

ANT 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.10	32.25	32.02	33.50	23.10	23.25	23.02	24.50
GPRS 1 Tx slot	32.18	32.28	32.15	33.50	23.18	23.28	23.15	24.50
GPRS 2 Tx slots	31.20	31.18	30.87	32.50	25.20	25.18	24.87	26.50
GPRS 3 Tx slots	28.97	29.28	28.98	30.50	24.71	25.02	24.72	26.24
GPRS 4 Tx slots	27.94	27.99	28.06	29.50	24.94	24.99	25.06	26.50
EDGE 1 Tx slot	25.98	26.19	25.98	27.50	16.98	17.19	16.98	18.50
EDGE 2 Tx slot	25.60	25.76	25.54	27.00	19.60	19.76	19.54	21.00
EDGE 3 Tx slots	23.63	23.68	23.65	25.00	19.37	19.42	19.39	20.74
EDGE 4 Tx slots	21.88	21.83	21.92	23.00	18.88	18.83	18.92	20.00

ANT 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.19	29.21	29.08	30.50	20.19	20.21	20.08	21.50
GPRS 1 Tx slot	29.44	29.44	29.43	30.50	20.44	20.44	20.43	21.50
GPRS 2 Tx slots	28.58	28.71	28.64	29.70	22.58	22.71	22.64	23.70
GPRS 3 Tx slots	26.80	26.82	27.18	28.00	22.54	22.56	22.92	23.74
GPRS 4 Tx slots	25.72	25.65	25.20	27.00	22.72	22.65	22.20	24.00
EDGE 1 Tx slot	25.41	25.62	25.41	26.50	16.41	16.62	16.41	17.50
EDGE 2 Tx slots	24.95	25.11	24.60	26.00	18.95	19.11	18.60	20.00
EDGE 3 Tx slots	24.02	24.10	23.41	25.00	19.76	19.84	19.15	20.74
EDGE 4 Tx slots	23.05	22.99	22.67	24.00	20.05	19.99	19.67	21.00

ANT 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.25	32.38	32.23	33.50	23.25	23.38	23.23	24.50
GPRS 1 Tx slot	32.28	32.45	32.23	33.50	23.28	23.45	23.23	24.50
GPRS 2 Tx slots	31.35	31.44	31.11	32.50	25.35	25.44	25.11	26.50
GPRS 3 Tx slots	29.24	29.26	29.00	30.50	24.98	25.00	24.74	26.24
GPRS 4 Tx slots	28.28	27.81	27.52	29.50	25.28	24.81	24.52	26.50
EDGE 1 Tx slot	26.24	26.35	26.25	27.50	17.24	17.35	17.25	18.50
EDGE 2 Tx slots	25.55	25.78	25.75	27.00	19.55	19.78	19.75	21.00
EDGE 3 Tx slots	23.66	23.94	23.74	25.00	19.40	19.68	19.48	20.74
EDGE 4 Tx slots	21.79	22.05	21.77	23.00	18.79	19.05	18.77	20.00

ANT 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.91	29.20	28.75	30.00	19.91	20.20	19.75	21.00
GPRS 1 Tx slot	29.00	29.20	28.78	30.00	20.00	20.20	19.78	21.00
GPRS 2 Tx slots	28.15	28.23	28.06	29.20	22.15	22.23	22.06	23.20
GPRS 3 Tx slots	26.75	26.67	26.47	27.50	22.49	22.41	22.21	23.24
GPRS 4 Tx slots	25.23	25.39	24.55	26.50	22.23	22.39	21.55	23.50
EDGE 1 Tx slot	25.47	25.38	24.94	26.00	16.47	16.38	15.94	17.00
EDGE 2 Tx slots	24.64	24.61	24.18	25.50	18.64	18.61	18.18	19.50
EDGE 3 Tx slots	23.67	23.39	22.85	24.50	19.41	19.13	18.59	20.24
EDGE 4 Tx slots	22.47	22.30	21.50	23.50	19.47	19.30	18.50	20.50

ANT 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.10	32.25	32.02	33.50	23.10	23.25	23.02	24.50
GPRS 1 Tx slot	32.18	32.28	32.15	33.50	23.18	23.28	23.15	24.50
GPRS 2 Tx slots	31.20	31.18	30.87	32.50	25.20	25.18	24.87	26.50
GPRS 3 Tx slots	28.97	29.28	28.98	30.50	24.71	25.02	24.72	26.24
GPRS 4 Tx slots	27.94	27.99	28.06	29.50	24.94	24.99	25.06	26.50
EDGE 1 Tx slot	25.98	26.19	25.98	27.50	16.98	17.19	16.98	18.50
EDGE 2 Tx slots	25.60	25.76	25.54	27.00	19.60	19.76	19.54	21.00
EDGE 3 Tx slots	23.63	23.68	23.65	25.00	19.37	19.42	19.39	20.74
EDGE 4 Tx slots	21.88	21.83	21.92	23.00	18.88	18.83	18.92	20.00

ANT 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.19	29.21	29.08	30.50	20.19	20.21	20.08	21.50
GPRS 1 Tx slot	29.44	29.44	29.43	30.50	20.44	20.44	20.43	21.50
GPRS 2 Tx slots	28.58	28.71	28.64	29.70	22.58	22.71	22.64	23.70
GPRS 3 Tx slots	26.80	26.82	27.18	28.00	22.54	22.56	22.92	23.74
GPRS 4 Tx slots	25.72	25.65	25.20	27.00	22.72	22.65	22.20	24.00
EDGE 1 Tx slot	25.41	25.62	25.41	26.50	16.41	16.62	16.41	17.50
EDGE 2 Tx slots	24.95	25.11	24.60	26.00	18.95	19.11	18.60	20.00
EDGE 3 Tx slots	24.02	24.10	23.41	25.00	19.76	19.84	19.15	20.74
EDGE 4 Tx slots	23.05	22.99	22.67	24.00	20.05	19.99	19.67	21.00

ANT 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.08	32.20	31.50	33.50	23.08	23.20	22.50	24.50
GPRS 1 Tx slot	32.09	32.22	32.30	33.50	23.09	23.22	23.30	24.50
GPRS 2 Tx slots	29.75	29.60	29.49	31.00	23.75	23.60	23.49	25.00
GPRS 3 Tx slots	27.90	27.84	27.64	29.00	23.64	23.58	23.38	24.74
GPRS 4 Tx slots	26.16	26.21	26.03	28.00	23.16	23.21	23.03	25.00
EDGE 1 Tx slot	26.15	26.23	26.10	27.50	17.15	17.23	17.10	18.50
EDGE 2 Tx slots	25.56	25.79	25.62	27.00	19.56	19.79	19.62	21.00
EDGE 3 Tx slots	23.81	23.90	23.81	25.00	19.55	19.64	19.55	20.74
EDGE 4 Tx slots	21.69	21.78	21.59	23.00	18.69	18.78	18.59	20.00

ANT 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.91	29.20	28.75	30.00	19.91	20.20	19.75	21.00
GPRS 1 Tx slot	29.00	29.20	28.78	30.00	20.00	20.20	19.78	21.00
GPRS 2 Tx slots	28.15	28.23	28.06	29.20	22.15	22.23	22.06	23.20
GPRS 3 Tx slots	26.75	26.67	26.47	27.50	22.49	22.41	22.21	23.24
GPRS 4 Tx slots	25.23	25.39	24.55	26.50	22.23	22.39	21.55	23.50
EDGE 1 Tx slot	25.47	25.38	24.94	26.00	16.47	16.38	15.94	17.00
EDGE 2 Tx slots	24.64	24.61	24.18	25.50	18.64	18.61	18.18	19.50
EDGE 3 Tx slots	23.67	23.39	22.85	24.50	19.41	19.13	18.59	20.24
EDGE 4 Tx slots	22.47	22.30	21.50	23.50	19.47	19.30	18.50	20.50

ANT 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.10	32.25	32.02	33.50	23.10	23.25	23.02	24.50
GPRS 1 Tx slot	32.18	32.28	32.15	33.50	23.18	23.28	23.15	24.50
GPRS 2 Tx slots	31.20	31.18	30.87	32.50	25.20	25.18	24.87	26.50
GPRS 3 Tx slots	28.97	29.28	28.98	30.50	24.71	25.02	24.72	26.24
GPRS 4 Tx slots	27.94	27.99	28.06	29.50	24.94	24.99	25.06	26.50
EDGE 1 Tx slot	25.98	26.19	25.98	27.50	16.98	17.19	16.98	18.50
EDGE 2 Tx slot	25.60	25.76	25.54	27.00	19.60	19.76	19.54	21.00
EDGE 3 Tx slots	23.63	23.68	23.65	25.00	19.37	19.42	19.39	20.74
EDGE 4 Tx slots	21.88	21.83	21.92	23.00	18.88	18.83	18.92	20.00

ANT 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.19	29.21	29.08	30.50	20.19	20.21	20.08	21.50
GPRS 1 Tx slot	29.44	29.44	29.43	30.50	20.44	20.44	20.43	21.50
GPRS 2 Tx slots	28.58	28.71	28.64	29.70	22.58	22.71	22.64	23.70
GPRS 3 Tx slots	26.80	26.82	27.18	28.00	22.54	22.56	22.92	23.74
GPRS 4 Tx slots	25.72	25.65	25.20	27.00	22.72	22.65	22.20	24.00
EDGE 1 Tx slot	25.41	25.62	25.41	26.50	16.41	16.62	16.41	17.50
EDGE 2 Tx slots	24.95	25.11	24.60	26.00	18.95	19.11	18.60	20.00
EDGE 3 Tx slots	24.02	24.10	23.41	25.00	19.76	19.84	19.15	20.74
EDGE 4 Tx slots	23.05	22.99	22.67	24.00	20.05	19.99	19.67	21.00

ANT 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.25	32.38	32.23	33.50	23.25	23.38	23.23	24.50
GPRS 1 Tx slot	32.28	32.45	32.23	33.50	23.28	23.45	23.23	24.50
GPRS 2 Tx slots	31.35	31.44	31.11	32.50	25.35	25.44	25.11	26.50
GPRS 3 Tx slots	29.24	29.26	29.00	30.50	24.98	25.00	24.74	26.24
GPRS 4 Tx slots	28.28	27.81	27.52	29.50	25.28	24.81	24.52	26.50
EDGE 1 Tx slot	26.24	26.35	26.25	27.50	17.24	17.35	17.25	18.50
EDGE 2 Tx slots	25.55	25.78	25.75	27.00	19.55	19.78	19.75	21.00
EDGE 3 Tx slots	23.66	23.94	23.74	25.00	19.40	19.68	19.48	20.74
EDGE 4 Tx slots	21.79	22.05	21.77	23.00	18.79	19.05	18.77	20.00

ANT 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.90	28.11	27.72	29.20	18.90	19.11	18.72	20.20
GPRS 1 Tx slot	27.92	28.12	27.75	29.20	18.92	19.12	18.75	20.20
GPRS 2 Tx slots	24.76	24.84	24.61	26.20	18.76	18.84	18.61	20.20
GPRS 3 Tx slots	23.09	23.11	22.66	24.40	18.83	18.85	18.40	20.14
GPRS 4 Tx slots	21.81	21.82	21.65	23.20	18.81	18.82	18.65	20.20
EDGE 1 Tx slot	25.33	25.18	24.78	26.00	16.33	16.18	15.78	17.00
EDGE 2 Tx slots	24.49	24.61	24.21	25.50	18.49	18.61	18.21	19.50
EDGE 3 Tx slots	22.38	22.96	22.14	24.10	18.12	18.70	17.88	19.84
EDGE 4 Tx slots	21.59	21.85	20.40	22.40	18.59	18.85	17.40	19.40

ANT 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.10	32.25	32.02	33.50	23.10	23.25	23.02	24.50
GPRS 1 Tx slot	32.18	32.28	32.15	33.50	23.18	23.28	23.15	24.50
GPRS 2 Tx slots	31.20	31.18	30.87	32.50	25.20	25.18	24.87	26.50
GPRS 3 Tx slots	28.97	29.28	28.98	30.50	24.71	25.02	24.72	26.24
GPRS 4 Tx slots	27.94	27.99	28.06	29.50	24.94	24.99	25.06	26.50
EDGE 1 Tx slot	25.98	26.19	25.98	27.50	16.98	17.19	16.98	18.50
EDGE 2 Tx slot	25.60	25.76	25.54	27.00	19.60	19.76	19.54	21.00
EDGE 3 Tx slots	23.63	23.68	23.65	25.00	19.37	19.42	19.39	20.74
EDGE 4 Tx slots	21.88	21.83	21.92	23.00	18.88	18.83	18.92	20.00

ANT 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.19	29.21	29.08	30.50	20.19	20.21	20.08	21.50
GPRS 1 Tx slot	29.44	29.44	29.43	30.50	20.44	20.44	20.43	21.50
GPRS 2 Tx slots	28.58	28.71	28.64	29.70	22.58	22.71	22.64	23.70
GPRS 3 Tx slots	26.80	26.82	27.18	28.00	22.54	22.56	22.92	23.74
GPRS 4 Tx slots	25.72	25.65	25.20	27.00	22.72	22.65	22.20	24.00
EDGE 1 Tx slot	25.41	25.62	25.41	26.50	16.41	16.62	16.41	17.50
EDGE 2 Tx slots	24.95	25.11	24.60	26.00	18.95	19.11	18.60	20.00
EDGE 3 Tx slots	24.02	24.10	23.41	25.00	19.76	19.84	19.15	20.74
EDGE 4 Tx slots	23.05	22.99	22.67	24.00	20.05	19.99	19.67	21.00

ANT 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.25	32.38	32.23	33.50	23.25	23.38	23.23	24.50
GPRS 1 Tx slot	32.28	32.45	32.23	33.50	23.28	23.45	23.23	24.50
GPRS 2 Tx slots	31.35	31.44	31.11	32.50	25.35	25.44	25.11	26.50
GPRS 3 Tx slots	29.24	29.26	29.00	30.50	24.98	25.00	24.74	26.24
GPRS 4 Tx slots	28.28	27.81	27.52	29.50	25.28	24.81	24.52	26.50
EDGE 1 Tx slot	26.24	26.35	26.25	27.50	17.24	17.35	17.25	18.50
EDGE 2 Tx slots	25.55	25.78	25.75	27.00	19.55	19.78	19.75	21.00
EDGE 3 Tx slots	23.66	23.94	23.74	25.00	19.40	19.68	19.48	20.74
EDGE 4 Tx slots	21.79	22.05	21.77	23.00	18.79	19.05	18.77	20.00

ANT 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.11	27.23	26.96	28.40	18.11	18.23	17.96	19.40
GPRS 1 Tx slot	27.16	27.31	26.96	28.40	18.16	18.31	17.96	19.40
GPRS 2 Tx slots	24.05	24.24	23.76	25.40	18.05	18.24	17.76	19.40
GPRS 3 Tx slots	22.27	22.30	21.97	23.60	18.01	18.04	17.71	19.34
GPRS 4 Tx slots	21.12	21.19	21.05	22.40	18.12	18.19	18.05	19.40
EDGE 1 Tx slot	25.29	25.29	24.92	26.00	16.29	16.29	15.92	17.00
EDGE 2 Tx slots	23.95	24.05	23.54	25.30	17.95	18.05	17.54	19.30
EDGE 3 Tx slots	22.25	22.12	21.73	23.50	17.99	17.86	17.47	19.24
EDGE 4 Tx slots	20.65	20.80	19.74	21.70	17.65	17.80	16.74	18.70

ANT 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.10	32.25	32.02	33.50	23.10	23.25	23.02	24.50
GPRS 1 Tx slot	32.18	32.28	32.15	33.50	23.18	23.28	23.15	24.50
GPRS 2 Tx slots	31.20	31.18	30.87	32.50	25.20	25.18	24.87	26.50
GPRS 3 Tx slots	28.97	29.28	28.98	30.50	24.71	25.02	24.72	26.24
GPRS 4 Tx slots	27.94	27.99	28.06	29.50	24.94	24.99	25.06	26.50
EDGE 1 Tx slot	25.98	26.19	25.98	27.50	16.98	17.19	16.98	18.50
EDGE 2 Tx slot	25.60	25.76	25.54	27.00	19.60	19.76	19.54	21.00
EDGE 3 Tx slots	23.63	23.68	23.65	25.00	19.37	19.42	19.39	20.74
EDGE 4 Tx slots	21.88	21.83	21.92	23.00	18.88	18.83	18.92	20.00

ANT 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.19	29.21	29.08	30.50	20.19	20.21	20.08	21.50
GPRS 1 Tx slot	29.44	29.44	29.43	30.50	20.44	20.44	20.43	21.50
GPRS 2 Tx slots	28.58	28.71	28.64	29.70	22.58	22.71	22.64	23.70
GPRS 3 Tx slots	26.80	26.82	27.18	28.00	22.54	22.56	22.92	23.74
GPRS 4 Tx slots	25.72	25.65	25.20	27.00	22.72	22.65	22.20	24.00
EDGE 1 Tx slot	25.41	25.62	25.41	26.50	16.41	16.62	16.41	17.50
EDGE 2 Tx slots	24.95	25.11	24.60	26.00	18.95	19.11	18.60	20.00
EDGE 3 Tx slots	24.02	24.10	23.41	25.00	19.76	19.84	19.15	20.74
EDGE 4 Tx slots	23.05	22.99	22.67	24.00	20.05	19.99	19.67	21.00

ANT 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.88	32.06	31.81	33.00	22.88	23.06	22.81	24.00
GPRS 1 Tx slot	31.90	32.09	31.85	33.00	22.90	23.09	22.85	24.00
GPRS 2 Tx slots	28.79	28.90	28.65	30.00	22.79	22.90	22.65	24.00
GPRS 3 Tx slots	26.99	26.94	26.85	28.30	22.73	22.68	22.59	24.04
GPRS 4 Tx slots	25.86	25.68	25.49	27.20	22.86	22.68	22.49	24.20
EDGE 1 Tx slot	26.21	26.23	26.01	27.50	17.21	17.23	17.01	18.50
EDGE 2 Tx slots	25.46	25.71	25.53	27.00	19.46	19.71	19.53	21.00
EDGE 3 Tx slots	23.78	23.87	23.69	25.00	19.52	19.61	19.43	20.74
EDGE 4 Tx slots	21.71	21.89	21.66	23.00	18.71	18.89	18.66	20.00

ANT 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.91	29.20	28.75	30.00	19.91	20.20	19.75	21.00
GPRS 1 Tx slot	29.00	29.20	28.78	30.00	20.00	20.20	19.78	21.00
GPRS 2 Tx slots	28.15	28.23	28.06	29.20	22.15	22.23	22.06	23.20
GPRS 3 Tx slots	26.75	26.67	26.47	27.50	22.49	22.41	22.21	23.24
GPRS 4 Tx slots	25.23	25.39	24.55	26.50	22.23	22.39	21.55	23.50
EDGE 1 Tx slot	25.47	25.38	24.94	26.00	16.47	16.38	15.94	17.00
EDGE 2 Tx slots	24.64	24.61	24.18	25.50	18.64	18.61	18.18	19.50
EDGE 3 Tx slots	23.67	23.39	22.85	24.50	19.41	19.13	18.59	20.24
EDGE 4 Tx slots	22.47	22.30	21.50	23.50	19.47	19.30	18.50	20.50

ANT 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.10	32.25	32.02	33.50	23.10	23.25	23.02	24.50
GPRS 1 Tx slot	32.18	32.28	32.15	33.50	23.18	23.28	23.15	24.50
GPRS 2 Tx slots	31.20	31.18	30.87	32.50	25.20	25.18	24.87	26.50
GPRS 3 Tx slots	28.97	29.28	28.98	30.50	24.71	25.02	24.72	26.24
GPRS 4 Tx slots	27.94	27.99	28.06	29.50	24.94	24.99	25.06	26.50
EDGE 1 Tx slot	25.98	26.19	25.98	27.50	16.98	17.19	16.98	18.50
EDGE 2 Tx slot	25.60	25.76	25.54	27.00	19.60	19.76	19.54	21.00
EDGE 3 Tx slots	23.63	23.68	23.65	25.00	19.37	19.42	19.39	20.74
EDGE 4 Tx slots	21.88	21.83	21.92	23.00	18.88	18.83	18.92	20.00

ANT 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.19	29.21	29.08	30.50	20.19	20.21	20.08	21.50
GPRS 1 Tx slot	29.44	29.44	29.43	30.50	20.44	20.44	20.43	21.50
GPRS 2 Tx slots	28.58	28.71	28.64	29.70	22.58	22.71	22.64	23.70
GPRS 3 Tx slots	26.80	26.82	27.18	28.00	22.54	22.56	22.92	23.74
GPRS 4 Tx slots	25.72	25.65	25.20	27.00	22.72	22.65	22.20	24.00
EDGE 1 Tx slot	25.41	25.62	25.41	26.50	16.41	16.62	16.41	17.50
EDGE 2 Tx slots	24.95	25.11	24.60	26.00	18.95	19.11	18.60	20.00
EDGE 3 Tx slots	24.02	24.10	23.41	25.00	19.76	19.84	19.15	20.74
EDGE 4 Tx slots	23.05	22.99	22.67	24.00	20.05	19.99	19.67	21.00

ANT 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.25	32.38	32.23	33.50	23.25	23.38	23.23	24.50
GPRS 1 Tx slot	32.28	32.45	32.23	33.50	23.28	23.45	23.23	24.50
GPRS 2 Tx slots	31.35	31.44	31.11	32.50	25.35	25.44	25.11	26.50
GPRS 3 Tx slots	29.24	29.26	29.00	30.50	24.98	25.00	24.74	26.24
GPRS 4 Tx slots	28.28	27.81	27.52	29.50	25.28	24.81	24.52	26.50
EDGE 1 Tx slot	26.24	26.35	26.25	27.50	17.24	17.35	17.25	18.50
EDGE 2 Tx slots	25.55	25.78	25.75	27.00	19.55	19.78	19.75	21.00
EDGE 3 Tx slots	23.66	23.94	23.74	25.00	19.40	19.68	19.48	20.74
EDGE 4 Tx slots	21.79	22.05	21.77	23.00	18.79	19.05	18.77	20.00

