



GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	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 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	30.96	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			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	21.87	21.77	21.85	23	0	
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	20.81	20.81	22	1	
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	20.91	21.12	21.40			
10	16QAM	1	25	21.03	20.80	21.26			
10	16QAM	1	49	21.33	21.03	20.83	21	2	
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	21	2	
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			
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	21.81	21.70	21.71	23	0	
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	22	1	
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	21	2	
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	21	2	
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	18.66	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			
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	21.86	21.72	21.77	23	0	
3	QPSK	1	8	21.80	21.60	21.28			
3	QPSK	1	14	21.46	21.42	21.47			
3	QPSK	8	0	20.80	20.88	20.67	22	1	
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	21	2	
3	16QAM	8	0	19.85	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	19.88	21	2	
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			
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	22	1	
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	20.89	21.06			
1.4	16QAM	1	5	21.26	21.25	20.84	22	1	
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	21	2	
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	21	2	
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		
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		
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	21.98		
5	QPSK	1	24	21.89	21.80	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	19.82		
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		
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	21.87	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	21.28	21	2
3	16QAM	8	0	20.07	20.02	20.15		
3	16QAM	8	7	19.97	20.25	20.13		
3	16QAM	15	0	19.86	20.00	20.20	21	2
3	64QAM	1	0	20.19	20.15	19.93		
3	64QAM	1	8	20.27	20.70	20.50		
3	64QAM	1	14	20.14	20.48	20.14	20	3
3	64QAM	8	0	19.06	18.81	19.10		
3	64QAM	8	4	19.15	18.96	19.16		
3	64QAM	8	7	19.17	19.12	19.11	20	3
3	64QAM	15	0	19.16	19.12	19.09		
Channel				23017	23095	23173		
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	21.82	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				
Frequency (MHz)				782				
10	QPSK	1	0		22.61		23	0
10	QPSK	1	25		22.43			
10	QPSK	1	49		22.41			
10	QPSK	25	0		21.65		22	1
10	QPSK	25	12		21.58			
10	QPSK	25	25		21.60			
10	QPSK	50	0		21.57		22	1
10	16QAM	1	0		21.92			
10	16QAM	1	25		21.84			
10	16QAM	1	49		21.78		21	2
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		21	2
10	64QAM	1	49		20.57			
10	64QAM	25	0		19.63			
10	64QAM	25	12		19.71		20	3
10	64QAM	25	25		19.57			
10	64QAM	50	0		19.88			
Channel				23205	23230	23255		
Frequency (MHz)				779.5	782	784.5		
5	QPSK	1	0		22.47		23	0
5	QPSK	1	12		22.43			
5	QPSK	1	24		22.41			
5	QPSK	12	0		21.47		22	1
5	QPSK	12	7		21.48			
5	QPSK	12	13		21.55			
5	QPSK	25	0		21.46		22	1
5	16QAM	1	0		21.85			
5	16QAM	1	12		21.74			
5	16QAM	1	24		21.60		21	2
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		21	2
5	64QAM	1	24		20.41			
5	64QAM	12	0		19.50			
5	64QAM	12	7		19.63		20	3
5	64QAM	12	13		19.45			
5	64QAM	25	0		19.74			



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			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	21.45	21.30	21.26	23	0	
10	QPSK	1	25	21.22	21.27	21.22			
10	QPSK	1	49	21.27	21.19	21.08			
10	QPSK	25	0	20.48	20.42	20.36	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	20.38	22	1	
10	16QAM	1	0	20.76	20.68	20.69			
10	16QAM	1	25	20.66	20.65	20.60			
10	16QAM	1	49	20.72	20.55	20.51	21	2	
10	16QAM	25	0	19.38	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			
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	21.38	21.28	21.16	23	0	
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	20.60			
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			
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	21.35	21.23	21.15	23	0	
3	QPSK	1	5	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	20.60			
3	16QAM	1	5	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	5	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			
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	20.46			
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	21	2	
1.4	64QAM	3	3	19.33	19.39	19.18			
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	20.62	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	20.92	20.83		
10	16QAM	1	49	20.83	20.84	20.70	21	2
10	16QAM	25	0	19.56	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		
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		
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	20.45		
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	19.28		
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		
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									
Channel	23230			23230			Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)	782			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		22	1	
10	QPSK	25	12		21.28				
10	QPSK	25	25		21.23				
10	QPSK	50	0		21.20		22	1	
10	16QAM	1	0		21.80				
10	16QAM	1	25		21.40				
10	16QAM	1	49		21.46		21	2	
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		21	2	
10	64QAM	1	49		20.16				
10	64QAM	25	0		19.23				
10	64QAM	25	12		19.31		20	3	
10	64QAM	25	25		19.17				
10	64QAM	50	0		19.33				
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	22	1	
5	QPSK	12	7	20.85	20.79	20.79			
5	QPSK	12	13	20.84	20.71	20.70			
5	QPSK	25	0	20.86	20.83	20.74	22	1	
5	16QAM	1	0	21.00	21.02	20.98			
5	16QAM	1	12	21.05	20.87	21.02			
5	16QAM	1	24	21.01	20.89	20.75	22	1	
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	21	2	
5	64QAM	1	24	19.89	19.82	19.87			
5	64QAM	12	0	18.93	18.84	18.86			
5	64QAM	12	7	18.93	18.74	18.78	20	3	
5	64QAM	12	13	18.81	18.75	18.81			
5	64QAM	25	0	18.86	18.84	18.79			



