
100	PI2 BPSK	1	271		17.78		18.0	0.0
100	PI2 BPSK	135	0		17.78			
100	PI2 BPSK	135	69		17.64		18.0	0.0
100	PI2 BPSK	135	138		17.66		18.0	0.0
100	PI2 BPSK	270	0		17.66		18.0	0.0
100	QPSK	1	1		17.67			
100	QPSK	1	137		17.66		18.0	0.0
100	QPSK	1	271		17.57		18.0	0.0
100	QPSK	135	0		17.71			
100	QPSK	135	69		17.70		18.0	0.0
100	QPSK	135	138		17.63		18.0	0.0
100	QPSK	270	0		17.74		18.0	0.0
100	16QAM	1	1		17.82		18.0	0.0
100	64QAM	1	1		17.77		18.0	0.0
100	256QAM	1	1		17.63		18.0	0.0
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
90	DPSK	1	123	17.67	17.62	17.71	18.0	0.0
Channel				632268	633334	634400	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	109	17.68	17.74	17.67	18.0	0.0
Channel				632334	633334	634334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3485.01	3500.01	3515.01		
70	QPSK	1	95	17.61	17.74	17.67	18.0	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3480	3500.01	3520.02		
60	DPSK	1	81	17.60	17.64	17.70	18.0	0.0
Channel				631668	633334	635000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
50	QPSK	1	67	17.64	17.80	17.71	18.0	0.0
Channel				631334	633334	635334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	53	17.62	17.73	17.77	18.0	0.0
Channel				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	DPSK	1	39	17.59	17.62	17.77	18.0	0.0
Channel				630268	633334	636000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	26	17.62	17.73	17.66	18.0	0.0
Channel				630000	633334	636168	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3457.5	3500.01	3542.52		
15	QPSK	1	19	17.59	17.65	17.78	18.0	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
10	DPSK	1	12	17.58	17.73	17.66	18.0	0.0



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3750	3840	3930		
100	PI2 BPSK	1	1	21.99	22.02	22.06		
100	PI2 BPSK	1	137	21.93	21.91	21.82	23.7	0.0
100	PI2 BPSK	1	271	22.01	21.99	21.90		
100	PI2 BPSK	135	0	22.07	22.08	22.03	23.7	0.0
100	PI2 BPSK	135	69	21.79	21.80	22.01	23.7	0.0
100	PI2 BPSK	135	138	21.67	21.78	21.67	23.7	0.0
100	PI2 BPSK	270	0	22.04	22.01	21.91		
100	QPSK	1	1	22.06	22.08	22.00		
100	QPSK	1	137	22.04	22.05	21.97	23.7	0.0
100	QPSK	1	271	22.00	22.06	22.00		
100	QPSK	135	0	21.83	21.83	22.02	23.7	0.0
100	QPSK	135	69	21.95	22.04	21.83	23.7	0.0
100	QPSK	135	138	22.00	21.95	22.01	23.7	0.0
100	QPSK	270	0	21.98	22.06	21.87		
100	16QAM	1	1	21.85	21.96	21.84	23.7	0.0
100	64QAM	1	1	21.47	21.47	21.52	23.2	0.5
100	256QAM	1	1	19.47	19.38	19.41	21.2	2.5
Channel								
Frequency (MHz)				64968	65500	66234	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	21.91	21.83	22.03	23.7	0.0
Channel								
Frequency (MHz)				64900	65500	66300	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3745	3840	3945		
80	QPSK	1	1	21.95	21.88	21.90	23.7	0.0
Channel								
Frequency (MHz)				64900	65500	66300	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3745	3840	3945		
70	QPSK	1	1	21.78	21.87	22.03	23.7	0.0
Channel								
Frequency (MHz)				64868	65500	66334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	21.87	21.85	21.84	23.7	0.0
Channel								
Frequency (MHz)				64900	65500	66300	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3725	3840	3955.02		
50	QPSK	1	1	21.96	21.87	21.98	23.7	0.0
Channel								
Frequency (MHz)				64800	65500	66400	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3723	3840	3960		
40	QPSK	1	1	21.81	22.01	21.98	23.7	0.0
Channel								
Frequency (MHz)				64768	65500	66434	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	21.90	21.86	21.89	23.7	0.0
Channel								
Frequency (MHz)				64724	65500	66488	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	21.83	21.99	21.97	23.7	0.0
Channel								
Frequency (MHz)				647168	655000	664834	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	21.98	21.82	22.03	23.7	0.0
Channel								
Frequency (MHz)				647000	655000	665000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	21.85	21.86	22.08	23.7	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)				3500.01				
100	PI2 BPSK	1	1	21.72				
100	PI2 BPSK	1	137	21.71			23.7	0.0
100	PI2 BPSK	1	271	21.70				
100	PI2 BPSK	135	0	21.75			23.7	0.0
100	PI2 BPSK	135	69	21.74			23.7	0.0
100	PI2 BPSK	135	138	21.78			23.7	0.0
100	PI2 BPSK	270	0	21.71			23.7	0.0
100	QPSK	1	1	21.81				
100	QPSK	1	137	21.70			23.7	0.0
100	QPSK	1	271	21.80				
100	QPSK	135	0	21.72			23.7	0.0
100	QPSK	135	69	21.77			23.7	0.0
100	QPSK	135	138	21.72			23.7	0.0
100	QPSK	270	0	21.70			23.7	0.0
100	16QAM	1	1	21.72			23.7	0.0
100	64QAM	1	1	21.22			23.2	0.0
100	256QAM	1	1	19.23			21.2	0.0
Channel								
Frequency (MHz)				633000	633334	633668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3485	3500.01	3505.02		
90	QPSK	1	1	21.45	21.47	21.59	23.7	0.0
Channel								
Frequency (MHz)				63268	63333	63300	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	1	21.44	21.43	21.57	23.7	0.0
Channel								
Frequency (MHz)				63234	633334	63434	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3488.01	3500.01	3518.01		
70	QPSK	1	1	21.45	21.47	21.59	23.7	0.0
Channel								
Frequency (MHz)				632000	633334	634668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3480	3500.01	3520.02		
60	QPSK	1	1	21.49	21.38	21.59	23.7	0.0
Channel								
Frequency (MHz)				63168	63333	63300	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
50	QPSK	1	1	21.39	21.43	21.54	23.7	0.0
Channel								
Frequency (MHz)				63134	633334	63334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	1	21.59	21.40	21.59	23.7	0.0
Channel								
Frequency (MHz)				631000	633334	633668	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	QPSK	1	1	21.39	21.48	21.50	23.7	0.0
Channel								
Frequency (MHz)				63068	63333	63300	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	1	21.39	21.41	21.56	23.7	0.0
Channel								
Frequency (MHz)				630500	633334	633168	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3457.5	3500.01	3542.52		
15	QPSK	1	1	21.49	21.42	21.56	23.7	0.0
Channel								
Frequency (MHz)				630334	633334	63334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
10	QPSK	1	1	21.47	21.39	21.49	23.7	0.0

Part270 n78 Ant11 DS11 PC2&3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				3750				
100	PI2 BPSK	1	1	23.75			25.0	0.0
100	PI2 BPSK	1	137	23.67			25.0	0.0
100	PI2 BPSK	1	271	23.58			25.0	0.0
100	PI2 BPSK	135	0	23.57			25.0	0.0
100	PI2 BPSK	135	69	23.52			25.0	0.0
100	PI2 BPSK	135	138	23.53			25.0	0.0
100	PI2 BPSK	270	0	23.48			25.0	0.0
100	QPSK	1	1	23.85			25.0	0.0
100	QPSK	1	137	23.80			25.0	0.0
100	QPSK	1	271	23.59			25.0	0.0
100	QPSK	135	0	23.51			25.0	0.0
100	QPSK	135	69	23.46			25.0	0.0
100	QPSK	135	138	23.42			25.0	0.0
100	QPSK	270	0	23.46			25.0	0.0
100	16QAM	1	1	23.80			24.7	0.0
100	64QAM	1	1	22.22			23.2	0.0
100	256QAM	1	1	19.97			21.2	0.0
Channel								
Frequency (MHz)				64868	655000	650334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3745.02	3750	3755.01		
90	QPSK	1	1	24.01	24.02	24.01	25.0	0.0
Channel								
Frequency (MHz)				64934	655000	65366	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3740.01	3750	3760.02		
80	QPSK	1	1	24.15	24.13	24.22	25.0	0.0
Channel								
Frequency (MHz)				649000	655000	651000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3735	3750	3765		
70	QPSK	1	1	24.18	24.13	24.10	25.0	0.0
Channel								
Frequency (MHz)				64868	655000	651334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3730.02	3750	3770.01		
60	QPSK	1	1	24.31	24.37	24.38	25.0	0.0
Channel								
Frequency (MHz)				64834	655000	65166	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3725.01	3750	3775.02		
50	QPSK	1	1	24.12	24.16	24.11	25.0	0.0
Channel								
Frequency (MHz)				648000	655000	652000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	24.11	24.17	24.10	25.0	0.0
Channel								
Frequency (MHz)				64768	655000	652334	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3715.02	3750	3785.01		
30	QPSK	1	1	24.01	24.08	24.06	25.0	0.0
Channel								
Frequency (MHz)				64734	655000	65266	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3710.01	3750	3790.02		
20	QPSK	1	1	24.11	24.19	24.21	25.0	0.0
Channel								
Frequency (MHz)				647168	655000	652834	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3707.52	3750	3792.51		
15	QPSK	1	1	23.29	23.56	23.41	25.0	0.0
Channel								
Frequency (MHz)				647000	655000	653000	Tune-up limit (dB)	MPR (dB)
Frequency (MHz)				3705	3			



Part27Q n78 Ant11 DSI1 PC2&3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				633334				
Frequency (MHz)				3500.01				
100	PI2 BPSK	1	1		23.48			
100	PI2 BPSK	1	137		23.22		25.0	0.0
100	PI2 BPSK	1	271		23.28		25.0	0.0
100	PI2 BPSK	135	0		23.18			
100	PI2 BPSK	135	69		23.08		25.0	0.0
100	PI2 BPSK	135	138		23.14		25.0	0.0
100	PI2 BPSK	270	0		23.17		25.0	0.0
100	QPSK	1	1		23.31			
100	QPSK	1	137		23.12		25.0	0.0
100	QPSK	1	271		23.25		25.0	0.0
100	QPSK	135	0		23.12		25.0	0.0
100	QPSK	135	69		23.21		25.0	0.0
100	QPSK	135	138		22.98		25.0	0.0
100	QPSK	270	0		23.10		25.0	0.0
100	16QAM	1	1		23.36		24.7	0.0
100	64QAM	1	1		21.93		23.2	0.0
100	256QAM	1	1		19.80		21.2	0.0
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
90	DPSK	1	1	23.54	23.02	23.49	23.0	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	1	23.44	23.55	23.51	23.0	0.0
Channel				632334	633334	634334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3485.01	3500.01	3515.01		
70	QPSK	1	1	23.55	23.59	23.58	23.0	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3480	3500.01	3520.02		
60	DPSK	1	1	23.57	23.50	23.50	23.0	0.0
Channel				631000	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
50	QPSK	1	1	23.57	23.60	23.59	23.0	0.0
Channel				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	1	23.59	23.59	23.59	23.0	0.0
Channel				631000	633334	635998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	DPSK	1	1	23.53	23.60	23.48	23.0	0.0
Channel				632000	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	1	23.50	23.56	23.52	23.0	0.0
Channel				630500	633334	636168	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3457.5	3500.01	3542.52		
15	QPSK	1	1	23.58	23.57	23.58	23.0	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
10	DPSK	1	1	23.51	23.56	23.51	23.0	0.0



Part270 n77 Ant12 DSH1									
BW (MHz)	Modulation	RB 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	24.09	24.12	24.14			
100	PI2 BPSK	1	137	24.10	24.18	24.21	25.7	0.0	
100	PI2 BPSK	1	271	23.96	24.10	24.13			
100	PI2 BPSK	135	0	23.80	23.85	23.87	25.2	0.5	
100	PI2 BPSK	135	69	24.12	24.07	24.08	25.7	0.0	
100	PI2 BPSK	135	138	23.58	23.54	23.55	25.2	0.5	
100	PI2 BPSK	270	0	23.60	23.49	23.53			
100	QPSK	1	1	24.17	24.22	24.16			
100	QPSK	1	137	24.19	24.14	24.10	25.7	0.0	
100	QPSK	1	271	24.11	24.19	24.07			
100	QPSK	135	0	23.06	23.00	23.02	24.7	1.0	
100	QPSK	135	69	24.02	24.08	24.01	25.7	0.0	
100	QPSK	135	138	23.15	23.05	23.01	24.7	1.0	
100	QPSK	270	0	22.88	22.95	22.85	24.7	1.0	
100	16QAM	1	1	23.37	23.29	23.33	24.7	1.0	
100	16QAM	1	1	21.99	21.88	21.86	23.2	2.5	
100	256QAM	1	1	19.90	19.84	19.87	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.98	24.02	24.14	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.03	24.04	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.87	24.05	24.10	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.01	23.90	23.98	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.98	24.12	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.93	24.08	23.90	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.98	24.12	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.10	24.00	24.02	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.97	24.09	24.15	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.98	24.05	24.00	25.7	0.0	

Part270 n77 Ant12 DSH1									
BW (MHz)	Modulation	RB 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	24.40		3500.01			
100	PI2 BPSK	1	137	24.50			25.7	0.0	
100	PI2 BPSK	1	271	24.35					
100	PI2 BPSK	135	0	23.82			25.7	0.0	
100	PI2 BPSK	135	69	24.41					
100	PI2 BPSK	135	138	23.85			25.2	0.5	
100	PI2 BPSK	270	0	23.73			25.2	0.5	
100	QPSK	1	1	24.57			25.7	0.0	
100	QPSK	1	137	24.47					
100	QPSK	1	271	24.45					
100	QPSK	135	0	23.33			25.7	0.0	
100	QPSK	135	69	24.40					
100	QPSK	135	138	23.33			24.7	1.0	
100	QPSK	270	0	23.28			24.7	1.0	
100	16QAM	1	1	23.55			24.7	1.0	
100	16QAM	1	1	22.16			23.2	2.5	
100	256QAM	1	1	19.89			21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.40	24.55	24.38	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.35	24.48	24.33	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	24.37	24.52	24.38	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	24.31	24.50	24.43	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	24.34	24.54	24.35	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	24.39	24.53	24.43	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	24.41	24.52	24.40	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	24.35	24.53	24.35	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	24.41	24.53	24.42	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	24.34	24.43	24.41	25.7	0.0	

Part270 n78 Ant12 DSH1 PC3									
BW (MHz)	Modulation	RB 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	24.28		3750			
100	PI2 BPSK	1	137	24.30			25.7	0.0	
100	PI2 BPSK	1	271	24.16					
100	PI2 BPSK	135	0	23.71			25.2	0.5	
100	PI2 BPSK	135	69	24.24			25.7	0.0	
100	PI2 BPSK	135	138	23.87			25.2	0.5	
100	PI2 BPSK	270	0	23.80					
100	QPSK	1	1	24.32			25.7	0.0	
100	QPSK	1	137	24.18					
100	QPSK	1	271	24.13					
100	QPSK	135	0	23.13			24.7	1.0	
100	QPSK	135	69	24.21			25.7	0.0	
100	QPSK	135	138	23.05			24.7	1.0	
100	QPSK	270	0	23.12			24.7	1.0	
100	16QAM	1	1	23.45			24.7	1.0	
100	16QAM	1	1	21.86			23.2	2.5	
100	256QAM	1	1	19.97			21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.20	24.27	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.07	24.09	24.10	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.12	24.26	24.02	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.28	24.09	23.97	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.05	24.04	24.07	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.11	24.08	24.08	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.14	24.05	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.10	24.24	24.00	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.20	24.25	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.17	24.25	23.95	25.7	0.0	



Part27Q 78 Ant12 DS11 PC3

BW (MHz)	Modulation	RB 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	24.79	24.80	24.81	25.7	0.0
100	PI2 BPSK	1	137	24.80	24.80	24.80		
100	PI2 BPSK	1	271	24.80	24.80	24.80		
100	PI2 BPSK	135	0	24.80	24.80	24.80	25.7	0.0
100	PI2 BPSK	135	69	24.79	24.79	24.79		
100	PI2 BPSK	135	138	24.79	24.79	24.79		
100	PI2 BPSK	270	0	24.79	24.79	24.79	25.2	0.5
100	QPSK	1	1	24.86	24.86	24.86		
100	QPSK	1	137	24.84	24.84	24.84		
100	QPSK	1	271	24.76	24.76	24.76	25.7	0.0
100	QPSK	135	0	23.71	23.71	23.71		
100	QPSK	135	69	24.79	24.79	24.79		
100	QPSK	135	138	23.00	23.00	23.00	25.7	0.0
100	QPSK	270	0	23.74	23.74	23.74		
100	16QAM	1	1	24.01	24.01	24.01		
100	16QAM	1	1	22.81	22.81	22.81	23.2	2.5
100	16QAM	1	1	22.33	22.33	22.33		
100	16QAM	1	1	22.33	22.33	22.33		
Channel								
Frequency (MHz)								
90	QPSK	1	1	24.73	24.85	24.83	25.1	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	24.73	24.87	24.89	25.7	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	24.70	24.91	24.87	25.7	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	24.74	24.87	24.80	25.7	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	24.69	24.92	24.82	25.7	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	24.73	24.87	24.80	25.7	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	24.74	24.90	24.83	25.7	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	24.70	24.91	24.87	25.7	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	24.76	24.91	24.87	25.7	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.74	24.85	24.84	25.7	0.0

Part27O n78 Ant12 PC2 DS11

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.34	25.41	25.41	27.0	0.0
100	PI2 BPSK	1	137	25.41	25.41	25.41		
100	PI2 BPSK	1	271	25.29	25.29	25.29		
100	PI2 BPSK	135	0	24.83	24.83	24.83	27.0	0.0
100	PI2 BPSK	135	69	25.31	25.31	25.31		
100	PI2 BPSK	135	138	24.73	24.73	24.73		
100	PI2 BPSK	270	0	24.67	24.67	24.67	26.5	0.5
100	QPSK	1	1	25.45	25.45	25.45		
100	QPSK	1	137	25.32	25.32	25.32		
100	QPSK	1	271	25.26	25.26	25.26	23.5	3.5
100	QPSK	135	0	24.21	24.21	24.21		
100	QPSK	135	69	25.31	25.31	25.31		
100	QPSK	135	138	24.16	24.16	24.16	27.0	0.0
100	QPSK	270	0	24.17	24.17	24.17		
100	16QAM	1	1	24.56	24.56	24.56		
100	16QAM	1	1	23.06	23.06	23.06	24.5	2.5
100	16QAM	1	1	20.74	20.74	20.74		
100	16QAM	1	1	20.74	20.74	20.74		
Channel								
Frequency (MHz)								
90	QPSK	1	1	25.20	25.44	25.21	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.27	25.37	25.29	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.75	23.90	23.85	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.30	25.42	25.27	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	24.83	25.00	25.16	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.25	25.38	25.26	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.27	25.44	25.22	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.27	25.40	25.23	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.33	25.41	25.20	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.27	25.41	25.27	27.0	0.0

Part27Q 78 Ant12 PC2 DS11

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI2 BPSK	1	1	25.33	25.40	25.40	27.0	0.0
100	PI2 BPSK	1	137	25.40	25.40	25.40		
100	PI2 BPSK	1	271	25.27	25.27	25.27		
100	PI2 BPSK	135	0	25.80	25.80	25.80	23.5	3.5
100	PI2 BPSK	135	69	25.27	25.27	25.27		
100	PI2 BPSK	135	138	25.75	25.75	25.75		
100	PI2 BPSK	270	0	25.72	25.72	25.72	26.5	0.5
100	QPSK	1	1	26.41	26.41	26.41		
100	QPSK	1	137	26.37	26.37	26.37		
100	QPSK	1	271	26.26	26.26	26.26	23.5	3.5
100	QPSK	135	0	25.10	25.10	25.10		
100	QPSK	135	69	26.31	26.31	26.31		
100	QPSK	135	138	25.13	25.13	25.13	27.0	0.0
100	QPSK	270	0	25.21	25.21	25.21		
100	16QAM	1	1	25.53	25.53	25.53		
100	16QAM	1	1	24.08	24.08	24.08	24.5	2.5
100	16QAM	1	1	21.79	21.79	21.79		
100	16QAM	1	1	21.79	21.79	21.79		
Channel								
Frequency (MHz)								
90	QPSK	1	1	25.32	25.32	25.32	27.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	26.30	26.39	26.24	27.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	24.82	25.01	25.15	27.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	26.26	26.36	26.20	27.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.26	25.35	25.23	27.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	26.28	26.36	26.24	27.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	26.30	26.33	26.16	27.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	26.23	26.37	26.18	27.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	26.28	26.34	26.14	27.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	26.26	26.33	26.17	27.0	0.0



Par270 n77 Ant13 DS1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	24.10	24.19	24.11			
100	Pl2 BPSK	1	137	24.01	24.19	24.17	25.7	0.0	
100	Pl2 BPSK	1	271	23.94	24.06	24.06			
100	Pl2 BPSK	135	0	23.55	23.61	23.52	25.2	0.5	
100	Pl2 BPSK	135	69	23.96	24.08	23.98	25.7	0.0	
100	Pl2 BPSK	135	138	23.49	23.45	23.56	25.2	0.5	
100	Pl2 BPSK	270	0	23.50	23.52	23.56			
100	QPSK	1	1	24.10	24.16	23.98			
100	QPSK	1	137	24.11	24.03	24.11	25.7	0.0	
100	QPSK	1	271	23.99	24.05	24.07			
100	QPSK	135	0	23.21	23.10	23.03	24.7	1.0	
100	QPSK	135	69	23.94	24.07	23.98	25.7	0.0	
100	QPSK	135	138	23.00	22.91	22.95	24.7	1.0	
100	QPSK	270	0	22.96	22.98	22.92			
100	16QAM	1	1	23.43	23.41	23.42	24.7	1.0	
100	16QAM	1	1	21.85	21.80	21.84	23.2	2.5	
100	256QAM	1	1	19.06	19.02	19.02	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.01	24.16	23.98	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.93	24.08	23.90	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.93	24.01	24.05	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.10	24.03	24.01	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.93	24.14	23.98	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.97	23.98	24.07	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.06	24.19	23.90	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.93	24.19	23.93	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.05	24.06	24.12	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.04	24.09	24.11	25.7	0.0	

Part27Q n77 Ant13 DS1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	24.54		3500.01			
100	Pl2 BPSK	1	137	24.55		3500.01	25.7	0.0	
100	Pl2 BPSK	1	271	24.44		3500.01			
100	Pl2 BPSK	135	0	23.97		3500.01	25.7	0.0	
100	Pl2 BPSK	135	69	24.11		3500.01	25.7	0.0	
100	Pl2 BPSK	135	138	23.84		3500.01	25.2	0.5	
100	Pl2 BPSK	270	0	23.98		3500.01			
100	QPSK	1	1	24.04		3500.01	25.7	0.0	
100	QPSK	1	137	24.02		3500.01	25.7	0.0	
100	QPSK	1	271	24.40		3500.01			
100	QPSK	135	0	23.54		3500.01	25.7	0.0	
100	QPSK	135	69	24.44		3500.01	25.7	0.0	
100	QPSK	135	138	23.30		3500.01	24.7	1.0	
100	QPSK	270	0	23.35		3500.01			
100	16QAM	1	1	23.80		3500.01	24.7	1.0	
100	16QAM	1	1	22.23		3500.01	23.2	2.5	
100	256QAM	1	1	20.04		3500.01	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.44	24.59	24.27	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.46	24.56	24.42	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.45	24.54	24.35	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.49	24.60	24.38	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.42	24.54	24.43	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.42	24.59	24.49	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.46	24.55	24.38	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.40	24.59	24.39	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.48	24.59	24.44	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.45	24.56	24.38	25.7	0.0	

Part27Q n78 Ant13 DS1 PC3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pl2 BPSK	1	1	24.11		3760.01			
100	Pl2 BPSK	1	137	24.21		3760.01	25.7	0.0	
100	Pl2 BPSK	1	271	24.07		3760.01			
100	Pl2 BPSK	135	0	23.62		3760.01	25.2	0.5	
100	Pl2 BPSK	135	69	24.07		3760.01	25.7	0.0	
100	Pl2 BPSK	135	138	23.34		3760.01	25.2	0.5	
100	Pl2 BPSK	270	0	23.48		3760.01			
100	QPSK	1	1	24.26		3760.01			
100	QPSK	1	137	24.23		3760.01	25.7	0.0	
100	QPSK	1	271	24.05		3760.01			
100	QPSK	135	0	23.02		3760.01	24.7	1.0	
100	QPSK	135	69	24.06		3760.01	25.7	0.0	
100	QPSK	135	138	22.83		3760.01	24.7	1.0	
100	QPSK	270	0	22.92		3760.01			
100	16QAM	1	1	22.86		3760.01	24.7	1.0	
100	16QAM	1	1	21.86		3760.01	23.2	2.5	
100	256QAM	1	1	19.01		3760.01	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.12	24.23	24.13	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.00	24.09	24.08	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.09	24.22	24.17	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.17	24.07	24.06	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.00	24.03	24.19	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.20	24.04	24.10	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.98	24.08	24.13	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.04	24.14	24.13	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.20	24.01	24.05	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.08	24.22	24.24	25.7	0.0	



Part27Q n78 Ant13 DS1H PC3									
BW [MHz]	Modulation	RB 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	24.43	3500.01	3500.01			
100	PI2 BPSK	1	137	24.51	24.51	24.51	25.7	0.0	
100	PI2 BPSK	1	271	24.13					
100	PI2 BPSK	135	0	23.98					
100	PI2 BPSK	135	69	24.46			25.7	0.0	
100	PI2 BPSK	135	138	23.85					
100	PI2 BPSK	270	0	23.99			25.2	0.5	
100	QPSK	1	1	24.56					
100	QPSK	1	137	24.54			25.7	0.0	
100	QPSK	1	271	24.40					
100	QPSK	135	0	23.54					
100	QPSK	135	69	24.44			25.7	0.0	
100	QPSK	135	138	23.35					
100	QPSK	270	0	23.35			24.7	1.0	
100	16QAM	1	1	23.80			24.7	1.0	
100	16QAM	1	1	22.23			23.2	2.5	
100	16QAM	1	1	20.04			21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.41	24.49	24.37	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.46	24.56	24.42	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	24.45	24.54	24.35	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	24.49	24.00	24.38	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	87	24.42	24.54	24.43	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	24.42	24.59	24.39	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	24.46	24.55	24.36	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	24.40	24.59	24.39	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	24.48	24.59	24.44	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	24.45	24.56	24.36	25.7	0.0	

Part27Q n78 Ant13 DS1H PC2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.34	3750	3750			
100	PI2 BPSK	1	137	26.25			27.0	0.0	
100	PI2 BPSK	1	271	26.34					
100	PI2 BPSK	135	0	25.83			26.5	0.5	
100	PI2 BPSK	135	69	26.24			27.0	0.0	
100	PI2 BPSK	135	138	25.62			26.5	0.5	
100	PI2 BPSK	270	0	25.71					
100	QPSK	1	1	26.41			27.0	0.0	
100	QPSK	1	137	26.26					
100	QPSK	1	271	26.30					
100	QPSK	135	0	25.52			26.0	1.0	
100	QPSK	135	69	26.09			27.0	0.0	
100	QPSK	135	138	26.01			26.0	1.0	
100	QPSK	270	0	25.00					
100	16QAM	1	1	25.20			26.0	1.0	
100	16QAM	1	1	23.87			24.5	2.5	
100	16QAM	1	1	21.85			22.5	4.5	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.28	26.31	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.22	26.40	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.28	26.34	26.25	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.28	26.35	26.31	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.28	26.35	26.31	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.25	26.40	26.31	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.29	26.33	26.19	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.19	26.39	26.19	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.24	26.34	26.21	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.19	26.34	26.27	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.20	26.37	26.25	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.20	26.38	26.19	27.0	0.0	

