



GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.71	31.48	31.35	32.00	22.71	22.48	22.35	23.00
GPRS 1 Tx slot	31.73	31.50	31.36	32.00	22.73	22.50	22.36	23.00
GPRS 2 Tx slots	29.91	29.93	29.65	30.00	23.91	23.93	23.65	24.00
GPRS 3 Tx slots	27.55	27.86	27.71	28.00	23.29	23.60	23.45	23.74
GPRS 4 Tx slots	25.80	25.98	25.57	26.00	22.80	22.98	22.57	23.00
EDGE 1 Tx slot	25.56	25.94	25.70	26.00	16.56	16.94	16.70	17.00
EDGE 2 Tx slots	24.82	24.90	24.60	25.00	18.82	18.90	18.60	19.00
EDGE 3 Tx slots	22.87	23.00	22.84	23.00	18.61	18.74	18.58	18.74
EDGE 4 Tx slots	20.77	20.99	20.85	21.00	17.77	17.99	17.85	18.00



GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	30.96	31.69	31.46	32.00	21.96	22.69	22.46	23.00
GPRS 1 Tx slot	30.88	31.70	31.43	32.00	21.88	22.70	22.43	23.00
GPRS 2 Tx slots	28.77	28.90	28.62	29.00	22.77	22.90	22.62	23.00
GPRS 3 Tx slots	26.46	26.67	26.61	27.00	22.20	22.41	22.35	22.74
GPRS 4 Tx slots	24.95	24.86	25.02	26.00	21.95	21.86	22.02	23.00
EDGE 1 Tx slot	24.80	25.03	24.82	25.50	15.80	16.03	15.82	16.50
EDGE 2 Tx slots	23.71	23.88	23.73	24.00	17.71	17.88	17.73	18.00
EDGE 3 Tx slots	21.62	21.92	21.80	22.00	17.36	17.66	17.54	17.74
EDGE 4 Tx slots	19.75	19.96	19.77	20.00	16.75	16.96	16.77	17.00



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	28.65	28.96	28.88	29.50	19.65	19.96	19.88	20.50
GPRS 1 Tx slot	28.74	29.08	28.93	29.50	19.74	20.08	19.93	20.50
GPRS 2 Tx slots	26.77	27.09	26.85	27.50	20.77	21.09	20.85	21.50
GPRS 3 Tx slots	24.78	25.08	24.86	25.50	20.52	20.82	20.60	21.24
GPRS 4 Tx slots	22.63	22.85	22.65	23.00	19.63	19.85	19.65	20.00
EDGE 1 Tx slot	25.34	25.63	25.39	26.00	16.34	16.63	16.39	17.00
EDGE 2 Tx slots	25.10	25.36	25.17	25.50	19.10	19.36	19.17	19.50
EDGE 3 Tx slots	24.84	25.12	24.90	25.50	20.58	20.86	20.64	21.24
EDGE 4 Tx slots	22.68	22.91	22.67	23.50	19.68	19.91	19.67	20.50



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	28.26	28.63	28.52	29.00	19.26	19.63	19.52	20.00
GPRS 1 Tx slot	28.20	28.58	28.47	29.00	19.20	19.58	19.47	20.00
GPRS 2 Tx slots	26.49	26.64	26.48	27.00	17.49	17.64	17.48	21.00
GPRS 3 Tx slots	24.46	24.57	24.53	25.00	15.46	15.57	15.53	20.74
GPRS 4 Tx slots	22.45	22.62	22.38	23.00	13.45	13.62	13.38	20.00
EDGE 1 Tx slot	23.90	24.11	24.04	24.50	14.90	15.11	15.04	15.50
EDGE 2 Tx slots	23.12	23.37	23.29	24.00	14.12	14.37	14.29	18.00
EDGE 3 Tx slots	21.47	21.49	21.48	22.00	12.47	12.49	12.48	17.74
EDGE 4 Tx slots	19.53	19.62	19.52	20.00	10.53	10.62	10.52	17.00



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	28.23	28.48	28.28	28.80	19.23	19.48	19.28	19.80
GPRS 1 Tx slot	28.25	28.49	28.30	28.80	19.25	19.49	19.30	19.80
GPRS 2 Tx slots	25.33	25.47	25.29	26.80	16.33	16.47	16.29	20.80
GPRS 3 Tx slots	23.51	23.62	23.51	24.80	14.51	14.62	14.51	20.54
GPRS 4 Tx slots	22.28	22.29	22.16	22.80	13.28	13.29	13.16	19.80
EDGE 1 Tx slot	23.92	23.99	24.01	24.50	14.92	14.99	15.01	15.50
EDGE 2 Tx slots	23.21	23.33	23.19	24.00	14.21	14.33	14.19	18.00
EDGE 3 Tx slots	21.45	21.56	21.45	22.00	12.45	12.56	12.45	17.74
EDGE 4 Tx slots	19.67	19.65	19.55	20.00	10.67	10.65	10.55	17.00



Band		WCDMA V			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.08	23.13	23.00	24.00
3GPP Rel 99	RMC 12.2Kbps	23.12	23.14	23.02	24.00
3GPP Rel 6	HSDPA Subtest-1	22.12	22.13	22.05	23.50
3GPP Rel 6	HSDPA Subtest-2	22.10	22.13	22.02	23.50
3GPP Rel 6	HSDPA Subtest-3	21.62	21.61	21.54	23.00
3GPP Rel 6	HSDPA Subtest-4	21.58	21.55	21.54	23.00
3GPP Rel 8	DC-HSDPA Subtest-1	22.10	22.11	21.99	23.50
3GPP Rel 8	DC-HSDPA Subtest-2	22.05	22.12	21.99	23.50
3GPP Rel 8	DC-HSDPA Subtest-3	21.59	21.52	21.51	23.00
3GPP Rel 8	DC-HSDPA Subtest-4	21.52	21.52	21.52	23.00
3GPP Rel 6	HSUPA Subtest-1	22.09	22.13	22.01	23.50
3GPP Rel 6	HSUPA Subtest-2	20.07	20.11	20.00	21.50
3GPP Rel 6	HSUPA Subtest-3	21.07	21.10	21.05	22.50
3GPP Rel 6	HSUPA Subtest-4	20.06	20.12	19.98	21.50
3GPP Rel 6	HSUPA Subtest-5	22.10	22.10	22.00	23.50



Band		WCDMA V			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	22.80	22.80	22.78	23.50
3GPP Rel 99	RMC 12.2Kbps	22.81	22.84	22.82	23.50
3GPP Rel 6	HSDPA Subtest-1	21.78	21.82	21.81	22.50
3GPP Rel 6	HSDPA Subtest-2	21.77	21.85	21.78	22.50
3GPP Rel 6	HSDPA Subtest-3	21.39	21.45	21.39	22.00
3GPP Rel 6	HSDPA Subtest-4	21.40	21.45	21.39	22.00
3GPP Rel 8	DC-HSDPA Subtest-1	21.78	21.58	21.78	22.50
3GPP Rel 8	DC-HSDPA Subtest-2	21.80	21.77	21.89	22.50
3GPP Rel 8	DC-HSDPA Subtest-3	21.09	21.06	21.04	22.00
3GPP Rel 8	DC-HSDPA Subtest-4	21.33	21.30	21.39	22.00
3GPP Rel 6	HSUPA Subtest-1	21.83	22.01	21.86	23.00
3GPP Rel 6	HSUPA Subtest-2	19.65	20.00	19.77	21.00
3GPP Rel 6	HSUPA Subtest-3	20.69	20.96	20.73	22.00
3GPP Rel 6	HSUPA Subtest-4	19.58	20.00	19.77	21.00
3GPP Rel 6	HSUPA Subtest-5	21.70	22.10	21.70	23.00



Band		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	23.45	23.48	23.50	24.00	23.61	23.63	23.35	24.00
3GPP Rel 99	RMC 12.2Kbps	23.53	23.51	23.55	24.00	23.69	23.68	23.42	24.00
3GPP Rel 6	HSDPA Subtest-1	22.56	22.52	22.55	23.50	22.74	22.72	22.46	23.50
3GPP Rel 6	HSDPA Subtest-2	22.52	22.50	22.59	23.50	22.73	22.72	22.42	23.50
3GPP Rel 6	HSDPA Subtest-3	22.08	22.01	22.10	23.00	22.26	22.20	21.92	23.00
3GPP Rel 6	HSDPA Subtest-4	22.07	22.01	22.06	23.00	22.22	22.25	21.93	23.00
3GPP Rel 8	DC-HSDPA Subtest-1	22.53	22.46	22.49	23.50	22.66	22.68	22.38	23.50
3GPP Rel 8	DC-HSDPA Subtest-2	22.49	22.46	22.55	23.50	22.69	22.63	22.36	23.50
3GPP Rel 8	DC-HSDPA Subtest-3	22.01	21.99	22.03	23.00	22.26	22.14	21.83	23.00
3GPP Rel 8	DC-HSDPA Subtest-4	22.06	21.94	21.99	23.00	22.19	22.15	21.89	23.00
3GPP Rel 6	HSUPA Subtest-1	22.51	22.54	22.61	23.50	22.77	22.74	22.47	23.50
3GPP Rel 6	HSUPA Subtest-2	20.49	20.55	20.59	21.50	20.76	20.70	20.51	21.50
3GPP Rel 6	HSUPA Subtest-3	21.56	21.54	21.63	22.50	21.74	21.73	21.47	22.50
3GPP Rel 6	HSUPA Subtest-4	20.55	20.53	20.58	21.50	20.71	20.69	20.49	21.50
3GPP Rel 6	HSUPA Subtest-5	22.50	22.50	22.60	23.50	22.80	22.70	22.50	23.50



Band		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	23.00	23.03	23.17	23.50	23.13	23.11	22.98	23.50
3GPP Rel 99	RMC 12.2Kbps	23.04	23.08	23.23	23.50	23.15	23.17	23.01	23.50
3GPP Rel 6	HSDPA Subtest-1	22.07	22.09	22.24	22.50	22.16	22.21	22.02	22.50
3GPP Rel 6	HSDPA Subtest-2	22.07	22.10	22.26	22.50	22.17	22.19	22.02	22.50
3GPP Rel 6	HSDPA Subtest-3	21.57	21.58	21.74	22.00	21.62	21.70	21.54	22.00
3GPP Rel 6	HSDPA Subtest-4	21.61	21.58	21.73	22.00	21.61	21.69	21.50	22.00
3GPP Rel 8	DC-HSDPA Subtest-1	22.04	22.05	22.24	22.50	22.15	22.11	21.99	22.50
3GPP Rel 8	DC-HSDPA Subtest-2	21.99	22.05	22.21	22.50	22.12	22.09	21.96	22.50
3GPP Rel 8	DC-HSDPA Subtest-3	21.51	21.48	21.70	22.00	21.62	21.65	21.53	22.00
3GPP Rel 8	DC-HSDPA Subtest-4	21.58	21.56	21.66	22.00	21.61	21.66	21.45	22.00
3GPP Rel 6	HSUPA Subtest-1	22.06	22.13	22.24	23.00	22.18	22.22	22.03	23.00
3GPP Rel 6	HSUPA Subtest-2	20.56	20.11	20.23	21.00	20.16	20.15	20.01	21.00
3GPP Rel 6	HSUPA Subtest-3	21.08	21.09	21.24	22.00	21.17	21.20	21.00	22.00
3GPP Rel 6	HSUPA Subtest-4	20.08	20.10	20.24	21.00	20.17	20.20	20.03	21.00
3GPP Rel 6	HSUPA Subtest-5	22.06	22.10	22.21	23.00	22.18	22.18	22.00	23.00

Band		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	20.05	20.15	20.08	21.60	20.04	20.09	20.03	21.40
3GPP Rel 99	RMC 12.2Kbps	20.10	20.16	20.12	21.60	20.06	20.11	20.06	21.40
3GPP Rel 6	HSDPA Subtest-1	19.07	19.11	19.23	20.60	19.09	19.09	18.96	20.40
3GPP Rel 6	HSDPA Subtest-2	19.04	19.13	19.22	20.60	19.08	18.97	19.02	20.40
3GPP Rel 6	HSDPA Subtest-3	18.54	18.62	18.72	20.10	18.57	18.59	18.53	19.90
3GPP Rel 6	HSDPA Subtest-4	18.57	18.60	18.69	20.10	18.55	18.58	18.52	19.90
3GPP Rel 8	DC-HSDPA Subtest-1	19.00	19.05	19.17	20.60	19.03	19.08	19.06	20.40
3GPP Rel 8	DC-HSDPA Subtest-2	19.01	19.09	19.12	20.60	19.07	18.87	19.01	20.40
3GPP Rel 8	DC-HSDPA Subtest-3	18.49	18.57	18.72	20.10	18.55	18.51	18.44	19.90
3GPP Rel 8	DC-HSDPA Subtest-4	18.57	18.58	18.62	20.10	18.47	18.58	18.47	19.90
3GPP Rel 6	HSUPA Subtest-1	19.05	19.10	19.25	20.60	19.17	19.33	19.20	20.40
3GPP Rel 6	HSUPA Subtest-2	17.06	17.07	17.26	18.60	17.11	17.19	17.14	18.40
3GPP Rel 6	HSUPA Subtest-3	18.02	18.13	18.24	19.60	18.03	18.08	18.06	19.40
3GPP Rel 6	HSUPA Subtest-4	17.03	17.13	17.18	18.60	17.05	17.12	17.09	18.40
3GPP Rel 6	HSUPA Subtest-5	19.10	19.10	19.20	20.60	19.05	19.11	19.09	20.40



Band 5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				20450	20525	20600	23	0	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	21.87	21.77	21.85	22	1	
10	QPSK	1	25	21.79	21.73	21.46			
10	QPSK	1	49	21.82	21.56	21.55			
10	QPSK	25	0	21.00	20.91	20.81			
10	QPSK	25	12	20.92	20.89	20.83			
10	QPSK	25	25	20.89	20.85	20.86			
10	QPSK	50	0	20.92	20.94	20.73	22	1	
10	16QAM	1	0	20.81	21.12	21.40			
10	16QAM	1	25	21.03	20.80	21.25			
10	16QAM	1	49	21.33	21.03	20.83			
10	16QAM	25	0	19.70	19.77	19.82			
10	16QAM	25	12	19.89	19.77	19.86			
10	16QAM	25	25	19.94	19.81	19.90	21	2	
10	16QAM	50	0	19.85	19.74	19.84			
10	64QAM	1	0	20.11	20.16	19.63			
10	64QAM	1	25	20.18	19.98	20.13			
10	64QAM	1	49	19.85	20.02	19.85			
10	64QAM	25	0	18.87	18.94	18.87			
10	64QAM	25	12	19.02	18.98	18.83	20	3	
10	64QAM	25	25	18.86	18.91	18.86			
10	64QAM	50	0	19.00	18.96	18.75			
Channel				20425	20525	20625	23	0	
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	21.81	21.70	21.71	22	1	
5	QPSK	1	12	21.74	21.73	21.40			
5	QPSK	1	24	21.58	21.49	21.41			
5	QPSK	12	0	20.90	20.81	20.67			
5	QPSK	12	7	20.76	20.75	20.70			
5	QPSK	12	13	20.72	20.71	20.72			
5	QPSK	25	0	20.88	20.80	20.57	22	1	
5	16QAM	1	0	20.84	20.95	21.37			
5	16QAM	1	12	20.88	20.69	21.12			
5	16QAM	1	24	21.16	20.90	20.63			
5	16QAM	12	0	19.88	19.82	19.78			
5	16QAM	12	7	19.73	19.71	19.71			
5	16QAM	12	13	19.79	19.65	19.70	21	2	
5	16QAM	25	0	19.78	19.58	19.81			
5	64QAM	1	0	19.88	20.02	19.54			
5	64QAM	1	12	20.10	19.79	19.85			
5	64QAM	1	24	19.40	19.87	19.67			
5	64QAM	12	0	18.79	18.77	18.71			
5	64QAM	12	7	19.00	18.85	18.65	20	3	
5	64QAM	12	13	18.84	18.91	18.81			
5	64QAM	25	0	19.00	18.86	18.56			
Channel				20415	20525	20635	23	0	
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	21.86	21.72	21.77	22	1	
3	QPSK	1	8	21.90	21.60	21.26			
3	QPSK	1	14	21.46	21.42	21.47			
3	QPSK	8	0	20.80	20.88	20.67			
3	QPSK	8	4	20.87	20.87	20.78			
3	QPSK	8	7	20.82	20.70	20.85			
3	QPSK	15	0	20.75	20.75	20.60	22	1	
3	16QAM	1	0	20.87	20.94	21.40			
3	16QAM	1	8	20.87	20.79	21.19			
3	16QAM	1	14	21.27	20.84	20.67			
3	16QAM	8	0	19.65	19.74	19.78			
3	16QAM	8	4	19.85	19.60	19.67			
3	16QAM	8	7	19.77	19.81	19.90	21	2	
3	16QAM	15	0	19.74	19.73	19.70			
3	64QAM	1	0	20.10	20.14	19.63			
3	64QAM	1	8	20.13	19.82	19.86			
3	64QAM	1	14	19.46	19.89	19.67			
3	64QAM	8	0	18.87	18.78	18.84			
3	64QAM	8	4	18.94	18.83	18.81	20	3	
3	64QAM	8	7	18.74	18.74	18.76			
3	64QAM	15	0	18.80	18.80	18.72			
Channel				20407	20525	20643	23	0	
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	21.77	21.59	21.59	23	0	
1.4	QPSK	1	3	21.71	21.72	21.63			
1.4	QPSK	1	5	21.63	21.71	21.52			
1.4	QPSK	3	0	21.78	21.60	21.64			
1.4	QPSK	3	1	21.79	21.68	21.63			
1.4	QPSK	3	3	21.71	21.78	21.59			
1.4	QPSK	6	0	20.74	20.74	20.71	22	1	
1.4	16QAM	1	0	20.96	20.79	20.78			
1.4	16QAM	1	3	21.14	20.99	21.06			
1.4	16QAM	1	5	21.26	21.25	20.84			
1.4	16QAM	3	0	20.89	20.67	20.63			
1.4	16QAM	3	1	20.86	20.84	20.79			
1.4	16QAM	3	3	20.81	20.74	20.66	21	2	
1.4	16QAM	6	0	19.67	19.89	19.76			
1.4	64QAM	1	0	19.99	20.03	19.76			
1.4	64QAM	1	3	20.06	20.16	19.75			
1.4	64QAM	1	5	19.78	19.88	19.91			
1.4	64QAM	3	0	20.05	19.88	19.81			
1.4	64QAM	3	1	20.03	20.02	19.71	20	3	
1.4	64QAM	3	3	19.94	19.91	19.92			
1.4	64QAM	6	0	18.82	18.80	18.77			