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	18800	18900			
Frequency (MHz)				18700	18800	18900			
20	QPSK	1	0	22.30	22.27	22.38	23	0	
20	QPSK	1	49	22.21	22.15	22.18			
20	QPSK	1	99	22.28	22.11	22.29			
20	QPSK	50	0	21.39	21.36	21.40	22	1	
20	QPSK	50	24	21.37	21.25	21.34			
20	QPSK	50	50	21.32	21.30	21.35			
20	QPSK	100	0	21.41	21.33	21.45	22	1	
20	16QAM	1	0	21.97	21.95	21.71			
20	16QAM	1	49	21.51	21.76	21.82			
20	16QAM	1	99	21.38	21.45	21.87	21	2	
20	16QAM	50	0	20.27	20.26	20.42			
20	16QAM	50	24	20.44	20.40	20.39			
20	16QAM	50	50	20.47	20.38	20.45	20	3	
20	16QAM	100	0	20.36	20.41	20.48			
20	64QAM	1	0	20.64	20.49	20.50			
20	64QAM	1	49	20.63	20.61	20.68	21	2	
20	64QAM	1	99	20.69	20.25	20.05			
20	64QAM	50	0	19.41	19.32	19.38			
20	64QAM	50	24	19.41	19.42	19.38	20	3	
20	64QAM	50	50	19.42	19.34	19.58			
20	64QAM	100	0	19.47	19.47	19.37			
Channel				18675	18800	19125			
Frequency (MHz)				18675	18800	19125			
15	QPSK	1	0	22.10	22.15	22.31	23	0	
15	QPSK	1	37	22.05	22.04	22.05			
15	QPSK	1	74	22.12	21.93	22.12			
15	QPSK	36	0	21.29	21.29	21.26	22	1	
15	QPSK	36	20	21.21	21.20	21.20			
15	QPSK	36	39	21.32	21.15	21.17			
15	QPSK	75	0	21.36	21.17	21.33	21	2	
15	16QAM	1	0	21.87	21.82	21.58			
15	16QAM	1	37	21.19	21.62	21.66			
15	16QAM	1	74	21.16	21.34	21.73	20	3	
15	16QAM	36	0	20.16	20.21	20.27			
15	16QAM	36	20	20.33	20.40	20.27			
15	16QAM	36	39	20.43	20.37	20.41	21	2	
15	16QAM	75	0	20.18	20.35	20.43			
15	64QAM	1	0	20.41	20.46	20.32			
15	64QAM	1	37	20.46	20.61	20.51	21	2	
15	64QAM	1	74	20.69	20.12	19.99			
15	64QAM	36	0	19.27	19.26	19.34			
15	64QAM	36	20	19.28	19.42	19.33	20	3	
15	64QAM	36	39	19.22	19.34	19.54			
15	64QAM	75	0	19.35	19.43	19.34			
Channel				18650	18800	19150			
Frequency (MHz)				18650	18800	19150			
10	QPSK	1	0	22.11	22.17	22.23	23	0	
10	QPSK	1	25	22.02	22.04	22.01			
10	QPSK	1	49	22.18	21.84	22.14			
10	QPSK	25	0	21.30	21.22	21.29	22	1	
10	QPSK	25	12	21.19	21.12	21.19			
10	QPSK	25	25	21.27	21.25	21.23			
10	QPSK	50	0	21.38	21.19	21.31	22	1	
10	16QAM	1	0	21.84	21.87	21.71			
10	16QAM	1	25	21.25	21.64	21.68			
10	16QAM	1	49	21.30	21.25	21.83	21	2	
10	16QAM	25	0	20.17	20.23	20.36			
10	16QAM	25	12	20.39	20.29	20.32			
10	16QAM	25	25	20.46	20.21	20.44	20	3	
10	16QAM	50	0	20.25	20.41	20.37			
10	64QAM	1	0	20.64	20.34	20.35			
10	64QAM	1	25	20.63	20.62	20.64	21	2	
10	64QAM	1	49	20.69	20.13	19.86			
10	64QAM	25	0	19.25	19.21	19.37			
10	64QAM	25	12	19.26	19.23	19.22	20	3	
10	64QAM	25	25	19.31	19.28	19.50			
10	64QAM	50	0	19.42	19.30	19.36			
Channel				18625	18800	19175			
Frequency (MHz)				18625	18800	19175			
5	QPSK	1	0	22.10	22.14	22.22	23	0	
5	QPSK	1	12	22.19	22.01	22.03			
5	QPSK	1	24	22.16	22.03	22.19			
5	QPSK	12	0	21.21	21.24	21.28	22	1	
5	QPSK	12	7	21.32	21.11	21.26			
5	QPSK	12	13	21.16	21.10	21.16			
5	QPSK	25	0	21.38	21.19	21.39	22	1	
5	16QAM	1	0	21.93	21.89	21.64			
5	16QAM	1	12	21.17	21.68	21.76			
5	16QAM	1	24	21.18	21.38	21.82	21	2	
5	16QAM	12	0	20.12	20.24	20.30			
5	16QAM	12	7	20.34	20.29	20.29			
5	16QAM	12	13	20.37	20.24	20.37	20	3	
5	16QAM	25	0	20.19	20.26	20.28			
5	64QAM	1	0	20.63	20.43	20.38			
5	64QAM	1	12	20.61	20.60	20.56	21	2	
5	64QAM	1	24	20.47	20.14	19.91			
5	64QAM	12	0	19.33	19.18	19.21			
5	64QAM	12	7	19.29	19.24	19.26	20	3	
5	64QAM	12	13	19.33	19.21	19.52			
5	64QAM	25	0	19.31	19.27	19.23			
Channel				18615	18800	19185			
Frequency (MHz)				18615	18800	19185			
3	QPSK	1	0	22.28	22.11	22.22	23	0	
3	QPSK	1	8	22.21	22.06	22.06			
3	QPSK	1	14	22.18	22.00	22.14			
3	QPSK	8	0	21.30	21.27	21.25	22	1	
3	QPSK	8	4	21.37	21.10	21.16			
3	QPSK	8	7	21.31	21.13	21.30			
3	QPSK	15	0	21.41	21.25	21.39	22	1	
3	16QAM	1	0	21.97	21.81	21.67			
3	16QAM	1	8	21.21	21.59	21.62			
3	16QAM	1	14	21.35	21.31	21.79	21	2	
3	16QAM	8	0	20.13	20.06	20.30			
3	16QAM	8	4	20.33	20.32	20.32			
3	16QAM	8	7	20.43	20.37	20.45	20	3	
3	16QAM	15	0	20.29	20.27	20.47			
3	64QAM	1	0	20.36	20.38	20.45			
3	64QAM	1	8	20.54	20.49	20.64	21	2	
3	64QAM	1	14	20.41	20.19	19.86			
3	64QAM	8	0	19.38	19.26	19.23			
3	64QAM	8	4	19.24	19.26	19.24	20	3	
3	64QAM	8	7	19.32	19.18	19.39			
3	64QAM	15	0	19.28	19.34	19.30			
Channel				18607	18800	19193			
Frequency (MHz)				18607	18800	19193			
1.4	QPSK	1	0	22.18	22.14	22.22	23	0	
1.4	QPSK	1	3	22.26	22.17	22.27			
1.4	QPSK	1	5	22.21	22.15	22.27			
1.4	QPSK	3	0	22.19	22.19	22.32	22	1	
1.4	QPSK	3	1	22.29	22.28	22.27			
1.4	QPSK	3	3	22.26	22.19	22.33			
1.4	QPSK	6	0	21.40	21.30	21.42	22	1	
1.4	16QAM	1	0	21.87	21.82	21.57			
1.4	16QAM	1	3	21.63	21.41	21.56			
1.4	16QAM	1	5	21.46	21.41	21.91	21	2	
1.4	16QAM	3	0	21.41	21.16	21.40			
1.4	16QAM	3	1	21.29	21.31	21.49			
1.4	16QAM	3	3	21.38	21.24	21.42	21	2	
1.4	16QAM	6	0	20.40	20.39	20.60			
1.4	64QAM	1	0	20.49	20.53	20.54			
1.4	64QAM	1	3	20.56	20.40	20.73	20	3	
1.4	64QAM	1	5	20.59	20.62	20.73			
1.4	64QAM	3	0	20.40	20.47	20.26			
1.4	64QAM	3	1	20.39	20.59	20.66	20	3	
1.4	64QAM	3	3	20.64	20.55	20.65			
1.4	64QAM	6	0	19.31	19.20	19.43			



Band 4							
Band	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)				2050	2075	2090	
20	QPSK	1	0	22.52	22.45	22.48	23
20	QPSK	1	49	22.26	22.41	22.27	23
20	QPSK	1	99	22.34	22.27	22.12	23
20	QPSK	50	0	21.87	21.81	21.54	22
20	QPSK	50	24	21.62	21.45	21.50	22
20	QPSK	50	50	21.47	21.43	21.25	22
20	QPSK	100	0	21.55	21.46	21.41	22
20	16QAM	1	0	21.80	21.73	21.79	22
20	16QAM	1	49	21.94	21.65	21.69	22
20	16QAM	1	99	21.56	21.34	21.85	22
20	16QAM	50	0	20.81	20.54	20.54	21
20	16QAM	50	24	20.53	20.44	20.43	21
20	16QAM	50	50	20.55	20.48	20.29	21
20	16QAM	100	0	20.62	20.54	20.52	21
20	64QAM	1	0	20.94	20.89	20.92	21
20	64QAM	1	49	20.72	20.74	20.31	21
20	64QAM	1	99	20.56	20.34	20.28	21
20	64QAM	50	0	19.57	19.57	19.53	20
20	64QAM	50	24	19.60	19.51	19.48	20
20	64QAM	50	50	19.54	19.48	19.39	20
20	64QAM	100	0	19.59	19.49	19.48	20
Channel							
Frequency (MHz)				2092	2117	2132	
15	QPSK	1	0	22.51	22.31	22.43	23
15	QPSK	1	37	22.18	22.34	22.25	23
15	QPSK	1	74	22.33	22.25	21.95	23
15	QPSK	36	0	21.55	21.60	21.46	22
15	QPSK	36	20	21.45	21.41	21.34	22
15	QPSK	36	39	21.33	21.32	21.20	22
15	QPSK	75	0	21.58	21.26	21.22	22
15	16QAM	1	0	21.84	21.63	21.62	22
15	16QAM	1	37	21.89	21.65	21.61	22
15	16QAM	1	74	21.51	21.27	21.80	22
15	16QAM	36	0	20.51	20.48	20.40	21
15	16QAM	36	20	20.49	20.24	20.38	21
15	16QAM	36	39	20.54	20.41	20.10	21
15	16QAM	75	0	20.52	20.44	20.40	21
15	64QAM	1	0	20.75	20.72	20.78	21
15	64QAM	1	37	20.64	20.68	20.29	21
15	64QAM	1	74	20.47	20.26	20.15	21
15	64QAM	36	0	19.40	19.35	19.51	20
15	64QAM	36	20	19.49	19.33	19.36	20
15	64QAM	36	39	19.40	19.38	19.30	20
15	64QAM	75	0	19.54	19.32	19.29	20
Channel							
Frequency (MHz)				2100	2175	2190	
10	QPSK	1	0	22.45	22.27	22.44	23
10	QPSK	1	25	22.13	22.33	22.22	23
10	QPSK	1	49	22.18	22.08	22.11	23
10	QPSK	25	0	21.66	21.52	21.51	22
10	QPSK	25	12	21.55	21.31	21.49	22
10	QPSK	25	25	21.27	21.33	21.17	22
10	QPSK	50	0	21.42	21.32	21.38	22
10	16QAM	1	0	21.72	21.62	21.69	22
10	16QAM	1	25	21.75	21.65	21.50	22
10	16QAM	1	49	21.56	21.27	21.47	22
10	16QAM	25	0	20.80	20.36	20.37	21
10	16QAM	25	12	20.48	20.31	20.38	21
10	16QAM	25	25	20.52	20.40	20.21	21
10	16QAM	50	0	20.50	20.45	20.40	21
10	64QAM	1	0	20.77	20.76	20.75	21
10	64QAM	1	25	20.67	20.69	20.15	21
10	64QAM	1	49	20.39	20.26	20.10	21
10	64QAM	25	0	19.41	19.50	19.38	20
10	64QAM	25	12	19.48	19.49	19.42	20
10	64QAM	25	25	19.44	19.37	19.21	20
10	64QAM	50	0	19.47	19.37	19.48	20
Channel							
Frequency (MHz)				1997	2175	2190	
5	QPSK	1	0	22.43	22.34	22.43	23
5	QPSK	1	12	22.17	22.35	22.23	23
5	QPSK	1	24	22.26	22.27	21.94	23
5	QPSK	12	0	21.62	21.60	21.45	22
5	QPSK	12	7	21.58	21.28	21.42	22
5	QPSK	12	13	21.39	21.36	21.16	22
5	QPSK	25	0	21.46	21.28	21.34	22
5	16QAM	1	0	21.73	21.67	21.72	22
5	16QAM	1	12	21.83	21.54	21.65	22
5	16QAM	1	24	21.52	21.28	21.56	22
5	16QAM	12	0	20.80	20.50	20.54	21
5	16QAM	12	7	20.48	20.27	20.27	21
5	16QAM	12	13	20.48	20.40	20.11	21
5	16QAM	25	0	20.48	20.46	20.51	21
5	64QAM	1	0	20.89	20.89	20.89	21
5	64QAM	1	12	20.58	20.56	20.25	21
5	64QAM	1	24	20.42	20.15	20.24	21
5	64QAM	12	0	19.40	19.48	19.37	20
5	64QAM	12	7	19.51	19.45	19.40	20
5	64QAM	12	13	19.53	19.35	19.27	20
5	64QAM	25	0	19.44	19.35	19.48	20
Channel							
Frequency (MHz)				1985	2175	2190	
3	QPSK	1	0	22.51	22.35	22.34	23
3	QPSK	1	8	22.08	22.23	22.14	23
3	QPSK	1	14	22.18	22.20	22.12	23
3	QPSK	8	0	21.57	21.52	21.49	22
3	QPSK	8	4	21.57	21.36	21.39	22
3	QPSK	8	7	21.43	21.30	21.16	22
3	QPSK	15	0	21.52	21.38	21.34	22
3	16QAM	1	0	21.86	21.57	21.71	22
3	16QAM	1	8	21.75	21.54	21.50	22
3	16QAM	1	14	21.44	21.20	21.63	22
3	16QAM	8	0	20.58	20.46	20.50	21
3	16QAM	8	4	20.36	20.41	20.23	21
3	16QAM	8	7	20.41	20.44	20.20	21
3	16QAM	15	0	20.44	20.49	20.49	21
3	64QAM	1	0	20.80	20.76	20.78	21
3	64QAM	1	8	20.70	20.65	20.21	21
3	64QAM	1	14	20.36	20.24	20.24	21
3	64QAM	8	0	19.42	19.57	19.50	20
3	64QAM	8	4	19.80	19.36	19.31	20
3	64QAM	8	7	19.50	19.44	19.24	20
3	64QAM	15	0	19.42	19.42	19.42	20
Channel							
Frequency (MHz)				1987	2175	2190	
1.4	QPSK	1	0	22.39	22.31	22.22	23
1.4	QPSK	1	3	22.50	22.36	22.10	23
1.4	QPSK	1	5	22.42	22.43	22.18	23
1.4	QPSK	3	0	22.46	22.48	22.14	23
1.4	QPSK	3	1	22.49	22.44	22.21	23
1.4	QPSK	3	3	22.43	22.46	22.22	23
1.4	QPSK	3	5	21.50	21.48	21.35	22
1.4	16QAM	1	0	22.00	21.60	21.39	22
1.4	16QAM	1	3	21.73	21.66	21.60	22
1.4	16QAM	1	5	21.76	21.48	21.79	22
1.4	16QAM	3	0	21.56	21.54	21.25	22
1.4	16QAM	3	1	21.64	21.58	21.34	22
1.4	16QAM	3	3	21.50	21.41	21.35	22
1.4	16QAM	6	0	20.47	20.54	20.40	21
1.4	64QAM	1	0	20.57	20.79	20.49	21
1.4	64QAM	1	3	20.39	20.87	20.63	21
1.4	64QAM	1	5	20.33	20.73	20.26	21
1.4	64QAM	3	0	20.79	20.56	20.30	21
1.4	64QAM	3	1	20.78	20.43	20.36	21
1.4	64QAM	3	3	20.72	20.73	20.35	21
1.4	64QAM	6	0	19.53	19.48	19.26	20