ANT 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.11	27.23	26.96	28.40	18.11	18.23	17.96	19.40
GPRS 1 Tx slot	27.16	27.31	26.96	28.40	18.16	18.31	17.96	19.40
GPRS 2 Tx slots	24.05	24.24	23.76	25.40	18.05	18.24	17.76	19.40
GPRS 3 Tx slots	22.27	22.30	21.97	23.60	18.01	18.04	17.71	19.34
GPRS 4 Tx slots	21.12	21.19	21.05	22.40	18.12	18.19	18.05	19.40
EDGE 1 Tx slot	25.29	25.29	24.92	26.00	16.29	16.29	15.92	17.00
EDGE 2 Tx slots	23.95	24.05	23.54	25.30	17.95	18.05	17.54	19.30
EDGE 3 Tx slots	22.25	22.12	21.73	23.50	17.99	17.86	17.47	19.24
EDGE 4 Tx slots	20.65	20.80	19.74	21.70	17.65	17.80	16.74	18.70

	Ant 2					Ant 2			Ant 0				
Band	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)	
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233		
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458		
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6		
3GPP Rel 99	AMR 12.2Kbps	24.33	24.38	24.23	25.70	23.96	24.02	23.98	25.70	23.98	24.06	24.04	25.00
3GPP Rel 99	RMC 12.2Kbps	24.36	24.43	24.26	25.70	24.02	24.06	23.99	25.70	24.03	24.08	24.05	25.00
3GPP Rel 6	HSDPA Subtest-1	23.40	23.45	23.35	24.70	23.13	23.18	23.12	24.70	23.15	23.18	23.23	24.00
3GPP Rel 6	HSDPA Subtest-2	23.44	23.45	23.31	24.70	23.10	23.16	23.03	24.70	23.12	23.20	23.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.98	22.97	22.77	24.20	22.58	22.64	22.54	24.20	22.70	22.69	22.66	23.50
3GPP Rel 6	HSDPA Subtest-4	22.96	22.88	22.84	24.20	22.60	22.69	22.55	24.20	22.58	22.72	22.69	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.28	23.37	23.26	24.70	23.02	23.08	23.02	24.70	23.06	23.13	23.17	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.45	23.42	23.26	24.70	23.13	23.13	23.00	24.70	23.14	23.08	23.09	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.84	22.91	22.72	24.20	22.53	22.69	22.55	24.20	22.63	22.71	22.70	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.89	22.86	22.70	24.20	22.44	22.67	22.44	24.20	22.58	22.65	22.60	23.50
3GPP Rel 6	HSUPA Subtest-1	23.60	24.02	23.91	24.70	23.00	23.12	23.07	24.70	23.16	23.20	23.08	24.00
3GPP Rel 6	HSUPA Subtest-2	21.58	21.61	21.51	22.70	20.72	20.78	20.84	22.70	21.13	21.18	21.16	22.00
3GPP Rel 6	HSUPA Subtest-3	22.62	22.68	22.56	23.70	21.77	21.79	21.80	23.70	22.11	22.19	22.19	23.00
3GPP Rel 6	HSUPA Subtest-4	21.62	21.64	21.57	22.70	20.73	20.91	20.82	22.70	21.16	21.13	21.15	22.00
3GPP Rel 6	HSUPA Subtest-5	23.61	23.68	23.60	24.70	22.83	22.81	22.80	24.70	23.06	23.16	23.22	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.42	24.39	24.26	25.70	24.19	24.11	24.13	25.70	23.72	23.67	23.74	25.00
3GPP Rel 99	RMC 12.2Kbps	24.39	24.45	24.31	25.70	24.23	24.14	24.16	25.70	23.74	23.69	23.71	25.00
3GPP Rel 6	HSDPA Subtest-1	23.09	23.51	23.42	24.70	23.34	23.37	23.40	24.70	22.87	22.90	22.86	24.00
3GPP Rel 6	HSDPA Subtest-2	23.08	23.51	23.42	24.70	23.37	23.38	23.39	24.70	22.87	22.88	22.85	24.00
3GPP Rel 6	HSDPA Subtest-3	22.58	23.02	22.92	24.20	22.92	22.49	22.85	24.20	22.39	22.44	22.40	23.50
3GPP Rel 6	HSDPA Subtest-4	22.65	23.10	22.86	24.20	22.85	22.86	22.93	24.20	22.35	22.35	22.36	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.04	23.49	23.33	24.70	23.27	23.39	23.38	24.70	22.84	22.86	22.83	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.03	23.43	23.31	24.70	23.24	23.33	23.30	24.70	22.78	22.80	22.82	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.50	22.86	22.86	24.20	22.91	22.51	22.78	24.20	22.32	22.39	22.31	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.52	23.00	22.80	24.20	22.77	22.73	22.86	24.20	22.35	22.30	22.29	23.50
3GPP Rel 6	HSUPA Subtest-1	23.18	23.45	23.37	24.70	23.39	23.34	23.30	24.70	22.87	22.82	22.85	24.00
3GPP Rel 6	HSUPA Subtest-2	21.12	21.07	21.02	22.70	21.07	21.07	21.08	22.70	20.86	20.91	20.85	22.00
3GPP Rel 6	HSUPA Subtest-3	22.07	22.11	22.04	23.70	22.02	22.05	22.12	23.70	21.89	21.87	21.80	23.00
3GPP Rel 6	HSUPA Subtest-4	21.16	21.17	21.00	22.70	21.05	21.09	21.10	22.70	20.78	20.95	20.82	22.00
3GPP Rel 6	HSUPA Subtest-5	23.22	23.05	23.03	24.70	23.09	23.05	23.12	24.70	22.93	22.89	22.81	24.00

Band	Ant 2				Ant 2				Ant 0			
	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	24.18	24.24	24.14	25.70	23.96	24.02	23.98	25.70	23.98	24.06	24.04	25.00
3GPP Rel 99 RMC 12.2Kbps	24.20	24.27	24.15	25.70	24.02	24.06	23.99	25.70	24.03	24.08	24.05	25.00
3GPP Rel 6 HSDPA Subtest-1	23.07	23.28	23.19	24.70	23.13	23.18	23.12	24.70	23.15	23.18	23.23	24.00
3GPP Rel 6 HSDPA Subtest-2	23.04	23.29	23.20	24.70	23.10	23.16	23.03	24.70	23.12	23.20	23.08	24.00
3GPP Rel 6 HSDPA Subtest-3	22.60	22.81	22.70	24.20	22.58	22.64	22.54	24.20	22.70	22.69	22.66	23.50
3GPP Rel 6 HSDPA Subtest-4	22.59	22.80	22.69	24.20	22.60	22.69	22.55	24.20	22.58	22.72	22.69	23.50
3GPP Rel 8 DC-HSDPA Subtest-1	23.04	23.24	23.19	24.70	23.02	23.08	23.02	24.70	23.06	23.13	23.17	24.00
3GPP Rel 8 DC-HSDPA Subtest-2	22.95	23.28	23.12	24.70	23.13	23.13	23.00	24.70	23.14	23.08	23.09	24.00
3GPP Rel 8 DC-HSDPA Subtest-3	22.59	22.76	22.62	24.20	22.53	22.69	22.55	24.20	22.63	22.71	22.70	23.50
3GPP Rel 8 DC-HSDPA Subtest-4	22.59	22.78	22.60	24.20	22.44	22.67	22.44	24.20	22.58	22.65	22.60	23.50
3GPP Rel 6 HSUPA Subtest-1	23.05	23.31	23.17	24.70	23.00	23.12	23.07	24.70	23.16	23.20	23.08	24.00
3GPP Rel 6 HSUPA Subtest-2	21.07	21.29	21.18	22.70	20.72	20.78	20.84	22.70	21.13	21.18	21.16	22.00
3GPP Rel 6 HSUPA Subtest-3	22.14	22.24	22.19	23.70	21.77	21.79	21.80	23.70	22.11	22.19	22.19	23.00
3GPP Rel 6 HSUPA Subtest-4	21.11	21.25	21.23	22.70	20.73	20.91	20.82	22.70	21.16	21.13	21.15	22.00
3GPP Rel 6 HSUPA Subtest-5	23.10	23.30	23.20	24.70	22.83	22.81	22.80	24.70	23.06	23.16	23.22	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.42	24.39	24.26	25.70	24.19	24.11	24.13	25.70	24.06	24.03	24.05	25.00
3GPP Rel 99	RMC 12.2Kbps	24.39	24.45	24.31	25.70	24.23	24.14	24.16	25.70	24.09	24.05	24.08	25.00
3GPP Rel 6	HSDPA Subtest-1	23.09	23.51	23.42	24.70	23.34	23.37	23.40	24.70	22.87	22.90	22.86	24.00
3GPP Rel 6	HSDPA Subtest-2	23.08	23.51	23.42	24.70	23.37	23.38	23.39	24.70	22.87	22.88	22.85	24.00
3GPP Rel 6	HSDPA Subtest-3	22.58	23.02	22.92	24.20	22.92	22.49	22.85	24.20	22.39	22.44	22.40	23.50
3GPP Rel 6	HSDPA Subtest-4	22.65	23.10	22.86	24.20	22.85	22.86	22.93	24.20	22.35	22.35	22.36	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.04	23.49	23.33	24.70	23.27	23.39	23.38	24.70	22.84	22.86	22.83	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.03	23.43	23.31	24.70	23.24	23.33	23.30	24.70	22.78	22.80	22.82	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.50	22.86	22.86	24.20	22.91	22.51	22.78	24.20	22.32	22.39	22.31	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.52	23.00	22.80	24.20	22.77	22.73	22.86	24.20	22.35	22.30	22.29	23.50
3GPP Rel 6	HSUPA Subtest-1	23.18	23.45	23.37	24.70	23.39	23.34	23.30	24.70	22.87	22.82	22.85	24.00
3GPP Rel 6	HSUPA Subtest-2	21.12	21.07	21.02	22.70	21.07	21.07	21.08	22.70	20.86	20.91	20.85	22.00
3GPP Rel 6	HSUPA Subtest-3	22.07	22.11	22.04	23.70	22.02	22.05	22.12	23.70	21.89	21.87	21.80	23.00
3GPP Rel 6	HSUPA Subtest-4	21.16	21.17	21.00	22.70	21.05	21.09	21.10	22.70	20.78	20.95	20.82	22.00
3GPP Rel 6	HSUPA Subtest-5	23.22	23.05	23.03	24.70	23.09	23.05	23.12	24.70	22.93	22.89	22.81	24.00

Band	Ant 2				Ant 2				Ant 0			
	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	23.33	23.50	23.38	25.30	23.98	23.97	23.96	25.70	23.98	24.06	24.04	25.00
3GPP Rel 99 RMC 12.2Kbps	23.35	23.53	23.42	25.30	24.03	24.01	23.99	25.70	24.03	24.08	24.05	25.00
3GPP Rel 6 HSDPA Subtest-1	22.39	22.58	22.46	24.30	22.86	22.83	22.72	24.70	23.15	23.18	23.23	24.00
3GPP Rel 6 HSDPA Subtest-2	22.38	22.59	22.44	24.30	22.85	22.81	22.76	24.70	23.12	23.20	23.08	24.00
3GPP Rel 6 HSDPA Subtest-3	21.89	22.11	21.95	23.80	22.38	22.33	22.34	24.20	22.70	22.69	22.66	23.50
3GPP Rel 6 HSDPA Subtest-4	21.90	22.09	22.00	23.80	22.33	22.33	22.28	24.20	22.58	22.72	22.69	23.50
3GPP Rel 8 DC-HSDPA Subtest-1	22.31	22.58	22.38	24.30	22.82	22.81	22.70	24.70	23.06	23.13	23.17	24.00
3GPP Rel 8 DC-HSDPA Subtest-2	22.30	22.57	22.42	24.30	22.77	22.72	22.71	24.70	23.14	23.08	23.09	24.00
3GPP Rel 8 DC-HSDPA Subtest-3	21.88	22.08	21.85	23.80	22.28	22.33	22.33	24.20	22.63	22.71	22.70	23.50
3GPP Rel 8 DC-HSDPA Subtest-4	21.87	22.00	21.92	23.80	22.23	22.33	22.21	24.20	22.58	22.65	22.60	23.50
3GPP Rel 6 HSUPA Subtest-1	22.43	22.57	22.50	24.30	22.88	22.75	22.76	24.70	23.16	23.20	23.08	24.00
3GPP Rel 6 HSUPA Subtest-2	20.38	20.53	20.46	22.30	20.84	20.73	20.71	22.70	21.13	21.18	21.16	22.00
3GPP Rel 6 HSUPA Subtest-3	21.33	21.61	21.45	23.30	21.86	21.78	21.79	23.70	22.11	22.19	22.19	23.00
3GPP Rel 6 HSUPA Subtest-4	20.34	20.52	20.51	22.30	20.87	20.78	20.72	22.70	21.16	21.13	21.15	22.00
3GPP Rel 6 HSUPA Subtest-5	22.40	22.60	22.50	24.30	22.89	22.79	22.79	24.70	23.06	23.16	23.22	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	19.58	19.63	19.46	21.30	19.47	19.37	19.34	20.80	24.06	24.03	24.05	25.00
3GPP Rel 99	RMC 12.2Kbps	19.62	19.65	19.50	21.30	19.49	19.40	19.35	20.80	24.09	24.05	24.08	25.00
3GPP Rel 6	HSDPA Subtest-1	18.67	18.72	18.55	20.30	18.52	18.39	18.38	19.80	22.87	22.90	22.86	24.00
3GPP Rel 6	HSDPA Subtest-2	18.63	18.74	18.55	20.30	18.52	18.40	18.34	19.80	22.87	22.88	22.85	24.00
3GPP Rel 6	HSDPA Subtest-3	18.14	18.23	18.03	19.80	18.01	17.89	17.85	19.30	22.39	22.44	22.40	23.50
3GPP Rel 6	HSDPA Subtest-4	18.12	18.22	17.80	19.80	18.00	17.89	17.84	19.30	22.35	22.35	22.36	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.64	18.69	18.45	20.30	18.42	18.35	18.36	19.80	22.84	22.86	22.83	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.56	18.72	18.54	20.30	18.52	18.32	18.26	19.80	22.78	22.80	22.82	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.08	18.22	17.98	19.80	17.92	17.82	17.75	19.30	22.32	22.39	22.31	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	18.06	18.12	17.80	19.80	18.00	17.86	17.78	19.30	22.35	22.30	22.29	23.50
3GPP Rel 6	HSUPA Subtest-1	18.64	18.73	18.55	20.30	18.08	18.38	18.37	19.80	22.87	22.82	22.85	24.00
3GPP Rel 6	HSUPA Subtest-2	16.63	16.67	16.57	18.30	16.49	16.40	16.37	17.80	20.86	20.91	20.85	22.00
3GPP Rel 6	HSUPA Subtest-3	17.64	17.70	17.58	19.30	17.48	17.41	17.36	18.80	21.89	21.87	21.80	23.00
3GPP Rel 6	HSUPA Subtest-4	16.62	16.75	16.61	18.30	16.50	16.42	16.36	17.80	20.78	20.95	20.82	22.00
3GPP Rel 6	HSUPA Subtest-5	18.60	18.70	18.60	20.30	18.50	18.40	18.40	19.80	22.93	22.89	22.81	24.00

		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.33	23.50	23.38	24.50	23.98	23.97	23.96	25.00	23.98	24.06	24.04	25.00
3GPP Rel 99	RMC 12.2Kbps	23.35	23.53	23.42	24.50	24.03	24.01	23.99	25.00	24.03	24.08	24.05	25.00
3GPP Rel 6	HSDPA Subtest-1	22.39	22.58	22.46	23.50	22.86	22.83	22.72	24.00	23.15	23.18	23.23	24.00
3GPP Rel 6	HSDPA Subtest-2	22.38	22.59	22.44	23.50	22.85	22.81	22.76	24.00	23.12	23.20	23.08	24.00
3GPP Rel 6	HSDPA Subtest-3	21.89	22.11	21.95	23.00	22.38	22.33	22.34	23.50	22.70	22.69	22.66	23.50
3GPP Rel 6	HSDPA Subtest-4	21.90	22.09	22.00	23.00	22.33	22.33	22.28	23.50	22.58	22.72	22.69	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.30	22.58	22.38	23.50	22.82	22.81	22.70	24.00	23.06	23.13	23.17	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.29	22.57	22.42	23.50	22.77	22.72	22.71	24.00	23.14	23.08	23.09	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	21.88	22.08	21.85	23.00	22.28	22.33	22.33	23.50	22.63	22.71	22.70	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.87	22.00	21.92	23.00	22.23	22.33	22.21	23.50	22.58	22.65	22.60	23.50
3GPP Rel 6	HSUPA Subtest-1	22.43	22.57	22.50	23.50	22.88	22.75	22.76	24.00	23.16	23.20	23.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.38	20.53	20.46	21.50	20.84	20.73	20.71	22.00	21.13	21.18	21.16	22.00
3GPP Rel 6	HSUPA Subtest-3	21.33	21.61	21.45	22.50	21.86	21.78	21.79	23.00	22.11	22.19	22.19	23.00
3GPP Rel 6	HSUPA Subtest-4	20.34	20.52	20.51	21.50	20.87	20.78	20.72	22.00	21.16	21.13	21.15	22.00
3GPP Rel 6	HSUPA Subtest-5	22.40	22.60	22.50	23.50	22.89	22.79	22.79	24.00	23.06	23.16	23.22	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	19.58	19.63	19.46	20.50	18.68	18.58	18.50	20.00	24.06	24.03	24.05	25.00
3GPP Rel 99	RMC 12.2Kbps	19.62	19.65	19.50	20.50	18.86	18.79	18.67	20.00	24.09	24.05	24.08	25.00
3GPP Rel 6	HSDPA Subtest-1	18.67	18.72	18.55	19.50	17.72	17.60	17.56	19.00	22.87	22.90	22.86	24.00
3GPP Rel 6	HSDPA Subtest-2	18.63	18.74	18.55	19.50	17.72	17.55	17.55	19.00	22.87	22.88	22.85	24.00
3GPP Rel 6	HSDPA Subtest-3	18.14	18.23	18.03	19.00	17.19	17.05	17.04	18.50	22.39	22.44	22.40	23.50
3GPP Rel 6	HSDPA Subtest-4	18.12	18.22	17.80	19.00	17.20	17.08	17.03	18.50	22.35	22.35	22.36	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.64	18.69	18.45	19.50	17.62	17.54	17.55	19.00	22.84	22.86	22.83	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.56	18.72	18.54	19.50	17.69	17.48	17.51	19.00	22.78	22.80	22.82	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.08	18.22	17.98	19.00	17.11	17.02	17.02	18.50	22.32	22.39	22.31	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	18.06	18.12	17.80	19.00	17.14	17.04	16.99	18.50	22.35	22.30	22.29	23.50
3GPP Rel 6	HSUPA Subtest-1	18.64	18.73	18.55	19.50	17.18	17.59	17.57	19.00	22.87	22.82	22.85	24.00
3GPP Rel 6	HSUPA Subtest-2	16.63	16.67	16.57	17.50	15.69	15.58	15.57	17.00	20.86	20.91	20.85	22.00
3GPP Rel 6	HSUPA Subtest-3	17.64	17.70	17.58	18.50	16.66	16.57	16.57	18.00	21.89	21.87	21.80	23.00
3GPP Rel 6	HSUPA Subtest-4	16.62	16.75	16.61	17.50	15.68	15.60	15.57	17.00	20.78	20.95	20.82	22.00
3GPP Rel 6	HSUPA Subtest-5	18.60	18.70	18.60	19.50	17.70	17.60	17.60	19.00	22.93	22.89	22.81	24.00