Part27Q n78 Ant13 DS1H PC2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.29	3500.01	3500.01			
100	PI2 BPSK	1	137	26.36			27.0	0.0	
100	PI2 BPSK	1	271	26.22					
100	PI2 BPSK	135	0	25.78					
100	PI2 BPSK	135	69	26.25			27.0	0.0	
100	PI2 BPSK	135	138	25.48					
100	PI2 BPSK	270	0	25.70			26.5	0.5	
100	QPSK	1	1	26.51			27.0	0.0	
100	QPSK	1	137	26.43					
100	QPSK	1	271	26.30					
100	QPSK	135	0	25.25					
100	QPSK	135	69	25.28			27.0	0.0	
100	QPSK	135	138	25.08					
100	QPSK	270	0	25.17			26.0	1.0	
100	16QAM	1	1	25.08			26.0	1.0	
100	16QAM	1	1	23.89			24.5	2.5	
100	16QAM	1	1	21.69			22.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.17	26.41	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.21	26.42	26.17	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.21	26.43	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.21	26.43	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.20	26.40	26.18	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.21	26.47	26.19	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.24	26.47	26.28	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.19	26.38	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.20	26.39	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.15	26.41	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.13	26.41	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.15	26.46	26.25	27.0	0.0	



n5 Ant0 DS14							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	MPR (dB)
Channel							
Frequency (MHz)				834	835.5	839	
20	PV2 BPSK	1	1	24.36	24.42	24.45	
20	PV2 BPSK	1	53	24.24	24.41	24.39	25.5
20	PV2 BPSK	1	104	24.41	24.35	24.43	
20	PV2 BPSK	50	0	23.97	23.90	23.98	25.0
20	PV2 BPSK	50	28	24.28	24.37	24.35	25.5
20	PV2 BPSK	50	55	23.85	23.81	23.79	
20	PV2 BPSK	100	0	23.85	23.93	23.84	25.0
20	QPSK	1	1	24.39	24.45	24.37	
20	QPSK	1	53	24.43	24.39	24.28	25.5
20	QPSK	1	104	24.33	24.38	24.40	
20	QPSK	50	0	23.44	23.38	23.34	24.5
20	QPSK	50	28	24.44	24.45	24.44	25.5
20	QPSK	50	55	23.25	23.25	23.33	
20	QPSK	100	0	23.25	23.35	23.35	24.5
20	16QAM	1	1	23.56	23.54	23.47	24.5
20	16QAM	1	1	22.75	22.64	22.61	23.0
20	16QAM	1	1	20.00	19.89	19.92	21.0
20	16QAM	1	1	20.00	19.89	19.92	21.0
Channel							
Frequency (MHz)				16630	16730	16830	
15	QPSK	1	1	84.33	84.51	84.40	23.5
Channel							
Frequency (MHz)				839	836.5	844	
10	QPSK	1	1	24.32	24.21	24.24	25.5
Channel							
Frequency (MHz)				16530	16730	16830	
5	QPSK	1	1	24.28	24.31	24.32	25.5

n7 Ant0 DS14							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	MPR (dB)
Channel							
Frequency (MHz)				504000	507000	510000	
40	PV2 BPSK	1	1	22.89	22.84	22.86	
40	PV2 BPSK	1	108	22.88	22.95	22.85	24.5
40	PV2 BPSK	1	214	22.98	22.98	23.00	
40	PV2 BPSK	108	0	22.24	22.32	22.24	24.0
40	PV2 BPSK	108	54	22.84	22.79	22.87	24.5
40	PV2 BPSK	108	108	22.37	22.36	22.28	
40	PV2 BPSK	216	0	22.32	22.30	22.32	24.0
40	QPSK	1	1	22.97	23.03	22.91	
40	QPSK	1	108	22.88	22.89	22.78	24.5
40	QPSK	1	214	23.02	22.94	23.02	
40	QPSK	108	0	21.85	21.85	21.87	23.5
40	QPSK	108	54	22.74	22.84	22.80	24.5
40	QPSK	108	108	21.78	21.86	21.78	23.0
40	QPSK	216	0	21.78	21.83	21.72	23.0
40	16QAM	1	1	21.76	21.81	21.90	23.5
40	16QAM	1	1	20.56	20.51	20.65	22.0
40	16QAM	1	1	18.34	18.35	18.28	20.0
40	16QAM	1	1	18.34	18.35	18.28	20.0
Channel							
Frequency (MHz)				508000	507000	511000	
30	QPSK	1	1	22.88	22.87	22.91	24.5
Channel							
Frequency (MHz)				505000	507000	510000	
25	QPSK	1	1	2512.5	2535	2557.5	24.5
Channel							
Frequency (MHz)				2510	2535	2550	
20	QPSK	1	1	22.80	22.91	22.89	24.5
Channel							
Frequency (MHz)				501000	507000	513000	
15	QPSK	1	1	22.78	22.99	22.88	24.5
Channel							
Frequency (MHz)				503000	507000	510000	
10	QPSK	1	1	22.82	23.03	22.92	24.5
Channel							
Frequency (MHz)				509000	507000	513000	
5	QPSK	1	1	22.80	22.97	22.89	24.5

n66 Ant0 DS14							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	MPR (dB)
Channel							
Frequency (MHz)				346500	349500	352500	
40	PV2 BPSK	1	1	22.84	22.84	22.87	
40	PV2 BPSK	1	108	22.90	22.89	22.77	24.5
40	PV2 BPSK	1	214	22.98	22.97	22.91	
40	PV2 BPSK	108	0	22.43	22.41	22.37	24.0
40	PV2 BPSK	108	54	22.78	22.83	22.71	24.5
40	PV2 BPSK	108	108	22.43	22.39	22.36	24.0
40	PV2 BPSK	216	0	22.42	22.33	22.39	
40	QPSK	1	1	22.84	22.99	22.94	
40	QPSK	1	108	22.82	22.89	22.96	24.5
40	QPSK	1	214	22.91	22.93	22.91	
40	QPSK	108	0	21.84	21.89	21.85	23.5
40	QPSK	108	54	22.88	22.91	22.86	24.5
40	QPSK	108	108	21.81	21.82	21.81	23.5
40	QPSK	216	0	21.73	21.85	21.83	
40	16QAM	1	1	22.22	22.12	22.15	23.5
40	16QAM	1	1	20.47	20.33	20.49	22.0
40	16QAM	1	1	18.42	18.35	18.24	20.0
40	16QAM	1	1	18.42	18.35	18.24	20.0
Channel							
Frequency (MHz)				345000	349500	353000	
30	QPSK	1	1	22.85	22.84	22.92	24.5
Channel							
Frequency (MHz)				344500	349500	350000	
20	QPSK	1	1	22.67	22.89	22.83	24.5
Channel							
Frequency (MHz)				34717.5	3495	35000	
15	QPSK	1	1	22.63	22.77	22.85	24.5
Channel							
Frequency (MHz)				343000	349000	350000	
10	QPSK	1	1	22.73	22.87	22.77	24.5
Channel							
Frequency (MHz)				342500	349000	350000	
5	QPSK	1	1	22.70	22.87	22.78	24.5



n38 Ant0 DS14								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				518004	519000	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	21.25	21.28	21.21	23.0	0.0
40	PI/2 BPSK	1	53	20.33	20.36	20.43		
40	PI/2 BPSK	1	104	19.04	19.12	19.20		
40	PI/2 BPSK	50	0	20.55	20.49	20.58	22.5	0.5
40	PI/2 BPSK	50	28	20.45	20.39	20.37	23.0	0.0
40	PI/2 BPSK	50	56	19.06	19.13	19.05	22.5	0.5
40	PI/2 BPSK	100	0	19.87	19.90	19.87		
40	QPSK	1	1	21.19	21.30	21.25		
40	QPSK	1	53	19.78	19.84	19.82	23.0	0.0
40	QPSK	1	104	19.08	19.14	19.07		
40	QPSK	50	0	19.81	19.77	19.82	22.0	1.0
40	QPSK	50	28	19.98	20.00	19.91	23.0	0.0
40	QPSK	50	56	18.48	18.53	18.55	22.0	1.0
40	QPSK	100	0	19.27	19.33	19.29		
40	16QAM	1	1	20.12	20.17	20.11	22.0	1.0
40	64QAM	1	1	18.96	19.02	19.04	20.5	2.5
40	256QAM	1	1	16.89	16.93	16.91	18.5	4.5
Channel				517002	519000	520998		
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	21.19	21.19	21.21	23.0	0.0
Channel				516000	519000	522000		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	21.20	21.18	21.19	23.0	0.0
Channel				515502	519000	522498		
Frequency (MHz)				2577.51	2595	2612.49		
15	PI/2 BPSK	1	1	21.04	21.13	21.08	23.0	0.0
Channel				515004	519000	522996		
Frequency (MHz)				2575.02	2595	2614.98		
10	PI/2 BPSK	1	1	21.02	21.12	21.13	23.0	0.0

n41 Ant0 DS14								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	19.66	19.61	19.75	23.0	0.0
100	PI/2 BPSK	1	137	21.73	21.79	21.59		
100	PI/2 BPSK	1	271	21.67	21.64	21.83		
100	PI/2 BPSK	135	0	21.58	21.62	21.65	22.5	0.5
100	PI/2 BPSK	135	69	21.45	21.67	21.66	23.0	0.0
100	PI/2 BPSK	135	138	20.68	20.58	20.69	22.5	0.5
100	PI/2 BPSK	270	0	21.35	21.37	21.50		
100	QPSK	1	1	21.60	21.88	21.26		
100	QPSK	1	137	21.80	21.88	21.72	23.0	0.0
100	QPSK	1	271	21.65	21.62	21.84		
100	QPSK	135	0	21.80	21.66	21.80	22.0	1.0
100	QPSK	135	69	21.62	21.86	21.62	23.0	0.0
100	QPSK	135	138	20.63	20.72	20.61	22.0	1.0
100	QPSK	270	0	21.20	21.46	21.45		
100	16QAM	1	1	20.05	20.06	20.06	22.0	1.0
100	64QAM	1	1	19.98	19.96	19.86	20.5	2.5
100	256QAM	1	1	18.65	18.57	18.65	18.5	4.5
Channel				508200	518598	528998		
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	21.69	21.62	21.49	23.0	0.0
Channel				507204	518598	529998		
Frequency (MHz)				2536.02	2592.99	2649.99		
80	QPSK	1	1	21.50	21.74	21.53	23.0	0.0
Channel				506202	518598	531000		
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	21.53	21.53	21.41	23.0	0.0
Channel				505200	518598	531996		
Frequency (MHz)				2526	2592.99	2659.98		
60	QPSK	1	1	21.52	21.64	21.46	23.0	0.0
Channel				504204	518598	532998		
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	21.55	21.79	21.42	23.0	0.0
Channel				503202	518598	534000		
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	21.60	21.65	21.63	23.0	0.0
Channel				502200	518598	534996		
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	21.59	21.75	21.52	23.0	0.0
Channel				501204	518598	535998		
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	21.56	21.75	21.52	23.0	0.0



n5 Ant1 DSI4								
BW [MHz]	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	PI/2 BPSK	1	1	22.27	22.37	22.27	23.7	0.0
20	PI/2 BPSK	1	53	22.27	22.33	22.31		
20	PI/2 BPSK	1	104	22.15	22.16	22.22		
20	PI/2 BPSK	50	0	22.06	22.18	22.20	23.7	0.0
20	PI/2 BPSK	50	28	22.26	22.20	22.18	23.7	0.0
20	PI/2 BPSK	50	56	22.19	22.22	22.27	23.7	0.0
20	PI/2 BPSK	100	0	22.19	22.15	22.09		
20	QPSK	1	1	22.38	22.45	22.33		
20	QPSK	1	53	22.29	22.22	22.19	23.7	0.0
20	QPSK	1	104	22.19	22.30	22.24		
20	QPSK	50	0	22.21	22.19	22.23		
20	QPSK	50	28	22.18	22.28	22.18	23.7	0.0
20	QPSK	50	56	22.02	22.10	22.16	23.7	0.0
20	QPSK	100	0	22.30	22.31	22.19		
20	16QAM	1	1	22.24	22.13	22.21		
20	64QAM	1	1	21.91	21.96	21.90	23.2	0.5
20	256QAM	1	1	19.74	19.78	19.78	21.2	2.5
Channel				166300	167300	168300	Tune-up limit	MPR
Frequency (MHz)				831.5	836.5	841.5	(dBm)	(dB)
15	QPSK	1	1	22.25	22.31	22.14	23.7	0.0
Channel				165800	167300	168800	Tune-up limit	MPR
Frequency (MHz)				829	836.5	844	(dBm)	(dB)
10	QPSK	1	1	22.34	22.24	22.18	23.7	0.0
Channel				165300	167300	169300	Tune-up limit	MPR
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)
5	QPSK	1	1	22.37	22.28	22.34	23.7	0.0



n7 Ant3 DSI4										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				504000	507000	510000				
Frequency (MHz)				2520	2535	2550				
40	PI/2 BPSK	1	1	22.35	22.47	22.43	24.0	0.0		
40	PI/2 BPSK	1	108	22.50	22.50	22.42				
40	PI/2 BPSK	1	214	22.46	22.46	22.34				
40	PI/2 BPSK	108	0	21.88	21.96	21.95	23.5	0.5		
40	PI/2 BPSK	108	54	22.40	22.36	22.41	24.0	0.0		
40	PI/2 BPSK	108	108	22.06	21.95	22.05	23.5	0.5		
40	PI/2 BPSK	216	0	21.98	21.88	21.77				
40	QPSK	1	1	22.38	22.53	22.43	24.0	0.0		
40	QPSK	1	108	22.50	22.47	22.45				
40	QPSK	1	214	22.48	22.51	22.49				
40	QPSK	108	0	21.49	21.42	21.41	23.0	1.0		
40	QPSK	108	54	22.38	22.46	22.38	24.0	0.0		
40	QPSK	108	108	21.36	21.44	21.39	23.0	1.0		
40	QPSK	216	0	21.38	21.46	21.39				
40	16QAM	1	1	21.66	21.67	21.58	23.0	1.0		
40	64QAM	1	1	20.02	20.12	20.10	21.5	2.5		
40	256QAM	1	1	17.79	17.87	17.98	19.5	4.5		
Channel				503000	507000	511000	Tune-up limit	MPR		
Frequency (MHz)				2515	2535	2555	(dBm)	(dB)		
30	QPSK	1	1	22.42	22.47	22.39	24.0	0.0		
Channel				502500	507000	511500	Tune-up limit	MPR		
Frequency (MHz)				2512.5	2535	2557.5	(dBm)	(dB)		
25	QPSK	1	1	22.40	22.46	22.38	24.0	0.0		
Channel				502000	507000	512000	Tune-up limit	MPR		
Frequency (MHz)				2510	2535	2560	(dBm)	(dB)		
20	QPSK	1	1	22.50	22.52	22.47	24.0	0.0		
Channel				501500	507000	512500	Tune-up limit	MPR		
Frequency (MHz)				2507.5	2535	2562.5	(dBm)	(dB)		
15	QPSK	1	1	22.46	22.39	22.37	24.0	0.0		
Channel				501000	507000	513000	Tune-up limit	MPR		
Frequency (MHz)				2505	2535	2565	(dBm)	(dB)		
10	QPSK	1	1	22.33	22.41	22.35	24.0	0.0		
Channel				500500	507000	513500	Tune-up limit	MPR		
Frequency (MHz)				2502.5	2535	2567.5	(dBm)	(dB)		
5	QPSK	1	1	22.40	22.50	22.35	24.0	0.0		

n66 Ant3 DSI4										
BW [MHz]	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	352000				
Frequency (MHz)				1730	1745	1760				
40	PI/2 BPSK	1	1	22.54	22.57	22.57	24.0	0.0		
40	PI/2 BPSK	1	108	22.34	22.43	22.41				
40	PI/2 BPSK	1	214	22.49	22.49	22.37				
40	PI/2 BPSK	108	0	21.88	21.98	21.88	23.5	0.5		
40	PI/2 BPSK	108	54	22.45	22.44	22.51	24.0	0.0		
40	PI/2 BPSK	108	108	21.94	22.00	21.97	23.5	0.5		
40	PI/2 BPSK	216	0	21.93	21.94	21.99				
40	QPSK	1	1	22.48	22.58	22.50	24.0	0.0		
40	QPSK	1	108	22.49	22.54	22.41				
40	QPSK	1	214	22.34	22.45	22.52				
40	QPSK	108	0	21.39	21.48	21.53	23.0	1.0		
40	QPSK	108	54	22.41	22.54	22.48	24.0	0.0		
40	QPSK	108	108	21.63	21.55	21.61	23.0	1.0		
40	QPSK	216	0	21.36	21.45	21.38				
40	16QAM	1	1	21.63	21.72	21.76	23.0	1.0		
40	64QAM	1	1	20.29	20.23	20.17	21.5	2.5		
40	256QAM	1	1	18.00	17.93	18.03	19.5	4.5		
Channel				345000	349000	353000	Tune-up limit	MPR		
Frequency (MHz)				1725	1745	1765	(dBm)	(dB)		
30	QPSK	1	1	22.40	22.36	22.46	24.0	0.0		
Channel				344000	349000	354000	Tune-up limit	MPR		
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)		
20	QPSK	1	1	22.26	22.53	22.39	24.0	0.0		
Channel				343500	349000	354500	Tune-up limit	MPR		
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)		
15	QPSK	1	1	22.37	22.51	22.44	24.0	0.0		
Channel				343000	349000	355000	Tune-up limit	MPR		
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)		
10	QPSK	1	1	22.25	22.34	22.36	24.0	0.0		
Channel				342500	349000	355500	Tune-up limit	MPR		
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)		
5	QPSK	1	1	22.30	22.37	22.48	24.0	0.0		

n38 Ant3 DS14									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	22.39	22.49	22.54	24.0	0.0	
40	PI/2 BPSK	1	53	22.48	22.50	22.45			
40	PI/2 BPSK	1	104	22.36	22.42	22.31			
40	PI/2 BPSK	50	0	22.07	22.00	22.01	23.5	0.5	
40	PI/2 BPSK	50	28	22.38	22.48	22.43	24.0	0.0	
40	PI/2 BPSK	50	56	22.05	21.95	22.06	23.5	0.5	
40	PI/2 BPSK	100	0	21.89	21.92	22.02			
40	QPSK	1	1	22.49	22.56	22.54	24.0	0.0	
40	QPSK	1	53	22.37	22.44	22.36			
40	QPSK	1	104	22.47	22.40	22.50			
40	QPSK	50	0	21.54	21.47	21.55	23.0	1.0	
40	QPSK	50	28	22.51	22.52	22.47	24.0	0.0	
40	QPSK	50	56	21.51	21.44	21.54	23.0	1.0	
40	QPSK	100	0	21.39	21.45	21.33			
40	16QAM	1	1	21.67	21.55	21.50	23.0	1.0	
40	64QAM	1	1	20.03	20.06	20.10	21.5	2.5	
40	256QAM	1	1	17.92	17.88	17.99	19.5	4.5	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99	24.0	0.0	
30	QPSK	1	1	22.21	22.51	22.38	24.0	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610	24.0	0.0	
20	QPSK	1	1	22.41	22.36	22.39	24.0	0.0	
Channel				515502	519000	524998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49	24.0	0.0	
15	PI/2 BPSK	1	1	22.35	22.42	22.41	24.0	0.0	
Channel				515004	519000	523996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98	24.0	0.0	
10	PI/2 BPSK	1	1	22.31	22.44	22.35	24.0	0.0	

n41 Ant3 DS14									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	22.24	22.34	22.29	24.0	0.0	
100	PI/2 BPSK	1	137	22.24	22.29	22.30			
100	PI/2 BPSK	1	271	22.34	22.41	22.32			
100	PI/2 BPSK	135	0	21.92	21.82	21.71	23.5	0.5	
100	PI/2 BPSK	135	69	22.15	22.22	22.10	24.0	0.0	
100	PI/2 BPSK	135	138	21.75	21.85	21.79	23.5	0.5	
100	PI/2 BPSK	270	0	21.63	21.74	21.84			
100	QPSK	1	1	22.40	22.42	22.27	24.0	0.0	
100	QPSK	1	137	22.38	22.37	22.27			
100	QPSK	1	271	22.37	22.38	22.36			
100	QPSK	135	0	21.43	21.64	21.56	23.0	1.0	
100	QPSK	135	69	22.38	22.40	22.24	24.0	0.0	
100	QPSK	135	138	21.64	21.62	21.69	23.0	1.0	
100	QPSK	270	0	21.54	21.56	21.48			
100	16QAM	1	1	21.40	21.49	21.50	23.0	1.0	
100	64QAM	1	1	19.97	20.04	20.02	21.5	2.5	
100	256QAM	1	1	18.14	18.14	18.23	19.5	4.5	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	24.0	0.0	
90	QPSK	1	1	22.10	22.29	22.16	24.0	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2640.99	24.0	0.0	
80	QPSK	1	1	22.03	22.22	22.17	24.0	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2635	24.0	0.0	
70	QPSK	1	1	22.14	22.21	22.09	24.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98	24.0	0.0	
60	QPSK	1	1	22.10	22.31	22.14	24.0	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	24.0	0.0	
50	QPSK	1	1	22.06	22.22	22.30	24.0	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670	24.0	0.0	
40	QPSK	1	1	22.17	22.28	22.16	24.0	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98	24.0	0.0	
30	QPSK	1	1	22.24	22.22	22.22	24.0	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2670.99	24.0	0.0	
20	QPSK	1	1	22.24	22.18	22.25	24.0	0.0	



n7 Ant4 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	24.69	24.65	24.67	25.5	0.0	
40	PI/2 BPSK	1	108	24.64	24.59	24.64			
40	PI/2 BPSK	1	214	24.68	24.67	24.57			
40	PI/2 BPSK	108	0	24.14	24.15	24.21	25.0	0.5	
40	PI/2 BPSK	108	54	24.43	24.55	24.44	25.5	0.0	
40	PI/2 BPSK	108	108	24.03	24.09	24.19	25.0	0.5	
40	PI/2 BPSK	216	0	24.13	24.12	24.17			
40	QPSK	1	1	24.66	24.72	24.66	25.5	0.0	
40	QPSK	1	108	24.71	24.65	24.58			
40	QPSK	1	214	24.54	24.64	24.53			
40	QPSK	108	0	23.58	23.60	23.61	24.5	1.0	
40	QPSK	108	54	24.51	24.57	24.56	25.5	0.0	
40	QPSK	108	108	23.71	23.61	23.57	24.5	1.0	
40	QPSK	216	0	23.50	23.69	23.58			
40	16QAM	1	1	23.77	23.85	23.91	24.5	1.0	
40	64QAM	1	1	22.22	22.31	22.21	23.0	2.5	
40	256QAM	1	1	20.26	20.15	20.04	21.0	4.5	
Channel				503000	507000	511000	Tune-up limit	MPR	
Frequency (MHz)				2515	2535	2555	(dBm)	(dB)	
30	QPSK	1	1	24.60	24.68	24.65	25.5	0.0	
Channel				502500	507000	511500	Tune-up limit	MPR	
Frequency (MHz)				2512.5	2535	2557.5	(dBm)	(dB)	
25	QPSK	1	1	24.70	24.51	24.62	25.5	0.0	
Channel				502000	507000	512000	Tune-up limit	MPR	
Frequency (MHz)				2510	2535	2560	(dBm)	(dB)	
20	QPSK	1	1	24.71	24.69	24.56	25.5	0.0	
Channel				501500	507000	512500	Tune-up limit	MPR	
Frequency (MHz)				2507.5	2535	2562.5	(dBm)	(dB)	
15	QPSK	1	1	24.64	24.65	24.58	25.5	0.0	
Channel				501000	507000	513000	Tune-up limit	MPR	
Frequency (MHz)				2505	2535	2565	(dBm)	(dB)	
10	QPSK	1	1	24.63	24.68	24.67	25.5	0.0	
Channel				500500	507000	513500	Tune-up limit	MPR	
Frequency (MHz)				2502.5	2535	2567.5	(dBm)	(dB)	
5	QPSK	1	1	24.64	24.54	24.66	25.5	0.0	

n66 Ant4 DSI4									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	24.32	24.36	24.31	25.5	0.0	
40	PI/2 BPSK	1	108	24.39	24.41	24.33			
40	PI/2 BPSK	1	214	24.26	24.33	24.25			
40	PI/2 BPSK	108	0	23.95	23.88	23.90	25.0	0.5	
40	PI/2 BPSK	108	54	24.30	24.41	24.37	25.5	0.0	
40	PI/2 BPSK	108	108	23.76	23.88	23.92	25.0	0.5	
40	PI/2 BPSK	216	0	23.61	23.52	23.42			
40	QPSK	1	1	24.45	24.47	24.41	25.5	0.0	
40	QPSK	1	108	24.38	24.46	24.43			
40	QPSK	1	214	24.39	24.51	24.38			
40	QPSK	108	0	23.42	23.36	23.40	24.5	1.0	
40	QPSK	108	54	24.17	24.25	24.14	25.5	0.0	
40	QPSK	108	108	23.26	23.36	23.31	24.5	1.0	
40	QPSK	216	0	23.37	23.41	23.35			
40	16QAM	1	1	23.47	23.42	23.47	24.5	1.0	
40	64QAM	1	1	22.05	22.04	22.15	23.0	2.5	
40	256QAM	1	1	19.80	19.89	19.94	21.0	4.5	
Channel				345000	349000	353000	Tune-up limit	MPR	
Frequency (MHz)				1725	1745	1765	(dBm)	(dB)	
30	QPSK	1	1	24.36	24.29	24.36	25.5	0.0	
Channel				344000	349000	354000	Tune-up limit	MPR	
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)	
20	QPSK	1	1	24.39	24.27	24.28	25.5	0.0	
Channel				343500	349000	354500	Tune-up limit	MPR	
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)	
15	QPSK	1	1	24.35	24.39	24.28	25.5	0.0	
Channel				343000	349000	355000	Tune-up limit	MPR	
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)	
10	QPSK	1	1	24.32	24.27	24.32	25.5	0.0	
Channel				342500	349000	355500	Tune-up limit	MPR	
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)	
5	QPSK	1	1	24.44	24.35	24.20	25.5	0.0	



n38 Ant4 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	24.65	24.69	24.75	25.5	0.0	
40	PI/2 BPSK	1	53	24.80	24.77	24.78			
40	PI/2 BPSK	1	104	24.71	24.79	24.76			
40	PI/2 BPSK	50	0	24.21	24.23	24.26	25.0	0.5	
40	PI/2 BPSK	50	28	24.67	24.67	24.71	25.5	0.0	
40	PI/2 BPSK	50	56	24.16	24.22	24.29	25.0	0.5	
40	PI/2 BPSK	100	0	24.33	24.25	24.26			
40	QPSK	1	1	24.63	24.81	24.75	25.5	0.0	
40	QPSK	1	53	24.78	24.79	24.76			
40	QPSK	1	104	24.74	24.75	24.77			
40	QPSK	50	0	23.85	23.74	23.79	24.5	1.0	
40	QPSK	50	28	24.72	24.78	24.70	25.5	0.0	
40	QPSK	50	56	23.75	23.67	23.73	24.5	1.0	
40	QPSK	100	0	24.62	24.69	23.80			
40	16QAM	1	1	23.80	23.68	23.68	24.5	1.0	
40	64QAM	1	1	22.23	22.31	22.43	23.0	2.5	
40	256QAM	1	1	20.41	20.44	20.39	21.0	4.5	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99	25.5	0.0	
30	QPSK	1	1	24.76	24.73	24.70	25.5	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610	25.5	0.0	
20	QPSK	1	1	24.60	24.70	24.74	25.5	0.0	
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49	25.5	0.0	
15	PI/2 BPSK	1	1	24.47	24.88	24.63	25.5	0.0	
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98	25.5	0.0	
10	PI/2 BPSK	1	1	24.47	24.88	24.63	25.5	0.0	

n41 Ant4 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	24.38	24.29	24.38	25.5	0.0	
100	PI/2 BPSK	1	137	24.31	24.34	24.35			
100	PI/2 BPSK	1	271	24.43	24.37	24.41			
100	PI/2 BPSK	135	0	23.77	23.89	23.82	25.0	0.5	
100	PI/2 BPSK	135	69	24.33	24.43	24.37	25.5	0.0	
100	PI/2 BPSK	135	138	24.01	23.96	23.91	25.0	0.5	
100	PI/2 BPSK	270	0	23.76	23.83	23.72			
100	QPSK	1	1	24.25	24.48	24.28	25.5	0.0	
100	QPSK	1	137	24.37	24.39	24.35			
100	QPSK	1	271	24.29	24.39	24.37			
100	QPSK	135	0	23.40	23.30	23.26	24.5	1.0	
100	QPSK	135	69	24.37	24.44	24.41	25.5	0.0	
100	QPSK	135	138	23.34	23.45	23.41	24.5	1.0	
100	QPSK	270	0	23.40	23.41	23.36			
100	16QAM	1	1	23.00	22.99	22.96	24.5	1.0	
100	64QAM	1	1	22.22	22.10	22.21	23.0	2.5	
100	256QAM	1	1	19.73	19.82	19.91	21.0	4.5	
Channel				508200	518598	528998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	25.5	0.0	
90	QPSK	1	1	24.34	24.27	24.34	25.5	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2640.99	25.5	0.0	
80	QPSK	1	1	24.25	24.30	24.17	25.5	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655	25.5	0.0	
70	QPSK	1	1	24.37	24.41	24.22	25.5	0.0	
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98	25.5	0.0	
60	QPSK	1	1	24.25	24.20	24.31	25.5	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	25.5	0.0	
50	QPSK	1	1	24.29	24.24	24.22	25.5	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670	25.5	0.0	
40	QPSK	1	1	24.23	24.28	24.21	25.5	0.0	
Channel				502200	518598	534998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98	25.5	0.0	
30	QPSK	1	1	24.39	24.27	24.34	25.5	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99	25.5	0.0	
20	QPSK	1	1	24.30	24.27	24.32	25.5	0.0	



n7 Ant5 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	20.32	20.33	20.35	22.0	0.0	
40	PI/2 BPSK	1	108	20.30	20.26	20.24			
40	PI/2 BPSK	1	214	20.33	20.23	20.27			
40	PI/2 BPSK	108	0	20.29	20.38	20.27	22.0	0.0	
40	PI/2 BPSK	108	54	20.15	20.14	20.06	22.0	0.0	
40	PI/2 BPSK	108	108	20.27	20.26	20.18	22.0	0.0	
40	PI/2 BPSK	216	0	20.30	20.34	20.27			
40	QPSK	1	1	20.31	20.39	20.32	22.0	0.0	
40	QPSK	1	108	20.32	20.31	20.32			
40	QPSK	1	214	20.27	20.31	20.25	22.0	0.0	
40	QPSK	108	0	20.10	20.07	19.97			
40	QPSK	108	54	20.13	20.31	20.14	22.0	0.0	
40	QPSK	108	108	20.28	20.28	20.21	22.0	0.0	
40	QPSK	216	0	20.30	20.35	20.34			
40	16QAM	1	1	20.23	20.27	20.37	22.0	0.0	
40	64QAM	1	1	18.72	18.81	18.69	20.5	1.5	
40	256QAM	1	1	16.86	16.83	16.82	18.5	3.5	
Channel				503000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	20.13	20.36	20.12	22.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	20.32	20.37	20.12	22.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	20.28	20.35	20.32	22.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	20.30	20.26	20.20	22.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	20.30	20.37	20.14	22.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	20.31	20.31	20.22	22.0	0.0	