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		
Frequency (MHz)				20910	20930	20950		
20	QPSK	1	0	22.48	22.54	22.60	23	0
20	QPSK	1	49	22.33	22.47	22.54		
20	QPSK	1	99	22.42	22.46	22.52		
20	QPSK	50	0	21.83	21.85	21.78	22	1
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	21	2
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	3
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	16QAM	1	0	20.55	20.75	20.73		
20	16QAM	1	49	20.67	20.31	20.90	20	3
20	16QAM	1	99	20.66	20.63	20.91		
20	16QAM	50	0	19.43	19.65	19.73		
20	16QAM	50	24	19.60	19.68	19.65	20	3
20	16QAM	50	50	19.45	19.72	19.79		
20	16QAM	100	0	19.55	19.60	19.65		
Channel				20825	21100	21375		
Frequency (MHz)				2097.5	20935	20925		
15	QPSK	1	0	22.38	22.36	22.17	23	0
15	QPSK	1	37	22.19	22.31	22.53		
15	QPSK	1	74	22.33	22.28	22.50		
15	QPSK	36	0	21.39	21.64	21.68	22	1
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	21	2
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	20	3
15	16QAM	36	0	20.45	20.45	20.78		
15	16QAM	36	39	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	16QAM	1	0	20.39	20.55	20.56		
15	16QAM	1	37	20.56	20.25	20.78	21	2
15	16QAM	1	74	20.51	20.59	20.62		
15	16QAM	36	0	19.24	19.45	19.69		
15	16QAM	36	20	19.51	19.53	19.48	20	3
15	16QAM	36	39	19.37	19.70	19.75		
15	16QAM	75	0	19.40	19.43	19.57		
Channel				20800	21100	21400		
Frequency (MHz)				20905	20935	20925		
10	QPSK	1	0	22.28	22.38	22.50	23	0
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	22	1
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	21.38	21.62	21	2
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	20	3
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	16QAM	1	0	20.47	20.59	20.68		
10	16QAM	1	25	20.65	20.29	20.83	20	3
10	16QAM	1	49	20.62	20.54	20.71		
10	16QAM	25	0	19.37	19.63	19.53		
10	16QAM	25	12	19.48	19.54	19.58	20	3
10	16QAM	25	25	19.33	19.72	19.65		
10	16QAM	50	0	19.49	19.45	19.59		
Channel				20775	21100	21425		
Frequency (MHz)				20925	20935	20975		
5	QPSK	1	0	22.29	22.51	22.46	23	0
5	QPSK	1	12	22.24	22.35	22.52		
5	QPSK	1	24	22.32	22.30	22.41		
5	QPSK	12	0	21.62	21.61	21.62	22	1
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	21	2
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	20	3
5	16QAM	12	0	20.40	20.42	20.62		
5	16QAM	12	7	20.35	20.55	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	16QAM	1	0	20.55	20.62	20.61		
5	16QAM	1	12	20.49	20.17	20.72	20	3
5	16QAM	1	24	20.65	20.51	20.76		
5	16QAM	12	0	19.39	19.64	19.54		
5	16QAM	12	7	19.58	19.61	19.45	20	3
5	16QAM	12	13	19.43	19.64	19.62		
5	16QAM	25	0	19.39	19.46	19.49		