Band 12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				23060	23095	23130	23	0	
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	22.03	22.14	22.02	23	0	
10	QPSK	1	25	21.85	21.97	21.92			
10	QPSK	1	49	21.93	22.05	21.90			
10	QPSK	25	0	21.14	21.22	21.20	22	1	
10	QPSK	25	12	21.11	21.09	21.17			
10	QPSK	25	25	21.11	21.17	21.19			
10	QPSK	50	0	21.09	21.16	21.09	22	1	
10	16QAM	1	0	21.18	20.99	21.30			
10	16QAM	1	25	21.15	21.27	21.22			
10	16QAM	1	49	21.61	21.34	21.37	21	2	
10	16QAM	25	0	20.12	20.18	20.15			
10	16QAM	25	12	20.10	20.17	20.20			
10	16QAM	25	25	20.05	20.31	20.13	21	2	
10	16QAM	50	0	20.05	20.15	20.25			
10	64QAM	1	0	20.35	20.26	20.09			
10	64QAM	1	25	20.42	20.70	20.51	21	2	
10	64QAM	1	49	20.25	20.66	20.26			
10	64QAM	25	0	19.07	19.07	19.14			
10	64QAM	25	12	19.19	19.13	19.28	20	3	
10	64QAM	25	25	19.18	19.20	19.26			
10	64QAM	50	0	19.18	19.13	19.09			
Channel				23035	23095	23155	23	0	
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	21.83	22.00	22.01	23	0	
5	QPSK	1	12	21.88	21.81	21.99			
5	QPSK	1	24	21.89	21.90	21.73			
5	QPSK	12	0	21.02	21.20	21.05	22	1	
5	QPSK	12	7	21.03	20.91	21.08			
5	QPSK	12	13	20.99	21.17	21.10			
5	QPSK	25	0	20.98	21.04	20.99	22	1	
5	16QAM	1	0	21.00	20.81	21.12			
5	16QAM	1	12	21.05	21.21	21.18			
5	16QAM	1	24	21.58	21.34	21.21	21	2	
5	16QAM	12	0	20.07	20.08	20.15			
5	16QAM	12	7	19.94	20.07	20.14			
5	16QAM	12	13	20.02	20.26	20.11	21	2	
5	16QAM	25	0	20.02	20.01	20.12			
5	64QAM	1	0	20.35	20.15	19.92			
5	64QAM	1	12	20.36	20.60	20.49	21	2	
5	64QAM	1	24	20.14	20.61	20.21			
5	64QAM	12	0	19.06	19.04	19.10			
5	64QAM	12	7	19.00	18.96	19.27	20	3	
5	64QAM	12	13	18.98	19.13	19.06			
5	64QAM	25	0	18.98	19.08	19.03			
Channel				23025	23095	23165	23	0	
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	21.94	22.03	21.84	23	0	
3	QPSK	1	8	21.76	21.97	21.90			
3	QPSK	1	14	21.87	21.88	21.84			
3	QPSK	8	0	21.12	21.20	21.09	22	1	
3	QPSK	8	4	21.01	20.94	21.01			
3	QPSK	8	7	20.98	21.09	21.08			
3	QPSK	15	0	20.91	21.12	21.00	22	1	
3	16QAM	1	0	21.18	20.91	21.19			
3	16QAM	1	8	20.96	21.15	21.06			
3	16QAM	1	14	21.42	21.33	21.26	21	2	
3	16QAM	8	0	20.07	20.13	20.11			
3	16QAM	8	4	20.07	20.02	20.15			
3	16QAM	8	7	19.97	20.25	20.13	21	2	
3	16QAM	15	0	19.86	20.00	20.20			
3	64QAM	1	0	20.19	20.15	19.93			
3	64QAM	1	8	20.27	20.70	20.50	21	2	
3	64QAM	1	14	20.14	20.48	20.14			
3	64QAM	8	0	19.06	18.91	19.10			
3	64QAM	8	4	19.15	18.96	19.16	20	3	
3	64QAM	8	7	19.17	19.12	19.11			
3	64QAM	15	0	19.16	19.12	19.09			
Channel				23017	23095	23173	23	0	
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	21.89	21.87	21.94	23	0	
1.4	QPSK	1	3	21.91	21.93	22.03			
1.4	QPSK	1	5	21.80	21.93	21.93			
1.4	QPSK	3	0	21.87	21.92	21.98	22	1	
1.4	QPSK	3	1	21.98	22.02	21.98			
1.4	QPSK	3	3	21.84	21.97	21.91			
1.4	QPSK	6	0	20.98	20.99	21.10	22	1	
1.4	16QAM	1	0	21.02	21.48	21.40			
1.4	16QAM	1	3	20.92	21.31	21.28			
1.4	16QAM	1	5	21.48	20.98	21.44	21	2	
1.4	16QAM	3	0	21.02	21.12	21.19			
1.4	16QAM	3	1	21.00	21.10	21.15			
1.4	16QAM	3	3	20.75	20.79	21.07	21	2	
1.4	16QAM	6	0	20.02	19.96	20.12			
1.4	64QAM	1	0	20.29	20.21	20.16			
1.4	64QAM	1	3	20.33	20.46	20.14	21	2	
1.4	64QAM	1	5	20.26	20.10	19.82			
1.4	64QAM	3	0	19.99	20.28	20.23			
1.4	64QAM	3	1	20.14	20.25	20.23	20	3	
1.4	64QAM	3	3	20.14	20.07	20.33			
1.4	64QAM	6	0	18.93	18.94	19.09			



Band 13									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				23230			23	0	
Frequency (MHz)				782					
10	QPSK	1	0		22.61		22	1	
10	QPSK	1	25		22.43				
10	QPSK	1	49		22.41				
10	QPSK	25	0		21.65				
10	QPSK	25	12		21.58		22	1	
10	QPSK	25	25		21.60				
10	QPSK	50	0		21.57				
10	16QAM	1	0		21.92				
10	16QAM	1	25		21.84		21	2	
10	16QAM	1	49		21.76				
10	16QAM	25	0		20.58				
10	16QAM	25	12		20.74				
10	16QAM	25	25		20.71		21	2	
10	16QAM	50	0		20.47				
10	64QAM	1	0		20.38				
10	64QAM	1	25		20.86				
10	64QAM	1	49		20.57		20	3	
10	64QAM	25	0		19.63				
10	64QAM	25	12		19.71				
10	64QAM	25	25		19.57				
10	64QAM	50	0		19.88				
Channel				23205	23230	23255	23	0	
Frequency (MHz)				779.5	782	784.5			
5	QPSK	1	0		22.47		22	1	
5	QPSK	1	12		22.43				
5	QPSK	1	24		22.41				
5	QPSK	12	0		21.47				
5	QPSK	12	7		21.48		22	1	
5	QPSK	12	13		21.55				
5	QPSK	25	0		21.46				
5	16QAM	1	0		21.85				
5	16QAM	1	12		21.74		21	2	
5	16QAM	1	24		21.60				
5	16QAM	12	0		20.48				
5	16QAM	12	7		20.63				
5	16QAM	12	13		20.52		21	2	
5	16QAM	25	0		20.39				
5	64QAM	1	0		20.30				
5	64QAM	1	12		20.82				
5	64QAM	1	24		20.41		21	2	
5	64QAM	12	0		19.50				
5	64QAM	12	7		19.63				
5	64QAM	12	13		19.45				
5	64QAM	25	0		19.74		20	3	



Band 5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				20450	20525	20600	23	0	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	21.45	21.30	21.26	22	1	
10	QPSK	1	25	21.22	21.27	21.22			
10	QPSK	1	49	21.27	21.19	21.08			
10	QPSK	25	0	20.49	20.42	20.35	22	1	
10	QPSK	25	12	20.48	20.37	20.28			
10	QPSK	25	25	20.40	20.41	20.44			
10	QPSK	50	0	20.49	20.36	20.36	22	1	
10	16QAM	1	0	20.76	20.68	20.69			
10	16QAM	1	25	20.66	20.65	20.69			
10	16QAM	1	49	20.72	20.55	20.51	21	2	
10	16QAM	25	0	19.36	19.35	19.31			
10	16QAM	25	12	19.47	19.40	19.34			
10	16QAM	25	25	19.38	19.44	19.40	21	2	
10	16QAM	50	0	19.45	19.36	19.44			
10	64QAM	1	0	19.63	19.42	19.60			
10	64QAM	1	25	19.61	19.57	19.48	21	2	
10	64QAM	1	49	19.55	19.53	19.37			
10	64QAM	25	0	18.44	18.43	18.36			
10	64QAM	25	12	18.50	18.42	18.39	20	3	
10	64QAM	25	25	18.44	18.47	18.30			
10	64QAM	50	0	18.48	18.42	18.27			
Channel				20425	20525	20625	23	0	
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	21.38	21.28	21.16	22	1	
5	QPSK	1	12	21.16	21.23	21.20			
5	QPSK	1	24	21.18	21.09	21.01			
5	QPSK	12	0	20.32	20.40	20.27	22	1	
5	QPSK	12	7	20.43	20.32	20.24			
5	QPSK	12	13	20.39	20.40	20.41			
5	QPSK	25	0	20.48	20.33	20.37	22	1	
5	16QAM	1	0	20.68	20.62	20.69			
5	16QAM	1	12	20.60	20.59	20.69			
5	16QAM	1	24	20.67	20.54	20.44	21	2	
5	16QAM	12	0	19.34	19.34	19.26			
5	16QAM	12	7	19.39	19.30	19.26			
5	16QAM	12	13	19.36	19.40	19.32	21	2	
5	16QAM	25	0	19.42	19.29	19.44			
5	64QAM	1	0	19.61	19.42	19.55			
5	64QAM	1	12	19.54	19.56	19.42	21	2	
5	64QAM	1	24	19.55	19.43	19.33			
5	64QAM	12	0	18.42	18.36	18.31			
5	64QAM	12	7	18.41	18.34	18.33	20	3	
5	64QAM	12	13	18.37	18.38	18.27			
5	64QAM	25	0	18.38	18.35	18.24			
Channel				20415	20525	20635	23	0	
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	21.35	21.23	21.15	22	1	
3	QPSK	1	8	21.14	21.19	21.18			
3	QPSK	1	14	21.09	21.02	21.01			
3	QPSK	8	0	20.24	20.39	20.20	22	1	
3	QPSK	8	4	20.38	20.30	20.14			
3	QPSK	8	7	20.34	20.38	20.41			
3	QPSK	15	0	20.39	20.27	20.30	22	1	
3	16QAM	1	0	20.64	20.59	20.69			
3	16QAM	1	8	20.52	20.49	20.57			
3	16QAM	1	14	20.59	20.45	20.37	21	2	
3	16QAM	8	0	19.32	19.27	19.22			
3	16QAM	8	4	19.30	19.25	19.24			
3	16QAM	8	7	19.32	19.40	19.22	21	2	
3	16QAM	15	0	19.42	19.21	19.38			
3	64QAM	1	0	19.53	19.40	19.54			
3	64QAM	1	8	19.46	19.53	19.36	21	2	
3	64QAM	1	14	19.48	19.42	19.27			
3	64QAM	8	0	18.32	18.28	18.30			
3	64QAM	8	4	18.33	18.25	18.33	20	3	
3	64QAM	8	7	18.36	18.28	18.19			
3	64QAM	15	0	18.28	18.30	18.21			
Channel				20407	20525	20643	23	0	
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	21.33	21.19	21.11	23	0	
1.4	QPSK	1	3	21.04	21.12	21.10			
1.4	QPSK	1	5	21.02	21.02	21.01			
1.4	QPSK	3	0	21.33	21.10	21.02	22	1	
1.4	QPSK	3	1	21.28	21.03	21.09			
1.4	QPSK	3	3	21.24	21.01	21.00			
1.4	QPSK	6	0	20.32	20.24	20.22	22	1	
1.4	16QAM	1	0	20.55	20.49	20.58			
1.4	16QAM	1	3	20.48	20.46	20.49			
1.4	16QAM	1	5	20.55	20.37	20.29	22	1	
1.4	16QAM	3	0	20.49	20.41	20.56			
1.4	16QAM	3	1	20.42	20.39	20.48			
1.4	16QAM	3	3	20.52	20.31	20.27	21	2	
1.4	16QAM	6	0	19.41	19.21	19.30			
1.4	64QAM	1	0	19.46	19.33	19.45			
1.4	64QAM	1	3	19.46	19.48	19.27	21	2	
1.4	64QAM	1	5	19.40	19.42	19.16			
1.4	64QAM	3	0	19.41	19.33	19.38			
1.4	64QAM	3	1	19.44	19.47	19.25	20	3	
1.4	64QAM	3	3	19.33	19.39	19.16			
1.4	64QAM	6	0	18.21	18.22	18.15			



