

**n2 Ant4 Main PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	23.09	23.15	23.12	
20	PI/2 BPSK	1	53	23.01	23.17	23.08	
20	PI/2 BPSK	1	104	23.07	23.04	23.10	
20	PI/2 BPSK	50	0	22.61	22.65	22.59	23.5
20	PI/2 BPSK	50	28	23.10	23.11	23.10	24.0
20	PI/2 BPSK	50	56	22.56	22.62	22.47	23.5
20	PI/2 BPSK	100	0	22.54	22.61	22.65	
20	QPSK	1	1	23.06	23.18	23.04	24.0
20	QPSK	1	53	23.08	23.17	23.12	
20	QPSK	1	104	23.14	23.11	23.00	
20	QPSK	50	0	22.11	22.19	22.18	23.0
20	QPSK	50	28	23.04	23.13	23.07	24.0
20	QPSK	50	56	22.12	22.13	22.15	23.0
20	QPSK	100	0	22.13	22.17	22.11	
20	16QAM	1	1	22.21	22.23	22.21	22.5
20	64QAM	1	1	20.64	20.75	20.65	
20	256QAM	1	1	18.71	18.78	18.64	20.0
Channel				371500	376000	380500	Tune-up limit
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	22.29	22.29	22.23	24.0
Channel				371000	376000	381000	Tune-up limit
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	1	22.21	22.30	22.26	24.0
Channel				370500	376000	381500	Tune-up limit
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	22.24	22.20	22.26	24.0

**n2 Ant4 Other PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	23.11	23.13	23.14	
20	PI/2 BPSK	1	53	23.10	23.14	23.13	
20	PI/2 BPSK	1	104	23.06	23.07	23.08	
20	PI/2 BPSK	50	0	22.61	22.66	22.37	23.0
20	PI/2 BPSK	50	28	23.08	23.12	23.12	23.5
20	PI/2 BPSK	50	56	22.31	22.61	22.57	23.0
20	PI/2 BPSK	100	0	22.60	22.60	22.34	
20	QPSK	1	1	23.01	23.16	23.15	24.0
20	QPSK	1	53	23.01	23.11	23.10	
20	QPSK	1	104	23.06	23.08	23.05	
20	QPSK	50	0	22.13	22.14	22.15	23.0
20	QPSK	50	28	23.01	23.15	23.06	23.5

20	QPSK	50	56	22.06	22.12	22.09	23.0
20	QPSK	100	0	22.13	22.14	22.10	
20	16QAM	1	1	22.31	22.25	22.24	
20	64QAM	1	1	20.64	20.74	20.64	21.5
20	256QAM	1	1	18.69	18.75	18.62	20.0
Channel				371500	376000	380500	Tune-up limit
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	23.10	23.07	23.02	24.0
Channel				371000	376000	381000	Tune-up limit
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	1	23.15	23.02	23.15	24.0
Channel				370500	376000	381500	Tune-up limit
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	23.06	23.08	23.13	24.0

n2 Ant4 Other PA Default							
BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	21.73	21.76	21.69	23.0
20	PI/2 BPSK	1	53	21.70	21.71	21.64	
20	PI/2 BPSK	1	104	21.65	21.76	21.66	
20	PI/2 BPSK	50	0	21.10	21.17	21.12	22.0
20	PI/2 BPSK	50	28	21.46	21.71	21.59	
20	PI/2 BPSK	50	56	21.20	21.25	21.11	22.0
20	PI/2 BPSK	100	0	21.16	21.24	21.16	
20	QPSK	1	1	21.73	21.78	21.72	23.0
20	QPSK	1	53	21.69	21.73	21.70	
20	QPSK	1	104	21.65	21.70	21.64	
20	QPSK	50	0	20.56	20.66	20.61	21.0
20	QPSK	50	28	21.63	21.76	21.67	22.0
20	QPSK	50	56	20.46	20.78	20.59	21.0
20	QPSK	100	0	20.69	20.78	20.66	
20	16QAM	1	1	20.74	20.81	20.75	22.0
20	64QAM	1	1	19.26	19.33	19.30	20.0
20	256QAM	1	1	17.25	17.38	17.31	18.0
Channel				371500	376000	380500	Tune-up limit
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	21.73	21.76	21.68	23.0
Channel				371000	376000	381000	Tune-up limit
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	1	21.74	21.73	21.65	23.0
Channel				370500	376000	381500	Tune-up limit
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	21.65	21.69	21.77	23.0

**n5 Ant4 Main PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
25	PI/2 BPSK	1	1	23.16	23.21	22.18	23.5
25	PI/2 BPSK	1	53	23.31	23.39	23.26	
25	PI/2 BPSK	1	104	23.35	23.42	23.36	
25	PI/2 BPSK	50	0	22.74	22.83	22.79	23.5
25	PI/2 BPSK	50	28	23.31	23.32	23.26	23.5
25	PI/2 BPSK	50	56	22.92	22.94	22.84	
25	PI/2 BPSK	100	0	22.84	22.91	22.82	
25	QPSK	1	1	23.36	23.43	23.41	23.5
25	QPSK	1	53	23.33	23.41	23.39	
25	QPSK	1	104	23.29	23.39	23.31	
25	QPSK	50	0	22.24	22.31	22.36	23.5
25	QPSK	50	28	23.31	23.34	23.36	23.5
25	QPSK	50	56	22.35	22.41	22.36	23.0
25	QPSK	100	0	22.27	22.39	22.35	
25	16QAM	1	1	22.35	22.48	22.41	
25	64QAM	1	1	20.82	20.97	20.91	22.0
25	256QAM	1	1	18.94	19.00	19.03	20.0
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
20	PI/2 BPSK	1	1	23.15	23.26	23.21	23.5
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
15	QPSK	1	1	23.23	23.22	23.28	23.5
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
10	QPSK	1	1	23.26	23.28	23.20	23.5
Channel				164800	167300	169800	Tune-up limit (dBm)
Frequency (MHz)				824	836.5	849	
5	PI/2 BPSK	1	1	23.23	23.25	23.26	23.5

**n5 Ant4 Other PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	21.15	21.14	21.18	22.0
20	PI/2 BPSK	1	53	21.18	21.18	21.14	
20	PI/2 BPSK	1	104	21.05	21.07	21.02	
20	PI/2 BPSK	50	0	20.65	20.64	20.63	21.0
20	PI/2 BPSK	50	28	21.23	21.24	21.24	22.0
20	PI/2 BPSK	50	56	20.71	20.77	20.75	21.5
20	PI/2 BPSK	100	0	20.78	20.81	20.79	
20	QPSK	1	1	21.25	21.26	21.21	
20	QPSK	1	53	21.14	21.18	21.14	22.0
20	QPSK	1	104	21.05	21.08	21.02	
20	QPSK	50	0	20.11	20.14	20.16	
20	QPSK	50	28	21.22	21.23	21.21	22.0

20	QPSK	50	56	20.21	20.28	20.25	21.0
20	QPSK	100	0	20.35	20.31	20.27	
20	16QAM	1	1	20.25	20.24	20.21	
20	64QAM	1	1	18.75	18.77	18.71	20.0
20	256QAM	1	1	16.88	16.91	16.85	18.0
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
20	PI/2 BPSK	1	1	21.11	21.21	21.09	22.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
15	QPSK	1	1	21.15	21.17	21.20	22.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
10	QPSK	1	1	21.16	21.09	21.14	22.0
Channel				164800	167300	169800	Tune-up limit (dBm)
Frequency (MHz)				824	836.5	849	
5	PI/2 BPSK	1	1	21.12	21.18	21.13	22.0

**n7 Ant4 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				504000	507000	510000	
Frequency (MHz)				2520	2535	2550	
40	PI/2 BPSK	1	1	22.93	22.92	22.94	24.0
40	PI/2 BPSK	1	108	22.90	22.93	22.95	
40	PI/2 BPSK	1	214	22.95	22.84	22.92	
40	PI/2 BPSK	108	0	22.91	22.36	22.82	23.5
40	PI/2 BPSK	108	54	22.74	22.78	22.75	
40	PI/2 BPSK	108	108	22.33	22.34	22.31	
40	PI/2 BPSK	216	0	22.29	22.33	22.28	23.0
40	QPSK	1	1	22.91	22.97	22.92	24.0
40	QPSK	1	108	22.89	22.95	22.89	
40	QPSK	1	214	22.92	22.89	22.82	
40	QPSK	108	0	21.85	21.92	21.89	23.0
40	QPSK	108	54	22.86	22.89	22.87	24.0
40	QPSK	108	108	21.88	21.87	21.85	23.0
40	QPSK	216	0	21.84	21.89	21.86	
40	16QAM	1	1	22.01	22.03	22.05	
40	64QAM	1	1	20.41	20.45	20.43	21.0
40	256QAM	1	1	18.45	18.49	18.44	19.0
Channel				503000	507000	511000	Tune-up limit
Frequency (MHz)				2515	2535	2555	
30	QPSK	1	1	22.95	22.93	22.92	24.0
Channel				502500	507000	511500	Tune-up limit
Frequency (MHz)				2512.5	2535	2557.5	
25	QPSK	1	1	22.88	22.91	22.89	24.0
Channel				502000	507000	512000	Tune-up limit
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	1	22.86	22.94	22.89	24.0
Channel				501500	507000	512000	Tune-up limit
Frequency (MHz)				2507.5	2535	2562.5	
10	QPSK	1	1	22.95	22.86	22.89	24.0
Channel				501000	507000	513000	Tune-up limit
Frequency (MHz)				2505	2535	2565	
5	QPSK	1	1	22.93	22.89	22.93	24.0
Channel				500500	507000	513500	Tune-up limit
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	1	22.89	22.89	22.88	24.0

**n26 Ant4 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				164800	166300	167800	
Frequency (MHz)				824	831.5	839	
20	PI/2 BPSK	1	1	21.24	21.28	21.26	22.5
20	PI/2 BPSK	1	53	21.18	21.24	21.21	
20	PI/2 BPSK	1	104	21.12	21.16	21.19	
20	PI/2 BPSK	50	0	20.63	20.66	20.62	21.5
20	PI/2 BPSK	50	28	21.02	21.09	21.02	
20	PI/2 BPSK	50	56	20.75	20.74	20.77	21.5
20	PI/2 BPSK	100	0	20.71	20.75	20.69	
20	QPSK	1	1	21.32	21.33	21.29	22.5
20	QPSK	1	53	21.27	21.30	21.25	
20	QPSK	1	104	21.15	21.17	21.11	
20	QPSK	50	0	21.18	21.17	21.15	22.0
20	QPSK	50	28	21.19	21.21	21.17	
20	QPSK	50	56	20.38	20.41	20.35	21.5
20	QPSK	100	0	20.21	20.23	20.18	
20	16QAM	1	1	21.25	21.27	21.22	22.0
20	64QAM	1	1	18.86	18.89	18.84	20.0
20	256QAM	1	1	16.99	17.00	16.95	18.0
Channel				164300	166300	168300	Tune-up limit
Frequency (MHz)				821.5	831.5	841.5	
15	PI/2 BPSK	1	1	21.28	21.24	21.23	22.5
Channel				163800	166300	168800	Tune-up limit
Frequency (MHz)				819	831.5	844	
10	QPSK	1	1	21.27	21.27	21.30	22.5
Channel				163300	166300	169300	Tune-up limit
Frequency (MHz)				816.5	831.5	846.5	
5	PI/2 BPSK	1	1	21.31	21.32	21.23	22.5

**n66 Ant4 Main PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	21.81	22.84	22.79	24.0
40	PI/2 BPSK	1	108	22.66	22.70	22.65	
40	PI/2 BPSK	1	214	22.21	22.23	22.18	
40	PI/2 BPSK	108	0	22.24	22.28	22.19	23.5
40	PI/2 BPSK	108	54	22.63	22.69	22.62	
40	PI/2 BPSK	108	108	22.19	22.23	22.21	23.0
40	PI/2 BPSK	216	0	22.23	22.18	22.14	
40	QPSK	1	1	22.81	22.85	22.79	24.0
40	QPSK	1	108	22.72	22.73	22.69	
40	QPSK	1	214	22.71	22.72	22.65	
40	QPSK	108	0	21.73	21.74	21.68	23.0
40	QPSK	108	54	22.66	22.68	22.61	23.5
40	QPSK	108	108	21.76	21.78	21.72	23.0
40	QPSK	216	0	21.65	21.69	21.63	
40	16QAM	1	1	21.94	21.96	21.91	
40	64QAM	1	1	20.39	20.41	20.37	21.0
40	256QAM	1	1	18.35	18.39	18.31	19.0
Channel				345500	349000	352500	Tune-up limit
Frequency (MHz)				1727.5	1745	1762.5	
35	QPSK	1	1	22.76	22.81	22.80	24.0
Channel				345000	349000	353000	Tune-up limit
Frequency (MHz)				1725	1745	1765	
30	QPSK	1	1	22.80	22.73	22.80	24.0
Channel				344500	349000	353500	Tune-up limit
Frequency (MHz)				1722.5	1745	1767.5	
25	QPSK	1	1	22.75	22.79	22.84	24.0
Channel				344000	349000	354000	Tune-up limit
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	1	22.77	22.82	22.82	24.0
Channel				343500	349000	344500	Tune-up limit
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	1	22.78	22.75	22.83	24.0
Channel				343000	349000	355000	Tune-up limit
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	1	22.74	22.73	22.81	24.0
Channel				342500	349000	355500	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	1	22.76	22.84	22.75	24.0

**n66 Ant4 Other PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	22.81	22.81	22.77	24.0
40	PI/2 BPSK	1	108	22.62	22.69	22.62	
40	PI/2 BPSK	1	214	22.71	22.78	22.67	
40	PI/2 BPSK	108	0	22.18	22.22	22.21	23.5
40	PI/2 BPSK	108	54	22.59	22.69	22.65	
40	PI/2 BPSK	108	108	22.15	22.27	22.21	23.0
40	PI/2 BPSK	216	0	22.13	22.19	22.15	
40	QPSK	1	1	22.78	22.82	22.75	24.0
40	QPSK	1	108	22.68	22.72	22.58	
40	QPSK	1	214	22.62	22.68	22.59	
40	QPSK	108	0	21.71	21.75	21.69	23.0
40	QPSK	108	54	22.67	22.71	21.64	23.5

40	QPSK	108	108	21.70	21.74	21.72	23.0
40	QPSK	216	0	21.69	21.73	21.68	
40	16QAM	1	1	21.89	21.92	21.91	
40	64QAM	1	1	20.41	20.46	20.45	21.0
40	256QAM	1	1	18.32	18.34	18.35	19.0
Channel				345500	349000	352500	Tune-up limit
Frequency (MHz)				1727.5	1745	1762.5	
35	QPSK	1	1	22.65	22.64	22.71	24.0
Channel				345000	349000	353000	Tune-up limit
Frequency (MHz)				1725	1745	1765	
30	QPSK	1	1	22.72	22.80	22.76	24.0
Channel				344500	349000	353500	Tune-up limit
Frequency (MHz)				1722.5	1745	1767.5	
25	QPSK	1	1	22.65	22.71	22.74	24.0
Channel				344000	349000	354000	Tune-up limit
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	1	22.72	22.76	22.79	24.0
Channel				343500	349000	344500	Tune-up limit
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	1	22.74	22.72	22.80	24.0
Channel				343000	349000	355000	Tune-up limit
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	1	22.79	22.77	22.75	24.0
Channel				342500	349000	355500	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	1	22.78	22.73	22.73	24.0

#### n66 Ant4 Other PA Default

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	20.88	20.75	20.85	22.0
40	PI/2 BPSK	1	108	20.58	20.97	20.81	
40	PI/2 BPSK	1	214	20.74	20.99	20.57	
40	PI/2 BPSK	108	0	20.89	20.42	20.88	21.0
40	PI/2 BPSK	108	54	20.90	20.94	20.53	
40	PI/2 BPSK	108	108	20.96	20.54	20.91	
40	PI/2 BPSK	216	0	20.49	20.51	20.48	22.0
40	QPSK	1	1	20.98	21.01	20.95	
40	QPSK	1	108	20.84	20.91	20.67	
40	QPSK	1	214	20.56	20.96	20.82	21.0
40	QPSK	108	0	19.97	19.91	19.92	
40	QPSK	108	54	20.79	20.98	20.79	
40	QPSK	108	108	20.14	20.13	20.12	19.0
40	QPSK	216	0	19.95	20.02	19.98	
40	16QAM	1	1	19.81	19.88	20.01	
40	64QAM	1	1	18.41	18.42	18.48	19.0
40	256QAM	1	1	16.32	16.36	16.38	17.0
Channel				345500	349000	352500	Tune-up limit
Frequency (MHz)				1727.5	1745	1762.5	
35	QPSK	1	1	22.76	22.81	22.83	22.0
Channel				345000	349000	353000	Tune-up limit
Frequency (MHz)				1725	1745	1765	
30	QPSK	1	1	20.90	20.94	20.94	22.0
Channel				344500	349000	353500	Tune-up limit
Frequency (MHz)				1722.5	1745	1767.5	
25	QPSK	1	1	20.74	20.86	20.81	22.0
Channel				344000	349000	354000	Tune-up limit
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	1	20.96	20.92	20.90	22.0