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	21.80	21.47	21.43	23	0	
20	QPSK	1	49	21.41	21.37	21.32			
20	QPSK	1	99	21.21	21.18	21.12			
20	QPSK	50	0	20.20	20.12	20.07	22	1	
20	QPSK	50	24	20.07	20.05	20.09			
20	QPSK	50	50	20.10	20.03	20.01			
20	QPSK	100	0	20.05	20.02	20.08	22	1	
20	16QAM	1	0	20.26	20.29	20.30			
20	16QAM	1	49	20.20	20.21	20.31			
20	16QAM	1	99	20.08	20.18	20.29	21	2	
20	16QAM	50	0	19.12	19.08	19.07			
20	16QAM	50	24	19.07	19.06	19.10			
20	16QAM	50	50	19.00	19.06	19.17	21	2	
20	16QAM	100	0	19.02	19.02	19.09			
20	64QAM	1	0	20.15	20.12	20.15			
20	64QAM	1	49	20.00	20.04	20.21	21	2	
20	64QAM	1	99	19.94	20.06	20.17			
20	64QAM	50	0	18.97	18.93	19.07			
20	64QAM	50	24	19.05	19.05	19.06	20	3	
20	64QAM	50	50	18.88	19.02	19.15			
20	64QAM	100	0	19.02	19.03	19.08			
Channel				18975	19000	19125	19150	MPR limit (dBm)	MPR (dB)
Frequency (MHz)				1897.5	1890	1902.5			
15	QPSK	1	0	21.44	21.46	21.40	23	0	
15	QPSK	1	37	21.33	21.35	21.29			
15	QPSK	1	74	21.16	21.13	21.10			
15	QPSK	36	0	20.10	20.09	20.00	22	1	
15	QPSK	36	20	20.01	20.05	20.08			
15	QPSK	36	39	20.01	20.30	20.10			
15	QPSK	75	0	20.01	20.00	20.08	22	1	
15	16QAM	1	0	20.24	20.23	20.23			
15	16QAM	1	37	20.13	20.13	20.25			
15	16QAM	1	74	20.07	20.08	20.27	21	2	
15	16QAM	36	0	19.05	19.04	19.06			
15	16QAM	36	20	19.04	19.00	19.05			
15	16QAM	36	39	19.03	19.03	19.15	21	2	
15	16QAM	75	0	19.01	19.00	19.02			
15	64QAM	1	0	20.13	20.03	20.11			
15	64QAM	1	37	19.97	19.97	20.16	20	3	
15	64QAM	1	74	19.93	20.01	20.16			
15	64QAM	36	0	18.96	18.93	18.98			
15	64QAM	36	20	18.99	19.05	19.03	20	3	
15	64QAM	36	39	18.98	18.92	19.09			
15	64QAM	75	0	19.02	19.02	19.06			
Channel				18650	18900	19150	19150	MPR limit (dBm)	MPR (dB)
Frequency (MHz)				1865	1890	1905			
10	QPSK	1	0	21.44	21.41	21.36	23	0	
10	QPSK	1	25	21.38	21.28	21.32			
10	QPSK	1	49	21.21	21.18	21.03			
10	QPSK	25	0	20.17	20.05	20.08	22	1	
10	QPSK	25	12	20.10	20.03	20.05			
10	QPSK	25	25	20.21	20.02	20.03			
10	16QAM	1	0	20.18	20.00	20.09	22	1	
10	16QAM	1	0	20.18	20.25	20.27			
10	16QAM	1	25	20.12	20.12	20.29			
10	16QAM	1	49	20.05	20.11	20.28	21	2	
10	16QAM	25	0	19.05	19.08	19.02			
10	16QAM	25	12	19.03	19.02	19.00			
10	16QAM	25	25	19.00	19.05	19.12	21	2	
10	16QAM	50	0	19.01	19.03	19.03			
10	64QAM	1	0	20.06	20.03	20.12			
10	64QAM	1	25	19.94	20.01	20.15	21	2	
10	64QAM	1	49	19.85	20.03	20.09			
10	64QAM	25	0	18.88	18.91	19.07			
10	64QAM	25	12	19.03	18.95	18.98	20	3	
10	64QAM	25	25	19.01	19.96	19.07			
10	64QAM	50	0	18.95	18.97	19.03			
Channel				18925	18900	19175	19175	MPR limit (dBm)	MPR (dB)
Frequency (MHz)				1892.5	1890	1907.5			
5	QPSK	1	0	21.41	21.46	21.37	23	0	
5	QPSK	1	12	21.31	21.28	21.29			
5	QPSK	1	24	21.12	21.11	21.07			
5	QPSK	12	0	20.15	20.11	20.00	22	1	
5	QPSK	12	7	20.10	20.09	20.06			
5	QPSK	12	13	20.07	20.05	20.01			
5	QPSK	25	0	20.00	20.01	20.07	22	1	
5	16QAM	1	0	20.25	20.23	20.29			
5	16QAM	1	12	20.12	20.17	20.31			
5	16QAM	1	24	20.02	20.16	20.27	21	2	
5	16QAM	12	0	19.04	19.02	19.03			
5	16QAM	12	7	19.10	19.07	19.05			
5	16QAM	12	13	19.03	19.06	19.08	21	2	
5	16QAM	25	0	19.00	19.01	19.09			
5	64QAM	1	0	20.14	20.11	20.16			
5	64QAM	1	12	19.99	20.03	20.16	21	2	
5	64QAM	1	24	19.86	20.02	20.07			
5	64QAM	12	0	18.94	18.95	19.04			
5	64QAM	12	7	19.01	19.05	19.03	20	3	
5	64QAM	12	13	18.92	19.02	19.06			
5	64QAM	25	0	19.01	19.02	19.05			
Channel				18515	18900	19185	19185	MPR limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1890	1908.5			
3	QPSK	1	0	21.49	21.38	21.43	23	0	
3	QPSK	1	8	21.38	21.36	21.25			
3	QPSK	1	14	21.18	21.12	21.09			
3	QPSK	8	0	20.19	20.05	20.07	22	1	
3	QPSK	8	4	20.18	20.03	20.40			
3	QPSK	8	7	20.10	20.01	20.00			
3	QPSK	15	0	20.01	20.04	20.05	22	1	
3	16QAM	1	0	20.25	20.24	20.23			
3	16QAM	1	8	20.15	20.19	20.26			
3	16QAM	1	14	20.08	20.12	20.28	21	2	
3	16QAM	8	0	19.02	19.04	19.01			
3	16QAM	8	4	19.03	19.06	19.00			
3	16QAM	8	7	19.01	19.06	19.10	21	2	
3	16QAM	15	0	19.00	19.00	19.08			
3	64QAM	1	0	20.05	20.08	20.06			
3	64QAM	1	8	19.94	20.00	20.12	21	2	
3	64QAM	1	14	19.88	20.04	20.07			
3	64QAM	8	0	18.94	18.90	18.99			
3	64QAM	8	4	18.99	19.02	18.98	20	3	
3	64QAM	8	7	18.98	18.95	19.10			
3	64QAM	15	0	19.01	18.93	19.03			
Channel				18607	18900	19193	19193	MPR limit (dBm)	MPR (dB)
Frequency (MHz)				1860.7	1890	1909.3			
1.4	QPSK	1	0	21.47	21.45	21.42	23	0	
1.4	QPSK	1	3	21.38	21.36	21.23			
1.4	QPSK	1	5	21.11	21.16	21.04			
1.4	QPSK	3	0	21.45	21.37	21.40	22	1	
1.4	QPSK	3	1	21.29	21.32	21.13			
1.4	QPSK	3	3	21.02	21.10	21.07			
1.4	QPSK	6	0	20.00	20.00	20.03	22	1	
1.4	16QAM	1	0	20.25	20.29	20.29			
1.4	16QAM	1	3	20.18	20.19	20.28			
1.4	16QAM	1	5	20.12	20.14	20.24	22	1	
1.4	16QAM	3	0	20.25	20.23	20.28			
1.4	16QAM	3	1	20.15	20.15	20.18			
1.4	16QAM	3	3	20.07	20.10	20.15	21	2	
1.4	16QAM	6	0	19.06	19.02	19.04			
1.4	64QAM	1	0	20.08	20.11	20.14			
1.4	64QAM	1	3	19.96	20.03	20.17	21	2	
1.4	64QAM	1	5	19.92	20.01	20.10			
1.4	64QAM	3	0	19.94	19.90	19.92			
1.4	64QAM	3	1	19.93	19.99	20.11	20	3	
1.4	64QAM	3	3	19.88	19.96	20.03			
1.4	64QAM	6	0	18.84	18.80	18.90			