n66 Ant5 DSI4									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	19.61	19.68	19.68	21.0	0.0	
40	PI/2 BPSK	1	108	19.64	19.64	19.54			
40	PI/2 BPSK	1	214	19.69	19.62	19.66			
40	PI/2 BPSK	108	0	19.58	19.59	19.51	21.0	0.0	
40	PI/2 BPSK	108	54	19.71	19.60	19.65	21.0	0.0	
40	PI/2 BPSK	108	108	19.84	19.74	19.76	21.0	0.0	
40	PI/2 BPSK	216	0	19.56	19.68	19.61			
40	QPSK	1	1	19.62	19.88	19.75	21.0	0.0	
40	QPSK	1	108	19.80	19.66	19.82			
40	QPSK	1	214	19.52	19.59	19.64	21.0	0.0	
40	QPSK	108	0	19.76	19.76	19.68			
40	QPSK	108	54	19.76	19.82	19.81	21.0	0.0	
40	QPSK	108	108	19.72	19.78	19.67	21.0	0.0	
40	QPSK	216	0	19.75	19.80	19.78			
40	16QAM	1	1	19.81	19.84	19.79	21.0	0.0	
40	64QAM	1	1	18.37	18.27	18.33	19.5	1.5	
40	256QAM	1	1	17.22	17.33	17.37	17.5	3.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	19.49	19.86	19.62	21.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	19.52	19.83	19.67	21.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	19.43	19.73	19.76	21.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	19.46	19.75	19.63	21.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	19.50	19.82	19.55	21.0	0.0	



n38 Ant5 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	Pi/2 BPSK	1	1	21.95	21.86	21.72	23.0	0.0	
40	Pi/2 BPSK	1	53	21.85	21.81	21.69			
40	Pi/2 BPSK	1	104	21.87	21.88	21.92			
40	Pi/2 BPSK	50	0	21.87	21.80	21.91			
40	Pi/2 BPSK	50	28	21.74	21.83	21.78	23.0	0.0	
40	Pi/2 BPSK	50	56	21.86	21.73	21.65	23.0	0.0	
40	Pi/2 BPSK	100	0	21.85	21.87	21.89	23.0	0.0	
40	QPSK	1	1	21.90	21.96	21.81	23.0	0.0	
40	QPSK	1	53	21.94	21.93	21.95			
40	QPSK	1	104	21.90	21.79	21.77			
40	QPSK	50	0	21.95	21.85	21.91			
40	QPSK	50	28	21.84	21.97	21.76	23.0	0.0	
40	QPSK	50	56	21.77	21.80	21.92	23.0	0.0	
40	QPSK	100	0	21.90	21.95	21.90	23.0	0.0	
40	16QAM	1	1	21.78	21.70	21.74	23.0	0.0	
40	64QAM	1	1	20.36	20.40	20.54	22.0	1.0	
40	256QAM	1	1	18.34	18.35	18.34	20.0	3.0	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99	23.0	0.0	
30	QPSK	1	1	21.94	21.93	21.95	23.0	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610	23.0	0.0	
20	QPSK	1	1	21.90	21.79	21.77	23.0	0.0	
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49	23.5	0.0	
15	Pi/2 BPSK	1	1	22.10	22.13	22.02	23.5	0.0	
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98	23.5	0.0	
10	Pi/2 BPSK	1	1	22.03	22.13	22.01	23.5	0.0	

n41 Ant5 DSI4									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	Pi/2 BPSK	1	1	22.06	21.98	21.87	23.0	0.0	
100	Pi/2 BPSK	1	137	21.98	21.93	21.82			
100	Pi/2 BPSK	1	271	22.00	22.00	22.04			
100	Pi/2 BPSK	135	0	22.01	21.95	22.04			
100	Pi/2 BPSK	135	69	21.87	21.94	21.90	23.0	0.0	
100	Pi/2 BPSK	135	138	21.97	21.86	21.77	23.0	0.0	
100	Pi/2 BPSK	270	0	21.98	21.98	22.03	23.0	0.0	
100	QPSK	1	1	22.03	22.10	21.94	23.0	0.0	
100	QPSK	1	137	22.05	22.07	22.09			
100	QPSK	1	271	22.04	21.94	21.87			
100	QPSK	135	0	22.06	21.99	22.03			
100	QPSK	135	69	21.95	22.07	21.88	23.0	0.0	
100	QPSK	135	138	21.88	21.93	22.04	23.0	0.0	
100	QPSK	270	0	22.02	22.05	22.01	23.0	0.0	
100	16QAM	1	1	21.89	21.80	21.86	23.0	0.0	
100	64QAM	1	1	20.48	20.55	20.65	22.0	1.0	
100	256QAM	1	1	18.48	18.46	18.46	20.0	3.0	
Channel				508200	518598	528998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	23.0	0.0	
90	QPSK	1	1	21.83	21.97	21.86	23.0	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2649.99	23.0	0.0	
80	QPSK	1	1	22.03	21.93	21.84	23.0	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655	23.0	0.0	
70	QPSK	1	1	21.98	22.08	21.95	23.0	0.0	
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98	23.0	0.0	
60	QPSK	1	1	22.01	21.95	21.85	23.0	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	23.0	0.0	
50	QPSK	1	1	22.02	21.99	21.82	23.0	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670	23.0	0.0	
40	QPSK	1	1	22.00	22.04	21.82	23.0	0.0	
Channel				502200	518598	534998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98	23.0	0.0	
30	QPSK	1	1	21.92	21.99	21.78	23.0	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99	23.0	0.0	
20	QPSK	1	1	21.97	22.08	21.77	23.0	0.0	



Part270 n77 Ant10 DS14									
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									
Frequency (MHz)				65000	65000	65000			
100	PI2 BPSK	1	1	2444	2454	2491			
100	PI2 BPSK	1	137	2435	2436	2439	25.7	0.0	
100	PI2 BPSK	1	271	2446	2438	2427			
100	PI2 BPSK	135	69	2436	2436	2436	25.2	0.0	
100	PI2 BPSK	135	69	2438	2444	2441	25.7	0.0	
100	PI2 BPSK	135	138	2388	2383	2395	25.2	0.5	
100	PI2 BPSK	270	0	2479	2486	2494			
100	QPSK	1	1	2450	2457	2453			
100	QPSK	1	137	2435	2444	2432	25.7	0.0	
100	QPSK	1	271	2441	2439	2443			
100	QPSK	135	69	2436	2430	2432	24.7	1.0	
100	QPSK	135	69	2435	2440	2436	25.7	0.0	
100	QPSK	135	138	2336	2331	2333	24.7	1.0	
100	QPSK	270	0	2426	2426	2417			
100	8QAM	1	1	2350	2356	2354	24.7	1.0	
100	8QAM	1	1	2212	2214	2230	23.2	2.5	
100	256QAM	1	1	1985	1982	1984	21.2	4.5	
Channel									
Frequency (MHz)				65000	65000	65000			
90	QPSK	1	1	2441	2433	2436	25.7	0.0	
Channel									
Frequency (MHz)				64900	65000	65000			
80	QPSK	1	1	2440	2450	2436	25.7	0.0	
Channel									
Frequency (MHz)				64900	65000	65000			
70	QPSK	1	1	2451	2432	2436	25.7	0.0	
Channel									
Frequency (MHz)				64896	65000	65000			
60	QPSK	1	1	2444	2447	2441	25.7	0.0	
Channel									
Frequency (MHz)				64800	65000	65000			
50	QPSK	1	1	2450	2444	2437	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
40	QPSK	1	1	2450	2450	2443	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
30	QPSK	1	1	2451	2447	2443	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
20	QPSK	1	1	2450	2450	2443	25.7	0.0	
Channel									
Frequency (MHz)				64718	65000	65000			
15	QPSK	1	1	2443	2453	2443	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
10	QPSK	1	1	2453	2453	2442	25.7	0.0	

Part27Q n77 Ant10 DS14									
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									
Frequency (MHz)				63000	63000	63000			
100	PI2 BPSK	1	1	2456	2456	2456			
100	PI2 BPSK	1	137	2432	2432	2432	25.7	0.0	
100	PI2 BPSK	1	271	2434	2434	2434			
100	PI2 BPSK	135	69	2431	2431	2431	25.7	0.0	
100	PI2 BPSK	135	69	2445	2445	2445			
100	PI2 BPSK	135	138	2387	2387	2387	25.2	0.5	
100	PI2 BPSK	270	0	2486	2486	2486			
100	QPSK	1	1	2450	2450	2450			
100	QPSK	1	137	2439	2439	2439	25.7	0.0	
100	QPSK	1	271	2441	2439	2443			
100	QPSK	135	69	2431	2431	2431	25.7	0.0	
100	QPSK	135	69	2436	2436	2436			
100	QPSK	135	138	2332	2332	2332	25.7	0.0	
100	QPSK	270	0	2423	2423	2417			
100	8QAM	1	1	2358	2358	2354	24.7	1.0	
100	8QAM	1	1	2208	2208	2212	23.2	2.5	
100	256QAM	1	1	1986	1986	1986	21.2	4.5	
Channel									
Frequency (MHz)				63000	63000	63000			
90	QPSK	1	1	2439	2439	2442	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
80	QPSK	1	1	2443	2447	2438	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
70	QPSK	1	1	2433	2439	2427	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
60	QPSK	1	1	2413	2412	2441	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
50	QPSK	1	1	2412	2415	2425	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
40	QPSK	1	1	2450	2448	2424	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
30	QPSK	1	1	2440	2441	2437	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
20	QPSK	1	1	2456	2454	2432	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
15	QPSK	1	1	2442	2437	2424	25.7	0.0	
Channel									
Frequency (MHz)				63000	63000	63000			
10	QPSK	1	1	2444	2445	2433	25.7	0.0	

Part270 n78 Ant10 DS14 PC3									
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									
Frequency (MHz)				65000	65000	65000			
100	PI2 BPSK	1	1	2444	2444	2444			
100	PI2 BPSK	1	137	2433	2433	2433	25.7	0.0	
100	PI2 BPSK	1	271	2430	2430	2430			
100	PI2 BPSK	135	69	2436	2436	2436	25.7	0.0	
100	PI2 BPSK	135	69	2437	2437	2437	25.7	0.0	
100	PI2 BPSK	135	138	2426	2426	2426	25.7	0.0	
100	PI2 BPSK	270	0	2428	2428	2428			
100	QPSK	1	1	2450	2450	2450			
100	QPSK	1	137	2441	2441	2441	25.7	0.0	
100	QPSK	1	271	2436	2436	2436			
100	QPSK	135	69	2436	2436	2436	25.7	0.0	
100	QPSK	135	69	2438	2438	2438	25.7	0.0	
100	QPSK	135	138	2425	2425	2425	25.7	0.0	
100	QPSK	270	0	2427	2427	2427			
100	8QAM	1	1	2435	2435	2435	25.7	0.0	
100	8QAM	1	1	2359	2359	2359	24.7	1.0	
100	256QAM	1	1	2132	2132	2132	22.7	3.0	
Channel									
Frequency (MHz)				65000	65000	65000			
90	QPSK	1	1	2422	2436	2421	25.7	0.0	
Channel									
Frequency (MHz)				64900	65000	65000			
80	QPSK	1	1	2422	2434	2421	25.7	0.0	
Channel									
Frequency (MHz)				64900	65000	65000			
70	QPSK	1	1	2418	2444	2427	25.7	0.0	
Channel									
Frequency (MHz)				64896	65000	65000			
60	QPSK	1	1	2418	2444	2427	25.7	0.0	
Channel									
Frequency (MHz)				64800	65000	65000			
50	QPSK	1	1	2418	2427	2427	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
40	QPSK	1	1	2427	2442	2434	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
30	QPSK	1	1	2423	2432	2436	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
20	QPSK	1	1	2420	2429	2440	25.7	0.0	
Channel									
Frequency (MHz)				64718	65000	65000			
15	QPSK	1	1	2427	2431	2439	25.7	0.0	
Channel									
Frequency (MHz)				64700	65000	65000			
10	QPSK	1	1	2422	2429	2435	25.7	0.0	



Part27Q n78 Ant10 DS14 PC3									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.30	26.30				
100	PI2 BPSK	1	137	25.28	25.28		25.7	0.0	
100	PI2 BPSK	1	271	25.08	25.08				
100	PI2 BPSK	135	0	25.23	25.23				
100	PI2 BPSK	135	69	25.22	25.22		25.7	0.0	
100	PI2 BPSK	135	138	25.08	25.08				
100	PI2 BPSK	270	0	25.03	25.03		25.7	0.0	
100	QPSK	1	1	25.25	25.25				
100	QPSK	1	137	25.18	25.18		25.7	0.0	
100	QPSK	1	271	25.08	25.08				
100	QPSK	135	0	25.26	25.26				
100	QPSK	135	69	25.16	25.16		25.7	0.0	
100	QPSK	135	138	24.98	24.98				
100	QPSK	270	0	25.12	25.12		25.7	0.0	
100	16QAM	1	1	25.25	25.25		25.7	0.0	
100	64QAM	1	1	24.36	24.36		24.7	1.0	
100	256QAM	1	1	22.12	22.12		22.7	3.0	
Channel									
Frequency (MHz)									
90	QPSK	1	123	25.02	25.26	25.22	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	25.10	25.18	25.12	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	25.04	25.15	25.08	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	25.10	25.20	25.19	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	25.10	25.33	25.13	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	25.16	25.19	25.22	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	25.02	25.24	25.13	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	25	25.19	25.17	25.21	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	24.97	25.18	25.07	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	25.12	25.09	25.00	25.7	0.0	

Part27Q n78 Ant10 DS14 PC2									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.00	26.00				
100	PI2 BPSK	1	137	26.03	26.03		27.0	0.0	
100	PI2 BPSK	1	271	25.95	25.95				
100	PI2 BPSK	135	0	25.49	25.49		26.5	0.5	
100	PI2 BPSK	135	69	25.58	25.58		27.0	0.0	
100	PI2 BPSK	135	138	25.44	25.44		26.5	0.5	
100	PI2 BPSK	270	0	25.42	25.42		26.5	0.5	
100	QPSK	1	1	25.00	25.00				
100	QPSK	1	137	26.05	26.05		27.0	0.0	
100	QPSK	1	271	25.90	25.90				
100	QPSK	135	0	25.00	25.00		27.0	0.0	
100	QPSK	135	69	25.05	25.05		27.0	0.0	
100	QPSK	135	138	24.88	24.88		27.0	0.0	
100	QPSK	270	0	24.85	24.85		27.0	0.0	
100	16QAM	1	1	25.25	25.25		26.0	1.0	
100	64QAM	1	1	23.65	23.65		24.5	2.5	
100	256QAM	1	1	21.42	21.42		22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.81	26.04	25.87	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.70	25.92	25.88	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.87	25.90	25.95	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.98	26.03	26.04	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.81	25.87	25.87	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.88	25.96	25.87	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.80	25.88	25.82	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.90	25.90	25.96	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.81	25.84	26.03	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.03	25.95	26.01	27.0	0.0	

Part27Q n78 Ant10 DS14 PC2									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.64	26.64				
100	PI2 BPSK	1	137	26.79	26.79		27.0	0.0	
100	PI2 BPSK	1	271	26.68	26.68				
100	PI2 BPSK	135	0	26.28	26.28		23.5	3.5	
100	PI2 BPSK	135	69	26.72	26.72		27.0	0.0	
100	PI2 BPSK	135	138	26.19	26.19		23.5	3.5	
100	PI2 BPSK	270	0	26.07	26.07		26.5	0.5	
100	QPSK	1	1	26.80	26.80		27.0	0.0	
100	QPSK	1	137	26.80	26.80		27.0	0.0	
100	QPSK	1	271	26.85	26.85		23.5	3.5	
100	QPSK	135	0	25.78	25.78		23.5	3.5	
100	QPSK	135	69	26.87	26.87		27.0	0.0	
100	QPSK	135	138	25.59	25.59		23.5	3.5	
100	QPSK	270	0	25.73	25.73		26.5	0.5	
100	16QAM	1	1	25.69	25.69		25.0	1.0	
100	64QAM	1	1	24.41	24.41		24.5	2.5	
100	256QAM	1	1	22.13	22.13		22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.75	26.67	26.66	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.73	26.80	26.83	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.73	26.87	26.95	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.99	25.77	26.08	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.69	26.76	26.84	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.62	26.68	26.66	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.62	26.80	26.80	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.74	26.83	26.89	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.77	26.80	26.88	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.78	26.81	26.73	27.0	0.0	



Par270 n77 Ant1 DS4

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								
Frequency (MHz)								
100	PI2 BPSK	1	1	21.90	22.02	22.06		
100	PI2 BPSK	1	137	21.93	21.91	21.82	23.7	0.0
100	PI2 BPSK	1	271	22.01	21.99	21.90		
100	PI2 BPSK	135	0	22.07	22.06	22.03	23.7	0.0
100	PI2 BPSK	135	69	21.78	21.80	22.01	23.7	0.0
100	PI2 BPSK	135	138	21.67	21.78	21.67	23.7	0.0
100	PI2 BPSK	270	0	22.04	22.01	21.91		
100	QPSK	1	1	22.06	22.09	22.00		
100	QPSK	1	137	22.04	22.05	21.97	23.7	0.0
100	QPSK	1	271	22.00	22.05	22.00		
100	QPSK	135	0	21.83	21.93	22.02	23.7	0.0
100	QPSK	135	69	21.85	22.04	21.83	23.7	0.0
100	QPSK	135	138	22.00	21.85	22.01	23.7	0.0
100	QPSK	270	0	21.88	22.05	21.87		
100	16QAM	1	1	21.85	21.96	21.84	23.7	0.0
100	16QAM	1	1	21.47	21.47	21.56	23.2	0.6
100	256QAM	1	1	19.47	19.38	19.41	21.2	2.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	21.91	21.83	22.03	23.7	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	21.95	21.88	21.90	23.7	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	21.78	21.87	22.03	23.7	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	21.87	21.95	21.94	23.7	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	21.95	21.87	21.98	23.7	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	21.81	22.01	21.98	23.7	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	21.90	21.86	21.89	23.7	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	21.83	21.99	21.97	23.7	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	21.98	21.82	22.03	23.7	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	21.85	21.86	22.08	23.7	0.0

Part27Q n77 Ant1 DS4

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								
Frequency (MHz)								
100	PI2 BPSK	1	1	21.72	21.71	21.72		
100	PI2 BPSK	1	137	21.71	21.71	21.71	23.7	0.0
100	PI2 BPSK	1	271	21.70	21.70	21.70		
100	PI2 BPSK	135	0	21.76	21.76	21.76	23.7	0.0
100	PI2 BPSK	135	69	21.74	21.74	21.74	23.7	0.0
100	PI2 BPSK	135	138	21.76	21.76	21.76	23.7	0.0
100	PI2 BPSK	270	0	21.71	21.71	21.71		
100	QPSK	1	1	21.81	21.81	21.81	23.7	0.0
100	QPSK	1	137	21.70	21.70	21.70	23.7	0.0
100	QPSK	1	271	21.80	21.80	21.80		
100	QPSK	135	0	21.72	21.72	21.72	23.7	0.0
100	QPSK	135	69	21.77	21.77	21.77	23.7	0.0
100	QPSK	135	138	21.72	21.72	21.72	23.7	0.0
100	QPSK	270	0	21.68	21.68	21.68	23.7	0.0
100	16QAM	1	1	21.72	21.72	21.72	23.7	0.0
100	16QAM	1	1	21.22	21.22	21.22	23.2	0.6
100	256QAM	1	1	19.23	19.23	19.23	21.2	0.6
Channel								
Frequency (MHz)								
90	QPSK	1	123	21.45	21.47	21.59	23.7	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	109	21.44	21.43	21.57	23.7	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	95	21.45	21.47	21.50	23.7	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	81	21.49	21.38	21.59	23.7	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	67	21.39	21.43	21.54	23.7	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	53	21.38	21.40	21.40	23.7	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	39	21.39	21.48	21.50	23.7	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	25	21.39	21.41	21.56	23.7	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	19	21.48	21.42	21.56	23.7	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	12	21.47	21.39	21.49	23.7	0.0

Part270 n78 Ant1 DS4 PC2&3

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								
Frequency (MHz)								
100	PI2 BPSK	1	1	23.78	23.78	23.78	25.0	0.0
100	PI2 BPSK	1	137	23.67	23.67	23.67	25.0	0.0
100	PI2 BPSK	1	271	23.69	23.69	23.69	25.0	0.0
100	PI2 BPSK	135	0	23.57	23.57	23.57	25.0	0.0
100	PI2 BPSK	135	69	23.63	23.63	23.63	25.0	0.0
100	PI2 BPSK	135	138	23.53	23.53	23.53	25.0	0.0
100	PI2 BPSK	270	0	23.48	23.48	23.48	25.0	0.0
100	QPSK	1	1	23.65	23.65	23.65	25.0	0.0
100	QPSK	1	137	23.60	23.60	23.60	25.0	0.0
100	QPSK	1	271	23.59	23.59	23.59	25.0	0.0
100	QPSK	135	0	23.51	23.51	23.51	25.0	0.0
100	QPSK	135	69	23.48	23.48	23.48	25.0	0.0
100	QPSK	135	138	23.42	23.42	23.42	25.0	0.0
100	QPSK	270	0	23.45	23.45	23.45	25.0	0.5
100	16QAM	1	1	23.80	23.80	23.80	24.7	0.0
100	16QAM	1	1	22.22	22.22	22.22	23.2	0.6
100	256QAM	1	1	19.97	19.97	19.97	21.2	0.6
Channel								
Frequency (MHz)								
90	QPSK	1	1	24.01	24.02	24.01	25.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	24.05	24.10	24.22	25.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	24.16	24.13	24.10	25.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	24.31	24.37	24.35	25.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	24.12	24.16	24.11	25.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	24.11	24.17	24.10	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	24.01	24.08	24.06	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	24.11	24.19	24.21	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.29	23.56	23.41	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.85	23.87	23.89	25.0	0.0



Part27Q n78 Ant11 DS4 PC2&3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				633000	633334	633668			
Frequency (MHz)				3495	3500.01	3505.02			
100	PI2 BPSK	1	1	23.48					
100	PI2 BPSK	1	137	23.22			25.0	0.0	
100	PI2 BPSK	1	271	23.28					
100	PI2 BPSK	135	0	23.18			25.0	0.0	
100	PI2 BPSK	135	69	23.06			25.0	0.0	
100	PI2 BPSK	135	138	23.14			25.0	0.0	
100	PI2 BPSK	270	0	23.17			25.0	0.0	
100	QPSK	1	1	23.81			25.0	0.0	
100	QPSK	1	137	23.12					
100	QPSK	1	271	23.25			25.0	0.0	
100	QPSK	135	0	23.12					
100	QPSK	135	69	23.21			25.0	0.0	
100	QPSK	135	138	22.98			25.0	0.0	
100	QPSK	270	0	23.10			25.0	0.0	
100	16QAM	1	1	23.36			24.7	0.0	
100	16QAM	1	1	21.80			24.2	0.0	
100	256QAM	1	1	19.00			21.2	0.0	
Channel				633000	633334	633668			
Frequency (MHz)				3495	3500.01	3505.02			
90	QPSK	1	123	23.94	23.52	23.49	23.0	0.0	
Channel				632668	633334	634000			
Frequency (MHz)				3490.02	3500.01	3510			
80	QPSK	1	109	23.44	23.56	23.51	23.0	0.0	
Channel				632334	633334	634334			
Frequency (MHz)				3485.01	3500.01	3515.01			
70	QPSK	1	95	23.56	23.59	23.58	23.0	0.0	
Channel				632000	633334	634668			
Frequency (MHz)				3480	3500.01	3530.00			
60	QPSK	1	81	23.57	23.50	23.50	23.0	0.0	
Channel				631668	633334	635000			
Frequency (MHz)				3475.02	3500.01	3525			
50	QPSK	1	67	23.57	23.01	23.50	23.0	0.0	
Channel				631334	633334	635334			
Frequency (MHz)				3470.01	3500.01	3530.01			
40	QPSK	1	53	23.20	23.50	23.50	23.0	0.0	
Channel				631000	633334	635668			
Frequency (MHz)				3465	3500.01	3535.02			
30	QPSK	1	39	23.53	23.60	23.48	23.0	0.0	
Channel				630668	633334	636000			
Frequency (MHz)				3460.02	3500.01	3540			
20	QPSK	1	26	23.50	23.56	23.52	23.0	0.0	
Channel				630300	633334	636368			
Frequency (MHz)				3455.5	3500.01	3542.40			
15	QPSK	1	19	23.58	23.57	23.58	23.0	0.0	
Channel				630334	633334	636334			
Frequency (MHz)				3455.01	3500.01	3545.01			
10	QPSK	1	12	23.51	23.56	23.51	23.0	0.0	



Part270 n77 Ant1 DS14							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq. [dBm]	Power Mid Ch./Freq. [dBm]	Power High Ch./Freq. [dBm]	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1	24.09	24.12	24.14	0.0
100	PI2 BPSK	1	137	24.10	24.18	24.21	0.0
100	PI2 BPSK	1	271	24.09	24.10	24.13	0.0
100	PI2 BPSK	135	69	24.05	24.05	24.07	0.0
100	PI2 BPSK	135	69	24.12	24.07	24.08	0.0
100	PI2 BPSK	135	138	23.58	23.54	23.55	0.5
100	PI2 BPSK	270	0	23.80	23.49	23.53	0.0
100	QPSK	1	1	24.17	23.92	24.15	0.0
100	QPSK	1	137	24.19	24.14	24.10	0.0
100	QPSK	1	271	24.11	24.19	24.07	0.0
100	QPSK	135	69	23.96	23.90	23.92	1.0
100	QPSK	135	69	24.02	24.08	24.01	0.0
100	QPSK	135	138	23.15	23.05	23.01	1.0
100	QPSK	270	0	22.89	22.96	22.85	0.0
100	16QAM	1	1	23.37	23.29	23.33	1.0
100	64QAM	1	1	21.99	21.88	21.80	2.5
100	256QAM	1	1	19.89	19.84	19.87	4.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	24.96	24.02	24.14	0.0
Channel							
Frequency (MHz)							
80	QPSK	1	1	24.03	24.04	24.12	0.0
Channel							
Frequency (MHz)							
70	QPSK	1	1	23.87	24.05	24.10	0.0
Channel							
Frequency (MHz)							
60	QPSK	1	1	24.01	23.90	23.98	0.0
Channel							
Frequency (MHz)							
50	QPSK	1	1	23.93	24.08	23.95	0.0
Channel							
Frequency (MHz)							
40	QPSK	1	1	23.75	23.80	23.85	0.0
Channel							
Frequency (MHz)							
30	QPSK	1	1	23.38	23.96	24.00	0.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	24.10	24.00	24.02	0.0
Channel							
Frequency (MHz)							
15	QPSK	1	1	24.97	24.09	24.15	0.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	23.98	24.06	24.00	0.0

Part270 n77 Ant1 DS14							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq. [dBm]	Power Mid Ch./Freq. [dBm]	Power High Ch./Freq. [dBm]	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1	24.40			0.0
100	PI2 BPSK	1	137	24.30			0.0
100	PI2 BPSK	1	271	24.36			0.0
100	PI2 BPSK	135	69	24.32			0.0
100	PI2 BPSK	135	69	24.41			0.0
100	PI2 BPSK	135	138	23.85			0.5
100	PI2 BPSK	270	0	24.73			0.0
100	QPSK	1	1	24.97			0.0
100	QPSK	1	137	24.47			0.0
100	QPSK	1	271	24.45			0.0
100	QPSK	135	69	23.39			0.0
100	QPSK	135	69	24.40			0.0
100	QPSK	135	138	23.33			1.0
100	QPSK	270	0	23.29			1.0
100	16QAM	1	1	23.55			1.0
100	64QAM	1	1	22.16			2.5
100	256QAM	1	1	19.89			4.5
Channel							
Frequency (MHz)							
90	QPSK	1	123	24.40	24.55	24.36	0.0
Channel							
Frequency (MHz)							
80	QPSK	1	106	24.35	24.48	24.33	0.0
Channel							
Frequency (MHz)							
70	QPSK	1	95	24.37	24.02	24.38	0.0
Channel							
Frequency (MHz)							
60	QPSK	1	81	24.21	24.50	24.43	0.0
Channel							
Frequency (MHz)							
50	QPSK	1	67	24.34	24.54	24.53	0.0
Channel							
Frequency (MHz)							
40	QPSK	1	53	24.29	24.53	24.43	0.0
Channel							
Frequency (MHz)							
30	QPSK	1	39	24.41	24.52	24.40	0.0
Channel							
Frequency (MHz)							
20	QPSK	1	26	24.35	24.53	24.35	0.0
Channel							
Frequency (MHz)							
15	QPSK	1	19	24.41	24.53	24.42	0.0
Channel							
Frequency (MHz)							
10	QPSK	1	12	24.44	24.43	24.41	0.0