Band 12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	21.51	21.57	21.54	23	0	
10	QPSK	1	25	21.39	21.54	21.50			
10	QPSK	1	49	21.39	21.51	21.49			
10	QPSK	25	0	20.82	20.68	20.64	22	1	
10	QPSK	25	12	20.66	20.64	20.60			
10	QPSK	25	25	20.66	20.62	20.66			
10	QPSK	50	0	20.69	20.65	20.65	22	1	
10	16QAM	1	0	20.84	20.86	20.88			
10	16QAM	1	25	20.76	20.82	20.83			
10	16QAM	1	49	20.83	20.84	20.70	21	2	
10	16QAM	25	0	19.58	19.65	19.66			
10	16QAM	25	12	19.65	19.64	19.64			
10	16QAM	25	25	19.61	19.59	19.70	21	2	
10	16QAM	50	0	19.65	19.64	19.65			
10	64QAM	1	0	19.78	19.84	19.80			
10	64QAM	1	25	19.68	19.77	19.87	21	2	
10	64QAM	1	49	19.67	19.69	19.69			
10	64QAM	25	0	18.64	18.66	18.73			
10	64QAM	25	12	18.72	18.67	18.68	20	3	
10	64QAM	25	25	18.68	18.64	18.62			
10	64QAM	50	0	18.65	18.61	18.66			
Channel				23035	23095	23155	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	21.03	21.04	21.02	23	0	
5	QPSK	1	12	21.01	21.04	21.10			
5	QPSK	1	24	21.00	21.01	21.08			
5	QPSK	12	0	20.01	20.16	20.15	22	1	
5	QPSK	12	7	20.07	20.10	20.17			
5	QPSK	12	13	20.05	20.09	20.12			
5	QPSK	25	0	20.06	20.12	20.13	22	1	
5	16QAM	1	0	20.26	20.28	20.45			
5	16QAM	1	12	20.27	20.33	20.45			
5	16QAM	1	24	20.25	20.41	20.35	21	2	
5	16QAM	12	0	19.10	19.18	19.23			
5	16QAM	12	7	19.09	19.18	19.18			
5	16QAM	12	13	19.00	19.13	19.16	21	2	
5	16QAM	25	0	19.09	19.14	19.11			
5	64QAM	1	0	19.23	19.36	19.26			
5	64QAM	1	12	19.17	19.30	19.35	21	2	
5	64QAM	1	24	19.13	19.31	19.28			
5	64QAM	12	0	18.12	18.19	18.22			
5	64QAM	12	7	18.15	18.21	18.22	20	3	
5	64QAM	12	13	18.08	18.19	18.17			
5	64QAM	25	0	18.10	18.18	18.15			
Channel				23025	23095	23165	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	21.02	21.01	21.08	23	0	
3	QPSK	1	8	21.01	21.11	21.11			
3	QPSK	1	14	21.03	21.00	21.01			
3	QPSK	8	0	20.08	20.12	20.11	22	1	
3	QPSK	8	4	20.03	20.10	20.19			
3	QPSK	8	7	20.00	20.08	20.10			
3	QPSK	15	0	20.07	20.06	20.13	22	1	
3	16QAM	1	0	20.33	20.38	20.39			
3	16QAM	1	8	20.33	20.46	20.43			
3	16QAM	1	14	20.25	20.35	20.33	21	2	
3	16QAM	8	0	19.09	19.17	19.19			
3	16QAM	8	4	19.11	19.18	19.20			
3	16QAM	8	7	19.09	19.16	19.17	21	2	
3	16QAM	15	0	19.10	19.12	19.16			
3	64QAM	1	0	19.20	19.24	19.31			
3	64QAM	1	8	19.22	19.35	19.39	21	2	
3	64QAM	1	14	19.18	19.23	19.26			
3	64QAM	8	0	18.18	18.19	18.22			
3	64QAM	8	4	18.11	18.19	18.21	20	3	
3	64QAM	8	7	18.01	18.17	18.14			
3	64QAM	15	0	18.10	18.12	18.10			
Channel				23017	23095	23173	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	21.01	21.05	21.07	23	0	
1.4	QPSK	1	3	21.01	21.01	21.02			
1.4	QPSK	1	5	21.00	21.02	21.03			
1.4	QPSK	3	0	21.03	21.03	21.01	22	1	
1.4	QPSK	3	1	21.00	21.02	21.04			
1.4	QPSK	3	3	21.01	21.00	21.02			
1.4	QPSK	6	0	20.07	20.05	20.12	22	1	
1.4	16QAM	1	0	20.28	20.34	20.32			
1.4	16QAM	1	3	20.28	20.46	20.37			
1.4	16QAM	1	5	20.23	20.33	20.27	22	1	
1.4	16QAM	3	0	20.18	20.28	20.27			
1.4	16QAM	3	1	20.26	20.39	20.33			
1.4	16QAM	3	3	20.20	20.32	20.22	21	2	
1.4	16QAM	6	0	19.03	19.05	19.08			
1.4	64QAM	1	0	19.18	19.15	19.25			
1.4	64QAM	1	3	19.13	19.25	19.32	21	2	
1.4	64QAM	1	5	19.08	19.15	19.23			
1.4	64QAM	3	0	19.10	19.14	19.21			
1.4	64QAM	3	1	19.07	19.19	19.26	21	2	
1.4	64QAM	3	3	19.02	19.09	19.21			
1.4	64QAM	6	0	18.07	18.12	18.03			



Band 13									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				23230			23	0	
Frequency (MHz)				782					
10	QPSK	1	0		22.31		23	0	
10	QPSK	1	25		22.15				
10	QPSK	1	49		22.06				
10	QPSK	25	0		21.32				
10	QPSK	25	12		21.28		22	1	
10	QPSK	25	25		21.23				
10	QPSK	50	0		21.20				
10	16QAM	1	0		21.80				
10	16QAM	1	25		21.40		22	1	
10	16QAM	1	49		21.46				
10	16QAM	25	0		20.36				
10	16QAM	25	12		20.31				
10	16QAM	25	25		20.09		21	2	
10	16QAM	50	0		20.26				
10	64QAM	1	0		20.50				
10	64QAM	1	25		20.39				
10	64QAM	1	49		20.16		21	2	
10	64QAM	25	0		19.23				
10	64QAM	25	12		19.31				
10	64QAM	25	25		19.17				
10	64QAM	50	0		19.33		20	3	
Channel				23205	23230	23255			
Frequency (MHz)				779.5	782	784.5			
5	QPSK	1	0	21.68	21.71	21.65	23	0	
5	QPSK	1	12	21.73	21.66	21.61			
5	QPSK	1	24	21.63	21.55	21.59			
5	QPSK	12	0	20.86	20.77	20.82			
5	QPSK	12	7	20.85	20.79	20.79	22	1	
5	QPSK	12	13	20.84	20.71	20.70			
5	QPSK	25	0	20.86	20.83	20.74			
5	16QAM	1	0	21.00	21.02	20.98			
5	16QAM	1	12	21.05	20.87	21.02	22	1	
5	16QAM	1	24	21.01	20.89	20.75			
5	16QAM	12	0	19.97	19.83	19.81			
5	16QAM	12	7	19.91	19.74	19.86			
5	16QAM	12	13	19.83	19.75	19.65	21	2	
5	16QAM	25	0	19.85	19.84	19.78			
5	64QAM	1	0	20.01	19.96	19.94			
5	64QAM	1	12	19.91	19.82	19.97			
5	64QAM	1	24	19.89	19.82	19.87	21	2	
5	64QAM	12	0	18.93	18.84	18.86			
5	64QAM	12	7	18.93	18.74	18.78			
5	64QAM	12	13	18.81	18.75	18.81			
5	64QAM	25	0	18.86	18.84	18.79	20	3	



Band 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				20850	21100	21350	23	0	
Frequency (MHz)				210	2350	2590			
20	QPSK	1	0	22.48	22.54	22.90	22	1	
20	QPSK	1	49	22.33	22.47	22.54			
20	QPSK	1	99	22.42	22.46	22.52			
20	QPSK	50	0	21.53	21.65	21.76			
20	QPSK	50	24	21.45	21.63	21.62			
20	QPSK	50	50	21.52	21.61	21.67			
20	QPSK	100	0	21.55	21.47	21.65	22	1	
20	16QAM	1	0	21.68	21.58	21.69			
20	16QAM	1	49	21.66	21.64	21.90			
20	16QAM	1	99	21.57	21.83	21.97			
20	16QAM	50	0	20.47	20.55	20.77			
20	16QAM	50	24	20.43	20.57	20.72			
20	16QAM	50	50	20.53	20.74	20.81	21	2	
20	16QAM	100	0	20.45	20.49	20.70			
20	64QAM	1	0	20.55	20.75	20.73			
20	64QAM	1	49	20.67	20.31	20.90			
20	64QAM	1	99	20.68	20.63	20.91			
20	64QAM	50	0	19.43	19.65	19.73			
20	64QAM	50	24	19.60	19.68	19.65	20	3	
20	64QAM	50	50	19.45	19.72	19.79			
20	64QAM	100	0	19.55	19.60	19.65			
Channel				20825	21100	21375	23	0	
Frequency (MHz)				2097.5	2335	2592.5			
15	QPSK	1	0	22.38	22.36	22.57	22	1	
15	QPSK	1	37	22.19	22.31	22.53			
15	QPSK	1	74	22.33	22.26	22.50			
15	QPSK	36	0	21.39	21.64	21.68			
15	QPSK	36	20	21.40	21.47	21.49			
15	QPSK	36	39	21.35	21.42	21.56			
15	QPSK	75	0	21.48	21.40	21.54	22	1	
15	16QAM	1	0	21.53	21.47	21.56			
15	16QAM	1	37	21.56	21.48	21.79			
15	16QAM	1	74	21.41	21.79	21.89			
15	16QAM	36	0	20.45	20.46	20.78			
15	16QAM	36	20	20.32	20.51	20.68			
15	16QAM	36	39	20.40	20.58	20.75	21	2	
15	16QAM	75	0	20.29	20.39	20.51			
15	64QAM	1	0	20.39	20.55	20.56			
15	64QAM	1	37	20.56	20.25	20.78			
15	64QAM	1	74	20.51	20.59	20.62			
15	64QAM	36	0	19.24	19.45	19.69			
15	64QAM	36	20	19.51	19.53	19.48	20	3	
15	64QAM	36	39	19.37	19.70	19.75			
15	64QAM	75	0	19.40	19.43	19.57			
Channel				20800	21100	21400	23	0	
Frequency (MHz)				2095	2335	2595			
10	QPSK	1	0	22.28	22.36	22.55	22	1	
10	QPSK	1	25	22.19	22.32	22.45			
10	QPSK	1	49	22.34	22.42	22.33			
10	QPSK	25	0	21.41	21.59	21.64			
10	QPSK	25	12	21.32	21.58	21.48			
10	QPSK	25	25	21.37	21.57	21.52			
10	QPSK	50	0	21.53	21.36	21.62	22	1	
10	16QAM	1	0	21.65	21.47	21.50			
10	16QAM	1	25	21.63	21.56	21.80			
10	16QAM	1	49	21.49	21.75	21.83			
10	16QAM	25	0	20.30	20.44	20.61			
10	16QAM	25	12	20.24	20.41	20.65			
10	16QAM	25	25	20.41	20.55	20.68	21	2	
10	16QAM	50	0	20.35	20.32	20.69			
10	64QAM	1	0	20.47	20.59	20.68			
10	64QAM	1	25	20.65	20.29	20.83			
10	64QAM	1	49	20.62	20.54	20.71			
10	64QAM	25	0	19.37	19.63	19.55			
10	64QAM	25	12	19.48	19.54	19.58	20	3	
10	64QAM	25	25	19.33	19.72	19.65			
10	64QAM	50	0	19.49	19.45	19.59			
Channel				20775	21100	21425	23	0	
Frequency (MHz)				20925	2335	2597.5			
5	QPSK	1	0	22.29	22.51	22.46	22	1	
5	QPSK	1	12	22.24	22.35	22.52			
5	QPSK	1	24	22.32	22.30	22.41			
5	QPSK	12	0	21.52	21.61	21.62			
5	QPSK	12	7	21.39	21.63	21.42			
5	QPSK	12	13	21.44	21.47	21.52			
5	QPSK	25	0	21.55	21.37	21.49	22	1	
5	16QAM	1	0	21.48	21.44	21.57			
5	16QAM	1	12	21.51	21.50	21.88			
5	16QAM	1	24	21.57	21.77	21.81			
5	16QAM	12	0	20.40	20.42	20.62			
5	16QAM	12	7	20.35	20.56	20.67			
5	16QAM	12	13	20.37	20.63	20.76	21	2	
5	16QAM	25	0	20.36	20.29	20.52			
5	64QAM	1	0	20.55	20.62	20.61			
5	64QAM	1	12	20.49	20.17	20.72			
5	64QAM	1	24	20.65	20.51	20.76			
5	64QAM	12	0	19.39	19.94	19.54			
5	64QAM	12	7	19.58	19.61	19.45	20	3	
5	64QAM	12	13	19.43	19.64	19.62			
5	64QAM	25	0	19.39	19.46	19.49			



Band 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				20850	21100	21350	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	21.01	21.08	21.30	23	0	
20	QPSK	1	49	21.03	21.21	21.29			
20	QPSK	1	99	21.10	21.25	21.29			
20	QPSK	50	0	20.05	20.24	20.47	22	1	
20	QPSK	50	24	20.16	20.29	20.39			
20	QPSK	50	50	20.15	20.37	20.44			
20	QPSK	100	0	20.16	20.26	20.38	21	2	
20	16QAM	1	0	20.32	20.49	20.60			
20	16QAM	1	49	20.35	20.55	20.61			
20	16QAM	1	99	20.47	20.56	20.60	21	2	
20	16QAM	50	0	19.07	19.28	19.40			
20	16QAM	50	24	19.19	19.28	19.40			
20	16QAM	50	50	19.17	19.36	19.46	20	3	
20	16QAM	100	0	19.14	19.27	19.36			
20	64QAM	1	0	20.16	20.28	20.50			
20	64QAM	1	49	20.26	20.32	20.48	21	2	
20	64QAM	1	99	20.35	20.38	20.48			
20	64QAM	50	0	19.02	19.26	19.37			
20	64QAM	50	24	19.17	19.26	19.39	20	3	
20	64QAM	50	50	19.19	19.36	19.45			
20	64QAM	100	0	19.15	19.24	19.37			
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	21.00	21.13	21.31	23	0	
15	QPSK	1	37	21.01	21.17	21.29			
15	QPSK	1	74	21.02	21.21	21.32			
15	QPSK	36	0	20.03	20.26	20.38	22	1	
15	QPSK	36	20	20.15	20.37	20.47			
15	QPSK	36	39	20.13	20.35	20.46			
15	QPSK	75	0	20.11	20.25	20.37	22	1	
15	16QAM	1	0	20.28	20.45	20.61			
15	16QAM	1	37	20.30	20.49	20.60			
15	16QAM	1	74	20.36	20.53	20.61	21	2	
15	16QAM	36	0	19.01	19.27	19.37			
15	16QAM	36	20	19.15	19.35	19.46			
15	16QAM	36	39	19.12	19.34	19.45	21	2	
15	16QAM	75	0	19.16	19.27	19.38			
15	64QAM	1	0	20.17	20.35	20.49			
15	64QAM	1	37	20.20	20.40	20.45	21	2	
15	64QAM	1	74	20.29	20.40	20.50			
15	64QAM	36	0	19.04	19.25	19.36			
15	64QAM	36	20	19.15	19.35	19.45	20	3	
15	64QAM	36	39	19.14	19.34	19.48			
15	64QAM	75	0	19.12	19.27	19.38			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	21.06	21.07	21.20	23	0	
10	QPSK	1	25	21.04	21.10	21.17			
10	QPSK	1	49	21.01	21.14	21.23			
10	QPSK	25	0	20.09	20.21	20.32	22	1	
10	QPSK	25	12	20.13	20.24	20.35			
10	QPSK	25	25	20.10	20.29	20.41			
10	QPSK	50	0	20.14	20.20	20.35	22	1	
10	16QAM	1	0	20.26	20.43	20.58			
10	16QAM	1	25	20.27	20.49	20.60			
10	16QAM	1	49	20.28	20.53	20.65	21	2	
10	16QAM	25	0	19.09	19.22	19.32			
10	16QAM	25	12	19.09	19.20	19.37			
10	16QAM	25	25	19.09	19.26	19.41	21	2	
10	16QAM	50	0	19.09	19.23	19.32			
10	64QAM	1	0	20.28	20.46	20.59			
10	64QAM	1	25	20.27	20.39	20.60	21	2	
10	64QAM	1	49	20.34	20.48	20.66			
10	64QAM	25	0	19.10	19.18	19.35			
10	64QAM	25	12	19.13	19.26	19.36	20	3	
10	64QAM	25	25	19.08	19.26	19.39			
10	64QAM	50	0	19.07	19.19	19.35			
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	21.06	21.08	21.26	23	0	
5	QPSK	1	12	21.01	21.14	21.25			
5	QPSK	1	24	21.00	21.15	21.30			
5	QPSK	12	0	20.08	20.25	20.40	22	1	
5	QPSK	12	7	20.06	20.29	20.40			
5	QPSK	12	13	20.11	20.28	20.39			
5	QPSK	25	0	20.10	20.22	20.42	22	1	
5	16QAM	1	0	20.30	20.43	20.69			
5	16QAM	1	12	20.28	20.50	20.64			
5	16QAM	1	24	20.27	20.51	20.67	22	1	
5	16QAM	12	0	19.13	19.24	19.41			
5	16QAM	12	7	19.08	19.27	19.42			
5	16QAM	12	13	19.09	19.30	19.43	21	2	
5	16QAM	25	0	19.10	19.21	19.44			
5	64QAM	1	0	20.14	20.31	20.53			
5	64QAM	1	12	20.17	20.33	20.45	21	2	
5	64QAM	1	24	20.16	20.38	20.49			
5	64QAM	12	0	19.09	19.22	19.38			
5	64QAM	12	7	19.05	19.30	19.39	20	3	
5	64QAM	12	13	19.06	19.26	19.42			
5	64QAM	25	0	19.10	19.25	19.43			