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			
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	20.38			
20	QPSK	50	50	20.15	20.37	20.44			
20	QPSK	100	0	20.16	20.26	20.38	22	1	
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	20.58	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	20.46	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				20850	21100	21375			
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	20	3	
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			
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	20.28	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	19.06	19.26	19.41	20	3	
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	19.09	19.26	19.39			
10	64QAM	50	0	19.07	19.19	19.35			
Channel				20775	21100	21425			
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	21	2	
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	20	3	
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	18800	19100			
Frequency (MHz)				1860	1880	1900			
20	QPSK	1	0	20.17	20.18	20.23			
20	QPSK	1	49	20.02	20.03	20.09	21.9	0	
20	QPSK	1	99	20.05	20.02	20.01			
20	QPSK	50	0	20.12	20.07	20.19			
20	QPSK	50	24	20.07	20.05	20.13	21.9	0	
20	QPSK	50	50	20.10	20.03	20.01			
20	QPSK	100	0	20.05	20.02	20.08			
20	16QAM	1	0	20.06	20.09	20.10			
20	16QAM	1	49	20.02	20.01	20.06	21.9	0	
20	16QAM	1	99	20.08	20.08	20.09			
20	16QAM	50	0	19.82	19.98	19.97			
20	16QAM	50	24	19.97	19.96	19.80	21	0.9	
20	16QAM	50	50	19.99	19.96	19.87			
20	16QAM	100	0	19.82	19.82	19.89			
20	64QAM	1	0	20.05	20.02	20.06			
20	64QAM	1	49	20.00	20.04	20.01	21	0.9	
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	18.02	19.15			
20	64QAM	100	0	19.02	19.03	19.08			
Channel				18875	18900	19125	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1887.5	1880	1902.5			
15	QPSK	1	0	20.14	20.14	20.14			
15	QPSK	1	37	19.99	19.98	20.02	21.9	0	
15	QPSK	1	74	19.97	19.95	19.97			
15	QPSK	36	0	20.09	20.06	20.12			
15	QPSK	36	20	19.99	19.95	20.11	21.9	0	
15	QPSK	36	39	20.04	19.99	19.92			
15	QPSK	75	0	19.95	20.01	20.06			
15	16QAM	1	0	20.00	20.05	20.08			
15	16QAM	1	37	20.00	19.99	19.97	21.9	0	
15	16QAM	1	74	20.05	20.00	20.04			
15	16QAM	36	0	19.81	19.89	19.93			
15	16QAM	36	20	19.87	19.95	19.70	21	0.9	
15	16QAM	36	39	19.93	19.95	19.78			
15	16QAM	75	0	19.77	19.76	19.79			
15	64QAM	1	0	19.99	19.98	20.01			
15	64QAM	1	37	19.95	20.04	20.01	21	0.9	
15	64QAM	1	74	19.89	20.05	20.04			
15	64QAM	36	0	18.96	18.93	18.97			
15	64QAM	36	20	18.95	18.01	18.96	20	1.9	
15	64QAM	36	39	18.88	18.96	19.13			
15	64QAM	75	0	18.96	19.00	19.01			
Channel				18950	18900	19150	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1895	1880	1905			
10	QPSK	1	0	20.11	20.18	20.13			
10	QPSK	1	25	20.00	19.97	20.01	21.9	0	
10	QPSK	1	49	20.05	20.01	19.95			
10	QPSK	25	0	20.06	20.06	20.13			
10	QPSK	25	12	20.01	19.98	20.08	21.9	0	
10	QPSK	25	25	20.07	19.99	19.96			
10	QPSK	50	0	19.97	19.92	20.08			
10	16QAM	1	0	19.97	20.01	20.09			
10	16QAM	1	25	20.01	19.95	19.98	21.9	0	
10	16QAM	1	49	19.99	20.08	20.05			
10	16QAM	25	0	19.82	19.94	19.87			
10	16QAM	25	12	19.91	19.86	19.70	21	0.9	
10	16QAM	25	25	19.94	19.91	19.85			
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	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1882.5	1890	1907.5			
5	QPSK	1	0	20.17	20.14	20.13			
5	QPSK	1	12	19.96	19.95	20.03	21.9	0	
5	QPSK	1	24	20.03	19.96	19.96			
5	QPSK	12	0	20.04	19.98	20.14			
5	QPSK	12	7	20.05	20.04	20.13	21.9	0	
5	QPSK	12	13	20.06	19.96	19.97			
5	QPSK	25	0	20.03	19.94	20.08			
5	16QAM	1	0	19.97	20.05	20.04			
5	16QAM	1	12	19.93	19.99	19.98	21.9	0	
5	16QAM	1	24	20.07	20.08	20.02			
5	16QAM	12	0	19.76	19.90	19.92			
5	16QAM	12	7	19.89	19.90	19.76	21	0.9	
5	16QAM	12	13	19.96	19.99	19.77			
5	16QAM	25	0	19.73	19.79	19.86			
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	19.06			
5	64QAM	25	0	19.00	19.00	19.01			
Channel				18815	18900	19185	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1881.5	1880	1908.5			
3	QPSK	1	0	20.10	20.09	20.15			
3	QPSK	1	8	20.02	20.03	20.08	21.9	0	
3	QPSK	1	14	20.01	20.02	19.93			
3	QPSK	8	0	20.04	20.02	20.12			
3	QPSK	8	4	19.97	20.02	20.12	21.9	0	
3	QPSK	8	7	20.01	19.95	20.00			
3	QPSK	15	0	20.00	20.01	20.04			
3	16QAM	1	0	19.99	20.05	20.10	21.9	0	
3	16QAM	1	8	19.99	19.97	19.99			
3	16QAM	1	14	20.07	20.01	19.99			
3	16QAM	8	0	19.76	19.88	19.97			
3	16QAM	8	4	19.84	19.94	19.70	21	0.9	
3	16QAM	8	7	19.95	19.87	19.86			
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	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1890.7	1880	1909.3			
1.4	QPSK	1	0	20.11	20.08	20.13			
1.4	QPSK	1	3	19.96	19.99	20.06			
1.4	QPSK	1	5	19.97	19.94	19.93	21.9	0	
1.4	QPSK	3	0	20.06	20.02	20.14			
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			
1.4	16QAM	1	3	20.09	19.97	20.13			
1.4	16QAM	1	5	20.06	20.00	20.19	21.9	0	
1.4	16QAM	3	0	20.00	19.96	20.07			
1.4	16QAM	3	1	20.01	20.02	20.07			
1.4	16QAM	3	3	20.04	19.98	20.09	21	0.9	
1.4	16QAM	6	0	19.73	19.72	19.88			
1.4	64QAM	1	0	20.02	20.01	20.04			
1.4	64QAM	1	3	19.96	20.00	19.99			
1.4	64QAM	1	5	19.94	19.99	20.01	21	0.9	
1.4	64QAM	3	0	19.94	19.96	20.00			
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	6	0	18.96	18.98	19.00			



Band 4									
BW [MHz]	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)	
				Low Ch. / Freq. 20050	Midle Ch. / Freq. 20175	High Ch. / Freq. 20300			
Channel				1720	1732.5	1745			
20	QPSK	1	0	18.59	18.81	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	18.46			
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				20050	20175	20300	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	18.48	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)				1722.5	1732.5	1742.5			
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			
1.4	16QAM	1	3	18.49	18.46	18.49			
1.4	16QAM	1	5	18.44	18.49	18.39	20.2	0	
1.4	16QAM	3	0	18.51	18.44	18.50			
1.4	16QAM	3	1	18.47	18.44	18.49			
1.4	16QAM	3	3	18.51	18.51	18.54	20.2	0	
1.4	16QAM	6	0	18.46	18.51	18.56			
1.4	64QAM	1	0	18.40	18.42	18.41			
1.4	64QAM	1	3	18.45	18.44	18.46	20.2	0	
1.4	64QAM	1	5	18.49	18.47	18.43			
1.4	64QAM	3	0	18.46	18.43	18.48			
1.4	64QAM	3	1	18.54	18.56	18.57	20	0.2	
1.4	64QAM	3	3	18.59	18.54	18.53			
1.4	64QAM	6	0	18.48	18.51	18.57			



Band 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)	
				Low Ch. / Freq. 20850	Midle Ch. / Freq. 21100	Power High Ch. / Freq. 21350			
Channel				2510	2535	2560			
Frequency (MHz)									
20	QPSK	1	0	17.49	17.55	17.44	18.9	0	
20	QPSK	1	49	17.49	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	17.48	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			
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				20890	21100	21400			
Frequency (MHz)				2505	2535	2565			
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			
10	64QAM	1	25	17.43	17.37	17.42	18.9	0	
10	64QAM	1	49	17.40	17.45	17.40			
10	64QAM	25	0	17.46	17.43	17.37			
10	64QAM	25	12	17.44	17.42	17.37	18.9	0	
10	64QAM	25	25	17.36	17.46	17.42			
10	64QAM	50	0	17.45	17.42	17.47			
Channel				20775	21100	21425			
Frequency (MHz)				2502.5	2535	2537.5			
5	QPSK	1	0	17.47	17.44	17.45	18.9	0	
5	QPSK	1	12	17.42	17.40	17.43			
5	QPSK	1	24	17.38	17.34	17.36			
5	QPSK	12	0	17.43	17.37	17.40	18.9	0	
5	QPSK	12	7	17.40	17.32	17.33			
5	QPSK	12	13	17.35	17.41	17.34			
5	QPSK	25	0	17.44	17.39	17.42	18.9	0	
5	16QAM	1	0	17.45	17.45	17.44			
5	16QAM	1	12	17.36	17.42	17.42			
5	16QAM	1	24	17.41	17.46	17.41	18.9	0	
5	16QAM	12	0	17.33	17.37	17.34			
5	16QAM	12	7	17.47	17.42	17.38			
5	16QAM	12	13	17.37	17.37	17.41	18.9	0	
5	16QAM	25	0	17.38	17.47	17.44			
5	64QAM	1	0	17.38	17.45	17.43			
5	64QAM	1	12	17.33	17.39	17.36	18.9	0	
5	64QAM	1	24	17.42	17.42	17.46			
5	64QAM	12	0	17.42	17.36	17.39			
5	64QAM	12	7	17.36	17.42	17.46	18.9	0	
5	64QAM	12	13	17.42	17.46	17.42			
5	64QAM	25	0	17.42	17.43	17.43			



Band 66									
BW [MHz]	Modulation	RB Size	RB Offset	Power			Time-up limit (dBm)	MPR (dB)	
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.			
Channel				132072	132322	132572			
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				132072	132322	132597	Time-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				132072	132322	132592	Time-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				131987	132322	132647	Time-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1722.5	1745	1772.5			
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	18.56	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				131987	132322	132657	Time-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	18.40	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	18.40	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				131979	132322	132665	Time-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			
1.4	16QAM	1	3	18.50	18.48	18.51			
1.4	16QAM	1	5	18.48	18.47	18.46	20.2	0	
1.4	16QAM	3	0	18.43	18.43	18.47			
1.4	16QAM	3	1	18.41	18.44	18.46			
1.4	16QAM	3	3	18.51	18.54	18.55	20.2	0	
1.4	16QAM	6	0	18.54	18.52	18.48			
1.4	64QAM	1	0	18.49	18.47	18.47			
1.4	64QAM	1	3	18.47	18.51	18.44	20.2	0	
1.4	64QAM	1	5	18.44	18.41	18.42			
1.4	64QAM	3	0	18.45	18.52	18.52			
1.4	64QAM	3	1	18.48	18.48	18.51	20	0.2	
1.4	64QAM	3	3	18.49	18.56	18.55			
1.4	64QAM	6	0	18.56	18.55	18.56			