Part270 n78 Ant1 DS14 PC3							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq. [dBm]	Power Mid Ch./Freq. [dBm]	Power High Ch./Freq. [dBm]	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1	24.06			0.0
100	PI2 BPSK	1	137	24.36			0.0
100	PI2 BPSK	1	271	24.16			0.0
100	PI2 BPSK	135	69	23.71			0.5
100	PI2 BPSK	135	69	24.24			0.0
100	PI2 BPSK	135	138	23.87			0.5
100	PI2 BPSK	270	0	24.80			0.0
100	QPSK	1	1	24.92			0.0
100	QPSK	1	137	24.19			0.0
100	QPSK	1	271	24.33			0.0
100	QPSK	135	69	23.19			1.0
100	QPSK	135	69	24.21			0.0
100	QPSK	135	138	23.95			1.0
100	QPSK	270	0	23.12			1.0
100	16QAM	1	1	22.85			1.0
100	64QAM	1	1	21.82			2.5
100	256QAM	1	1	19.87			4.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	24.20	24.27	24.12	0.0
Channel							
Frequency (MHz)							
80	QPSK	1	1	24.07	24.09	24.10	0.0
Channel							
Frequency (MHz)							
70	QPSK	1	1	24.12	24.26	24.02	0.0
Channel							
Frequency (MHz)							
60	QPSK	1	1	24.29	24.09	23.87	0.0
Channel							
Frequency (MHz)							
50	QPSK	1	1	24.11	24.08	24.06	0.0
Channel							
Frequency (MHz)							
40	QPSK	1	1	24.11	24.08	24.06	0.0
Channel							
Frequency (MHz)							
30	QPSK	1	1	24.14	24.05	24.12	0.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	24.10	24.24	24.00	0.0
Channel							
Frequency (MHz)							
15	QPSK	1	1	24.20	24.25	24.12	0.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	24.17	24.25	23.95	0.0



Part27Q 78 Ant12 DS4 PC3									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.79	24.79	24.79			
100	PI2 BPSK	1	137	24.80	24.80	24.80	25.7	0.0	
100	PI2 BPSK	1	271	24.80	24.80	24.80			
100	PI2 BPSK	135	69	24.80	24.80	24.80	25.7	0.0	
100	PI2 BPSK	135	138	24.26	24.26	24.26	26.2	0.0	
100	PI2 BPSK	270	0	24.26	24.26	24.26			
100	QPSK	1	1	24.84	24.84	24.84	25.7	0.0	
100	QPSK	1	137	24.79	24.79	24.79			
100	QPSK	1	271	24.79	24.79	24.79			
100	QPSK	135	69	24.79	24.79	24.79	25.7	0.0	
100	QPSK	135	138	23.50	23.50	23.50	24.7	1.0	
100	QPSK	270	0	23.50	23.50	23.50			
100	16QAM	1	1	24.01	24.01	24.01	24.7	1.0	
100	64QAM	1	1	23.61	23.61	23.61	24.2	2.5	
100	256QAM	1	1	20.33	20.33	20.33	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	123	24.73	24.86	24.63	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	24.73	24.87	24.69	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	24.70	24.91	24.67	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	24.74	24.87	24.60	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	24.69	24.82	24.62	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	24.73	24.87	24.60	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	24.74	24.90	24.63	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	24.70	24.91	24.67	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	24.76	24.91	24.67	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	24.74	24.85	24.64	25.7	0.0	

Part27O n78 Ant12 PC2 DS4									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.34	25.34	25.34			
100	PI2 BPSK	1	137	25.41	25.41	25.41	27.0	0.0	
100	PI2 BPSK	1	271	25.29	25.29	25.29	23.5	3.5	
100	PI2 BPSK	135	69	25.31	25.31	25.31	27.0	0.0	
100	PI2 BPSK	135	138	24.73	24.73	24.73	23.5	3.5	
100	PI2 BPSK	270	0	24.67	24.67	24.67	26.9	0.0	
100	QPSK	1	1	25.65	25.65	25.65	27.0	0.0	
100	QPSK	1	137	25.32	25.32	25.32	27.0	0.0	
100	QPSK	1	271	25.26	25.26	25.26	23.5	3.5	
100	QPSK	135	69	24.21	24.21	24.21	23.5	3.5	
100	QPSK	135	138	25.31	25.31	25.31	27.0	0.0	
100	QPSK	135	138	24.76	24.76	24.76	23.5	3.5	
100	QPSK	270	0	24.77	24.77	24.77	26.6	0.5	
100	16QAM	1	1	24.66	24.66	24.66	25.0	1.0	
100	64QAM	1	1	23.06	23.06	23.06	24.5	2.5	
100	256QAM	1	1	20.74	20.74	20.74	22.6	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	123	25.26	25.44	25.21	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	25.27	25.37	25.29	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	25.27	25.43	25.26	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	25.30	25.43	25.27	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	25.27	25.38	25.26	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	25.35	25.34	25.29	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	25.27	25.44	25.22	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	25.27	25.40	25.23	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	25.35	25.41	25.20	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	25.27	25.41	25.27	27.0	0.0	

Part27Q 78 Ant12 PC2 DS4									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.33	26.33	26.33			
100	PI2 BPSK	1	137	26.40	26.40	26.40	27.0	0.0	
100	PI2 BPSK	1	271	26.27	26.27	26.27	23.5	3.5	
100	PI2 BPSK	135	69	26.30	26.30	26.30	27.0	0.0	
100	PI2 BPSK	135	138	25.70	25.70	25.70	23.5	3.5	
100	PI2 BPSK	270	0	25.72	25.72	25.72	26.5	0.0	
100	QPSK	1	1	26.41	26.41	26.41	27.0	0.0	
100	QPSK	1	137	26.37	26.37	26.37	27.0	0.0	
100	QPSK	1	271	26.26	26.26	26.26	23.5	3.5	
100	QPSK	135	69	25.16	25.16	25.16	23.5	3.5	
100	QPSK	135	138	26.31	26.31	26.31	27.0	0.0	
100	QPSK	135	138	25.13	25.13	25.13	23.5	3.5	
100	QPSK	270	0	25.21	25.21	25.21	26.5	0.5	
100	16QAM	1	1	25.23	25.23	25.23	25.0	1.0	
100	64QAM	1	1	24.08	24.08	24.08	24.5	2.5	
100	256QAM	1	1	21.79	21.79	21.79	22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	123	26.32	26.42	26.18	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	26.30	26.39	26.24	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	26.22	26.37	26.14	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	26.36	26.36	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	26.26	26.30	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	26.28	26.30	26.24	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	26.30	26.33	26.18	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	26.23	26.37	26.18	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	26.28	26.34	26.14	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	26.26	26.33	26.17	27.0	0.0	



Part270 n7 Ant1 DS4							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq. (dBm)	Power Mid Ch./Freq. (dBm)	Power High Ch./Freq. (dBm)	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1	24.10	24.18	24.11	0.0
100	PI2 BPSK	1	137	24.01	24.19	24.17	0.0
100	PI2 BPSK	1	271	23.94	24.06	24.06	0.0
100	PI2 BPSK	135	0	23.55	23.61	23.62	0.5
100	PI2 BPSK	135	69	23.96	24.08	23.99	0.0
100	PI2 BPSK	135	138	23.49	23.45	23.56	0.5
100	PI2 BPSK	270	0	23.90	23.92	23.96	0.0
100	QPSK	1	1	24.15	24.16	23.99	0.0
100	QPSK	1	137	24.11	24.20	24.11	0.0
100	QPSK	1	271	23.99	24.05	24.07	0.0
100	QPSK	135	0	23.21	23.19	23.03	1.0
100	QPSK	135	69	23.94	24.07	23.99	0.0
100	QPSK	135	138	23.00	22.91	22.85	1.0
100	QPSK	270	0	22.96	22.98	22.92	0.0
100	16QAM	1	1	23.43	23.41	23.42	1.0
100	64QAM	1	1	21.85	21.80	21.84	2.5
100	256QAM	1	1	19.66	19.62	19.62	4.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	24.01	24.16	23.98	0.0
Channel							
Frequency (MHz)							
80	QPSK	1	1	23.93	24.08	23.90	0.0
Channel							
Frequency (MHz)							
70	QPSK	1	1	23.93	24.01	24.05	0.0
Channel							
Frequency (MHz)							
60	QPSK	1	1	24.10	24.03	24.01	0.0
Channel							
Frequency (MHz)							
50	QPSK	1	1	23.97	23.96	24.07	0.0
Channel							
Frequency (MHz)							
40	QPSK	1	1	23.97	23.96	24.07	0.0
Channel							
Frequency (MHz)							
30	QPSK	1	1	24.06	24.19	23.90	0.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	23.93	24.19	23.93	0.0
Channel							
Frequency (MHz)							
15	QPSK	1	1	24.05	24.05	24.12	0.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	24.04	24.09	24.11	0.0

Part270 n7 Ant1 DS4							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq. (dBm)	Power Mid Ch./Freq. (dBm)	Power High Ch./Freq. (dBm)	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1		24.54		0.0
100	PI2 BPSK	1	137		24.35		0.0
100	PI2 BPSK	1	271		24.44		0.0
100	PI2 BPSK	135	0		24.95		0.5
100	PI2 BPSK	135	69		24.51		0.0
100	PI2 BPSK	135	138		23.84		0.5
100	PI2 BPSK	270	0		24.96		0.0
100	QPSK	1	1		24.56		0.0
100	QPSK	1	137		24.56		0.0
100	QPSK	1	271		24.40		0.0
100	QPSK	135	0		24.50		0.0
100	QPSK	135	69		24.60		0.0
100	QPSK	135	138		24.10		0.0
100	QPSK	270	0		23.36		1.0
100	16QAM	1	1		23.80		1.0
100	64QAM	1	1		22.23		2.5
100	256QAM	1	1		20.04		4.5
Channel							
Frequency (MHz)							
90	QPSK	1	123		24.44	24.59	24.37
Channel							
Frequency (MHz)							
80	QPSK	1	106		24.46	24.56	24.42
Channel							
Frequency (MHz)							
70	QPSK	1	95		24.45	24.54	24.35
Channel							
Frequency (MHz)							
60	QPSK	1	81		24.49	24.60	24.38
Channel							
Frequency (MHz)							
50	QPSK	1	67		24.42	24.54	24.43
Channel							
Frequency (MHz)							
40	QPSK	1	53		24.42	24.59	24.39
Channel							
Frequency (MHz)							
30	QPSK	1	39		24.46	24.55	24.36
Channel							
Frequency (MHz)							
20	QPSK	1	26		24.40	24.59	24.39
Channel							
Frequency (MHz)							
15	QPSK	1	19		24.48	24.59	24.44
Channel							
Frequency (MHz)							
10	QPSK	1	12		24.45	24.56	24.36

Part270 n7 Ant1 DS4 PC3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq. (dBm)	Power Mid Ch./Freq. (dBm)	Power High Ch./Freq. (dBm)	MPR (dB)
Channel							
Frequency (MHz)							
100	PI2 BPSK	1	1		24.11		0.0
100	PI2 BPSK	1	137		24.21		0.0
100	PI2 BPSK	1	271		24.07		0.0
100	PI2 BPSK	135	0		23.82		0.5
100	PI2 BPSK	135	69		24.07		0.0
100	PI2 BPSK	135	138		23.34		0.5
100	PI2 BPSK	270	0		23.48		0.0
100	QPSK	1	1		24.26		0.0
100	QPSK	1	137		24.23		0.0
100	QPSK	1	271		24.05		0.0
100	QPSK	135	0		23.02		1.0
100	QPSK	135	69		24.03		0.0
100	QPSK	135	138		22.83		1.0
100	QPSK	270	0		22.52		1.0
100	16QAM	1	1		22.86		1.0
100	64QAM	1	1		21.85		2.5
100	256QAM	1	1		19.81		4.5
Channel							
Frequency (MHz)							
90	QPSK	1	1		24.12	24.23	24.13
Channel							
Frequency (MHz)							
80	QPSK	1	1		24.00	24.09	24.08
Channel							
Frequency (MHz)							
70	QPSK	1	1		24.09	24.22	24.17
Channel							
Frequency (MHz)							
60	QPSK	1	1		24.17	24.07	24.06
Channel							
Frequency (MHz)							
50	QPSK	1	1		24.20	24.04	24.10
Channel							
Frequency (MHz)							
40	QPSK	1	1		24.20	24.04	24.10
Channel							
Frequency (MHz)							
30	QPSK	1	1		23.98	24.08	24.13
Channel							
Frequency (MHz)							
20	QPSK	1	1		24.04	24.14	24.13
Channel							
Frequency (MHz)							
15	QPSK	1	1		24.20	24.01	24.05
Channel							
Frequency (MHz)							
10	QPSK	1	1		24.06	24.22	24.24



Part27Q n78 Ant13 DS14 PC3									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.03	24.03	24.03			
100	PI2 BPSK	1	137	24.81	24.81	24.81	25.7	0.0	
100	PI2 BPSK	1	271	24.13	24.13	24.13			
100	PI2 BPSK	135	69	23.96	23.96	23.96			
100	PI2 BPSK	135	69	24.46	24.46	24.46	25.7	0.0	
100	PI2 BPSK	135	138	23.85	23.85	23.85			
100	PI2 BPSK	270	0	23.99	23.99	23.99	25.2	0.5	
100	QPSK	1	1	24.56	24.56	24.56			
100	QPSK	1	137	24.84	24.84	24.84	25.7	0.0	
100	QPSK	1	271	24.49	24.49	24.49			
100	QPSK	135	69	23.54	23.54	23.54			
100	QPSK	135	69	24.44	24.44	24.44	25.7	0.0	
100	QPSK	135	138	23.35	23.35	23.35			
100	QPSK	270	0	23.35	23.35	23.35	24.7	1.0	
100	16QAM	1	1	23.92	23.92	23.92	24.7	1.0	
100	64QAM	1	1	22.23	22.23	22.23	23.2	2.5	
100	256QAM	1	1	20.24	20.24	20.24	21.2	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	123	24.44	24.44	24.37	25.7	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	24.46	24.46	24.42	25.7	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	24.45	24.54	24.36	25.7	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	24.49	24.10	24.39	25.7	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	24.42	24.54	24.43	25.7	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	24.42	24.59	24.39	25.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	24.46	24.55	24.36	25.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	24.40	24.59	24.39	25.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	24.48	24.59	24.44	25.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	24.45	24.55	24.35	25.7	0.0	

Part27Q n78 Ant13 DS14 PC2									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.34	26.34	26.34			
100	PI2 BPSK	1	137	26.25	26.25	26.25	27.0	0.0	
100	PI2 BPSK	1	271	26.34	26.34	26.34			
100	PI2 BPSK	135	69	26.29	26.29	26.29	26.5	0.5	
100	PI2 BPSK	135	69	26.24	26.24	26.24	27.0	0.0	
100	PI2 BPSK	135	138	25.62	25.62	25.62			
100	PI2 BPSK	270	0	25.71	25.71	25.71	26.5	0.5	
100	QPSK	1	1	26.61	26.61	26.61			
100	QPSK	1	137	26.26	26.26	26.26	27.0	0.0	
100	QPSK	1	271	26.35	26.35	26.35			
100	QPSK	135	69	26.32	26.32	26.32	26.9	1.0	
100	QPSK	135	69	26.09	26.09	26.09	27.0	0.0	
100	QPSK	135	138	25.01	25.01	25.01			
100	QPSK	270	0	25.05	25.05	25.05	26.0	1.0	
100	16QAM	1	1	25.20	25.20	25.20	24.5	1.0	
100	64QAM	1	1	23.87	23.87	23.87	24.5	2.5	
100	256QAM	1	1	21.85	21.85	21.85	22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.26	26.31	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.22	26.40	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.29	26.34	26.25	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.29	26.35	26.21	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.25	26.42	26.31	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.29	26.33	26.19	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.19	26.39	26.19	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.24	26.34	26.21	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.20	26.37	26.25	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.30	26.38	26.19	27.0	0.0	

Part27Q n78 Ant13 DS14 PC2									
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									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.29	26.29	26.29			
100	PI2 BPSK	1	137	26.26	26.26	26.26	27.0	0.0	
100	PI2 BPSK	1	271	26.22	26.22	26.22			
100	PI2 BPSK	135	69	26.25	26.25	26.25			
100	PI2 BPSK	135	69	26.20	26.20	26.20	27.0	0.0	
100	PI2 BPSK	135	138	25.48	25.48	25.48			
100	PI2 BPSK	270	0	25.70	25.70	25.70	26.5	0.5	
100	QPSK	1	1	26.51	26.51	26.51			
100	QPSK	1	137	26.43	26.43	26.43	27.0	0.0	
100	QPSK	1	271	26.30	26.30	26.30			
100	QPSK	135	69	26.25	26.25	26.25	26.5	0.5	
100	QPSK	135	69	26.28	26.28	26.28	27.0	0.0	
100	QPSK	135	138	25.08	25.08	25.08			
100	QPSK	270	0	25.17	25.17	25.17	26.0	1.0	
100	16QAM	1	1	25.28	25.28	25.28	24.5	1.0	
100	64QAM	1	1	23.89	23.89	23.89	24.5	2.5	
100	256QAM	1	1	21.66	21.66	21.66	22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	123	26.17	26.41	26.22	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	26.21	26.42	26.17	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	95	26.18	26.43	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	26.23	26.40	26.18	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	26.21	26.47	26.19	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	26.24	26.47	26.28	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	26.19	26.38	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	26.21	26.49	26.27	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	26.13	26.41	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	26.15	26.45	26.23	27.0	0.0	



n5 Ant0 DS12									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				168300	167300	167600			
Frequency (MHz)				834	836.5	839			
20	PI2 BPSK	1	1	24.38	24.42	24.45			
20	PI2 BPSK	1	53	24.24	24.41	24.39			
20	PI2 BPSK	1	104	24.41	24.35	24.43	25.5	0.0	
20	PI2 BPSK	50	0	23.97	23.90	23.98	25.0	0.5	
20	PI2 BPSK	50	28	24.26	24.37	24.32	25.5	0.0	
20	PI2 BPSK	50	58	23.85	23.81	23.79			
20	PI2 BPSK	100	0	23.83	23.93	23.84	25.0	0.5	
20	QPSK	1	1	24.38	24.46	24.37			
20	QPSK	1	53	24.43	24.39	24.28	25.5	0.0	
20	QPSK	1	104	24.33	24.38	24.40			
20	QPSK	50	0	23.44	23.38	23.34	24.5	1.0	
20	QPSK	50	28	24.44	24.45	24.44	25.5	0.0	
20	QPSK	50	58	23.25	23.28	23.33	24.5	1.0	
20	QPSK	100	0	23.25	23.38	23.35			
20	16QAM	1	1	23.58	23.54	23.47	24.5	1.0	
20	16QAM	1	1	22.10	22.04	22.01	23.0	2.5	
20	256QAM	1	1	20.00	19.89	19.92	21.0	4.5	
Channel				168300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	24.33	24.31	24.40	25.5	0.0	
Channel				168300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				839	836.5	844			
10	QPSK	1	1	24.32	24.21	24.24	25.5	0.0	
Channel				168300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				841.5	836.5	844.5			
5	QPSK	1	1	24.28	24.31	24.32	25.5	0.0	

n7 Ant0 DS12									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				503000	507000	510000			
Frequency (MHz)				2620	2635	2650			
40	PI2 BPSK	1	1	19.53	19.64	19.61			
40	PI2 BPSK	1	108	19.88	19.76	19.88	21.5	0.0	
40	PI2 BPSK	1	214	19.75	19.85	19.87			
40	PI2 BPSK	108	0	19.62	19.71	19.62	21.5	0.0	
40	PI2 BPSK	108	54	19.72	19.64	19.65	21.5	0.0	
40	PI2 BPSK	108	108	19.57	19.65	19.64			
40	PI2 BPSK	216	0	19.74	19.72	19.78	21.5	0.0	
40	QPSK	1	1	19.83	19.93	19.73			
40	QPSK	1	108	19.74	19.82	19.72	21.5	0.0	
40	QPSK	1	214	19.72	19.78	19.72			
40	QPSK	108	0	19.65	19.71	19.68	21.5	0.0	
40	QPSK	108	54	19.54	19.83	19.69	21.5	0.0	
40	QPSK	108	108	19.73	19.64	19.74			
40	QPSK	216	0	19.76	19.79	19.69			
40	16QAM	1	1	19.78	19.84	19.81	21.5	0.0	
40	16QAM	1	1	19.77	19.78	19.68	21.5	0.0	
40	256QAM	1	1	18.28	18.17	18.06	20.0	1.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2615	2635	2655			
30	QPSK	1	1	19.63	19.70	19.65	21.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2612.5	2635	2657.5			
25	QPSK	1	1	19.67	19.81	19.59	21.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2610	2635	2660			
20	QPSK	1	1	19.79	19.80	19.73	21.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2607.5	2635	2662.5			
15	QPSK	1	1	19.88	19.86	19.65	21.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2605	2635	2668			
10	QPSK	1	1	19.84	19.84	19.65	21.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2602.5	2635	2672.5			
5	QPSK	1	1	19.63	19.88	19.71	21.5	0.0	

n66 Ant0 DS12									
BW (MHz)	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI2 BPSK	1	1	22.84	22.94	22.87			
40	PI2 BPSK	1	108	22.88	22.89	22.77	23.5	0.0	
40	PI2 BPSK	1	214	22.84	22.97	22.91			
40	PI2 BPSK	108	0	22.43	22.41	22.37	23.5	0.0	
40	PI2 BPSK	108	54	22.76	22.83	22.71	23.5	0.0	
40	PI2 BPSK	108	108	22.43	22.39	22.38			
40	PI2 BPSK	216	0	22.42	22.33	22.38	23.5	0.0	
40	QPSK	1	1	22.84	22.88	22.84			
40	QPSK	1	108	22.82	22.88	22.88	23.5	0.0	
40	QPSK	1	214	22.91	22.93	22.91			
40	QPSK	108	0	21.84	21.88	21.95	23.5	0.0	
40	QPSK	108	54	22.88	22.91	22.88	23.5	0.0	
40	QPSK	108	108	21.81	21.92	21.81	23.5	0.0	
40	QPSK	216	0	21.73	21.89	21.83			
40	16QAM	1	1	22.22	22.12	22.15	23.5	0.0	
40	16QAM	1	1	20.47	20.53	20.49	22.0	1.5	
40	256QAM	1	1	18.42	18.35	18.24	20.0	3.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	22.88	22.74	22.82	23.5	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	22.67	22.88	22.83	23.5	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
15	QPSK	1	1	22.83	22.77	22.85	23.5	0.0	
Channel				342000	349000	356000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
10	QPSK	1	1	22.73	22.87	22.77	23.5	0.0	
Channel				341000	349000	357000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	22.70	22.87	22.78	23.5	0.0	



n38 Ant0 DSI2									
BW [MHz]	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	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	17.28	17.23	17.19			
40	PI/2 BPSK	1	53	16.40	16.39	16.50	19.0	0.0	
40	PI/2 BPSK	1	104	14.88	14.97	14.99			
40	PI/2 BPSK	50	0	16.89	16.92	16.84	19.0	0.0	
40	PI/2 BPSK	50	28	16.44	16.36	16.44	19.0	0.0	
40	PI/2 BPSK	50	56	15.62	15.60	15.57	19.0	0.0	
40	PI/2 BPSK	100	0	16.46	16.40	16.34			
40	QPSK	1	1	17.38	17.46	17.31			
40	QPSK	1	53	16.37	16.37	16.44	19.0	0.0	
40	QPSK	1	104	15.03	14.97	15.05			
40	QPSK	50	0	17.03	16.96	17.01	19.0	0.0	
40	QPSK	50	28	16.61	17.07	16.69	19.0	0.0	
40	QPSK	50	56	15.57	15.59	15.62	19.0	0.0	
40	QPSK	100	0	16.30	16.30	16.34	19.0	0.0	
40	16QAM	1	1	17.38	17.25	17.37	19.0	0.0	
40	64QAM	1	1	17.44	17.40	17.32	19.0	0.0	
40	256QAM	1	1	16.66	16.77	16.87	18.5	0.5	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	17.39	17.25	17.10	19.0	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	17.35	17.38	17.17	19.0	0.0	
Channel				515002	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49			
15	PI/2 BPSK	1	1	17.28	17.27	17.20	19.0	0.0	
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98			
10	PI/2 BPSK	1	1	17.27	17.32	17.17	19.0	0.0	

n41 Ant0 DSI2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	15.76	15.72	15.72			
100	PI/2 BPSK	1	137	17.67	17.78	17.66	19.0	0.0	
100	PI/2 BPSK	1	271	17.69	17.67	17.76			
100	PI/2 BPSK	135	0	17.51	17.63	17.54	19.0	0.0	
100	PI/2 BPSK	135	69	17.57	17.60	17.60	19.0	0.0	
100	PI/2 BPSK	135	138	16.65	16.68	16.79	19.0	0.0	
100	PI/2 BPSK	270	0	17.29	17.35	17.44			
100	QPSK	1	1	17.53	17.80	17.38			
100	QPSK	1	137	17.73	17.49	17.75	19.0	0.0	
100	QPSK	1	271	17.76	17.72	17.73			
100	QPSK	135	0	17.73	17.69	17.73	19.0	0.0	
100	QPSK	135	69	17.69	17.76	17.72	19.0	0.0	
100	QPSK	135	138	16.80	16.82	16.57	19.0	0.0	
100	QPSK	270	0	17.28	17.42	17.38			
100	16QAM	1	1	15.94	16.03	16.06	19.0	0.0	
100	64QAM	1	1	15.95	15.96	15.86	19.0	0.0	
100	256QAM	1	1	14.70	14.68	14.70	18.5	0.5	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	17.56	17.75	17.62	19.0	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	17.68	17.72	17.63	19.0	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	17.70	17.72	17.63	19.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98			
60	QPSK	1	1	17.63	17.76	17.78	19.0	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	17.78	17.62	17.58	19.0	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	17.64	17.60	17.55	19.0	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	17.55	17.78	17.73	19.0	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	17.72	17.73	17.69	19.0	0.0	



n7 Ant3_DS12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	Pi/2 BPSK	1	1	18.14	18.10	18.11			
40	Pi/2 BPSK	1	108	18.29	18.17	18.25	20.0	0.0	
40	Pi/2 BPSK	1	214	18.31	18.19	18.31			
40	Pi/2 BPSK	108	0	17.99	18.09	18.12	20.0	0.0	
40	Pi/2 BPSK	108	54	18.03	18.07	18.03	20.0	0.0	
40	Pi/2 BPSK	108	108	18.10	18.11	18.20	20.0	0.0	
40	Pi/2 BPSK	216	0	18.06	18.06	17.97			
40	QPSK	1	1	18.19	18.37	18.29			
40	QPSK	1	108	18.10	18.13	18.17	20.0	0.0	
40	QPSK	1	214	18.36	18.27	18.18			
40	QPSK	108	0	18.20	18.21	18.07	20.0	0.0	
40	QPSK	108	54	18.00	18.11	18.19	20.0	0.0	
40	QPSK	108	108	18.16	18.10	18.12	20.0	0.0	
40	QPSK	216	0	17.98	18.13	18.03			
40	16QAM	1	1	18.22	18.27	18.26	20.0	0.0	
40	64QAM	1	1	18.21	18.22	18.14	20.0	0.0	
40	256QAM	1	1	17.69	17.58	17.62	19.5	0.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555	20.0	0.0	
30	QPSK	1	1	18.18	18.28	18.29	20.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	18.00	18.25	18.30	20.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	18.16	18.29	18.19	20.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	18.00	18.24	18.30	20.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	18.20	18.25	18.18	20.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	18.21	18.18	18.14	20.0	0.0	

n66 Ant3_DS12									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	Pi/2 BPSK	1	1	21.24	21.35	21.25			
40	Pi/2 BPSK	1	108	21.35	21.31	21.36	23.0	0.0	
40	Pi/2 BPSK	1	214	21.28	21.30	21.30			
40	Pi/2 BPSK	108	0	21.34	21.35	21.37	23.0	0.0	
40	Pi/2 BPSK	108	54	21.15	21.24	21.31	23.0	0.0	
40	Pi/2 BPSK	108	108	21.23	21.35	21.28	23.0	0.0	
40	Pi/2 BPSK	216	0	21.30	21.31	21.36			
40	QPSK	1	1	21.34	21.38	21.26			
40	QPSK	1	108	21.20	21.28	21.25	23.0	0.0	
40	QPSK	1	214	21.36	21.31	21.36			
40	QPSK	108	0	21.19	21.30	21.28	23.0	0.0	
40	QPSK	108	54	21.24	21.35	21.18	23.0	0.0	
40	QPSK	108	108	21.21	21.28	21.21	23.0	0.0	
40	QPSK	216	0	21.27	21.33	21.22			
40	16QAM	1	1	21.37	21.29	21.17	23.0	0.0	
40	64QAM	1	1	19.98	19.92	19.85	21.5	1.5	
40	256QAM	1	1	17.76	17.80	17.89	19.5	3.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	21.17	21.26	21.07	23.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	21.25	21.23	21.20	23.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	21.23	21.37	21.22	23.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	21.13	21.24	21.18	23.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	21.16	21.24	21.21	23.0	0.0	



n38 Ant3 DSI2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	17.16	17.14	17.03			
40	PI/2 BPSK	1	53	17.16	17.04	16.96	19.0	0.0	
40	PI/2 BPSK	1	104	17.02	16.99	17.03			
40	PI/2 BPSK	50	0	17.01	17.00	16.93	19.0	0.0	
40	PI/2 BPSK	50	28	16.96	17.02	17.04	19.0	0.0	
40	PI/2 BPSK	50	56	17.09	17.00	17.03	19.0	0.0	
40	PI/2 BPSK	100	0	17.03	16.99	16.95			
40	QPSK	1	1	17.27	17.37	17.33			
40	QPSK	1	53	17.12	17.05	17.02	19.0	0.0	
40	QPSK	1	104	16.98	16.95	16.99			
40	QPSK	50	0	16.93	17.01	16.96	19.0	0.0	
40	QPSK	50	28	16.82	17.08	16.95	19.0	0.0	
40	QPSK	50	56	16.89	16.92	17.01	19.0	0.0	
40	QPSK	100	0	17.02	17.06	17.01	19.0	0.0	
40	16QAM	1	1	17.28	17.20	17.27	19.0	0.0	
40	64QAM	1	1	17.34	17.32	17.31	19.0	0.0	
40	256QAM	1	1	17.23	17.12	17.00	19.0	0.0	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	17.19	17.21	17.30	19.0	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	17.22	17.18	17.27	19.0	0.0	
Channel				515002	518000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2593	2612.49			
15	PI/2 BPSK	1	1	17.17	17.10	17.22	19.0	0.0	
Channel				515004	519000	523996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98			
10	PI/2 BPSK	1	1	17.08	17.25	17.15	19.0	0.0	

n41 Ant3 DSI2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	18.23	18.31	18.24			
100	PI/2 BPSK	1	137	18.27	18.36	18.26	20.0	0.0	
100	PI/2 BPSK	1	271	18.12	18.03	17.99			
100	PI/2 BPSK	135	0	18.40	18.40	18.36	20.0	0.0	
100	PI/2 BPSK	135	69	18.22	18.32	18.24	20.0	0.0	
100	PI/2 BPSK	135	138	18.22	18.20	18.13	20.0	0.0	
100	PI/2 BPSK	270	0	18.26	18.28	18.40			
100	QPSK	1	1	18.46	18.56	18.27			
100	QPSK	1	137	18.35	18.24	18.24	20.0	0.0	
100	QPSK	1	271	18.40	18.32	18.36			
100	QPSK	135	0	18.33	18.29	18.28	20.0	0.0	
100	QPSK	135	69	18.27	18.35	18.24	20.0	0.0	
100	QPSK	135	138	18.16	18.19	18.16	20.0	0.0	
100	QPSK	270	0	18.26	18.34	18.17			
100	16QAM	1	1	18.53	18.38	18.47	20.0	0.0	
100	64QAM	1	1	18.40	18.52	18.51	20.0	0.0	
100	256QAM	1	1	17.26	17.28	17.29	19.5	0.5	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	18.37	18.36	18.28	20.0	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	18.38	18.54	18.21	20.0	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	18.28	18.34	18.23	20.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98			
60	QPSK	1	1	18.42	18.40	18.23	20.0	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	18.34	18.47	18.24	20.0	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	18.48	18.47	18.22	20.0	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	18.38	18.51	18.16	20.0	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	18.29	18.39	18.21	20.0	0.0	