Band 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				18700	18900	19100				
Frequency (MHz)				1860	1880	1900				
20	QPSK	1	0	20.17	20.18	20.23	21.9	0		
20	QPSK	1	49	20.02	20.03	20.09				
20	QPSK	1	99	20.05	20.02	20.01				
20	QPSK	50	0	20.12	20.07	20.19	21.9	0		
20	QPSK	50	24	20.07	20.05	20.13				
20	QPSK	50	50	20.10	20.03	20.01				
20	QPSK	100	0	20.05	20.02	20.08	21.9	0		
20	16QAM	1	0	20.06	20.09	20.10				
20	16QAM	1	49	20.02	20.01	20.05				
20	16QAM	1	99	20.08	20.08	20.09	21	0.9		
20	16QAM	50	0	19.82	19.82	19.89				
20	16QAM	50	24	19.97	19.96	19.80				
20	16QAM	50	50	19.99	19.96	19.87	21	0.9		
20	16QAM	100	0	19.82	19.82	19.89				
20	64QAM	1	0	20.05	20.02	20.05				
20	64QAM	1	49	20.00	20.04	20.01	21	0		
20	64QAM	1	99	19.94	20.06	20.07				
20	64QAM	50	0	18.97	18.93	19.07				
20	64QAM	50	24	19.05	19.05	19.06	20	1.9		
20	64QAM	50	50	18.98	19.02	19.15				
20	64QAM	100	0	19.02	19.03	19.08				
Channel				18875	18900	19125	19125 limit (dBm)	MPR (dB)		
Frequency (MHz)				1887.5	1890	1902.5				
15	QPSK	1	0	20.14	20.14	20.14	21.9	0		
15	QPSK	1	37	19.99	19.98	20.02				
15	QPSK	1	74	19.97	19.95	19.97				
15	QPSK	36	0	20.09	20.06	20.12	21.9	0		
15	QPSK	36	20	19.99	19.95	20.11				
15	QPSK	36	39	20.04	19.99	19.92				
15	QPSK	75	0	19.95	20.01	20.06	21	0.9		
15	16QAM	1	0	20.00	20.05	20.08				
15	16QAM	1	37	20.00	19.99	19.97				
15	16QAM	1	74	20.05	20.00	20.04	21	0.9		
15	16QAM	36	0	19.81	19.89	19.93				
15	16QAM	36	20	19.87	19.95	19.70				
15	16QAM	36	39	19.93	19.95	19.76	21	0.9		
15	16QAM	75	0	19.77	19.76	19.79				
15	64QAM	1	0	19.99	19.98	20.01	21	0.9		
15	64QAM	1	37	19.95	20.04	20.01				
15	64QAM	1	74	19.89	20.05	20.04				
15	64QAM	36	0	18.96	18.93	18.97	20	1.9		
15	64QAM	36	20	18.95	19.01	18.96				
15	64QAM	36	39	18.88	18.96	19.13				
15	64QAM	75	0	18.96	19.00	19.01	19150 limit (dBm)	MPR (dB)		
Channel				18950	18900	19150				
Frequency (MHz)				1895	1890	1905				
10	QPSK	1	0	20.11	20.18	20.13	21.9	0		
10	QPSK	1	25	20.00	19.97	20.01				
10	QPSK	1	49	20.05	20.01	19.95				
10	QPSK	25	0	20.06	20.06	20.13	21.9	0		
10	QPSK	25	12	20.01	19.98	20.08				
10	QPSK	25	25	20.07	19.99	19.96				
10	QPSK	50	0	19.97	19.92	20.08	21.9	0		
10	16QAM	1	0	19.97	20.01	20.09				
10	16QAM	1	25	20.01	19.95	19.98				
10	16QAM	1	49	19.99	20.08	20.05	21	0.9		
10	16QAM	25	0	19.82	19.94	19.87				
10	16QAM	25	12	19.91	19.86	19.70				
10	16QAM	25	25	19.94	19.91	19.85	21	0.9		
10	16QAM	50	0	19.74	19.82	19.80				
10	64QAM	1	0	20.04	19.96	20.03				
10	64QAM	1	25	19.98	19.96	20.00	21	0.9		
10	64QAM	1	49	19.94	20.04	20.00				
10	64QAM	25	0	18.97	18.94	19.01				
10	64QAM	25	12	18.96	18.96	18.99	20	1.9		
10	64QAM	25	25	18.96	18.92	19.05				
10	64QAM	50	0	18.99	18.93	19.06				
Channel				18825	18900	19175	19175 limit (dBm)	MPR (dB)		
Frequency (MHz)				1882.5	18900	1907.5				
5	QPSK	1	0	20.17	20.14	20.13	21.9	0		
5	QPSK	1	12	19.96	19.95	20.03				
5	QPSK	1	24	20.03	19.96	19.96				
5	QPSK	12	0	20.04	19.98	20.14	21.9	0		
5	QPSK	12	7	20.05	20.04	20.13				
5	QPSK	12	13	20.06	19.96	19.97				
5	QPSK	25	0	20.03	19.94	20.08	21.9	0		
5	16QAM	1	0	19.97	20.05	20.04				
5	16QAM	1	12	19.93	19.99	19.98				
5	16QAM	1	24	20.07	20.08	20.02	21	0.9		
5	16QAM	12	0	19.76	19.90	19.92				
5	16QAM	12	7	19.89	19.90	19.76				
5	16QAM	12	13	19.96	19.99	19.77	21	0.9		
5	16QAM	25	0	19.73	19.79	19.88				
5	64QAM	1	0	20.02	19.96	20.04				
5	64QAM	1	12	19.99	19.97	20.01	21	0.9		
5	64QAM	1	24	19.84	19.98	20.03				
5	64QAM	12	0	18.94	18.89	19.05				
5	64QAM	12	7	18.99	19.00	18.96	20	1.9		
5	64QAM	12	13	18.92	19.00	19.08				
5	64QAM	25	0	19.00	19.00	19.01				
Channel				18815	18900	19185	19185 limit (dBm)	MPR (dB)		
Frequency (MHz)				1881.5	18900	1908.5				
3	QPSK	1	0	20.10	20.09	20.15	21.9	0		
3	QPSK	1	8	20.02	20.03	20.08				
3	QPSK	1	14	20.01	20.02	19.93				
3	QPSK	8	0	20.04	20.02	20.12	21.9	0		
3	QPSK	8	4	19.97	20.02	20.12				
3	QPSK	8	7	20.01	19.95	20.00				
3	QPSK	15	0	20.00	20.01	20.04	21.9	0		
3	16QAM	1	0	19.99	20.05	20.10				
3	16QAM	1	8	19.99	19.97	19.99				
3	16QAM	1	14	20.07	20.01	19.99	21	0.9		
3	16QAM	8	0	19.76	19.88	19.97				
3	16QAM	8	4	19.94	19.94	19.70				
3	16QAM	8	7	19.95	19.87	19.86	21	0.9		
3	16QAM	15	0	19.80	19.81	19.81				
3	64QAM	1	0	20.02	19.93	19.99				
3	64QAM	1	8	19.97	20.04	19.98	21	0.9		
3	64QAM	1	14	19.89	20.04	20.00				
3	64QAM	8	0	18.94	18.89	18.98				
3	64QAM	8	4	18.97	19.04	18.96	20	1.9		
3	64QAM	8	7	18.94	18.99	19.12				
3	64QAM	15	0	18.96	19.02	19.03				
Channel				18907	18900	19193	19193 limit (dBm)	MPR (dB)		
Frequency (MHz)				1890.7	18900	1909.3				
1.4	QPSK	1	0	20.11	20.08	20.13	21.9	0		
1.4	QPSK	1	3	19.96	19.99	20.06				
1.4	QPSK	1	5	19.97	19.94	19.93				
1.4	QPSK	3	0	20.08	20.02	20.14	21.9	0		
1.4	QPSK	3	1	20.04	19.96	20.12				
1.4	QPSK	3	3	20.03	19.99	19.97				
1.4	QPSK	6	0	19.95	19.96	20.02	21.9	0		
1.4	16QAM	1	0	20.01	20.02	20.03	21.9	0		
1.4	16QAM	1	3	20.00	19.97	20.13				
1.4	16QAM	1	5	20.00	20.00	20.13				
1.4	16QAM	3	0	20.00	19.96	19.95	21.9	0		
1.4	16QAM	3	1	20.01	20.02	20.07				
1.4	16QAM	3	3	20.04	19.98	20.08				
1.4	16QAM	6	0	19.73	19.72	19.88	21	0.9		
1.4	16QAM	6	1	20.02	20.01	20.04				
1.4	16QAM	1	3	19.96	20.00	19.96				
1.4	64QAM	1	5	18.94	19.99	20.01	21	0.9		
1.4	64QAM	3	0	19.94	19.96	20.01				
1.4	64QAM	3	1	20.00	19.98	19.93				
1.4	64QAM	3	3	19.93	20.01	20.07	20	1.9		
1.4	64QAM	3	6	19.84	19.89	19.92				
1.4	64QAM	3	9	19.84	19.89	19.92				



Band 4										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20050	Power Middle Ch. / Freq. 20175	Power High Ch. / Freq. 20300	Tune-up limit (dBm)	MPR (dB)		
Channel				1720	1732.5	1745				
Frequency (MHz)										
20	QPSK	1	0	18.59	18.61	18.57	20.2	0		
20	QPSK	1	49	18.55	18.49	18.46				
20	QPSK	1	99	18.54	18.44	18.49				
20	QPSK	50	0	18.57	18.60	18.55	20.2	0		
20	QPSK	50	24	18.57	18.56	18.50				
20	QPSK	50	50	18.54	18.46	18.44				
20	QPSK	100	0	18.59	18.58	18.50	20.2	0		
20	16QAM	1	0	18.49	18.49	18.46				
20	16QAM	1	49	18.52	18.47	18.49				
20	16QAM	1	99	18.49	18.48	18.47	20.2	0		
20	16QAM	50	0	18.53	18.52	18.45				
20	16QAM	50	24	18.49	18.49	18.42				
20	16QAM	50	50	18.56	18.55	18.56	20.2	0		
20	16QAM	100	0	18.56	18.54	18.48				
20	64QAM	1	0	18.49	18.44	18.42				
20	64QAM	1	49	18.54	18.53	18.50	20.2	0		
20	64QAM	1	99	18.51	18.49	18.47				
20	64QAM	50	0	18.53	18.43	18.49				
20	64QAM	50	24	18.57	18.49	18.55	20	0.2		
20	64QAM	50	50	18.59	18.50	18.50				
20	64QAM	100	0	18.58	18.54	18.53				
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1717.5	1732.5	1747.5				
15	QPSK	1	0	18.55	18.51	18.56	20.2	0		
15	QPSK	1	37	18.45	18.52	18.47				
15	QPSK	1	74	18.49	18.44	18.47				
15	QPSK	36	0	18.54	18.57	18.51	20.2	0		
15	QPSK	36	20	18.49	18.57	18.52				
15	QPSK	36	39	18.50	18.52	18.47				
15	QPSK	75	0	18.51	18.59	18.53	20.2	0		
15	16QAM	1	0	18.43	18.45	18.39				
15	16QAM	1	37	18.48	18.51	18.51				
15	16QAM	1	74	18.42	18.46	18.44	20.2	0		
15	16QAM	36	0	18.47	18.52	18.46				
15	16QAM	36	20	18.40	18.47	18.46				
15	16QAM	36	39	18.47	18.49	18.53	20.2	0		
15	16QAM	75	0	18.46	18.54	18.53				
15	64QAM	1	0	18.47	18.45	18.46				
15	64QAM	1	37	18.49	18.44	18.53	20.2	0		
15	64QAM	1	74	18.51	18.50	18.49				
15	64QAM	36	0	18.43	18.50	18.44				
15	64QAM	36	20	18.55	18.55	18.54	20	0.2		
15	64QAM	36	39	18.53	18.53	18.57				
15	64QAM	75	0	18.51	18.48	18.52				
Channel				20090	20115	20355	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1715	1732.5	1750				
10	QPSK	1	0	18.57	18.57	18.52	20.2	0		
10	QPSK	1	25	18.55	18.48	18.51				
10	QPSK	1	49	18.48	18.48	18.51				
10	QPSK	25	0	18.52	18.55	18.55	20.2	0		
10	QPSK	25	12	18.57	18.50	18.56				
10	QPSK	25	25	18.53	18.51	18.44				
10	QPSK	50	0	18.53	18.53	18.51	20.2	0		
10	16QAM	1	0	18.43	18.40	18.45				
10	16QAM	1	25	18.49	18.48	18.42				
10	16QAM	1	49	18.48	18.49	18.39	20.2	0		
10	16QAM	25	0	18.46	18.50	18.49				
10	16QAM	25	12	18.49	18.45	18.49				
10	16QAM	25	25	18.47	18.56	18.46	20.2	0		
10	16QAM	50	0	18.54	18.53	18.50				
10	64QAM	1	0	18.39	18.41	18.42				
10	64QAM	1	25	18.44	18.45	18.51	20.2	0		
10	64QAM	1	49	18.42	18.49	18.46				
10	64QAM	25	0	18.46	18.46	18.47				
10	64QAM	25	12	18.47	18.49	18.47	20	0.2		
10	64QAM	25	25	18.57	18.54	18.52				
10	64QAM	50	0	18.58	18.58	18.49				
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1712.5	1725	1732.5				
5	QPSK	1	0	18.56	18.55	18.49	20.2	0		
5	QPSK	1	12	18.50	18.48	18.51				
5	QPSK	1	24	18.49	18.52	18.49				
5	QPSK	12	0	18.52	18.50	18.49	20.2	0		
5	QPSK	12	7	18.49	18.49	18.48				
5	QPSK	12	13	18.44	18.48	18.47				
5	QPSK	25	0	18.53	18.59	18.53	20.2	0		
5	16QAM	1	0	18.46	18.40	18.39				
5	16QAM	1	12	18.44	18.47	18.49				
5	16QAM	1	24	18.41	18.40	18.49	20.2	0		
5	16QAM	12	0	18.44	18.52	18.47				
5	16QAM	12	7	18.39	18.48	18.42				
5	16QAM	12	13	18.50	18.47	18.49	20.2	0		
5	16QAM	25	0	18.47	18.50	18.51				
5	64QAM	1	0	18.40	18.45	18.42				
5	64QAM	1	12	18.44	18.49	18.50	20.2	0		
5	64QAM	1	24	18.49	18.45	18.46				
5	64QAM	12	0	18.50	18.50	18.49				
5	64QAM	12	7	18.46	18.51	18.51	20	0.2		
5	64QAM	12	13	18.49	18.58	18.59				
5	64QAM	25	0	18.57	18.56	18.49				
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1711.5	1732.5	1753.5				
3	QPSK	1	0	18.57	18.55	18.49	20.2	0		
3	QPSK	1	8	18.54	18.53	18.55				
3	QPSK	1	14	18.45	18.52	18.53				
3	QPSK	8	0	18.52	18.54	18.49	20.2	0		
3	QPSK	8	4	18.52	18.57	18.54				
3	QPSK	8	7	18.45	18.48	18.50				
3	QPSK	15	0	18.49	18.57	18.52	20.2	0		
3	16QAM	1	0	18.49	18.39	18.42				
3	16QAM	1	8	18.50	18.48	18.42				
3	16QAM	1	14	18.44	18.42	18.43	20.2	0		
3	16QAM	8	0	18.47	18.52	18.52				
3	16QAM	8	4	18.42	18.47	18.43				
3	16QAM	8	7	18.53	18.48	18.55	20.2	0		
3	16QAM	15	0	18.48	18.46	18.51				
3	64QAM	1	0	18.44	18.40	18.40				
3	64QAM	1	8	18.49	18.52	18.45	20.2	0		
3	64QAM	1	14	18.44	18.50	18.51				
3	64QAM	8	0	18.47	18.44	18.51				
3	64QAM	8	4	18.54	18.54	18.50	20	0.2		
3	64QAM	8	7	18.53	18.58	18.54				
3	64QAM	15	0	18.57	18.53	18.50				
Channel				19967	20175	20393	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1710.7	1732.5	1754.3				
1.4	QPSK	1	0	18.54	18.51	18.49	20.2	0		
1.4	QPSK	1	3	18.52	18.51	18.45				
1.4	QPSK	1	5	18.51	18.54	18.47				
1.4	QPSK	3	0	18.53	18.54	18.47	20.2	0		
1.4	QPSK	3	1	18.49	18.56	18.50				
1.4	QPSK	3	3	18.48	18.49	18.48				
1.4	QPSK	6	0	18.55	18.52	18.59	20.2	0		
1.4	16QAM	1	0	18.41	18.46	18.47	20.2	0		
1.4	16QAM	1	3	18.49	18.46	18.49				
1.4	16QAM	1	5	18.44	18.49	18.39				
1.4	16QAM	3	0	18.51	18.44	18.50	20.2	0		
1.4	16QAM	3	1	18.47	18.44	18.49				
1.4	16QAM	3	3	18.51	18.51	18.54				
1.4	16QAM	6	0	18.46	18.51	18.56	20.2	0		
1.4	16QAM	6	0	18.40	18.42	18.41				
1.4	64QAM	1	3	18.45	18.44	18.48				
1.4	64QAM	1	5	18.46	18.47	18.43	20.2	0		
1.4	64QAM	3	0	18.46	18.43	18.48				
1.4	64QAM	3	1	18.54	18.56	18.57				
1.4	64QAM	3	3	18.59	18.54	18.53	20	0.2		
1.4	64QAM	3	5	18.54	18.54	18.54				
1.4	64QAM	15	0	18.57	18.53	18.50				