Channel				343500	349000	344500	Tune-up limit
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	1	20.98	20.92	20.90	22.0
Channel				343000	349000	355000	Tune-up limit
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	1	20.97	20.88	20.94	22.0
Channel				342500	349000	355500	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	1	20.98	20.94	20.95	22.0

n2 Ant1 Main PA Default							
BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	22.84	22.89	23.13	24.0
20	PI/2 BPSK	1	53	22.96	23.01	22.86	
20	PI/2 BPSK	1	104	22.93	22.98	22.79	
20	PI/2 BPSK	50	0	22.31	22.33	22.34	24.0
20	PI/2 BPSK	50	28	22.64	22.99	22.74	
20	PI/2 BPSK	50	56	22.47	22.50	22.51	24.0
20	PI/2 BPSK	100	0	22.36	22.49	22.43	
20	QPSK	1	1	23.12	23.16	13.11	24.0
20	QPSK	1	53	22.88	22.98	22.84	
20	QPSK	1	104	23.01	23.04	22.95	
20	QPSK	50	0	21.75	21.84	21.91	23.0
20	QPSK	50	28	22.69	22.98	22.70	24.0
20	QPSK	50	56	22.01	22.03	22.10	23.0
20	QPSK	100	0	21.83	21.97	21.74	
20	16QAM	1	1	22.00	22.04	22.10	
20	64QAM	1	1	20.41	20.52	20.37	21.0
20	256QAM	1	1	18.47	18.50	18.43	19.0
Channel				371500	376000	380500	Tune-up limit
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	22.81	22.94	22.84	24.0
Channel				371000	376000	381000	Tune-up limit
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	1	22.64	22.95	22.81	24.0
Channel				370500	376000	381500	Tune-up limit
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	22.88	23.12	23.14	24.0

n2 Ant1 Other PA Default							
BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	22.70	22.68	22.61	23.0
20	PI/2 BPSK	1	53	22.61	22.64	22.51	
20	PI/2 BPSK	1	104	22.47	22.58	22.53	
20	PI/2 BPSK	50	0	22.03	22.15	22.11	23.0
20	PI/2 BPSK	50	28	22.55	22.63	22.65	
20	PI/2 BPSK	50	56	22.04	22.09	22.10	23.0
20	PI/2 BPSK	100	0	22.08	22.10	22.06	
20	QPSK	1	1	22.69	22.75	22.71	23.0
20	QPSK	1	53	22.63	22.70	22.65	
20	QPSK	1	104	22.54	22.61	22.66	
20	QPSK	50	0	21.53	21.64	21.49	22.0
20	QPSK	50	28	22.57	22.65	22.53	23.0

20	QPSK	50	56	21.53	21.67	21.52	23.0
20	QPSK	100	0	22.10	22.12	22.16	
20	16QAM	1	1	21.63	21.77	21.64	
20	64QAM	1	1	20.31	20.30	20.33	21.0
20	256QAM	1	1	18.16	18.28	18.21	19.0
Channel				371500	376000	380500	Tune-up limit
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	22.71	22.69	22.62	23.0
Channel				371000	376000	381000	Tune-up limit
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	1	22.63	22.56	22.54	23.0
Channel				370500	376000	381500	Tune-up limit
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	22.59	22.67	22.66	23.0

**n66 Ant1 Main PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	23.18	23.21	23.27	24.0
40	PI/2 BPSK	1	108	23.22	23.29	23.25	
40	PI/2 BPSK	1	214	23.29	23.33	23.27	
40	PI/2 BPSK	108	0	22.61	22.69	22.66	23.5
40	PI/2 BPSK	108	54	23.12	23.19	23.17	
40	PI/2 BPSK	108	108	22.84	22.88	22.85	23.5
40	PI/2 BPSK	216	0	22.68	22.73	22.74	
40	QPSK	1	1	23.28	23.34	23.31	24.0
40	QPSK	1	108	23.21	23.26	23.24	
40	QPSK	1	214	23.24	23.30	23.25	
40	QPSK	108	0	22.14	22.19	22.13	23.5
40	QPSK	108	54	23.19	23.22	23.17	24.0
40	QPSK	108	108	22.29	22.33	22.31	23.0
40	QPSK	216	0	22.18	22.24	22.21	23.0
40	16QAM	1	1	22.27	22.32	22.29	
40	64QAM	1	1	20.76	20.79	20.75	22.0
40	256QAM	1	1	18.72	18.76	18.74	19.5
Channel				345500	349000	352500	Tune-up limit
Frequency (MHz)				1727.5	1745	1762.5	
35	QPSK	1	1	23.21	23.26	23.18	24.0
Channel				345000	349000	353000	Tune-up limit
Frequency (MHz)				1725	1745	1765	
30	QPSK	1	1	23.32	23.29	23.24	24.0
Channel				344500	349000	353500	Tune-up limit
Frequency (MHz)				1722.5	1745	1767.5	
25	QPSK	1	1	23.25	23.17	23.29	24.0
Channel				344000	349000	354000	Tune-up limit
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	1	23.32	23.31	23.28	24.0
Channel				343500	349000	344500	Tune-up limit
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	1	23.24	23.29	23.25	24.0
Channel				343000	349000	355000	Tune-up limit
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	1	23.33	23.30	23.29	24.0
Channel				342500	349000	355500	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	1	23.28	23.32	23.31	24.0

**n66 Ant1 Other PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	22.25	22.37	22.32	23.5
40	PI/2 BPSK	1	108	22.38	22.45	22.39	
40	PI/2 BPSK	1	214	22.26	22.33	22.26	
40	PI/2 BPSK	108	0	21.75	21.84	21.79	22.5
40	PI/2 BPSK	108	54	22.24	22.31	22.27	23.0
40	PI/2 BPSK	108	108	21.78	21.89	21.76	22.5
40	PI/2 BPSK	216	0	21.76	21.87	21.79	
40	QPSK	1	1	22.39	22.49	22.47	23.5
40	QPSK	1	108	22.24	22.39	22.35	
40	QPSK	1	214	22.21	22.35	22.29	
40	QPSK	108	0	21.23	21.35	21.32	22.0
40	QPSK	108	54	22.27	22.32	22.31	23.0

40	QPSK	108	108	21.38	21.45	21.42	22.5
40	QPSK	216	0	21.32	21.44	21.39	
40	16QAM	1	1	21.41	21.57	21.48	
40	64QAM	1	1	20.01	20.09	20.05	21.0
40	256QAM	1	1	17.95	18.00	17.98	19.0
Channel				345500	349000	352500	Tune-up limit
Frequency (MHz)				1727.5	1745	1762.5	
35	QPSK	1	1	22.36	22.31	22.35	23.5
Channel				345000	349000	353000	Tune-up limit
Frequency (MHz)				1725	1745	1765	
30	QPSK	1	1	22.48	22.48	22.40	23.5
Channel				344500	349000	353500	Tune-up limit
Frequency (MHz)				1722.5	1745	1767.5	
25	QPSK	1	1	22.36	22.41	22.38	23.5
Channel				344000	349000	354000	Tune-up limit
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	1	22.44	22.47	22.40	23.5
Channel				343500	349000	344500	Tune-up limit
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	1	22.38	22.47	22.38	23.5
Channel				343000	349000	355000	Tune-up limit
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	1	22.42	22.40	22.42	23.5
Channel				342500	349000	355500	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	1	22.45	22.46	22.39	23.5

**n66 Ant1 Other PA Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	23.05	23.13	23.04	24.0
40	PI/2 BPSK	1	108	23.01	23.15	23.08	
40	PI/2 BPSK	1	214	23.09	23.19	22.14	
40	PI/2 BPSK	108	0	22.35	22.45	22.39	23.5
40	PI/2 BPSK	108	54	22.98	23.03	22.99	
40	PI/2 BPSK	108	108	22.69	22.71	22.65	23.5
40	PI/2 BPSK	216	0	22.51	22.56	22.49	
40	QPSK	1	1	23.14	23.20	23.18	24.0
40	QPSK	1	108	23.05	23.14	23.04	
40	QPSK	1	214	23.03	23.15	23.09	
40	QPSK	108	0	21.96	22.03	22.01	23.0
40	QPSK	108	54	23.07	23.13	22.09	23.5
40	QPSK	108	108	22.07	22.16	22.12	23.0
40	QPSK	216	0	22.03	22.14	22.11	
40	16QAM	1	1	22.14	22.27	22.28	
40	64QAM	1	1	20.65	20.76	20.74	22.0
40	256QAM	1	1	18.69	18.72	18.72	20.0
Channel				345500	349000	352500	Tune-up limit
Frequency (MHz)				1727.5	1745	1762.5	
35	QPSK	1	1	23.14	23.11	23.12	24.0
Channel				345000	349000	353000	Tune-up limit
Frequency (MHz)				1725	1745	1765	
30	QPSK	1	1	23.12	23.17	23.10	24.0
Channel				344500	349000	353500	Tune-up limit
Frequency (MHz)				1722.5	1745	1767.5	
25	QPSK	1	1	23.16	23.18	23.04	24.0
Channel				344000	349000	354000	Tune-up limit
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	1	23.11	23.09	23.19	24.0

Channel				343500	349000	344500	Tune-up limit
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	1	23.15	23.18	23.14	24.0
Channel				343000	349000	355000	Tune-up limit
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	1	23.10	23.12	23.12	24.0
Channel				342500	349000	355500	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	1	23.16	23.18	23.16	24.0

**n7 Ant1 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				504000	507000	510000	
Frequency (MHz)				2520	2535	2550	
40	PI/2 BPSK	1	1	22.09	22.15	22.11	
40	PI/2 BPSK	1	108	22.18	22.24	22.18	23.0
40	PI/2 BPSK	1	214	22.19	22.23	22.14	
40	PI/2 BPSK	108	0	21.65	21.70	21.63	
40	PI/2 BPSK	108	54	22.24	22.30	22.27	23.0
40	PI/2 BPSK	108	108	21.93	21.97	21.95	23.0
40	PI/2 BPSK	216	0	21.84	21.88	21.84	
40	QPSK	1	1	22.29	22.32	22.29	
40	QPSK	1	108	22.21	22.27	22.17	23.0
40	QPSK	1	214	22.18	22.21	22.15	
40	QPSK	108	0	21.12	21.17	22.11	
40	QPSK	108	54	22.24	22.30	22.27	23.0
40	QPSK	108	108	21.38	21.44	21.38	22.5
40	QPSK	216	0	21.29	21.35	21.33	
40	16QAM	1	1	21.27	21.33	21.32	
40	64QAM	1	1	19.72	19.76	19.72	20.5
40	256QAM	1	1	17.65	17.71	17.69	18.5
Channel				503000	507000	511000	Tune-up limit
Frequency (MHz)				2515	2535	2555	
30	QPSK	1	1	22.32	22.29	22.22	
Channel				502500	507000	511500	Tune-up limit
Frequency (MHz)				2512.5	2535	2557.5	
25	QPSK	1	1	22.27	22.29	22.22	
Channel				502000	507000	512000	Tune-up limit
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	1	22.31	22.25	22.28	
Channel				501500	507000	512000	Tune-up limit
Frequency (MHz)				2507.5	2535	2562.5	
10	QPSK	1	1	22.28	22.29	22.25	
Channel				501000	507000	513000	Tune-up limit
Frequency (MHz)				2505	2535	2565	
5	QPSK	1	1	22.27	22.31	22.26	
Channel				500500	507000	513500	Tune-up limit
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	1	22.30	22.32	22.31	

**n38 Ant1 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				518004	519000	519996	
Frequency (MHz)				2590.02	2595	2599.98	
40	PI/2 BPSK	1	1	22.89	22.91	22.84	24.0
40	PI/2 BPSK	1	108	22.95	23.04	22.94	23.5
40	PI/2 BPSK	1	214	22.96	23.05	22.98	
40	PI/2 BPSK	108	0	22.32	22.40	22.37	23.5
40	PI/2 BPSK	108	54	22.91	22.98	22.94	
40	PI/2 BPSK	108	108	22.51	22.56	22.52	23.0
40	PI/2 BPSK	216	0	22.39	22.48	22.43	
40	QPSK	1	1	23.26	23.40	23.34	24.0
40	QPSK	1	108	23.08	23.12	22.98	23.5
40	QPSK	1	214	23.09	23.14	23.11	
40	QPSK	108	0	21.92	21.96	21.94	23.0
40	QPSK	108	54	21.89	21.96	21.93	
40	QPSK	108	108	21.88	21.96	21.91	
40	QPSK	216	0	21.93	21.97	21.95	
40	16QAM	1	1	22.01	22.06	22.02	21.0
40	64QAM	1	1	20.51	20.56	20.54	
40	256QAM	1	1	17.98	18.00	17.96	19.0
Channel				517002	519000	520998	Tune-up limit (dBm)
Frequency (MHz)				2585.01	2595	2604.99	
30	QPSK	1	1	23.05	23.38	23.36	24.0
Channel				516000	519000	522000	Tune-up limit (dBm)
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	1	23.35	23.32	23.30	24.0
Channel				515500	519000	522500	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	1	23.36	23.24	23.16	24.0
Channel				515000	519000	523000	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	1	23.31	23.33	23.28	24.0



**n41 Ant1 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				509202	518596	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	23.37	23.41	23.32	24.0
100	PI/2 BPSK	1	137	22.10	22.19	22.15	23.0
100	PI/2 BPSK	1	271	22.06	22.11	22.14	
100	PI/2 BPSK	135	0	22.65	22.73	22.62	23.5
100	PI/2 BPSK	135	69	23.14	23.16	23.11	
100	PI/2 BPSK	135	138	21.06	21.32	21.28	22.5
100	PI/2 BPSK	270	0	22.12	22.01	22.06	
100	QPSK	1	1	23.32	23.42	23.31	24.0
100	QPSK	1	137	21.54	21.68	21.62	23.0
100	QPSK	1	271	22.02	22.03	22.10	
100	QPSK	135	0	22.16	22.21	22.16	23.5
100	QPSK	135	69	22.65	22.71	22.64	
100	QPSK	135	138	20.46	20.72	20.62	22.0
100	QPSK	270	0	21.43	21.55	21.37	
100	16QAM	1	1	22.36	22.48	22.41	23.0
100	64QAM	1	1	21.01	21.00	21.03	22.0
100	256QAM	1	1	18.82	18.93	18.74	20.0
Channel				508200	52	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	QPSK	1	1	23.14	23.10	23.14	24.0
Channel				507204	518596	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	QPSK	1	1	23.06	23.06	23.08	24.0
Channel				506202	518596	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	QPSK	1	1	23.13	23.07	23.10	24.0
Channel				505200	518596	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	QPSK	1	1	23.09	23.07	23.09	24.0
Channel				504204	518596	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	QPSK	1	1	23.12	23.01	23.15	24.0
Channel				503202	518596	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	QPSK	1	1	23.12	23.06	23.14	24.0
Channel				502200	518596	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	QPSK	1	1	23.07	23.08	23.07	24.0
Channel				501204	518596	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	QPSK	1	1	23.12	23.12	23.08	24.0
Channel				500703	518596	536499	Tune-up limit (dBm)
Frequency (MHz)				2503.52	2592.99	2682.49	
15	QPSK	1	1	23.37	23.22	23.26	24.0
Channel				500205	518596	536997	Tune-up limit (dBm)
Frequency (MHz)				2501.02	2592.99	2684.99	
10	QPSK	1	1	23.17	23.16	23.28	24.0

**n78 Ant2 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Ture-up Limit (dBm)
Channel					633332		Ture-up Limit (dBm)
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		22.76		23.5
100	PI/2 BPSK	1	137		22.75		
100	PI/2 BPSK	1	271		22.70		
100	PI/2 BPSK	135	0		22.14		23.0
100	PI/2 BPSK	135	69		22.60		
100	PI/2 BPSK	135	138		22.13		22.5
100	PI/2 BPSK	270	0		22.20		
100	QPSK	1	1		22.79		23.5
100	QPSK	1	137		22.35		
100	QPSK	1	271		21.81		
100	QPSK	135	0		21.61		22.5
100	QPSK	135	69		22.33		
100	QPSK	135	138		21.09		22.0
100	QPSK	270	0		21.43		
100	16QAM	1	1		21.82		22.5
100	64QAM	1	1		20.24		
100	256QAM	1	1		18.21		19.0
Channel				633000	633332	633666	Ture-up Limit
Frequency (MHz)				3495	3499.98	3504.99	
90	QPSK	1	1	22.69	22.74	22.78	23.5
Channel				632668	633332	634000	Ture-up Limit
Frequency (MHz)				3490.02	3499.98	3510	
80	QPSK	1	1	22.72	22.74	22.70	23.5
Channel				632334	633332	634332	Ture-up Limit
Frequency (MHz)				3485.01	3499.98	3514.98	
70	QPSK	1	1	22.77	22.72	22.78	23.5
Channel				632000	633332	634666	Ture-up Limit
Frequency (MHz)				3480	3499.98	3519.99	
60	QPSK	1	1	22.70	22.74	22.69	23.5
Channel				631668	633332	635000	Ture-up Limit
Frequency (MHz)				3475.02	3499.98	3525	
50	QPSK	1	1	22.74	22.73	22.70	23.5
Channel				631334	633332	635332	Ture-up Limit
Frequency (MHz)				3470.01	3499.98	3529.98	
40	QPSK	1	1	22.74	22.69	22.73	23.5
Channel				631000	633332	635666	Ture-up Limit
Frequency (MHz)				3465	3499.98	3534.99	
30	QPSK	1	1	22.78	22.76	22.73	23.5
Channel				630668	633332	636000	Ture-up Limit
Frequency (MHz)				3460.02	3499.98	3540	
20	QPSK	1	1	22.73	22.74	22.78	23.5
Channel				630501	633332	636167	Ture-up Limit
Frequency (MHz)				3457.52	3499.98	3542.5	
15	QPSK	1	1	22.67	22.65	22.71	23.5
Channel				630335	633332	636333	Ture-up Limit
Frequency (MHz)				3455.02	3499.98	3545	
10	QPSK	1	1	22.63	22.59	22.66	23.5