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000	65000	65000		
100	PI2 BPSK	1	1	19.45	19.49	19.52		
100	PI2 BPSK	1	137	19.30	19.41	19.49		0.0
100	PI2 BPSK	1	271	19.55	19.65	19.55		
100	PI2 BPSK	135	0	19.48	19.46	19.58	20.7	0.0
100	PI2 BPSK	135	69	19.47	19.48	19.40	20.7	0.0
100	PI2 BPSK	135	138	19.45	19.39	19.31	20.7	0.0
100	PI2 BPSK	270	0	19.52	19.61	19.63		
100	QPSK	1	1	19.58	19.69	19.55		
100	QPSK	1	137	19.68	19.50	19.65	20.7	0.0
100	QPSK	1	271	19.67	19.66	19.62		
100	QPSK	135	0	19.57	19.52	19.53	20.7	0.0
100	QPSK	135	69	19.65	19.66	19.57	20.7	0.0
100	QPSK	135	138	19.59	19.57	19.47	20.7	0.0
100	QPSK	270	0	19.47	19.53	19.50		
100	16QAM	1	1	19.60	19.63	19.64	20.7	0.0
100	64QAM	1	1	19.53	19.54	19.66	20.7	0.0
100	256QAM	1	1	19.58	19.49	19.57	20.7	0.0
Channel								
Frequency (MHz)				64968	65000	65234	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	19.52	19.43	19.44	20.7	0.0
Channel								
Frequency (MHz)				3745.02	3840	3835.01	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	19.48	19.58	19.39	20.7	0.0
Channel								
Frequency (MHz)				649000	650000	653000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	19.50	19.59	19.48	20.7	0.0
Channel								
Frequency (MHz)				64868	65000	65334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	19.47	19.47	19.54	20.7	0.0
Channel								
Frequency (MHz)				64334	65000	65568	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	19.42	19.64	19.56	20.7	0.0
Channel								
Frequency (MHz)				648000	650000	664000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	19.49	19.43	19.51	20.7	0.0
Channel								
Frequency (MHz)				64768	65000	65434	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	19.48	19.65	19.38	20.7	0.0
Channel								
Frequency (MHz)				3710.01	3840	3870.02	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	19.54	19.62	19.52	20.7	0.0
Channel								
Frequency (MHz)				647168	650000	664834	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	19.36	19.64	19.43	20.7	0.0
Channel								
Frequency (MHz)				647000	650000	655000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	19.58	19.65	19.40	20.7	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)				63334				
100	PI2 BPSK	1	1	19.45	19.50	19.50		
100	PI2 BPSK	1	137	19.36	19.56	19.56	20.7	0.0
100	PI2 BPSK	1	271	19.48	19.48	19.48		
100	PI2 BPSK	135	0	19.48	19.93	19.93	20.7	0.0
100	PI2 BPSK	135	69	19.45	19.45	19.45	20.7	0.0
100	PI2 BPSK	135	138	19.42	19.92	19.92	20.7	0.0
100	PI2 BPSK	270	0	19.67	19.67	19.67	20.7	0.0
100	QPSK	1	1	19.53	19.53	19.53		
100	QPSK	1	137	19.52	19.52	19.52	20.7	0.0
100	QPSK	1	271	19.57	19.57	19.57		
100	QPSK	135	0	19.44	19.44	19.44	20.7	0.0
100	QPSK	135	69	19.46	19.46	19.46	20.7	0.0
100	QPSK	135	138	19.43	19.43	19.43	20.7	0.0
100	QPSK	270	0	19.33	19.33	19.33	20.7	0.0
100	16QAM	1	1	19.67	19.67	19.67	20.7	0.0
100	64QAM	1	1	19.26	19.26	19.26	20.7	0.0
100	256QAM	1	1	19.02	19.02	19.02	20.7	0.0
Channel								
Frequency (MHz)				633000	63334	63368	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	123	19.34	19.40	19.52	20.7	0.0
Channel								
Frequency (MHz)				3490.02	3500.01	3510	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	109	19.41	19.42	19.50	20.7	0.0
Channel								
Frequency (MHz)				632000	63334	63468	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	95	19.25	19.43	19.48	20.7	0.0
Channel								
Frequency (MHz)				631000	63334	63502	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	81	19.39	19.28	19.36	20.7	0.0
Channel								
Frequency (MHz)				63168	63334	63500	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	67	19.36	19.50	19.50	20.7	0.0
Channel								
Frequency (MHz)				63134	63334	63534	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	53	19.31	19.46	19.33	20.7	0.0
Channel								
Frequency (MHz)				631000	63334	63568	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	39	19.36	19.34	19.38	20.7	0.0
Channel								
Frequency (MHz)				3460.02	3500.01	3540	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	26	19.48	19.38	19.40	20.7	0.0
Channel								
Frequency (MHz)				630500	63334	63618	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	19	19.35	19.47	19.53	20.7	0.0
Channel								
Frequency (MHz)				63034	63334	63634	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	12	19.36	19.43	19.38	20.7	0.0

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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				65000	65000	65000		
100	PI2 BPSK	1	1	19.45	19.49	19.52		
100	PI2 BPSK	1	137	19.30	19.41	19.49		0.0
100	PI2 BPSK	1	271	19.55	19.65	19.55		
100	PI2 BPSK	135	0	19.48	19.46	19.58	20.0	0.0
100	PI2 BPSK	135	69	19.47	19.48	19.40	20.0	0.0
100	PI2 BPSK	135	138	19.45	19.39	19.31	20.0	0.0
100	PI2 BPSK	270	0	19.52	19.61	19.63		
100	QPSK	1	1	19.58	19.69	19.55		
100	QPSK	1	137	19.68	19.50	19.65	20.0	0.0
100	QPSK	1	271	19.67	19.66	19.62		
100	QPSK	135	0	19.57	19.52	19.53	20.0	0.0
100	QPSK	135	69	19.65	19.66	19.57	20.0	0.0
100	QPSK	135	138	19.59	19.57	19.47	20.0	0.0
100	QPSK	270	0	19.47	19.53	19.50		
100	16QAM	1	1	19.60	19.63	19.64	20.0	0.0
100	64QAM	1	1	19.53	19.54	19.66	20.0	0.0
100	256QAM	1	1	19.58	19.49	19.57	20.0	0.5
Channel								
Frequency (MHz)				64968	65000	65034	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	19.52	19.43	19.44	20.0	0.0
Channel								
Frequency (MHz)				3745.02	3840	3835.01	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	19.48	19.58	19.39	20.0	0.0
Channel								
Frequency (MHz)				649000	650000	653000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	19.50	19.59	19.48	20.0	0.0
Channel								
Frequency (MHz)				64868	65000	65134	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	19.47	19.47	19.54	20.0	0.0
Channel								
Frequency (MHz)				64334	65000	65568	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	19.42	19.64	19.56	20.0	0.0
Channel								
Frequency (MHz)				648000	650000	662000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	19.49	19.43	19.51	20.0	0.0
Channel								
Frequency (MHz)				64768	65000	65234	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	19.48	19.65	19.38	20.0	0.0
Channel								
Frequency (MHz)				3710.01	3840	3870.02	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	19.54	19.62	19.52	20.0	0.0
Channel								
Frequency (MHz)				647168	650000	662834	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	19.36	19.64	19.43	20.0	0.0
Channel								
Frequency (MHz)				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	19.58	19.65	19.40	20.0	0.0



Part27Q n78 Ant12 DSI2 PC2&3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
100	PI2 BPSK	1	1	18.03	18.03	18.03	20.0	0.0
100	PI2 BPSK	1	137	18.02	18.02	18.02		
100	PI2 BPSK	1	271	18.19	18.19	18.19		
100	PI2 BPSK	135	0	18.92	18.92	18.92	20.0	0.0
100	PI2 BPSK	135	69	18.86	18.86	18.86		
100	PI2 BPSK	135	138	18.73	18.73	18.73		
100	PI2 BPSK	270	0	18.76	18.76	18.76	20.0	0.0
100	QPSK	1	1	18.15	18.15	18.15		
100	QPSK	1	137	18.94	18.94	18.94	20.0	0.0
100	QPSK	1	271	18.72	18.72	18.72		
100	QPSK	135	0	18.92	18.92	18.92	20.0	0.0
100	QPSK	135	69	18.87	18.87	18.87		
100	QPSK	135	138	18.25	18.25	18.25		
100	QPSK	270	0	18.97	18.97	18.97	20.0	0.0
100	16QAM	1	1	18.82	18.82	18.82	20.0	0.0
100	16QAM	1	1	18.27	18.27	18.27	20.0	0.0
100	256QAM	1	1	18.22	18.22	18.22	19.5	0.5
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
90	QPSK	1	123	18.67	18.64	18.97	20.0	0.0
Channel				632938	633334	633730	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	109	18.02	19.03	18.95	20.0	0.0
Channel				632334	633334	634334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3485.01	3500.01	3515.01		
70	QPSK	1	95	18.95	19.01	18.78	20.0	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3480	3500.01	3520.02		
60	QPSK	1	81	18.95	18.85	18.87	20.0	0.0
Channel				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
50	QPSK	1	67	18.94	18.89	18.85	20.0	0.0
Channel				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	53	18.95	18.99	18.85	20.0	0.0
Channel				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	QPSK	1	39	18.83	18.68	18.77	20.0	0.0
Channel				630538	633334	636000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	25	18.90	18.97	18.83	20.0	0.0
Channel				630500	633334	636168	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3457.5	3500.01	3542.58		
15	QPSK	1	19	18.22	18.65	18.22	20.0	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
10	QPSK	1	12	18.17	18.22	18.63	20.0	0.0



n7 Ant4 DSI3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	19.74	19.81	19.76			
40	PI/2 BPSK	1	108	19.80	19.83	19.77	20.5	0.0	
40	PI/2 BPSK	1	214	19.78	19.82	19.82			
40	PI/2 BPSK	108	0	19.80	19.77	19.73	20.5	0.0	
40	PI/2 BPSK	108	54	19.75	19.70	19.62	20.5	0.0	
40	PI/2 BPSK	108	108	19.69	19.74	19.79	20.5	0.0	
40	PI/2 BPSK	216	0	19.71	19.67	19.72			
40	QPSK	1	1	19.73	19.85	19.81			
40	QPSK	1	108	19.78	19.71	19.70	20.5	0.0	
40	QPSK	1	214	19.79	19.83	19.72			
40	QPSK	108	0	19.65	19.76	19.68	20.5	0.0	
40	QPSK	108	54	19.65	19.69	19.61	20.5	0.0	
40	QPSK	108	108	19.62	19.74	19.67	20.5	0.0	
40	QPSK	216	0	19.75	19.77	19.69			
40	16QAM	1	1	19.80	19.79	19.82	20.5	0.0	
40	64QAM	1	1	19.62	19.62	19.61	20.5	0.0	
40	256QAM	1	1	19.65	19.60	19.52	20.5	0.0	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	19.70	19.63	19.66	20.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	19.74	19.83	19.78	20.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	19.65	19.80	19.64	20.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	19.62	19.64	19.64	20.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	19.63	19.69	19.60	20.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	19.61	19.75	19.68	20.5	0.0	

n66 Ant4 DSI3									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	21.42	21.40	21.32			
40	PI/2 BPSK	1	108	21.39	21.42	21.50	22.5	0.0	
40	PI/2 BPSK	1	214	21.36	21.39	21.30			
40	PI/2 BPSK	108	0	21.20	21.26	21.18	22.5	0.0	
40	PI/2 BPSK	108	54	21.37	21.37	21.40	22.5	0.0	
40	PI/2 BPSK	108	108	21.33	21.25	21.20	22.5	0.0	
40	PI/2 BPSK	216	0	21.39	21.47	21.47			
40	QPSK	1	1	21.42	21.53	21.45			
40	QPSK	1	108	21.46	21.46	21.50	22.5	0.0	
40	QPSK	1	214	21.38	21.44	21.49			
40	QPSK	108	0	21.21	21.19	21.24	22.5	0.0	
40	QPSK	108	54	21.24	21.43	21.32	22.5	0.0	
40	QPSK	108	108	21.42	21.36	21.27	22.5	0.0	
40	QPSK	216	0	21.41	21.51	21.39			
40	16QAM	1	1	21.25	21.17	21.09	22.5	0.0	
40	64QAM	1	1	21.51	21.51	21.51	22.5	0.0	
40	256QAM	1	1	19.89	19.87	19.96	21.0	1.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	21.36	21.38	21.33	22.5	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	21.24	21.51	21.42	22.5	0.0	
Channel				343000	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	21.38	21.41	21.35	22.5	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	21.22	21.39	21.35	22.5	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	21.41	21.48	21.41	22.5	0.0	



n38 Ant4_DSI3									
BW [MHz]	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	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	18.75	18.86	18.90	19.5	0.0	
40	PI/2 BPSK	1	53	18.73	18.79	18.81			
40	PI/2 BPSK	1	104	18.74	18.86	18.88			
40	PI/2 BPSK	50	0	18.86	18.82	18.85	19.5	0.0	
40	PI/2 BPSK	50	28	18.75	18.74	18.81	19.5	0.0	
40	PI/2 BPSK	50	56	18.91	18.87	18.78	19.5	0.0	
40	PI/2 BPSK	100	0	18.85	18.82	18.81			
40	QPSK	1	1	18.95	19.03	18.97	19.5	0.0	
40	QPSK	1	53	18.78	18.87	18.92			
40	QPSK	1	104	18.96	18.95	19.02			
40	QPSK	50	0	18.76	18.84	18.78	19.5	0.0	
40	QPSK	50	28	18.86	18.88	18.73	19.5	0.0	
40	QPSK	50	56	18.81	18.79	18.80	19.5	0.0	
40	QPSK	100	0	18.75	18.77	18.73	19.5	0.0	
40	16QAM	1	1	18.82	18.81	18.78	19.5	0.0	
40	64QAM	1	1	19.00	18.90	18.83	19.5	0.0	
40	256QAM	1	1	18.91	18.82	18.77	19.5	0.0	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99	19.5	0.0	
30	QPSK	1	1	18.93	19.00	18.79	19.5	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610	19.5	0.0	
20	QPSK	1	1	18.76	18.82	18.95	19.5	0.0	
Channel				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49	19.5	0.0	
15	PI/2 BPSK	1	1	18.76	18.75	18.79	19.5	0.0	
Channel				516004	519000	522996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98	19.5	0.0	
10	PI/2 BPSK	1	1	18.85	18.91	18.94	19.5	0.0	

n41 Ant4_DSI3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	19.45	19.50	19.46	20.5	0.0	
100	PI/2 BPSK	1	137	19.68	19.62	19.64			
100	PI/2 BPSK	1	271	19.63	19.64	19.65			
100	PI/2 BPSK	135	0	19.51	19.60	19.68	20.5	0.0	
100	PI/2 BPSK	135	69	19.57	19.63	19.71	20.5	0.0	
100	PI/2 BPSK	135	138	19.58	19.59	19.66	20.5	0.0	
100	PI/2 BPSK	270	0	19.63	19.61	19.65			
100	QPSK	1	1	19.63	19.72	19.52	20.5	0.0	
100	QPSK	1	137	19.65	19.70	17.69			
100	QPSK	1	271	19.65	19.66	19.56			
100	QPSK	135	0	19.62	19.64	19.57	20.5	0.0	
100	QPSK	135	69	19.61	19.71	19.61	20.5	0.0	
100	QPSK	135	138	19.68	19.80	19.83	20.5	0.0	
100	QPSK	270	0	19.56	19.68	19.54			
100	16QAM	1	1	19.58	19.47	19.59	20.5	0.0	
100	64QAM	1	1	19.59	19.68	19.66	20.5	0.0	
100	256QAM	1	1	19.47	19.50	19.48	20.5	0.0	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	20.5	0.0	
90	QPSK	1	1	19.61	19.55	19.67	20.5	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2649.99	20.5	0.0	
80	QPSK	1	1	19.49	19.59	19.51	20.5	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655	20.5	0.0	
70	QPSK	1	1	19.49	19.59	19.51	20.5	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98	20.5	0.0	
60	QPSK	1	1	19.43	19.69	19.50	20.5	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	20.5	0.0	
50	QPSK	1	1	19.58	19.70	19.52	20.5	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670	20.5	0.0	
40	QPSK	1	1	19.43	19.57	19.65	20.5	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98	20.5	0.0	
30	QPSK	1	1	19.46	19.53	19.38	20.5	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99	20.5	0.0	
20	QPSK	1	1	19.59	19.65	19.49	20.5	0.0	



Par270 n77 Ant10 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				650000	650000	650000			
100	PI2 BPSK	1	1	18.15	18.15	18.09			
100	PI2 BPSK	1	137	18.01	18.01	18.06			
100	PI2 BPSK	1	271	18.08	18.08	18.01			
100	PI2 BPSK	135	0	18.00	18.09	18.08	19.7	0.0	
100	PI2 BPSK	135	69	18.04	18.04	18.08	19.7	0.0	
100	PI2 BPSK	135	138	18.14	18.13	18.02			
100	PI2 BPSK	270	0	18.09	18.05	18.04			
100	QPSK	1	1	17.90	18.17	18.01			
100	QPSK	1	137	18.05	17.94	18.07			
100	QPSK	1	271	18.04	18.12	18.16			
100	QPSK	135	0	18.05	18.04	18.09	19.7	0.0	
100	QPSK	135	69	18.07	18.10	18.07	19.7	0.0	
100	QPSK	135	138	18.00	18.04	18.01			
100	QPSK	270	0	18.07	18.02		19.7	0.0	
100	16QAM	1	1	18.12	18.11	18.15	19.7	0.0	
100	64QAM	1	1	18.01	18.03	18.01	19.7	0.0	
100	256QAM	1	1	18.05	18.01	18.06	19.7	0.0	
Channel									
Frequency (MHz)				648688	650000	652334	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	18.15	18.03	18.07	19.7	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	18.05	18.05	18.10	19.7	0.0	
Channel									
Frequency (MHz)				649000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	18.08	18.01	18.05	19.7	0.0	
Channel									
Frequency (MHz)				648688	650000	653334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	18.01	18.09	18.04	19.7	0.0	
Channel									
Frequency (MHz)				3725.01	3840	3955.02	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	18.06	18.12	18.09	19.7	0.0	
Channel									
Frequency (MHz)				649000	650000	654000	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	17.97	18.06	18.08	19.7	0.0	
Channel									
Frequency (MHz)				647868	650000	654334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	18.04	17.95	18.09	19.7	0.0	
Channel									
Frequency (MHz)				3710.01	3840	3970.02	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	18.16	18.01	18.09	19.7	0.0	
Channel									
Frequency (MHz)				647168	650000	654834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	18.01	18.07	17.93	19.7	0.0	
Channel									
Frequency (MHz)				647000	650000	655000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	18.05	18.00	17.96	19.7	0.0	

Par270Q n77 Ant10 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				633000	633334	635000			
100	PI2 BPSK	1	1	18.31	18.31	18.09			
100	PI2 BPSK	1	137	18.25	18.25	18.06			
100	PI2 BPSK	1	271	18.32	18.32	18.08			
100	PI2 BPSK	135	0	18.15	18.15	18.07	19.7	0.0	
100	PI2 BPSK	135	69	18.11	18.11	18.07	19.7	0.0	
100	PI2 BPSK	135	138	18.20	18.20	18.02			
100	PI2 BPSK	270	0	18.14	18.14	18.04			
100	QPSK	1	1	18.33	18.33	18.01			
100	QPSK	1	137	18.21	18.21	18.07			
100	QPSK	1	271	18.15	18.15	18.16			
100	QPSK	135	0	18.05	18.05	18.09	19.7	0.0	
100	QPSK	135	69	18.29	18.29	18.07	19.7	0.0	
100	QPSK	135	138	18.26	18.26	18.02			
100	QPSK	270	0	18.24	18.24	18.04			
100	16QAM	1	1	18.23	18.23	18.15	19.7	0.0	
100	64QAM	1	1	18.24	18.24	18.17	19.7	0.0	
100	256QAM	1	1	18.23	18.23	18.17	19.7	0.0	
Channel									
Frequency (MHz)				633000	633334	635688	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	123	18.28	18.17	18.25	19.7	0.0	
Channel									
Frequency (MHz)				3490.02	3500.01	3510	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	109	18.23	18.17	18.20	19.7	0.0	
Channel									
Frequency (MHz)				632334	633334	634334	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	95	18.20	18.14	18.21	19.7	0.0	
Channel									
Frequency (MHz)				632000	633334	634688	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	81	18.24	18.20	18.24	19.7	0.0	
Channel									
Frequency (MHz)				3475.02	3500.01	3525	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	67	18.26	18.18	18.17	19.7	0.0	
Channel									
Frequency (MHz)				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	53	18.21	18.21	18.24	19.7	0.0	
Channel									
Frequency (MHz)				631000	633334	635688	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	39	18.21	18.23	18.26	19.7	0.0	
Channel									
Frequency (MHz)				630688	633334	635900	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	26	18.22	18.14	18.25	19.7	0.0	
Channel									
Frequency (MHz)				630500	633334	636168	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	19	18.24	18.21	18.20	19.7	0.0	
Channel									
Frequency (MHz)				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	12	18.24	18.14	18.19	19.7	0.0	

Par270 n78 Ant10 DSI3 PC2&3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				650000	650000	650000			
100	PI2 BPSK	1	1	20.78	20.78	20.78	21.0	0.0	
100	PI2 BPSK	1	137	20.69	20.69	20.69			
100	PI2 BPSK	1	271	20.71	20.71	20.71	17.5	3.5	
100	PI2 BPSK	135	0	20.71	20.71	20.71	21.0	0.0	
100	PI2 BPSK	135	69	20.64	20.64	20.64	21.0	0.0	
100	PI2 BPSK	135	138	20.62	20.62	20.62	17.5	3.5	
100	PI2 BPSK	270	0	20.66	20.66	20.66	21.0	0.0	
100	QPSK	1	1	20.65	20.65	20.65	21.0	0.0	
100	QPSK	1	137	20.61	20.61	20.61	21.0	0.0	
100	QPSK	1	271	20.59	20.59	20.59	17.5	3.5	
100	QPSK	135	0	20.78	20.78	20.78	21.0	0.0	
100	QPSK	135	69	20.79	20.79	20.79	21.0	0.0	
100	QPSK	135	138	20.64	20.64	20.64	17.5	3.5	
100	QPSK	270	0	20.74	20.74	20.74	21.0	0.0	
100	16QAM	1	1	20.81	20.81	20.81	21.0	0.0	
100	64QAM	1	1	20.76	20.76	20.76	21.0	0.0	
100	256QAM	1	1	20.68	20.68	20.68	21.0	0.0	
Channel									
Frequency (MHz)				648688	650000	650334	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	20.24	20.19	20.18	21.0	0.0	
Channel									
Frequency (MHz)				3740.01	3750	3760.02	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	20.26	20.19	20.24	21.0	0.0	
Channel									
Frequency (MHz)				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	20.19	20.19	20.16	21.0	0.0	
Channel									
Frequency (MHz)				648688	650000	651334	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	20.26	20.19	20.17	21.0	0.0	
Channel									
Frequency (MHz)				3725.01	3750	3765.02	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	20.28	20.22	20.22	21.0	0.0	
Channel									
Frequency (MHz)				649000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	20.24	20.21	20.24	21.0	0.0	
Channel									
Frequency (MHz)				647868	650000	652334	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	20.27	20.20	20.16	21.0	0.0	
Channel									
Frequency (MHz)				647334	650000	653000	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	20.19	20.23	20.25	21.0	0.0	
Channel									
Frequency (MHz)				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	20.19	20.22	20.24	21.0	0.0	
Channel									
Frequency (MHz)				647000	650000	653000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	20.18	20.21	20.21	21.0	0.0	



Part27Q n78 Ant10 DSI3 PC2&3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
100	PI2 BPSK	1	1	20.24	20.45		21.0	0.0
100	PI2 BPSK	1	137	20.43				
100	PI2 BPSK	1	271	20.34				
100	PI2 BPSK	135	0	20.38				
100	PI2 BPSK	135	69	20.39			21.0	0.0
100	PI2 BPSK	135	138	20.32				
100	PI2 BPSK	270	0	20.34			21.0	0.0
100	QPSK	1	1	20.42				
100	QPSK	1	137	20.41			21.0	0.0
100	QPSK	1	271	20.41				
100	QPSK	135	0	20.39				
100	QPSK	135	69	20.37			21.0	0.0
100	QPSK	135	138	20.21				
100	QPSK	270	0	20.25			21.0	0.0
100	16QAM	1	1	20.31			21.0	0.0
100	16QAM	1	1	20.10			21.0	0.0
100	256QAM	1	1	20.38			21.0	0.0
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
90	QPSK	1	123	20.21	20.19	20.18	21.0	0.0
Channel				632000	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	109	20.20	20.17	20.19	21.0	0.0
Channel				632334	633334	634334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3485.01	3500.01	3515.01		
70	QPSK	1	95	20.25	20.23	20.23	21.0	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3480	3500.01	3505.02		
80	QPSK	1	81	20.27	20.17	20.25	21.0	0.0
Channel				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
60	QPSK	1	67	20.19	20.21	20.22	21.0	0.0
Channel				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3520.01		
40	QPSK	1	53	20.25	20.18	20.20	21.0	0.0
Channel				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	QPSK	1	39	20.28	20.20	20.18	21.0	0.0
Channel				630668	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	25	20.19	20.22	20.24	21.0	0.0
Channel				630500	633334	636168	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3457.5	3500.01	3542.52		
15	QPSK	1	19	20.24	20.20	20.25	21.0	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
10	QPSK	1	12	20.19	20.19	20.24	21.0	0.0