Band 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				20880	21100	21350			
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	17.49	17.55	17.44	18.9	0	
20	QPSK	1	49	17.48	17.46	17.44			
20	QPSK	1	99	17.42	17.46	17.44			
20	QPSK	50	0	17.46	17.52	17.40	18.9	0	
20	QPSK	50	24	17.40	17.39	17.39			
20	QPSK	50	50	17.42	17.41	17.43			
20	QPSK	100	0	17.48	17.48	17.43	18.9	0	
20	16QAM	1	0	17.45	17.39	17.43			
20	16QAM	1	49	17.43	17.44	17.41			
20	16QAM	1	99	17.49	17.48	17.40	18.9	0	
20	16QAM	50	0	17.41	17.39	17.42			
20	16QAM	50	24	17.48	17.44	17.41			
20	16QAM	50	50	17.46	17.41	17.43	18.9	0	
20	16QAM	100	0	17.48	17.46	17.42			
20	64QAM	1	0	17.46	17.49	17.44			
20	64QAM	1	49	17.43	17.49	17.43	18.9	0	
20	64QAM	1	99	17.48	17.43	17.39			
20	64QAM	50	0	17.46	17.49	17.39			
20	64QAM	50	24	17.46	17.46	17.40	18.9	0	
20	64QAM	50	50	17.46	17.42	17.40			
20	64QAM	100	0	17.49	17.45	17.42			
Channel				20925	21100	21375	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	17.41	17.45	17.46	18.9	0	
15	QPSK	1	37	17.40	17.45	17.39			
15	QPSK	1	74	17.39	17.38	17.34			
15	QPSK	36	0	17.41	17.42	17.38	18.9	0	
15	QPSK	36	20	17.37	17.40	17.39			
15	QPSK	36	39	17.32	17.37	17.32			
15	QPSK	75	0	17.42	17.47	17.41	18.9	0	
15	16QAM	1	0	17.41	17.38	17.38			
15	16QAM	1	37	17.43	17.40	17.41			
15	16QAM	1	74	17.43	17.45	17.44	18.9	0	
15	16QAM	36	0	17.38	17.32	17.37			
15	16QAM	36	20	17.47	17.42	17.40			
15	16QAM	36	39	17.36	17.45	17.46	18.9	0	
15	16QAM	75	0	17.44	17.47	17.43			
15	64QAM	1	0	17.38	17.40	17.42			
15	64QAM	1	37	17.33	17.35	17.42	18.9	0	
15	64QAM	1	74	17.39	17.38	17.38			
15	64QAM	36	0	17.46	17.38	17.38			
15	64QAM	36	20	17.42	17.39	17.38	18.9	0	
15	64QAM	36	39	17.42	17.46	17.40			
15	64QAM	75	0	17.39	17.40	17.39			
Channel				20980	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2595	2635	2665			
10	QPSK	1	0	17.42	17.47	17.44	18.9	0	
10	QPSK	1	25	17.39	17.43	17.47			
10	QPSK	1	49	17.42	17.32	17.36			
10	QPSK	25	0	17.40	17.41	17.38	18.9	0	
10	QPSK	25	12	17.30	17.30	17.40			
10	QPSK	25	25	17.39	17.35	17.39			
10	QPSK	50	0	17.44	17.41	17.40	18.9	0	
10	16QAM	1	0	17.45	17.42	17.44			
10	16QAM	1	25	17.35	17.36	17.34			
10	16QAM	1	49	17.40	17.40	17.46	18.9	0	
10	16QAM	25	0	17.37	17.37	17.40			
10	16QAM	25	12	17.46	17.45	17.43			
10	16QAM	25	25	17.41	17.42	17.40	18.9	0	
10	16QAM	50	0	17.47	17.41	17.39			
10	64QAM	1	0	17.39	17.43	17.44	18.9	0	
10	64QAM	1	25	17.43	17.37	17.42			
10	64QAM	1	49	17.40	17.45	17.40			
10	64QAM	25	0	17.46	17.43	17.37	18.9	0	
10	64QAM	25	12	17.44	17.42	17.37			
10	64QAM	25	25	17.36	17.46	17.42			
10	64QAM	50	0	17.45	17.42	17.47	18.9	0	
10	64QAM	1	12	17.33	17.39	17.36			
10	64QAM	1	24	17.42	17.42	17.46			
10	64QAM	12	0	17.42	17.36	17.39	18.9	0	
10	64QAM	12	7	17.36	17.42	17.46			
10	64QAM	12	13	17.42	17.46	17.42			
10	64QAM	25	0	17.42	17.43	17.43			



Band 66										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				13207.2	13232.2	13257.2				
Frequency (MHz)				1720	1745	1770				
20	QPSK	1	0	18.54	18.56	18.59	20.2	0		
20	QPSK	1	49	18.54	18.54	18.46				
20	QPSK	1	99	18.49	18.51	18.49				
20	QPSK	50	0	18.49	18.53	18.57	20.2	0		
20	QPSK	50	24	18.51	18.48	18.51				
20	QPSK	50	50	18.51	18.45	18.49				
20	QPSK	100	0	18.53	18.55	18.55	20.2	0		
20	16QAM	1	0	18.46	18.46	18.48				
20	16QAM	1	49	18.51	18.48	18.51				
20	16QAM	1	99	18.39	18.39	18.40	20.2	0		
20	16QAM	50	0	18.45	18.53	18.50				
20	16QAM	50	24	18.47	18.47	18.48				
20	16QAM	50	50	18.51	18.54	18.54	20.2	0		
20	16QAM	100	0	18.51	18.56	18.50				
20	64QAM	1	0	18.39	18.43	18.40				
20	64QAM	1	49	18.49	18.48	18.46	20.2	0		
20	64QAM	1	99	18.42	18.44	18.51				
20	64QAM	50	0	18.44	18.53	18.49				
20	64QAM	50	24	18.52	18.49	18.49	20	0.2		
20	64QAM	50	50	18.52	18.52	18.56				
20	64QAM	100	0	18.56	18.50	18.51				
Channel				13207.2	13232.2	13257.2	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1717.5	1745	1772.5				
15	QPSK	1	0	18.50	18.50	18.58	20.2	0		
15	QPSK	1	37	18.53	18.53	18.47				
15	QPSK	1	74	18.50	18.50	18.44				
15	QPSK	36	0	18.57	18.57	18.56	20.2	0		
15	QPSK	36	20	18.47	18.47	18.50				
15	QPSK	36	39	18.44	18.44	18.53				
15	QPSK	75	0	18.51	18.51	18.50	20.2	0		
15	16QAM	1	0	18.45	18.45	18.47				
15	16QAM	1	37	18.43	18.43	18.49				
15	16QAM	1	74	18.40	18.40	18.44	20.2	0		
15	16QAM	36	0	18.51	18.51	18.47				
15	16QAM	36	20	18.39	18.39	18.43				
15	16QAM	36	39	18.56	18.56	18.51	20.2	0		
15	16QAM	75	0	18.48	18.48	18.48				
15	64QAM	1	0	18.47	18.47	18.48				
15	64QAM	1	37	18.46	18.46	18.47	20.2	0		
15	64QAM	1	74	18.41	18.41	18.44				
15	64QAM	36	0	18.51	18.51	18.51				
15	64QAM	36	20	18.54	18.54	18.52	20	0.2		
15	64QAM	36	39	18.51	18.51	18.55				
15	64QAM	75	0	18.55	18.55	18.52				
Channel				13202.2	13232.2	13262.2	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1715	1745	1775				
10	QPSK	1	0	18.54	18.55	18.56	20.2	0		
10	QPSK	1	25	18.48	18.51	18.49				
10	QPSK	1	49	18.44	18.50	18.49				
10	QPSK	25	0	18.51	18.47	18.48	20.2	0		
10	QPSK	25	12	18.56	18.55	18.53				
10	QPSK	25	25	18.45	18.49	18.52				
10	QPSK	50	0	18.52	18.56	18.54	20.2	0		
10	16QAM	1	0	18.49	18.47	18.42				
10	16QAM	1	25	18.49	18.47	18.51				
10	16QAM	1	49	18.47	18.41	18.46	20.2	0		
10	16QAM	25	0	18.47	18.49	18.53				
10	16QAM	25	12	18.49	18.41	18.48				
10	16QAM	25	25	18.49	18.51	18.53	20.2	0		
10	16QAM	50	0	18.49	18.50	18.49				
10	64QAM	1	0	18.47	18.44	18.43				
10	64QAM	1	25	18.46	18.54	18.54	20.2	0		
10	64QAM	1	49	18.42	18.41	18.46				
10	64QAM	25	0	18.46	18.43	18.49				
10	64QAM	25	12	18.47	18.57	18.49	20	0.2		
10	64QAM	25	25	18.51	18.56	18.52				
10	64QAM	50	0	18.51	18.51	18.53				
Channel				13199.7	13232.2	13264.7	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1712.5	1745	1777.5				
5	QPSK	1	0	18.57	18.54	18.59	20.2	0		
5	QPSK	1	12	18.50	18.46	18.52				
5	QPSK	1	24	18.54	18.52	18.50				
5	QPSK	12	0	18.47	18.47	18.48	20.2	0		
5	QPSK	12	7	18.48	18.49	18.57				
5	QPSK	12	13	18.46	18.49	18.46				
5	QPSK	25	0	18.56	18.55	18.58	20.2	0		
5	16QAM	1	0	18.40	18.41	18.39				
5	16QAM	1	12	18.43	18.48	18.43				
5	16QAM	1	24	18.40	18.45	18.41	20.2	0		
5	16QAM	12	0	18.49	18.53	18.49				
5	16QAM	12	7	18.47	18.40	18.44				
5	16QAM	12	13	18.51	18.51	18.55	20.2	0		
5	16QAM	25	0	18.56	18.55	18.56				
5	64QAM	1	0	18.40	18.45	18.49				
5	64QAM	1	12	18.45	18.48	18.48	20.2	0		
5	64QAM	1	24	18.44	18.51	18.41				
5	64QAM	12	0	18.49	18.52	18.48				
5	64QAM	12	7	18.53	18.50	18.55	20	0.2		
5	64QAM	12	13	18.58	18.57	18.52				
5	64QAM	25	0	18.50	18.49	18.53				
Channel				13198.7	13232.2	13265.7	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1711.5	1745	1778.5				
3	QPSK	1	0	18.54	18.55	18.51	20.2	0		
3	QPSK	1	8	18.45	18.53	18.54				
3	QPSK	1	14	18.52	18.46	18.44				
3	QPSK	8	0	18.49	18.48	18.53	20.2	0		
3	QPSK	8	4	18.53	18.55	18.54				
3	QPSK	8	7	18.47	18.54	18.51				
3	QPSK	15	0	18.52	18.58	18.58	20.2	0		
3	16QAM	1	0	18.47	18.40	18.40				
3	16QAM	1	8	18.48	18.46	18.44				
3	16QAM	1	14	18.42	18.49	18.41	20.2	0		
3	16QAM	8	0	18.46	18.44	18.53				
3	16QAM	8	4	18.39	18.43	18.41				
3	16QAM	8	7	18.54	18.54	18.47	20.2	0		
3	16QAM	15	0	18.47	18.55	18.52				
3	64QAM	1	0	18.48	18.46	18.43				
3	64QAM	1	8	18.46	18.53	18.54	20.2	0		
3	64QAM	1	14	18.42	18.49	18.45				
3	64QAM	8	0	18.49	18.53	18.53				
3	64QAM	8	4	18.48	18.48	18.54	20	0.2		
3	64QAM	8	7	18.50	18.49	18.49				
3	64QAM	15	0	18.55	18.49	18.50				
Channel				13197.9	13232.2	13266.5	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				1710.7	1745	1779.3				
1.4	QPSK	1	0	18.54	18.50	18.52	20.2	0		
1.4	QPSK	1	3	18.47	18.53	18.48				
1.4	QPSK	1	5	18.45	18.47	18.46				
1.4	QPSK	3	0	18.52	18.56	18.53	20.2	0		
1.4	QPSK	3	1	18.57	18.50	18.47				
1.4	QPSK	3	3	18.45	18.51	18.49				
1.4	QPSK	6	0	18.51	18.57	18.56	20.2	0		
1.4	16QAM	1	0	18.45	18.39	18.42	20.2	0		
1.4	16QAM	1	3	18.50	18.46	18.51				
1.4	16QAM	1	5	18.48	18.47	18.48				
1.4	16QAM	3	0	18.43	18.43	18.43	20.2	0		
1.4	16QAM	3	1	18.41	18.44	18.46				
1.4	16QAM	3	3	18.51	18.54	18.55				
1.4	16QAM	6	0	18.54	18.52	18.48	20.2	0		
1.4	16QAM	6	1	18.49	18.47	18.47				
1.4	64QAM	1	3	18.47	18.51	18.44				
1.4	64QAM	1	5	18.44	18.41	18.42	20.2	0		
1.4	64QAM	3	0	18.45	18.52	18.52				
1.4	64QAM	3	1	18.48	18.48	18.51				
1.4	64QAM	3	3	18.49	18.56	18.55	20	0.2		
1.4	64QAM	3	5	18.56	18.55	18.55				
1.4	64QAM	3	7	18.47	18.47	18.47				