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	56830	56150	56640			
Frequency (MHz)				3560	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	21.73	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	21.62	21.49		22	1
20	16QAM	1	49	21.49	21.82	21.68	21.49			
20	16QAM	1	99	21.56	21.83	21.63	21.54			
20	16QAM	50	0	20.65	20.94	20.82	20.56		21	2
20	16QAM	50	24	20.62	21.00	20.80	20.54			
20	16QAM	50	50	20.63	20.99	20.63	20.46			
20	16QAM	100	0	20.64	20.96	20.78	20.56			
20	64QAM	1	0	20.11	20.46	20.41	20.10		21	2
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	3
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			
Channel				55315	55820	55160	55665			
Frequency (MHz)				3575.5	3608	3642	3692.5			
15	QPSK	1	0	22.41	22.74	22.60	22.31		23	0
15	QPSK	1	37	22.41	22.81	22.67	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		22	1
15	QPSK	36	20	21.55	21.94	21.68	21.51			
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		22	1
15	16QAM	1	37	21.34	21.80	21.61	21.44			
15	16QAM	1	74	21.51	21.99	21.66	21.53			
15	16QAM	36	0	20.52	20.59	20.72	20.49		21	2
15	16QAM	36	20	20.51	20.92	20.67	20.47			
15	16QAM	36	39	20.53	20.92	20.81	20.47			
15	16QAM	75	0	20.60	20.97	20.75	20.55			
15	64QAM	1	0	20.08	20.43	20.33	20.06		21	2
15	64QAM	1	37	20.10	20.53	20.32	20.17			
15	64QAM	1	74	20.13	20.52	20.16	20.13			
15	64QAM	36	0	19.59	19.97	19.76	19.53		20	3
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			
Channel				55290	55815	55165	55690			
Frequency (MHz)				3565	3607.5	3642.5	3695			
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		22	1
10	QPSK	25	12	21.60	22.00	21.74	21.45			
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	21.96	21.75	21.50		22	1
10	16QAM	1	25	21.49	21.99	21.71	21.46			
10	16QAM	1	49	21.47	21.95	21.66	21.49			
10	16QAM	25	0	20.55	20.95	20.70	20.42		21	2
10	16QAM	25	12	20.60	20.98	20.73	20.51			
10	16QAM	25	25	20.55	20.98	20.69	20.45			
10	16QAM	50	0	20.62	20.87	20.77	20.53			
10	64QAM	1	0	20.11	20.61	20.26	19.94		21	2
10	64QAM	1	25	20.12	20.50	20.26	20.08			
10	64QAM	1	49	20.28	20.67	20.12	20.08			
10	64QAM	25	0	19.66	20.00	19.79	19.46		20	3
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			
Channel				55265	55810	55170	55715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
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		22	1
5	QPSK	12	7	21.59	21.99	21.70	21.47			
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		22	1
5	16QAM	1	12	21.59	21.95	21.78	21.45			
5	16QAM	1	24	21.71	21.98	21.71	21.56			
5	16QAM	12	0	20.55	20.93	20.72	20.52		21	2
5	16QAM	12	7	20.57	20.95	20.67	20.44			
5	16QAM	12	13	20.57	20.99	20.67	20.45			
5	16QAM	25	0	20.58	21.00	20.76	20.50			
5	64QAM	1	0	20.22	20.61	20.40	20.48		21	2
5	64QAM	1	12	20.14	20.54	20.28	20.40			
5	64QAM	1	24	20.22	20.64	20.33	20.51			
5	64QAM	12	0	19.65	19.78	19.78	19.51			
5	64QAM	12	7	19.64	19.76	19.77	19.51		20	3
5	64QAM	12	13	19.63	19.77	19.77	19.52			
5	64QAM	25	0	19.64	19.75	19.79	19.48			



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	56830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	22.32	22.51	22.42	22.17			
20	QPSK	1	49	22.26	22.45	22.35	22.04	23	0	
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			
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	21.29			
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			
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	21	2	
20	64QAM	1	99	20.06	20.24	20.03	19.69			
20	64QAM	50	0	19.56	19.59	19.67	19.30			
20	64QAM	50	24	19.50	19.85	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	20	3	
Channel				55315	55820	55160	55655			
Frequency (MHz)				3575.5	3608	3642	3692.5			
15	QPSK	1	0	22.12	22.32	22.29	22.13			
15	QPSK	1	37	22.12	22.32	22.35	21.90	23	0	
15	QPSK	1	74	22.28	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			
15	16QAM	1	74	21.16	21.42	21.28	20.98	22	1	
15	16QAM	36	0	20.45	20.50	20.53	20.08			
15	16QAM	36	20	20.30	20.63	20.38	20.02	21	2	
15	16QAM	36	39	20.29	20.45	20.26	20.04			
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	21	2	
15	64QAM	1	74	19.89	20.06	20.01	19.65			
15	64QAM	36	0	19.51	19.47	19.82	19.28			
15	64QAM	36	20	19.39	19.64	19.56	19.23	20	3	
15	64QAM	36	39	19.42	19.55	19.36	18.99			
15	64QAM	75	0	19.41	19.45	19.41	19.13			
Channel				55290	55815	55165	55690			
Frequency (MHz)				3555	3607.5	3642.5	3692.5			
10	QPSK	1	0	22.19	22.40	22.39	22.05			
10	QPSK	1	25	22.09	22.27	22.23	21.96	23	0	
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	22	1	
10	16QAM	1	25	21.38	21.38	21.25	20.98			
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	21	2	
10	16QAM	25	25	20.25	20.49	20.39	20.06			
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	21	2	
10	64QAM	1	49	19.88	20.21	19.85	19.55			
10	64QAM	25	0	19.52	19.59	19.56	19.20			
10	64QAM	25	12	19.32	19.45	19.48	19.13	20	3	
10	64QAM	25	25	19.25	19.46	19.26	18.88			
10	64QAM	50	0	19.43	19.53	19.55	19.09			
Channel				55265	55810	55170	55715			
Frequency (MHz)				3522.5	3607	3643	3697.5			
5	QPSK	1	0	22.19	22.36	22.26	21.96			
5	QPSK	1	12	22.24	22.25	22.26	21.99	23	0	
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	22	1	
5	16QAM	1	12	21.25	21.55	21.25	21.04			
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	21	2	
5	16QAM	12	13	20.40	20.56	20.35	19.94			
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	21	2	
5	64QAM	1	24	19.91	20.21	19.90	19.60			
5	64QAM	12	0	19.46	19.56	19.49	19.17			
5	64QAM	12	7	19.36	19.46	19.38	19.21	20	3	
5	64QAM	12	13	19.32	19.57	19.27	19.05			
5	64QAM	25	0	19.43	19.47	19.51	19.12			



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	56830	56150	56640			
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	17.56	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	17.36	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	17.51			
Channel				55315	55820	55160	55655			
Frequency (MHz)				3575.5	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	17.29	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			
Channel				55220	55815	55165	55690			
Frequency (MHz)				3555	3607.5	3642.5	3692.5			
10	QPSK	1	0	17.14	17.32	17.51	17.60	18.3	0	
10	QPSK	1	25	17.10	17.28	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	17.06	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			
Channel				55265	55810	55170	55715			
Frequency (MHz)				3552.5	3607	3643	3692.5			
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	17.53			
5	64QAM	12	13	17.11	17.31	17.44	17.55			
5	64QAM	25	0	17.11	17.35	17.46	17.51			