**n78 Ant5 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Ture-up Limit (dBm)
Channel					633332		Ture-up Limit (dBm)
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		14.72		16.5
100	PI/2 BPSK	1	137		14.77		
100	PI/2 BPSK	1	271		14.49		
100	PI/2 BPSK	135	0		13.82		15.0
100	PI/2 BPSK	135	69		14.74		15.5
100	PI/2 BPSK	135	138		13.72		14.5
100	PI/2 BPSK	270	0		13.78		
100	QPSK	1	1		15.85		16.5
100	QPSK	1	137		15.83		
100	QPSK	1	271		15.52		
100	QPSK	135	0		15.34		16.0
100	QPSK	135	69		15.73		
100	QPSK	135	138		15.15		
100	QPSK	270	0		15.19		
100	16QAM	1	1		13.86		14.5
100	64QAM	1	1		12.42		13.0
100	256QAM	1	1		10.98		12.0
Channel				633000	633332	633666	Ture-up Limit
Frequency (MHz)				3495	3499.98	3504.99	
90	QPSK	1	1	15.65	15.64	15.41	16.5
Channel				632668	633332	634000	Ture-up Limit
Frequency (MHz)				3490.02	3499.98	3510	
80	QPSK	1	1	15.43	15.43	15.64	16.5
Channel				632334	633332	634332	Ture-up Limit
Frequency (MHz)				3485.01	3499.98	3514.98	
70	QPSK	1	1	15.47	15.58	15.68	16.5
Channel				632000	633332	634666	Ture-up Limit
Frequency (MHz)				3480	3499.98	3519.99	
60	QPSK	1	1	15.83	15.44	15.70	16.5
Channel				631668	633332	635000	Ture-up Limit
Frequency (MHz)				3475.02	3499.98	3525	
50	QPSK	1	1	15.77	15.52	15.77	16.5
Channel				631334	633332	635332	Ture-up Limit
Frequency (MHz)				3470.01	3499.98	3529.98	
40	QPSK	1	1	15.42	15.60	15.79	16.5
Channel				631000	633332	635666	Ture-up Limit
Frequency (MHz)				3465	3499.98	3534.99	
30	QPSK	1	1	15.65	15.64	15.83	16.5
Channel				630668	633332	636000	Ture-up Limit
Frequency (MHz)				3460.02	3499.98	3540	
20	QPSK	1	1	15.57	15.82	15.42	16.5
Channel				630501	633332	636167	Ture-up Limit
Frequency (MHz)				3457.52	3499.98	3542.5	
15	QPSK	1	1	15.48	15.60	15.43	16.5
Channel				630335	633332	636333	Ture-up Limit
Frequency (MHz)				3455.02	3499.98	3545	
10	QPSK	1	1	15.43	15.78	15.57	16.5

**n78 Ant7 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Ture-up Limit (dBm)
Channel					633332		Ture-up Limit (dBm)
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.13		17.0
100	PI/2 BPSK	1	137		15.12		
100	PI/2 BPSK	1	271		15.06		
100	PI/2 BPSK	135	0		14.22		15.0
100	PI/2 BPSK	135	69		15.13		16.0
100	PI/2 BPSK	135	138		14.18		15.0
100	PI/2 BPSK	270	0		14.12		
100	QPSK	1	1		16.42		17.0
100	QPSK	1	137		16.27		
100	QPSK	1	271		16.18		
100	QPSK	135	0		15.76		16.0
100	QPSK	135	69		16.14		17.0
100	QPSK	135	138		15.62		16.0
100	QPSK	270	0		15.51		
100	16QAM	1	1		14.41		15.0
100	64QAM	1	1		12.87		14.0
100	256QAM	1	1		11.42		12.0
Channel				633000	633332	633666	Ture-up Limit
Frequency (MHz)				3495	3499.98	3504.99	
90	QPSK	1	1	16.40	16.34	16.37	17.0
Channel				632668	633332	634000	Ture-up Limit
Frequency (MHz)				3490.02	3499.98	3510	
80	QPSK	1	1	16.31	16.36	16.41	17.0
Channel				632334	633332	634332	Ture-up Limit
Frequency (MHz)				3485.01	3499.98	3514.98	
70	QPSK	1	1	16.38	16.31	16.37	17.0
Channel				632000	633332	634666	Ture-up Limit
Frequency (MHz)				3480	3499.98	3519.99	
60	QPSK	1	1	16.33	16.34	16.33	17.0
Channel				631668	633332	635000	Ture-up Limit
Frequency (MHz)				3475.02	3499.98	3525	
50	QPSK	1	1	16.34	16.31	16.35	17.0
Channel				631334	633332	635332	Ture-up Limit
Frequency (MHz)				3470.01	3499.98	3529.98	
40	QPSK	1	1	16.35	16.40	16.35	17.0
Channel				631000	633332	635666	Ture-up Limit
Frequency (MHz)				3465	3499.98	3534.99	
30	QPSK	1	1	16.37	16.32	16.37	17.0
Channel				630668	633332	636000	Ture-up Limit
Frequency (MHz)				3460.02	3499.98	3540	
20	QPSK	1	1	16.27	16.37	16.31	17.0
Channel				630501	633332	636167	Ture-up Limit
Frequency (MHz)				3457.52	3499.98	3542.5	
15	QPSK	1	1	16.28	16.35	16.32	17.0
Channel				630335	633332	636333	Ture-up Limit
Frequency (MHz)				3455.02	3499.98	3545	
10	QPSK	1	1	16.34	16.30	16.31	17.0

**n78 Ant11 Default**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Ture-up Limit (dBm)
Channel					633332		Ture-up Limit (dBm)
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		22.18		23.0
100	PI/2 BPSK	1	137		22.06		
100	PI/2 BPSK	1	271		21.97		
100	PI/2 BPSK	135	0		21.61		22.5
100	PI/2 BPSK	135	69		21.97		
100	PI/2 BPSK	135	138		21.42		
100	PI/2 BPSK	270	0		21.50		23.0
100	QPSK	1	1		22.20		
100	QPSK	1	137		21.65		
100	QPSK	1	271		21.34		22.0
100	QPSK	135	0		20.89		
100	QPSK	135	69		21.62		
100	QPSK	135	138		20.48		21.0
100	QPSK	270	0		20.70		
100	16QAM	1	1		21.21		
100	64QAM	1	1		19.69		20.0
100	256QAM	1	1		17.69		18.0
Channel				633000	633332	633666	Ture-up Limit
Frequency (MHz)				3495	3499.98	3504.99	
90	QPSK	1	1	22.08	22.19	22.11	23.0
Channel				632668	633332	634000	Ture-up Limit
Frequency (MHz)				3490.02	3499.98	3510	
80	QPSK	1	1	22.14	22.16	22.12	23.0
Channel				632334	633332	634332	Ture-up Limit
Frequency (MHz)				3485.01	3499.98	3514.98	
70	QPSK	1	1	22.09	22.08	22.07	23.0
Channel				632000	633332	634666	Ture-up Limit
Frequency (MHz)				3480	3499.98	3519.99	
60	QPSK	1	1	22.07	22.17	22.11	23.0
Channel				631668	633332	635000	Ture-up Limit
Frequency (MHz)				3475.02	3499.98	3525	
50	QPSK	1	1	22.15	22.19	22.10	23.0
Channel				631334	633332	635332	Ture-up Limit
Frequency (MHz)				3470.01	3499.98	3529.98	
40	QPSK	1	1	22.08	22.13	22.07	23.0
Channel				631000	633332	635666	Ture-up Limit
Frequency (MHz)				3465	3499.98	3534.99	
30	QPSK	1	1	22.07	22.09	22.07	23.0
Channel				630668	633332	636000	Ture-up Limit
Frequency (MHz)				3460.02	3499.98	3540	
20	QPSK	1	1	22.18	22.14	22.16	23.0
Channel				630501	633332	636167	Ture-up Limit
Frequency (MHz)				3457.52	3499.98	3542.5	
15	QPSK	1	1	22.15	22.12	22.11	23.0
Channel				630335	633332	636333	Ture-up Limit
Frequency (MHz)				3455.02	3499.98	3545	
10	QPSK	1	1	22.13	22.17	22.14	23.0

GSM1900 Ant1 DS13								
GSM1900	Burst Average Power(dBm)			Tune-up limit (dBm)	Frame-Average Power(dBm)			Tune-up limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency(MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx Slot	29.47	29.52	29.53	30.0	20.47	20.52	20.53	21.00
GPRS 1 Tx Slot	29.26	29.26	29.21	30.0	20.26	20.26	20.21	21.00
GPRS 2 Tx Slot	26.91	26.96	26.88	28.0	20.91	20.96	20.88	22.00
GPRS 3 Tx Slot	24.71	24.73	24.67	25.5	20.45	20.47	20.41	21.24
GPRS 4 Tx Slot	23.90	23.93	23.88	24.5	20.90	20.93	20.88	21.50
EDGE 1 Tx Slot	25.60	25.62	25.57	26.0	16.60	16.62	16.57	17.00
EDGE 2 Tx Slot	23.17	23.16	23.14	24.0	17.17	17.16	17.14	18.00
EDGE 3 Tx Slot	21.44	21.47	21.38	22.0	17.18	17.21	17.12	17.74
EDGE 4 Tx Slot	19.02	19.09	19.03	20.0	16.02	16.09	16.03	17.00

GSM1900 Ant1 DSI7								
GSM1900 TX Channel	Burst Average Power(dBm)			Tune-up limit (dBm)	Frame-Average Power(dBm)			Tune-up limit (dBm)
	512	661	810		512	661	810	
Frequency(MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx Slot	29.47	29.52	29.53	30.0	20.47	20.52	20.53	21.00
GPRS 1 Tx Slot	29.26	29.26	29.21	30.0	20.26	20.26	20.21	21.00
GPRS 2 Tx Slot	26.91	26.96	26.88	28.0	20.91	20.96	20.88	22.00
GPRS 3 Tx Slot	24.71	24.73	24.67	25.5	20.45	20.47	20.41	21.24
GPRS 4 Tx Slot	23.90	23.93	23.88	24.5	20.90	20.93	20.88	21.50
EDGE 1 Tx Slot	25.60	25.62	25.57	26.0	16.60	16.62	16.57	17.00
EDGE 2 Tx Slot	23.17	23.16	23.14	24.0	17.17	17.16	17.14	18.00
EDGE 3 Tx Slot	21.44	21.47	21.38	22.0	17.18	17.21	17.12	17.74
EDGE 4 Tx Slot	19.02	19.09	19.03	20.0	16.02	16.09	16.03	17.00

Band		WCDMA II Ant1 DSI3				WCDMA IV Ant1 DSI3			
		WCDMA II			Tune-up limit (dBm)	WCDMA IV			Tune-up limit (dBm)
TX Channel	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	21.48	21.41	21.47	22.0	21.12	21.17	21.19	22.0
3GPP Rel 99	RMC 12.2Kbps	21.48	21.55	21.41	22.0	21.20	21.21	21.16	22.0
3GPP Rel 6	HSDPA Subtest-1	20.35	20.50	20.54	21.0	20.16	20.28	20.11	21.0
3GPP Rel 6	HSDPA Subtest-2	20.54	20.50	20.53	21.0	20.19	20.24	20.15	21.0
3GPP Rel 6	HSDPA Subtest-3	19.65	19.63	19.84	20.5	19.36	19.43	19.40	20.0
3GPP Rel 6	HSDPA Subtest-4	19.51	19.55	19.38	20.0	19.23	19.37	19.27	20.0
3GPP Rel 6	HSUPA Subtest-1	20.51	20.33	20.58	21.0	20.16	20.21	20.11	21.0
3GPP Rel 6	HSUPA Subtest-2	18.44	18.38	18.48	19.0	18.13	18.15	18.12	19.0
3GPP Rel 6	HSUPA Subtest-3	19.58	19.54	19.49	20.0	19.33	19.36	19.30	20.0
3GPP Rel 6	HSUPA Subtest-4	18.37	18.41	18.32	19.0	18.11	18.12	18.15	19.0
3GPP Rel 6	HSUPA Subtest-5	20.32	20.46	20.30	21.0	20.26	20.36	20.31	21.0
3GPP Rel 7	HSUPA+(16QAM)	17.98	17.93	17.93	18.5	17.62	17.74	17.65	18.0



Band		WCDMA II Ant1 DSI7			Tune-up limit (dBm)	WCDMA IV Ant1 DSI7			Tune-up limit (dBm)
		WCDMA II				WCDMA IV			
TX Channel		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	20.55	20.69	20.61	21.0	19.45	19.51	19.53	20.0
3GPP Rel 99	RMC 12.2Kbps	20.61	20.72	20.65	21.0	19.69	19.72	19.65	20.0
3GPP Rel 6	HSDPA Subtest-1	20.56	20.64	20.61	21.0	18.96	19.10	18.92	20.0
3GPP Rel 6	HSDPA Subtest-2	19.73	19.81	19.79	20.5	18.66	18.60	18.51	19.0
3GPP Rel 6	HSDPA Subtest-3	19.36	19.64	19.56	20.0	18.52	18.54	18.52	19.0
3GPP Rel 6	HSDPA Subtest-4	18.21	18.26	18.34	19.0	17.25	17.14	17.27	18.0
3GPP Rel 6	HSUPA Subtest-1	17.55	17.65	17.61	18.0	16.70	16.78	16.65	17.0
3GPP Rel 6	HSUPA Subtest-2	18.14	18.21	18.23	19.0	17.70	17.83	17.70	18.0
3GPP Rel 6	HSUPA Subtest-3	17.34	17.45	17.43	18.0	16.50	16.50	16.43	17.0
3GPP Rel 6	HSUPA Subtest-4	17.52	17.41	17.56	18.0	16.62	16.46	16.65	17.0
3GPP Rel 6	HSUPA Subtest-5	18.21	18.23	18.19	19.0	17.92	17.92	17.83	18.5
3GPP Rel 7	HSUPA+(16QAM)	17.64	17.66	17.62	18.0	16.64	16.75	16.69	17.0

Band		WCDMA II Ant1 DSI6			Tune-up limit (dBm)	WCDMA IV Ant1 DSI6			Tune-up limit (dBm)
		WCDMA II				WCDMA IV			
TX Channel		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	23.14	23.11	23.10	24.0	23.01	23.12	23.11	24.0
3GPP Rel 99	RMC 12.2Kbps	23.18	23.20	23.16	24.0	23.12	23.13	23.11	24.0
3GPP Rel 6	HSDPA Subtest-1	22.11	22.18	22.14	23.0	22.41	22.53	22.36	23.0
3GPP Rel 6	HSDPA Subtest-2	22.12	22.01	22.14	22.5	22.00	22.11	22.06	22.5
3GPP Rel 6	HSDPA Subtest-3	21.38	21.53	21.32	22.0	20.01	22.08	22.10	22.5
3GPP Rel 6	HSDPA Subtest-4	21.11	21.16	21.12	21.5	20.64	20.65	20.61	22.5
3GPP Rel 6	HSUPA Subtest-1	22.06	22.10	22.13	22.5	20.33	20.26	20.31	21.0
3GPP Rel 6	HSUPA Subtest-2	20.05	20.03	20.06	20.5	21.37	21.31	21.28	22.0
3GPP Rel 6	HSUPA Subtest-3	21.12	21.11	21.08	21.5	19.26	19.21	19.14	20.0
3GPP Rel 6	HSUPA Subtest-4	20.06	20.15	20.11	20.5	20.15	20.16	20.15	21.0
3GPP Rel 6	HSUPA Subtest-5	22.19	22.21	22.12	22.5	21.36	21.32	21.29	22.0
3GPP Rel 7	HSUPA+(16QAM)	19.64	19.61	19.59	20.0	18.73	18.71	18.67	19.0

**Band2 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	17.69	18.17	17.57	19.0
20	QPSK	1	49	17.60	17.54	17.42	
20	QPSK	1	99	17.59	17.61	16.88	
20	QPSK	50	0	17.74	17.64	17.64	18.5
20	QPSK	50	24	17.62	17.64	17.48	
20	QPSK	50	50	17.57	17.65	17.12	
20	QPSK	100	0	17.61	17.61	17.37	
20	16QAM	1	0	17.86	17.80	17.75	18.5
20	16QAM	1	49	17.88	17.92	17.57	
20	16QAM	1	99	17.60	17.95	17.12	
20	16QAM	50	0	17.76	17.69	17.68	18.5
20	16QAM	50	24	17.68	17.67	17.46	
20	16QAM	50	50	17.65	17.69	17.17	
20	16QAM	100	0	17.69	17.72	17.43	
20	64QAM	1	0	17.82	17.59	17.67	18.5
20	64QAM	1	49	17.70	17.66	17.59	
20	64QAM	1	99	17.57	17.71	16.93	
20	64QAM	50	0	17.72	17.64	17.63	18.5
20	64QAM	50	24	17.64	17.63	17.46	
20	64QAM	50	50	17.60	17.72	17.09	
20	64QAM	100	0	17.62	17.57	17.38	
20	256QAM	1	0	17.96	17.78	17.75	18.5
20	256QAM	1	49	17.53	17.80	17.56	
20	256QAM	1	99	17.68	17.85	16.98	
20	256QAM	50	0	17.76	17.64	17.62	18.5
20	256QAM	50	24	17.61	17.65	17.43	
20	256QAM	50	50	17.64	17.74	17.08	
20	256QAM	100	0	17.64	17.63	17.45	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	17.69	17.45	17.45	19.0
15	QPSK	1	37	17.72	17.61	17.23	
15	QPSK	1	74	17.63	17.67	16.90	
15	QPSK	36	0	17.76	17.64	17.47	18.5
15	QPSK	36	20	17.59	17.55	17.26	
15	QPSK	39	39	17.66	17.70	17.00	
15	QPSK	75	0	17.65	17.61	17.28	
15	16QAM	1	0	17.82	17.70	17.73	18.5
15	16QAM	1	37	17.77	17.79	17.28	
15	16QAM	1	74	17.69	17.87	17.12	
15	16QAM	36	0	17.77	17.60	17.47	18.5
15	16QAM	36	20	17.69	17.58	17.31	
15	16QAM	39	39	17.62	17.66	17.02	
15	16QAM	75	0	17.70	17.66	17.37	
15	64QAM	1	0	17.81	17.59	17.57	18.5
15	64QAM	1	37	17.65	17.80	17.35	
15	64QAM	1	74	17.66	17.91	16.87	
15	64QAM	36	0	17.70	17.71	17.50	18.5
15	64QAM	36	20	17.57	17.52	17.20	
15	64QAM	39	39	17.58	17.64	17.04	
15	64QAM	75	0	17.58	17.64	17.34	
15	256QAM	1	0	17.83	17.69	17.73	18.5
15	256QAM	1	37	17.92	17.92	17.41	
15	256QAM	1	74	17.68	17.92	16.88	
15	256QAM	36	0	17.79	17.59	17.45	18.5
15	256QAM	36	20	17.69	17.58	17.28	
15	256QAM	39	39	17.63	17.73	16.98	
15	256QAM	75	0	17.68	17.68	17.34	

Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	17.84	17.57	17.48	19.0
10	QPSK	1	25	17.90	17.85	17.20	
10	QPSK	1	49	17.78	17.78	16.99	
10	QPSK	25	0	17.88	17.83	17.37	18.5
10	QPSK	25	12	17.91	17.83	17.28	
10	QPSK	25	25	17.83	17.87	17.05	
10	QPSK	50	0	17.92	17.84	17.19	18.5
10	16QAM	1	0	18.01	17.85	17.64	
10	16QAM	1	25	18.08	17.85	17.33	
10	16QAM	1	49	17.92	17.95	17.20	18.5
10	16QAM	25	0	17.90	17.78	17.38	
10	16QAM	25	12	17.92	17.76	17.34	
10	16QAM	25	25	17.86	17.88	17.06	18.5
10	16QAM	50	0	17.93	17.85	17.25	
10	64QAM	1	0	18.13	17.84	17.53	
10	64QAM	1	25	17.95	18.03	17.23	18.5
10	64QAM	1	49	17.88	17.91	17.13	
10	64QAM	25	0	17.91	17.77	17.33	
10	64QAM	25	12	17.95	17.80	17.32	18.5
10	64QAM	25	25	17.81	17.84	17.10	
10	64QAM	50	0	17.90	17.79	17.26	
10	256QAM	1	0	18.11	17.74	17.47	18.5
10	256QAM	1	25	18.15	17.86	17.42	
10	256QAM	1	49	17.86	17.90	16.91	
10	256QAM	25	0	17.99	17.84	17.43	18.5
10	256QAM	25	12	17.95	17.88	17.25	
10	256QAM	25	25	17.88	17.81	17.08	
10	256QAM	50	0	18.00	17.78	17.28	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	17.84	17.72	17.10	19.0
5	QPSK	1	12	17.93	17.78	17.06	
5	QPSK	1	24	17.82	17.73	16.94	
5	QPSK	12	0	17.97	17.80	17.10	18.5
5	QPSK	12	7	17.95	17.75	17.11	
5	QPSK	12	13	17.88	17.77	16.99	
5	QPSK	25	0	17.98	17.75	17.09	18.5
5	16QAM	1	0	18.03	18.01	17.44	
5	16QAM	1	12	18.16	18.08	17.45	
5	16QAM	1	24	18.10	17.89	17.23	18.5
5	16QAM	12	0	18.00	17.79	17.25	
5	16QAM	12	7	18.00	17.80	17.18	
5	16QAM	12	13	17.98	17.81	17.11	18.5
5	16QAM	25	0	17.94	17.70	17.05	
5	64QAM	1	0	18.16	17.91	17.00	
5	64QAM	1	12	18.16	17.86	17.11	18.5
5	64QAM	1	24	18.00	17.86	17.23	
5	64QAM	12	0	18.01	17.86	17.16	
5	64QAM	12	7	17.95	17.71	17.14	18.5
5	64QAM	12	13	17.90	17.83	17.05	
5	64QAM	25	0	18.00	17.78	17.13	
5	256QAM	1	0	17.91	17.80	17.24	18.5
5	256QAM	1	12	18.06	18.07	17.26	
5	256QAM	1	24	17.99	17.81	17.14	
5	256QAM	12	0	17.92	17.83	17.17	18.5
5	256QAM	12	7	17.98	17.82	17.11	
5	256QAM	12	13	17.95	17.88	17.15	
5	256QAM	25	0	17.93	17.72	17.07	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	17.87	17.64	16.97	

3	QPSK	1	8	17.94	17.81	16.98	19.0
3	QPSK	1	14	17.84	17.80	16.91	
3	QPSK	8	0	17.91	17.75	17.08	18.5
3	QPSK	8	4	17.94	17.74	17.04	
3	QPSK	8	7	17.89	17.78	17.01	
3	QPSK	15	0	17.89	17.79	17.00	
3	16QAM	1	0	17.48	17.94	17.22	18.5
3	16QAM	1	8	17.71	17.74	17.21	
3	16QAM	1	14	17.59	17.84	17.08	
3	16QAM	8	0	17.66	17.84	17.08	18.5
3	16QAM	8	4	17.98	17.85	17.17	
3	16QAM	8	7	17.95	17.74	17.07	
3	16QAM	15	0	17.94	17.81	17.08	
3	64QAM	1	0	17.99	17.78	17.10	18.5
3	64QAM	1	8	17.48	18.08	17.05	
3	64QAM	1	14	17.92	17.74	17.15	
3	64QAM	8	0	17.96	17.76	17.13	18.5
3	64QAM	8	4	17.71	17.88	17.05	
3	64QAM	8	7	17.86	17.78	17.12	
3	64QAM	15	0	17.93	17.81	17.05	
3	256QAM	1	0	17.53	17.79	17.24	18.5
3	256QAM	1	8	17.66	17.76	17.01	
3	256QAM	1	14	17.65	17.97	17.00	
3	256QAM	8	0	17.57	17.90	17.06	18.5
3	256QAM	8	4	17.60	17.83	17.14	
3	256QAM	8	7	17.91	17.85	17.04	
3	256QAM	15	0	17.92	17.72	17.10	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	17.87	17.72	16.93	19.0
1.4	QPSK	1	3	17.93	17.81	16.93	
1.4	QPSK	1	5	17.83	17.74	16.94	
1.4	QPSK	3	0	17.91	17.76	16.91	18.5
1.4	QPSK	3	1	17.94	17.72	16.95	
1.4	QPSK	3	3	17.90	17.72	16.93	
1.4	QPSK	6	0	17.88	17.76	17.01	
1.4	16QAM	1	0	17.99	17.85	16.93	18.5
1.4	16QAM	1	3	18.13	17.87	17.16	
1.4	16QAM	1	5	17.94	17.85	17.02	
1.4	16QAM	3	0	18.05	17.79	17.09	18.5
1.4	16QAM	3	1	17.94	17.83	16.97	
1.4	16QAM	3	3	17.98	17.77	17.06	
1.4	16QAM	6	0	17.92	17.76	16.98	
1.4	64QAM	1	0	18.15	17.81	17.12	18.5
1.4	64QAM	1	3	18.10	17.73	17.11	
1.4	64QAM	1	5	18.01	17.78	17.09	
1.4	64QAM	3	0	17.96	17.85	17.00	18.5
1.4	64QAM	3	1	17.93	17.78	17.09	
1.4	64QAM	3	3	17.84	17.76	16.98	
1.4	64QAM	6	0	17.98	17.86	17.03	
1.4	256QAM	1	0	18.10	17.90	17.17	18.5
1.4	256QAM	1	3	18.14	17.96	17.31	
1.4	256QAM	1	5	18.09	17.91	17.08	
1.4	256QAM	3	0	17.91	17.86	17.11	18.5
1.4	256QAM	3	1	18.06	17.89	17.14	
1.4	256QAM	3	3	18.05	17.87	17.02	
1.4	256QAM	6	0	18.00	17.82	17.01	

**Band4 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low CH./Freq.	Mid CH./Freq.	High CH./Freq.	
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	18.67	18.84	18.78	19.0
20	QPSK	1	49	18.63	18.75	18.64	
20	QPSK	1	99	18.62	18.81	18.50	
20	QPSK	50	0	18.66	18.77	18.76	19.0
20	QPSK	50	24	18.72	18.69	18.72	
20	QPSK	50	50	18.68	18.71	18.53	
20	QPSK	100	0	18.66	18.73	18.63	
20	16QAM	1	0	18.62	18.79	18.60	19.0
20	16QAM	1	49	18.60	18.77	18.62	
20	16QAM	1	99	18.78	18.68	18.77	
20	16QAM	50	0	18.60	18.63	18.83	19.0
20	16QAM	50	24	18.68	18.67	18.62	
20	16QAM	50	50	18.82	18.82	18.54	
20	16QAM	100	0	18.80	18.62	18.69	
20	64QAM	1	0	18.76	18.67	18.83	19.0
20	64QAM	1	49	18.79	18.72	18.78	
20	64QAM	1	99	18.77	18.78	18.61	
20	64QAM	50	0	17.64	17.96	17.77	19.0
20	64QAM	50	24	17.77	18.06	17.75	
20	64QAM	50	50	17.92	17.94	17.76	
20	64QAM	100	0	17.82	17.96	17.77	
20	256QAM	1	0	15.61	15.84	16.03	17.0
20	256QAM	1	49	16.09	16.22	15.91	
20	256QAM	1	99	16.03	16.03	15.83	
20	256QAM	50	0	15.69	15.93	15.84	16.5
20	256QAM	50	24	15.90	16.02	15.80	
20	256QAM	50	50	15.95	15.97	15.80	
20	256QAM	100	0	15.87	15.99	15.80	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	18.39	18.70	18.76	19.0
15	QPSK	1	37	18.70	18.73	18.78	
15	QPSK	1	74	18.62	18.78	18.60	
15	QPSK	36	0	18.75	18.69	18.61	19.0
15	QPSK	36	20	18.66	18.77	18.63	
15	QPSK	39	39	18.71	18.70	18.80	
15	QPSK	75	0	18.69	18.81	18.65	
15	16QAM	1	0	18.69	18.72	18.81	19.0
15	16QAM	1	37	18.73	18.64	18.63	
15	16QAM	1	74	18.68	18.69	18.78	
15	16QAM	36	0	18.81	18.81	18.78	19.0
15	16QAM	36	20	18.71	18.72	18.60	
15	16QAM	39	39	18.68	18.73	18.79	
15	16QAM	75	0	18.64	18.64	18.61	
15	64QAM	1	0	18.75	18.82	18.61	19.0
15	64QAM	1	37	18.79	18.61	18.73	
15	64QAM	1	74	18.61	18.78	18.63	
15	64QAM	36	0	17.73	17.87	18.08	18.0
15	64QAM	36	20	17.81	17.94	18.04	
15	64QAM	39	39	17.87	17.97	18.00	
15	64QAM	75	0	17.79	17.91	17.99	
15	256QAM	1	0	15.54	16.06	16.26	17.0
15	256QAM	1	37	15.89	16.05	16.27	
15	256QAM	1	74	15.83	16.08	16.15	
15	256QAM	36	0	15.75	16.01	16.12	16.5
15	256QAM	36	20	15.88	16.00	16.12	
15	256QAM	39	39	15.93	16.00	16.02	
15	256QAM	75	0	15.82	15.95	16.03	

Channel				20000	20175	20350	Tune-up limit
Frequency (MHz)				1715	1732.5	1750	(dBm)
10	QPSK	1	0	18.74	18.61	18.72	19.0
10	QPSK	1	25	18.63	18.79	18.64	
10	QPSK	1	49	18.82	18.80	18.60	
10	QPSK	25	0	18.74	18.66	18.64	19.0
10	QPSK	25	12	18.81	18.67	18.81	
10	QPSK	25	25	18.82	18.81	18.75	
10	QPSK	50	0	18.81	18.73	18.77	
10	16QAM	1	0	18.75	18.79	18.62	19.0
10	16QAM	1	25	18.60	18.70	18.75	
10	16QAM	1	49	18.66	18.78	18.62	
10	16QAM	25	0	18.71	18.67	18.82	19.0
10	16QAM	25	12	18.72	18.75	18.75	
10	16QAM	25	25	18.65	18.61	18.82	
10	16QAM	50	0	18.62	18.63	18.63	
10	64QAM	1	0	18.71	18.79	18.76	19.0
10	64QAM	1	25	18.65	18.80	18.70	
10	64QAM	1	49	18.62	18.79	18.79	
10	64QAM	25	0	17.91	18.11	18.75	18.5
10	64QAM	25	12	18.04	18.10	18.80	
10	64QAM	25	25	18.08	18.14	18.10	
10	64QAM	50	0	17.89	18.17	18.11	
10	256QAM	1	0	15.83	16.15	16.25	17.0
10	256QAM	1	25	16.39	16.36	16.41	
10	256QAM	1	49	16.14	16.25	16.08	
10	256QAM	25	0	16.00	16.13	16.20	16.5
10	256QAM	25	12	16.05	16.20	16.11	
10	256QAM	25	25	16.05	16.19	16.05	
10	256QAM	50	0	16.03	16.16	16.04	
Channel				19975	20175	20375	Tune-up limit
Frequency (MHz)				1712.5	1732.5	1752.5	(dBm)
5	QPSK	1	0	18.60	18.82	18.61	19.0
5	QPSK	1	12	18.64	18.82	18.75	
5	QPSK	1	24	18.75	18.67	18.69	
5	QPSK	12	0	18.62	18.63	18.79	19.0
5	QPSK	12	7	18.67	18.82	18.80	
5	QPSK	12	13	18.74	18.60	18.81	
5	QPSK	25	0	18.79	18.67	18.76	
5	16QAM	1	0	18.80	18.76	18.80	19.0
5	16QAM	1	12	18.61	18.72	18.69	
5	16QAM	1	24	18.66	18.64	18.66	
5	16QAM	12	0	18.60	18.70	18.64	19.0
5	16QAM	12	7	18.80	18.77	18.78	
5	16QAM	12	13	18.70	18.62	18.69	
5	16QAM	25	0	18.73	18.60	18.74	
5	64QAM	1	0	18.65	18.67	18.68	19.0
5	64QAM	1	12	18.78	18.61	18.79	
5	64QAM	1	24	18.68	18.73	18.79	
5	64QAM	12	0	18.60	18.81	18.81	18.5
5	64QAM	12	7	18.81	18.22	18.80	
5	64QAM	12	13	18.13	18.20	18.65	
5	64QAM	25	0	17.96	18.07	18.08	
5	256QAM	1	0	16.12	15.99	16.18	17.0
5	256QAM	1	12	16.24	16.29	16.16	
5	256QAM	1	24	16.11	16.38	16.22	
5	256QAM	12	0	16.04	16.06	16.09	16.5
5	256QAM	12	7	16.04	16.21	16.21	
5	256QAM	12	13	16.16	16.19	16.11	
5	256QAM	25	0	16.05	16.13	16.11	
Channel				19965	20175	20385	Tune-up limit
Frequency (MHz)				1711.5	1732.5	1753.5	(dBm)
3	QPSK	1	0	18.66	18.61	18.71	

3	QPSK	1	8	18.81	18.79	18.78	19.0
3	QPSK	1	14	18.79	18.80	18.69	
3	QPSK	8	0	18.79	18.71	18.72	19.0
3	QPSK	8	4	18.78	18.76	18.61	
3	QPSK	8	7	18.64	18.81	18.65	
3	QPSK	15	0	18.82	18.71	18.61	
3	16QAM	1	0	18.81	18.60	18.66	19.0
3	16QAM	1	8	18.79	18.80	18.77	
3	16QAM	1	14	18.70	18.77	18.61	
3	16QAM	8	0	18.60	18.79	18.61	19.0
3	16QAM	8	4	18.73	18.61	18.72	
3	16QAM	8	7	18.63	18.61	18.69	
3	16QAM	15	0	18.80	18.63	18.63	
3	64QAM	1	0	18.74	18.78	18.68	
3	64QAM	1	8	18.81	18.73	18.67	19.0
3	64QAM	1	14	18.78	18.63	18.63	
3	64QAM	8	0	18.67	18.63	18.74	
3	64QAM	8	4	18.62	18.68	18.73	18.5
3	64QAM	8	7	18.60	18.62	18.70	
3	64QAM	15	0	18.72	18.62	18.78	
3	256QAM	1	0	16.08	16.17	16.21	
3	256QAM	1	8	16.32	16.31	16.32	17.0
3	256QAM	1	14	16.09	16.22	16.28	
3	256QAM	8	0	16.03	16.16	16.20	
3	256QAM	8	4	16.07	16.26	16.20	16.5
3	256QAM	8	7	16.03	16.25	16.14	
3	256QAM	15	0	16.03	16.13	16.13	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	18.76	18.68	18.79	19.0
1.4	QPSK	1	3	18.77	18.75	18.77	
1.4	QPSK	1	5	18.68	18.82	18.76	
1.4	QPSK	3	0	18.73	18.61	18.80	19.0
1.4	QPSK	3	1	18.73	18.73	18.75	
1.4	QPSK	3	3	18.69	18.71	18.73	
1.4	QPSK	6	0	18.79	18.82	18.67	
1.4	16QAM	1	0	18.76	18.63	18.79	
1.4	16QAM	1	3	18.68	18.80	18.68	19.0
1.4	16QAM	1	5	18.81	18.69	18.74	
1.4	16QAM	3	0	18.81	18.73	18.68	
1.4	16QAM	3	1	18.68	18.77	18.79	19.0
1.4	16QAM	3	3	18.82	18.71	18.63	
1.4	16QAM	6	0	18.77	18.67	18.67	
1.4	64QAM	1	0	18.65	18.65	18.67	
1.4	64QAM	1	3	18.72	18.64	18.82	19.0
1.4	64QAM	1	5	18.76	18.79	18.76	
1.4	64QAM	3	0	18.78	18.79	18.68	
1.4	64QAM	3	1	18.62	18.75	18.69	19.0
1.4	64QAM	3	3	18.76	18.72	18.61	
1.4	64QAM	6	0	18.82	18.70	18.62	
1.4	256QAM	1	0	16.18	16.29	16.37	
1.4	256QAM	1	3	16.02	16.30	16.14	
1.4	256QAM	1	5	16.20	16.13	16.29	17.0
1.4	256QAM	3	0	16.09	16.17	16.08	
1.4	256QAM	3	1	16.07	16.21	15.98	
1.4	256QAM	3	3	16.07	16.25	15.98	17.0
1.4	256QAM	6	0	16.02	16.17	16.01	