Band 48												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel Frequency (MHz)				3590	3609	3641	3690					
20	QPSK	1	0	22.45	22.84	22.66	22.34	23	0			
20	QPSK	1	49	22.45	22.81	22.55	22.37					
20	QPSK	1	99	22.50	22.83	22.54	22.39					
20	QPSK	50	0	21.60	21.99	21.78	21.52					
20	QPSK	50	24	21.61	21.94	21.71	21.51	22	1			
20	QPSK	50	50	21.58	21.96	21.61	21.44					
20	QPSK	100	0	21.61	21.96	21.72	21.53					
20	16QAM	1	0	21.52	21.90	21.82	21.49					
20	16QAM	1	49	21.49	21.92	21.88	21.49	22	1			
20	16QAM	1	99	21.56	21.93	21.83	21.54					
20	16QAM	50	0	20.65	20.94	20.82	20.56					
20	16QAM	50	24	20.62	21.00	20.80	20.54					
20	16QAM	50	50	20.63	20.99	20.63	20.46	21	2			
20	16QAM	100	0	20.64	20.96	20.78	20.56					
20	64QAM	1	0	20.11	20.46	20.41	20.10					
20	64QAM	1	49	20.13	20.53	20.27	20.07					
20	64QAM	1	99	20.19	20.57	20.19	20.15	21	2			
20	64QAM	50	0	19.64	20.00	19.80	19.53					
20	64QAM	50	24	19.66	19.99	19.76	19.58					
20	64QAM	50	50	19.61	19.97	19.64	19.48					
20	64QAM	100	0	19.63	19.99	19.74	19.54	20	3			
Channel Frequency (MHz)				55315	55820	56160	56665				tune-up limit (dBm)	MPR (dB)
15	QPSK	1	0	22.41	22.74	22.60	22.31				23	0
15	QPSK	1	37	22.41	22.81	22.57	22.35					
15	QPSK	1	74	22.42	22.84	22.49	22.38					
15	QPSK	36	0	21.58	21.95	21.73	21.52					
15	QPSK	36	20	21.55	21.94	21.68	21.51	22	1			
15	QPSK	36	39	21.53	21.94	21.61	21.50					
15	QPSK	75	0	21.56	21.95	21.72	21.51					
15	16QAM	1	0	21.48	21.91	21.79	21.52					
15	16QAM	1	37	21.34	21.80	21.61	21.44	22	1			
15	16QAM	1	74	21.51	21.99	21.66	21.53					
15	16QAM	36	0	20.52	20.93	20.72	20.49					
15	16QAM	36	20	20.51	20.92	20.67	20.47					
15	16QAM	36	39	20.53	20.92	20.81	20.47	21	2			
15	16QAM	75	0	20.60	20.97	20.75	20.55					
15	64QAM	1	0	20.08	20.43	20.33	20.06					
15	64QAM	1	37	20.10	20.53	20.32	20.17					
15	64QAM	1	74	20.13	20.52	20.16	20.13	21	2			
15	64QAM	36	0	19.59	19.97	19.76	19.53					
15	64QAM	36	20	19.54	19.97	19.71	19.51					
15	64QAM	36	39	19.54	19.94	19.61	19.52					
15	64QAM	75	0	19.60	19.98	19.75	19.52	20	3			
Channel Frequency (MHz)				55290	55815	56165	56690				tune-up limit (dBm)	MPR (dB)
10	QPSK	1	0	22.42	22.79	22.57	22.32				23	0
10	QPSK	1	25	22.39	22.75	22.51	22.30					
10	QPSK	1	49	22.37	22.78	22.46	22.32					
10	QPSK	25	0	21.61	21.98	21.76	21.43					
10	QPSK	25	12	21.60	22.00	21.74	21.45	22	1			
10	QPSK	25	25	21.57	21.99	21.72	21.46					
10	QPSK	50	0	21.60	21.97	21.71	21.44					
10	16QAM	1	0	21.53	21.98	21.75	21.50					
10	16QAM	1	25	21.49	21.99	21.71	21.46	22	1			
10	16QAM	1	49	21.47	21.95	21.66	21.49					
10	16QAM	25	0	20.55	20.95	20.70	20.42					
10	16QAM	25	12	20.60	20.98	20.73	20.51					
10	16QAM	25	25	20.55	20.98	20.69	20.45	21	2			
10	16QAM	50	0	20.62	20.87	20.77	20.53					
10	64QAM	1	0	20.11	20.61	20.26	19.94					
10	64QAM	1	25	20.12	20.50	20.26	20.08					
10	64QAM	1	49	20.28	20.67	20.12	20.08	21	2			
10	64QAM	25	0	19.68	20.00	19.79	19.46					
10	64QAM	25	12	19.68	19.99	19.81	19.54					
10	64QAM	25	25	19.68	19.95	19.78	19.54					
10	64QAM	50	0	19.65	19.92	19.77	19.48	20	3			
Channel Frequency (MHz)				55265 <th>55810</th> <th>56170</th> <th>56715</th> <th>tune-up limit (dBm)</th> <th>MPR (dB)</th>	55810	56170	56715				tune-up limit (dBm)	MPR (dB)
5	QPSK	1	0	22.46	22.83	22.64	22.41				23	0
5	QPSK	1	12	22.35	22.75	22.53	22.32					
5	QPSK	1	24	22.46	22.82	22.54	22.46					
5	QPSK	12	0	21.60	21.95	21.75	21.51					
5	QPSK	12	7	21.59	21.99	21.70	21.47	22	1			
5	QPSK	12	13	21.59	21.99	21.70	21.48					
5	QPSK	25	0	21.57	21.95	21.75	21.50					
5	16QAM	1	0	21.65	21.98	21.80	21.54					
5	16QAM	1	12	21.59	21.95	21.78	21.45	22	1			
5	16QAM	1	24	21.71	21.96	21.71	21.56					
5	16QAM	12	0	20.55	20.93	20.72	20.52					
5	16QAM	12	7	20.57	20.95	20.67	20.44					
5	16QAM	12	13	20.57	20.99	20.67	20.45	21	2			
5	16QAM	25	0	20.58	21.00	20.76	20.50					
5	64QAM	1	0	20.22	20.61	20.40	20.48					
5	64QAM	1	12	20.14	20.54	20.28	20.40					
5	64QAM	1	24	20.22	20.64	20.33	20.51	21	2			
5	64QAM	12	0	19.65	19.78	19.78	19.51					
5	64QAM	12	7	19.64	19.76	19.77	19.51					
5	64QAM	12	13	19.63	19.77	19.77	19.52					
5	64QAM	25	0	19.64	19.75	19.79	19.48	20	3			



Band 48											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dbm)	MPR (dB)		
Channel				55340	55830	56150	56640				
Frequency (MHz)				3560	3609	3641	3690				
20	QPSK	1	0	22.32	22.51	22.42	22.17	23	0		
20	QPSK	1	49	22.26	22.45	22.35	22.04				
20	QPSK	1	99	22.30	22.37	22.16	21.80				
20	QPSK	50	0	21.49	21.61	21.57	21.24				
20	QPSK	50	24	21.47	21.58	21.54	21.14	22	1		
20	QPSK	50	50	21.41	21.56	21.37	20.98				
20	QPSK	100	0	21.48	21.61	21.45	21.20				
20	16QAM	1	0	21.53	21.66	21.70	21.26				
20	16QAM	1	49	21.45	21.57	21.42	21.07	22	1		
20	16QAM	1	99	21.34	21.50	21.33	21.03				
20	16QAM	50	0	20.51	20.63	20.66	20.20				
20	16QAM	50	24	20.48	20.63	20.58	20.18				
20	16QAM	50	50	20.44	20.64	20.40	20.10	21	2		
20	16QAM	100	0	20.50	20.64	20.49	20.16				
20	64QAM	1	0	20.14	20.22	20.37	20.03				
20	64QAM	1	49	20.07	20.22	20.15	19.83				
20	64QAM	1	99	20.06	20.24	20.03	19.69	21	2		
20	64QAM	50	0	19.56	19.59	19.67	19.30				
20	64QAM	50	24	19.50	19.65	19.56	19.24				
20	64QAM	50	50	19.42	19.58	19.41	19.05				
20	64QAM	100	0	19.55	19.62	19.57	19.16	Tune-up limit (dbm)		MPR (db)	
Channel				55315	55820	56160	56655				
Frequency (MHz)				3557.5	3608	3642	3692.5				
15	QPSK	1	0	22.12	22.32	22.29	22.13	23	0		
15	QPSK	1	37	22.12	22.32	22.35	21.90				
15	QPSK	1	74	22.26	22.34	22.12	21.67				
15	QPSK	36	0	21.48	21.53	21.38	21.19				
15	QPSK	36	20	21.33	21.38	21.39	21.12	22	1		
15	QPSK	36	39	21.37	21.50	21.27	20.78				
15	QPSK	75	0	21.41	21.47	21.28	21.01				
15	16QAM	1	0	21.45	21.66	21.69	21.06				
15	16QAM	1	37	21.44	21.38	21.39	20.88	22	1		
15	16QAM	1	74	21.16	21.42	21.28	20.98				
15	16QAM	36	0	20.45	20.50	20.53	20.08				
15	16QAM	36	20	20.30	20.63	20.38	20.02				
15	16QAM	36	39	20.29	20.45	20.26	20.04	21	2		
15	16QAM	75	0	20.36	20.44	20.41	20.09				
15	64QAM	1	0	20.10	20.20	20.28	19.89				
15	64QAM	1	37	19.87	20.12	19.97	19.73				
15	64QAM	1	74	19.89	20.05	20.01	19.65	21	2		
15	64QAM	36	0	19.51	19.47	19.62	19.28				
15	64QAM	36	20	19.39	19.64	19.56	19.23				
15	64QAM	36	39	19.42	19.55	19.36	18.99				
15	64QAM	75	0	19.41	19.45	19.41	19.13	Tune-up limit (dbm)		MPR (db)	
Channel				55290	55815	56165	56690				
Frequency (MHz)				3555	3607.5	3642.5	3695				
10	QPSK	1	0	22.19	22.40	22.39	22.05	23	0		
10	QPSK	1	25	22.09	22.27	22.23	21.96				
10	QPSK	1	49	22.13	22.36	22.08	21.63				
10	QPSK	25	0	21.41	21.46	21.43	21.11				
10	QPSK	25	12	21.46	21.42	21.52	21.13	22	1		
10	QPSK	25	25	21.26	21.52	21.32	20.82				
10	QPSK	50	0	21.35	21.44	21.45	21.00				
10	16QAM	1	0	21.33	21.66	21.69	21.19				
10	16QAM	1	25	21.38	21.38	21.25	20.98	22	1		
10	16QAM	1	49	21.15	21.38	21.17	20.94				
10	16QAM	25	0	20.51	20.57	20.60	20.07				
10	16QAM	25	12	20.34	20.46	20.56	20.05				
10	16QAM	25	25	20.25	20.49	20.39	20.08	21	2		
10	16QAM	50	0	20.35	20.46	20.38	19.96				
10	64QAM	1	0	20.09	20.09	20.21	20.00				
10	64QAM	1	25	19.96	20.09	20.13	19.73				
10	64QAM	1	49	19.88	20.21	19.85	19.55	21	2		
10	64QAM	25	0	19.52	19.59	19.56	19.20				
10	64QAM	25	12	19.32	19.45	19.48	19.13				
10	64QAM	25	25	19.25	19.46	19.26	18.88				
10	64QAM	50	0	19.43	19.53	19.55	19.09	Tune-up limit (dbm)		MPR (db)	
Channel				55265	55810	56170	56715				
Frequency (MHz)				3552.5	3607	3643	3697.5				
5	QPSK	1	0	22.19	22.36	22.26	21.98	23	0		
5	QPSK	1	12	22.24	22.25	22.26	21.99				
5	QPSK	1	24	22.28	22.34	22.03	21.70				
5	QPSK	12	0	21.42	21.55	21.45	21.12				
5	QPSK	12	7	21.36	21.45	21.49	21.11	22	1		
5	QPSK	12	13	21.41	21.52	21.18	20.86				
5	QPSK	25	0	21.34	21.60	21.43	21.15				
5	16QAM	1	0	21.33	21.47	21.54	21.22				
5	16QAM	1	12	21.25	21.55	21.25	21.04	22	1		
5	16QAM	1	24	21.20	21.38	21.14	21.00				
5	16QAM	12	0	20.45	20.62	20.53	20.13				
5	16QAM	12	7	20.39	20.59	20.47	20.14				
5	16QAM	12	13	20.40	20.56	20.35	19.94	21	2		
5	16QAM	25	0	20.43	20.46	20.39	20.14				
5	64QAM	1	0	20.10	20.03	20.20	19.97				
5	64QAM	1	12	19.97	20.10	20.10	19.74				
5	64QAM	1	24	19.91	20.21	19.90	19.60	21	2		
5	64QAM	12	0	19.46	19.56	19.49	19.17				
5	64QAM	12	7	19.36	19.46	19.38	19.21				
5	64QAM	12	13	19.32	19.57	19.27	19.05				
5	64QAM	25	0	19.43	19.47	19.51	19.12	Tune-up limit (dbm)		MPR (db)	



Band 48									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				55340	55830	56150	56640	18.3	0
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	17.18	17.40	17.54	17.61	18.3	0
20	QPSK	1	49	17.12	17.33	17.54	17.52		
20	QPSK	1	99	17.13	17.33	17.50	17.52		
20	QPSK	50	0	17.12	17.35	17.49	17.60		
20	QPSK	50	24	17.09	17.32	17.50	17.58	18.3	0
20	QPSK	50	50	17.09	17.36	17.44	17.59		
20	QPSK	100	0	17.08	17.31	17.49	17.52		
20	16QAM	1	0	17.15	17.40	17.51	17.58		
20	16QAM	1	49	17.13	17.38	17.50	17.56	18.3	0
20	16QAM	1	99	17.17	17.34	17.52	17.58		
20	16QAM	50	0	17.08	17.38	17.51	17.53		
20	16QAM	50	24	17.17	17.36	17.45	17.54		
20	16QAM	50	50	17.08	17.31	17.45	17.56	18.3	0
20	16QAM	100	0	17.17	17.36	17.53	17.51		
20	64QAM	1	0	17.11	17.33	17.52	17.55		
20	64QAM	1	49	17.16	17.32	17.51	17.52		
20	64QAM	1	99	17.08	17.37	17.49	17.55	18.3	0
20	64QAM	50	0	17.15	17.40	17.50	17.53		
20	64QAM	50	24	17.12	17.34	17.44	17.60		
20	64QAM	50	50	17.12	17.32	17.44	17.56		
20	64QAM	100	0	17.11	17.39	17.50	17.57	Tune-up limit (dBm) MPR (dB)	
Channel				55315	55820	56160	56655	18.3	0
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	17.13	17.32	17.49	17.55	18.3	0
15	QPSK	1	37	17.02	17.25	17.53	17.48		
15	QPSK	1	74	17.11	17.24	17.40	17.47		
15	QPSK	36	0	17.03	17.33	17.43	17.53		
15	QPSK	36	20	17.08	17.31	17.43	17.50	18.3	0
15	QPSK	36	39	17.07	17.33	17.36	17.57		
15	QPSK	75	0	17.00	17.26	17.48	17.44		
15	16QAM	1	0	17.09	17.35	17.42	17.48		
15	16QAM	1	37	17.13	17.35	17.49	17.48	18.3	0
15	16QAM	1	74	17.13	17.29	17.52	17.52		
15	16QAM	36	0	17.03	17.31	17.49	17.49		
15	16QAM	36	20	17.09	17.32	17.39	17.46		
15	16QAM	36	39	17.07	17.24	17.35	17.47	18.3	0
15	16QAM	75	0	17.16	17.32	17.51	17.41		
15	64QAM	1	0	17.11	17.30	17.49	17.49		
15	64QAM	1	37	17.13	17.29	17.45	17.52		
15	64QAM	1	74	17.05	17.28	17.39	17.54	18.3	0
15	64QAM	36	0	17.08	17.31	17.49	17.46		
15	64QAM	36	20	17.11	17.24	17.43	17.60		
15	64QAM	36	39	17.09	17.31	17.38	17.53		
15	64QAM	75	0	17.10	17.35	17.50	17.51	Tune-up limit (dBm) MPR (dB)	
Channel				55200	55815	56165	56690	18.3	0
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	17.14	17.32	17.51	17.60	18.3	0
10	QPSK	1	25	17.10	17.26	17.53	17.42		
10	QPSK	1	49	17.11	17.25	17.50	17.48		
10	QPSK	25	0	17.12	17.28	17.44	17.59		
10	QPSK	25	12	17.08	17.31	17.46	17.49	18.3	0
10	QPSK	25	25	17.09	17.33	17.42	17.59		
10	QPSK	50	0	17.03	17.24	17.39	17.42		
10	16QAM	1	0	17.12	17.36	17.42	17.52		
10	16QAM	1	25	17.03	17.36	17.44	17.56	18.3	0
10	16QAM	1	49	17.16	17.30	17.45	17.53		
10	16QAM	25	0	17.04	17.38	17.44	17.49		
10	16QAM	25	12	17.12	17.27	17.39	17.50		
10	16QAM	25	25	17.08	17.25	17.40	17.48	18.3	0
10	16QAM	50	0	17.13	17.28	17.50	17.44		
10	64QAM	1	0	17.03	17.24	17.43	17.52		
10	64QAM	1	25	17.15	17.22	17.42	17.52		
10	64QAM	1	49	17.06	17.35	17.48	17.47	18.3	0
10	64QAM	25	0	17.15	17.36	17.43	17.45		
10	64QAM	25	12	17.06	17.31	17.41	17.57		
10	64QAM	25	25	17.11	17.30	17.43	17.54		
10	64QAM	50	0	17.02	17.32	17.48	17.49	Tune-up limit (dBm) MPR (dB)	
Channel				55265	55810	56170	56715	18.3	0
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	17.16	17.38	17.45	17.58	18.3	0
5	QPSK	1	12	17.12	17.32	17.50	17.51		
5	QPSK	1	24	17.10	17.25	17.42	17.51		
5	QPSK	12	0	17.06	17.27	17.39	17.53		
5	QPSK	12	7	16.99	17.23	17.48	17.52	18.3	0
5	QPSK	12	13	17.05	17.29	17.42	17.56		
5	QPSK	25	0	17.01	17.30	17.43	17.48		
5	16QAM	1	0	17.07	17.34	17.50	17.58		
5	16QAM	1	12	17.11	17.33	17.48	17.52	18.3	0
5	16QAM	1	24	17.16	17.30	17.44	17.58		
5	16QAM	12	0	17.07	17.37	17.45	17.43		
5	16QAM	12	7	17.09	17.33	17.42	17.52		
5	16QAM	12	13	17.06	17.28	17.37	17.51	18.3	0
5	16QAM	25	0	17.14	17.34	17.47	17.49		
5	64QAM	1	0	17.06	17.28	17.47	17.53		
5	64QAM	1	12	17.13	17.23	17.41	17.42		
5	64QAM	1	24	17.06	17.30	17.39	17.52	18.3	0
5	64QAM	12	0	17.08	17.37	17.41	17.50		
5	64QAM	12	7	17.07	17.27	17.36	17.55		
5	64QAM	12	13	17.11	17.31	17.44	17.55		
5	64QAM	25	0	17.11	17.35	17.46	17.51	Tune-up limit (dBm) MPR (dB)	