Band	Ant 2				Ant 2				Ant 0			
	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	24.18	24.24	24.14	25.70	23.96	24.02	23.98	25.70	23.98	24.06	24.04	25.00
3GPP Rel 99 RMC 12.2Kbps	24.20	24.27	24.15	25.70	24.02	24.06	23.99	25.70	24.03	24.08	24.05	25.00
3GPP Rel 6 HSDPA Subtest-1	23.07	23.28	23.19	24.70	23.13	23.18	23.12	24.70	23.15	23.18	23.23	24.00
3GPP Rel 6 HSDPA Subtest-2	23.04	23.29	23.20	24.70	23.10	23.16	23.03	24.70	23.12	23.20	23.08	24.00
3GPP Rel 6 HSDPA Subtest-3	22.60	22.81	22.70	24.20	22.58	22.64	22.54	24.20	22.70	22.69	22.66	23.50
3GPP Rel 6 HSDPA Subtest-4	22.59	22.80	22.69	24.20	22.60	22.69	22.55	24.20	22.58	22.72	22.69	23.50
3GPP Rel 8 DC-HSDPA Subtest-1	23.04	23.24	23.19	24.70	23.02	23.08	23.02	24.70	23.06	23.13	23.17	24.00
3GPP Rel 8 DC-HSDPA Subtest-2	22.95	23.28	23.12	24.70	23.13	23.13	23.00	24.70	23.14	23.08	23.09	24.00
3GPP Rel 8 DC-HSDPA Subtest-3	22.59	22.76	22.62	24.20	22.53	22.69	22.55	24.20	22.63	22.71	22.70	23.50
3GPP Rel 8 DC-HSDPA Subtest-4	22.59	22.78	22.60	24.20	22.44	22.67	22.44	24.20	22.58	22.65	22.60	23.50
3GPP Rel 6 HSUPA Subtest-1	23.05	23.31	23.17	24.70	23.00	23.12	23.07	24.70	23.16	23.20	23.08	24.00
3GPP Rel 6 HSUPA Subtest-2	21.07	21.29	21.18	22.70	20.72	20.78	20.84	22.70	21.13	21.18	21.16	22.00
3GPP Rel 6 HSUPA Subtest-3	22.14	22.24	22.19	23.70	21.77	21.79	21.80	23.70	22.11	22.19	22.19	23.00
3GPP Rel 6 HSUPA Subtest-4	21.11	21.25	21.23	22.70	20.73	20.91	20.82	22.70	21.16	21.13	21.15	22.00
3GPP Rel 6 HSUPA Subtest-5	23.10	23.30	23.20	24.70	22.83	22.81	22.80	24.70	23.06	23.16	23.22	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.42	24.39	24.26	25.70	24.19	24.11	24.13	25.70	24.06	24.03	24.05	25.00
3GPP Rel 99	RMC 12.2Kbps	24.39	24.45	24.31	25.70	24.23	24.14	24.16	25.70	24.09	24.05	24.08	25.00
3GPP Rel 6	HSDPA Subtest-1	23.09	23.51	23.42	24.70	23.34	23.37	23.40	24.70	22.87	22.90	22.86	24.00
3GPP Rel 6	HSDPA Subtest-2	23.08	23.51	23.42	24.70	23.37	23.38	23.39	24.70	22.87	22.88	22.85	24.00
3GPP Rel 6	HSDPA Subtest-3	22.58	23.02	22.92	24.20	22.92	22.49	22.85	24.20	22.39	22.44	22.40	23.50
3GPP Rel 6	HSDPA Subtest-4	22.65	23.10	22.86	24.20	22.85	22.86	22.93	24.20	22.35	22.35	22.36	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.04	23.49	23.33	24.70	23.27	23.39	23.38	24.70	22.84	22.86	22.83	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.03	23.43	23.31	24.70	23.24	23.33	23.30	24.70	22.78	22.80	22.82	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.50	22.86	22.86	24.20	22.91	22.51	22.78	24.20	22.32	22.39	22.31	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.52	23.00	22.80	24.20	22.77	22.73	22.86	24.20	22.35	22.30	22.29	23.50
3GPP Rel 6	HSUPA Subtest-1	23.18	23.45	23.37	24.70	23.39	23.34	23.30	24.70	22.87	22.82	22.85	24.00
3GPP Rel 6	HSUPA Subtest-2	21.12	21.07	21.02	22.70	21.07	21.07	21.08	22.70	20.86	20.91	20.85	22.00
3GPP Rel 6	HSUPA Subtest-3	22.07	22.11	22.04	23.70	22.02	22.05	22.12	23.70	21.89	21.87	21.80	23.00
3GPP Rel 6	HSUPA Subtest-4	21.16	21.17	21.00	22.70	21.05	21.09	21.10	22.70	20.78	20.95	20.82	22.00
3GPP Rel 6	HSUPA Subtest-5	23.22	23.05	23.03	24.70	23.09	23.05	23.12	24.70	22.93	22.89	22.81	24.00

Band	Ant 2				Ant 2				Ant 0			
	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	23.33	23.50	23.38	24.50	23.98	23.97	23.96	25.00	23.98	24.06	24.04	25.00
3GPP Rel 99 RMC 12.2Kbps	23.35	23.53	23.42	24.50	24.03	24.01	23.99	25.00	24.03	24.08	24.05	25.00
3GPP Rel 6 HSDPA Subtest-1	22.39	22.58	22.46	23.50	22.86	22.83	22.72	24.00	23.15	23.18	23.23	24.00
3GPP Rel 6 HSDPA Subtest-2	22.38	22.59	22.44	23.50	22.85	22.81	22.76	24.00	23.12	23.20	23.08	24.00
3GPP Rel 6 HSDPA Subtest-3	21.89	22.11	21.95	23.00	22.38	22.33	22.34	23.50	22.70	22.69	22.66	23.50
3GPP Rel 6 HSDPA Subtest-4	21.90	22.09	22.00	23.00	22.33	22.33	22.28	23.50	22.58	22.72	22.69	23.50
3GPP Rel 8 DC-HSDPA Subtest-1	22.30	22.58	22.38	23.50	22.82	22.81	22.70	24.00	23.06	23.13	23.17	24.00
3GPP Rel 8 DC-HSDPA Subtest-2	22.29	22.57	22.42	23.50	22.77	22.72	22.71	24.00	23.14	23.08	23.09	24.00
3GPP Rel 8 DC-HSDPA Subtest-3	21.88	22.08	21.85	23.00	22.28	22.33	22.33	23.50	22.63	22.71	22.70	23.50
3GPP Rel 8 DC-HSDPA Subtest-4	21.87	22.00	21.92	23.00	22.23	22.33	22.21	23.50	22.58	22.65	22.60	23.50
3GPP Rel 6 HSUPA Subtest-1	22.43	22.57	22.50	23.50	22.88	22.75	22.76	24.00	23.16	23.20	23.08	24.00
3GPP Rel 6 HSUPA Subtest-2	20.38	20.53	20.46	21.50	20.84	20.73	20.71	22.00	21.13	21.18	21.16	22.00
3GPP Rel 6 HSUPA Subtest-3	21.33	21.61	21.45	22.50	21.86	21.78	21.79	23.00	22.11	22.19	22.19	23.00
3GPP Rel 6 HSUPA Subtest-4	20.34	20.52	20.51	21.50	20.87	20.78	20.72	22.00	21.16	21.13	21.15	22.00
3GPP Rel 6 HSUPA Subtest-5	22.40	22.60	22.50	23.50	22.89	22.79	22.79	24.00	23.06	23.16	23.22	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	19.58	19.63	19.46	20.50	18.68	18.58	18.50	20.00	24.06	24.03	24.05	25.00
3GPP Rel 99	RMC 12.2Kbps	19.62	19.65	19.50	20.50	18.86	18.79	18.67	20.00	24.09	24.05	24.08	25.00
3GPP Rel 6	HSDPA Subtest-1	18.67	18.72	18.55	19.50	17.72	17.60	17.56	19.00	22.87	22.90	22.86	24.00
3GPP Rel 6	HSDPA Subtest-2	18.63	18.74	18.55	19.50	17.72	17.55	17.55	19.00	22.87	22.88	22.85	24.00
3GPP Rel 6	HSDPA Subtest-3	18.14	18.23	18.03	19.00	17.19	17.05	17.04	18.50	22.39	22.44	22.40	23.50
3GPP Rel 6	HSDPA Subtest-4	18.12	18.22	17.80	19.00	17.20	17.08	17.03	18.50	22.35	22.35	22.36	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.64	18.69	18.45	19.50	17.62	17.54	17.55	19.00	22.84	22.86	22.83	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.56	18.72	18.54	19.50	17.69	17.48	17.51	19.00	22.78	22.80	22.82	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.08	18.22	17.98	19.00	17.11	17.02	17.02	18.50	22.32	22.39	22.31	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	18.06	18.12	17.80	19.00	17.14	17.04	16.99	18.50	22.35	22.30	22.29	23.50
3GPP Rel 6	HSUPA Subtest-1	18.64	18.73	18.55	19.50	17.18	17.59	17.57	19.00	22.87	22.82	22.85	24.00
3GPP Rel 6	HSUPA Subtest-2	16.63	16.67	16.57	17.50	15.69	15.58	15.57	17.00	20.86	20.91	20.85	22.00
3GPP Rel 6	HSUPA Subtest-3	17.64	17.70	17.58	18.50	16.66	16.57	16.57	18.00	21.89	21.87	21.80	23.00
3GPP Rel 6	HSUPA Subtest-4	16.62	16.75	16.61	17.50	15.68	15.60	15.57	17.00	20.78	20.95	20.82	22.00
3GPP Rel 6	HSUPA Subtest-5	18.60	18.70	18.60	19.50	17.70	17.60	17.60	19.00	22.93	22.89	22.81	24.00



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. 7	Power Middle Ch. 7	Power High Ch. 7	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.07	24.04	23.98	25.7
20	QPSK	1	49	24.00	24.00	23.89	
20	QPSK	1	99	24.01	23.98	23.98	
20	QPSK	50	0	23.08	23.09	23.07	
20	QPSK	50	24	23.12	23.18	23.10	
20	QPSK	50	50	23.17	23.10	23.15	24.7
20	QPSK	100	0	23.22	23.10	23.04	
20	16QAM	1	0	23.37	23.36	23.37	
20	16QAM	1	49	23.28	23.28	23.22	23.7
20	16QAM	1	99	23.34	23.35	23.28	
20	16QAM	50	0	22.06	22.11	22.01	
20	16QAM	50	24	22.23	22.15	22.12	23.7
20	16QAM	50	50	22.18	22.12	22.22	
20	16QAM	100	0	22.15	22.14	22.00	
20	64QAM	1	0	22.27	22.22	22.19	23.7
20	64QAM	1	49	22.19	22.11	21.33	
20	64QAM	1	99	22.11	22.23	22.04	
20	64QAM	50	0	21.08	21.06	20.72	22.7
20	64QAM	50	24	21.14	21.22	20.70	
20	64QAM	50	50	21.12	21.15	20.85	
20	64QAM	100	0	21.18	21.16	20.77	Tune-up limit (dBm)
Channel				1867.5	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.02	24.01	24.01	25.7
15	QPSK	1	37	23.96	23.97	24.01	
15	QPSK	1	74	24.02	24.06	24.05	
15	QPSK	36	0	23.09	23.02	23.03	
15	QPSK	36	20	23.18	23.10	23.02	
15	QPSK	36	39	23.16	23.18	23.20	24.7
15	QPSK	75	0	23.19	23.15	23.08	
15	16QAM	1	0	23.30	23.31	23.32	
15	16QAM	1	37	23.29	23.25	23.27	24.7
15	16QAM	1	74	23.40	23.37	23.26	
15	16QAM	36	0	22.09	22.04	22.06	
15	16QAM	36	20	22.15	22.11	22.11	23.7
15	16QAM	36	39	22.19	22.20	22.11	
15	16QAM	75	0	22.11	22.20	22.06	
15	64QAM	1	0	22.18	22.19	21.87	23.7
15	64QAM	1	37	22.31	22.27	21.70	
15	64QAM	1	74	22.19	22.28	22.25	
15	64QAM	36	0	21.19	21.11	20.70	22.7
15	64QAM	36	20	21.18	21.22	20.73	
15	64QAM	36	39	21.21	21.21	21.02	
15	64QAM	75	0	21.15	21.13	20.70	Tune-up limit (dBm)
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.01	24.01	23.93	25.7
10	QPSK	1	25	23.91	23.92	23.96	
10	QPSK	1	49	23.96	23.97	24.05	
10	QPSK	25	0	23.05	23.04	22.98	
10	QPSK	25	12	23.20	23.13	23.10	
10	QPSK	25	25	23.17	23.16	23.12	24.7
10	QPSK	50	0	23.19	23.18	23.09	
10	16QAM	1	0	23.35	23.33	23.35	
10	16QAM	1	25	23.40	23.40	23.34	24.7
10	16QAM	1	49	23.37	23.43	23.43	
10	16QAM	25	0	22.07	22.04	22.04	
10	16QAM	25	12	22.19	22.20	22.07	23.7
10	16QAM	25	25	22.16	22.17	22.17	
10	16QAM	50	0	22.15	22.20	22.06	
10	64QAM	1	0	22.32	22.13	21.70	23.7
10	64QAM	1	25	22.29	22.26	22.08	
10	64QAM	1	49	22.25	22.30	22.25	
10	64QAM	25	0	21.17	21.11	20.70	22.7
10	64QAM	25	12	21.18	21.20	20.88	
10	64QAM	25	25	21.21	21.19	21.07	
10	64QAM	50	0	21.23	21.23	20.77	Tune-up limit (dBm)
Channel				1862.5	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.87	23.93	23.99	25.7
5	QPSK	1	12	24.03	24.03	24.00	
5	QPSK	1	24	24.01	24.00	24.01	
5	QPSK	12	0	23.12	23.02	23.13	
5	QPSK	12	7	23.12	23.14	23.19	
5	QPSK	12	13	23.10	23.14	23.19	24.7
5	QPSK	25	0	23.13	23.07	23.06	
5	16QAM	1	0	23.30	23.20	23.29	
5	16QAM	1	12	23.35	23.36	23.36	24.7
5	16QAM	1	24	23.30	23.37	23.37	
5	16QAM	12	0	22.11	22.10	22.17	
5	16QAM	12	7	22.16	22.22	22.15	23.7
5	16QAM	12	13	22.20	22.13	22.18	
5	16QAM	25	0	22.09	22.18	22.08	
5	64QAM	1	0	22.28	22.24	22.01	23.7
5	64QAM	1	12	22.28	22.24	22.18	
5	64QAM	1	24	22.27	22.34	22.26	
5	64QAM	12	0	21.15	21.18	21.21	22.7
5	64QAM	12	7	21.22	21.18	21.20	
5	64QAM	12	13	21.25	21.24	21.20	
5	64QAM	25	0	21.11	21.12	21.13	Tune-up limit (dBm)
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.94	23.93	23.99	25.7
3	QPSK	1	8	24.03	24.06	24.04	
3	QPSK	1	14	23.96	24.01	24.01	
3	QPSK	8	0	23.03	23.08	23.11	
3	QPSK	8	4	23.07	23.16	23.14	
3	QPSK	8	7	23.08	23.12	23.10	24.7
3	QPSK	15	0	23.07	23.12	23.13	
3	16QAM	1	0	23.26	23.33	23.33	
3	16QAM	1	8	23.34	23.36	23.41	24.7
3	16QAM	1	14	23.31	23.32	23.29	
3	16QAM	8	0	22.19	22.12	22.15	
3	16QAM	8	4	22.15	22.25	22.18	23.7
3	16QAM	8	7	22.20	22.21	22.19	
3	16QAM	15	0	22.13	22.10	22.06	
3	64QAM	1	0	22.19	22.23	22.25	23.7
3	64QAM	1	8	22.32	22.27	22.36	
3	64QAM	1	14	22.27	22.31	22.30	
3	64QAM	8	0	21.16	21.17	21.16	22.7
3	64QAM	8	4	21.27	21.27	21.14	
3	64QAM	8	7	21.17	21.21	21.17	
3	64QAM	15	0	21.11	21.11	21.15	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.94	23.97	23.96	25.7
1.4	QPSK	1	3	24.02	24.01	23.99	
1.4	QPSK	1	5	23.92	23.95	23.89	
1.4	QPSK	3	0	23.94	24.00	23.91	
1.4	QPSK	3	1	23.98	24.03	24.04	
1.4	QPSK	3	3	23.99	23.99	23.99	24.7
1.4	QPSK	6	0	23.07	22.99	23.07	
1.4	16QAM	1	0	23.17	23.25	23.18	
1.4	16QAM	1	3	23.30	23.38	23.31	24.7
1.4	16QAM	1	5	23.20	23.21	23.18	
1.4	16QAM	3	0	23.02	23.08	22.96	
1.4	16QAM	3	1	23.03	23.08	23.01	23.7
1.4	16QAM	3	3	23.05	23.02	22.97	
1.4	16QAM	6	0	22.06	22.14	22.07	
1.4	64QAM	1	0	22.19	22.14	22.16	23.7
1.4	64QAM	1	3	22.18	22.23	22.28	
1.4	64QAM	1	5	22.13	22.18	22.16	
1.4	64QAM	3	0	22.17	22.17	22.12	23.7
1.4	64QAM	3	1	22.21	22.25	22.15	
1.4	64QAM	3	3	22.11	22.21	22.16	
1.4	64QAM	6	0	21.06	21.02	21.04	22.7



Band 4									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	24.31	24.32	24.35	25.7		
20	QPSK	1	49	24.20	24.17	24.08			
20	QPSK	1	99	24.21	24.16	24.12			
20	QPSK	50	0	23.35	23.32	23.29	24.7		
20	QPSK	50	24	23.41	23.41	23.23			
20	QPSK	50	50	23.32	23.25	23.23			
20	QPSK	100	0	23.29	23.38	23.24	24.7		
20	16QAM	1	0	23.69	23.65	23.64			
20	16QAM	1	49	23.51	23.46	23.46			
20	16QAM	1	99	23.57	23.42	23.43	23.7		
20	16QAM	50	0	22.31	22.31	22.35			
20	16QAM	50	24	22.33	22.32	22.23			
20	16QAM	50	50	22.34	22.25	22.23	22.7		
20	16QAM	100	0	22.35	22.45	22.24			
20	64QAM	1	0	22.29	22.51	22.11			
20	64QAM	1	49	22.41	22.33	22.34	22.7		
20	64QAM	1	99	22.41	22.04	22.43			
20	64QAM	50	0	21.33	21.42	21.09			
20	64QAM	50	24	21.42	21.38	21.28	22.7		
20	64QAM	50	50	21.29	21.12	21.25			
20	64QAM	100	0	21.41	21.42	21.25			
Channel				20025	20175	20325	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	24.34	24.33	24.33	25.7		
15	QPSK	1	37	24.12	24.14	24.11			
15	QPSK	1	74	24.21	24.22	24.14			
15	QPSK	36	0	23.38	23.29	23.31	24.7		
15	QPSK	36	20	23.38	23.33	23.20			
15	QPSK	36	39	23.34	23.33	23.30			
15	QPSK	75	0	23.36	23.42	23.23	24.7		
15	16QAM	1	0	23.56	23.59	23.62			
15	16QAM	1	37	23.47	23.50	23.44			
15	16QAM	1	74	23.53	23.47	23.42	23.7		
15	16QAM	36	0	22.39	22.39	22.33			
15	16QAM	36	20	22.31	22.37	22.30			
15	16QAM	36	39	22.29	22.34	22.22	23.7		
15	16QAM	75	0	22.36	22.41	22.24			
15	64QAM	1	0	22.33	22.52	22.27			
15	64QAM	1	37	22.48	22.46	22.44	23.7		
15	64QAM	1	74	22.42	22.13	22.33			
15	64QAM	36	0	21.42	21.36	21.34			
15	64QAM	36	20	21.33	21.48	21.30	22.7		
15	64QAM	36	39	21.35	21.07	21.28			
15	64QAM	75	0	21.36	21.36	21.30			
Channel				20000	20175	20350	Tune-up limit (dBm)		
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.20	24.24	24.21	25.7		
10	QPSK	1	25	24.18	24.16	24.15			
10	QPSK	1	49	24.29	24.23	24.22			
10	QPSK	25	0	23.29	23.31	23.21	24.7		
10	QPSK	25	12	23.34	23.38	23.22			
10	QPSK	25	25	23.30	23.41	23.29			
10	QPSK	50	0	23.32	23.37	23.21	24.7		
10	16QAM	1	0	23.60	23.63	23.56			
10	16QAM	1	25	23.54	23.60	23.51			
10	16QAM	1	49	23.64	23.53	23.60	24.7		
10	16QAM	25	0	22.31	22.31	22.27			
10	16QAM	25	12	22.35	22.36	22.27			
10	16QAM	25	25	22.37	22.38	22.30	23.7		
10	16QAM	50	0	22.34	22.33	22.29			
10	64QAM	1	0	22.16	22.45	22.40			
10	64QAM	1	25	22.54	22.49	22.42	23.7		
10	64QAM	1	49	22.49	22.12	22.47			
10	64QAM	25	0	21.35	21.31	21.24			
10	64QAM	25	12	21.43	21.40	21.26	22.7		
10	64QAM	25	25	21.32	21.17	21.38			
10	64QAM	50	0	21.35	21.32	21.29			
Channel				19975	20175	20375	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.21	24.19	24.17	25.7		
5	QPSK	1	12	24.27	24.28	24.18			
5	QPSK	1	24	24.24	24.25	24.16			
5	QPSK	12	0	23.35	23.31	23.23	24.7		
5	QPSK	12	7	23.39	23.36	23.32			
5	QPSK	12	13	23.41	23.39	23.24			
5	QPSK	25	0	23.27	23.38	23.20	24.7		
5	16QAM	1	0	23.50	23.54	23.53			
5	16QAM	1	12	23.62	23.63	23.56			
5	16QAM	1	24	23.57	23.57	23.50	23.7		
5	16QAM	12	0	22.41	22.32	22.34			
5	16QAM	12	7	22.39	22.37	22.28			
5	16QAM	12	13	22.37	22.42	22.36	23.7		
5	16QAM	25	0	22.39	22.31	22.29			
5	64QAM	1	0	22.20	22.51	22.47			
5	64QAM	1	12	22.43	22.47	22.50	23.7		
5	64QAM	1	24	22.55	22.09	22.44			
5	64QAM	12	0	21.17	21.28	21.39			
5	64QAM	12	7	21.40	21.46	21.31	22.7		
5	64QAM	12	13	21.38	21.22	21.36			
5	64QAM	25	0	21.32	21.44	21.24			
Channel				19965	20175	20385	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.24	24.20	24.22	25.7		
3	QPSK	1	8	24.32	24.34	24.24			
3	QPSK	1	14	24.27	24.24	24.18			
3	QPSK	8	0	23.29	23.24	23.23	24.7		
3	QPSK	8	4	23.35	23.37	23.32			
3	QPSK	8	7	23.42	23.34	23.21			
3	QPSK	15	0	23.36	23.37	23.31	24.7		
3	16QAM	1	0	23.64	23.49	23.51			
3	16QAM	1	8	23.63	23.59	23.61			
3	16QAM	1	14	23.55	23.57	23.54	24.7		
3	16QAM	8	0	22.41	22.35	22.29			
3	16QAM	8	4	22.41	22.41	22.32			
3	16QAM	8	7	22.37	22.48	22.27	23.7		
3	16QAM	15	0	22.34	22.36	22.26			
3	64QAM	1	0	22.28	22.53	22.39			
3	64QAM	1	8	22.47	22.65	22.52	23.7		
3	64QAM	1	14	22.49	22.32	22.46			
3	64QAM	8	0	21.18	21.35	21.33			
3	64QAM	8	4	21.37	21.41	21.39	22.7		
3	64QAM	8	7	21.34	21.34	21.31			
3	64QAM	15	0	21.32	21.40	21.33			
Channel				19957	20175	20393	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.15	24.15	24.12	25.7		
1.4	QPSK	1	3	24.27	24.30	24.13			
1.4	QPSK	1	5	24.24	24.23	24.07			
1.4	QPSK	3	0	24.25	24.16	24.10	24.7		
1.4	QPSK	3	1	24.28	24.31	24.17			
1.4	QPSK	3	3	24.15	24.24	24.12			
1.4	QPSK	6	0	23.25	23.26	23.26	24.7		
1.4	QPSK	6	4	23.33	23.37	23.30			
1.4	QPSK	6	7	23.39	23.37	23.32			
1.4	16QAM	1	3	23.59	23.55	23.50	24.7		
1.4	16QAM	1	5	23.66	23.47	23.50			
1.4	16QAM	3	0	23.42	23.31	23.23			
1.4	16QAM	3	1	23.32	23.36	23.29	23.7		
1.4	16QAM	3	3	22.34	22.32	22.27			
1.4	64QAM	1	0	22.15	22.46	22.38			
1.4	64QAM	1	3	22.22	22.44	22.32	23.7		
1.4	64QAM	3	0	22.18	22.38	22.27			
1.4	64QAM	3	1	22.29	22.43	22.43			
1.4	64QAM	3	3	22.28	22.37	22.38	22.7		
1.4	64QAM	6	0	21.25	21.37	21.32			
1.4	64QAM	6	4	21.35	21.37	21.31			