**Band5 Ant4 DS12**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	20.70	20.83	20.74	21.5
10	QPSK	1	25	20.61	20.75	20.73	
10	QPSK	1	49	20.66	20.67	20.59	
10	QPSK	25	0	19.73	19.79	19.75	20.5
10	QPSK	25	12	19.88	19.78	19.85	
10	QPSK	25	25	19.83	19.80	19.82	
10	QPSK	50	0	19.91	19.82	19.72	
10	16QAM	1	0	19.97	20.00	19.88	20.5
10	16QAM	1	25	19.93	20.04	19.85	
10	16QAM	1	49	19.81	20.12	19.96	
10	16QAM	25	0	18.88	18.87	18.79	19.5
10	16QAM	25	12	18.92	18.89	18.82	
10	16QAM	25	25	18.80	18.87	18.91	
10	16QAM	50	0	18.87	18.79	18.72	
10	64QAM	1	0	19.09	18.93	19.11	19.5
10	64QAM	1	25	19.05	18.96	19.02	
10	64QAM	1	49	18.93	18.90	18.93	
10	64QAM	25	0	17.83	17.83	17.79	18.5
10	64QAM	25	12	17.97	17.82	17.83	
10	64QAM	25	25	17.84	17.91	17.81	
10	64QAM	50	0	17.88	17.81	17.79	
10	256QAM	1	0	15.86	15.84	15.91	16.5
10	256QAM	1	25	15.97	15.96	15.91	
10	256QAM	1	49	16.05	16.00	15.89	
10	256QAM	25	0	15.84	15.86	15.85	16.5
10	256QAM	25	12	15.92	15.93	15.86	
10	256QAM	25	25	15.89	15.87	15.88	
10	256QAM	50	0	15.86	15.83	15.84	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	20.69	20.67	20.67	21.5
5	QPSK	1	12	20.77	20.79	20.75	
5	QPSK	1	24	20.71	20.61	20.64	
5	QPSK	12	0	19.86	19.78	19.75	20.5
5	QPSK	12	7	19.86	19.83	19.80	
5	QPSK	12	13	19.89	19.87	19.85	
5	QPSK	25	0	19.85	19.80	19.75	
5	16QAM	1	0	20.02	19.78	20.00	20.5
5	16QAM	1	12	20.15	20.11	20.09	
5	16QAM	1	24	20.04	20.06	20.10	
5	16QAM	12	0	18.95	18.77	18.71	19.5
5	16QAM	12	7	18.91	18.93	18.73	
5	16QAM	12	13	18.92	18.85	18.84	
5	16QAM	25	0	18.86	18.81	18.76	
5	64QAM	1	0	18.87	19.03	18.95	19.5
5	64QAM	1	12	19.09	18.92	19.01	
5	64QAM	1	24	18.82	18.92	18.98	
5	64QAM	12	0	17.92	17.83	17.77	18.5
5	64QAM	12	7	17.92	17.94	17.83	
5	64QAM	12	13	17.84	17.82	17.85	
5	64QAM	25	0	17.86	17.79	17.72	
5	256QAM	1	0	16.09	15.99	15.70	16.5
5	256QAM	1	12	16.06	16.15	16.15	
5	256QAM	1	24	16.12	16.03	15.98	
5	256QAM	12	0	15.92	15.84	15.75	16.5
5	256QAM	12	7	15.95	15.88	15.88	
5	256QAM	12	13	15.86	15.87	15.81	
5	256QAM	25	0	15.85	15.82	15.79	

Channel				20415	20525	20635	Tune-up limit
Frequency (MHz)				825.5	836.5	847.5	(dBm)
3	QPSK	1	0	20.78	20.63	20.63	21.5
3	QPSK	1	8	20.81	20.71	20.68	
3	QPSK	1	14	20.67	20.69	20.58	
3	QPSK	8	0	19.92	19.77	19.78	20.5
3	QPSK	8	4	19.96	19.81	19.86	
3	QPSK	8	7	19.84	19.82	19.83	
3	QPSK	15	0	19.86	19.78	19.87	
3	16QAM	1	0	19.95	20.02	19.97	20.5
3	16QAM	1	8	20.07	20.00	19.97	
3	16QAM	1	14	20.13	19.90	19.93	
3	16QAM	8	0	18.90	18.81	18.89	19.5
3	16QAM	8	4	18.86	18.90	18.87	
3	16QAM	8	7	18.90	18.84	18.81	
3	16QAM	15	0	18.84	18.80	18.76	
3	64QAM	1	0	19.14	18.77	18.84	19.5
3	64QAM	1	8	19.03	19.06	18.97	
3	64QAM	1	14	18.92	18.94	18.79	
3	64QAM	8	0	17.91	17.75	17.84	18.5
3	64QAM	8	4	17.99	17.91	17.82	
3	64QAM	8	7	17.91	17.86	17.89	
3	64QAM	15	0	17.92	17.77	17.86	
3	256QAM	1	0	16.02	15.97	15.86	16.5
3	256QAM	1	8	16.04	15.86	15.82	
3	256QAM	1	14	15.95	15.87	15.85	
3	256QAM	8	0	15.92	15.90	15.90	16.5
3	256QAM	8	4	16.02	15.86	15.85	
3	256QAM	8	7	15.98	15.89	15.87	
3	256QAM	15	0	15.95	15.84	15.83	
Channel				20407	20525	20643	Tune-up limit
Frequency (MHz)				824.7	836.5	848.3	(dBm)
1.4	QPSK	1	0	20.73	20.58	20.66	21.5
1.4	QPSK	1	3	20.72	20.73	20.63	
1.4	QPSK	1	5	20.74	20.63	20.61	
1.4	QPSK	3	0	20.78	20.61	20.66	21.5
1.4	QPSK	3	1	20.77	20.72	20.60	
1.4	QPSK	3	3	20.75	20.63	20.71	20.5
1.4	QPSK	6	0	19.84	19.82	19.77	
1.4	16QAM	1	0	19.93	19.99	19.89	20.5
1.4	16QAM	1	3	19.98	19.90	19.78	
1.4	16QAM	1	5	19.90	19.68	19.95	
1.4	16QAM	3	0	19.89	19.85	19.91	20.5
1.4	16QAM	3	1	19.93	19.93	19.88	
1.4	16QAM	3	3	19.90	19.95	19.87	
1.4	16QAM	6	0	18.82	18.79	18.84	19.5
1.4	64QAM	1	0	19.01	18.94	18.80	19.5
1.4	64QAM	1	3	19.00	19.01	18.95	
1.4	64QAM	1	5	18.91	18.84	18.85	
1.4	64QAM	3	0	18.94	18.83	18.88	19.5
1.4	64QAM	3	1	19.01	18.83	18.86	
1.4	64QAM	3	3	18.96	18.84	18.80	
1.4	64QAM	6	0	17.88	17.79	17.69	18.5
1.4	256QAM	1	0	16.03	15.82	15.81	16.5
1.4	256QAM	1	3	15.97	16.01	15.89	
1.4	256QAM	1	5	15.94	16.03	15.82	
1.4	256QAM	3	0	15.94	15.83	15.85	16.5
1.4	256QAM	3	1	16.01	15.84	15.84	
1.4	256QAM	3	3	15.86	15.90	15.91	
1.4	256QAM	6	0	15.88	15.87	15.79	

**Band7 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	17.65	17.85	17.64	18.0
20	QPSK	1	49	17.72	17.82	17.72	
20	QPSK	1	99	10.06	10.18	10.00	11.0
20	QPSK	50	0	17.82	17.69	17.78	18.0
20	QPSK	50	24	17.73	17.75	17.61	
20	QPSK	50	50	16.76	16.74	16.75	18.0
20	QPSK	100	0	17.82	17.20	17.66	
20	16QAM	1	0	17.81	17.60	17.82	18.0
20	16QAM	1	49	17.75	17.70	17.76	
20	16QAM	1	99	10.08	10.12	10.06	11.0
20	16QAM	50	0	17.66	17.66	17.63	18.0
20	16QAM	50	24	17.72	17.74	17.68	
20	16QAM	50	50	16.67	16.68	16.69	17.0
20	16QAM	100	0	17.62	17.21	17.64	18.0
20	64QAM	1	0	17.70	17.76	17.70	
20	64QAM	1	49	17.73	17.79	17.63	18.0
20	64QAM	1	99	10.20	10.52	10.04	
20	64QAM	50	0	17.82	17.67	17.66	18.0
20	64QAM	50	24	17.63	17.78	17.65	
20	64QAM	50	50	16.59	16.77	16.66	17.0
20	64QAM	100	0	17.78	17.24	17.82	18.0
20	256QAM	1	0	17.65	17.58	17.77	
20	256QAM	1	49	17.75	17.72	17.67	18.0
20	256QAM	1	99	10.00	10.10	10.14	
20	256QAM	50	0	17.74	17.58	17.67	18.0
20	256QAM	50	24	17.65	17.70	17.65	
20	256QAM	50	50	16.69	16.72	16.69	17.0
20	256QAM	100	0	17.66	17.17	17.66	18.0
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.82	17.81	17.77	18.0
15	QPSK	1	37	17.83	17.72	17.81	
15	QPSK	1	74	10.18	10.01	10.00	11.0
15	QPSK	36	0	17.81	17.67	17.65	18.0
15	QPSK	36	20	17.73	17.63	17.83	
15	QPSK	39	39	16.66	16.74	16.69	18.0
15	QPSK	75	0	17.81	17.68	17.62	
15	16QAM	1	0	17.63	17.77	17.69	18.0
15	16QAM	1	37	17.83	17.74	17.71	
15	16QAM	1	74	10.01	10.14	10.18	11.0
15	16QAM	36	0	17.70	17.83	17.84	18.0
15	16QAM	36	20	17.72	17.72	17.83	
15	16QAM	39	39	16.71	16.62	16.63	17.0
15	16QAM	75	0	17.78	17.63	17.80	18.0
15	64QAM	1	0	17.69	17.66	17.65	
15	64QAM	1	37	17.78	17.62	17.64	18.0
15	64QAM	1	74	10.14	10.06	10.07	
15	64QAM	36	0	17.78	17.81	17.73	18.0
15	64QAM	36	20	17.83	17.72	17.67	
15	64QAM	39	39	16.73	16.73	16.74	17.0
15	64QAM	75	0	17.79	17.80	17.72	18.0
15	256QAM	1	0	17.69	17.65	17.74	
15	256QAM	1	37	17.83	17.64	17.76	18.0
15	256QAM	1	74	10.07	10.17	10.06	
15	256QAM	36	0	17.83	17.65	17.65	18.0
15	256QAM	36	20	17.71	17.79	17.62	
15	256QAM	39	39	16.63	16.71	16.71	17.0
15	256QAM	75	0	17.74	17.80	17.80	18.0

Channel				20800	21100	21400	Tune-up limit
Frequency (MHz)				2505	2535	2565	(dBm)
10	QPSK	1	0	17.69	17.66	17.74	18.0
10	QPSK	1	25	17.76	17.75	17.84	
10	QPSK	1	49	10.16	10.15	10.08	11.0
10	QPSK	25	0	17.64	17.74	17.78	18.0
10	QPSK	25	12	17.77	17.72	17.69	18.0
10	QPSK	25	25	16.78	16.66	16.78	
10	QPSK	50	0	17.72	17.71	17.74	
10	16QAM	1	0	17.72	17.61	17.68	18.0
10	16QAM	1	25	17.63	17.80	17.81	
10	16QAM	1	49	10.18	10.09	10.06	11.0
10	16QAM	25	0	17.67	17.69	17.73	18.0
10	16QAM	25	12	17.69	17.64	17.60	
10	16QAM	25	25	16.77	16.64	16.73	17.0
10	16QAM	50	0	17.69	17.65	17.74	18.0
10	64QAM	1	0	17.83	17.72	17.62	
10	64QAM	1	25	17.79	17.60	17.60	
10	64QAM	1	49	10.16	10.04	10.15	11.0
10	64QAM	25	0	17.74	17.84	17.68	18.0
10	64QAM	25	12	17.81	17.69	17.81	
10	64QAM	25	25	16.80	16.74	16.60	17.0
10	64QAM	50	0	17.74	17.70	17.70	18.0
10	256QAM	1	0	17.76	17.79	17.74	
10	256QAM	1	25	17.60	17.82	17.62	
10	256QAM	1	49	10.13	10.18	10.15	11.0
10	256QAM	25	0	17.65	17.75	17.74	18.0
10	256QAM	25	12	17.62	17.84	17.73	
10	256QAM	25	25	16.63	16.75	16.74	17.0
10	256QAM	50	0	17.74	17.62	17.72	18.0
Channel				20775	21100	21425	Tune-up limit
Frequency (MHz)				2502.5	2535	2567.5	(dBm)
5	QPSK	1	0	17.71	17.78	17.74	18.0
5	QPSK	1	12	17.72	17.74	17.72	
5	QPSK	1	24	10.05	10.06	10.14	11.0
5	QPSK	12	0	17.66	17.66	17.63	18.0
5	QPSK	12	7	17.64	17.80	17.60	18.0
5	QPSK	12	13	16.69	16.70	16.73	
5	QPSK	25	0	17.83	17.70	17.61	
5	16QAM	1	0	17.64	17.67	17.69	18.0
5	16QAM	1	12	17.68	17.81	17.84	
5	16QAM	1	24	10.17	10.04	10.07	11.0
5	16QAM	12	0	17.60	17.79	17.65	18.0
5	16QAM	12	7	17.60	17.75	17.64	
5	16QAM	12	13	16.68	16.73	16.73	17.0
5	16QAM	25	0	17.84	17.84	17.77	18.0
5	64QAM	1	0	17.76	17.74	17.82	
5	64QAM	1	12	17.84	17.82	17.78	
5	64QAM	1	24	10.18	10.09	10.20	11.0
5	64QAM	12	0	17.70	17.70	17.84	18.0
5	64QAM	12	7	17.67	17.61	17.68	
5	64QAM	12	13	16.63	16.74	16.65	17.0
5	64QAM	25	0	17.64	17.77	17.76	18.0
5	256QAM	1	0	17.71	17.65	17.77	
5	256QAM	1	12	17.66	17.79	17.67	
5	256QAM	1	24	10.08	10.02	10.19	11.0
5	256QAM	12	0	17.83	17.72	17.71	18.0
5	256QAM	12	7	17.62	17.69	17.77	
5	256QAM	12	13	16.62	16.71	16.71	17.0
5	256QAM	25	0	17.71	17.67	17.76	18.0

**Band12 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				20360	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	21.87	21.97	21.77	23.0
10	QPSK	1	25	21.88	21.81	21.74	
10	QPSK	1	49	21.72	21.64	21.64	
10	QPSK	25	0	20.97	20.94	20.90	22.0
10	QPSK	25	12	21.00	20.91	20.92	
10	QPSK	25	25	20.96	20.93	20.85	
10	QPSK	50	0	21.04	20.88	20.92	22.0
10	16QAM	1	0	21.20	21.01	21.19	
10	16QAM	1	25	21.12	21.04	21.02	
10	16QAM	1	49	20.92	20.88	20.85	21.0
10	16QAM	25	0	20.00	19.96	19.91	
10	16QAM	25	12	19.99	19.83	19.92	
10	16QAM	25	25	19.97	19.94	19.85	21.0
10	16QAM	50	0	19.93	19.88	19.82	
10	64QAM	1	0	20.09	20.11	20.03	
10	64QAM	1	25	20.07	20.01	19.92	21.0
10	64QAM	1	49	19.95	19.87	19.83	
10	64QAM	25	0	18.98	18.94	18.91	
10	64QAM	25	12	19.00	18.92	18.85	20.0
10	64QAM	25	25	18.98	18.93	18.88	
10	64QAM	50	0	19.03	18.88	18.76	
10	256QAM	1	0	17.27	17.32	17.11	18.0
10	256QAM	1	25	17.20	17.29	17.27	
10	256QAM	1	49	17.09	17.20	16.91	
10	256QAM	25	0	17.10	17.11	17.05	18.0
10	256QAM	25	12	17.22	17.14	17.04	
10	256QAM	25	25	17.19	17.16	17.10	
10	256QAM	50	0	17.12	17.12	17.05	
Channel				23035	23095	23155	Tune-up limit
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	21.86	21.80	21.80	23.0
5	QPSK	1	12	21.80	21.79	21.72	
5	QPSK	1	24	21.67	21.70	21.58	
5	QPSK	12	0	20.97	20.93	20.81	22.0
5	QPSK	12	7	20.99	20.93	20.78	
5	QPSK	12	13	20.87	20.91	20.81	
5	QPSK	25	0	20.96	20.85	20.77	22.0
5	16QAM	1	0	21.27	21.09	21.07	
5	16QAM	1	12	21.16	21.15	21.15	
5	16QAM	1	24	20.98	21.02	20.86	21.0
5	16QAM	12	0	20.03	19.91	19.80	
5	16QAM	12	7	20.00	19.93	19.80	
5	16QAM	12	13	20.02	19.91	19.86	21.0
5	16QAM	25	0	19.96	19.87	19.77	
5	64QAM	1	0	20.07	19.99	19.97	
5	64QAM	1	12	20.23	20.18	19.89	21.0
5	64QAM	1	24	19.93	19.90	19.82	
5	64QAM	12	0	19.03	18.89	18.76	
5	64QAM	12	7	18.98	18.98	18.81	20.0
5	64QAM	12	13	18.95	18.95	18.81	
5	64QAM	25	0	18.95	18.88	18.76	
5	256QAM	1	0	17.27	16.98	16.90	18.0
5	256QAM	1	12	17.47	17.21	17.11	
5	256QAM	1	24	17.04	17.23	17.18	
5	256QAM	12	0	17.17	17.09	17.00	18.0
5	256QAM	12	7	17.19	17.05	17.03	
5	256QAM	12	13	17.18	17.05	16.99	
5	256QAM	25	0	17.16	17.11	16.94	