Band 48										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640	21	0	
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	20.78	20.89	20.84	20.85	21	0	
20	QPSK	1	49	20.75	20.86	20.84	20.80			
20	QPSK	1	99	20.74	20.81	20.76	20.77	21	0	
20	QPSK	50	0	20.76	20.86	20.81	20.76			
20	QPSK	50	24	20.73	20.84	20.74	20.73	21	0	
20	QPSK	50	50	20.71	20.82	20.80	20.77			
20	QPSK	100	0	20.67	20.76	20.72	20.70	21	0	
20	16QAM	1	0	20.76	20.79	20.84	20.81			
20	16QAM	1	49	20.75	20.85	20.77	20.83	21	0	
20	16QAM	1	99	20.70	20.85	20.76	20.75			
20	16QAM	50	0	20.65	20.74	20.72	20.56	21	0	
20	16QAM	50	24	20.62	20.71	20.70	20.54			
20	16QAM	50	50	20.63	20.69	20.63	20.46	21	0	
20	16QAM	100	0	20.64	20.66	20.68	20.56			
20	64QAM	1	0	20.11	20.56	20.41	20.10	21	0	
20	64QAM	1	49	20.13	20.53	20.27	20.07			
20	64QAM	1	99	20.19	20.57	20.19	20.15	20	1	
20	64QAM	50	0	19.64	20.00	19.80	19.53			
20	64QAM	50	24	19.66	19.99	19.76	19.58	20	1	
20	64QAM	50	50	19.61	19.97	19.64	19.48			
20	64QAM	100	0	19.63	19.99	19.74	19.54	21	0	
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5	21	0	
15	QPSK	1	0	20.74	20.79	20.82	20.79			
15	QPSK	1	37	20.75	20.76	20.76	20.77	21	0	
15	QPSK	1	74	20.72	20.80	20.70	20.76			
15	QPSK	36	0	20.67	20.86	20.76	20.78	21	0	
15	QPSK	36	20	20.68	20.83	20.71	20.75			
15	QPSK	36	39	20.73	20.81	20.76	20.69	21	0	
15	QPSK	75	0	20.59	20.66	20.77	20.69			
15	16QAM	1	0	20.76	20.69	20.81	20.76	21	0	
15	16QAM	1	37	20.65	20.82	20.76	20.78			
15	16QAM	1	74	20.66	20.78	20.71	20.68	21	0	
15	16QAM	36	0	20.60	20.70	20.70	20.47			
15	16QAM	36	20	20.52	20.67	20.63	20.47	21	0	
15	16QAM	36	39	20.58	20.68	20.81	20.42			
15	16QAM	75	0	20.57	20.61	20.69	20.56	21	0	
15	64QAM	1	0	20.08	20.55	20.39	20.06			
15	64QAM	1	37	20.10	20.51	20.25	20.04	21	0	
15	64QAM	1	74	20.09	20.49	20.19	20.10			
15	64QAM	36	0	19.82	19.91	19.78	19.43	20	1	
15	64QAM	36	20	19.64	19.93	19.68	19.49			
15	64QAM	36	39	19.59	19.90	19.61	19.40	21	0	
15	64QAM	75	0	19.55	19.96	19.74	19.52			
Channel				55200	55815	56165	56690	21	0	
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	20.72	20.82	20.74	20.81	21	0	
10	QPSK	1	25	20.69	20.82	20.75	20.75			
10	QPSK	1	49	20.66	20.72	20.74	20.70	21	0	
10	QPSK	25	0	20.67	20.76	20.74	20.73			
10	QPSK	25	12	20.66	20.83	20.69	20.75	21	0	
10	QPSK	25	25	20.74	20.72	20.75	20.69			
10	QPSK	50	0	20.65	20.74	20.80	20.69	21	0	
10	16QAM	1	0	20.76	20.72	20.74	20.81			
10	16QAM	1	25	20.70	20.78	20.67	20.74	21	0	
10	16QAM	1	49	20.63	20.76	20.73	20.65			
10	16QAM	25	0	20.63	20.71	20.72	20.46	21	0	
10	16QAM	25	12	20.55	20.83	20.69	20.49			
10	16QAM	25	25	20.58	20.63	20.67	20.38	21	0	
10	16QAM	50	0	20.54	20.64	20.63	20.50			
10	64QAM	1	0	20.03	20.50	20.39	20.06	21	0	
10	64QAM	1	25	20.05	20.50	20.27	20.02			
10	64QAM	1	49	20.19	20.53	20.18	20.10	20	1	
10	64QAM	25	0	19.63	19.96	19.76	19.46			
10	64QAM	25	12	19.60	19.97	19.67	19.57	21	0	
10	64QAM	25	25	19.54	19.93	19.59	19.44			
10	64QAM	50	0	19.59	19.89	19.67	19.44	21	0	
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5	21	0	
5	QPSK	1	0	20.68	20.79	20.83	20.81			
5	QPSK	1	12	20.75	20.84	20.75	20.75	21	0	
5	QPSK	1	24	20.74	20.75	20.70	20.71			
5	QPSK	12	0	20.68	20.84	20.74	20.68	21	0	
5	QPSK	12	7	20.67	20.78	20.64	20.75			
5	QPSK	12	13	20.76	20.80	20.71	20.73	21	0	
5	QPSK	25	0	20.61	20.71	20.73	20.68			
5	16QAM	1	0	20.71	20.75	20.75	20.78	21	0	
5	16QAM	1	12	20.74	20.87	20.74	20.74			
5	16QAM	1	24	20.62	20.85	20.69	20.72	21	0	
5	16QAM	12	0	20.64	20.70	20.62	20.52			
5	16QAM	12	7	20.54	20.69	20.65	20.46	21	0	
5	16QAM	12	13	20.58	20.65	20.57	20.42			
5	16QAM	25	0	20.59	20.58	20.63	20.49	21	0	
5	64QAM	1	0	20.04	20.53	20.32	20.08			
5	64QAM	1	12	20.11	20.46	20.19	19.99	21	0	
5	64QAM	1	24	20.09	20.48	20.16	20.14			
5	64QAM	12	0	19.54	19.93	19.80	19.47	20	1	
5	64QAM	12	7	19.57	19.97	19.71	19.58			
5	64QAM	12	13	19.57	19.94	19.80	19.38	21	0	
5	64QAM	25	0	19.54	19.96	19.64	19.53			



n2 (Ant 2)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1860	1860	1900	Tune-up limit (dBm)	MPR (dB)
20	PV2 BPSK	1	1	23.98	23.73	23.81		
20	PV2 BPSK	1	53	23.97	23.88	23.96	24.0	0.0
20	PV2 BPSK	1	104	23.81	23.75	23.83		
20	PV2 BPSK	50	0	23.43	23.36	23.42	23.5	0.5
20	PV2 BPSK	50	28	23.85	23.70	23.76	24.0	0.0
20	PV2 BPSK	50	56	23.43	23.39	23.45		
20	PV2 BPSK	100	0	23.42	23.41	23.37	23.5	0.5
20	QPSK	1	1	23.89	23.86	23.88		
20	QPSK	1	53	23.97	24.99	23.96	24.0	0.0
20	QPSK	1	104	23.94	23.86	23.90		
20	QPSK	50	0	23.03	22.83	22.90	23.0	1.0
20	QPSK	50	28	23.99	23.90	23.98	24.0	0.0
20	QPSK	50	56	22.96	22.86	22.93		
20	QPSK	100	0	22.95	22.88	22.91	23.0	1.0
20	16QAM	1	1	22.82	22.86	22.94	23.0	1.0
20	64QAM	1	1	20.12	19.82	20.09	21.5	2.5
20	256QAM	1	1	16.42	16.35	16.45	19.5	4.5
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1867.5	1860	1902.5	Tune-up limit (dBm)	MPR (dB)
15	PV2 BPSK	1	1	23.73	23.69	23.79	24.0	0.0
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1860	1905	Tune-up limit (dBm)	MPR (dB)
10	PV2 BPSK	1	1	23.78	23.63	23.71	24.0	0.0
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1862.5	1860	1907.5	Tune-up limit (dBm)	MPR (dB)
5	PV2 BPSK	1	1	22.53	22.07	22.75	24.0	0.0



n2 (Ant 6)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1860	1880	1900		
20	PI/2 BPSK	1	1	23.64	23.33	23.25	24.0	0.0
20	PI/2 BPSK	1	53	23.62	23.62	23.61		
20	PI/2 BPSK	1	104	23.37	23.20	23.54		
20	PI/2 BPSK	50	0	22.71	22.07	22.53		
20	PI/2 BPSK	50	28	23.31	23.11	23.29	24.0	0.0
20	PI/2 BPSK	50	56	23.30	23.12	23.12	23.5	0.5
20	PI/2 BPSK	100	0	23.18	22.79	23.17		
20	QPSK	1	1	23.46	23.29	23.37	24.0	0.0
20	QPSK	1	53	23.71	23.44	23.67		
20	QPSK	1	104	23.72	23.38	23.74		
20	QPSK	50	0	22.57	22.29	22.54		
20	QPSK	50	28	23.46	23.17	23.48	24.0	0.0
20	QPSK	50	56	22.52	22.41	22.48	23.0	1.0
20	QPSK	100	0	22.59	22.22	22.62		
20	16QAM	1	1	22.34	22.37	22.39	23.0	1.0
20	64QAM	1	1	20.62	20.78	20.66	21.5	2.5
20	256QAM	1	1	18.64	18.85	18.63	19.5	4.5
Channel				371000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	PI/2 BPSK	1	1	23.33	23.54	23.67	24.0	0.0
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1865	1880	1905		
10	PI/2 BPSK	1	1	23.16	22.62	23.25	24.0	0.0
Channel				370000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	PI/2 BPSK	1	1	23.01	22.58	23.25	24.0	0.0



n5 (Ant 1)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				166800	167300	167800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				834	836.5	839		
20	PV2 BPSK	1	1	22.96	22.88	22.90	23.0	0.0
20	PV2 BPSK	1	53	22.94	22.84	22.92		
20	PV2 BPSK	1	104	22.76	22.53	22.62		
20	PV2 BPSK	50	0	22.56	22.40	22.53		
20	PV2 BPSK	50	28	22.83	22.58	22.52	22.5	0.5
20	PV2 BPSK	50	56	22.24	22.09	22.26		
20	PV2 BPSK	100	0	22.40	22.15	22.39		
20	QPSK	1	1	22.91	22.83	22.87		
20	QPSK	1	0	22.82	22.72	22.89	23.0	0.0
20	QPSK	1	104	22.56	22.42	22.57		
20	QPSK	50	0	21.92	21.85	21.94		
20	QPSK	50	28	22.82	22.72	22.88		
20	QPSK	50	56	21.87	21.53	21.82	22.0	1.0
20	QPSK	100	0	21.77	21.63	21.79		
20	16QAM	1	1	21.94	21.93	21.83		
20	64QAM	1	1	20.53	20.50	20.44		
20	256QAM	1	1	18.49	18.53	18.45	Tune-up limit (dBm)	MPR (dB)
Channel				168300	167300	168300		
Frequency (MHz)				831.5	836.5	841.5	Tune-up limit (dBm)	MPR (dB)
15	PV2 BPSK	1	1	22.77	22.81	22.85		
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	PV2 BPSK	1	1	22.68	22.80	22.84	Tune-up limit (dBm)	MPR (dB)
Channel				165300	167300	168300		
Frequency (MHz)				826.5	836.5	846.5	Tune-up limit (dBm)	MPR (dB)
5	PV2 BPSK	1	1	22.57	22.86	22.84		



n5 (Ant 0)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				166800	167300	167800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				834	836.5	839		
20	PV2 BPSK	1	1	22.94	22.91	23.05	24.0	0.0
20	PV2 BPSK	1	53	22.77	22.81	23.03		
20	PV2 BPSK	1	104	22.79	22.80	23.04		
20	PV2 BPSK	50	0	22.36	22.25	22.47		
20	PV2 BPSK	50	28	22.77	22.85	22.86	23.5	0.5
20	PV2 BPSK	50	56	22.73	22.39	22.71		
20	PV2 BPSK	100	0	22.69	22.36	22.60	24.0	0.0
20	QPSK	1	1	22.71	22.75	22.86		
20	QPSK	1	53	23.23	22.94	23.30		
20	QPSK	1	104	23.39	22.99	23.34		
20	QPSK	50	0	22.01	21.73	21.99	23.0	1.0
20	QPSK	50	28	23.21	22.90	21.17		
20	QPSK	50	56	22.31	21.92	22.24	23.0	1.0
20	QPSK	100	0	22.06	21.81	22.08		
20	16QAM	1	1	21.80	21.86	21.95	23.0	1.0
20	64QAM	1	1	20.02	20.04	20.13		
20	256QAM	1	1	18.21	18.22	18.26	18.5	4.5
Channel				169300	167300	168300		
Frequency (MHz)				831.5	836.5	841.5	Tune-up limit (dBm)	MPR (dB)
15	PV2 BPSK	1	1	22.85	22.78	22.88		
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	PV2 BPSK	1	1	22.66	22.03	22.79	24.0	0.0
Channel				169300	167300	168300		
Frequency (MHz)				826.5	836.5	846.5	Tune-up limit (dBm)	MPR (dB)
5	PV2 BPSK	1	1	22.72	22.06	22.78		