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.43	24.42	24.42	25.7
10	QPSK	1	25	24.34	24.44	24.43	
10	QPSK	1	49	24.44	24.54	24.20	
10	QPSK	25	0	23.47	23.49	23.49	24.7
10	QPSK	25	12	23.52	23.58	23.57	
10	QPSK	25	25	23.49	23.58	23.47	
10	QPSK	50	0	23.54	23.49	23.60	24.7
10	16QAM	1	0	23.81	23.83	23.86	
10	16QAM	1	25	23.70	23.84	23.83	
10	16QAM	1	49	23.81	23.92	23.71	23.7
10	16QAM	25	0	22.45	22.59	22.54	
10	16QAM	25	12	22.53	22.52	22.54	
10	16QAM	25	25	22.56	22.55	22.57	23.7
10	16QAM	50	0	22.51	22.50	22.49	
10	64QAM	1	0	22.59	22.66	22.64	
10	64QAM	1	25	22.70	22.74	22.76	22.7
10	64QAM	1	49	22.67	22.37	21.72	
10	64QAM	25	0	21.54	21.61	21.55	
10	64QAM	25	12	21.62	21.62	21.60	Tune-up limit (dBm)
10	64QAM	25	25	21.53	21.61	20.86	
10	64QAM	50	0	21.53	21.50	21.26	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.47	24.51	24.50	25.7
5	QPSK	1	12	24.47	24.45	24.31	
5	QPSK	1	24	24.41	24.52	24.20	
5	QPSK	12	0	23.55	23.64	23.59	24.7
5	QPSK	12	7	23.52	23.57	23.34	
5	QPSK	12	13	23.54	23.55	23.16	
5	QPSK	25	0	23.47	23.56	23.52	24.7
5	16QAM	1	0	23.83	23.83	23.79	
5	16QAM	1	12	23.77	23.83	23.57	
5	16QAM	1	24	23.68	23.85	23.46	23.7
5	16QAM	12	0	22.66	22.51	22.52	
5	16QAM	12	7	22.53	22.60	22.45	
5	16QAM	12	13	22.48	22.61	22.27	23.7
5	16QAM	25	0	22.56	22.52	22.56	
5	64QAM	1	0	22.75	22.73	22.50	
5	64QAM	1	12	22.64	22.69	21.78	22.7
5	64QAM	1	24	22.75	22.55	21.74	
5	64QAM	12	0	21.65	21.66	21.30	
5	64QAM	12	7	21.54	21.63	20.70	Tune-up limit (dBm)
5	64QAM	12	13	21.51	21.61	20.71	
5	64QAM	25	0	21.58	21.61	20.70	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.47	24.41	24.18	25.7
3	QPSK	1	8	24.50	24.48	24.04	
3	QPSK	1	14	24.40	24.49	24.13	
3	QPSK	8	0	23.54	23.58	23.04	24.7
3	QPSK	8	4	23.49	23.62	23.07	
3	QPSK	8	7	23.50	23.55	23.20	
3	QPSK	15	0	23.57	23.53	23.08	24.7
3	16QAM	1	0	23.83	23.81	23.53	
3	16QAM	1	8	23.83	23.86	23.38	
3	16QAM	1	14	23.69	23.78	23.46	23.7
3	16QAM	8	0	22.64	22.58	22.31	
3	16QAM	8	4	22.60	22.65	22.23	
3	16QAM	8	7	22.57	22.60	22.28	23.7
3	16QAM	15	0	22.60	22.62	22.19	
3	64QAM	1	0	22.63	22.73	21.70	
3	64QAM	1	8	22.75	22.75	21.72	22.7
3	64QAM	1	14	22.63	22.50	21.71	
3	64QAM	8	0	21.65	21.56	20.70	
3	64QAM	8	4	21.58	21.67	20.70	Tune-up limit (dBm)
3	64QAM	8	7	21.49	21.63	20.74	
3	64QAM	15	0	21.53	21.62	20.71	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.39	24.32	23.95	25.7
1.4	QPSK	1	3	24.42	24.47	24.10	
1.4	QPSK	1	5	24.29	24.38	24.09	
1.4	QPSK	3	0	24.41	24.36	24.12	24.7
1.4	QPSK	3	1	24.47	24.40	24.12	
1.4	QPSK	3	3	24.41	24.44	24.37	
1.4	QPSK	6	0	23.42	23.57	23.18	24.7
1.4	16QAM	1	0	23.68	23.69	23.34	
1.4	16QAM	1	3	23.69	23.85	23.50	
1.4	16QAM	1	5	23.61	23.69	23.58	24.7
1.4	16QAM	3	0	23.51	23.51	23.12	
1.4	16QAM	3	1	23.49	23.54	23.28	
1.4	16QAM	3	3	23.42	23.48	23.42	23.7
1.4	16QAM	6	0	22.55	22.62	22.27	
1.4	64QAM	1	0	22.60	22.60	21.70	
1.4	64QAM	1	3	22.68	22.75	21.72	23.7
1.4	64QAM	1	5	22.60	22.59	21.71	
1.4	64QAM	3	0	22.63	22.63	21.70	
1.4	64QAM	3	1	22.65	22.62	21.72	22.7
1.4	64QAM	3	3	22.55	22.58	21.71	
1.4	64QAM	6	0	21.45	21.48	20.72	



Band 7							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.42	24.46	24.29	25.7
20	QPSK	1	49	24.47	24.42	24.26	
20	QPSK	1	99	24.57	24.45	24.26	
20	QPSK	50	0	23.70	23.47	23.46	24.7
20	QPSK	50	24	23.67	23.48	23.39	
20	QPSK	50	50	23.63	23.56	23.41	
20	QPSK	100	0	23.65	23.54	23.41	24.7
20	16QAM	1	0	23.78	23.66	23.64	
20	16QAM	1	49	23.50	23.75	23.62	
20	16QAM	1	99	23.92	23.90	23.63	23.7
20	16QAM	50	0	22.63	22.47	22.42	
20	16QAM	50	24	22.62	22.52	22.45	
20	16QAM	50	50	22.67	22.54	22.47	23.7
20	16QAM	100	0	22.62	22.54	22.38	
20	64QAM	1	0	22.62	22.55	22.54	
20	64QAM	1	49	22.70	22.68	21.98	22.7
20	64QAM	1	99	22.80	22.64	22.33	
20	64QAM	50	0	21.70	21.49	21.27	
20	64QAM	50	24	21.76	21.56	21.21	22.7
20	64QAM	50	50	21.74	21.62	21.38	
20	64QAM	100	0	21.65	21.55	21.21	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.47	24.39	24.28	25.7
15	QPSK	1	37	24.53	24.47	24.21	
15	QPSK	1	74	24.56	24.48	24.31	
15	QPSK	36	0	23.55	23.46	23.42	24.7
15	QPSK	36	20	23.69	23.35	23.43	
15	QPSK	36	39	23.66	23.58	23.40	
15	QPSK	75	0	23.65	23.50	23.38	24.7
15	16QAM	1	0	23.77	23.74	23.63	
15	16QAM	1	37	23.89	23.87	23.62	
15	16QAM	1	74	23.67	23.81	23.66	23.7
15	16QAM	36	0	22.59	22.43	22.39	
15	16QAM	36	20	22.69	22.55	22.46	
15	16QAM	36	39	22.68	22.50	22.37	23.7
15	16QAM	75	0	22.62	22.50	22.40	
15	64QAM	1	0	22.74	22.60	22.49	
15	64QAM	1	37	22.76	22.74	22.01	23.7
15	64QAM	1	74	22.86	22.71	22.47	
15	64QAM	36	0	21.65	21.50	21.05	
15	64QAM	36	20	21.74	21.56	21.23	22.7
15	64QAM	36	39	21.74	21.62	21.47	
15	64QAM	75	0	21.73	21.57	21.18	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.39	24.39	24.21	25.7
10	QPSK	1	25	24.46	24.35	24.11	
10	QPSK	1	49	24.51	24.44	24.22	
10	QPSK	25	0	23.61	23.41	23.33	24.7
10	QPSK	25	12	23.67	23.45	23.39	
10	QPSK	25	25	23.63	23.54	23.38	
10	QPSK	50	0	23.58	23.48	23.27	24.7
10	16QAM	1	0	23.65	23.66	23.46	
10	16QAM	1	25	23.77	23.77	23.48	
10	16QAM	1	49	23.87	23.78	23.54	23.7
10	16QAM	25	0	22.56	22.38	22.28	
10	16QAM	25	12	22.65	22.45	22.36	
10	16QAM	25	25	22.66	22.51	22.30	23.7
10	16QAM	50	0	22.66	22.46	22.26	
10	64QAM	1	0	22.74	22.61	22.24	
10	64QAM	1	25	22.74	22.65	22.46	23.7
10	64QAM	1	49	22.82	22.67	22.50	
10	64QAM	25	0	21.64	21.45	21.27	
10	64QAM	25	12	21.63	21.57	21.34	22.7
10	64QAM	25	25	21.55	21.51	21.31	
10	64QAM	50	0	21.60	21.53	21.29	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.52	24.31	24.15	25.7
5	QPSK	1	12	24.53	24.50	24.27	
5	QPSK	1	24	24.51	24.44	24.20	
5	QPSK	12	0	23.55	23.47	23.28	24.7
5	QPSK	12	7	23.56	23.53	23.25	
5	QPSK	12	13	23.62	23.61	23.32	
5	QPSK	25	0	23.66	23.52	23.29	24.7
5	16QAM	1	0	23.79	23.64	23.45	
5	16QAM	1	12	23.80	23.76	23.46	
5	16QAM	1	24	23.90	23.74	23.55	23.7
5	16QAM	12	0	22.62	22.36	22.33	
5	16QAM	12	7	22.65	22.52	22.34	
5	16QAM	12	13	22.70	22.65	22.31	23.7
5	16QAM	25	0	22.67	22.57	22.33	
5	64QAM	1	0	22.81	22.68	22.42	
5	64QAM	1	12	22.79	22.69	22.40	23.7
5	64QAM	1	24	22.61	22.77	22.44	
5	64QAM	12	0	21.67	21.59	21.37	
5	64QAM	12	7	21.68	21.57	21.37	22.7
5	64QAM	12	13	21.74	21.63	21.40	
5	64QAM	25	0	21.68	21.48	21.35	



Band 12							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.34	24.12	24.24	25.7
10	QPSK	1	25	24.15	24.15	24.14	
10	QPSK	1	49	24.31	24.24	24.14	
10	QPSK	25	0	23.27	23.33	23.32	24.7
10	QPSK	25	12	23.38	23.34	23.35	
10	QPSK	25	25	23.31	23.30	23.35	
10	QPSK	50	0	23.34	23.28	23.32	24.7
10	16QAM	1	0	23.55	23.49	23.56	
10	16QAM	1	25	23.61	23.61	23.56	
10	16QAM	1	49	23.66	23.60	23.54	23.7
10	16QAM	25	0	22.32	22.28	22.33	
10	16QAM	25	12	22.40	22.35	22.36	
10	16QAM	25	25	22.37	22.36	22.34	23.7
10	16QAM	50	0	22.39	22.31	22.33	
10	64QAM	1	0	22.43	22.31	22.39	
10	64QAM	1	25	22.52	22.42	22.25	22.7
10	64QAM	1	49	22.61	22.54	22.53	
10	64QAM	25	0	21.31	21.33	21.22	
10	64QAM	25	12	21.46	21.39	21.33	21.7
10	64QAM	25	25	21.37	21.41	21.37	
10	64QAM	50	0	21.36	21.34	21.37	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.27	24.18	24.20	25.7
5	QPSK	1	12	24.27	24.28	24.27	
5	QPSK	1	24	24.23	24.21	24.24	
5	QPSK	12	0	23.38	23.32	23.26	24.7
5	QPSK	12	7	23.33	23.26	23.25	
5	QPSK	12	13	23.33	23.26	23.27	
5	QPSK	25	0	23.36	23.28	23.20	24.7
5	16QAM	1	0	23.59	23.56	23.50	
5	16QAM	1	12	23.60	23.59	23.55	
5	16QAM	1	24	23.61	23.61	23.50	23.7
5	16QAM	12	0	22.36	22.32	22.28	
5	16QAM	12	7	22.39	22.34	22.36	
5	16QAM	12	13	22.32	22.36	22.28	23.7
5	16QAM	25	0	22.40	22.35	22.32	
5	64QAM	1	0	22.37	22.24	22.40	
5	64QAM	1	12	22.51	22.44	22.40	22.7
5	64QAM	1	24	22.35	22.46	22.45	
5	64QAM	12	0	21.39	21.41	21.39	
5	64QAM	12	7	21.34	21.35	21.34	22.7
5	64QAM	12	13	21.43	21.38	21.28	
5	64QAM	25	0	21.42	21.39	21.32	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.31	24.21	24.28	25.7
3	QPSK	1	8	24.32	24.30	24.30	
3	QPSK	1	14	24.28	24.27	24.16	
3	QPSK	8	0	23.35	23.27	23.30	24.7
3	QPSK	8	4	23.37	23.40	23.35	
3	QPSK	8	7	23.38	23.38	23.25	
3	QPSK	15	0	23.39	23.28	23.21	24.7
3	16QAM	1	0	23.71	23.62	23.52	
3	16QAM	1	8	23.56	23.59	23.60	
3	16QAM	1	14	23.60	23.56	23.46	23.7
3	16QAM	8	0	22.42	22.42	22.32	
3	16QAM	8	4	22.41	22.40	22.36	
3	16QAM	8	7	22.33	22.41	22.27	23.7
3	16QAM	15	0	22.37	22.31	22.30	
3	64QAM	1	0	22.46	22.41	22.47	
3	64QAM	1	8	22.64	22.55	22.45	22.7
3	64QAM	1	14	22.47	22.49	22.43	
3	64QAM	8	0	21.41	21.39	21.36	
3	64QAM	8	4	21.44	21.51	21.40	22.7
3	64QAM	8	7	21.34	21.40	21.35	
3	64QAM	15	0	21.37	21.34	21.24	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.18	24.13	24.08	25.7
1.4	QPSK	1	3	24.23	24.21	24.18	
1.4	QPSK	1	5	24.19	24.20	24.02	
1.4	QPSK	3	0	24.26	24.09	24.16	24.7
1.4	QPSK	3	1	24.25	24.22	24.19	
1.4	QPSK	3	3	24.21	24.22	24.13	
1.4	QPSK	6	0	23.32	23.26	23.12	24.7
1.4	16QAM	1	0	23.60	23.49	23.46	
1.4	16QAM	1	3	23.57	23.57	23.48	
1.4	16QAM	1	5	23.53	23.52	23.43	24.7
1.4	16QAM	3	0	23.34	23.24	23.26	
1.4	16QAM	3	1	23.36	23.30	23.31	
1.4	16QAM	3	3	23.31	23.24	23.13	23.7
1.4	16QAM	6	0	22.32	22.23	22.22	
1.4	64QAM	1	0	22.48	22.42	22.36	
1.4	64QAM	1	3	22.46	22.50	22.42	23.7
1.4	64QAM	1	5	22.46	22.36	22.34	
1.4	64QAM	3	0	22.37	22.36	22.36	
1.4	64QAM	3	1	22.41	22.38	22.32	22.7
1.4	64QAM	3	3	22.40	22.38	22.31	
1.4	64QAM	6	0	21.27	21.21	21.21	



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.83			25.2
10	QPSK	1	25	23.84			
10	QPSK	1	49	23.97			
10	QPSK	25	0	22.96			24.2
10	QPSK	25	12	23.01			
10	QPSK	25	25	22.91			
10	QPSK	50	0	23.01			24.2
10	16QAM	1	0	23.16			
10	16QAM	1	25	23.16			
10	16QAM	1	49	23.15			23.2
10	16QAM	25	0	21.97			
10	16QAM	25	12	22.03			
10	16QAM	25	25	21.93			23.2
10	16QAM	50	0	21.95			
10	64QAM	1	0	22.01			
10	64QAM	1	25	22.13			23.2
10	64QAM	1	49	22.04			
10	64QAM	25	0	21.02			
10	64QAM	25	12	21.00			22.2
10	64QAM	25	25	21.04			
10	64QAM	50	0	20.99			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	794.5	
5	QPSK	1	0	23.75	23.76	23.86	25.2
5	QPSK	1	12	23.88	23.84	23.87	
5	QPSK	1	24	23.87	23.86	23.87	
5	QPSK	12	0	22.89	22.92	22.92	24.2
5	QPSK	12	7	22.93	22.97	22.83	
5	QPSK	12	13	23.02	23.01	22.92	
5	QPSK	25	0	23.01	22.99	22.91	24.2
5	16QAM	1	0	23.08	23.05	23.08	
5	16QAM	1	12	23.16	23.14	23.09	
5	16QAM	1	24	23.16	23.10	23.03	23.2
5	16QAM	12	0	21.99	21.97	21.98	
5	16QAM	12	7	22.05	21.98	21.96	
5	16QAM	12	13	22.02	21.94	21.97	23.2
5	16QAM	25	0	22.03	21.94	21.88	
5	64QAM	1	0	22.00	22.13	21.98	
5	64QAM	1	12	22.13	22.06	22.08	23.2
5	64QAM	1	24	22.07	22.15	22.00	
5	64QAM	12	0	21.03	21.06	20.99	
5	64QAM	12	7	21.07	21.01	20.92	22.2
5	64QAM	12	13	20.98	21.05	20.97	
5	64QAM	25	0	20.96	20.95	20.88	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.44			25.7
10	QPSK	1	25	24.49			
10	QPSK	1	49	24.32			
10	QPSK	25	0	23.51			24.7
10	QPSK	25	12	23.50			
10	QPSK	25	25	23.48			
10	QPSK	50	0	23.42			24.7
10	16QAM	1	0	23.87			
10	16QAM	1	25	23.84			
10	16QAM	1	49	23.71			24.7
10	16QAM	25	0	22.44			
10	16QAM	25	12	22.54			
10	16QAM	25	25	22.55			23.7
10	16QAM	50	0	22.44			
10	64QAM	1	0	22.75			
10	64QAM	1	25	22.58			23.7
10	64QAM	1	49	22.65			
10	64QAM	25	0	21.50			
10	64QAM	25	12	21.33			22.7
10	64QAM	25	25	21.48			
10	64QAM	50	0	21.55			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.48	24.40	24.42	25.7
5	QPSK	1	12	24.48	24.48	24.47	
5	QPSK	1	24	24.47	24.44	24.42	
5	QPSK	12	0	23.54	23.49	23.41	24.7
5	QPSK	12	7	23.60	23.52	23.47	
5	QPSK	12	13	23.50	23.55	23.45	
5	QPSK	25	0	23.59	23.48	23.43	24.7
5	16QAM	1	0	23.74	23.78	23.68	
5	16QAM	1	12	23.78	23.80	23.80	
5	16QAM	1	24	23.80	23.72	23.71	23.7
5	16QAM	12	0	22.51	22.57	22.48	
5	16QAM	12	7	22.62	22.60	22.49	
5	16QAM	12	13	22.59	22.55	22.51	23.7
5	16QAM	25	0	22.57	22.52	22.50	
5	64QAM	1	0	22.71	22.62	22.36	
5	64QAM	1	12	22.78	22.24	22.53	23.7
5	64QAM	1	24	22.33	22.27	22.70	
5	64QAM	12	0	21.61	21.26	21.16	
5	64QAM	12	7	21.68	21.24	21.54	22.7
5	64QAM	12	13	21.36	21.23	21.61	
5	64QAM	25	0	21.64	21.16	21.49	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.38	24.29	24.27	25.7
10	QPSK	1	25	24.35	24.27	24.31	
10	QPSK	1	49	24.33	24.40	24.28	
10	QPSK	25	0	23.34	23.38	23.37	24.7
10	QPSK	25	12	23.51	23.39	23.43	
10	QPSK	25	25	23.50	23.51	23.46	
10	QPSK	50	0	23.44	23.37	23.34	24.7
10	16QAM	1	0	23.64	23.67	23.59	
10	16QAM	1	25	23.73	23.67	23.67	
10	16QAM	1	49	23.70	23.70	23.73	23.7
10	16QAM	25	0	22.35	22.28	22.38	
10	16QAM	25	12	22.43	22.42	22.38	
10	16QAM	25	25	22.40	22.45	22.42	23.7
10	16QAM	50	0	22.50	22.55	22.41	
10	64QAM	1	0	22.59	22.53	22.57	
10	64QAM	1	25	22.67	22.66	22.50	22.7
10	64QAM	1	49	22.65	22.65	22.58	
10	64QAM	25	0	21.36	21.43	21.41	
10	64QAM	25	12	21.47	21.43	21.46	22.7
10	64QAM	25	25	21.51	21.55	21.51	
10	64QAM	50	0	21.54	21.40	21.44	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.24	24.27	24.26	25.7
5	QPSK	1	12	24.31	24.37	24.39	
5	QPSK	1	24	24.38	24.39	24.31	
5	QPSK	12	0	23.43	23.34	23.35	24.7
5	QPSK	12	7	23.48	23.47	23.43	
5	QPSK	12	13	23.46	23.44	23.40	
5	QPSK	25	0	23.49	23.45	23.42	24.7
5	16QAM	1	0	23.57	23.61	23.61	
5	16QAM	1	12	23.61	23.69	23.63	
5	16QAM	1	24	23.73	23.76	23.68	23.7
5	16QAM	12	0	22.40	22.39	22.36	
5	16QAM	12	7	22.45	22.40	22.38	
5	16QAM	12	13	22.51	22.44	22.43	23.7
5	16QAM	25	0	22.43	22.44	22.49	
5	64QAM	1	0	22.41	22.31	22.54	
5	64QAM	1	12	22.59	22.50	22.51	23.7
5	64QAM	1	24	22.61	22.53	22.49	
5	64QAM	12	0	21.43	21.40	21.44	
5	64QAM	12	7	21.47	21.45	21.53	22.7
5	64QAM	12	13	21.53	21.55	21.51	
5	64QAM	25	0	21.45	21.39	21.40	