Channel				23025	23095	23165	Tune-up limit
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	21.86	21.68	21.55	23.0
3	QPSK	1	8	21.87	21.82	21.64	
3	QPSK	1	14	21.83	21.68	21.57	
3	QPSK	8	0	21.02	20.87	20.70	22.0
3	QPSK	8	4	20.94	20.93	20.84	
3	QPSK	8	7	21.00	20.99	20.78	
3	QPSK	15	0	21.00	20.83	20.75	22.0
3	16QAM	1	0	21.13	21.02	20.71	
3	16QAM	1	8	21.05	21.09	21.01	
3	16QAM	1	14	21.02	21.08	20.74	21.0
3	16QAM	8	0	20.09	19.90	19.80	
3	16QAM	8	4	20.08	19.96	19.88	
3	16QAM	8	7	20.01	20.04	19.85	21.0
3	16QAM	15	0	19.99	19.91	19.77	
3	64QAM	1	0	20.10	20.01	19.63	
3	64QAM	1	8	20.10	19.90	20.01	21.0
3	64QAM	1	14	19.74	20.00	19.79	
3	64QAM	8	0	19.06	18.95	18.76	
3	64QAM	8	4	18.96	18.97	18.87	20.0
3	64QAM	8	7	19.03	18.99	18.83	
3	64QAM	15	0	19.04	18.96	18.74	
3	256QAM	1	0	17.26	17.07	17.14	18.0
3	256QAM	1	8	17.36	17.26	17.15	
3	256QAM	1	14	17.18	17.27	17.06	
3	256QAM	8	0	17.16	17.10	17.01	18.0
3	256QAM	8	4	17.22	17.20	17.04	
3	256QAM	8	7	17.20	17.18	16.97	
3	256QAM	15	0	17.19	17.04	16.88	
Channel				23025	23095	23165	Tune-up limit
Frequency (MHz)				700.5	707.5	714.5	
1.4	QPSK	1	0	21.87	21.67	21.58	23.0
1.4	QPSK	1	3	21.96	21.79	21.61	
1.4	QPSK	1	5	21.90	21.74	21.49	
1.4	QPSK	3	0	21.95	21.75	21.61	22.0
1.4	QPSK	3	1	21.94	21.72	21.58	
1.4	QPSK	3	3	21.95	21.70	21.64	
1.4	QPSK	6	0	21.07	20.84	20.77	22.0
1.4	16QAM	1	0	21.05	20.97	20.82	
1.4	16QAM	1	3	21.15	21.00	20.85	
1.4	16QAM	1	5	21.05	20.79	20.69	21.5
1.4	16QAM	3	0	21.09	20.95	20.79	
1.4	16QAM	3	1	21.10	20.93	20.74	
1.4	16QAM	3	3	21.22	20.90	20.82	20.5
1.4	16QAM	6	0	20.11	19.83	19.70	
1.4	64QAM	1	0	20.21	20.06	19.73	
1.4	64QAM	1	3	20.22	20.01	19.94	21.0
1.4	64QAM	1	5	20.05	19.86	19.73	
1.4	64QAM	3	0	20.15	20.02	19.75	
1.4	64QAM	3	1	20.21	19.97	19.75	20.5
1.4	64QAM	3	3	20.14	19.98	19.86	
1.4	64QAM	6	0	19.05	18.79	18.81	
1.4	256QAM	1	0	17.32	17.13	16.98	18.0
1.4	256QAM	1	3	17.41	17.24	17.01	
1.4	256QAM	1	5	17.36	17.27	16.97	
1.4	256QAM	3	0	17.36	17.02	17.11	18.0
1.4	256QAM	3	1	17.36	17.09	16.99	
1.4	256QAM	3	3	17.16	17.19	16.88	
1.4	256QAM	6	0	17.26	17.02	16.91	

**Band13 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		21.31		22.0
10	QPSK	1	25		21.22		
10	QPSK	1	49		21.02		
10	QPSK	25	0		20.29		21.0
10	QPSK	25	12		20.35		
10	QPSK	25	25		20.34		
10	QPSK	50	0		20.21		21.0
10	16QAM	1	0		20.61		
10	16QAM	1	25		20.55		
10	16QAM	1	49		20.22		21.0
10	16QAM	25	0		19.34		
10	16QAM	25	12		19.38		
10	16QAM	25	25		19.32		20.0
10	16QAM	50	0		19.30		
10	64QAM	1	0		19.62		
10	64QAM	1	25		19.57		20.0
10	64QAM	1	49		19.35		
10	64QAM	25	0		18.39		
10	64QAM	25	12		18.33		19.0
10	64QAM	25	25		18.33		
10	64QAM	50	0		18.28		
10	256QAM	1	0		16.32		17.0
10	256QAM	1	25		16.66		
10	256QAM	1	49		16.35		
10	256QAM	25	0		16.42		17.0
10	256QAM	25	12		16.36		
10	256QAM	25	25		16.34		
10	256QAM	50	0		16.39		
Channel				23205	23230	23255	Tune-up limit
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	21.27	21.23	21.14	22.0
5	QPSK	1	12	21.29	21.22	21.17	
5	QPSK	1	24	21.18	21.25	21.11	
5	QPSK	12	0	20.28	20.25	20.25	21.0
5	QPSK	12	7	20.42	20.26	20.20	
5	QPSK	12	13	20.35	20.27	20.32	
5	QPSK	25	0	20.35	20.26	20.18	21.0
5	16QAM	1	0	20.75	20.57	20.55	
5	16QAM	1	12	20.63	20.48	20.55	
5	16QAM	1	24	20.38	20.56	20.39	21.0
5	16QAM	12	0	19.38	19.35	19.34	
5	16QAM	12	7	19.42	19.32	19.30	
5	16QAM	12	13	19.34	19.37	19.36	20.0
5	16QAM	25	0	19.37	19.35	19.26	
5	64QAM	1	0	19.45	19.45	19.48	
5	64QAM	1	12	19.49	19.47	19.40	20.0
5	64QAM	1	24	19.39	19.49	19.31	
5	64QAM	12	0	18.39	18.26	18.34	
5	64QAM	12	7	18.41	18.34	18.25	19.0
5	64QAM	12	13	18.37	18.34	18.32	
5	64QAM	25	0	18.45	18.34	18.26	
5	256QAM	1	0	16.28	16.49	16.35	17.0
5	256QAM	1	12	16.49	16.41	16.48	
5	256QAM	1	24	16.43	16.39	16.45	
5	256QAM	12	0	16.38	16.34	16.34	17.0
5	256QAM	12	7	16.44	16.33	16.38	
5	256QAM	12	13	16.35	16.34	16.29	
5	256QAM	25	0	16.41	16.35	16.23	

**Band17 Ant4 DS12**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	21.83	21.85	21.69	
10	QPSK	1	25	21.70	21.79	21.71	23.0
10	QPSK	1	49	21.65	21.67	21.53	
10	QPSK	25	0	20.86	20.91	20.91	
10	QPSK	25	12	20.97	20.78	20.83	22.0
10	QPSK	25	25	20.86	20.86	20.86	
10	QPSK	50	0	20.76	20.82	20.81	
10	16QAM	1	0	21.12	21.00	21.13	22.0
10	16QAM	1	25	20.95	20.94	21.11	
10	16QAM	1	49	20.87	20.88	20.89	
10	16QAM	25	0	19.83	19.89	19.89	21.0
10	16QAM	25	12	19.97	19.79	19.87	
10	16QAM	25	25	19.83	19.86	19.85	
10	16QAM	50	0	19.86	19.89	19.80	21.0
10	64QAM	1	0	20.01	19.87	20.02	
10	64QAM	1	25	20.02	20.06	20.07	
10	64QAM	1	49	19.95	19.95	19.92	20.0
10	64QAM	25	0	18.85	18.91	18.80	
10	64QAM	25	12	18.96	18.79	18.81	
10	64QAM	25	25	18.85	18.90	18.87	20.0
10	64QAM	50	0	18.73	18.85	18.87	
10	256QAM	1	0	17.04	16.97	17.06	
10	256QAM	1	25	17.15	17.07	17.08	18.0
10	256QAM	1	49	16.95	16.94	17.05	
10	256QAM	25	0	16.85	16.93	16.94	
10	256QAM	25	12	16.99	16.92	16.97	18.0
10	256QAM	25	25	16.97	16.88	16.89	
10	256QAM	50	0	16.95	16.83	16.86	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	21.79	21.67	21.70	
5	QPSK	1	12	21.76	21.82	21.73	23.0
5	QPSK	1	24	21.74	21.66	21.69	
5	QPSK	12	0	20.86	20.90	20.83	
5	QPSK	12	7	20.87	20.84	20.80	22.0
5	QPSK	12	13	20.78	20.88	20.82	
5	QPSK	25	0	20.86	20.82	20.77	
5	16QAM	1	0	21.05	20.92	20.92	22.0
5	16QAM	1	12	21.19	21.15	21.06	
5	16QAM	1	24	20.81	21.16	21.10	
5	16QAM	12	0	19.97	19.92	19.81	21.0
5	16QAM	12	7	19.96	19.86	19.81	
5	16QAM	12	13	19.92	19.91	19.88	
5	16QAM	25	0	19.99	19.83	19.76	21.0
5	64QAM	1	0	20.03	19.98	19.82	
5	64QAM	1	12	20.01	19.93	20.02	
5	64QAM	1	24	19.84	19.91	19.74	21.0
5	64QAM	12	0	18.89	18.91	18.72	
5	64QAM	12	7	18.94	18.85	18.83	
5	64QAM	12	13	18.88	18.94	18.81	20.0
5	64QAM	25	0	18.89	18.84	18.80	
5	256QAM	1	0	16.97	17.00	16.99	
5	256QAM	1	12	16.91	17.08	17.13	18.0
5	256QAM	1	24	16.97	16.84	16.98	
5	256QAM	12	0	16.91	16.86	16.84	
5	256QAM	12	7	16.88	16.90	16.94	18.0
5	256QAM	12	13	16.95	16.90	16.81	
5	256QAM	25	0	16.92	16.86	16.88	



**Band25 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	17.83	18.45	17.63	19.0
20	QPSK	1	49	17.95	17.51	17.46	
20	QPSK	1	99	17.88	17.39	16.64	
20	QPSK	50	0	17.97	17.66	17.75	18.5
20	QPSK	50	24	18.09	17.52	17.59	
20	QPSK	50	50	17.95	17.46	17.20	
20	QPSK	100	0	17.95	17.53	17.42	
20	16QAM	1	0	17.94	18.02	17.81	18.5
20	16QAM	1	49	18.26	17.76	17.69	
20	16QAM	1	99	18.18	17.69	16.79	
20	16QAM	50	0	17.93	17.66	17.78	18.5
20	16QAM	50	24	18.01	17.48	17.64	
20	16QAM	50	50	17.99	17.49	17.14	
20	16QAM	100	0	18.00	17.54	17.46	
20	64QAM	1	0	17.89	17.89	17.69	18.5
20	64QAM	1	49	18.05	17.58	17.68	
20	64QAM	1	99	17.90	17.58	16.85	
20	64QAM	50	0	18.05	17.61	17.70	18.5
20	64QAM	50	24	18.07	17.49	17.69	
20	64QAM	50	50	17.93	17.43	17.17	
20	64QAM	100	0	18.01	17.49	17.43	
20	256QAM	1	0	18.02	17.90	17.86	18.5
20	256QAM	1	49	18.02	17.63	17.78	
20	256QAM	1	99	17.97	17.66	16.94	
20	256QAM	50	0	18.02	17.66	17.77	18.5
20	256QAM	50	24	18.09	17.55	17.54	
20	256QAM	50	50	17.91	17.40	17.14	
20	256QAM	100	0	18.02	17.58	17.46	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	17.85	17.63	17.47	19.0
15	QPSK	1	37	18.02	17.45	17.20	
15	QPSK	1	74	18.01	17.34	16.51	
15	QPSK	36	0	18.06	17.63	17.47	18.5
15	QPSK	36	20	18.00	17.51	17.25	
15	QPSK	39	39	18.08	17.39	16.94	
15	QPSK	75	0	17.97	17.45	17.24	
15	16QAM	1	0	18.08	17.77	17.51	18.5
15	16QAM	1	37	18.12	17.54	17.29	
15	16QAM	1	74	18.09	17.47	16.80	
15	16QAM	36	0	17.99	17.64	17.44	18.5
15	16QAM	36	20	18.01	17.47	17.22	
15	16QAM	39	39	18.06	17.45	16.94	
15	16QAM	75	0	17.98	17.44	17.25	
15	64QAM	1	0	17.89	17.64	17.48	18.5
15	64QAM	1	37	18.42	17.51	17.35	
15	64QAM	1	74	18.14	17.36	16.65	
15	64QAM	36	0	17.94	17.68	17.47	18.5
15	64QAM	36	20	17.95	17.41	17.21	
15	64QAM	39	39	18.03	17.46	16.83	
15	64QAM	75	0	18.01	17.49	17.24	
15	256QAM	1	0	17.98	17.94	17.77	18.5
15	256QAM	1	37	18.00	17.72	17.19	
15	256QAM	1	74	18.09	17.52	16.74	
15	256QAM	36	0	18.04	17.65	17.51	18.5
15	256QAM	36	20	18.06	17.48	17.31	
15	256QAM	39	39	18.03	17.46	16.92	
15	256QAM	75	0	18.03	17.55	17.21	

Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	18.10	17.83	17.50	19.0
10	QPSK	1	25	18.24	17.67	17.14	
10	QPSK	1	49	18.22	17.47	16.76	
10	QPSK	25	0	18.18	17.83	17.35	18.5
10	QPSK	25	12	18.17	17.69	17.25	
10	QPSK	25	25	18.20	17.57	16.94	
10	QPSK	50	0	18.16	17.71	17.13	18.5
10	16QAM	1	0	18.22	17.81	17.75	
10	16QAM	1	25	18.27	17.85	17.27	
10	16QAM	1	49	18.26	17.63	16.94	18.5
10	16QAM	25	0	18.13	17.77	17.40	
10	16QAM	25	12	18.15	17.64	17.17	
10	16QAM	25	25	18.15	17.59	16.96	18.5
10	16QAM	50	0	18.13	17.69	17.12	
10	64QAM	1	0	18.22	17.82	17.60	
10	64QAM	1	25	18.41	17.74	17.18	18.5
10	64QAM	1	49	18.26	17.65	16.85	
10	64QAM	25	0	18.12	17.85	17.43	
10	64QAM	25	12	18.21	17.59	17.22	18.5
10	64QAM	25	25	18.13	17.58	16.95	
10	64QAM	50	0	18.20	17.66	17.19	
10	256QAM	1	0	18.25	17.99	17.62	18.5
10	256QAM	1	25	18.43	17.84	17.30	
10	256QAM	1	49	18.27	17.82	16.82	
10	256QAM	25	0	18.20	17.80	17.40	18.5
10	256QAM	25	12	18.21	17.75	17.19	
10	256QAM	25	25	18.24	17.62	16.99	
10	256QAM	50	0	18.20	17.72	17.25	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.00	17.72	16.97	19.0
5	QPSK	1	12	18.12	17.66	16.90	
5	QPSK	1	24	18.17	17.51	16.70	
5	QPSK	12	0	18.16	17.71	17.02	18.5
5	QPSK	12	7	18.16	17.61	16.90	
5	QPSK	12	13	18.22	17.61	16.80	
5	QPSK	25	0	18.19	17.61	16.85	18.5
5	16QAM	1	0	18.23	17.89	17.32	
5	16QAM	1	12	18.31	17.90	17.21	
5	16QAM	1	24	18.34	17.77	17.01	18.5
5	16QAM	12	0	18.15	17.76	17.07	
5	16QAM	12	7	18.23	17.65	16.94	
5	16QAM	12	13	18.21	17.61	16.84	18.5
5	16QAM	25	0	18.17	17.61	16.99	
5	64QAM	1	0	18.14	17.91	17.20	
5	64QAM	1	12	18.29	17.89	17.17	18.5
5	64QAM	1	24	18.31	17.70	16.93	
5	64QAM	12	0	18.12	17.75	16.99	
5	64QAM	12	7	18.22	17.67	16.86	18.5
5	64QAM	12	13	18.19	17.63	16.85	
5	64QAM	25	0	18.14	17.58	16.92	
5	256QAM	1	0	18.38	17.87	17.32	18.5
5	256QAM	1	12	18.26	17.81	17.02	
5	256QAM	1	24	18.25	17.73	17.00	
5	256QAM	12	0	18.20	17.75	17.09	18.5
5	256QAM	12	7	18.20	17.69	16.95	
5	256QAM	12	13	18.19	17.59	16.84	
5	256QAM	25	0	18.23	17.66	16.89	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.07	17.64	16.86	

3	QPSK	1	8	18.13	17.63	16.76	19.0
3	QPSK	1	14	18.08	17.56	16.71	
3	QPSK	8	0	18.11	17.67	16.83	18.5
3	QPSK	8	4	18.18	17.68	16.80	
3	QPSK	8	7	18.20	17.64	16.79	
3	QPSK	15	0	18.18	17.66	16.79	18.5
3	16QAM	1	0	18.27	17.84	17.07	
3	16QAM	1	8	18.22	17.86	17.18	
3	16QAM	1	14	18.24	17.77	16.86	18.5
3	16QAM	8	0	18.19	17.62	16.88	
3	16QAM	8	4	18.22	17.66	16.87	
3	16QAM	8	7	18.20	17.73	16.79	18.5
3	16QAM	15	0	18.16	17.59	16.83	
3	64QAM	1	0	18.25	17.83	16.82	
3	64QAM	1	8	18.29	17.82	16.97	18.5
3	64QAM	1	14	18.27	17.83	16.86	
3	64QAM	8	0	18.13	17.80	16.88	
3	64QAM	8	4	18.16	17.70	16.90	18.5
3	64QAM	8	7	18.17	17.63	16.82	
3	64QAM	15	0	18.14	17.66	16.87	
3	256QAM	1	0	18.29	17.81	17.13	18.5
3	256QAM	1	8	18.44	17.90	17.00	
3	256QAM	1	14	18.41	17.79	16.83	
3	256QAM	8	0	18.15	17.77	16.92	18.5
3	256QAM	8	4	18.20	17.77	16.84	
3	256QAM	8	7	18.23	17.77	16.77	
3	256QAM	15	0	18.22	17.70	16.82	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	18.09	17.65	16.69	19.0
1.4	QPSK	1	3	18.08	17.65	16.67	
1.4	QPSK	1	5	18.09	17.60	16.70	
1.4	QPSK	3	0	18.12	17.65	16.71	19.0
1.4	QPSK	3	1	18.11	17.74	16.75	
1.4	QPSK	3	3	18.07	17.70	16.74	
1.4	QPSK	6	0	18.08	17.62	16.73	18.5
1.4	16QAM	1	0	18.16	17.79	16.89	
1.4	16QAM	1	3	18.17	17.75	16.83	
1.4	16QAM	1	5	18.13	17.70	16.82	18.5
1.4	16QAM	3	0	18.18	17.76	16.89	
1.4	16QAM	3	1	18.20	17.75	16.89	
1.4	16QAM	3	3	18.20	17.53	16.85	18.5
1.4	16QAM	6	0	18.13	17.54	16.73	
1.4	64QAM	1	0	18.22	17.72	16.86	
1.4	64QAM	1	3	18.16	17.78	16.88	18.5
1.4	64QAM	1	5	18.12	17.63	16.82	
1.4	64QAM	3	0	18.19	17.72	16.82	
1.4	64QAM	3	1	18.25	17.82	16.82	18.5
1.4	64QAM	3	3	18.08	17.75	16.70	
1.4	64QAM	6	0	18.19	17.67	16.84	
1.4	256QAM	1	0	18.24	17.80	17.00	18.5
1.4	256QAM	1	3	18.24	17.71	16.91	
1.4	256QAM	1	5	18.24	17.66	16.87	
1.4	256QAM	3	0	18.23	17.74	16.95	18.5
1.4	256QAM	3	1	18.23	17.74	16.84	
1.4	256QAM	3	3	18.21	17.70	16.89	
1.4	256QAM	6	0	18.19	17.59	16.83	