n66 (Ant 2)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				340000	340000	352000	24.0	0.0
Frequency (MHz)				1730	1745	1760		
40	PV2 BPSK	1	1	23.58	23.89	23.99		
40	PV2 BPSK	1	108	23.84	23.73	23.86		
40	PV2 BPSK	1	214	23.79	23.81	23.98	24.0	0.0
40	PV2 BPSK	108	0	23.67	23.76	23.81		
40	PV2 BPSK	108	54	23.46	23.75	23.51		
40	PV2 BPSK	108	108	23.78	23.26	23.78		
40	PV2 BPSK	216	0	23.23	23.36	23.37	23.5	0.5
40	QPSK	1	1	23.61	23.59	23.85	24.0	0.0
40	QPSK	1	108	23.80	23.89	24.25		
40	QPSK	1	214	23.72	23.82	24.30		
40	QPSK	108	0	23.86	23.66	23.85		
40	QPSK	108	54	23.99	23.80	22.01	24.0	0.0
40	QPSK	108	108	23.23	22.73	23.15	23.0	1.0
40	QPSK	216	0	22.93	22.62	22.95		
40	16QAM	1	1	21.80	21.68	21.80		
40	64QAM	1	1	20.04	20.26	20.39		
40	256QAM	1	1	17.70	18.13	18.54	19.5	4.5
Channel				344000	348000	354000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1720	1745	1770	24.0	0.0
20	PV2 BPSK	1	1	23.17	23.34	23.57		
Channel				343500	349000	354500		
Frequency (MHz)				1717.5	1745	1772.5		
15	PV2 BPSK	1	1	23.73	23.10	23.72	24.0	0.0
Channel				343000	348000	353000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775	24.0	0.0
10	PV2 BPSK	1	1	23.85	23.20	23.66		
Channel				342500	349000	355500		
Frequency (MHz)				1712.5	1745	1777.5		
5	PV2 BPSK	1	1	23.65	23.19	23.84	24.0	0.0



n66 (Ant 6)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				346000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	PV2 BPSK	1	1	22.93	22.81	22.48		
40	PV2 BPSK	1	108	22.82	22.66	22.61	23.0	0.0
40	PV2 BPSK	1	214	22.87	22.69	22.73		
40	PV2 BPSK	108	0	22.81	22.79	22.63		
40	PV2 BPSK	108	54	22.90	22.73	22.59	23.0	0.0
40	PV2 BPSK	108	108	22.79	22.66	22.82		
40	PV2 BPSK	216	0	22.76	22.46	22.34	22.5	0.5
40	QPSK	1	1	22.81	22.49	22.46		
40	QPSK	1	108	22.82	22.68	22.78	23.0	0.0
40	QPSK	1	214	22.76	22.65	22.71		
40	QPSK	108	0	22.67	22.10	22.69		
40	QPSK	108	54	22.68	22.67	22.71	23.0	0.0
40	QPSK	108	108	22.34	22.29	22.53		
40	QPSK	216	0	21.77	21.97	21.94	22.0	1.0
40	16QAM	1	1	21.95	21.64	21.59	22.0	1.0
40	64QAM	1	1	20.36	20.46	20.55	20.5	2.5
40	256QAM	1	1	18.36	18.61	18.55	18.5	4.5
Channel				344000	349000	354000	100Hz up limit (dBm)	MPR (dB)
Frequency (MHz)				1720	1745	1770		
20	PV2 BPSK	1	1	22.76	22.61	22.81	23.0	0.0
Channel				343500	349000	354500	100Hz up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	PV2 BPSK	1	1	22.75	22.80	22.83	23.0	0.0
Channel				343000	349000	355000	100Hz up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	PV2 BPSK	1	1	22.75	22.70	22.77	23.0	0.0
Channel				342500	349000	355500	100Hz up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	PV2 BPSK	1	1	22.79	22.89	22.88	23.0	0.0



n2 (Ant 6)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1860	1860	1900	Tune-up limit (dBm)	MPR (dB)
20	PV2 BPSK	1	1	21.40	21.39	21.38		
20	PV2 BPSK	1	53	21.27	21.33	21.36	22.3	0.0
20	PV2 BPSK	1	104	21.28	21.32	21.31		
20	PV2 BPSK	50	0	21.32	21.20	21.28		
20	PV2 BPSK	50	28	21.33	21.22	21.31	22.3	0.0
20	PV2 BPSK	50	56	21.26	21.20	21.30		
20	PV2 BPSK	100	0	21.25	21.15	21.23	22.3	0.0
20	QPSK	1	1	21.34	21.37	21.27		
20	QPSK	1	53	21.28	21.31	21.27	22.3	0.0
20	QPSK	1	104	21.28	21.29	21.31		
20	QPSK	50	0	21.31	21.26	21.26		
20	QPSK	50	28	21.31	21.30	21.32	22.3	0.0
20	QPSK	50	56	21.32	21.34	21.30		
20	QPSK	100	0	21.33	21.30	21.29		
20	16QAM	1	1	21.32	21.24	21.30	22.3	0.0
20	64QAM	1	1	21.36	21.29	21.26	21.5	0.8
20	256QAM	1	1	19.26	19.19	19.15	19.5	2.8
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1867.5	1860	1902.5	Tune-up limit (dBm)	MPR (dB)
15	PV2 BPSK	1	1	23.33	23.54	23.67	22.3	0.0
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1865	1860	1906	Tune-up limit (dBm)	MPR (dB)
10	PV2 BPSK	1	1	23.16	22.62	23.25	22.3	0.0
Channel				370600	376000	381600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1862.5	1860	1907.5	Tune-up limit (dBm)	MPR (dB)
5	PV2 BPSK	1	1	23.01	22.58	23.25	22.3	0.0



n66 (Ant 6)								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				340000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	PV2 BPSK	1	1	20.73	21.10	21.06		
40	PV2 BPSK	1	108	20.71	21.01	20.99	21.7	0.0
40	PV2 BPSK	1	214	20.65	20.96	21.02		
40	PV2 BPSK	108	0	20.66	21.04	21.03		
40	PV2 BPSK	108	54	20.69	20.98	20.98	21.7	0.0
40	PV2 BPSK	108	108	20.66	21.00	20.95		
40	PV2 BPSK	216	0	20.64	21.00	20.95	21.7	0.0
40	QPSK	1	1	20.64	20.96	20.97		
40	QPSK	1	108	20.65	20.96	21.04	21.7	0.0
40	QPSK	1	214	20.72	21.05	20.99		
40	QPSK	108	0	20.65	21.02	20.96		
40	QPSK	108	54	20.67	21.04	20.97	21.7	0.0
40	QPSK	108	108	20.66	21.02	20.97		
40	QPSK	216	0	20.65	21.01	20.96	21.7	0.0
40	16QAM	1	1	20.69	20.97	20.96	21.7	0.0
40	64QAM	1	1	19.63	19.80	19.83	20.5	1.2
40	256QAM	1	1	17.71	17.29	17.92	18.5	3.2
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1720	1745	1770		
20	PV2 BPSK	1	1	20.72	20.98	21.04	21.7	0.0
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	PV2 BPSK	1	1	20.72	20.96	21.06	21.7	0.0
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	PV2 BPSK	1	1	20.73	21.00	21.03	21.7	0.0
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	PV2 BPSK	1	1	20.73	21.01	21.04	21.7	0.0



Transmit Antenna				Ant 9			Ant 10			Ant 9+10		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.57	18.00	98.28	16.31	18.00	98.28	19.99	21.00	98.28
		116	5580	16.41	18.00		17.13	18.00		19.79	21.00	
		124	5620	16.93	18.00		16.63	18.00		19.79	21.00	
		132	5660	17.10	18.00		16.81	18.00		19.96	21.00	
		144	5720	17.13	18.00		16.71	18.00		19.93	21.00	
	802.11n-HT20 MCS0	100	5500		17.50			17.50			20.50	
		116	5580		17.50			17.50			20.50	
		124	5620		17.50			17.50			20.50	
		132	5660		17.50			17.50			20.50	
		144	5720		17.50			17.50			20.50	
	802.11n-HT40 MCS0	102	5510		17.00			17.00			20.00	
		110	5550		17.00			17.00			20.00	
		126	5630		17.00			17.00			20.00	
		134	5670		17.00			17.00			20.00	
		142	5710		17.00			17.00			20.00	
	802.11ac-VHT20 MCS0	100	5500	Not required	17.50	Not required	Not required	17.50	Not required	Not required	20.50	Not required
		116	5580		17.50			17.50			20.50	
		124	5620		17.50			17.50			20.50	
		132	5660		17.50			17.50			20.50	
		144	5720		17.50			17.50			20.50	
	802.11ac-VHT40 MCS0	102	5510		16.00			16.00			19.00	
		110	5550		16.00			16.00			19.00	
		126	5630		16.00			16.00			19.00	
		134	5670		16.00			16.00			19.00	
		142	5710		16.00			16.00			19.00	
	802.11ac-VHT80 MCS0	106	5530		16.50			16.50			19.50	
		122	5610		16.50			16.50			19.50	
		138	5690		16.50			16.50			19.50	

Transmit Antenna				Ant 9			Ant 10			Ant 9+10		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	17.93	18.00	98.28	17.31	18.00	98.28	20.64	21.00	98.28
		157	5785	17.60	18.00		17.46	18.00		20.54	21.00	
		165	5825	17.93	18.00		17.70	18.00		20.82	21.00	
	802.11n-HT20 MCS0	149	5745	Not required	17.50	Not required	17.50	Not required	17.50	Not required	20.50	Not required
		157	5785		17.50		17.50		20.50			
		165	5825		17.50		17.50		20.50			
	802.11n-HT40 MCS0	151	5755		17.00		17.00		20.00			
		159	5795		17.00		17.00		20.00			
	802.11ac-VHT20 MCS0	149	5745		17.50		17.50		20.50			
		157	5785		17.50		17.50		20.50			
		165	5825		17.50		17.50		20.50			
	802.11ac-VHT40 MCS0	151	5755		16.50		16.50		19.50			
		159	5795		16.50		16.50		19.50			
	802.11ac-VHT80 MCS0	155	5775		16.50		16.50		19.50			



Transmit Antenna							Ant 8			Ant 10			Ant 8+10		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %				Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	14.05	14.50	100				14.20	14.50	100	17.14	17.50	100
		6	2437	14.33	14.50					14.46	14.50		17.41	17.50	
		11	2462	14.43	14.50					14.37	14.50		17.41	17.50	
	802.11g 6Mbps	1	2412	Not required	14.50	Not required				14.50	14.50	Not required	Not required	17.50	Not required
		6	2437		14.50					14.50	14.50			17.50	
		11	2462		14.50					14.50	14.50			17.50	
	802.11n-HT20 MCS0	1	2412		14.50					14.50	14.50			17.50	
		6	2437		14.50					14.50	14.50			17.50	
		11	2462		14.50					14.50	14.50			17.50	

Transmit Antenna							Ant 9			Ant 10			Ant 9+10		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %				Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not required	11.50	Not required				11.50	11.50	Not required	Not required	14.50	Not required
		40	5200		11.50					11.50	11.50			14.50	
		44	5220		11.50					11.50	11.50			14.50	
		48	5240		11.50					11.50	11.50			14.50	
	802.11n-HT20 MCS0	36	5180		11.50					11.50	11.50			14.50	
		40	5200		11.50					11.50	11.50			14.50	
		44	5220		11.50					11.50	11.50			14.50	
		48	5240		11.50					11.50	11.50			14.50	
	802.11n-HT40 MCS0	38	5190		11.50					11.50	11.50			14.50	
		46	5230		11.50					11.50	11.50			14.50	
		36	5180		11.50					11.50	11.50			14.50	
		40	5200		11.50					11.50	11.50			14.50	
	802.11ac-VHT20 MCS0	44	5220		11.50					11.50	11.50			14.50	
		48	5240		11.50					11.50	11.50			14.50	
		38	5190		11.50					11.50	11.50			14.50	
		46	5230		11.50					11.50	11.50			14.50	
	802.11ac-VHT80 MCS0	42	5210	11.29	11.50	93.08				11.41	11.50	93.08	14.36	14.50	93.08

Transmit Antenna							Ant 9			Ant 10			Ant 9+10		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %				Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not required	10.00	Not required				10.00	10.00	Not required	Not required	13.00	Not required
		56	5280		10.00					10.00	10.00			13.00	
		60	5300		10.00					10.00	10.00			13.00	
		64	5320		10.00					10.00	10.00			13.00	
	802.11n-HT20 MCS0	52	5260		10.00					10.00	10.00			13.00	
		56	5280		10.00					10.00	10.00			13.00	
		60	5300		10.00					10.00	10.00			13.00	
		64	5320		10.00					10.00	10.00			13.00	
	802.11n-HT40 MCS0	54	5270		10.00					10.00	10.00			13.00	
		62	5310		10.00					10.00	10.00			13.00	
		52	5260		10.00					10.00	10.00			13.00	
		56	5280		10.00					10.00	10.00			13.00	
	802.11ac-VHT20 MCS0	60	5300		10.00					10.00	10.00			13.00	
		64	5320		10.00					10.00	10.00			13.00	
		54	5270		10.00					10.00	10.00			13.00	
		62	5310		10.00					10.00	10.00			13.00	
	802.11ac-VHT40 MCS0	58	5290	9.46	10.00	93.08				9.61	10.00	93.08	12.55	13.00	93.08



Transmit Antenna				Ant 9			Ant 10			Ant 9+10		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not required	13.50	Not required	Not required	13.50	Not required	Not required	16.50	Not required
		116	5580		13.50			16.50				
		124	5620		13.50			16.50				
		132	5660		13.50			16.50				
		144	5720		13.50			16.50				
	802.11n-HT20 MCS0	100	5500		13.50			16.50				
		116	5580		13.50			16.50				
		124	5620		13.50			16.50				
		132	5660		13.50			16.50				
		144	5720		13.50			16.50				
	802.11n-HT40 MCS0	102	5510		13.50			16.50				
		110	5550		13.50			16.50				
		126	5630		13.50			16.50				
		134	5670		13.50			16.50				
		142	5710		13.50			16.50				
	802.11ac-VHT20 MCS0	100	5500		13.50			16.50				
		116	5580		13.50			16.50				
		124	5620		13.50			16.50				
		132	5660		13.50			16.50				
		144	5720		13.50			16.50				
	802.11ac-VHT40 MCS0	102	5510		13.50			16.50				
		110	5550		13.50			16.50				
		126	5630		13.50			16.50				
		134	5670		13.50			16.50				
		142	5710		13.50			16.50				
	802.11ac-VHT80 MCS0	106	5530	12.19	13.50	93.08	13.35	13.50	93.08	15.82	16.50	93.08
		122	5610	11.96	13.50		13.03	13.50		15.54	16.50	
		138	5690	12.30	13.50		12.99	13.50		15.67	16.50	

Transmit Antenna				Ant 9			Ant 10			Ant 9+10		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	Not required	13.50	Not required	13.50	Not required	16.50	Not required		
		157	5785		13.50		16.50					
		165	5825		13.50		16.50					
	802.11n-HT20 MCS0	149	5745		13.50		16.50					
		157	5785		13.50		16.50					
		165	5825		13.50		16.50					
	802.11n-HT40 MCS0	151	5755		13.50		16.50					
		159	5795		13.50		16.50					
	802.11ac-VHT20 MCS0	149	5745		13.50		16.50					
		157	5785		13.50		16.50					
		165	5825		13.50		16.50					
	802.11ac-VHT40 MCS0	151	5755		13.50		16.50					
		159	5795		13.50		16.50					
	802.11ac-VHT80 MCS0	155	5775	12.44	13.50	93.08	13.37	13.50	93.08	15.94	16.50	93.08



Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	11.27	10.58	10.89
	CH 39	2441	12.71	12.09	12.40
	CH 78	2480	11.47	10.89	11.18
Tune-up Limit			13.00	12.50	12.50

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	6.00	5.67
	CH 19	2440	7.16	7.13
	CH 39	2480	6.39	6.64
Tune-up Limit			7.50	7.50