Band 25										
Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				26140	26340	26590				
Frequency (MHz)				1860	1880	1905				
20	QPSK	1	0	24.13	24.06	23.91	25.7			
20	QPSK	1	49	23.99	23.97	23.95				
20	QPSK	1	99	24.02	23.98	23.70				
20	QPSK	50	0	23.05	23.09	23.04	24.7			
20	QPSK	50	24	23.18	23.14	23.08				
20	QPSK	50	50	23.10	23.11	23.05				
20	QPSK	100	0	23.16	23.17	22.97	24.7			
20	16QAM	1	0	23.34	23.39	23.30				
20	16QAM	1	49	23.37	23.32	23.19				
20	16QAM	1	99	23.23	23.33	23.01	23.7			
20	16QAM	50	0	22.11	22.14	22.04				
20	16QAM	50	24	22.16	22.16	22.01				
20	16QAM	50	50	22.19	22.13	22.05	22.7			
20	16QAM	100	0	22.18	22.15	22.00				
20	64QAM	1	0	22.18	22.13	21.86				
20	64QAM	1	49	22.25	22.19	21.73	22.7			
20	64QAM	1	99	21.80	22.20	21.70				
20	64QAM	50	0	21.19	21.17	20.70				
20	64QAM	50	24	21.24	21.25	20.85	22.7			
20	64QAM	50	50	20.98	21.20	20.83				
20	64QAM	100	0	21.14	21.10	20.54				
Channel				26115	26340	26615	Tune-up limit (dBm)			
Frequency (MHz)				1857.5	1880	1907.5				
15	QPSK	1	0	24.01	24.09	23.92	25.7			
15	QPSK	1	37	24.01	24.00	23.88				
15	QPSK	1	74	23.99	24.09	23.80				
15	QPSK	36	0	23.19	23.14	22.96	24.7			
15	QPSK	36	20	23.23	23.17	23.10				
15	QPSK	36	39	23.07	23.13	23.05				
15	QPSK	75	0	23.20	23.18	23.11	24.7			
15	16QAM	1	0	23.27	23.38	23.22				
15	16QAM	1	37	23.35	23.25	23.24				
15	16QAM	1	74	23.32	23.35	23.15	23.7			
15	16QAM	36	0	22.15	22.16	22.01				
15	16QAM	36	20	22.12	22.14	22.05				
15	16QAM	36	39	22.07	22.18	22.09	23.7			
15	16QAM	75	0	22.16	22.12	22.07				
15	64QAM	1	0	22.25	22.23	21.70				
15	64QAM	1	37	22.18	22.24	22.09	23.7			
15	64QAM	1	74	22.17	22.25	21.71				
15	64QAM	36	0	21.17	21.12	20.67				
15	64QAM	36	20	21.20	21.21	21.16	22.7			
15	64QAM	36	39	21.22	21.21	20.81				
15	64QAM	75	0	21.17	21.21	20.70				
Channel				26090	26340	26640	Tune-up limit (dBm)			
Frequency (MHz)				1855	1880	1910				
10	QPSK	1	0	24.01	24.06	23.92	25.7			
10	QPSK	1	25	23.92	23.97	23.87				
10	QPSK	1	49	24.04	24.00	23.70				
10	QPSK	25	0	23.08	23.13	22.98	24.7			
10	QPSK	25	12	23.11	23.14	23.08				
10	QPSK	25	25	23.08	23.10	23.09				
10	QPSK	50	0	23.17	23.08	22.99	24.7			
10	16QAM	1	0	23.40	23.34	23.30				
10	16QAM	1	25	23.33	23.41	23.28				
10	16QAM	1	49	23.40	23.46	23.17	23.7			
10	16QAM	25	0	22.09	22.18	21.95				
10	16QAM	25	12	22.15	22.16	22.08				
10	16QAM	25	25	22.06	22.15	22.09	23.7			
10	16QAM	50	0	22.13	22.15	21.98				
10	64QAM	1	0	22.28	22.24	22.07				
10	64QAM	1	25	22.32	22.25	22.23	23.7			
10	64QAM	1	49	22.28	22.33	21.70				
10	64QAM	25	0	21.15	21.20	20.96				
10	64QAM	25	12	21.22	21.24	21.09	22.7			
10	64QAM	25	25	21.16	21.12	20.65				
10	64QAM	50	0	21.08	21.23	20.68				
Channel				26065	26340	26665	Tune-up limit (dBm)			
Frequency (MHz)				1852.5	1880	1912.5				
5	QPSK	1	0	24.03	23.93	23.85	25.7			
5	QPSK	1	12	24.00	24.06	23.99				
5	QPSK	1	24	24.07	24.05	23.70				
5	QPSK	12	0	23.01	23.11	22.97	24.7			
5	QPSK	12	7	23.05	23.20	23.08				
5	QPSK	12	13	23.19	23.18	22.88				
5	QPSK	25	0	23.10	23.09	23.03	24.7			
5	16QAM	1	0	23.41	23.31	23.27				
5	16QAM	1	12	23.34	23.34	23.22				
5	16QAM	1	24	23.31	23.34	23.00	23.7			
5	16QAM	12	0	22.05	22.14	22.01				
5	16QAM	12	7	22.19	22.16	22.10				
5	16QAM	12	13	22.11	22.19	22.08	23.7			
5	16QAM	25	0	22.13	22.15	21.97				
5	64QAM	1	0	22.30	22.25	21.98				
5	64QAM	1	12	22.17	22.21	21.72	23.7			
5	64QAM	1	24	22.28	22.32	21.70				
5	64QAM	12	0	21.16	21.10	20.95				
5	64QAM	12	7	21.21	21.20	20.63	22.7			
5	64QAM	12	13	21.17	21.28	20.33				
5	64QAM	25	0	21.12	21.14	20.45				
Channel				26055	26340	26675	Tune-up limit (dBm)			
Frequency (MHz)				1851.5	1880	1913.5				
3	QPSK	1	0	23.98	23.93	23.87	25.7			
3	QPSK	1	8	24.12	24.09	23.82				
3	QPSK	1	14	24.05	24.08	23.70				
3	QPSK	8	0	23.07	23.05	22.95	24.7			
3	QPSK	8	4	23.17	23.11	23.02				
3	QPSK	8	7	23.15	23.21	22.74				
3	QPSK	15	0	23.15	23.14	22.92	24.7			
3	16QAM	1	0	23.25	23.28	23.13				
3	16QAM	1	8	23.36	23.49	23.11				
3	16QAM	1	14	23.39	23.48	22.84	23.7			
3	16QAM	8	0	22.13	22.17	22.00				
3	16QAM	8	4	22.22	22.22	22.12				
3	16QAM	8	7	22.22	22.17	21.96	23.7			
3	16QAM	15	0	22.11	22.15	22.01				
3	64QAM	1	0	22.23	22.13	21.73				
3	64QAM	1	8	22.34	22.32	22.31	23.7			
3	64QAM	1	14	22.27	22.32	21.97				
3	64QAM	8	0	21.12	21.17	21.71				
3	64QAM	8	4	21.22	21.22	20.35	22.7			
3	64QAM	8	7	21.16	21.22	20.17				
3	64QAM	15	0	21.11	21.15	20.31				
Channel				26047	26340	26683	Tune-up limit (dBm)			
Frequency (MHz)				1850.7	1880	1914.3				
1.4	QPSK	1	0	23.95	23.95	23.74	25.7			
1.4	QPSK	1	3	24.09	24.02	23.83				
1.4	QPSK	1	5	23.99	24.04	23.84				
1.4	QPSK	3	0	23.96	24.00	23.76	24.7			
1.4	QPSK	3	1	24.06	24.09	23.79				
1.4	QPSK	3	3	24.05	24.00	23.77				
1.										



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.28	24.16	24.24	25.7
15	QPSK	1	37	24.14	24.24	24.21	
15	QPSK	1	74	24.27	24.52	24.13	
15	QPSK	36	0	23.38	23.39	23.34	24.7
15	QPSK	36	20	23.40	23.31	23.37	
15	QPSK	36	39	23.33	23.34	23.29	
15	QPSK	75	0	23.39	23.35	23.35	24.7
15	16QAM	1	0	23.55	23.56	23.61	
15	16QAM	1	37	23.54	23.54	23.60	
15	16QAM	1	74	23.56	23.63	23.47	23.7
15	16QAM	36	0	22.36	22.42	22.34	
15	16QAM	36	20	22.34	22.33	22.30	
15	16QAM	36	39	22.36	22.36	22.33	23.7
15	16QAM	75	0	22.42	22.38	22.53	
15	64QAM	1	0	22.48	22.42	22.41	
15	64QAM	1	37	22.45	22.49	22.41	22.7
15	64QAM	1	74	22.48	22.48	21.70	
15	64QAM	36	0	21.43	21.46	21.41	
15	64QAM	36	20	21.47	21.43	21.37	22.7
15	64QAM	36	39	21.38	21.44	21.49	
15	64QAM	75	0	21.47	21.35	21.42	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.38	24.29	24.37	25.7
10	QPSK	1	25	24.22	24.25	24.23	
10	QPSK	1	49	24.28	24.29	24.20	
10	QPSK	25	0	23.50	23.36	23.44	24.7
10	QPSK	25	12	23.50	23.41	23.37	
10	QPSK	25	25	23.40	23.42	23.37	
10	QPSK	50	0	23.38	23.41	23.42	24.7
10	16QAM	1	0	23.77	23.60	23.75	
10	16QAM	1	25	23.61	23.73	23.64	
10	16QAM	1	49	23.64	23.67	23.62	23.7
10	16QAM	25	0	22.46	22.36	22.37	
10	16QAM	25	12	22.45	22.42	22.36	
10	16QAM	25	25	22.30	22.44	22.38	22.7
10	16QAM	50	0	22.46	22.37	22.33	
10	64QAM	1	0	22.64	22.51	22.57	
10	64QAM	1	25	22.54	22.66	22.66	22.7
10	64QAM	1	49	22.56	22.60	22.05	
10	64QAM	25	0	21.44	21.42	21.43	
10	64QAM	25	12	21.50	21.47	21.48	22.7
10	64QAM	25	25	21.37	21.41	21.29	
10	64QAM	50	0	21.47	21.37	21.36	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				616.5	631.5	646.5	
5	QPSK	1	0	24.45	24.32	24.35	25.7
5	QPSK	1	12	24.38	24.38	24.33	
5	QPSK	1	24	24.30	24.37	24.26	
5	QPSK	12	0	23.50	23.37	23.40	24.7
5	QPSK	12	7	23.51	23.41	23.44	
5	QPSK	12	13	23.44	23.36	23.33	
5	QPSK	25	0	23.44	23.40	23.38	24.7
5	16QAM	1	0	23.78	23.60	23.73	
5	16QAM	1	12	23.72	23.66	23.60	
5	16QAM	1	24	23.66	23.72	23.58	23.7
5	16QAM	12	0	22.49	22.38	22.41	
5	16QAM	12	7	22.45	22.45	22.41	
5	16QAM	12	13	22.44	22.37	22.30	23.7
5	16QAM	25	0	22.43	22.39	22.40	
5	64QAM	1	0	22.73	22.56	22.53	
5	64QAM	1	12	22.54	22.59	21.87	22.7
5	64QAM	1	24	22.56	22.57	21.82	
5	64QAM	12	0	21.58	21.56	21.51	
5	64QAM	12	7	21.59	21.50	20.86	22.7
5	64QAM	12	13	21.54	21.45	20.56	
5	64QAM	25	0	21.50	21.39	21.68	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.43	24.37	24.37	25.7
3	QPSK	1	8	24.41	24.37	24.32	
3	QPSK	1	14	24.30	24.35	24.26	
3	QPSK	8	0	23.51	23.43	23.27	24.7
3	QPSK	8	4	23.54	23.46	23.33	
3	QPSK	8	7	23.40	23.41	23.37	
3	QPSK	15	0	23.42	23.35	23.30	24.7
3	16QAM	1	0	23.79	23.62	23.67	
3	16QAM	1	8	23.80	23.76	23.49	
3	16QAM	1	14	23.68	23.71	23.56	23.7
3	16QAM	8	0	22.53	22.44	22.45	
3	16QAM	8	4	22.59	22.47	22.41	
3	16QAM	8	7	22.46	22.49	22.38	23.7
3	16QAM	15	0	22.56	22.36	22.37	
3	64QAM	1	0	22.61	22.57	21.91	
3	64QAM	1	8	22.68	22.58	21.70	22.7
3	64QAM	1	14	22.58	22.61	21.71	
3	64QAM	8	0	21.59	21.49	20.70	
3	64QAM	8	4	21.55	21.54	20.57	22.7
3	64QAM	8	7	21.49	21.52	20.57	
3	64QAM	15	0	21.50	21.48	20.64	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.37	24.27	24.21	25.7
1.4	QPSK	1	3	24.42	24.39	24.23	
1.4	QPSK	1	5	24.36	24.21	24.15	
1.4	QPSK	3	0	24.41	24.23	24.20	24.7
1.4	QPSK	3	1	24.41	24.33	24.21	
1.4	QPSK	3	3	24.40	24.32	24.20	
1.4	QPSK	6	0	23.41	23.38	23.30	24.7
1.4	16QAM	1	0	23.71	23.59	23.46	
1.4	16QAM	1	3	23.72	23.62	23.59	
1.4	16QAM	1	5	23.63	23.59	23.46	23.7
1.4	16QAM	3	0	23.56	23.29	23.30	
1.4	16QAM	3	1	23.60	23.39	23.30	
1.4	16QAM	3	3	23.50	23.35	23.24	23.7
1.4	16QAM	6	0	22.50	22.46	22.33	
1.4	64QAM	1	0	22.68	22.47	21.74	
1.4	64QAM	1	3	22.68	22.61	21.70	23.7
1.4	64QAM	1	5	22.62	22.46	21.71	
1.4	64QAM	3	0	22.64	22.46	21.72	
1.4	64QAM	3	1	22.57	22.47	21.71	22.7
1.4	64QAM	3	3	22.56	22.51	21.80	
1.4	64QAM	6	0	21.43	21.42	20.70	



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		22.18		23.7
10	QPSK	1	25		22.07		
10	QPSK	1	49		22.09		
10	QPSK	25	0		21.18		22.7
10	QPSK	25	12		21.14		
10	QPSK	25	25		21.23		
10	QPSK	50	0		21.14		22.7
10	16QAM	1	0		21.51		
10	16QAM	1	25		21.44		
10	16QAM	1	49		21.52		21.7
10	16QAM	25	0		20.18		
10	16QAM	25	12		20.25		
10	16QAM	25	25		20.19		21.7
10	16QAM	50	0		20.23		
10	64QAM	1	0		20.35		
10	64QAM	1	25		20.42		21.7
10	64QAM	1	49		20.39		
10	64QAM	25	0		19.24		
10	64QAM	25	12		19.21		20.7
10	64QAM	25	25		19.22		
10	64QAM	50	0		19.21		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.04	22.08	22.10	23.7
5	QPSK	1	12	22.18	22.10	22.13	
5	QPSK	1	24	22.11	22.12	22.14	
5	QPSK	12	0	21.14	21.18	21.17	
5	QPSK	12	7	21.27	21.18	21.20	22.7
5	QPSK	12	13	21.32	21.23	21.13	
5	QPSK	25	0	21.24	21.15	21.21	
5	16QAM	1	0	21.36	21.35	21.42	
5	16QAM	1	12	21.47	21.47	21.42	22.7
5	16QAM	1	24	21.55	21.44	21.44	
5	16QAM	12	0	20.15	20.21	20.17	
5	16QAM	12	7	20.20	20.25	20.29	
5	16QAM	12	13	20.22	20.20	20.19	21.7
5	16QAM	25	0	20.24	20.17	20.23	
5	64QAM	1	0	20.27	20.34	20.47	
5	64QAM	1	12	20.39	20.35	20.37	
5	64QAM	1	24	20.53	20.37	20.31	21.7
5	64QAM	12	0	19.25	19.27	19.23	
5	64QAM	12	7	19.29	19.22	19.33	
5	64QAM	12	13	19.31	19.33	19.25	
5	64QAM	25	0	19.27	19.21	19.27	20.7



Band 66										
Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 132072	Power Middle Ch. / 132322	Power High Ch. / 132572	Tune-up limit (dBm)			
Channel				1720	1745	1772				
20	QPSK	1	0	24.14	24.20	24.01	25.7			
20	QPSK	1	49	24.00	23.99	23.95				
20	QPSK	1	99	24.13	24.01	23.91				
20	QPSK	50	0	23.15	23.19	23.14				
20	QPSK	50	24	23.24	23.14	23.13	24.7			
20	QPSK	50	50	23.25	23.13	23.13				
20	QPSK	100	0	23.22	23.22	23.17				
20	16QAM	1	0	23.49	23.42	23.32				
20	16QAM	1	49	23.36	23.24	23.23	24.7			
20	16QAM	1	99	23.49	23.28	23.19				
20	16QAM	50	0	22.19	22.20	22.09				
20	16QAM	50	24	22.29	22.15	22.19				
20	16QAM	50	50	22.29	22.19	22.19	23.7			
20	16QAM	100	0	22.28	22.13	22.25				
20	64QAM	1	0	22.35	22.30	22.29				
20	64QAM	1	49	22.23	22.15	22.21				
20	64QAM	1	99	22.34	22.29	22.09	22.7			
20	64QAM	50	0	21.15	21.16	21.21				
20	64QAM	50	24	21.23	21.15	21.15				
20	64QAM	50	50	21.25	21.18	21.13				
20	64QAM	100	0	21.34	21.22	21.24				
Channel				132047	132322	132597	Tune-up limit (dBm)			
Frequency (MHz)				1717.5	1745	1772.5				
15	QPSK	1	0	24.10	24.08	24.03	25.7			
15	QPSK	1	37	24.06	24.00	23.96				
15	QPSK	1	74	24.13	24.11	23.95				
15	QPSK	36	0	23.14	23.19	23.11				
15	QPSK	36	20	23.18	23.25	23.14	24.7			
15	QPSK	36	39	23.19	23.18	23.14				
15	QPSK	75	0	23.20	23.21	23.04				
15	16QAM	1	37	23.33	23.33	23.31				
15	16QAM	1	74	23.45	23.30	23.25	24.7			
15	16QAM	36	0	22.19	22.19	22.07				
15	16QAM	36	20	22.22	22.14	22.13				
15	16QAM	36	39	22.22	22.17	22.16				
15	16QAM	75	0	22.24	22.19	22.06	23.7			
15	16QAM	1	0	22.26	22.22	22.19				
15	64QAM	1	37	22.30	22.29	22.15				
15	64QAM	1	74	22.36	22.26	22.18				
15	64QAM	36	0	21.20	21.19	21.11	22.7			
15	64QAM	36	20	21.22	21.20	21.13				
15	64QAM	36	39	21.22	21.18	21.12				
15	64QAM	75	0	21.23	21.16	21.07				
Channel				132022	132322	132622	Tune-up limit (dBm)			
Frequency (MHz)				1715	1745	1775				
10	QPSK	1	0	24.09	24.03	24.07	25.7			
10	QPSK	1	25	24.08	24.07	24.06				
10	QPSK	1	49	24.14	24.08	24.07				
10	QPSK	25	0	23.16	23.15	23.15				
10	QPSK	25	12	23.19	23.22	23.13	24.7			
10	QPSK	25	25	23.19	23.19	23.14				
10	QPSK	50	0	23.20	23.23	23.06				
10	16QAM	1	0	23.59	23.46	23.51				
10	16QAM	1	25	23.44	23.45	23.45	24.7			
10	16QAM	1	49	23.54	23.39	23.44				
10	16QAM	25	0	22.18	22.16	22.08				
10	16QAM	25	12	22.23	22.16	22.11				
10	16QAM	25	25	22.21	22.20	22.21	23.7			
10	16QAM	50	0	22.23	22.23	22.08				
10	64QAM	1	0	22.37	22.29	22.29				
10	64QAM	1	25	22.42	22.34	22.40				
10	64QAM	1	49	22.36	22.38	22.34	23.7			
10	64QAM	25	0	21.20	21.16	21.19				
10	64QAM	25	12	21.30	21.22	21.19				
10	64QAM	25	25	21.24	21.21	21.15				
10	64QAM	50	0	21.30	21.24	21.13	22.7			
Channel				131997	132322	132647		Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5				
5	QPSK	1	0	24.07	24.10	24.08		25.7		
5	QPSK	1	12	24.12	24.06	24.05				
5	QPSK	1	24	24.09	24.11	24.08				
5	QPSK	12	0	23.22	23.13	23.12				
5	QPSK	12	7	23.25	23.15	23.14	24.7			
5	QPSK	12	13	23.17	23.22	23.17				
5	QPSK	25	0	23.16	23.20	23.17				
5	16QAM	1	0	23.46	23.36	23.34				
5	16QAM	1	12	23.53	23.43	23.47	24.7			
5	16QAM	1	24	23.47	23.38	23.32				
5	16QAM	12	0	22.24	22.17	22.17				
5	16QAM	12	7	22.24	22.21	22.25				
5	16QAM	12	13	22.25	22.23	22.16	23.7			
5	16QAM	25	0	22.18	22.22	22.14				
5	64QAM	1	0	22.35	22.31	22.33				
5	64QAM	1	12	22.38	22.38	22.34				
5	64QAM	1	24	22.45	22.31	22.32	22.7			
5	64QAM	12	0	21.26	21.19	21.23				
5	64QAM	12	7	21.23	21.28	21.28				
5	64QAM	12	13	21.32	21.21	21.23				
5	64QAM	25	0	21.20	21.22	21.19				
Channel				131987	132322	132657	Tune-up limit (dBm)			
Frequency (MHz)				1711.5	1745	1778.5				
3	QPSK	1	0	24.10	24.13	24.08	25.7			
3	QPSK	1	8	24.11	24.13	24.18				
3	QPSK	1	14	24.15	24.07	24.11				
3	QPSK	8	0	23.23	23.12	23.17				
3	QPSK	8	4	23.22	23.20	23.19	24.7			
3	QPSK	8	7	23.28	23.20	23.12				
3	QPSK	15	0	23.16	23.23	23.18				
3	16QAM	1	0	23.52	23.35	23.45				
3	16QAM	1	8	23.54	23.53	23.47	24.7			
3	16QAM	1	14	23.49	23.45	23.45				
3	16QAM	8	0	22.25	22.14	22.17				
3	16QAM	8	4	22.35	22.21	22.20				
3	16QAM	8	7	22.29	22.23	22.22	23.7			
3	16QAM	15	0	22.32	22.19	22.16				
3	64QAM	1	0	22.39	22.32	22.35				
3	64QAM	1	8	22.54	22.45	22.38				
3	64QAM	1	14	22.42	22.35	22.40	22.7			
3	64QAM	8	0	21.28	21.15	21.14				
3	64QAM	8	4	21.36	21.27	21.20				
3	64QAM	8	7	21.31	21.27	21.24				
3	64QAM	15	0	21.21	21.17	21.23				
Channel				131979	132322	132665	Tune-up limit (dBm)			
Frequency (MHz)				1710.7	1745	1779.3				
1.4	QPSK	1	0	24.12	23.98	23.97	25.7			
1.4	QPSK	1	3	24.17	24.09	24.04				
1.4	QPSK	1	5	24.10	24.08	24.05				
1.4	QPSK	3	0	24.11	24.14	24.05				
1.4	QPSK	3	1	24.19	24.12	24.10	24.7			
1.4	QPSK	3	3	24.17	24.07	24.04				
1.4	QPSK	6	0	23.18	23.09	23.19				
1.4	QPSK	3	3	23.32	23.20	23.19	24.7			
1.4	16QAM	1	3	23.52	23.43	23.46				
1.4	16QAM	1	5	23.42	23.36	23.32				
1.4	16QAM	3	0	23.24	23.20	23.16				
1.4	16QAM	3	1	23.28	23.19	23.24	23.7			
1.4	16QAM	3	3	23.25	23.21	23.24				
1.4	16QAM	6	0	22.25	22.21	22.26				
1.4	16QAM	6	2	22.27	22.23	22.27				
1.4	16QAM	1	3	22.46	22.33	22.41	23.7			
1.4	64QAM	1	5	22.37	22.27	22.25				
1.4	64QAM	3	0	22.34	22.24	22.25				
1.4	64QAM	3	1	22.33	22.24	22.29				
1.4	64QAM	3	3	22.27	22.27	22.22	22.7			
1.4	64QAM	3	5	22.31	22.21	22.18				
1.4	64QAM	6	0	22.23	22.19	22.23				
1.4	64QAM	6	2	22.25	22.21	22.25				