**Band26 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	20.74	20.87	20.59	21.5
15	QPSK	1	37	20.62	20.69	20.67	
15	QPSK	1	74	20.85	20.63	20.65	
15	QPSK	36	0	20.84	20.66	20.60	21.0
15	QPSK	36	20	20.71	20.78	20.66	
15	QPSK	36	39	20.85	20.74	20.67	
15	QPSK	75	0	19.93	19.83	19.75	
15	16QAM	1	0	20.01	19.86	19.77	20.5
15	16QAM	1	37	19.85	19.66	19.95	
15	16QAM	1	74	19.65	19.79	19.81	
15	16QAM	36	0	18.69	18.74	18.55	19.5
15	16QAM	36	20	18.71	18.58	18.60	
15	16QAM	36	39	18.66	18.72	18.69	
15	16QAM	75	0	18.72	18.68	18.66	
15	64QAM	1	0	18.94	18.85	18.79	19.5
15	64QAM	1	37	18.69	18.64	18.80	
15	64QAM	1	74	18.58	18.88	18.67	
15	64QAM	36	0	17.78	17.74	17.65	18.5
15	64QAM	36	20	17.80	17.56	17.59	
15	64QAM	36	39	17.75	17.67	17.69	
15	64QAM	75	0	17.82	17.66	17.73	
15	256QAM	1	0	16.05	15.81	15.82	16.5
15	256QAM	1	37	15.78	15.82	15.82	
15	256QAM	1	74	15.84	15.82	15.88	
15	256QAM	36	0	15.74	15.70	15.66	16.5
15	256QAM	36	20	15.75	15.65	15.66	
15	256QAM	36	39	15.78	15.69	15.69	
15	256QAM	75	0	15.77	15.69	15.72	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	20.65	20.79	20.73	21.5
10	QPSK	1	25	20.80	20.75	20.69	
10	QPSK	1	49	20.59	20.67	20.69	
10	QPSK	25	0	19.98	19.81	19.75	20.5
10	QPSK	25	12	19.92	19.82	19.76	
10	QPSK	25	25	19.90	19.89	19.82	
10	QPSK	50	0	19.92	19.80	19.79	
10	16QAM	1	0	20.19	19.84	20.01	20.5
10	16QAM	1	25	19.89	20.15	19.98	
10	16QAM	1	49	19.82	20.03	19.95	
10	16QAM	25	0	18.97	18.87	18.84	19.5
10	16QAM	25	12	18.93	18.72	18.74	
10	16QAM	25	25	18.92	18.90	18.83	
10	16QAM	50	0	18.94	18.79	18.78	
10	64QAM	1	0	19.20	18.97	18.89	19.5
10	64QAM	1	25	19.07	18.98	18.94	
10	64QAM	1	49	19.07	18.85	18.94	
10	64QAM	25	0	17.87	17.80	17.79	18.5
10	64QAM	25	12	17.93	17.83	17.75	
10	64QAM	25	25	17.81	17.86	17.81	
10	64QAM	50	0	17.94	17.82	17.81	
10	256QAM	1	0	16.17	16.00	15.85	16.5
10	256QAM	1	25	16.13	16.10	15.97	
10	256QAM	1	49	16.06	16.00	15.86	
10	256QAM	25	0	15.97	15.88	15.81	16.5
10	256QAM	25	12	15.90	15.84	15.85	
10	256QAM	25	25	15.87	15.89	15.83	
10	256QAM	50	0	15.95	15.88	15.82	

Channel				26715	26865	27015	Tune-up limit
Frequency (MHz)				816.5	831.5	846.5	(dBm)
5	QPSK	1	0	20.70	20.73	20.74	21.5
5	QPSK	1	12	20.80	20.69	20.70	
5	QPSK	1	24	20.68	20.74	20.63	
5	QPSK	12	0	19.94	19.73	19.77	20.5
5	QPSK	12	7	19.96	19.82	19.86	
5	QPSK	12	13	19.90	19.82	19.78	
5	QPSK	25	0	19.96	19.71	19.77	
5	16QAM	1	0	20.24	20.04	19.96	20.5
5	16QAM	1	12	20.28	20.09	20.06	
5	16QAM	1	24	19.97	19.94	19.85	
5	16QAM	12	0	19.00	18.79	18.88	19.5
5	16QAM	12	7	19.07	18.89	18.89	
5	16QAM	12	13	18.92	18.83	18.79	
5	16QAM	25	0	18.95	18.81	18.76	
5	64QAM	1	0	19.17	19.00	18.87	19.5
5	64QAM	1	12	19.03	19.11	18.77	
5	64QAM	1	24	18.85	18.88	18.94	
5	64QAM	12	0	17.95	17.79	17.84	18.5
5	64QAM	12	7	17.99	17.79	17.89	
5	64QAM	12	13	17.91	17.94	17.82	
5	64QAM	25	0	17.96	17.80	17.80	
5	256QAM	1	0	16.05	16.00	16.01	16.5
5	256QAM	1	12	16.14	15.94	15.95	
5	256QAM	1	24	15.93	15.98	15.93	
5	256QAM	12	0	16.02	15.82	15.89	16.5
5	256QAM	12	7	15.97	15.92	15.90	
5	256QAM	12	13	16.05	15.90	15.80	
5	256QAM	25	0	15.92	15.82	15.90	
Channel				26705	26865	27025	Tune-up limit
Frequency (MHz)				815.5	831.5	847.5	(dBm)
3	QPSK	1	0	20.83	20.65	20.64	21.5
3	QPSK	1	8	20.64	20.71	20.66	
3	QPSK	1	14	20.75	20.65	20.55	
3	QPSK	8	0	20.03	19.79	19.78	20.5
3	QPSK	8	4	20.00	19.90	19.82	
3	QPSK	8	7	19.94	19.78	19.72	
3	QPSK	15	0	20.00	19.79	19.84	
3	16QAM	1	0	20.00	19.98	20.02	20.5
3	16QAM	1	8	20.12	20.01	20.05	
3	16QAM	1	14	20.08	19.98	19.85	
3	16QAM	8	0	19.03	18.83	18.83	19.5
3	16QAM	8	4	19.04	18.88	18.86	
3	16QAM	8	7	18.95	18.95	18.85	
3	16QAM	15	0	19.00	18.79	18.82	
3	64QAM	1	0	18.99	18.88	18.92	19.5
3	64QAM	1	8	19.17	19.00	18.96	
3	64QAM	1	14	18.84	18.81	18.64	
3	64QAM	8	0	18.06	17.81	17.85	18.5
3	64QAM	8	4	18.03	17.95	17.86	
3	64QAM	8	7	18.08	17.86	17.83	
3	64QAM	15	0	17.96	17.78	17.80	
3	256QAM	1	0	16.05	15.86	15.95	16.5
3	256QAM	1	8	16.14	16.02	16.04	
3	256QAM	1	14	16.07	16.01	15.95	
3	256QAM	8	0	16.02	15.75	15.84	16.5
3	256QAM	8	4	16.04	15.88	15.82	
3	256QAM	8	7	15.93	15.85	15.84	
3	256QAM	15	0	15.97	15.86	15.81	
Channel				26697	26865	27033	Tune-up limit
Frequency (MHz)				814.7	831.5	848.3	(dBm)
1.4	QPSK	1	0	20.61	20.49	20.44	

1.4	QPSK	1	3	20.61	20.42	20.51	21.5
1.4	QPSK	1	5	20.48	20.42	20.36	
1.4	QPSK	3	0	19.66	19.65	19.60	21.5
1.4	QPSK	3	1	19.69	19.56	19.61	
1.4	QPSK	3	3	20.85	20.74	20.67	20.5
1.4	QPSK	6	0	19.93	19.83	19.75	
1.4	16QAM	1	0	19.95	19.86	19.87	20.5
1.4	16QAM	1	3	20.02	20.03	19.89	
1.4	16QAM	1	5	20.11	19.85	19.82	
1.4	16QAM	3	0	20.07	19.89	19.86	20.5
1.4	16QAM	3	1	20.00	19.95	19.84	
1.4	16QAM	3	3	19.98	19.87	19.82	
1.4	16QAM	6	0	18.97	18.86	18.71	19.5
1.4	64QAM	1	0	19.14	18.90	18.84	19.5
1.4	64QAM	1	3	19.15	19.07	18.79	
1.4	64QAM	1	5	19.10	19.04	18.83	
1.4	64QAM	3	0	19.05	18.80	18.89	19.5
1.4	64QAM	3	1	18.97	18.90	18.81	
1.4	64QAM	3	3	18.99	18.93	18.93	
1.4	64QAM	6	0	18.07	17.82	17.80	18.5
1.4	256QAM	1	0	16.07	15.89	15.77	16.5
1.4	256QAM	1	3	16.04	16.01	16.01	
1.4	256QAM	1	5	16.15	15.93	15.91	
1.4	256QAM	3	0	16.12	15.89	15.78	16.5
1.4	256QAM	3	1	16.16	15.86	15.81	
1.4	256QAM	3	3	16.06	15.86	15.88	
1.4	256QAM	6	0	15.90	15.79	15.80	

**Band66 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.85	18.89	18.72	
20	QPSK	1	49	18.17	18.50	18.57	19.0
20	QPSK	1	99	18.27	18.63	18.62	
20	QPSK	50	0	18.44	18.43	18.63	
20	QPSK	50	24	18.33	18.55	18.65	19.0
20	QPSK	50	50	18.18	18.53	18.70	
20	QPSK	100	0	18.30	18.42	18.67	
20	16QAM	1	0	18.82	18.51	18.62	19.0
20	16QAM	1	49	18.39	18.50	18.59	
20	16QAM	1	99	18.53	18.76	18.74	
20	16QAM	50	0	18.48	18.39	18.62	19.0
20	16QAM	50	24	18.29	18.54	18.65	
20	16QAM	50	50	18.26	18.51	18.61	
20	16QAM	100	0	18.32	18.43	18.66	19.0
20	64QAM	1	0	18.82	18.38	18.74	
20	64QAM	1	49	18.48	18.61	18.71	
20	64QAM	1	99	18.47	18.77	18.77	18.0
20	64QAM	50	0	17.61	17.53	17.72	
20	64QAM	50	24	17.31	17.63	17.75	
20	64QAM	50	50	17.28	17.70	17.84	17.0
20	64QAM	100	0	17.43	17.56	17.80	
20	256QAM	1	0	16.08	15.77	16.05	
20	256QAM	1	49	15.76	16.08	16.07	16.5
20	256QAM	1	99	15.72	16.06	16.10	
20	256QAM	50	0	15.89	15.82	15.97	
20	256QAM	50	24	15.73	15.98	16.08	16.5
20	256QAM	50	50	15.67	15.94	16.06	
20	256QAM	100	0	15.74	15.82	16.10	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.30	18.45	18.44	
15	QPSK	1	37	18.45	18.59	18.32	19.0
15	QPSK	1	74	18.58	18.79	18.24	
15	QPSK	36	0	18.47	18.64	18.52	
15	QPSK	36	20	18.40	18.69	18.45	19.0
15	QPSK	39	39	18.50	18.73	18.44	
15	QPSK	75	0	18.40	18.67	18.47	
15	16QAM	1	0	18.39	18.67	18.47	19.0
15	16QAM	1	37	18.44	18.64	18.56	
15	16QAM	1	74	18.70	18.77	18.56	
15	16QAM	36	0	18.45	18.61	18.61	19.0
15	16QAM	36	20	18.42	18.66	18.43	
15	16QAM	39	39	18.49	18.62	18.42	
15	16QAM	75	0	18.43	18.66	18.46	19.0
15	64QAM	1	0	18.51	18.61	18.55	
15	64QAM	1	37	18.64	18.76	18.44	
15	64QAM	1	74	18.80	18.84	18.48	18.0
15	64QAM	36	0	17.59	17.69	17.64	
15	64QAM	36	20	17.52	17.77	17.54	
15	64QAM	39	39	17.60	17.83	17.57	17.0
15	64QAM	75	0	17.53	17.75	17.59	
15	256QAM	1	0	15.84	16.05	16.09	
15	256QAM	1	37	15.99	16.09	15.94	16.5
15	256QAM	1	74	16.12	16.13	15.96	
15	256QAM	36	0	15.88	16.01	15.96	
15	256QAM	36	20	15.85	16.08	15.87	16.5
15	256QAM	39	39	15.98	16.09	15.83	
15	256QAM	75	0	15.86	16.05	15.85	

Channel				132022	132322	132622	Tune-up limit
Frequency (MHz)				1715	1745	1775	(dBm)
10	QPSK	1	0	18.52	18.63	18.52	19.0
10	QPSK	1	25	18.65	18.83	18.46	
10	QPSK	1	49	18.57	18.73	18.48	
10	QPSK	25	0	18.67	18.82	18.54	19.0
10	QPSK	25	12	18.67	18.85	18.57	
10	QPSK	25	25	18.67	18.76	18.53	
10	QPSK	50	0	18.58	18.78	18.57	
10	16QAM	1	0	18.77	18.83	18.67	19.0
10	16QAM	1	25	18.80	18.84	18.52	
10	16QAM	1	49	18.85	18.64	18.63	
10	16QAM	25	0	18.59	18.75	18.52	19.0
10	16QAM	25	12	18.66	18.85	18.57	
10	16QAM	25	25	18.59	18.78	18.52	
10	16QAM	50	0	18.65	18.78	18.55	
10	64QAM	1	0	18.70	18.82	18.57	19.0
10	64QAM	1	25	18.87	18.77	18.62	
10	64QAM	1	49	18.77	18.72	18.50	
10	64QAM	25	0	17.72	17.84	17.64	18.5
10	64QAM	25	12	17.83	17.94	17.71	
10	64QAM	25	25	17.77	17.93	17.69	
10	64QAM	50	0	17.69	17.97	17.70	
10	256QAM	1	0	16.05	16.15	16.12	17.0
10	256QAM	1	25	16.35	16.41	15.88	
10	256QAM	1	49	16.21	16.38	16.02	
10	256QAM	25	0	16.00	16.17	16.00	16.5
10	256QAM	25	12	16.14	16.26	15.94	
10	256QAM	25	25	16.15	16.25	16.02	
10	256QAM	50	0	16.04	16.25	15.95	
Channel				131997	132322	132647	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	(dBm)
5	QPSK	1	0	18.56	18.72	18.45	19.0
5	QPSK	1	12	18.66	18.77	18.61	
5	QPSK	1	24	18.64	18.70	18.41	
5	QPSK	12	0	18.65	18.79	18.48	19.0
5	QPSK	12	7	18.59	18.79	18.51	
5	QPSK	12	13	18.56	18.84	18.59	
5	QPSK	25	0	18.51	18.77	18.50	
5	16QAM	1	0	18.88	18.85	18.54	19.0
5	16QAM	1	12	18.85	18.82	18.73	
5	16QAM	1	24	18.72	18.81	18.66	
5	16QAM	12	0	18.64	18.78	18.51	19.0
5	16QAM	12	7	18.58	18.82	18.62	
5	16QAM	12	13	18.65	18.83	18.53	
5	16QAM	25	0	18.64	18.78	18.47	
5	64QAM	1	0	18.65	18.78	18.47	19.0
5	64QAM	1	12	18.76	18.73	18.61	
5	64QAM	1	24	18.74	18.81	18.60	
5	64QAM	12	0	17.69	17.89	17.65	18.5
5	64QAM	12	7	17.72	18.02	17.73	
5	64QAM	12	13	17.72	17.96	17.65	
5	64QAM	25	0	17.67	17.87	17.64	
5	256QAM	1	0	16.11	16.18	16.04	17.0
5	256QAM	1	12	16.24	16.35	16.09	
5	256QAM	1	24	16.07	16.34	16.02	
5	256QAM	12	0	16.05	16.18	16.02	16.5
5	256QAM	12	7	16.05	16.23	16.04	
5	256QAM	12	13	16.04	16.27	16.02	
5	256QAM	25	0	15.98	16.22	15.97	
Channel				131987	132322	132657	Tune-up limit
Frequency (MHz)				1711.5	1745	1778.5	(dBm)
3	QPSK	1	0	18.53	18.66	18.46	