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	56830	56150	56640			
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			
20	QPSK	50	0	20.76	20.86	20.81	20.78			
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			
20	16QAM	1	0	20.76	20.79	20.84	20.81			
20	16QAM	1	49	20.75	20.86	20.77	20.83	21	0	
20	16QAM	1	99	20.70	20.85	20.78	20.75			
20	16QAM	50	0	20.65	20.74	20.72	20.56			
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			
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	64QAM	50	50	19.61	19.97	19.64	19.48			
20	64QAM	100	0	19.63	19.99	19.74	19.54			
Channel				55318	55820	55160	55655			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	20.74	20.79	20.82	20.79	21	0	
15	QPSK	1	37	20.75	20.78	20.76	20.77			
15	QPSK	1	74	20.72	20.80	20.70	20.76			
15	QPSK	36	0	20.67	20.86	20.76	20.78			
15	QPSK	36	20	20.68	20.83	20.71	20.75	21	0	
15	QPSK	36	39	20.73	20.81	20.76	20.69			
15	QPSK	75	0	20.59	20.66	20.77	20.69			
15	16QAM	1	0	20.76	20.69	20.81	20.76			
15	16QAM	1	37	20.65	20.82	20.76	20.78	21	0	
15	16QAM	1	74	20.66	20.78	20.71	20.68			
15	16QAM	36	0	20.60	20.70	20.70	20.47			
15	16QAM	36	20	20.52	20.67	20.63	20.47			
15	16QAM	36	39	20.58	20.68	20.81	20.42	21	0	
15	16QAM	75	0	20.57	20.61	20.69	20.56			
15	64QAM	1	0	20.08	20.55	20.39	20.06			
15	64QAM	1	37	20.10	20.51	20.25	20.04			
15	64QAM	1	74	20.09	20.49	20.19	20.10	20	1	
15	64QAM	36	0	19.62	19.31	19.78	19.43			
15	64QAM	36	20	19.64	19.93	19.68	19.49			
15	64QAM	36	39	19.59	19.90	19.61	19.40			
15	64QAM	75	0	19.55	19.96	19.74	19.52			
Channel				55290	55815	55165	55690			
Frequency (MHz)				3555	3607.5	3642.5	3692.5			
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			
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			
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			
10	16QAM	25	12	20.55	20.63	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			
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	19.49			
10	64QAM	25	12	19.60	19.97	19.67	19.57			
10	64QAM	25	25	19.54	19.93	19.59	19.44			
10	64QAM	50	0	19.59	19.89	19.67	19.44			
Channel				55265	55810	55170	55715			
Frequency (MHz)				3552.5	3607	3643	3692.5			
5	QPSK	1	0	20.68	20.79	20.63	20.81	21	0	
5	QPSK	1	12	20.75	20.84	20.75	20.75			
5	QPSK	1	24	20.74	20.75	20.70	20.71			
5	QPSK	12	0	20.68	20.84	20.74	20.68			
5	QPSK	12	7	20.67	20.78	20.64	20.75	21	0	
5	QPSK	12	13	20.76	20.80	20.71	20.73			
5	QPSK	25	0	20.61	20.71	20.73	20.68			
5	16QAM	1	0	20.71	20.75	20.75	20.78			
5	16QAM	1	12	20.74	20.87	20.74	20.74	21	0	
5	16QAM	1	24	20.62	20.85	20.69	20.72			
5	16QAM	12	0	20.64	20.70	20.62	20.52			
5	16QAM	12	7	20.54	20.69	20.65	20.46			
5	16QAM	12	13	20.58	20.65	20.57	20.42	21	0	
5	16QAM	25	0	20.59	20.59	20.63	20.49			
5	64QAM	1	0	20.04	20.53	20.32	20.08			
5	64QAM	1	12	20.11	20.46	20.19	19.99			
5	64QAM	1	24	20.09	20.48	20.16	20.14	21	0	
5	64QAM	12	0	19.54	19.93	19.80	19.47			
5	64QAM	12	7	19.57	19.97	19.71	19.58			
5	64QAM	12	13	19.57	19.94	19.60	19.38			
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.	MPR (dB)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1890	1900	
20	PI/2 BPSK	1	1	23.98	23.73	23.81	
20	PI/2 BPSK	1	53	23.97	23.88	23.96	24.0
20	PI/2 BPSK	1	104	23.81	23.75	23.83	
20	PI/2 BPSK	50	0	23.43	23.36	23.42	23.5
20	PI/2 BPSK	50	29	23.95	23.70	23.75	24.0
20	PI/2 BPSK	50	56	23.43	23.39	23.45	
20	PI/2 BPSK	100	0	23.42	23.41	23.37	23.5
20	QPSK	1	1	23.89	23.86	23.88	
20	QPSK	1	53	23.97	24.99	23.96	24.0
20	QPSK	1	104	23.94	23.86	23.90	
20	QPSK	50	0	23.03	22.83	22.88	23.0
20	QPSK	50	28	23.99	23.90	23.98	24.0
20	QPSK	50	56	22.96	22.86	22.93	
20	QPSK	100	0	22.95	22.88	22.91	23.0
20	16QAM	1	1	22.82	22.86	22.94	23.0
20	64QAM	1	1	20.12	19.82	20.09	21.5
20	256QAM	1	1	16.42	16.35	16.45	19.5
Channel				371500	376000	380500	
Frequency (MHz)				1897.5	1890	1902.5	
15	PI/2 BPSK	1	1	23.73	23.69	23.79	24.0
Channel				371000	376000	381000	
Frequency (MHz)				1855	1890	1905	
10	PI/2 BPSK	1	1	23.78	23.63	23.71	24.0
Channel				370500	376000	381500	
Frequency (MHz)				1892.5	1890	1907.5	
5	PI/2 BPSK	1	1	22.53	22.07	22.75	24.0



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				37200	37600	38000		
Frequency (MHz)				1860	1880	1900		
20	PV2 BPSK	1	1	23.64	23.33	23.25		
20	PV2 BPSK	1	53	23.62	23.62	23.61	24.0	0.0
20	PV2 BPSK	1	104	23.37	23.20	23.54		
20	PV2 BPSK	50	0	22.71	22.07	22.53	23.5	0.5
20	PV2 BPSK	50	28	23.31	23.11	23.29	24.0	0.0
20	PV2 BPSK	50	56	23.30	23.12	23.12	23.5	0.5
20	PV2 BPSK	100	0	23.18	22.79	23.17		
20	QPSK	1	1	23.46	23.29	23.37		
20	QPSK	1	53	23.71	23.44	23.67	24.0	0.0
20	QPSK	1	104	23.72	23.38	23.74		
20	QPSK	50	0	22.57	22.29	22.54	23.0	1.0
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	18.65	18.63	19.5	4.5
Channel				37190	37600	38000		
Frequency (MHz)				1857.5	1880	1902.5		
15	PV2 BPSK	1	1	23.33	23.54	23.67	24.0	0.0
Channel				37100	37600	381000		
Frequency (MHz)				1865	1880	1905		
10	PV2 BPSK	1	1	23.16	22.62	23.25	24.0	0.0
Channel				37090	37600	38100		
Frequency (MHz)				1852.5	1880	1907.5		
5	PV2 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	
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	22.5 / 0.5
20	PV2 BPSK	50	28	22.83	22.88	22.52	23.0 / 0.0
20	PV2 BPSK	50	56	22.24	22.09	22.26	22.5 / 0.5
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	22.67	
20	QPSK	50	0	21.92	21.85	21.94	22.0 / 1.0
20	QPSK	50	28	22.82	22.72	22.88	23.0 / 0.0
20	QPSK	50	56	21.87	21.63	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	22.0 / 1.0
20	64QAM	1	1	20.53	20.50	20.44	20.5 / 2.5
20	256QAM	1	1	18.49	18.53	18.45	18.5 / 4.5
Channel				168300	167300	168300	
Frequency (MHz)				831.5	836.5	841.5	
15	PV2 BPSK	1	1	22.77	22.81	22.85	23.0 / 0.0
Channel				165800	167300	168800	
Frequency (MHz)				829	836.5	844	
10	PV2 BPSK	1	1	22.68	22.80	22.84	23.0 / 0.0
Channel				163300	167300	163300	
Frequency (MHz)				826.5	836.5	846.5	
5	PV2 BPSK	1	1	22.57	22.86	22.84	23.0 / 0.0



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	
Frequency (MHz)				834	836.5	839	
20	PV2 BPSK	1	1	22.94	22.91	23.05	
20	PV2 BPSK	1	53	22.77	22.81	23.03	24.0
20	PV2 BPSK	1	104	22.79	22.80	23.04	
20	PV2 BPSK	50	0	22.36	22.25	22.47	23.5
20	PV2 BPSK	50	28	22.77	22.85	22.86	24.0
20	PV2 BPSK	50	56	22.73	22.39	22.71	
20	PV2 BPSK	100	0	22.69	22.36	22.60	23.5
20	QPSK	1	1	22.71	22.75	22.86	
20	QPSK	1	53	23.23	22.94	23.30	24.0
20	QPSK	1	104	23.39	22.99	23.34	
20	QPSK	50	0	22.01	21.73	21.99	23.0
20	QPSK	50	28	23.21	22.90	21.17	24.0
20	QPSK	50	56	22.31	21.92	22.24	
20	QPSK	100	0	22.06	21.81	22.08	23.0
20	16QAM	1	1	21.80	21.86	21.95	23.0
20	64QAM	1	1	20.02	20.04	20.13	21.5
20	256QAM	1	1	18.21	18.22	18.26	19.5
Channel				168300	167300	168300	
Frequency (MHz)				831.5	836.5	841.5	
15	PV2 BPSK	1	1	22.85	22.78	22.88	24.0
Channel				165800	167300	168800	
Frequency (MHz)				829	836.5	844	
10	PV2 BPSK	1	1	22.66	22.03	22.79	24.0
Channel				165300	167300	168300	
Frequency (MHz)				826.5	836.5	846.5	
5	PV2 BPSK	1	1	22.72	22.06	22.78	24.0