Band 71							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.39	24.32	24.28	25.7
20	QPSK	1	49	24.21	24.25	24.28	
20	QPSK	1	99	24.24	24.21	24.14	
20	QPSK	50	0	23.39	23.37	23.38	24.7
20	QPSK	50	24	23.50	23.42	23.32	
20	QPSK	50	50	23.45	23.39	23.33	
20	QPSK	100	0	23.46	23.30	23.37	24.7
20	16QAM	1	0	23.69	23.66	23.66	
20	16QAM	1	49	23.56	23.55	23.57	
20	16QAM	1	99	23.81	23.58	23.54	23.7
20	16QAM	50	0	22.46	22.32	22.40	
20	16QAM	50	24	22.42	22.33	22.39	
20	16QAM	50	50	22.42	22.39	22.39	23.7
20	16QAM	100	0	22.46	22.34	22.42	
20	64QAM	1	0	21.73	22.29	22.52	
20	64QAM	1	49	22.23	22.43	21.81	22.7
20	64QAM	1	99	22.50	22.00	22.43	
20	64QAM	50	0	20.70	21.36	21.01	
20	64QAM	50	24	20.85	21.40	21.15	22.7
20	64QAM	50	50	21.49	21.04	21.37	
20	64QAM	100	0	21.05	21.35	21.45	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.23	24.27	24.23	25.7
15	QPSK	1	37	24.23	24.18	24.22	
15	QPSK	1	74	24.28	24.26	24.14	
15	QPSK	36	0	23.41	23.31	23.37	24.7
15	QPSK	36	20	23.45	23.30	23.34	
15	QPSK	36	39	23.36	23.40	23.35	
15	QPSK	75	0	23.36	23.35	23.34	24.7
15	16QAM	1	0	23.68	23.64	23.56	
15	16QAM	1	37	23.38	23.54	23.52	
15	16QAM	1	74	23.54	23.51	23.54	23.7
15	16QAM	36	0	22.28	22.39	22.28	
15	16QAM	36	20	22.31	22.34	22.43	
15	16QAM	36	39	22.45	22.37	22.38	23.7
15	16QAM	75	0	22.45	22.32	22.35	
15	64QAM	1	0	21.71	22.45	22.43	
15	64QAM	1	37	21.70	22.51	22.51	23.7
15	64QAM	1	74	22.41	22.16	22.49	
15	64QAM	36	0	20.70	21.34	20.97	
15	64QAM	36	20	20.44	21.43	21.36	22.7
15	64QAM	36	39	21.00	20.91	21.37	
15	64QAM	75	0	20.86	21.39	21.33	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.27	24.17	24.29	25.7
10	QPSK	1	25	24.19	24.16	24.20	
10	QPSK	1	49	24.17	24.27	24.18	
10	QPSK	25	0	23.33	23.31	23.33	24.7
10	QPSK	25	12	23.33	23.43	23.26	
10	QPSK	25	25	23.24	23.30	23.27	
10	QPSK	50	0	23.41	23.40	23.28	24.7
10	16QAM	1	0	23.71	23.36	23.60	
10	16QAM	1	25	23.62	23.63	23.53	
10	16QAM	1	49	23.62	23.61	23.47	23.7
10	16QAM	25	0	22.27	22.28	22.30	
10	16QAM	25	12	22.28	22.38	22.33	
10	16QAM	25	25	22.14	22.38	22.23	23.7
10	16QAM	50	0	22.32	22.42	22.24	
10	64QAM	1	0	21.75	21.80	22.44	
10	64QAM	1	25	21.73	22.52	22.48	23.7
10	64QAM	1	49	21.70	22.46	22.13	
10	64QAM	25	0	20.70	21.34	21.35	
10	64QAM	25	12	20.33	21.41	21.36	22.7
10	64QAM	25	25	20.40	21.38	21.31	
10	64QAM	50	0	20.33	21.35	21.30	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.07	24.21	24.21	25.7
5	QPSK	1	12	24.33	24.20	24.17	
5	QPSK	1	24	24.22	24.20	24.18	
5	QPSK	12	0	23.33	23.35	23.25	24.7
5	QPSK	12	7	23.30	23.36	23.33	
5	QPSK	12	13	23.32	23.30	23.28	
5	QPSK	25	0	23.32	23.37	23.25	24.7
5	16QAM	1	0	23.51	23.53	23.57	
5	16QAM	1	12	23.51	23.55	23.55	
5	16QAM	1	24	23.48	23.53	23.47	23.7
5	16QAM	12	0	22.16	22.40	22.33	
5	16QAM	12	7	22.31	22.37	22.34	
5	16QAM	12	13	22.38	22.34	22.27	23.7
5	16QAM	25	0	22.24	22.39	22.29	
5	64QAM	1	0	21.78	21.74	22.47	
5	64QAM	1	12	21.72	22.51	22.39	23.7
5	64QAM	1	24	21.70	22.56	21.87	
5	64QAM	12	0	20.70	21.16	21.31	
5	64QAM	12	7	20.42	21.41	21.39	22.7
5	64QAM	12	13	20.40	21.40	21.19	
5	64QAM	25	0	20.23	21.10	21.23	



Band 2									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 18700	Power Middle Ch. / 18900	Power High Ch. / 19100	Tune-up limit (dBm)		
Channel				18600	18800	19000			
Frequency (MHz)				1860	1880	1900			
20	QPSK	1	0	24.25	24.10	24.15	25.7		
20	QPSK	1	49	24.12	24.04	24.04			
20	QPSK	1	99	24.03	24.11	24.05			
20	QPSK	50	0	23.16	23.10	23.15			
20	QPSK	50	24	23.34	23.19	23.14			
20	QPSK	50	50	23.22	23.21	23.22	24.7		
20	QPSK	100	0	23.29	23.27	23.18			
20	16QAM	1	0	23.43	23.43	23.45			
20	16QAM	1	49	23.41	23.40	23.35			
20	16QAM	1	99	23.34	23.43	23.47			
20	16QAM	50	0	22.18	22.17	22.17	23.7		
20	16QAM	50	24	22.26	22.28	22.18			
20	16QAM	50	50	22.32	22.24	22.22			
20	16QAM	100	0	22.21	22.24	22.13			
20	64QAM	1	0	22.35	22.29	22.33			
20	64QAM	1	49	22.35	22.31	21.77	23.7		
20	64QAM	1	99	22.27	22.31	21.86			
20	64QAM	50	0	21.19	21.19	21.00			
20	64QAM	50	24	21.28	21.32	20.92			
20	64QAM	50	50	21.26	21.24	20.90			
20	64QAM	100	0	21.25	21.25	20.96	Tune-up limit (dBm)		
Channel				1867.5	18900	19125			
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	24.14	24.04	24.06	25.7		
15	QPSK	1	37	24.08	24.01	23.95			
15	QPSK	1	74	24.01	24.03	23.97			
15	QPSK	36	0	23.10	23.05	23.10			
15	QPSK	36	39	23.12	23.11	23.16			
15	QPSK	75	0	23.20	23.25	23.10	24.7		
15	16QAM	1	0	23.37	23.35	23.40			
15	16QAM	1	37	23.37	23.33	23.30			
15	16QAM	1	74	23.27	23.38	23.46			
15	16QAM	36	0	22.13	22.07	22.14			
15	16QAM	36	20	22.17	22.18	22.14	23.7		
15	16QAM	36	39	22.25	22.16	22.13			
15	16QAM	75	0	22.20	22.19	22.08			
15	64QAM	1	0	22.31	22.23	22.29			
15	64QAM	1	37	22.31	22.26	21.73			
15	64QAM	1	74	22.20	22.24	21.77	23.7		
15	64QAM	36	0	21.18	21.19	20.97			
15	64QAM	36	20	21.28	21.24	20.88			
15	64QAM	36	39	21.20	21.18	20.85			
15	64QAM	75	0	21.22	21.16	20.87			
15	64QAM	75	0	21.22	21.16	20.87	Tune-up limit (dBm)		
Channel				18650	18900	19150			
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	24.19	24.06	24.13	25.7		
10	QPSK	1	25	24.12	24.03	23.95			
10	QPSK	1	49	24.01	24.05	23.99			
10	QPSK	25	0	23.13	23.10	23.05			
10	QPSK	25	12	23.30	23.13	23.10			
10	QPSK	25	25	23.14	23.17	23.17	24.7		
10	QPSK	50	0	23.19	23.22	23.09			
10	16QAM	1	0	23.39	23.42	23.42			
10	16QAM	1	25	23.35	23.32	23.28			
10	16QAM	1	49	23.31	23.40	23.42			
10	16QAM	25	0	22.17	22.07	22.12	23.7		
10	16QAM	25	12	22.23	22.20	22.13			
10	16QAM	25	25	22.32	22.21	22.15			
10	16QAM	50	0	22.19	22.24	22.12			
10	64QAM	1	0	22.29	22.22	22.26			
10	64QAM	1	25	22.31	22.29	21.70	23.7		
10	64QAM	1	49	22.24	22.31	21.84			
10	64QAM	25	0	21.10	21.13	20.94			
10	64QAM	25	12	21.16	21.32	20.92			
10	64QAM	25	25	21.18	21.21	20.88			
10	64QAM	50	0	21.25	21.20	20.89	Tune-up limit (dBm)		
Channel				1862.5	18900	19175			
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	24.15	24.05	24.07	25.7		
5	QPSK	1	12	24.20	24.15	24.18			
5	QPSK	1	24	24.13	24.16	24.16			
5	QPSK	12	0	23.23	23.13	23.24			
5	QPSK	12	7	23.38	23.28	23.21			
5	QPSK	12	13	23.27	23.27	23.21	24.7		
5	QPSK	25	0	23.28	23.21	23.20			
5	16QAM	1	0	23.44	23.30	23.38			
5	16QAM	1	12	23.48	23.48	23.46			
5	16QAM	1	24	23.54	23.47	23.42			
5	16QAM	12	0	22.32	22.24	22.21	23.7		
5	16QAM	12	7	22.32	22.35	22.31			
5	16QAM	12	13	22.27	22.27	22.24			
5	16QAM	25	0	22.30	22.28	22.20			
5	64QAM	1	0	22.47	22.31	21.86			
5	64QAM	1	12	22.35	22.36	21.97	23.7		
5	64QAM	1	24	22.36	22.44	21.87			
5	64QAM	12	0	21.32	21.23	20.96			
5	64QAM	12	7	21.35	21.36	20.95			
5	64QAM	12	13	21.39	21.40	20.89			
5	64QAM	25	0	21.30	21.33	20.83	Tune-up limit (dBm)		
Channel				18615	18900	19185			
Frequency (MHz)				1851.5	1880	1908.5			
3	QPSK	1	0	24.21	24.11	24.09	25.7		
3	QPSK	1	8	24.24	24.24	24.16			
3	QPSK	1	14	24.23	24.19	24.07			
3	QPSK	8	0	23.29	23.29	23.24			
3	QPSK	8	4	23.36	23.24	23.26			
3	QPSK	8	7	23.31	23.21	23.18	24.7		
3	QPSK	15	0	23.34	23.24	23.16			
3	16QAM	1	0	23.45	23.41	23.42			
3	16QAM	1	8	23.56	23.51	23.43			
3	16QAM	1	14	23.51	23.43	23.48			
3	16QAM	8	0	22.29	22.37	22.28	23.7		
3	16QAM	8	4	22.37	22.38	22.32			
3	16QAM	8	7	22.34	22.32	22.25			
3	16QAM	15	0	22.35	22.29	22.31			
3	64QAM	1	0	22.45	22.37	21.95			
3	64QAM	1	8	22.50	22.46	22.02	23.7		
3	64QAM	1	14	22.50	22.48	21.92			
3	64QAM	8	0	21.38	21.32	20.88			
3	64QAM	8	4	21.37	21.43	20.88			
3	64QAM	8	7	21.37	21.36	20.81			
3	64QAM	15	0	21.34	21.35	20.84	Tune-up limit (dBm)		
Channel				18607	18900	19193			
Frequency (MHz)				1850.7	1880	1909.3			
1.4	QPSK	1	0	24.11	23.99	23.98	25.7		
1.4	QPSK	1	3	24.20	24.14	24.13			
1.4	QPSK	1	5	24.15	24.04	24.07			
1.4	QPSK	3	0	24.11	24.06	23.99			
1.4	QPSK	3	1	24.20	24.13	24.15			
1.4	QPSK	3	3	24.19	24.06	24.01	24.7		
1.4	QPSK	6	0	23.26	23.13	23.13			
1.4	QPSK	3	0	23.46	23.34	23.36	24.7		
1.4	16QAM	1	0	23.25	23.25	23.25			
1.4	16QAM	1	3	23.35	23.35	23.40			
1.4	16QAM	1	5	23.52	23.43	23.36			
1.4	16QAM	3	0	23.20	23.13	23.16			
1.4	16QAM	3	3	23.33	23.24	23.14	23.7		
1.4	16QAM	6	0	22.22	22.20	22.20			
1.4	16QAM	1	3	22.36	22.36	22.34			
1.4	16QAM	1	5	22.36	22.36	22.34			
1.4	16QAM	3	3	22.43	22.42	22.20			
1.4	64QAM	1	5	22.36	22.41	21.89	23.7		
1.4	64QAM	3	0	22.30	22.24	21.89			
1.4	64QAM	3	1	22.37	22.35	22.05			
1.4	64QAM	3	3	22.37	22.34	21.96			
1.4	64QAM	3	5	21.39	21.39	20.78			



Band 4										
Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				20050	20175	20300				
Frequency (MHz)				1720	1732.5	1745				
20	QPSK	1	0	24.19	24.13	24.23	25.7			
20	QPSK	1	49	24.02	23.94	23.98				
20	QPSK	1	99	24.06	24.04	24.04				
20	QPSK	50	0	23.20	23.16	23.22	24.7			
20	QPSK	50	24	23.27	23.18	23.16				
20	QPSK	50	50	23.13	23.10	23.11				
20	QPSK	100	0	23.18	23.23	23.06	24.7			
20	16QAM	1	0	23.51	23.50	23.48				
20	16QAM	1	49	23.40	23.31	23.32				
20	16QAM	1	99	23.47	23.33	23.32	23.7			
20	16QAM	50	0	22.25	22.22	22.17				
20	16QAM	50	24	22.27	22.17	22.14				
20	16QAM	50	50	22.20	22.15	22.19	22.7			
20	16QAM	100	0	22.17	22.27	22.13				
20	64QAM	1	0	22.32	22.38	22.07				
20	64QAM	1	49	22.21	22.20	22.29	22.7			
20	64QAM	1	99	22.28	22.04	22.25				
20	64QAM	50	0	21.18	21.26	21.24				
20	64QAM	50	24	21.29	21.20	21.10	22.7			
20	64QAM	50	50	21.20	21.13	21.14				
20	64QAM	100	0	21.22	21.24	21.19				
Channel				20050	20175	20325	Tune-up limit (dBm)			
Frequency (MHz)				1717.5	1732.5	1747.5				
15	QPSK	1	0	24.21	24.17	24.22	25.7			
15	QPSK	1	37	24.07	24.08	24.05				
15	QPSK	1	74	24.04	24.09	24.08				
15	QPSK	36	0	23.33	23.31	23.16	24.7			
15	QPSK	36	20	23.27	23.20	23.10				
15	QPSK	36	39	23.27	23.16	23.14				
15	QPSK	75	0	23.24	23.22	23.15	24.7			
15	16QAM	1	0	23.49	23.51	23.55				
15	16QAM	1	37	23.41	23.39	23.38				
15	16QAM	1	74	23.48	23.39	23.31	24.7			
15	16QAM	36	0	22.30	22.16	22.24				
15	16QAM	36	20	22.20	22.25	22.12				
15	16QAM	36	39	22.20	22.20	22.17	23.7			
15	16QAM	75	0	22.23	22.28	22.14				
15	64QAM	1	0	22.43	22.38	22.34				
15	64QAM	1	37	22.30	22.18	22.26	23.7			
15	64QAM	1	74	22.37	22.07	22.20				
15	64QAM	36	0	21.27	21.29	21.27				
15	64QAM	36	20	21.25	21.13	21.21	22.7			
15	64QAM	36	39	21.27	21.05	21.20				
15	64QAM	75	0	21.32	21.21	21.20				
Channel				20000	20175	20350	Tune-up limit (dBm)			
Frequency (MHz)				1715	1732.5	1750				
10	QPSK	1	0	24.16	24.09	24.14	25.7			
10	QPSK	1	25	24.14	24.09	24.08				
10	QPSK	1	49	24.15	24.17	24.10				
10	QPSK	25	0	23.24	23.19	23.15	24.7			
10	QPSK	25	12	23.31	23.27	23.19				
10	QPSK	25	25	23.30	23.29	23.28				
10	QPSK	50	0	23.32	23.25	23.15	24.7			
10	16QAM	1	0	23.67	23.54	23.47				
10	16QAM	1	25	23.43	23.51	23.48				
10	16QAM	1	49	23.52	23.45	23.56	23.7			
10	16QAM	25	0	22.25	22.14	22.15				
10	16QAM	25	12	22.27	22.25	22.16				
10	16QAM	25	25	22.24	22.23	22.24	23.7			
10	16QAM	50	0	22.31	22.29	22.14				
10	64QAM	1	0	22.36	22.33	22.38				
10	64QAM	1	25	22.46	22.28	22.46	23.7			
10	64QAM	1	49	22.42	22.07	22.45				
10	64QAM	25	0	21.30	21.23	21.23				
10	64QAM	25	12	21.30	21.14	21.25	22.7			
10	64QAM	25	25	21.35	20.96	21.26				
10	64QAM	50	0	21.30	21.11	21.20				
Channel				19975	20175	20375	Tune-up limit (dBm)			
Frequency (MHz)				1712.5	1732.5	1752.5				
5	QPSK	1	0	24.19	24.12	24.06	25.7			
5	QPSK	1	12	24.19	24.19	24.16				
5	QPSK	1	24	24.22	24.12	24.15				
5	QPSK	12	0	23.28	23.19	23.19	24.7			
5	QPSK	12	7	23.36	23.28	23.23				
5	QPSK	12	13	23.28	23.23	23.14				
5	QPSK	25	0	23.30	23.24	23.23	24.7			
5	16QAM	1	0	23.53	23.36	23.43				
5	16QAM	1	12	23.55	23.48	23.47				
5	16QAM	1	24	23.56	23.45	23.44	23.7			
5	16QAM	12	0	22.25	22.15	22.29				
5	16QAM	12	7	22.32	22.31	22.21				
5	16QAM	12	13	22.28	22.32	22.28	23.7			
5	16QAM	25	0	22.28	22.29	22.26				
5	64QAM	1	0	22.32	22.38	22.44				
5	64QAM	1	12	22.47	22.29	22.39	23.7			
5	64QAM	1	24	22.55	22.04	22.40				
5	64QAM	12	0	21.33	21.25	21.33				
5	64QAM	12	7	21.35	21.25	21.29	22.7			
5	64QAM	12	13	21.36	21.12	21.27				
5	64QAM	25	0	21.32	21.08	21.24				
Channel				19965	20175	20385	Tune-up limit (dBm)			
Frequency (MHz)				1711.5	1732.5	1753.5				
3	QPSK	1	0	24.14	24.04	24.07	25.7			
3	QPSK	1	8	24.23	24.20	24.15				
3	QPSK	1	14	24.19	24.20	24.10				
3	QPSK	8	0	23.25	23.18	23.17	24.7			
3	QPSK	8	4	23.28	23.26	23.28				
3	QPSK	8	7	23.26	23.29	23.18				
3	QPSK	15	0	23.31	23.31	23.21	24.7			
3	16QAM	1	0	23.51	23.42	23.42				
3	16QAM	1	8	23.59	23.56	23.46				
3	16QAM	1	14	23.49	23.41	23.43	23.7			
3	16QAM	8	0	22.30	22.21	22.21				
3	16QAM	8	4	22.39	22.33	22.33				
3	16QAM	8	7	22.37	22.27	22.25	23.7			
3	16QAM	15	0	22.32	22.22	22.26				
3	64QAM	1	0	22.37	22.24	22.33				
3	64QAM	1	8	22.57	22.28	22.45	23.7			
3	64QAM	1	14	22.53	22.19	22.42				
3	64QAM	8	0	21.36	21.16	21.30				
3	64QAM	8	4	21.37	21.17	21.27	22.7			
3	64QAM	8	7	21.35	21.09	21.22				
3	64QAM	15	0	21.29	21.14	21.20				
Channel				19957	20175	20393	Tune-up limit (dBm)			
Frequency (MHz)				1710.7	1732.5	1754.3				
1.4	QPSK	1	0	24.02	24.07	24.05	25.7			
1.4	QPSK	1	3	24.21	24.16	24.08				
1.4	QPSK	1	5	24.09	24.07	23.98				
1.4	QPSK	3	0	24.17	24.02	24.08	24.7			
1.4	QPSK	3	1	24.17	24.16	24.09				
1.4	QPSK	3	3	24.14	24.12	24.05				
1.4	QPSK	6	0	23.12	23.14	23.06	24.7			
1.4	QPSK	6	3	23.18	23.26	23.28				
1.4	QPSK	6	3	23.20	23.24	23.17				
1.4	16QAM	1	3	23.52	23.42	23.37	24.7			
1.4	16QAM	1	5	23.45	23.41	23.33				
1.4	16QAM	3	0	23.22	23.16	23.13				
1.4	16QAM	3	3	23.23	23.16	23.13	23.7			
1.4	16QAM	3	5	22.26	22.21	22.14				
1.4	64QAM	1	3	22.34	22.23	22.28				
1.4	64QAM	1	5	22.34	22.21	22.23	23.7			
1.4	64QAM	3	0	22.36	22.28	22.22				
1.4	64QAM	3	3	22.36	22.24	22.30				
1.4	64QAM	3	5	22.34	22.21	22.23	22.7			
1.4	64QAM	3	7	22.38	22.26	22.28				
1.4	64QAM	3	9	21.41	21.21	21.26				