3	QPSK	1	8	18.62	18.80	18.50	19.0
3	QPSK	1	14	18.57	18.67	18.44	
3	QPSK	8	0	18.58	18.81	18.50	19.0
3	QPSK	8	4	18.69	18.82	18.57	
3	QPSK	8	7	18.57	18.79	18.58	
3	QPSK	15	0	18.53	18.79	18.53	
3	16QAM	1	0	18.65	18.84	18.57	19.0
3	16QAM	1	8	18.74	18.79	18.87	
3	16QAM	1	14	18.71	18.72	18.57	
3	16QAM	8	0	18.66	18.84	18.50	19.0
3	16QAM	8	4	18.70	18.80	18.64	
3	16QAM	8	7	18.61	18.79	18.54	
3	16QAM	15	0	18.55	18.86	18.57	
3	64QAM	1	0	18.78	18.81	18.55	19.0
3	64QAM	1	8	18.88	18.74	18.73	
3	64QAM	1	14	18.79	18.84	18.43	
3	64QAM	8	0	17.85	17.94	17.62	18.5
3	64QAM	8	4	17.80	17.90	17.72	
3	64QAM	8	7	17.75	17.96	17.57	
3	64QAM	15	0	17.73	17.90	17.67	
3	256QAM	1	0	16.16	16.24	16.07	17.0
3	256QAM	1	8	16.11	16.38	15.99	
3	256QAM	1	14	16.03	16.30	16.04	
3	256QAM	8	0	16.14	16.23	16.02	16.5
3	256QAM	8	4	16.14	16.30	15.95	
3	256QAM	8	7	16.03	16.14	15.98	
3	256QAM	15	0	15.99	16.18	15.95	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.57	18.69	18.42	19.0
1.4	QPSK	1	3	18.65	18.67	18.48	
1.4	QPSK	1	5	18.56	18.70	18.48	
1.4	QPSK	3	0	18.61	18.74	18.49	19.0
1.4	QPSK	3	1	18.59	18.74	18.47	
1.4	QPSK	3	3	18.58	18.72	18.50	
1.4	QPSK	6	0	18.59	18.77	18.54	
1.4	16QAM	1	0	18.66	18.83	18.60	19.0
1.4	16QAM	1	3	18.63	18.85	18.64	
1.4	16QAM	1	5	18.70	18.88	18.54	
1.4	16QAM	3	0	18.60	18.82	18.42	19.0
1.4	16QAM	3	1	18.69	18.83	18.62	
1.4	16QAM	3	3	18.65	18.84	18.52	
1.4	16QAM	6	0	18.64	18.75	18.45	
1.4	64QAM	1	0	18.74	18.79	18.61	19.0
1.4	64QAM	1	3	18.57	18.69	18.57	
1.4	64QAM	1	5	18.77	18.83	18.67	
1.4	64QAM	3	0	18.64	18.75	18.57	19.0
1.4	64QAM	3	1	18.62	18.74	18.67	
1.4	64QAM	3	3	18.66	18.78	18.68	
1.4	64QAM	6	0	17.73	17.83	17.72	
1.4	256QAM	1	0	16.10	16.33	16.02	17.0
1.4	256QAM	1	3	16.24	16.29	16.10	
1.4	256QAM	1	5	16.03	16.39	16.01	
1.4	256QAM	3	0	16.08	16.21	16.00	17.0
1.4	256QAM	3	1	16.12	16.31	15.99	
1.4	256QAM	3	3	16.02	16.16	15.91	
1.4	256QAM	6	0	16.02	16.22	15.94	

**Band38 Ant4 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low	Power Mid	Power High	Tune-up limit (dBm)
				CH./Freq.	CH./Freq.	CH./Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	16.70	16.87	16.66	17.5
20	QPSK	1	49	16.69	16.84	16.77	
20	QPSK	1	99	16.63	16.71	16.64	
20	QPSK	50	0	16.60	16.74	16.62	17.5
20	QPSK	50	24	16.75	16.70	16.62	
20	QPSK	50	50	16.73	16.84	16.75	
20	QPSK	100	0	16.70	16.72	16.59	
20	16QAM	1	0	16.80	16.50	16.66	17.5
20	16QAM	1	49	16.69	16.56	16.61	
20	16QAM	1	99	16.65	16.52	16.64	
20	16QAM	50	0	16.75	16.68	16.79	17.5
20	16QAM	50	24	16.73	16.68	16.80	
20	16QAM	50	50	16.70	16.72	16.70	
20	16QAM	100	0	16.76	16.70	16.77	
20	64QAM	1	0	16.76	16.82	16.80	17.5
20	64QAM	1	49	16.77	16.81	16.69	
20	64QAM	1	99	16.74	16.82	16.67	
20	64QAM	50	0	16.67	16.80	16.67	17.5
20	64QAM	50	24	16.83	16.77	16.74	
20	64QAM	50	50	16.68	16.86	16.76	
20	64QAM	100	0	16.76	16.75	16.83	
20	256QAM	1	0	16.74	16.69	16.77	17.5
20	256QAM	1	49	16.70	16.79	16.66	
20	256QAM	1	99	16.68	16.86	16.84	
20	256QAM	50	0	16.74	16.78	16.72	17.5
20	256QAM	50	24	16.78	16.82	16.61	
20	256QAM	50	50	16.80	16.71	16.74	
20	256QAM	100	0	16.79	16.74	16.84	
Channel				37825	38000	38175	Tune-up limit
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	16.82	16.62	16.63	17.5
15	QPSK	1	37	16.74	16.60	16.83	
15	QPSK	1	74	16.61	16.84	16.60	
15	QPSK	36	0	16.62	16.61	16.67	17.5
15	QPSK	36	20	16.68	16.73	16.70	
15	QPSK	39	39	16.74	16.60	16.65	
15	QPSK	75	0	16.66	16.64	16.59	
15	16QAM	1	0	16.61	16.79	16.60	17.5
15	16QAM	1	37	16.80	16.60	16.70	
15	16QAM	1	74	16.74	16.63	16.77	
15	16QAM	36	0	16.70	16.75	16.64	17.5
15	16QAM	36	20	16.76	16.60	16.66	
15	16QAM	39	39	16.76	16.69	16.66	
15	16QAM	75	0	16.79	16.71	16.83	
15	64QAM	1	0	16.73	16.72	16.83	17.5
15	64QAM	1	37	16.67	16.70	16.65	
15	64QAM	1	74	16.71	16.81	16.76	
15	64QAM	36	0	16.68	16.75	16.83	17.5
15	64QAM	36	20	16.82	16.62	16.62	
15	64QAM	39	39	16.71	16.72	16.83	
15	64QAM	75	0	16.73	16.71	16.79	
15	256QAM	1	0	16.61	16.64	16.63	17.5
15	256QAM	1	37	16.70	16.72	16.65	
15	256QAM	1	74	16.81	16.77	16.65	
15	256QAM	36	0	16.65	16.66	16.64	17.5
15	256QAM	36	20	16.60	16.83	16.80	
15	256QAM	39	39	16.78	16.64	16.78	
15	256QAM	75	0	16.62	16.68	16.80	

Channel				37800	38000	38200	Tune-up limit
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	16.62	16.61	16.68	17.5
10	QPSK	1	25	16.64	16.77	16.73	
10	QPSK	1	49	16.64	16.63	16.78	
10	QPSK	25	0	16.69	16.79	16.73	17.5
10	QPSK	25	12	16.60	16.80	16.65	
10	QPSK	25	25	16.76	16.67	16.74	
10	QPSK	50	0	16.62	16.60	16.59	
10	16QAM	1	0	16.74	16.80	16.61	17.5
10	16QAM	1	25	16.59	16.59	16.74	
10	16QAM	1	49	16.67	16.73	16.62	
10	16QAM	25	0	16.78	16.62	16.79	17.5
10	16QAM	25	12	16.70	16.74	16.70	
10	16QAM	25	25	16.78	16.71	16.74	
10	16QAM	50	0	16.78	16.81	16.76	
10	64QAM	1	0	16.60	16.63	16.60	17.5
10	64QAM	1	25	16.61	16.62	16.80	
10	64QAM	1	49	16.76	16.74	16.60	
10	64QAM	25	0	16.68	16.67	16.80	17.5
10	64QAM	25	12	16.77	16.82	16.62	
10	64QAM	25	25	16.81	16.77	16.82	
10	64QAM	50	0	16.61	16.79	16.70	
10	256QAM	1	0	16.82	16.81	16.66	17.5
10	256QAM	1	25	16.71	16.63	16.70	
10	256QAM	1	49	16.64	16.73	16.67	
10	256QAM	25	0	16.77	16.73	16.82	17.5
10	256QAM	25	12	16.69	16.72	16.68	
10	256QAM	25	25	16.61	16.75	16.76	
10	256QAM	50	0	16.79	16.71	16.68	
Channel				37775	38000	38225	Tune-up limit
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	16.60	16.82	16.75	17.5
5	QPSK	1	12	16.77	16.66	16.76	
5	QPSK	1	24	16.75	16.84	16.77	
5	QPSK	12	0	16.60	16.79	16.82	17.5
5	QPSK	12	7	16.75	16.60	16.70	
5	QPSK	12	13	16.61	16.73	16.80	
5	QPSK	25	0	16.62	16.79	16.66	
5	16QAM	1	0	16.67	16.69	16.72	17.5
5	16QAM	1	12	16.66	16.73	16.71	
5	16QAM	1	24	16.74	16.61	16.72	
5	16QAM	12	0	16.63	16.73	16.77	17.5
5	16QAM	12	7	16.78	16.64	16.79	
5	16QAM	12	13	16.84	16.71	16.60	
5	16QAM	25	0	16.82	16.69	16.65	
5	64QAM	1	0	16.82	16.68	16.62	17.5
5	64QAM	1	12	16.70	16.80	16.61	
5	64QAM	1	24	16.66	16.60	16.79	
5	64QAM	12	0	16.63	16.66	16.77	17.5
5	64QAM	12	7	16.75	16.66	16.75	
5	64QAM	12	13	16.77	16.61	16.60	
5	64QAM	25	0	16.78	16.83	16.64	
5	256QAM	1	0	16.61	16.69	16.80	17.5
5	256QAM	1	12	16.78	16.79	16.83	
5	256QAM	1	24	16.80	16.74	16.71	
5	256QAM	12	0	16.65	16.71	16.81	17.5
5	256QAM	12	7	16.76	16.73	16.68	
5	256QAM	12	13	16.72	16.69	16.69	
5	256QAM	25	0	16.71	16.69	16.61	

**Band41 Ant1 DSI2**

BW(MHz)	Moudulation	RB Size	RB Offset	Power Low CH./Freq.	Power Mid CH./Freq.	Power Mid CH./Freq.	Power Mid CH./Freq.	Power High CH./Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	16.94	16.81	16.97	16.71	16.80	17.5
20	QPSK	1	49	16.84	16.85	16.75	16.73	16.94	
20	QPSK	1	99	16.76	16.90	16.74	16.79	16.83	
20	QPSK	50	0	16.69	16.77	16.67	16.72	16.88	17.5
20	QPSK	50	24	16.74	16.71	16.74	16.78	16.68	
20	QPSK	50	50	16.71	16.64	16.65	16.62	16.77	
20	QPSK	100	0	16.79	16.75	16.74	16.70	16.66	
20	16QAM	1	0	16.73	16.65	16.54	16.67	16.70	17.5
20	16QAM	1	49	16.60	16.77	16.50	16.74	16.72	
20	16QAM	1	99	16.72	16.66	16.56	16.77	16.73	
20	16QAM	50	0	16.65	16.71	16.61	16.67	16.62	17.5
20	16QAM	50	24	16.69	16.59	16.71	16.66	16.59	
20	16QAM	50	50	16.78	16.69	16.62	16.73	16.60	
20	16QAM	100	0	16.59	16.62	16.71	16.65	16.67	
20	64QAM	1	0	16.96	16.79	16.95	16.96	16.71	17.5
20	64QAM	1	49	16.93	16.92	16.93	16.72	16.87	
20	64QAM	1	99	16.81	16.83	16.94	16.70	16.85	
20	64QAM	50	0	16.87	16.91	16.73	16.83	16.73	17.5
20	64QAM	50	24	16.85	16.88	16.81	16.85	16.83	
20	64QAM	50	50	16.77	16.93	16.78	16.85	16.80	
20	64QAM	100	0	16.72	16.74	16.78	16.94	16.71	
20	256QAM	1	0	16.66	16.61	16.60	16.70	16.60	17.5
20	256QAM	1	49	16.69	16.79	16.69	16.70	16.61	
20	256QAM	1	99	16.69	16.78	16.81	16.73	16.65	
20	256QAM	50	0	16.83	16.92	16.72	16.81	16.92	17.5
20	256QAM	50	24	16.70	16.93	16.79	16.78	16.94	
20	256QAM	50	50	16.93	16.77	16.79	16.77	16.71	
20	256QAM	100	0	16.71	16.92	16.84	16.77	16.92	
Channel				39725	40173	40620	41068	41515	Tune-up limit
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	16.73	16.78	16.93	16.86	16.95	17.5
15	QPSK	1	37	16.85	16.94	16.73	16.86	16.85	
15	QPSK	1	74	16.87	16.81	16.73	16.78	16.76	
15	QPSK	36	0	16.72	16.91	16.74	16.95	16.67	17.5
15	QPSK	36	20	16.62	16.66	16.74	16.79	16.64	
15	QPSK	39	39	16.66	16.59	16.67	16.66	16.66	
15	QPSK	75	0	16.76	16.72	16.73	16.59	16.69	
15	16QAM	1	0	16.72	16.68	16.80	16.59	16.61	17.5
15	16QAM	1	37	16.78	16.76	16.61	16.66	16.72	
15	16QAM	1	74	16.63	16.63	16.69	16.68	16.61	
15	16QAM	36	0	16.68	16.74	16.80	16.61	16.68	17.5
15	16QAM	36	20	16.68	16.60	16.67	16.67	16.79	
15	16QAM	39	39	16.64	16.62	16.72	16.64	16.63	
15	16QAM	75	0	16.77	16.70	16.73	16.61	16.68	
15	64QAM	1	0	16.87	16.84	16.89	16.78	16.75	17.5
15	64QAM	1	37	16.79	16.83	16.96	16.73	16.89	
15	64QAM	1	74	16.82	16.73	16.95	16.86	16.70	
15	64QAM	36	0	16.88	16.83	16.84	16.80	16.70	17.5
15	64QAM	36	20	16.71	16.77	16.94	16.70	16.75	
15	64QAM	39	39	16.79	16.82	16.96	16.94	16.91	
15	64QAM	75	0	16.79	16.70	16.78	16.90	16.91	
15	256QAM	1	0	16.68	16.78	16.60	16.73	16.61	17.5
15	256QAM	1	37	16.71	16.66	16.71	16.68	16.61	
15	256QAM	1	74	16.67	16.72	16.70	16.66	16.65	
15	256QAM	36	0	16.72	16.74	16.85	16.95	16.72	17.5
15	256QAM	36	20	16.94	16.74	16.94	16.88	16.83	
15	256QAM	39	39	16.85	16.94	16.73	16.86	16.93	
15	256QAM	75	0	16.74	16.94	16.81	16.70	16.96	
Channel				39700	40160	40620	41080	41540	Tune-up limit
Frequency (MHz)				2510	2547	2593	2639	2685	
10	QPSK	1	0	16.87	16.84	16.78	16.90	16.78	17.5
10	QPSK	1	25	16.89	16.95	16.95	16.73	16.75	
10	QPSK	1	49	16.75	16.74	16.83	16.89	16.81	
10	QPSK	25	0	16.64	16.95	16.69	16.90	16.60	

10	QPSK	25	12	16.75	16.74	16.80	16.73	16.70	17.5
10	QPSK	25	25	16.75	16.65	16.59	16.80	16.72	
10	QPSK	50	0	16.71	16.59	16.62	16.70	16.64	
10	16QAM	1	0	16.66	16.76	16.77	16.66	16.71	17.5
10	16QAM	1	25	16.63	16.62	16.73	16.68	16.69	
10	16QAM	1	49	16.68	16.79	16.61	16.70	16.76	
10	16QAM	25	0	16.66	16.73	16.78	16.80	16.61	17.5
10	16QAM	25	12	16.63	16.71	16.78	16.77	16.64	
10	16QAM	25	25	16.71	16.66	16.68	16.59	16.64	
10	16QAM	50	0	16.73	16.79	16.59	16.77	16.70	17.5
10	64QAM	1	0	16.92	16.84	16.75	16.84	16.83	
10	64QAM	1	25	16.86	16.78	16.75	16.85	16.73	
10	64QAM	1	49	16.86	16.80	16.95	16.78	16.77	17.5
10	64QAM	25	0	16.96	16.72	16.90	16.84	16.77	
10	64QAM	25	12	16.71	16.89	16.93	16.89	16.88	
10	64QAM	25	25	16.91	16.92	16.81	16.88	16.72	17.5
10	64QAM	50	0	16.82	16.72	16.78	16.82	16.78	
10	256QAM	1	0	16.60	16.64	16.80	16.73	16.68	
10	256QAM	1	25	16.75	16.67	16.75	16.71	16.68	17.5
10	256QAM	1	49	16.79	16.63	16.79	16.59	16.60	
10	256QAM	25	0	16.87	16.79	16.89	16.90	16.92	
10	256QAM	25	12	16.79	16.77	16.79	16.94	16.89	17.5
10	256QAM	25	25	16.94	16.71	16.95	16.73	16.72	
10	256QAM	50	0	16.91	16.88	16.70	16.79	16.88	
Channel				39675	40148	40620	41093	41565	Tune-up limit
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5	
5	QPSK	1	0	16.82	16.87	16.84	16.76	16.96	17.5
5	QPSK	1	12	16.92	16.87	16.71	16.76	16.70	
5	QPSK	1	24	16.84	16.71	16.90	16.85	16.87	
5	QPSK	12	0	16.75	16.86	16.76	16.86	16.76	17.5
5	QPSK	12	7	16.65	16.70	16.78	16.74	16.68	
5	QPSK	12	13	16.73	16.66	16.72	16.75	16.79	
5	QPSK	25	0	16.78	16.66	16.61	16.78	16.76	17.5
5	16QAM	1	0	16.74	16.73	16.78	16.60	16.71	
5	16QAM	1	12	16.71	16.60	16.80	16.70	16.59	
5	16QAM	1	24	16.61	16.60	16.61	16.61	16.78	17.5
5	16QAM	12	0	16.66	16.72	16.79	16.60	16.70	
5	16QAM	12	7	16.61	16.61	16.80	16.70	16.60	
5	16QAM	12	13	16.66	16.75	16.76	16.79	16.76	17.5
5	16QAM	25	0	16.75	16.69	16.80	16.71	16.66	
5	64QAM	1	0	16.74	16.81	16.75	16.89	16.85	
5	64QAM	1	12	16.82	16.89	16.74	16.88	16.95	17.5
5	64QAM	1	24	16.86	16.72	16.81	16.95	16.90	
5	64QAM	12	0	16.81	16.88	16.70	16.86	16.90	
5	64QAM	12	7	16.77	16.84	16.85	16.73	16.87	17.5
5	64QAM	12	13	16.74	16.94	16.94	16.85	16.70	
5	64QAM	25	0	16.85	16.85	16.70	16.79	16.70	
5	256QAM	1	0	16.74	16.68	16.71	16.59	16.79	17.5
5	256QAM	1	12	16.62	16.68	16.72	16.73	16.80	
5	256QAM	1	24	16.79	16.65	16.68	16.61	16.71	
5	256QAM	12	0	16.92	16.82	16.83	16.82	16.93	17.5
5	256QAM	12	7	16.93	16.74	16.80	16.94	16.71	
5	256QAM	12	13	16.77	16.72	16.95	16.91	16.84	
5	256QAM	25	0	16.79	16.78	16.83	16.90	16.81	