Par27Q n77 Ant13_DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				633000					
Frequency (MHz)				3500.01					
100	PI2 BPSK	1	1	16.93			18.5	0.0	
100	PI2 BPSK	1	137	16.99					
100	PI2 BPSK	1	271	16.86			15.0	3.5	
100	PI2 BPSK	135	0	16.34					
100	PI2 BPSK	135	69	16.81			18.5	0.0	
100	PI2 BPSK	135	138	16.38			15.0	3.5	
100	PI2 BPSK	270	0	16.36			18.5	0.0	
100	QPSK	1	1	16.93			18.5	0.0	
100	QPSK	1	137	16.92					
100	QPSK	1	271	16.89			15.0	3.5	
100	QPSK	135	0	16.85			18.5	0.0	
100	QPSK	135	69	16.91			18.5	0.0	
100	QPSK	135	138	16.77			15.0	3.5	
100	QPSK	270	0	16.74			18.5	0.0	
100	16QAM	1	1	16.24			18.5	0.0	
100	64QAM	1	1	16.96			18.5	0.0	
100	256QAM	1	1	16.34			18.5	0.0	
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3495	3500.01	3505.02			
90	QPSK	1	123	16.83	16.88	16.80	18.5	0.0	
Channel				633668	633334	633000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3490.02	3500.01	3510			
80	QPSK	1	109	16.75	16.90	16.72	18.5	0.0	
Channel				633334	633334	634334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3485.01	3500.01	3515.01			
70	QPSK	1	95	16.75	16.83	16.87	18.5	0.0	
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3480	3500.01	3520.02			
60	QPSK	1	81	16.92	16.85	16.83	18.5	0.0	
Channel				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3475.02	3500.01	3525			
50	QPSK	1	67	16.70	16.96	16.80	18.5	0.0	
Channel				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3470.01	3500.01	3530.01			
40	QPSK	1	53	16.79	16.73	16.89	18.5	0.0	
Channel				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3465	3500.01	3535.02			
30	QPSK	1	39	16.88	17.01	16.72	18.5	0.0	
Channel				630668	633334	636000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3460.02	3500.01	3540			
20	QPSK	1	26	16.75	17.01	16.75	18.5	0.0	
Channel				630500	633334	636168	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455.01	3500.01	3545.02			
15	QPSK	1	19	16.87	16.89	16.94	18.5	0.0	
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3450.01	3500.01	3545.01			
10	QPSK	1	12	16.86	16.91	16.93	18.5	0.0	

Par270 n77 Ant13_DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				650000					
Frequency (MHz)				3750		3840		3950	
100	PI2 BPSK	1	1	17.03	17.02	16.92			
100	PI2 BPSK	1	137	16.96	16.93	16.96	18.5	0.0	
100	PI2 BPSK	1	271	17.11	17.06	17.16			
100	PI2 BPSK	135	0	16.96	16.99	16.95	18.5	0.0	
100	PI2 BPSK	135	69	16.91	17.02	16.99	18.5	0.0	
100	PI2 BPSK	135	138	17.08	17.02	16.98			
100	PI2 BPSK	270	0	16.85	16.96	17.05	18.5	0.0	
100	QPSK	1	1	16.93	17.05	16.78			
100	QPSK	1	137	17.04	17.13	17.01	18.5	0.0	
100	QPSK	1	271	17.10	17.09	17.01			
100	QPSK	135	0	16.98	16.95	16.85	18.5	0.0	
100	QPSK	135	69	17.08	17.05	16.97	18.5	0.0	
100	QPSK	135	138	16.90	16.94	17.02	18.5	0.0	
100	QPSK	270	0	17.09	17.15	17.07			
100	16QAM	1	1	16.87	16.99	16.97	18.5	0.0	
100	64QAM	1	1	17.02	17.07	17.05	18.5	0.0	
100	256QAM	1	1	16.85	16.87	17.02	18.5	0.0	
Channel				649668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	16.98	16.95	16.92	18.5	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3940.02			
80	QPSK	1	1	17.03	16.88	16.74	18.5	0.0	
Channel				649000	650000	650000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	16.90	16.91	16.70	18.5	0.0	
Channel				648668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	QPSK	1	1	17.02	16.93	16.81	18.5	0.0	
Channel				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	17.05	16.90	16.87	18.5	0.0	
Channel				648000	650000	650000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	16.88	16.97	16.93	18.5	0.0	
Channel				647668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	17.02	16.89	16.80	18.5	0.0	
Channel				647334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	QPSK	1	1	16.93	16.95	16.81	18.5	0.0	
Channel				647168	650000	650000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3840	3972.51			
15	QPSK	1	1	16.85	16.83	16.89	18.5	0.0	
Channel				647000	650000	650500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	16.98	16.87	16.79	18.5	0.0	

Par270 n78 Ant13_DS13 PC2&3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				650000					
Frequency (MHz)				3750					
100	PI2 BPSK	1	1				17.79		
100	PI2 BPSK	1	137				17.85		0.0
100	PI2 BPSK	1	271				17.81		
100	PI2 BPSK	135	0				17.96		19.2
100	PI2 BPSK	135	69				17.54		19.2
100	PI2 BPSK	135	138				17.85		19.2
100	PI2 BPSK	270	0				17.76		19.2
100	QPSK	1	1				17.83		
100	QPSK	1	137				17.83		19.2
100	QPSK	1	271				17.89		
100	QPSK	135	0				17.79		19.2
100	QPSK	135	69				17.81		19.2
100	QPSK	135	138				17.70		19.2
100	QPSK	270	0				17.71		
100	16QAM	1	1				17.74		19.2
100	64QAM	1	1				17.74		19.2
100	256QAM	1	1				17.61		19.2
Channel				649668	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1	17.70	17.81	17.67	18.5	0.0	
Channel				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3750	3760.02			
80	QPSK	1	1	17.72	17.69	17.75	19.2	0.0	
Channel				649000	650000	651000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1	17.80	17.87	17.60	19.2	0.0	
Channel				648668	650000	651334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3750	3770.01			
60	QPSK	1	1	17.52	17.63	17.69	19.2	0.0	
Channel				648334	650000	651668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3750	3775.02			
50	QPSK	1	1	17.74	17.68	17.72	19.2	0.0	
Channel				648000	650000	652000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3750	3780			
40	QPSK	1	1	17.52	17.74	17.75	19.2	0.0	
Channel				647668	650000	652334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3750	3785.01			
30	QPSK	1	1	17.67	17.72	17.82	19.2	0.0	
Channel				647334	650000	652668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3750	3790.02			
20	QPSK	1	1	17.81	17.63	17.80	19.2	0.0	
Channel				647168	650000	652834	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.52	3750	3792.51			



Part27Q n78 Ant13_DSI3 PC2&3

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				633334				
Frequency (MHz)				3500.01				
100	PI2 BPSK	1	1	17.55				
100	PI2 BPSK	1	137	17.36			19.2	0.0
100	PI2 BPSK	1	271	17.14				
100	PI2 BPSK	135	0	17.47				
100	PI2 BPSK	135	69	17.36			19.2	0.0
100	PI2 BPSK	135	138	17.21				
100	PI2 BPSK	270	0	17.68			19.2	0.0
100	QPSK	1	1	17.81				
100	QPSK	1	137	17.62			19.2	0.0
100	QPSK	1	271	17.11				
100	QPSK	135	0	17.49				
100	QPSK	135	69	17.41			19.2	0.0
100	QPSK	135	138	17.18				
100	QPSK	270	0	17.53			19.2	0.0
100	16QAM	1	1	17.21			19.2	0.0
100	16QAM	1	1	17.42			19.2	0.0
100	256QAM	1	1	17.34			19.2	0.0
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
90	QPSK	1	123	17.47	17.67	17.38	19.2	0.0
Channel				632668	633334	634002	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	109	17.53	17.67	17.52	19.2	0.0
Channel				632334	633334	634334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3485.01	3500.01	3515.01		
70	QPSK	1	95	17.39	17.38	17.42	19.2	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3480	3500.01	3520.02		
60	QPSK	1	81	17.37	17.48	17.35	19.2	0.0
Channel				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
50	QPSK	1	67	17.58	17.45	17.39	19.2	0.0
Channel				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	53	17.45	17.54	17.48	19.2	0.0
Channel				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	QPSK	1	39	17.51	17.53	17.43	19.2	0.0
Channel				630668	633334	636000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	26	17.49	17.59	17.31	19.2	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
15	QPSK	1	19	17.53	17.42	17.45	19.2	0.0
Channel				630000	633334	636668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3450.01	3500.01	3550.01		
10	QPSK	1	12	17.45	17.23	17.33	19.2	0.0



n5 Ant0 DSI5							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	MPR (dB)
Channel							
Frequency (MHz)				834	835.5	839	
20	PV2 BPSK	1	1	24.36	24.42	24.45	
20	PV2 BPSK	1	53	24.24	24.41	24.39	25.5
20	PV2 BPSK	1	104	24.41	24.35	24.43	
20	PV2 BPSK	50	0	23.97	23.90	23.98	25.0
20	PV2 BPSK	50	28	24.28	24.37	24.35	25.5
20	PV2 BPSK	50	55	23.95	23.81	23.79	
20	PV2 BPSK	100	0	23.85	23.93	23.84	25.0
20	QPSK	1	1	24.39	24.45	24.37	
20	QPSK	1	53	24.43	24.39	24.28	25.5
20	QPSK	1	104	24.33	24.38	24.40	
20	QPSK	50	0	23.44	23.38	23.34	24.5
20	QPSK	50	28	24.44	24.45	24.44	25.5
20	QPSK	50	55	23.25	23.25	23.33	
20	QPSK	100	0	23.25	23.35	23.35	24.5
20	16QAM	1	1	23.56	23.54	23.47	24.5
20	16QAM	1	1	22.75	22.64	22.61	23.0
20	16QAM	1	1	20.00	19.89	19.92	21.0
Channel							
Frequency (MHz)				16630	16730	16830	
15	QPSK	1	1	24.33	24.31	24.40	23.5
Channel							
Frequency (MHz)				839	836.5	844	
10	QPSK	1	1	24.32	24.21	24.24	25.5
Channel							
Frequency (MHz)				16530	16730	16830	
5	QPSK	1	1	24.28	24.31	24.32	25.5

n7 Ant0 DSI5							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	MPR (dB)
Channel							
Frequency (MHz)				504000	507000	510000	
40	PV2 BPSK	1	1	19.53	19.54	19.61	
40	PV2 BPSK	1	108	19.88	19.76	19.66	21.5
40	PV2 BPSK	1	214	19.75	19.85	19.87	
40	PV2 BPSK	108	0	19.62	19.71	19.62	21.5
40	PV2 BPSK	108	54	19.72	19.64	19.65	21.5
40	PV2 BPSK	108	108	19.57	19.65	19.64	
40	PV2 BPSK	216	0	19.74	19.72	19.78	21.5
40	QPSK	1	1	19.83	19.90	19.73	
40	QPSK	1	108	19.74	19.82	19.72	21.5
40	QPSK	1	214	19.72	19.78	19.72	
40	QPSK	108	0	19.65	19.71	19.68	21.5
40	QPSK	108	54	19.54	19.63	19.69	21.5
40	QPSK	108	108	19.73	19.64	19.74	21.5
40	QPSK	216	0	19.76	19.73	19.69	21.5
40	16QAM	1	1	19.78	19.84	19.81	21.5
40	16QAM	1	1	19.77	19.78	19.68	21.5
40	16QAM	1	1	18.28	18.77	18.06	20.0
Channel							
Frequency (MHz)				508000	507000	511000	
30	QPSK	1	1	19.63	19.70	19.55	21.5
Channel							
Frequency (MHz)				505000	507000	511000	
25	QPSK	1	1	19.67	19.81	19.69	21.5
Channel							
Frequency (MHz)				509000	507000	512000	
20	QPSK	1	1	19.79	19.80	19.73	21.5
Channel							
Frequency (MHz)				501000	507000	512000	
15	QPSK	1	1	19.85	19.86	19.55	21.5
Channel							
Frequency (MHz)				501000	507000	513000	
10	QPSK	1	1	19.64	19.64	19.63	21.5
Channel							
Frequency (MHz)				500000	507000	513000	
5	QPSK	1	1	19.63	19.88	19.71	21.5

n66 Ant0 DSI5							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	MPR (dB)
Channel							
Frequency (MHz)				346000	349000	352000	
40	PV2 BPSK	1	1	22.84	22.94	22.87	
40	PV2 BPSK	1	108	22.90	22.89	22.77	24.5
40	PV2 BPSK	1	214	22.98	22.97	22.91	
40	PV2 BPSK	108	0	22.43	22.41	22.37	24.0
40	PV2 BPSK	108	54	22.78	22.89	22.71	24.5
40	PV2 BPSK	108	108	22.43	22.39	22.36	24.0
40	PV2 BPSK	216	0	22.42	22.33	22.39	
40	QPSK	1	1	22.84	22.99	22.94	
40	QPSK	1	108	22.82	22.89	22.86	24.5
40	QPSK	1	214	22.91	22.93	22.91	
40	QPSK	108	0	21.84	21.89	21.85	23.5
40	QPSK	108	54	22.88	22.91	22.86	24.5
40	QPSK	108	108	21.81	21.82	21.81	23.5
40	QPSK	216	0	21.73	21.85	21.83	
40	16QAM	1	1	22.22	22.12	22.15	23.5
40	16QAM	1	1	20.47	20.33	20.46	22.0
40	16QAM	1	1	18.42	18.35	18.24	20.0
Channel							
Frequency (MHz)				345000	349000	353000	
30	QPSK	1	1	22.65	22.74	22.52	24.5
Channel							
Frequency (MHz)				346000	349000	355000	
20	QPSK	1	1	22.67	22.89	22.83	24.5
Channel							
Frequency (MHz)				343000	349000	356000	
15	QPSK	1	1	22.63	22.77	22.85	24.5
Channel							
Frequency (MHz)				343000	349000	359000	
10	QPSK	1	1	22.73	22.87	22.77	24.5
Channel							
Frequency (MHz)				342000	349000	360000	
5	QPSK	1	1	22.70	22.87	22.78	24.5



n38 Ant0 DSIS									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI/2 BPSK	1	1	17.28	17.23	17.19	19.0	0.0	
40	PI/2 BPSK	1	53	16.40	16.39	16.50			
40	PI/2 BPSK	1	104	14.88	14.97	14.99			
40	PI/2 BPSK	50	0	16.89	16.92	16.84			
40	PI/2 BPSK	50	28	16.44	16.36	16.44			
40	PI/2 BPSK	50	56	15.62	15.60	15.57			
40	PI/2 BPSK	100	0	16.46	16.40	16.34			
40	QPSK	1	1	17.38	17.46	17.31			
40	QPSK	1	53	16.37	16.37	16.44			
40	QPSK	1	104	15.03	14.97	15.05			
40	QPSK	50	0	17.03	16.96	17.01	19.0	0.0	
40	QPSK	50	28	16.61	17.07	16.69	19.0	0.0	
40	QPSK	50	56	15.57	15.59	15.62	19.0	0.0	
40	QPSK	100	0	16.30	16.39	16.34	19.0	0.0	
40	16QAM	1	1	17.38	17.25	17.37	19.0	0.0	
40	64QAM	1	1	17.44	17.40	17.32	19.0	0.0	
40	256QAM	1	1	16.66	16.77	16.87	18.5	0.5	
Channel				517002	519000	520998			
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	17.39	17.25	17.10	19.0	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	17.35	17.38	17.17	19.0	0.0	
Channel				515502	519000	52498			
Frequency (MHz)				2577.51	2595	2612.49			
15	PI/2 BPSK	1	1	17.23	17.27	17.20	19.0	0.0	
Channel				516004	519000	523996			
Frequency (MHz)				2575.02	2595	2614.98			
10	PI/2 BPSK	1	1	17.24	17.34	17.12	19.0	0.0	

n41 Ant0 DSIS									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI/2 BPSK	1	1	15.76	15.72	15.72	19.0	0.0	
100	PI/2 BPSK	1	137	17.67	17.78	17.66			
100	PI/2 BPSK	1	271	17.69	17.67	17.76			
100	PI/2 BPSK	135	0	17.51	17.63	17.54			
100	PI/2 BPSK	135	69	17.57	17.60	17.60			
100	PI/2 BPSK	135	138	16.65	16.68	16.79			
100	PI/2 BPSK	270	0	17.29	17.35	17.44			
100	QPSK	1	1	17.53	17.80	17.38			
100	QPSK	1	137	17.73	17.49	17.75			
100	QPSK	1	271	17.76	17.72	17.73			
100	QPSK	135	0	17.73	17.69	17.73	19.0	0.0	
100	QPSK	135	69	17.69	17.76	17.72	19.0	0.0	
100	QPSK	135	138	16.60	16.62	16.57	19.0	0.0	
100	QPSK	270	0	17.28	17.42	17.38	19.0	0.0	
100	16QAM	1	1	15.94	16.03	16.06	19.0	0.0	
100	64QAM	1	1	15.95	15.96	15.86	19.0	0.0	
100	256QAM	1	1	14.70	14.68	14.70	18.5	0.5	
Channel				508200	518598	528996			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	17.56	17.75	17.62	19.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	17.68	17.72	17.63	19.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	17.70	17.72	17.63	19.0	0.0	
Channel				506200	518598	531996			
Frequency (MHz)				2526	2592.99	2659.98			
60	QPSK	1	1	17.63	17.76	17.78	19.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	17.78	17.62	17.58	19.0	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	17.64	17.60	17.55	19.0	0.0	
Channel				502200	518598	534996			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	17.55	17.78	17.73	19.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	17.72	17.73	17.69	19.0	0.0	

n5 Ant1 DSI5								
BW [MHz]	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	PI/2 BPSK	1	1	21.25	21.28	21.27		
20	PI/2 BPSK	1	53	21.30	21.21	21.14	22.7	0.0
20	PI/2 BPSK	1	104	21.11	21.18	21.18		
20	PI/2 BPSK	50	0	21.36	21.25	21.19	22.7	0.0
20	PI/2 BPSK	50	28	21.22	21.19	21.23	22.7	0.0
20	PI/2 BPSK	50	56	21.14	21.16	21.18		
20	PI/2 BPSK	100	0	21.11	21.20	21.16	22.7	0.0
20	QPSK	1	1	21.23	21.41	21.12		
20	QPSK	1	53	21.24	21.18	21.07	22.7	0.0
20	QPSK	1	104	21.17	21.13	21.15		
20	QPSK	50	0	21.15	21.18	21.18	22.7	0.0
20	QPSK	50	28	21.07	21.21	21.11	22.7	0.0
20	QPSK	50	56	21.12	21.20	21.10		
20	QPSK	100	0	21.15	21.22	21.13	22.7	0.0
20	16QAM	1	1	21.20	21.13	21.24	22.7	0.0
20	64QAM	1	1	21.36	21.19	21.29	22.7	0.0
20	256QAM	1	1	19.83	19.85	19.92	21.2	1.5
Channel				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	836.5	841.5		
15	QPSK	1	1	21.07	21.36	21.03	22.7	0.0
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	QPSK	1	1	21.15	21.39	21.02	22.7	0.0
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	1	21.16	21.32	20.94	22.7	0.0



n7 Ant3_DSI5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	18.14	18.10	18.11			
40	PI/2 BPSK	1	108	18.29	18.17	18.25	20.0	0.0	
40	PI/2 BPSK	1	214	18.31	18.19	18.31			
40	PI/2 BPSK	108	0	17.99	18.09	18.12	20.0	0.0	
40	PI/2 BPSK	108	54	18.03	18.07	18.03	20.0	0.0	
40	PI/2 BPSK	108	108	18.10	18.11	18.20	20.0	0.0	
40	PI/2 BPSK	216	0	18.06	18.08	17.97			
40	QPSK	1	1	18.19	18.37	18.29			
40	QPSK	1	108	18.10	18.13	18.17	20.0	0.0	
40	QPSK	1	214	18.35	18.27	18.18			
40	QPSK	108	0	18.20	18.21	18.07	20.0	0.0	
40	QPSK	108	54	18.00	18.11	18.19	20.0	0.0	
40	QPSK	108	108	18.16	18.10	18.12	20.0	0.0	
40	QPSK	216	0	17.98	18.13	18.03			
40	16QAM	1	1	18.22	18.27	18.26	20.0	0.0	
40	64QAM	1	1	18.21	18.22	18.14	20.0	0.0	
40	256QAM	1	1	17.69	17.58	17.62	19.5	0.5	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	18.18	18.28	18.29	20.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	18.00	18.25	18.30	20.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	18.16	18.29	18.19	20.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	18.00	18.24	18.30	20.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	18.20	18.25	18.18	20.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	18.21	18.18	18.14	20.0	0.0	

n66 Ant3_DSI5									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	21.24	21.35	21.25			
40	PI/2 BPSK	1	108	21.35	21.31	21.36	23.0	0.0	
40	PI/2 BPSK	1	214	21.28	21.30	21.30			
40	PI/2 BPSK	108	0	21.34	21.35	21.37	23.0	0.0	
40	PI/2 BPSK	108	54	21.15	21.24	21.31	23.0	0.0	
40	PI/2 BPSK	108	108	21.23	21.35	21.28	23.0	0.0	
40	PI/2 BPSK	216	0	21.30	21.31	21.36			
40	QPSK	1	1	21.34	21.38	21.26			
40	QPSK	1	108	21.20	21.28	21.25	23.0	0.0	
40	QPSK	1	214	21.36	21.31	21.36			
40	QPSK	108	0	21.19	21.30	21.28	23.0	0.0	
40	QPSK	108	54	21.24	21.35	21.18	23.0	0.0	
40	QPSK	108	108	21.21	21.28	21.21	23.0	0.0	
40	QPSK	216	0	21.27	21.33	21.22			
40	16QAM	1	1	21.37	21.29	21.17	23.0	0.0	
40	64QAM	1	1	19.88	19.92	19.85	21.5	1.5	
40	256QAM	1	1	17.76	17.80	17.89	19.5	3.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	21.17	21.26	21.07	23.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	21.25	21.23	21.20	23.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	21.23	21.37	21.22	23.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	21.13	21.24	21.18	23.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	21.16	21.24	21.21	23.0	0.0	



n38 Ant3 DSI5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				518004	519000	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	17.16	17.14	17.03	19.0	0.0
40	PI/2 BPSK	1	53	17.16	17.04	16.96		
40	PI/2 BPSK	1	104	17.02	16.99	17.03		
40	PI/2 BPSK	50	0	17.01	17.00	16.93	19.0	0.0
40	PI/2 BPSK	50	28	16.96	17.02	17.04	19.0	0.0
40	PI/2 BPSK	50	56	17.09	17.00	17.03	19.0	0.0
40	PI/2 BPSK	100	0	17.03	16.99	16.95		
40	QPSK	1	1	17.27	17.37	17.33	19.0	0.0
40	QPSK	1	53	17.12	17.05	17.02		
40	QPSK	1	104	16.98	16.95	16.89		
40	QPSK	50	0	16.93	17.01	16.96	19.0	0.0
40	QPSK	50	28	16.82	17.08	16.95	19.0	0.0
40	QPSK	50	56	16.89	16.92	17.01	19.0	0.0
40	QPSK	100	0	17.02	17.06	17.01		
40	16QAM	1	1	17.28	17.20	17.27	19.0	0.0
40	64QAM	1	1	17.34	17.32	17.31	19.0	0.0
40	256QAM	1	1	17.23	17.12	17.00	19.0	0.0
Channel				517002	519000	520998		
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	17.19	17.21	17.30	19.0	0.0
Channel				516000	519000	522000		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	17.22	17.18	17.27	19.0	0.0
Channel				515502	519000	524998		
Frequency (MHz)				2577.51	2595	2612.49		
15	PI/2 BPSK	1	1	17.03	17.18	17.16	19.0	0.0
Channel				515004	519000	522996		
Frequency (MHz)				2575.02	2595	2614.98		
10	PI/2 BPSK	1	1	17.17	17.23	17.23	19.0	0.0

n41 Ant3 DSI5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	18.23	18.31	18.24	20.0	0.0
100	PI/2 BPSK	1	137	18.27	18.36	18.26		
100	PI/2 BPSK	1	271	18.12	18.03	17.99		
100	PI/2 BPSK	135	0	18.40	18.40	18.36	20.0	0.0
100	PI/2 BPSK	135	69	18.22	18.32	18.24	20.0	0.0
100	PI/2 BPSK	135	138	18.22	18.20	18.13	20.0	0.0
100	PI/2 BPSK	270	0	18.26	18.28	18.40		
100	QPSK	1	1	18.46	18.56	18.27	20.0	0.0
100	QPSK	1	137	18.35	18.24	18.24		
100	QPSK	1	271	18.40	18.32	18.36		
100	QPSK	135	0	18.33	18.29	18.28	20.0	0.0
100	QPSK	135	69	18.27	18.35	18.24	20.0	0.0
100	QPSK	135	138	18.16	18.19	18.16	20.0	0.0
100	QPSK	270	0	18.26	18.34	18.17		
100	16QAM	1	1	18.53	18.38	18.47	20.0	0.0
100	64QAM	1	1	18.40	18.52	18.51	20.0	0.0
100	256QAM	1	1	17.26	17.28	17.29	19.5	0.5
Channel				508200	518598	528996		
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	18.37	18.36	18.28	20.0	0.0
Channel				507204	518598	529998		
Frequency (MHz)				2536.02	2592.99	2649.99		
80	QPSK	1	1	18.38	18.54	18.21	20.0	0.0
Channel				506202	518598	531000		
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	18.23	18.34	18.23	20.0	0.0
Channel				505200	518598	531996		
Frequency (MHz)				2526	2592.99	2659.98		
60	QPSK	1	1	18.42	18.40	18.23	20.0	0.0
Channel				504204	518598	532998		
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	18.34	18.47	18.24	20.0	0.0
Channel				503202	518598	534000		
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	18.48	18.47	18.22	20.0	0.0
Channel				502200	518598	534996		
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	18.38	18.51	18.16	20.0	0.0
Channel				501204	518598	535998		
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	18.29	18.39	18.21	20.0	0.0



n7 Ant4 DSI5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	19.74	19.81	19.76	20.5	0.0	
40	PI/2 BPSK	1	108	19.80	19.83	19.77			
40	PI/2 BPSK	1	214	19.78	19.82	19.82			
40	PI/2 BPSK	108	0	19.80	19.77	19.73	20.5	0.0	
40	PI/2 BPSK	108	54	19.75	19.70	19.62	20.5	0.0	
40	PI/2 BPSK	108	108	19.69	19.74	19.79	20.5	0.0	
40	PI/2 BPSK	216	0	19.71	19.67	19.72	20.5	0.0	
40	QPSK	1	1	19.73	19.85	19.81	20.5	0.0	
40	QPSK	1	108	19.78	19.71	19.70			
40	QPSK	1	214	19.79	19.83	19.72			
40	QPSK	108	0	19.65	19.75	19.58	20.5	0.0	
40	QPSK	108	54	19.65	19.76	19.61	20.5	0.0	
40	QPSK	108	108	19.62	19.74	19.67	20.5	0.0	
40	QPSK	216	0	19.75	19.77	19.69	20.5	0.0	
40	16QAM	1	1	19.80	19.79	19.82	20.5	0.0	
40	64QAM	1	1	19.62	19.62	19.61	20.5	0.0	
40	256QAM	1	1	19.65	19.60	19.52	20.5	0.0	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	19.70	19.63	19.66	20.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	19.74	19.83	19.78	20.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	19.65	19.80	19.64	20.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	19.62	19.64	19.64	20.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	19.63	19.69	19.60	20.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	19.61	19.75	19.68	20.5	0.0	

n66 Ant4 DSI5									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	18.46	18.41	18.52	19.5	0.0	
40	PI/2 BPSK	1	108	18.29	18.34	18.23			
40	PI/2 BPSK	1	214	18.30	18.32	18.31			
40	PI/2 BPSK	108	0	18.43	18.38	18.30	19.5	0.0	
40	PI/2 BPSK	108	54	18.40	18.30	18.27	19.5	0.0	
40	PI/2 BPSK	108	108	18.27	18.34	18.38	19.5	0.0	
40	PI/2 BPSK	216	0	18.33	18.38	18.46	19.5	0.0	
40	QPSK	1	1	18.39	18.53	18.41	19.5	0.0	
40	QPSK	1	108	18.33	18.42	18.40			
40	QPSK	1	214	18.43	18.37	18.41			
40	QPSK	108	0	18.25	18.30	18.41	19.5	0.0	
40	QPSK	108	54	18.36	18.44	18.30	19.5	0.0	
40	QPSK	108	108	18.29	18.33	18.39	19.5	0.0	
40	QPSK	216	0	18.33	18.51	18.40	19.5	0.0	
40	16QAM	1	1	18.18	18.28	18.39	19.5	0.0	
40	64QAM	1	1	18.44	18.45	18.49	19.5	0.0	
40	256QAM	1	1	18.37	18.38	18.27	19.5	0.0	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	18.29	18.44	18.33	19.5	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	18.19	18.41	18.20	19.5	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	18.19	18.31	18.33	19.5	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	18.25	18.31	18.23	19.5	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	18.27	18.37	18.29	19.5	0.0	



n38 Ant4 DSI5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				518004	519000	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	PI/2 BPSK	1	1	18.75	18.86	18.90	19.5	0.0
40	PI/2 BPSK	1	53	18.73	18.79	18.81		
40	PI/2 BPSK	1	104	18.74	18.86	18.88		
40	PI/2 BPSK	50	0	18.86	18.82	18.85	19.5	0.0
40	PI/2 BPSK	50	28	18.75	18.74	18.81	19.5	0.0
40	PI/2 BPSK	50	56	18.91	18.87	18.78	19.5	0.0
40	PI/2 BPSK	100	0	18.85	18.82	18.81		
40	QPSK	1	1	18.95	19.03	18.97	19.5	0.0
40	QPSK	1	53	18.78	18.87	18.92		
40	QPSK	1	104	18.96	18.95	19.02		
40	QPSK	50	0	18.76	18.84	18.78	19.5	0.0
40	QPSK	50	28	18.86	18.88	18.73	19.5	0.0
40	QPSK	50	56	18.81	18.79	18.80	19.5	0.0
40	QPSK	100	0	18.75	18.77	18.73		
40	16QAM	1	1	18.82	18.81	18.76	19.5	0.0
40	64QAM	1	1	19.00	18.90	18.83	19.5	0.0
40	256QAM	1	1	18.91	18.82	18.77	19.5	0.0
Channel				517002	519000	520998		
Frequency (MHz)				2585.01	2595	2604.99		
30	QPSK	1	1	18.93	19.00	18.79	19.5	0.0
Channel				516000	519000	522000		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	1	18.76	18.82	18.95	19.5	0.0
Channel				515502	519000	522498		
Frequency (MHz)				2577.51	2595	2612.49		
15	PI/2 BPSK	1	1	18.83	18.92	18.84	19.5	0.0
Channel				515004	519000	522996		
Frequency (MHz)				2575.02	2595	2614.98		
10	PI/2 BPSK	1	1	18.76	18.88	18.78	19.5	0.0