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				346000	349000	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	23.58	23.89	23.99			
40	PI/2 BPSK	1	108	23.84	23.73	23.88	24.0	0.0	
40	PI/2 BPSK	1	214	23.79	23.81	23.98			
40	PI/2 BPSK	108	0	23.67	23.76	23.81			
40	PI/2 BPSK	108	54	23.46	23.75	23.51	24.0	0.0	
40	PI/2 BPSK	108	108	23.78	23.26	23.78			
40	PI/2 BPSK	216	0	23.23	23.36	23.37	23.5	0.5	
40	QPSK	1	1	23.61	23.59	23.85			
40	QPSK	1	108	23.80	23.89	24.25	24.0	0.0	
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			
40	QPSK	216	0	22.93	22.62	22.93	23.0	1.0	
40	16QAM	1	1	21.80	21.68	21.80	23.0	1.0	
40	84QAM	1	1	20.04	20.26	20.39	21.5	2.5	
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			
20	PI/2 BPSK	1	1	23.17	23.34	23.57	24.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	PI/2 BPSK	1	1	23.73	23.10	23.72	24.0	0.0	
Channel				343000	348000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	PI/2 BPSK	1	1	23.85	23.20	23.66	24.0	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	PI/2 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	22.81	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	23.0	0.0
40	PV2 BPSK	108	54	22.90	22.73	22.99		
40	PV2 BPSK	108	108	22.79	22.86	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	22.99		
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	21.87	21.84	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	15dB-10p 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	15dB-10p limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	PV2 BPSK	1	1	22.75	22.60	22.83	23.0	0.0
Channel				343000	349000	355000	15dB-10p 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	15dB-10p 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			Tune-up limit (dBm)	MPR (dB)	
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.			
Channel				372000	376000	380000			
Frequency (MHz)				1860	1880	1900			
20	PI/2 BPSK	1	1	21.40	21.39	21.38			
20	PI/2 BPSK	1	53	21.27	21.33	21.36	22.3	0.0	
20	PI/2 BPSK	1	104	21.28	21.32	21.31			
20	PI/2 BPSK	50	0	21.32	21.20	21.28			
20	PI/2 BPSK	50	29	21.33	21.22	21.31	22.3	0.0	
20	PI/2 BPSK	50	58	21.26	21.20	21.30			
20	PI/2 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	21.35	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			
Frequency (MHz)				1897.5	1880	1902.5			
15	PI/2 BPSK	1	1	23.33	23.54	23.67	22.3	0.0	
Channel				371000	376000	381000			
Frequency (MHz)				1855	1880	1905			
10	PI/2 BPSK	1	1	23.16	22.62	23.25	22.3	0.0	
Channel				370500	376000	381500			
Frequency (MHz)				1892.5	1880	1907.5			
5	PI/2 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				348000	349000	350000		
Frequency (MHz)				1730	1745	1760		
40	PI/2 BPSK	1	1	20.73	21.10	21.08		
40	PI/2 BPSK	1	108	20.71	21.01	20.99	21.7	0.0
40	PI/2 BPSK	1	214	20.65	20.96	21.02		
40	PI/2 BPSK	108	0	20.66	21.04	21.03		
40	PI/2 BPSK	108	54	20.59	20.96	20.98	21.7	0.0
40	PI/2 BPSK	108	108	20.66	21.00	20.95		
40	PI/2 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	20.98		
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	20.98	21.7	0.0
40	16QAM	1	1	20.69	20.97	20.96	21.7	0.0
40	84QAM	1	1	19.63	19.80	19.83	20.5	1.2
40	256QAM	1	1	17.71	17.28	17.92	18.5	3.2
Channel				348000	349000	350000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1720	1745	1770		
20	PI/2 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	PI/2 BPSK	1	1	20.72	20.96	21.05	21.7	0.0
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	PI/2 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	PI/2 BPSK	1	1	20.73	21.01	21.04	21.7	0.0



Transmit Antenna							Ant 8			Ant 10			Ant 8+10		
2.4GHz WLAN	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 %			
	802.11b 1Mbps	1	2412	17.87	18.00	100	17.92	18.00	100	20.91	21.00	100			
		6	2437	17.92	18.00		17.86	18.00		20.90	21.00				
		11	2462	17.62	18.00		17.74	18.00		20.69	21.00				
	802.11g 6Mbps	1	2412	Not required	17.50	Not required	Not required	17.50	Not required	Not required	20.50	Not required			
		6	2437		17.50			17.50			20.50				
		11	2462		17.50			17.50			20.50				
	802.11n-HT20 MCS0	1	2412	Not required	16.00	Not required	Not required	16.00	Not required	Not required	19.00	Not required			
		6	2437		16.00			16.00			19.00				
		11	2462		16.00			16.00			19.00				

Transmit Antenna							Ant 9			Ant 10			Ant 9+10		
5.2GHz WLAN	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 %			
	802.11a 6Mbps		36	5180	Not required	17.50	Not required	Not required	Not required	Not required	Not required	20.50	Not required		
			40	5200		17.50						17.50		20.50	
			44	5220		17.50						17.50		20.50	
			48	5240		17.50						17.50		20.50	
	802.11n-HT20 MCS0		36	5180	Not required	17.50	Not required	Not required	Not required	Not required	Not required	20.50	Not required		
			40	5200		17.50						17.50		20.50	
			44	5220		17.50						17.50		20.50	
			48	5240		17.50						17.50		20.50	
	802.11n-HT40 MCS0		38	5190	Not required	17.00	Not required	Not required	Not required	Not required	Not required	20.00	Not required		
			46	5230		17.00						17.00		20.00	
	802.11ac-VHT20 MCS0		36	5180	Not required	17.50	Not required	Not required	Not required	Not required	Not required	20.50	Not required		
			40	5200		17.50						17.50		20.50	
			44	5220		17.50						17.50		20.50	
	802.11ac-VHT40 MCS0		38	5190	Not required	16.50	Not required	Not required	Not required	Not required	Not required	19.50	Not required		
			46	5230		16.50						16.50		19.50	
			42	5210		16.50						16.50		19.50	

Transmit Antenna							Ant 9			Ant 10			Ant 9+10		
5.3GHz WLAN	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 %			
	802.11a 6Mbps		52	5260	17.41	17.50	98.28	16.04	17.50	98.28	19.78	20.50	98.28		
			56	5280	17.30	17.50		16.11	17.50		19.75	20.50			
			60	5300	17.11	17.50		16.39	17.50		19.77	20.50			
			64	5320	16.97	17.50		16.36	17.50		19.68	20.50			
	802.11n-HT20 MCS0		52	5260	Not required	17.50	Not required	Not required	Not required	Not required	Not required	20.50	Not required		
			56	5280		17.50						17.50		20.50	
			60	5300		17.50						17.50		20.50	
			64	5320		17.50						17.50		20.50	
	802.11n-HT40 MCS0		54	5270	Not required	17.00	Not required	Not required	Not required	Not required	Not required	20.00	Not required		
			62	5310		17.00						17.00		20.00	
	802.11ac-VHT20 MCS0		52	5260	Not required	17.50	Not required	Not required	Not required	Not required	Not required	20.50	Not required		
			56	5280		17.50						17.50		20.50	
			60	5300		17.50						17.50		20.50	
			64	5320		17.50						17.50		20.50	
	802.11ac-VHT40 MCS0		54	5270	Not required	16.50	Not required	Not required	Not required	Not required	Not required	19.50	Not required		
			62	5310		16.50						16.50		19.50	
802.11ac-VHT80 MCS0		58	5290	Not required	16.50	Not required	Not required	Not required	Not required	19.50	Not required				



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	Not required	17.50	Not required	17.50	Not required	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	
	802.11n-HT40 MCS0	102	5510	Not required	17.00	Not required	17.00	Not required	Not required	Not required	20.00	Not required
		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	17.50	Not required	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	
	802.11ac-VHT40 MCS0	102	5510	Not required	16.00	Not required	16.00	Not required	Not required	Not required	19.00	Not required
110		5550	16.00		16.00		19.00					
126		5630	16.00		16.00		19.00					
134		5670	16.00		16.00		19.00					
802.11ac-VHT80 MCS0	106	5530	Not required	16.50	Not required	16.50	Not required	Not required	Not required	19.50	Not required	
	110	5550		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	Not required	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	Not required	17.00	Not required	17.00	Not required	Not required	Not required	20.00	Not required
		159	5795		17.00		17.00				20.00	
	802.11ac-VHT20 MCS0	149	5745	Not required	17.50	Not required	17.50	Not required	Not required	Not required	20.50	Not required
		157	5785		17.50		17.50				20.50	
		165	5825		17.50		17.50				20.50	
	802.11ac-VHT40 MCS0	151	5755	Not required	16.50	Not required	16.50	Not required	Not required	Not required	19.50	Not required
		159	5795		16.50		16.50				19.50	
802.11ac-VHT80 MCS0	155	5775	Not required	16.50	Not required	16.50	Not required	Not required	Not required	19.50	Not required	



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	Not required	14.50	Not required	Not required	17.50	Not required
		6	2437		14.50			17.50				
		11	2462		14.50			17.50				
	802.11n-HT20 MCS0	1	2412	Not required	14.50	Not required	Not required	14.50	Not required	Not required	17.50	Not required
		6	2437		14.50			17.50				
		11	2462		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	Not required	11.50	Not required	Not required	14.50	Not required						
		40	5200		11.50			14.50										
		44	5220		11.50			14.50										
		48	5240		11.50			14.50										
	802.11n-HT20 MCS0	36	5180		11.50			14.50										
		40	5200		11.50			14.50										
		44	5220		11.50			14.50										
		48	5240		11.50			14.50										
	802.11n-HT40 MCS0	38	5190		11.50			14.50										
		46	5230		11.50			14.50										
	802.11ac-VHT20 MCS0	36	5180		11.50			14.50										
		40	5200		11.50			14.50										
		44	5220		11.50			14.50										
	802.11ac-VHT40 MCS0	38	5190		11.50			14.50										
		46	5230		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	Not required	10.00	Not required	Not required	13.00	Not required						
		56	5280		10.00			13.00										
		60	5300		10.00			13.00										
		64	5320		10.00			13.00										
	802.11n-HT20 MCS0	52	5260		10.00			13.00										
		56	5280		10.00			13.00										
		60	5300		10.00			13.00										
		64	5320		10.00			13.00										
	802.11n-HT40 MCS0	54	5270		10.00			13.00										
		62	5310		10.00			13.00										
	802.11ac-VHT20 MCS0	52	5260		10.00			13.00										
		56	5280		10.00			13.00										
		60	5300		10.00			13.00										
	802.11ac-VHT40 MCS0	54	5270		10.00			13.00										
		62	5310		10.00			13.00										
	802.11ac-VHT80 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									
		116	5580									16.50								
		124	5620									16.50								
		132	5660									16.50								
		144	5720									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	Not required	13.50	Not required	Not required	16.50									
		157	5785									16.50								
		165	5825									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							
	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