n41 Ant4 DSI5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	19.45	19.50	19.46	20.5	0.0
100	PI/2 BPSK	1	137	19.68	19.62	19.64		
100	PI/2 BPSK	1	271	19.63	19.64	19.65		
100	PI/2 BPSK	135	0	19.51	19.60	19.68	20.5	0.0
100	PI/2 BPSK	135	69	19.57	19.63	19.71	20.5	0.0
100	PI/2 BPSK	135	138	19.58	19.59	19.66	20.5	0.0
100	PI/2 BPSK	270	0	19.63	19.61	19.65		
100	QPSK	1	1	19.63	19.72	19.52	20.5	0.0
100	QPSK	1	137	19.65	19.70	17.69		
100	QPSK	1	271	19.65	18.66	19.56		
100	QPSK	135	0	19.62	19.64	19.57	20.5	0.0
100	QPSK	135	69	19.61	19.71	19.61	20.5	0.0
100	QPSK	135	138	19.68	19.60	19.63	20.5	0.0
100	QPSK	270	0	19.58	19.68	19.54		
100	16QAM	1	1	19.58	19.47	19.59	20.5	0.0
100	64QAM	1	1	19.59	19.68	19.66	20.5	0.0
100	256QAM	1	1	19.47	19.50	19.48	20.5	0.0
Channel				508200	518598	528996		
Frequency (MHz)				2541	2592.99	2644.98		
90	QPSK	1	1	19.61	19.55	19.67	20.5	0.0
Channel				507204	518598	529998		
Frequency (MHz)				2536.02	2592.99	2649.99		
80	QPSK	1	1	19.49	19.59	19.51	20.5	0.0
Channel				506202	518598	531000		
Frequency (MHz)				2531.01	2592.99	2655		
70	QPSK	1	1	19.49	19.69	19.61	20.5	0.0
Channel				505200	518598	531996		
Frequency (MHz)				2526	2592.99	2659.98		
60	QPSK	1	1	19.43	19.69	19.50	20.5	0.0
Channel				504204	518598	532998		
Frequency (MHz)				2521.02	2592.99	2664.99		
50	QPSK	1	1	19.58	19.70	19.52	20.5	0.0
Channel				503202	518598	534000		
Frequency (MHz)				2516.01	2592.99	2670		
40	QPSK	1	1	19.43	19.57	19.65	20.5	0.0
Channel				502200	518598	534996		
Frequency (MHz)				2511	2592.99	2674.98		
30	QPSK	1	1	19.46	19.63	19.38	20.5	0.0
Channel				501204	518598	535998		
Frequency (MHz)				2506.02	2592.99	2679.99		
20	QPSK	1	1	19.59	19.65	19.49	20.5	0.0



n7 Ant5 DSI5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	20.32	20.33	20.35	22.0	0.0	
40	PI/2 BPSK	1	108	20.30	20.26	20.24			
40	PI/2 BPSK	1	214	20.33	20.23	20.27			
40	PI/2 BPSK	108	0	20.29	20.38	20.27	22.0	0.0	
40	PI/2 BPSK	108	54	20.15	20.14	20.06	22.0	0.0	
40	PI/2 BPSK	108	108	20.27	20.26	20.18	22.0	0.0	
40	PI/2 BPSK	216	0	20.30	20.34	20.27			
40	QPSK	1	1	20.31	20.39	20.32	22.0	0.0	
40	QPSK	1	108	20.32	20.31	20.32			
40	QPSK	1	214	20.27	20.31	20.25	22.0	0.0	
40	QPSK	108	0	20.10	20.07	19.97			
40	QPSK	108	54	20.13	20.31	20.14	22.0	0.0	
40	QPSK	108	108	20.28	20.28	20.21	22.0	0.0	
40	QPSK	216	0	20.30	20.35	20.34			
40	16QAM	1	1	20.23	20.27	20.37	22.0	0.0	
40	64QAM	1	1	18.72	18.81	18.69	20.5	1.5	
40	256QAM	1	1	16.86	16.83	16.82	18.5	3.5	
Channel				503000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	20.13	20.36	20.12	22.0	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	20.32	20.37	20.12	22.0	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	1	20.28	20.35	20.32	22.0	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	20.30	20.26	20.20	22.0	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	20.30	20.37	20.14	22.0	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	20.31	20.31	20.22	22.0	0.0	

n66 Ant5 DSI5									
BW [MHz]	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	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	17.63	17.58	17.60	19.0	0.0	
40	PI/2 BPSK	1	108	17.65	17.66	17.66			
40	PI/2 BPSK	1	214	17.65	17.68	17.67			
40	PI/2 BPSK	108	0	17.48	17.59	17.67	19.0	0.0	
40	PI/2 BPSK	108	54	17.64	17.66	17.69	19.0	0.0	
40	PI/2 BPSK	108	108	17.60	17.67	17.62	19.0	0.0	
40	PI/2 BPSK	216	0	17.77	17.69	17.70			
40	QPSK	1	1	17.78	17.81	17.74	19.0	0.0	
40	QPSK	1	108	17.74	17.80	17.70			
40	QPSK	1	214	17.57	17.68	17.77	19.0	0.0	
40	QPSK	108	0	17.59	17.66	17.60			
40	QPSK	108	54	17.71	17.79	17.65	19.0	0.0	
40	QPSK	108	108	17.71	17.75	17.65	19.0	0.0	
40	QPSK	216	0	17.64	17.68	17.58			
40	16QAM	1	1	17.74	17.71	17.68	19.0	0.0	
40	64QAM	1	1	17.77	17.71	17.67	19.0	0.0	
40	256QAM	1	1	16.10	16.04	16.13	17.5	1.5	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	17.74	17.77	17.68	19.0	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	17.68	17.71	17.72	19.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	17.65	17.72	17.67	19.0	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	17.67	17.66	17.64	19.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	17.74	17.67	17.67	19.0	0.0	



n38 Ant5 DSI5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	Pi/2 BPSK	1	1	21.95	21.86	21.72	23.0	0.0	
40	Pi/2 BPSK	1	53	21.85	21.81	21.69			
40	Pi/2 BPSK	1	104	21.87	21.88	21.92			
40	Pi/2 BPSK	50	0	21.87	21.80	21.91	23.0	0.0	
40	Pi/2 BPSK	50	28	21.74	21.83	21.78	23.0	0.0	
40	Pi/2 BPSK	50	56	21.86	21.73	21.65	23.0	0.0	
40	Pi/2 BPSK	100	0	21.85	21.87	21.89	23.0	0.0	
40	QPSK	1	1	21.90	21.96	21.81	23.0	0.0	
40	QPSK	1	53	21.94	21.93	21.95			
40	QPSK	1	104	21.90	21.79	21.77			
40	QPSK	50	0	21.95	21.85	21.91	23.0	0.0	
40	QPSK	50	28	21.84	21.97	21.76	23.0	0.0	
40	QPSK	50	56	21.77	21.80	21.92	23.0	0.0	
40	QPSK	100	0	21.90	21.95	21.90	23.0	0.0	
40	16QAM	1	1	21.78	21.70	21.74	23.0	0.0	
40	64QAM	1	1	20.36	20.40	20.54	22.0	1.0	
40	256QAM	1	1	18.34	18.35	18.34	20.0	3.0	
Channel				517002	519000	520998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2585.01	2595	2604.99	23.0	0.0	
30	QPSK	1	1	21.94	21.93	21.95	23.0	0.0	
Channel				516000	519000	522000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2580	2595	2610	23.0	0.0	
20	QPSK	1	1	21.90	21.79	21.77	23.0	0.0	
Channel				515002	519000	522498	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.51	2595	2612.49	23.5	0.0	
15	Pi/2 BPSK	1	1	22.10	22.13	22.02	23.5	0.0	
Channel				515004	519000	522996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575.02	2595	2614.98	23.5	0.0	
10	Pi/2 BPSK	1	1	22.03	22.13	22.01	23.5	0.0	

n41 Ant5 DSI5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	Pi/2 BPSK	1	1	22.06	21.98	21.87	23.0	0.0	
100	Pi/2 BPSK	1	137	21.98	21.93	21.82			
100	Pi/2 BPSK	1	271	22.00	22.00	22.04			
100	Pi/2 BPSK	135	0	22.01	21.95	22.04	23.0	0.0	
100	Pi/2 BPSK	135	69	21.87	21.94	21.90	23.0	0.0	
100	Pi/2 BPSK	135	138	21.97	21.86	21.77	23.0	0.0	
100	Pi/2 BPSK	270	0	21.98	21.98	22.03	23.0	0.0	
100	QPSK	1	1	22.03	22.10	21.94	23.0	0.0	
100	QPSK	1	197	22.05	22.07	22.09			
100	QPSK	1	271	22.04	21.94	21.87			
100	QPSK	135	0	22.06	21.99	22.03	23.0	0.0	
100	QPSK	135	69	21.95	22.07	21.88	23.0	0.0	
100	QPSK	135	138	21.88	21.93	22.04	23.0	0.0	
100	QPSK	270	0	22.02	22.05	22.01	23.0	0.0	
100	16QAM	1	1	21.89	21.80	21.86	23.0	0.0	
100	64QAM	1	1	20.48	20.55	20.65	22.0	1.0	
100	256QAM	1	1	18.48	18.46	18.46	20.0	3.0	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	23.0	0.0	
90	QPSK	1	1	21.83	21.97	21.86	23.0	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2536.02	2592.99	2649.99	23.0	0.0	
80	QPSK	1	1	22.03	21.93	21.84	23.0	0.0	
Channel				506202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2531.01	2592.99	2655	23.0	0.0	
70	QPSK	1	1	21.98	22.08	21.95	23.0	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2526	2592.99	2659.98	23.0	0.0	
60	QPSK	1	1	22.01	21.95	21.85	23.0	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	23.0	0.0	
50	QPSK	1	1	22.02	21.99	21.82	23.0	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2516.01	2592.99	2670	23.0	0.0	
40	QPSK	1	1	22.00	22.04	21.82	23.0	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2592.99	2674.98	23.0	0.0	
30	QPSK	1	1	21.92	21.99	21.78	23.0	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2592.99	2679.99	23.0	0.0	
20	QPSK	1	1	21.97	22.08	21.77	23.0	0.0	



Par270 n77 Ant10 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1	16.15	16.15	16.00				
100	PI2 BPSK	1	137	16.01	16.01	16.00	18.0	0.0		
100	PI2 BPSK	1	271	16.08	16.08	16.01				
100	PI2 BPSK	135	9	16.00	16.00	16.08	18.0	0.0		
100	PI2 BPSK	135	69	16.04	16.04	16.08	18.0	0.0		
100	PI2 BPSK	135	138	16.14	16.13	16.02				
100	PI2 BPSK	210	0	16.00	16.06	16.04	18.0	0.0		
100	QPSK	1	1	15.90	16.17	16.01				
100	QPSK	1	137	16.05	16.04	16.07	18.0	0.0		
100	QPSK	1	271	16.04	16.12	16.16				
100	QPSK	135	9	16.05	16.04	16.09	18.0	0.0		
100	QPSK	135	69	16.07	16.10	16.07	18.0	0.0		
100	QPSK	135	138	16.00	16.04	16.01				
100	QPSK	210	0	16.07	16.02	16.06	18.0	0.0		
100	16QAM	1	1	16.12	16.11	16.13	18.0	0.0		
100	64QAM	1	1	16.01	16.03	16.01	18.0	0.0		
100	256QAM	1	1	16.06	16.01	16.06	18.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	16.15	16.03	16.07	18.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	16.05	16.05	16.10	18.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	16.08	16.01	16.06	18.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	16.01	16.09	16.04	18.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	16.06	16.00	16.00	18.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	16.04	16.04	16.00	18.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	16.04	16.04	16.00	18.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	16.16	16.01	16.09	18.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	16.01	16.07	16.03	18.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	16.06	16.00	16.06	18.0	0.0		

Par270 n77 Ant10 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1		16.31					
100	PI2 BPSK	1	137		16.25		18.0	0.0		
100	PI2 BPSK	1	271		16.32					
100	PI2 BPSK	135	9		16.15		18.0	0.0		
100	PI2 BPSK	135	69		16.11		18.0	0.0		
100	PI2 BPSK	135	138		16.20					
100	PI2 BPSK	210	0		16.14		18.0	0.0		
100	QPSK	1	1		16.33					
100	QPSK	1	137		16.21		18.0	0.0		
100	QPSK	1	271		16.15					
100	QPSK	135	9		16.05		18.0	0.0		
100	QPSK	135	69		16.29		18.0	0.0		
100	QPSK	135	138		16.26					
100	QPSK	210	0		16.24		18.0	0.0		
100	16QAM	1	1		16.23		18.0	0.0		
100	64QAM	1	1		16.24		18.0	0.0		
100	256QAM	1	1		16.23		18.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	123	16.22	16.18	16.20	18.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	109	16.10	16.18	16.01	18.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	95	16.20	16.02	16.10	18.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	81	16.01	16.20	16.01	18.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	67	16.13	16.22	16.10	18.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	53	16.23	16.02	16.08	18.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	39	16.22	16.01	16.09	18.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	26	16.29	16.21	16.22	18.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	19	16.20	16.16	16.21	18.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	12	16.03	16.22	16.06	18.0	0.0		

Par270 n78 Ant10 DSIS PC2&3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1		16.73		18.0	0.0		
100	PI2 BPSK	1	137		16.72					
100	PI2 BPSK	1	271		16.79		14.5	3.5		
100	PI2 BPSK	135	9		16.74		18.0	0.0		
100	PI2 BPSK	135	69		16.67		18.0	0.0		
100	PI2 BPSK	135	138		16.66		14.5	3.5		
100	PI2 BPSK	210	0		16.64		18.0	0.0		
100	QPSK	1	1		16.83					
100	QPSK	1	137		16.65		18.0	0.0		
100	QPSK	1	271		16.82					
100	QPSK	135	9		16.72		14.5	3.5		
100	QPSK	135	69		16.82		18.0	0.0		
100	QPSK	135	138		16.67		14.5	3.5		
100	QPSK	210	0		16.76		18.0	0.0		
100	16QAM	1	1		16.79		18.0	0.0		
100	64QAM	1	1		16.74		18.0	0.0		
100	256QAM	1	1		16.66		18.0	0.0		
Channel										
Frequency (MHz)										
90	QPSK	1	1	16.62	16.64	16.71	18.0	0.0		
Channel										
Frequency (MHz)										
80	QPSK	1	1	16.66	16.63	16.79	18.0	0.0		
Channel										
Frequency (MHz)										
70	QPSK	1	1	16.81	16.66	16.63	18.0	0.0		
Channel										
Frequency (MHz)										
60	QPSK	1	1	16.61	16.59	16.81	18.0	0.0		
Channel										
Frequency (MHz)										
50	QPSK	1	1	16.74	16.63	16.72	18.0	0.0		
Channel										
Frequency (MHz)										
40	QPSK	1	1	16.64	16.72	16.71	18.0	0.0		
Channel										
Frequency (MHz)										
30	QPSK	1	1	16.65	16.63	16.73	18.0	0.0		
Channel										
Frequency (MHz)										
20	QPSK	1	1	16.71	16.53	16.75	18.0	0.0		
Channel										
Frequency (MHz)										
15	QPSK	1	1	16.63	16.55	16.71	18.0	0.0		
Channel										
Frequency (MHz)										
10	QPSK	1	1	16.58	16.62	16.59	18.0	0.0		



Part27Q n78 Ant10 DS16 PC2&3

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Med. Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
100	PI2 BPSK	1	1		16.44		18.0	0.0		
100	PI2 BPSK	1	137		16.43					
100	PI2 BPSK	1	271		16.39					
100	PI2 BPSK	135	9		16.36		18.0	0.0		
100	PI2 BPSK	135	69		16.37					
100	PI2 BPSK	135	138		16.28					
100	PI2 BPSK	210	0		16.28		18.0	0.0		
100	QPSK	1	1		16.45					
100	QPSK	1	137		16.41					
100	QPSK	1	271		16.36		18.0	0.0		
100	QPSK	135	9		16.36					
100	QPSK	135	69		16.35					
100	QPSK	135	138		16.25		18.0	0.0		
100	QPSK	210	0		16.27					
100	16QAM	1	1		16.35					
100	64QAM	1	1		16.09		18.0	0.0		
100	256QAM	1	1		16.02					
Channel										
				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)										
90	QPSK	1	123	16.22	16.36	16.21	18.0	0.0		
Channel										
				630068	633334	636600			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
80	QPSK	1	109	16.22	16.34	16.21	18.0	0.0		
Channel										
				632334	633334	634334			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
70	QPSK	1	95	16.18	16.44	16.27	18.0	0.0		
Channel										
				632000	633334	634668			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
60	QPSK	1	81	16.18	16.27	16.37	18.0	0.0		
Channel										
				3488	3500.01	3502.02			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
50	QPSK	1	67	16.24	16.24	16.23	18.0	0.0		
Channel										
				631668	633334	635000			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
40	QPSK	1	53	16.18	16.27	16.37	18.0	0.0		
Channel										
				3475.02	3500.01	3525			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
30	QPSK	1	39	16.23	16.32	16.36	18.0	0.0		
Channel										
				630068	633334	636600			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
20	QPSK	1	26	16.20	16.29	16.40	18.0	0.0		
Channel										
				630000	633334	636168			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
15	QPSK	1	19	16.27	16.31	16.39	18.0	0.0		
Channel										
				630334	633334	636334			Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)										
10	QPSK	1	12	16.22	16.29	16.35	18.0	0.0		
Channel										
				3452.5	3500.01	3542.5			Tune-up limit (dBm)	MPR (dB)



Par270 n77 Ant1 DS15

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								
Frequency (MHz)				3750	3850	3950		
100	PI2 BPSK	1	1	21.90	22.02	22.06		
100	PI2 BPSK	1	137	21.93	21.91	21.82	23.7	0.0
100	PI2 BPSK	1	271	22.01	21.99	21.90		
100	PI2 BPSK	135	0	22.07	22.06	22.03	23.7	0.0
100	PI2 BPSK	135	69	21.78	21.80	22.01	23.7	0.0
100	PI2 BPSK	135	138	21.67	21.78	21.67	23.7	0.0
100	PI2 BPSK	270	0	22.04	22.01	21.91		
100	QPSK	1	1	22.06	22.09	22.00		
100	QPSK	1	137	22.04	22.05	21.97	23.7	0.0
100	QPSK	1	271	22.00	22.05	22.00		
100	QPSK	135	0	21.83	21.93	22.02	23.7	0.0
100	QPSK	135	69	21.85	22.04	21.83	23.7	0.0
100	QPSK	135	138	22.00	21.85	22.01	23.7	0.0
100	QPSK	270	0	21.88	22.05	21.87		
100	16QAM	1	1	21.85	21.96	21.84	23.7	0.0
100	16QAM	1	1	21.47	21.47	21.56	23.2	0.6
100	256QAM	1	1	19.47	19.38	19.41	21.2	2.5
Channel								
Frequency (MHz)				64966	65000	65034		
90	QPSK	1	1	21.91	21.83	22.03	23.7	0.0
Channel								
Frequency (MHz)				64934	65000	65068		
80	QPSK	1	1	21.95	21.88	21.90	23.7	0.0
Channel								
Frequency (MHz)				3735	3850	3945		
70	QPSK	1	1	21.78	21.87	22.03	23.7	0.0
Channel								
Frequency (MHz)				64868	65000	65334		
60	QPSK	1	1	21.87	21.95	21.94	23.7	0.0
Channel								
Frequency (MHz)				64834	65000	65668		
50	QPSK	1	1	21.93	21.84	21.98	23.7	0.0
Channel								
Frequency (MHz)				3720	3850	3960		
40	QPSK	1	1	21.81	22.01	21.98	23.7	0.0
Channel								
Frequency (MHz)				3715.02	3850	3953.1		
30	QPSK	1	1	21.90	21.86	21.89	23.7	0.0
Channel								
Frequency (MHz)				64734	65000	65668		
20	QPSK	1	1	21.83	21.99	21.97	23.7	0.0
Channel								
Frequency (MHz)				647168	650000	654834		
15	QPSK	1	1	21.98	21.82	22.03	23.7	0.0
Channel								
Frequency (MHz)				647000	650000	650000		
10	QPSK	1	1	21.85	21.86	22.08	23.7	0.0

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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								
Frequency (MHz)				3500.01				
100	PI2 BPSK	1	1	21.72				
100	PI2 BPSK	1	137	21.71			23.7	0.0
100	PI2 BPSK	1	271	21.70				
100	PI2 BPSK	135	0	21.79			23.7	0.0
100	PI2 BPSK	135	69	21.74			23.7	0.0
100	PI2 BPSK	135	138	21.76			23.7	0.0
100	PI2 BPSK	270	0	21.71				
100	QPSK	1	1	21.86			23.7	0.0
100	QPSK	1	137	21.70			23.7	0.0
100	QPSK	1	271	21.82				
100	QPSK	135	0	21.72			23.7	0.0
100	QPSK	135	69	21.77			23.7	0.0
100	QPSK	135	138	21.72			23.7	0.0
100	QPSK	270	0	21.68			23.7	0.0
100	16QAM	1	1	21.72			23.7	0.0
100	16QAM	1	1	21.22			23.2	0.6
100	256QAM	1	1	19.23			21.2	0.6
Channel								
Frequency (MHz)				63300	63334	63368		
90	QPSK	1	123	21.45	21.47	21.59	23.7	0.0
Channel								
Frequency (MHz)				63268	63334	63400		
80	QPSK	1	109	21.44	21.43	21.57	23.7	0.0
Channel								
Frequency (MHz)				3480.01	3500.01	3515.01		
70	QPSK	1	95	21.45	21.47	21.60	23.7	0.0
Channel								
Frequency (MHz)				63200	63334	63468		
60	QPSK	1	81	21.49	21.38	21.59	23.7	0.0
Channel								
Frequency (MHz)				63168	63334	63500		
50	QPSK	1	67	21.59	21.43	21.54	23.7	0.0
Channel								
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	53	21.50	21.40	21.60	23.7	0.0
Channel								
Frequency (MHz)				63100	63334	63568		
30	QPSK	1	39	21.39	21.48	21.50	23.7	0.0
Channel								
Frequency (MHz)				63068	63334	63600		
20	QPSK	1	25	21.39	21.41	21.56	23.7	0.0
Channel								
Frequency (MHz)				63000	63334	63668		
15	QPSK	1	19	21.48	21.42	21.56	23.7	0.0
Channel								
Frequency (MHz)				63034	63334	63634		
10	QPSK	1	12	21.47	21.39	21.49	23.7	0.0

Part270 n78 Ant1 DS15 PC2&3

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								
Frequency (MHz)				3750				
100	PI2 BPSK	1	1	22.78			25.0	0.0
100	PI2 BPSK	1	137	22.67			25.0	0.0
100	PI2 BPSK	1	271	23.59			25.0	0.0
100	PI2 BPSK	135	0	23.57			25.0	0.0
100	PI2 BPSK	135	69	23.23			25.0	0.0
100	PI2 BPSK	135	138	23.53			25.0	0.0
100	PI2 BPSK	270	0	23.48			25.0	0.0
100	QPSK	1	1	23.65			25.0	0.0
100	QPSK	1	137	23.60			25.0	0.0
100	QPSK	1	271	23.59			25.0	0.0
100	QPSK	135	0	23.51			25.0	0.0
100	QPSK	135	69	23.48			25.0	0.0
100	QPSK	135	138	23.42			25.0	0.0
100	QPSK	270	0	23.45			25.0	0.0
100	16QAM	1	1	23.80			24.7	0.0
100	16QAM	1	1	22.22			23.2	0.6
100	256QAM	1	1	19.97			21.2	0.6
Channel								
Frequency (MHz)				64966	65000	65034		
90	QPSK	1	1	24.01	24.02	24.01	25.0	0.0
Channel								
Frequency (MHz)				64934	65000	65068		
80	QPSK	1	1	24.05	24.10	24.22	25.0	0.0
Channel								
Frequency (MHz)				3740.01	3750	3762.02		
70	QPSK	1	1	24.15	24.13	24.10	25.0	0.0
Channel								
Frequency (MHz)				64868	65000	65134		
60	QPSK	1	1	24.31	24.37	24.35	25.0	0.0
Channel								
Frequency (MHz)				64834	65000	65168		
50	QPSK	1	1	24.12	24.16	24.11	25.0	0.0
Channel								
Frequency (MHz)				3720	3750	3780		
40	QPSK	1	1	24.11	24.17	24.10	25.0	0.0
Channel								
Frequency (MHz)				3715.02	3750	3785.01		
30	QPSK	1	1	24.01	24.08	24.06	25.0	0.0
Channel								
Frequency (MHz)				64734	65000	65668		
20	QPSK	1	1	24.11	24.19	24.21	25.0	0.0
Channel								
Frequency (MHz)				647168	650000	652834		
15	QPSK	1	1	23.28	23.56	23.41	25.0	0.0
Channel								
Frequency (MHz)				647000	650000	650000		
10	QPSK	1	1	23.85	23.87	23.89	25.0	0.0



Part27Q n78 Ant11 DS15 PC2&3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	MPR (dB)
Channel				633000	633334	633668	
Frequency (MHz)				3495	3500.01	3505.02	
100	PI2 BPSK	1	1	23.48			25.0
100	PI2 BPSK	1	137	23.22			25.0
100	PI2 BPSK	1	271	23.28			25.0
100	PI2 BPSK	135	0	23.18			25.0
100	PI2 BPSK	135	69	23.06			25.0
100	PI2 BPSK	135	138	23.14			25.0
100	PI2 BPSK	270	0	23.17			25.0
100	QPSK	1	1	23.81			25.0
100	QPSK	1	137	23.12			25.0
100	QPSK	1	271	23.25			25.0
100	QPSK	135	0	23.12			25.0
100	QPSK	135	69	23.21			25.0
100	QPSK	135	138	22.98			25.0
100	QPSK	270	0	23.10			25.0
100	16QAM	1	1	23.36			24.7
100	16QAM	1	1	21.80			24.2
100	256QAM	1	1	19.60			21.2
Channel				633000	633334	633668	
Frequency (MHz)				3495	3500.01	3505.02	
90	QPSK	1	123	23.94	23.52	23.49	23.0
Channel				632668	633334	634000	
Frequency (MHz)				3490.02	3500.01	3510	
80	QPSK	1	109	23.44	23.56	23.61	23.0
Channel				632334	633334	634334	
Frequency (MHz)				3485.01	3500.01	3515.01	
70	QPSK	1	95	23.56	23.59	23.58	23.0
Channel				632000	633334	634668	
Frequency (MHz)				3480	3500.01	3520.00	
60	QPSK	1	81	23.57	23.50	23.50	23.0
Channel				631668	633334	635000	
Frequency (MHz)				3475.02	3500.01	3525	
50	QPSK	1	67	23.57	23.01	23.59	23.0
Channel				631334	633334	635334	
Frequency (MHz)				3470.01	3500.01	3530.01	
40	QPSK	1	53	23.20	23.56	23.80	23.0
Channel				631000	633334	635668	
Frequency (MHz)				3465	3500.01	3535.02	
30	QPSK	1	39	23.53	23.60	23.48	23.0
Channel				630668	633334	636000	
Frequency (MHz)				3460.02	3500.01	3540	
20	QPSK	1	26	23.50	23.56	23.92	23.0
Channel				630300	633334	636368	
Frequency (MHz)				3455.5	3500.01	3542.40	
15	QPSK	1	19	23.58	23.97	23.58	23.0
Channel				630334	633334	636334	
Frequency (MHz)				3455.01	3500.01	3545.01	
10	QPSK	1	12	23.51	23.56	23.51	23.0



Par27Q n77 Ant12 DS15									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				650000	650000	650000			
Frequency (MHz)				3750	3840	3930			
100	PI2 BPSK	1	1	18.45	19.49	19.52			
100	PI2 BPSK	1	137	19.30	19.41	19.49	20.7	0.0	
100	PI2 BPSK	1	271	19.55	19.65	19.65			
100	PI2 BPSK	135	0	19.48	19.46	19.56	20.7	0.0	
100	PI2 BPSK	135	69	19.47	19.48	19.40	20.7	0.0	
100	PI2 BPSK	135	135	19.45	19.39	19.31	20.7	0.0	
100	PI2 BPSK	270	0	19.52	19.61	19.63			
100	QPSK	1	1	19.58	19.69	19.55			
100	QPSK	1	137	19.68	19.50	19.55	20.7	0.0	
100	QPSK	1	271	19.67	19.66	19.62			
100	QPSK	135	0	19.57	19.52	19.53	20.7	0.0	
100	QPSK	135	69	19.65	19.65	19.57	20.7	0.0	
100	QPSK	135	135	19.59	19.57	19.47	20.7	0.0	
100	QPSK	270	0	19.47	19.53	19.50			
100	16QAM	1	1	19.60	19.63	19.64	20.7	0.0	
100	16QAM	1	1	19.53	19.54	19.66	20.7	0.0	
100	16QAM	1	1	19.58	19.49	19.57	20.7	0.0	
Channel									
Frequency (MHz)				649698	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	19.50	19.43	19.44	20.7	0.0	
Channel									
Frequency (MHz)				649334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3945.02			
80	QPSK	1	1	19.48	19.58	19.39	20.7	0.0	
Channel									
Frequency (MHz)				649500	650000	650500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3840	3945			
70	QPSK	1	1	19.50	19.59	19.48	20.7	0.0	
Channel									
Frequency (MHz)				649698	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3740.01	3840	3945.01			
60	QPSK	1	1	19.47	19.47	19.54	20.7	0.0	
Channel									
Frequency (MHz)				648334	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3725.01	3840	3950.02			
50	QPSK	1	1	19.42	19.64	19.54	20.7	0.0	
Channel									
Frequency (MHz)				649000	650000	650000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	QPSK	1	1	19.47	19.43	19.51	20.7	0.0	
Channel									
Frequency (MHz)				649500	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3965.01			
30	QPSK	1	1	19.48	19.65	19.38	20.7	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	19.54	19.62	19.52	20.7	0.0	
Channel									
Frequency (MHz)				647168	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3707.42	3840	3974.51			
15	QPSK	1	1	19.38	19.64	19.43	20.7	0.0	
Channel									
Frequency (MHz)				647000	650000	650000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	19.50	19.65	19.40	20.7	0.0	

Par27Q n77 Ant12 DS15									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3495	3500.01	3505.02			
100	PI2 BPSK	1	1	19.50	19.50	19.50			
100	PI2 BPSK	1	137	19.36	19.36	19.36	20.7	0.0	
100	PI2 BPSK	1	271	19.48	19.48	19.48			
100	PI2 BPSK	135	0	19.93	19.93	19.93	20.7	0.0	
100	PI2 BPSK	135	69	19.45	19.45	19.45	20.7	0.0	
100	PI2 BPSK	135	135	19.42	19.42	19.42	20.7	0.0	
100	PI2 BPSK	270	0	19.87	19.87	19.87	20.7	0.0	
100	QPSK	1	1	19.58	19.58	19.55			
100	QPSK	1	137	19.52	19.52	19.52	20.7	0.0	
100	QPSK	1	271	19.57	19.57	19.57			
100	QPSK	135	0	19.44	19.44	19.44	20.7	0.0	
100	QPSK	135	69	19.46	19.46	19.37	20.7	0.0	
100	QPSK	135	135	19.43	19.43	19.43	20.7	0.0	
100	QPSK	270	0	19.33	19.33	19.33	20.7	0.0	
100	16QAM	1	1	19.67	19.67	19.67	20.7	0.0	
100	16QAM	1	1	19.26	19.26	19.26	20.7	0.0	
100	16QAM	1	1	19.02	19.02	19.02	20.7	0.0	
Channel									
Frequency (MHz)				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3495	3500.01	3505.02			
90	QPSK	1	123	19.34	19.40	19.42	20.7	0.0	
Channel									
Frequency (MHz)				632668	633334	634000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3490.02	3500.01	3510			
80	QPSK	1	109	19.41	19.42	19.80	20.7	0.0	
Channel									
Frequency (MHz)				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3485.01	3500.01	3515.01			
70	QPSK	1	96	19.25	19.43	19.48	20.7	0.0	
Channel									
Frequency (MHz)				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3479.01	3500.01	3520			
60	QPSK	1	81	19.39	19.28	19.38	20.7	0.0	
Channel									
Frequency (MHz)				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3472.02	3500.01	3525			
50	QPSK	1	67	19.36	19.50	19.50	20.7	0.0	
Channel									
Frequency (MHz)				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3470.01	3500.01	3530.01			
40	QPSK	1	53	19.31	19.46	19.43	20.7	0.0	
Channel									
Frequency (MHz)				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3465	3500.01	3535.02			
30	QPSK	1	39	19.38	19.34	19.38	20.7	0.0	
Channel									
Frequency (MHz)				630668	633334	636000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3460.02	3500.01	3540			
20	QPSK	1	26	19.48	19.38	19.40	20.7	0.0	
Channel									
Frequency (MHz)				630500	633334	636168	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455.5	3500.01	3542.42			
15	QPSK	1	19	19.35	19.47	19.53	20.7	0.0	
Channel									
Frequency (MHz)				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3450.01	3500.01	3545.01			
10	QPSK	1	12	19.36	19.43	19.38	20.7	0.0	

Par27Q n78 Ant12 DS15 PC2&3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				650000	650000	650000			
Frequency (MHz)				3750	3750	3750			
100	PI2 BPSK	1	1	18.84	18.84	18.84			
100	PI2 BPSK	1	137	18.63	18.63	18.63	20.0	0.0	
100	PI2 BPSK	1	271	18.75	18.75	18.75			
100	PI2 BPSK	135	0	18.67	18.67	18.67	20.0	0.0	
100	PI2 BPSK	135	69	18.72	18.72	18.72	20.0	0.0	
100	PI2 BPSK	135	135	18.68	18.68	18.68	20.0	0.0	
100	PI2 BPSK	270	0	18.86	18.86	18.86			
100	QPSK	1	1	18.67	18.67	18.67			
100	QPSK	1	137	18.75	18.75	18.75	20.0	0.0	
100	QPSK	1	271	18.65	18.65	18.65			
100	QPSK	135	0	18.77	18.77	18.77	20.0	0.0	
100	QPSK	135	69	18.65	18.65	18.65	20.0	0.0	
100	QPSK	135	135	18.76	18.76	18.76	20.0	0.0	
100	QPSK	270	0	18.65	18.65	18.65			
100	16QAM	1	1	18.84	18.84	18.84	20.0	0.0	
100	16QAM	1	1	18.70	18.70	18.70	20.0	0.0	
100	16QAM	1	1	18.33	18.33	18.33	20.0	0.5	
Channel									
Frequency (MHz)				649698	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3750	3755.01			
90	QPSK	1	1	18.70	18.85	18.44	20.0	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	18.77	18.77	18.72	20.0	0.0	
Channel									
Frequency (MHz)				649500	650000	650668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3735	3750	3765			
70	QPSK	1	1	18.64	18.78	18.61	20.0	0.0	
Channel									
Frequency (MHz)				649698	650000	650334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.01	3750	3775.02			
60	QPSK	1	1	18.58	18.67	18.64	20.0	0.0	
Channel									
Frequency (MHz)				648334	650000	650			



Part27Q n78 Ant12 DS15 PC2&3

BW [MHz]	Modulation	RE Size	RE Offset	Power Low Ch. F [MHz]	Power Middle Ch. F [MHz]	Power High Ch. F [MHz]	Tune-up limit (dBm)	MPR (dB)
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
100	P1/2 BPSK	1	1	19.03				
100	P1/2 BPSK	1	137	19.02			20.0	0.0
100	P1/2 BPSK	1	271	18.79				
100	P1/2 BPSK	135	0	18.82				
100	P1/2 BPSK	135	69	18.86			20.0	0.0
100	P1/2 BPSK	135	138	18.73				
100	P1/2 BPSK	270	0	18.76			20.0	0.0
100	QPSK	1	1	19.15				
100	QPSK	1	137	18.84			20.0	0.0
100	QPSK	1	271	18.72				
100	QPSK	135	0	18.92				
100	QPSK	135	69	18.87			20.0	0.0
100	QPSK	135	138	18.25				
100	QPSK	270	0	18.87			20.0	0.0
100	16QAM	1	1	18.82			20.0	0.0
100	64QAM	1	1	18.87			20.0	0.0
100	256QAM	1	1	18.22			19.5	0.5
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
90	QPSK	1	123	18.87	18.84	18.87	20.0	0.0
Channel				633068	633334	633600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	109	18.82	19.03	18.95	20.0	0.0
Channel				633204	633334	633334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3485.01	3500.01	3515.01		
70	QPSK	1	95	18.86	19.01	18.78	20.0	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3480	3500.01	3520.02		
60	QPSK	1	81	18.86	18.85	18.87	20.0	0.0
Channel				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3473.02	3500.01	3525		
50	QPSK	1	67	18.84	18.89	18.85	20.0	0.0
Channel				631334	633334	633334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	53	18.20	18.96	18.88	20.0	0.0
Channel				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	QPSK	1	39	18.83	18.98	18.77	20.0	0.0
Channel				630668	633334	636000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	25	18.80	18.97	18.83	20.0	0.0
Channel				630500	633334	636168	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455	3500.01	3542.02		
15	QPSK	1	19	18.22	18.85	18.22	20.0	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3450.01	3500.01	3545.01		
10	QPSK	1	12	18.17	18.22	18.83	20.0	0.0



Par27Q n77 Ant13_DSIS									
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									
Frequency (MHz)									
100	Pi2 BPSK	1	1	16.83	16.99	17.02	18.5	0.0	
100	Pi2 BPSK	1	137	16.88	16.99	16.96	18.5	0.0	
100	Pi2 BPSK	1	271	16.88	16.99	16.96	18.5	0.0	
100	Pi2 BPSK	135	0	16.24	16.34	16.34	15.0	3.5	
100	Pi2 BPSK	135	69	16.81	16.91	16.91	18.5	0.0	
100	Pi2 BPSK	135	138	16.38	16.38	16.38	15.0	3.5	
100	Pi2 BPSK	270	0	16.38	16.38	16.38	15.0	0.0	
100	QPSK	1	1	16.53	16.53	16.53	18.5	0.0	
100	QPSK	1	137	16.92	16.92	16.92	18.5	0.0	
100	QPSK	1	271	16.89	16.89	16.89	18.5	0.0	
100	QPSK	135	0	16.85	16.85	16.85	15.0	3.5	
100	QPSK	135	69	16.81	16.81	16.81	18.5	0.0	
100	QPSK	135	138	16.77	16.77	16.77	15.0	3.5	
100	QPSK	270	0	16.74	16.74	16.74	18.5	0.5	
100	16QAM	1	1	16.24	16.24	16.24	18.5	0.0	
100	16QAM	1	1	16.86	16.86	16.86	18.5	0.0	
100	256QAM	1	1	16.34	16.34	16.34	18.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	123	16.83	16.88	16.88	18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	109	16.75	16.90	16.72	18.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	96	16.78	16.83	16.87	18.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	81	16.92	16.85	16.83	18.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	67	16.70	16.85	16.81	18.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	53	16.70	16.78	16.89	18.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	39	16.88	17.01	16.72	18.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	26	16.78	17.01	16.76	18.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	19	16.87	16.88	16.94	18.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	12	16.80	16.91	16.93	18.5	0.0	

Par27Q n77 Ant13_DSIS									
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									
Frequency (MHz)									
100	Pi2 BPSK	1	1	17.03	17.02	16.92	18.5	0.0	
100	Pi2 BPSK	1	137	16.88	16.93	16.96	18.5	0.0	
100	Pi2 BPSK	1	271	17.11	17.06	17.16	18.5	0.0	
100	Pi2 BPSK	135	0	16.96	16.99	16.95	18.5	0.0	
100	Pi2 BPSK	135	69	16.91	17.02	16.99	18.5	0.0	
100	Pi2 BPSK	135	138	17.08	17.02	16.98	18.5	0.0	
100	Pi2 BPSK	270	0	16.85	16.96	17.02	18.5	0.0	
100	QPSK	1	1	16.83	17.19	16.78	18.5	0.0	
100	QPSK	1	137	17.04	17.13	17.03	18.5	0.0	
100	QPSK	1	271	17.10	17.09	17.01	18.5	0.0	
100	QPSK	135	0	16.98	16.95	16.86	18.5	0.0	
100	QPSK	135	69	17.03	17.05	16.97	18.5	0.0	
100	QPSK	135	138	16.90	16.94	17.02	18.5	0.0	
100	QPSK	270	0	17.09	17.15	17.07	18.5	0.0	
100	16QAM	1	1	16.87	16.99	16.97	18.5	0.0	
100	16QAM	1	1	17.06	17.07	17.06	18.5	0.0	
100	256QAM	1	1	16.95	16.97	17.02	18.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.98	16.99	16.92	18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.03	16.98	16.74	18.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.90	16.91	16.70	18.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.02	16.93	16.81	18.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.05	16.93	16.87	18.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.88	16.97	16.93	18.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.02	16.89	16.80	18.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.93	16.95	16.81	18.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.85	16.83	16.86	18.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.98	16.97	16.79	18.5	0.0	

Par27Q n78 Ant13_DSIS PC2&3									
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									
Frequency (MHz)									
100	Pi2 BPSK	1	1	17.79	17.79	17.79	19.2	0.0	
100	Pi2 BPSK	1	137	17.65	17.65	17.65	19.2	0.0	
100	Pi2 BPSK	1	271	17.61	17.61	17.61	19.2	0.0	
100	Pi2 BPSK	135	0	17.56	17.56	17.56	19.2	0.0	
100	Pi2 BPSK	135	69	17.64	17.64	17.64	19.2	0.0	
100	Pi2 BPSK	135	138	17.65	17.65	17.65	19.2	0.0	
100	Pi2 BPSK	270	0	17.76	17.76	17.76	19.2	0.0	
100	QPSK	1	1	17.63	17.63	17.63	19.2	0.0	
100	QPSK	1	137	17.63	17.63	17.63	19.2	0.0	
100	QPSK	1	271	17.69	17.69	17.69	19.2	0.0	
100	QPSK	135	0	17.79	17.79	17.79	19.2	0.0	
100	QPSK	135	69	17.61	17.61	17.61	19.2	0.0	
100	QPSK	135	138	17.70	17.70	17.70	19.2	0.0	
100	QPSK	270	0	17.71	17.71	17.71	19.2	0.0	
100	16QAM	1	1	17.74	17.74	17.74	19.2	0.0	
100	16QAM	1	1	17.74	17.74	17.74	19.2	0.0	
100	256QAM	1	1	17.61	17.61	17.61	19.2	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.70	17.61	17.67	19.2	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.62	17.69	17.76	19.2	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.60	17.67	17.60	19.2	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.52	17.63	17.69	19.2	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.74	17.68	17.72	19.2	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.52	17.74	17.79	19.2	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.67	17.72	17.82	19.2	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.61	17.63	17.80	19.2	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.58	17.71	17.65	19.2	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.65	17.60	17.70	19.2	0.0	



Part27Q n78 Ant13_DSIS PC2&3

BW (MHz)	Modulation	RE Size	RE Offset	Power Low Ch. F (MHz)	Power Middle Ch. F (MHz)	Power High Ch. F (MHz)	Tune-up limit (dBm)	MPR (dB)
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
100	P1/2 BPSK	1	1	17.25				
100	P1/2 BPSK	1	137	17.36			19.2	0.0
100	P1/2 BPSK	1	271	17.14				
100	P1/2 BPSK	135	0	17.47				
100	P1/2 BPSK	135	69	17.36			19.2	0.0
100	P1/2 BPSK	135	138	17.21				
100	P1/2 BPSK	270	0	17.28			19.2	0.0
100	QPSK	1	1	17.61				
100	QPSK	1	137	17.52			19.2	0.0
100	QPSK	1	271	17.11				
100	QPSK	135	0	17.40				
100	QPSK	135	69	17.41			19.2	0.0
100	QPSK	135	138	17.16				
100	QPSK	270	0	17.33			19.2	0.0
100	16QAM	1	1	17.21			19.2	0.0
100	64QAM	1	1	17.42			19.2	0.0
100	256QAM	1	1	17.24			19.2	0.0
Channel				633000	633334	633668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3495	3500.01	3505.02		
90	QPSK	1	123	17.47	17.57	17.38	19.2	0.0
Channel				632668	633334	634000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3490.02	3500.01	3510		
80	QPSK	1	109	17.63	17.57	17.52	19.2	0.0
Channel				632334	633334	634334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3485.01	3500.01	3515.01		
70	QPSK	1	95	17.39	17.38	17.42	19.2	0.0
Channel				632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3480	3500.01	3520.02		
60	QPSK	1	81	17.37	17.46	17.35	19.2	0.0
Channel				631668	633334	635000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3475.02	3500.01	3525		
50	QPSK	1	67	17.63	17.65	17.59	19.2	0.0
Channel				631334	633334	635334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3470.01	3500.01	3530.01		
40	QPSK	1	53	17.40	17.24	17.48	19.2	0.0
Channel				631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3465	3500.01	3535.02		
30	QPSK	1	39	17.61	17.63	17.43	19.2	0.0
Channel				630668	633334	636000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3460.02	3500.01	3540		
20	QPSK	1	25	17.48	17.59	17.31	19.2	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455	3500.01	3542.02		
15	QPSK	1	19	17.63	17.42	17.45	19.2	0.0
Channel				630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3455.01	3500.01	3545.01		
10	QPSK	1	12	17.45	17.23	17.33	19.2	0.0



WLAN/Bluetooth Power

Full Power						
Ant 16+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	22.12	23.50	100.00
		6	2437	22.06	23.50	
		11	2462	22.17	23.50	
	802.11g 6Mbps	1	2412	21.07	22.50	100.00
		6	2437	21.15	22.50	
		11	2462	21.15	22.50	
	802.11n-HT20 MCS0	1	2412	20.89	22.50	100.00
		6	2437	20.92	22.50	
		11	2462	21.02	22.50	
	802.11n-HT40 MCS0	3	2422	19.93	21.50	100.00
		6	2437	20.03	21.50	
		9	2452	20.01	21.50	
	802.11ax-HE20 MCS0	1	2412	21.00	22.50	100.00
		6	2437	21.01	22.50	
		11	2462	21.09	22.50	
	802.11ax-HE40 MCS0	3	2422	20.02	21.50	100.00
		6	2437	20.11	21.50	
		9	2452	20.12	21.50	

Head Simultaneous						
Ant 16+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	17.22	18.50	100.00
		6	2437	17.18	18.50	
		11	2462	17.32	18.50	
	802.11g 6Mbps	1	2412	Not Required	18.50	100.00
		6	2437		18.50	
		11	2462		18.50	
	802.11n-HT20 MCS0	1	2412	Not Required	18.50	100.00
		6	2437		18.50	
		11	2462		18.50	
	802.11n-HT40 MCS0	3	2422	Not Required	18.50	100.00
		6	2437		18.50	
		9	2452		18.50	
	802.11ax-HE20 MCS0	1	2412	Not Required	18.50	100.00
		6	2437		18.50	
		11	2462		18.50	
	802.11ax-HE40 MCS0	3	2422	Not Required	18.50	100.00
		6	2437		18.50	
		9	2452		18.50	



Full Power						
Art 17+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	20.11	21.50	100.00
		40	5200	20.24	21.50	
		44	5220	20.24	21.50	
		48	5240	20.17	21.50	
		36	5180	18.87	20.50	
	802.11n HT20 MCS9	40	5200	19.08	20.50	100.00
		44	5220	19.01	20.50	
		48	5240	18.84	20.50	
		38	5190	18.20	19.50	
		46	5230	18.20	19.50	
	802.11n HT40 MCS9	36	5180	19.66	21.50	100.00
		40	5200	20.05	21.50	
		44	5220	20.03	21.50	
		48	5240	19.93	21.50	
		38	5190	19.58	21.00	
	802.11ac VHT40 MCS9	46	5230	19.72	21.00	100.00
		42	5210	19.32	21.00	
		36	5180	20.06	21.50	
		40	5200	20.23	21.50	
		44	5220	20.19	21.50	
802.11ac VHT80 MCS9	48	5240	20.07	21.50	100.00	
	38	5190	18.71	20.50		
	46	5230	18.77	20.50		
	42	5210	17.53	19.50		
	42	5210	17.53	19.50		

Full Power						
Art 17+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	21.21	22.50	100.00
		56	5280	21.18	22.50	
		60	5300	21.13	22.50	
		64	5320	21.21	22.50	
		52	5260	19.99	21.50	
	802.11n HT20 MCS9	56	5280	19.97	21.50	100.00
		60	5300	20.03	21.50	
		64	5320	20.09	21.50	
		54	5270	19.16	20.50	
		62	5310	19.27	20.50	
	802.11n HT40 MCS9	52	5260	20.99	22.50	100.00
		56	5280	21.02	22.50	
		60	5300	21.03	22.50	
		64	5320	21.04	22.50	
		54	5270	20.69	22.00	
	802.11ac VHT40 MCS9	62	5310	20.84	22.00	100.00
		58	5290	19.77	21.50	
		50	5250	18.94	20.50	
		52	5260	20.13	21.50	
		56	5280	20.14	21.50	
802.11ac VHT80 MCS9	60	5300	20.23	21.50	100.00	
	64	5320	20.27	21.50		
	54	5270	19.25	21.00		
	62	5310	19.47	21.00		
	58	5290	18.62	20.50		
802.11ac HE160 MCS9	50	5250	18.94	20.50	100	
	52	5260	20.13	21.50		
	56	5280	20.14	21.50		
	60	5300	20.23	21.50		
	64	5320	20.27	21.50		

Full Power						
Art 17+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	18.75	20.50	100.00
		116	5580	18.95	20.50	
		124	5620	18.72	20.50	
		132	5660	18.67	20.50	
		140	5700	18.67	20.50	
	802.11n HT20 MCS9	144	5720	18.69	20.50	100.00
		100	5500	18.49	20.00	
		116	5580	18.77	20.50	
		124	5620	18.42	20.00	
		132	5660	18.43	20.00	
	802.11n HT40 MCS9	140	5700	18.29	20.00	100.00
		144	5720	18.42	20.00	
		102	5510	18.20	20.00	
		110	5550	18.22	20.00	
		126	5630	18.26	20.00	
	802.11ac VHT20 MCS9	134	5670	18.14	20.00	100.00
		142	5710	18.28	20.00	
		100	5500	18.51	20.50	
		116	5580	18.80	20.50	
		124	5620	18.46	20.00	
802.11ac VHT40 MCS9	132	5660	18.41	20.00	100.00	
	140	5700	18.30	20.00		
	144	5720	18.45	20.00		
	102	5510	18.26	20.00		
	110	5550	18.26	20.00		
802.11ac VHT80 MCS9	126	5630	18.29	20.00	100.00	
	134	5670	18.21	20.00		
	142	5710	18.32	20.00		
	106	5530	17.85	20.50		
	122	5610	17.77	19.50		
802.11ac VHT160 MCS9	138	5690	17.65	19.50	100.00	
	114	5570	16.71	18.50		
	100	5500	17.61	19.50		
	116	5580	17.79	19.50		
	124	5620	17.55	19.50		
802.11ac HE20 MCS9	132	5660	17.51	19.50	100.00	
	140	5700	17.44	19.00		
	144	5720	17.51	19.50		
	102	5510	16.27	18.00		
	110	5550	16.28	18.00		
802.11ac HE40 MCS9	126	5630	16.33	18.00	100.00	
	134	5670	16.29	18.00		
	142	5710	16.36	18.00		
	106	5530	16.65	18.50		
	122	5610	16.81	18.50		
802.11ac HE80 MCS9	138	5690	16.62	18.50	100.00	
	114	5570	18.37	20.00		
	100	5500	17.61	19.50		
	116	5580	17.79	19.50		
	124	5620	17.55	19.50		
802.11ac HE160 MCS9	132	5660	17.51	19.50	100.00	
	140	5700	17.44	19.00		
	144	5720	17.51	19.50		
	102	5510	16.27	18.00		
	110	5550	16.28	18.00		

Full Power						
Art 17+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	21.55	22.50	100.00
		167	5785	22.03	22.50	
		165	5825	21.90	22.50	
		149	5745	21.43	22.50	
		157	5785	21.86	22.50	
	802.11n HT20 MCS9	165	5825	21.64	22.50	100.00
		151	5755	21.23	22.00	
		159	5795	21.28	22.00	
		149	5745	21.37	22.50	
		157	5785	21.84	22.50	
	802.11n HT40 MCS9	165	5825	21.62	22.50	100.00
		151	5755	21.26	22.00	
		159	5795	21.30	22.00	
		155	5775	19.83	20.50	
		149	5745	21.60	22.50	
	802.11ac VHT80 MCS9	167	5785	22.01	22.50	100.00
		165	5825	21.81	22.50	
		151	5755	20.77	22.00	
		159	5795	20.83	22.00	
		155	5775	18.65	20.50	

Head Simultaneous						
Art 17+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180		16.50	100.00
		40	5200		16.50	
		44	5220		16.50	
		48	5240		16.50	
		36	5180		16.50	
	802.11n HT20 MCS9	40	5200		16.50	100.00
		44	5220		16.50	
		48	5240		16.50	
		38	5190		16.50	
		46	5230		16.50	
	802.11ac VHT20 MCS9	36	5180		16.50	100.00
		40	5200		16.50	
		44	5220		16.50	
		48	5240		16.50	
		38	5190		16.50	
	802.11ac VHT40 MCS9	46	5230		16.50	100.00
		42	5210		16.50	
		36	5180		16.50	
		40	5200		16.50	
		44	5220		16.50	
802.11ac VHT80 MCS9	48	5240		16.50	100.00	
	38	5190		16.50		
	46	5230		16.50		
	42	5210		16.50		
	36	5180		16.50		
802.11ac HE20 MCS9	40	5200		16.50	100.00	
	44	5220		16.50		
	48	5240		16.50		
	38	5190		16.50		
	46	5230		16.50		
802.11ac HE40 MCS9	42	5210		16.50	100.00	
	36	5180		16.50		
	40	5200		16.50		
	44	5220		16.50		
	48	5240		16.50		

Head Simultaneous						
Art 17+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260		16.50	100.00
		56	5280		16.50	
		60	5300		16.50	
		64	5320		16.50	
		52	5260		16.50	
	802.11n HT20 MCS9	56	5280		16.50	100.00
		60	5300		16.50	
		64	5320		16.50	
		54	5270		16.50	
		62	5310		16.50	
	802.11n HT40 MCS9	52	5260		16.50	100.00
		56	5280		16.50	
		60	5300		16.50	
		64	5320		16.50	
		54	5270		16.50	
	802.11ac VHT20 MCS9	62	5310		16.50	100.00
		52	5260		16.50	
		56	5280		16.50	
		60	5300		16.50	
		64	5320		16.50	
802.11ac VHT40 MCS9	54	5270		16.50	100.00	
	62	5310		16.50		
	58	5290		16.50		
	50	5250		16.00		
	52	5260		16.50		
802.11ac VHT80 MCS9	56	5280		16.50	100.00	
	60	5300		16.50		
	64	5320		16.50		
	54	5270		16.50		
	62	5310		16.50		
802.11ac HE20 MCS9	58	5290		16.50	100.00	
	50	5250		16.00		
	52	5260		16.50		
	56	5280		16.50		
	60	5300		16.50		
802.11ac HE40 MCS9	62	5310		16.50	100.00	
	54	5270		16.50		
	62	5310		16.50		
	58	5290		16.50		
	50	5250		16.00		

Head Simultaneous						
Art 17+18						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500		16.50	100.00
		116	5580		16.50	
		124	5620		16.50	
		132	5660		16.50	
		140	5700		16.50	
	802.11n HT20 MCS9	144	5720		16.50	100.00
		100	5500		16.50	
		116	5580			

BT BR/EDR		ANT 16		Average power (dBm)		
Mode	Channel	Frequency (MHz)	Average power (dBm)			
			1Mbps	2Mbps	3Mbps	
BR / EDR	CH 00	2402	14.70	13.16	13.05	
	CH 39	2441	15.57	13.69	13.61	
	CH 78	2480	14.19	12.40	12.50	
Tune-up Limit			16	15.5	15.5	

BT BR/EDR		ANT 16		Head Simultaneous		Average power (dBm)		
Mode	Channel	Frequency (MHz)	Average power (dBm)					
			1Mbps	2Mbps	3Mbps			
BR / EDR	CH 00	2402	9.81			Not Required	Not Required	
	CH 39	2441	10.68					
	CH 78	2480	9.35					
Tune-up Limit			11	11	11			

BT BR/EDR		ANT 18		Average power (dBm)		
Mode	Channel	Frequency (MHz)	Average power (dBm)			
			1Mbps	2Mbps	3Mbps	
BR / EDR	CH 00	2402	15.02	12.99	12.97	
	CH 39	2441	15.59	13.79	13.84	
	CH 78	2480	14.86	13.36	13.00	
Tune-up Limit			16	15.5	15.5	

BT BR/EDR		ANT 18		Head Simultaneous		Average power (dBm)		
Mode	Channel	Frequency (MHz)	Average power (dBm)					
			1Mbps	2Mbps	3Mbps			
BR / EDR	CH 00	2402	10.11			Not Required	Not Required	
	CH 39	2441	10.67					
	CH 78	2480	9.91					
Tune-up Limit			11	11	11			

BT LE		ANT 16		Average power (dBm)	
Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	
LE	CH 00	2402	7.95		
	CH 19	2440	8.85		
	CH 39	2480	7.40		
Tune-up Limit			10.5		

BT LE V5.0		ANT 16		Average power (dBm)	
Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	
LE	CH 00	2402	7.82		
	CH 19	2440	8.95		
	CH 39	2480	7.59		
Tune-up Limit			10.5		

BT LE		ANT 18		Average power (dBm)	
Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	
LE	CH 00	2402	5.55		
	CH 19	2440	6.08		
	CH 39	2480	4.96		
Tune-up Limit			8		

BT LE V5.0		ANT 18		Average power (dBm)	
Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	
LE	CH 00	2402	5.76		
	CH 19	2440	6.35		
	CH 39	2480	5.29		
Tune-up Limit			8		