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.09	24.12	24.20	25.7
10	QPSK	1	25	23.99	24.14	24.15	
10	QPSK	1	49	24.18	24.24	24.16	
10	QPSK	25	0	23.22	23.22	23.21	24.7
10	QPSK	25	12	23.27	23.24	23.31	
10	QPSK	25	25	23.28	23.28	23.27	
10	QPSK	50	0	23.24	23.26	23.25	24.7
10	16QAM	1	0	23.42	23.48	23.50	
10	16QAM	1	25	23.44	23.49	23.50	
10	16QAM	1	49	23.55	23.64	23.48	23.7
10	16QAM	25	0	22.17	22.28	22.24	
10	16QAM	25	12	22.32	22.27	22.30	
10	16QAM	25	25	22.19	22.25	22.38	23.7
10	16QAM	50	0	22.31	22.26	22.33	
10	64QAM	1	0	22.88	22.77	22.89	
10	64QAM	1	25	22.95	22.74	22.89	22.7
10	64QAM	1	49	22.95	22.56	22.14	
10	64QAM	25	0	21.70	21.80	21.85	
10	64QAM	25	12	21.81	21.83	21.85	21.51
10	64QAM	25	25	21.83	21.79	21.64	
10	64QAM	50	0	21.68	21.80	21.51	
Channel				20455	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.19	24.13	24.18	25.7
5	QPSK	1	12	24.09	24.21	23.89	
5	QPSK	1	24	24.08	24.12	23.96	
5	QPSK	12	0	23.30	23.27	23.23	24.7
5	QPSK	12	7	23.23	23.30	23.00	
5	QPSK	12	13	23.14	23.23	23.05	
5	QPSK	25	0	23.22	23.21	23.15	24.7
5	16QAM	1	0	23.57	23.50	23.47	
5	16QAM	1	12	23.39	23.54	23.21	
5	16QAM	1	24	23.39	23.55	23.17	23.7
5	16QAM	12	0	22.28	22.34	22.26	
5	16QAM	12	7	22.20	22.31	22.18	
5	16QAM	12	13	22.19	22.30	22.22	23.7
5	16QAM	25	0	22.28	22.22	22.30	
5	64QAM	1	0	22.94	22.94	22.53	
5	64QAM	1	12	22.83	22.89	21.92	22.7
5	64QAM	1	24	22.81	22.82	21.84	
5	64QAM	12	0	21.84	21.90	21.18	
5	64QAM	12	7	21.75	21.81	20.82	21.71
5	64QAM	12	13	21.78	21.83	21.71	
5	64QAM	25	0	21.70	21.81	20.89	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.12	24.15	23.99	25.7
3	QPSK	1	8	24.17	24.20	23.99	
3	QPSK	1	14	24.08	24.13	24.04	
3	QPSK	8	0	23.28	23.24	22.89	24.7
3	QPSK	8	4	23.19	23.27	23.03	
3	QPSK	8	7	23.25	23.23	23.20	
3	QPSK	15	0	23.20	23.22	23.02	24.7
3	16QAM	1	0	23.50	23.43	23.20	
3	16QAM	1	8	23.50	23.53	23.21	
3	16QAM	1	14	23.41	23.51	23.27	23.7
3	16QAM	8	0	22.33	22.29	22.05	
3	16QAM	8	4	22.23	22.39	22.15	
3	16QAM	8	7	22.24	22.33	22.19	23.7
3	16QAM	15	0	22.30	22.30	22.10	
3	64QAM	1	0	22.01	22.88	21.84	
3	64QAM	1	8	22.90	23.03	21.82	22.7
3	64QAM	1	14	22.90	22.88	21.79	
3	64QAM	8	0	21.75	21.80	21.63	
3	64QAM	8	4	21.83	21.88	21.73	22.7
3	64QAM	8	7	21.76	21.80	20.75	
3	64QAM	15	0	21.75	21.85	20.77	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.11	24.14	24.03	25.7
1.4	QPSK	1	3	24.10	24.10	24.15	
1.4	QPSK	1	5	23.95	24.09	24.02	
1.4	QPSK	3	0	24.15	24.08	24.06	24.7
1.4	QPSK	3	1	24.10	24.13	24.19	
1.4	QPSK	3	3	24.09	24.08	24.12	
1.4	QPSK	6	0	23.11	23.27	23.23	24.7
1.4	16QAM	1	0	23.38	23.40	23.32	
1.4	16QAM	1	3	23.38	23.55	23.53	
1.4	16QAM	1	5	23.33	23.42	23.39	23.7
1.4	16QAM	3	0	23.15	23.25	23.11	
1.4	16QAM	3	1	23.22	23.29	23.23	
1.4	16QAM	3	3	23.13	23.20	23.15	23.7
1.4	16QAM	6	0	22.19	22.29	22.31	
1.4	64QAM	1	0	22.79	22.85	21.81	
1.4	64QAM	1	3	22.82	22.95	21.84	23.7
1.4	64QAM	1	5	22.75	22.82	21.90	
1.4	64QAM	3	0	22.75	22.76	21.77	
1.4	64QAM	3	1	22.79	22.89	21.84	22.7
1.4	64QAM	3	3	22.74	22.88	22.00	
1.4	64QAM	6	0	21.70	21.79	21.65	



Band 7							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.43	24.33	24.16	25.7
20	QPSK	1	49	24.40	24.36	24.21	
20	QPSK	1	99	24.53	24.43	24.20	
20	QPSK	50	0	23.80	23.46	23.37	24.7
20	QPSK	50	24	23.62	23.47	23.35	
20	QPSK	50	50	23.58	23.49	23.38	
20	QPSK	100	0	23.57	23.49	23.30	24.7
20	16QAM	1	0	23.72	23.69	23.53	
20	16QAM	1	49	23.75	23.65	23.47	
20	16QAM	1	99	23.89	23.74	23.52	23.7
20	16QAM	50	0	22.64	22.40	22.33	
20	16QAM	50	24	22.66	22.46	22.32	
20	16QAM	50	50	22.66	22.45	22.30	23.7
20	16QAM	100	0	22.58	22.45	22.52	
20	64QAM	1	0	22.63	22.49	22.44	
20	64QAM	1	49	22.62	22.65	22.46	22.7
20	64QAM	1	99	22.70	22.63	22.38	
20	64QAM	50	0	21.65	21.44	21.35	
20	64QAM	50	24	21.69	21.52	21.43	22.7
20	64QAM	50	50	21.66	21.44	21.59	
20	64QAM	100	0	21.67	21.51	21.40	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.41	24.35	24.22	25.7
15	QPSK	1	37	24.50	24.38	24.11	
15	QPSK	1	74	24.49	24.42	24.24	
15	QPSK	36	0	23.49	23.39	23.27	24.7
15	QPSK	36	20	23.64	23.46	23.32	
15	QPSK	36	39	23.64	23.46	23.32	
15	QPSK	75	0	23.58	23.40	23.35	24.7
15	16QAM	1	0	23.72	23.67	23.49	
15	16QAM	1	37	23.83	23.64	23.48	
15	16QAM	1	74	23.80	23.78	23.53	23.7
15	16QAM	36	0	22.50	22.47	22.29	
15	16QAM	36	20	22.60	22.50	22.35	
15	16QAM	36	39	22.65	22.48	22.34	23.7
15	16QAM	75	0	22.58	22.49	22.33	
15	64QAM	1	0	22.67	22.52	22.41	
15	64QAM	1	37	22.68	22.59	22.34	23.7
15	64QAM	1	74	22.80	22.60	22.41	
15	64QAM	36	0	21.49	21.41	21.39	
15	64QAM	36	20	21.66	21.55	21.32	22.7
15	64QAM	36	39	21.64	21.48	21.35	
15	64QAM	75	0	21.61	21.42	21.33	
Channel				20860	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.42	24.34	24.18	25.7
10	QPSK	1	25	24.48	24.37	24.08	
10	QPSK	1	49	24.42	24.34	24.20	
10	QPSK	25	0	23.43	23.29	23.24	24.7
10	QPSK	25	12	23.58	23.44	23.25	
10	QPSK	25	25	23.58	23.38	23.31	
10	QPSK	50	0	23.49	23.34	23.26	24.7
10	16QAM	1	0	23.65	23.57	23.43	
10	16QAM	1	25	23.81	23.62	23.38	
10	16QAM	1	49	23.72	23.72	23.47	23.7
10	16QAM	25	0	22.49	22.47	22.26	
10	16QAM	25	12	22.51	22.43	22.25	
10	16QAM	25	25	22.59	22.47	22.31	23.7
10	16QAM	50	0	22.57	22.46	22.24	
10	64QAM	1	0	22.65	22.45	22.36	
10	64QAM	1	25	22.68	22.53	22.25	22.7
10	64QAM	1	49	22.80	22.54	22.33	
10	64QAM	25	0	21.47	21.36	21.29	
10	64QAM	25	12	21.56	21.52	21.23	22.7
10	64QAM	25	25	21.52	21.45	21.33	
10	64QAM	50	0	21.61	21.33	21.23	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.45	24.33	24.22	25.7
5	QPSK	1	12	24.43	24.36	24.11	
5	QPSK	1	24	24.41	24.32	24.15	
5	QPSK	12	0	23.47	23.38	23.18	24.7
5	QPSK	12	7	23.62	23.39	23.31	
5	QPSK	12	13	23.61	23.38	23.24	
5	QPSK	25	0	23.48	23.32	23.26	24.7
5	16QAM	1	0	23.67	23.61	23.44	
5	16QAM	1	12	23.81	23.56	23.45	
5	16QAM	1	24	23.72	23.69	23.43	23.7
5	16QAM	12	0	22.47	22.45	22.20	
5	16QAM	12	7	22.56	22.41	22.33	
5	16QAM	12	13	22.62	22.48	22.25	23.7
5	16QAM	25	0	22.56	22.44	22.26	
5	64QAM	1	0	22.63	22.44	22.37	
5	64QAM	1	12	22.63	22.49	22.32	23.7
5	64QAM	1	24	22.76	22.55	22.37	
5	64QAM	12	0	21.41	21.34	21.30	
5	64QAM	12	7	21.83	21.52	21.24	22.7
5	64QAM	12	13	21.62	21.42	21.34	
5	64QAM	25	0	21.52	21.39	21.29	



Band 12							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.86	23.82	23.80	25.7
10	QPSK	1	25	23.75	23.83	23.77	
10	QPSK	1	49	23.69	23.89	23.81	
10	QPSK	25	0	22.95	22.92	22.90	24.7
10	QPSK	25	12	23.03	22.92	22.96	
10	QPSK	25	25	23.01	22.94	22.95	
10	QPSK	50	0	22.97	22.99	22.97	24.7
10	16QAM	1	0	23.25	23.19	23.16	
10	16QAM	1	25	23.25	23.24	23.10	
10	16QAM	1	49	23.30	23.28	23.19	23.7
10	16QAM	25	0	21.94	21.92	21.86	
10	16QAM	25	12	22.01	21.86	21.92	
10	16QAM	25	25	21.88	22.00	21.87	23.7
10	16QAM	50	0	22.02	21.94	21.98	
10	64QAM	1	0	22.58	22.53	22.59	
10	64QAM	1	25	22.63	22.67	22.64	23.7
10	64QAM	1	49	22.68	22.68	22.58	
10	64QAM	25	0	21.49	21.44	21.40	
10	64QAM	25	12	21.58	21.43	21.57	22.7
10	64QAM	25	25	21.47	21.47	21.41	
10	64QAM	50	0	21.59	21.45	21.45	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.88	23.80	23.79	25.7
5	QPSK	1	12	23.88	23.84	23.84	
5	QPSK	1	24	23.78	23.82	23.80	
5	QPSK	12	0	22.91	22.93	22.91	24.7
5	QPSK	12	7	23.00	22.86	22.96	
5	QPSK	12	13	22.93	22.94	22.85	
5	QPSK	25	0	22.99	22.87	22.91	24.7
5	16QAM	1	0	23.20	23.22	23.09	
5	16QAM	1	12	23.14	23.21	23.15	
5	16QAM	1	24	23.14	23.15	23.09	23.7
5	16QAM	12	0	21.99	21.96	21.94	
5	16QAM	12	7	21.98	21.89	21.93	
5	16QAM	12	13	21.96	21.92	21.87	23.7
5	16QAM	25	0	21.94	21.98	21.92	
5	64QAM	1	0	22.69	22.61	22.58	
5	64QAM	1	12	22.59	22.54	22.60	23.7
5	64QAM	1	24	22.66	22.63	22.56	
5	64QAM	12	0	21.51	21.50	21.41	
5	64QAM	12	7	21.50	21.45	21.50	22.7
5	64QAM	12	13	21.52	21.45	21.42	
5	64QAM	25	0	21.44	21.46	21.39	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.84	23.80	23.81	25.7
3	QPSK	1	8	23.85	23.94	23.80	
3	QPSK	1	14	23.85	23.83	23.77	
3	QPSK	8	0	23.01	22.94	22.90	24.7
3	QPSK	8	4	22.92	22.95	22.91	
3	QPSK	8	7	22.90	22.87	22.84	
3	QPSK	15	0	22.90	22.92	22.84	24.7
3	16QAM	1	0	23.24	23.13	23.17	
3	16QAM	1	8	23.19	23.23	23.16	
3	16QAM	1	14	23.23	23.22	23.18	23.7
3	16QAM	8	0	22.06	21.94	21.94	
3	16QAM	8	4	22.01	22.06	22.01	
3	16QAM	8	7	22.03	21.92	21.88	23.7
3	16QAM	15	0	22.01	21.96	21.86	
3	64QAM	1	0	22.70	22.60	22.53	
3	64QAM	1	8	22.68	22.72	22.60	23.7
3	64QAM	1	14	22.66	22.60	22.57	
3	64QAM	8	0	21.60	21.44	21.47	
3	64QAM	8	4	21.60	21.50	21.53	22.7
3	64QAM	8	7	21.47	21.45	21.41	
3	64QAM	15	0	21.45	21.39	21.36	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.80	23.74	23.79	25.7
1.4	QPSK	1	3	23.81	23.79	23.77	
1.4	QPSK	1	5	23.80	23.74	23.70	
1.4	QPSK	3	0	23.82	23.73	23.71	24.7
1.4	QPSK	3	1	23.84	23.75	23.79	
1.4	QPSK	3	3	23.76	23.75	23.71	
1.4	QPSK	6	0	22.97	22.78	22.79	24.7
1.4	16QAM	1	0	23.15	23.06	23.09	
1.4	16QAM	1	3	23.18	23.21	23.09	
1.4	16QAM	1	5	23.08	23.08	22.98	24.7
1.4	16QAM	3	0	22.96	22.81	22.80	
1.4	16QAM	3	1	22.96	22.87	22.88	
1.4	16QAM	3	3	22.92	22.88	22.78	23.7
1.4	16QAM	6	0	21.94	21.86	21.82	
1.4	64QAM	1	0	22.59	22.48	22.43	
1.4	64QAM	1	3	22.69	22.57	22.48	23.7
1.4	64QAM	1	5	22.55	22.46	22.43	
1.4	64QAM	3	0	22.57	22.51	22.45	
1.4	64QAM	3	1	22.55	22.45	22.53	22.7
1.4	64QAM	3	3	22.55	22.57	22.46	
1.4	64QAM	6	0	21.40	21.32	21.31	



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.60			25.2
10	QPSK	1	25	23.47			
10	QPSK	1	49	23.51			
10	QPSK	25	0	22.56			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.56			
10	QPSK	50	0	22.58			24.2
10	16QAM	1	0	22.75			
10	16QAM	1	25	22.82			
10	16QAM	1	49	22.76			23.2
10	16QAM	25	0	21.59			
10	16QAM	25	12	21.62			
10	16QAM	25	25	21.61			23.2
10	16QAM	50	0	21.57			
10	64QAM	1	0	23.07			
10	64QAM	1	25	23.04			23.2
10	64QAM	1	49	23.01			
10	64QAM	25	0	22.07			
10	64QAM	25	12	22.06			22.2
10	64QAM	25	25	22.02			
10	64QAM	50	0	22.04			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.50	23.45	23.49	25.2
5	QPSK	1	12	23.45	23.54	23.52	
5	QPSK	1	24	23.50	23.51	23.52	
5	QPSK	12	0	22.63	22.56	22.61	24.2
5	QPSK	12	7	22.67	22.64	22.67	
5	QPSK	12	13	22.67	22.62	22.62	
5	QPSK	25	0	22.64	22.57	22.55	24.2
5	16QAM	1	0	22.71	22.71	22.78	
5	16QAM	1	12	22.78	22.85	22.79	
5	16QAM	1	24	22.62	22.85	22.72	23.2
5	16QAM	12	0	21.70	21.62	21.68	
5	16QAM	12	7	21.68	21.57	21.60	
5	16QAM	12	13	21.69	21.60	21.70	23.2
5	16QAM	25	0	21.63	21.64	21.54	
5	64QAM	1	0	22.14	22.25	22.17	
5	64QAM	1	12	22.26	22.30	22.21	23.2
5	64QAM	1	24	22.26	22.23	22.15	
5	64QAM	12	0	21.19	21.11	21.20	
5	64QAM	12	7	21.24	21.14	21.08	22.2
5	64QAM	12	13	21.15	21.17	21.08	
5	64QAM	25	0	21.21	21.11	21.10	



Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.12			
10	QPSK	1	49	24.04			
10	QPSK	25	0	23.11			24.7
10	QPSK	25	12	23.18			
10	QPSK	25	25	23.16			
10	QPSK	50	0	23.15			24.7
10	16QAM	1	0	23.49			
10	16QAM	1	25	23.41			
10	16QAM	1	49	23.37			24.7
10	16QAM	25	0	22.10			
10	16QAM	25	12	22.09			
10	16QAM	25	25	22.19			23.7
10	16QAM	50	0	22.16			
10	64QAM	1	0	22.81			
10	64QAM	1	25	22.86			23.7
10	64QAM	1	49	22.73			
10	64QAM	25	0	21.72			
10	64QAM	25	12	21.81			22.7
10	64QAM	25	25	21.67			
10	64QAM	50	0	21.68			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.98	24.04	24.05	25.7
5	QPSK	1	12	24.14	24.19	24.14	
5	QPSK	1	24	24.08	24.07	24.05	
5	QPSK	12	0	23.13	23.12	23.08	24.7
5	QPSK	12	7	23.21	23.21	23.14	
5	QPSK	12	13	23.14	23.16	23.12	
5	QPSK	25	0	23.11	23.12	23.03	24.7
5	16QAM	1	0	23.40	23.37	23.34	
5	16QAM	1	12	23.47	23.44	23.43	
5	16QAM	1	24	23.45	23.34	23.39	24.7
5	16QAM	12	0	22.13	22.09	22.10	
5	16QAM	12	7	22.24	22.13	22.18	
5	16QAM	12	13	22.15	22.19	22.15	23.7
5	16QAM	25	0	22.17	22.07	22.08	
5	64QAM	1	0	22.75	22.83	22.82	
5	64QAM	1	12	22.89	22.72	22.82	23.7
5	64QAM	1	24	22.71	22.89	22.80	
5	64QAM	12	0	21.63	21.70	21.65	
5	64QAM	12	7	21.69	21.72	21.71	22.7
5	64QAM	12	13	21.75	21.67	21.65	
5	64QAM	25	0	21.71	21.66	21.61	



Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.25	24.20	24.11	25.7
10	QPSK	1	25	24.30	24.36	24.15	
10	QPSK	1	49	24.30	24.21	24.20	
10	QPSK	25	0	23.29	23.30	23.28	24.7
10	QPSK	25	12	23.40	23.30	23.28	
10	QPSK	25	25	23.38	23.36	23.44	
10	QPSK	50	0	23.35	23.29	23.30	24.7
10	16QAM	1	0	23.62	23.59	23.59	
10	16QAM	1	25	23.66	23.61	23.58	
10	16QAM	1	49	23.60	23.63	23.62	23.7
10	16QAM	25	0	22.29	22.27	22.30	
10	16QAM	25	12	22.41	22.37	22.28	
10	16QAM	25	25	22.44	22.35	22.45	23.7
10	16QAM	50	0	22.37	22.35	22.25	
10	64QAM	1	0	23.01	22.91	22.99	
10	64QAM	1	25	23.11	23.02	23.01	22.7
10	64QAM	1	49	23.05	23.02	22.93	
10	64QAM	25	0	21.81	21.82	21.78	
10	64QAM	25	12	21.95	21.88	21.82	22.7
10	64QAM	25	25	21.89	21.92	21.97	
10	64QAM	50	0	21.05	21.82	21.85	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.16	24.23	24.17	25.7
5	QPSK	1	12	24.32	24.33	24.24	
5	QPSK	1	24	24.30	24.32	24.28	
5	QPSK	12	0	23.28	23.30	23.29	24.7
5	QPSK	12	7	23.31	23.30	23.32	
5	QPSK	12	13	23.40	23.37	23.34	
5	QPSK	25	0	23.34	23.27	23.38	24.7
5	16QAM	1	0	23.61	23.57	23.51	
5	16QAM	1	12	23.64	23.63	23.59	
5	16QAM	1	24	23.62	23.61	23.59	23.7
5	16QAM	12	0	22.38	22.40	22.27	
5	16QAM	12	7	22.39	22.35	22.30	
5	16QAM	12	13	22.34	22.35	22.30	23.7
5	16QAM	25	0	22.35	22.38	22.37	
5	64QAM	1	0	22.76	22.83	23.01	
5	64QAM	1	12	23.01	23.08	22.96	23.7
5	64QAM	1	24	23.04	23.07	22.97	
5	64QAM	12	0	21.93	21.92	21.91	
5	64QAM	12	7	21.96	21.91	21.94	22.7
5	64QAM	12	13	21.92	21.96	21.92	
5	64QAM	25	0	21.86	21.84	21.91	



Band 25										
Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				26140	26340	26590				
Frequency (MHz)				1860	1880	1905				
20	QPSK	1	0	24.37	24.06	23.99	25.7			
20	QPSK	1	49	24.17	24.10	24.01				
20	QPSK	1	99	24.09	24.05	23.83				
20	QPSK	50	0	23.26	23.27	23.08	24.7			
20	QPSK	50	24	23.33	23.30	23.12				
20	QPSK	50	50	23.27	23.29	23.14				
20	QPSK	100	0	23.28	23.29	23.17	24.7			
20	16QAM	1	0	23.53	23.42	23.38				
20	16QAM	1	49	23.52	23.45	23.38				
20	16QAM	1	99	23.42	23.47	23.21	23.7			
20	16QAM	50	0	22.25	22.27	22.14				
20	16QAM	50	24	22.33	22.33	22.11				
20	16QAM	50	50	22.28	22.24	22.22	22.7			
20	16QAM	100	0	22.26	22.27	22.13				
20	64QAM	1	0	22.41	22.30	22.21				
20	64QAM	1	49	22.31	22.32	21.92	22.7			
20	64QAM	1	99	22.39	22.38	21.70				
20	64QAM	50	0	21.29	21.27	20.87				
20	64QAM	50	24	21.33	21.30	20.90	22.7			
20	64QAM	50	50	21.35	21.35	20.70				
20	64QAM	100	0	21.29	21.35	20.71				
Channel				26115	26340	26615	Tune-up limit (dBm)			
Frequency (MHz)				1857.5	1880	1907.5				
15	QPSK	1	0	24.24	24.13	24.06	25.7			
15	QPSK	1	37	24.11	24.17	24.07				
15	QPSK	1	74	24.19	24.20	23.81				
15	QPSK	36	0	23.36	23.25	23.15	24.7			
15	QPSK	36	20	23.39	23.30	23.14				
15	QPSK	36	39	23.27	23.27	23.17				
15	QPSK	75	0	23.32	23.26	23.15	24.7			
15	16QAM	1	0	23.46	23.50	23.39				
15	16QAM	1	37	23.44	23.50	23.30				
15	16QAM	1	74	23.42	23.50	23.19	23.7			
15	16QAM	36	0	22.34	22.29	22.14				
15	16QAM	36	20	22.32	22.29	22.20				
15	16QAM	36	39	22.32	22.27	22.14	23.7			
15	16QAM	75	0	22.27	22.28	22.24				
15	64QAM	1	0	22.42	22.33	21.77				
15	64QAM	1	37	22.35	22.38	21.86	23.7			
15	64QAM	1	74	22.33	22.45	21.71				
15	64QAM	36	0	21.39	21.25	20.86				
15	64QAM	36	20	21.36	21.30	20.96	22.7			
15	64QAM	36	39	21.33	21.28	20.71				
15	64QAM	75	0	21.33	21.34	20.70				
Channel				26090	26340	26640	Tune-up limit (dBm)			
Frequency (MHz)				1855	1880	1910				
10	QPSK	1	0	24.16	24.13	24.06	25.7			
10	QPSK	1	25	24.18	24.14	24.06				
10	QPSK	1	49	24.22	24.21	23.78				
10	QPSK	25	0	23.35	23.33	23.04	24.7			
10	QPSK	25	12	23.32	23.27	23.25				
10	QPSK	25	25	23.28	23.32	23.17				
10	QPSK	50	0	23.29	23.26	23.18	24.7			
10	16QAM	1	0	23.60	23.57	23.34				
10	16QAM	1	25	23.54	23.53	23.43				
10	16QAM	1	49	23.58	23.54	23.19	23.7			
10	16QAM	25	0	22.31	22.28	22.05				
10	16QAM	25	12	22.33	22.29	22.16				
10	16QAM	25	25	22.35	22.27	22.12	23.7			
10	16QAM	50	0	22.35	22.36	22.09				
10	64QAM	1	0	22.54	22.39	22.01				
10	64QAM	1	25	22.52	22.42	21.87	23.7			
10	64QAM	1	49	22.41	22.48	21.75				
10	64QAM	25	0	21.31	21.33	20.78				
10	64QAM	25	12	21.42	21.36	20.85	22.7			
10	64QAM	25	25	21.40	21.37	20.64				
10	64QAM	50	0	21.33	21.40	20.52				
Channel				26065	26340	26665	Tune-up limit (dBm)			
Frequency (MHz)				1852.5	1880	1912.5				
5	QPSK	1	0	24.26	24.17	24.08	25.7			
5	QPSK	1	12	24.23	24.21	24.04				
5	QPSK	1	24	24.29	24.19	23.74				
5	QPSK	12	0	23.23	23.22	23.18	24.7			
5	QPSK	12	7	23.32	23.29	23.20				
5	QPSK	12	13	23.34	23.34	23.00				
5	QPSK	25	0	23.30	23.30	23.10	24.7			
5	16QAM	1	0	23.57	23.48	23.36				
5	16QAM	1	12	23.60	23.55	23.41				
5	16QAM	1	24	23.60	23.55	23.14	24.7			
5	16QAM	12	0	22.27	22.26	22.14				
5	16QAM	12	7	22.37	22.30	22.21				
5	16QAM	12	13	22.42	22.39	22.17	23.7			
5	16QAM	25	0	22.36	22.28	22.13				
5	64QAM	1	0	22.42	22.44	21.76				
5	64QAM	1	12	22.41	22.39	21.78	23.7			
5	64QAM	1	24	22.53	22.43	21.73				
5	64QAM	12	0	21.37	21.38	20.72				
5	64QAM	12	7	21.42	21.35	20.55	22.7			
5	64QAM	12	13	21.42	21.34	20.36				
5	64QAM	25	0	21.29	21.32	20.45				
Channel				26055	26340	26675	Tune-up limit (dBm)			
Frequency (MHz)				1851.5	1880	1913.5				
3	QPSK	1	0	24.15	24.03	24.06	25.7			
3	QPSK	1	8	24.29	24.32	23.94				
3	QPSK	1	14	24.31	24.28	23.76				
3	QPSK	8	0	23.29	23.22	23.13	24.7			
3	QPSK	8	4	23.31	23.33	23.06				
3	QPSK	8	7	23.31	23.37	22.84				
3	QPSK	15	0	23.28	23.32	22.90	24.7			
3	16QAM	1	0	23.48	23.44	23.26				
3	16QAM	1	8	23.65	23.61	23.22				
3	16QAM	1	14	23.57	23.60	22.97	24.7			
3	16QAM	8	0	22.29	22.31	22.20				
3	16QAM	8	4	22.41	22.31	22.13				
3	16QAM	8	7	22.34	22.42	22.10	23.7			
3	16QAM	15	0	22.35	22.31	22.09				
3	64QAM	1	0	22.36	22.28	21.77				
3	64QAM	1	8	22.49	22.52	21.79	23.7			
3	64QAM	1	14	22.57	22.51	21.75				
3	64QAM	8	0	21.29	21.29	21.66				
3	64QAM	8	4	21.41	21.39	20.42	22.7			
3	64QAM	8	7	21.47	21.37	20.21				
3	64QAM	15	0	21.39	21.36	20.34				
Channel				26047	26340	26683	Tune-up limit (dBm)			
Frequency (MHz)				1850.7	1880	1914.3				
1.4	QPSK	1	0	24.13	24.06	23.93	25.7			
1.4	QPSK	1	3	24.16	24.35	23.78				
1.4	QPSK	1	5	24.34	24.22	23.73				
1.4	QPSK	3	0	24.22	24.20	23.75	24.7			
1.4	QPSK	3	1	24.29	24.30	23.76				
1.4	QPSK	3	3	24.24	24.17	23.74				
1.4	QPSK	6	0	23.28	23.21	22.91	24.7			
1.4	QPSK	3	3	23.34	23.30	23.06				
1.4	16QAM	1	0	23.58	23.49	23.18				
1.4	16QAM	1	5	23.62	23.46	22.98	24.7			
1.4	16QAM	3	0	23.31	23.28	22.98				
1.4	16QAM	3	3	23.36	23.25	22.91				
1.4	16QAM	3	3	23.38	23.25	22.84	23.7			
1.4	64QAM	1	0	22.28	22.41	22.00				
1.4	64QAM	1	3	22.36	22.44	22.14				
1.4	64QAM	1	3	22.56	22.33	21.72	23.7			
1.4	64QAM	3	0	22.40	22.41	21.75				
1.4	64QAM	3	1	22.50	22.44	21.77				
1.4	64QAM	3	3	22.58	22.43	21.70	22.7			
1.4	64QAM	3	3	23.19	23.33	23.06				
1.4	64QAM	3	3	23.25	23.33	23.28				



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.04	24.05	24.03	25.7
15	QPSK	1	37	23.98	24.02	24.02	
15	QPSK	1	74	24.10	24.33	23.96	
15	QPSK	36	0	23.17	23.22	23.18	24.7
15	QPSK	36	20	23.23	23.18	23.12	
15	QPSK	36	39	23.19	23.19	23.15	
15	QPSK	75	0	23.23	23.17	23.12	24.7
15	16QAM	1	0	23.36	23.36	23.38	
15	16QAM	1	37	23.38	23.42	23.42	
15	16QAM	1	74	23.43	23.44	23.29	23.7
15	16QAM	36	0	22.16	22.22	22.16	
15	16QAM	36	20	22.17	22.15	22.16	
15	16QAM	36	39	22.14	22.17	22.23	22.7
15	16QAM	75	0	22.17	22.15	22.22	
15	64QAM	1	0	22.79	22.70	22.74	
15	64QAM	1	37	22.72	22.80	22.79	22.7
15	64QAM	1	74	22.80	22.76	22.16	
15	64QAM	36	0	21.64	21.76	21.77	
15	64QAM	36	20	21.66	21.73	21.65	22.7
15	64QAM	36	39	21.67	21.79	21.78	
15	64QAM	75	0	21.76	21.65	21.77	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.13	24.13	24.21	25.7
10	QPSK	1	25	24.03	24.13	24.12	
10	QPSK	1	49	24.09	24.17	24.09	
10	QPSK	25	0	23.22	23.12	23.21	24.7
10	QPSK	25	12	23.20	23.20	23.20	
10	QPSK	25	25	23.16	23.23	23.25	
10	QPSK	50	0	23.23	23.14	23.16	24.7
10	16QAM	1	0	23.45	23.52	23.59	
10	16QAM	1	25	23.55	23.51	23.52	
10	16QAM	1	49	23.53	23.49	23.45	23.7
10	16QAM	25	0	22.22	22.20	22.21	
10	16QAM	25	12	22.23	22.21	22.15	
10	16QAM	25	25	22.17	22.23	22.08	23.7
10	16QAM	50	0	22.20	22.19	22.19	
10	64QAM	1	0	22.96	22.76	22.91	
10	64QAM	1	25	22.81	22.91	22.98	23.7
10	64QAM	1	49	22.55	22.91	22.96	
10	64QAM	25	0	21.76	21.73	21.75	
10	64QAM	25	12	21.62	21.75	21.78	22.7
10	64QAM	25	25	21.70	21.75	21.48	
10	64QAM	50	0	21.74	21.68	21.72	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				616.5	631.5	646.5	
5	QPSK	1	0	24.31	24.13	24.11	25.7
5	QPSK	1	12	24.24	24.19	24.09	
5	QPSK	1	24	24.07	24.24	24.16	
5	QPSK	12	0	23.33	23.23	23.21	24.7
5	QPSK	12	7	23.27	23.27	23.22	
5	QPSK	12	13	23.26	23.24	23.11	
5	QPSK	25	0	23.28	23.13	23.20	24.7
5	16QAM	1	0	23.63	23.43	23.45	
5	16QAM	1	12	23.43	23.51	23.32	
5	16QAM	1	24	23.44	23.49	23.31	23.7
5	16QAM	12	0	22.38	22.22	22.22	
5	16QAM	12	7	22.32	22.24	22.21	
5	16QAM	12	13	22.21	22.25	22.18	23.7
5	16QAM	25	0	22.22	22.21	22.21	
5	64QAM	1	0	23.02	22.85	22.89	
5	64QAM	1	12	22.84	22.89	22.19	23.7
5	64QAM	1	24	22.68	22.92	22.34	
5	64QAM	12	0	21.90	21.94	21.65	
5	64QAM	12	7	21.89	21.81	21.18	22.7
5	64QAM	12	13	21.75	21.82	21.02	
5	64QAM	25	0	21.82	21.69	21.36	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.19	24.16	24.20	25.7
3	QPSK	1	8	24.24	24.27	24.13	
3	QPSK	1	14	24.07	24.18	24.11	
3	QPSK	8	0	23.34	23.18	23.17	24.7
3	QPSK	8	4	23.25	23.25	23.22	
3	QPSK	8	7	23.29	23.24	23.10	
3	QPSK	15	0	23.24	23.18	23.13	24.7
3	16QAM	1	0	23.53	23.45	23.50	
3	16QAM	1	8	23.59	23.51	23.39	
3	16QAM	1	14	23.50	23.53	23.35	23.7
3	16QAM	8	0	22.35	22.23	22.26	
3	16QAM	8	4	22.30	22.37	22.25	
3	16QAM	8	7	22.27	22.33	22.13	23.7
3	16QAM	15	0	22.38	22.17	22.16	
3	64QAM	1	0	22.92	22.87	22.25	
3	64QAM	1	8	23.00	22.93	22.12	23.7
3	64QAM	1	14	22.89	22.94	22.30	
3	64QAM	8	0	21.87	21.79	21.08	
3	64QAM	8	4	21.84	21.88	21.07	22.7
3	64QAM	8	7	21.88	21.80	21.14	
3	64QAM	15	0	21.81	21.79	21.12	
Channel				26897	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.16	24.04	24.05	25.7
1.4	QPSK	1	3	24.24	24.13	24.07	
1.4	QPSK	1	5	24.12	24.08	23.93	
1.4	QPSK	3	0	24.23	24.06	24.02	24.7
1.4	QPSK	3	1	24.21	24.05	24.03	
1.4	QPSK	3	3	24.16	24.14	23.99	
1.4	QPSK	6	0	23.25	23.20	23.04	24.7
1.4	16QAM	1	0	23.52	23.37	23.36	
1.4	16QAM	1	3	23.54	23.47	23.35	
1.4	16QAM	1	5	23.41	23.39	23.29	24.7
1.4	16QAM	3	0	23.23	23.16	23.12	
1.4	16QAM	3	1	23.23	23.20	23.14	
1.4	16QAM	3	3	23.27	23.11	23.09	23.7
1.4	16QAM	6	0	22.34	22.26	22.14	
1.4	64QAM	1	0	22.85	22.81	22.16	
1.4	64QAM	1	3	22.96	22.89	22.39	23.7
1.4	64QAM	1	5	22.79	22.75	22.41	
1.4	64QAM	3	0	22.92	22.75	22.11	
1.4	64QAM	3	1	22.90	22.81	22.20	22.7
1.4	64QAM	3	3	22.84	22.75	22.38	
1.4	64QAM	6	0	21.75	21.73	21.14	



Band 30							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.60			23.7
10	QPSK	1	25	22.58			
10	QPSK	1	49	22.57			
10	QPSK	25	0	21.40			22.7
10	QPSK	25	12	21.84			
10	QPSK	25	25	21.51			
10	QPSK	50	0	21.63			22.7
10	16QAM	1	0	21.91			
10	16QAM	1	25	21.92			
10	16QAM	1	49	21.84			21.7
10	16QAM	25	0	20.46			
10	16QAM	25	12	20.53			
10	16QAM	25	25	20.45			21.7
10	16QAM	50	0	20.55			
10	64QAM	1	0	20.69			
10	64QAM	1	25	20.70			21.7
10	64QAM	1	49	20.62			
10	64QAM	25	0	19.46			
10	64QAM	25	12	19.61			20.7
10	64QAM	25	25	19.67			
10	64QAM	50	0	19.60			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.40	22.33	22.46	23.7
5	QPSK	1	12	22.50	22.59	22.53	
5	QPSK	1	24	22.58	22.42	22.56	
5	QPSK	12	0	21.52	21.63	21.49	22.7
5	QPSK	12	7	21.58	21.57	21.60	
5	QPSK	12	13	21.55	21.61	21.44	
5	QPSK	25	0	21.68	21.45	21.51	22.7
5	16QAM	1	0	21.71	21.78	21.72	
5	16QAM	1	12	21.80	21.73	21.86	
5	16QAM	1	24	22.01	21.70	21.78	21.7
5	16QAM	12	0	20.58	20.56	20.55	
5	16QAM	12	7	20.71	20.64	20.67	
5	16QAM	12	13	20.59	20.54	20.63	21.7
5	16QAM	25	0	20.66	20.60	20.51	
5	64QAM	1	0	20.71	20.69	20.64	
5	64QAM	1	12	20.68	20.73	20.64	21.7
5	64QAM	1	24	20.85	20.83	20.70	
5	64QAM	12	0	19.54	19.68	19.68	
5	64QAM	12	7	19.70	19.57	19.60	20.7
5	64QAM	12	13	19.73	19.65	19.69	
5	64QAM	25	0	19.73	19.66	19.62	



Band 66									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132047	132322	132597			
Frequency (MHz)				1720	1745	1772			
20	QPSK	1	0	24.30	24.23	24.29	25.7		
20	QPSK	1	49	24.09	24.18	24.12			
20	QPSK	1	99	24.24	24.20	24.16			
20	QPSK	50	0	23.14	23.07	23.15			
20	QPSK	50	24	23.18	22.94	23.14	24.7		
20	QPSK	50	50	23.21	23.00	23.03			
20	QPSK	100	0	23.14	23.16	23.11			
20	16QAM	1	0	23.42	23.47	23.37			
20	16QAM	1	49	23.34	23.34	23.20	24.7		
20	16QAM	1	99	23.33	23.34	23.10			
20	16QAM	50	0	22.13	21.98	22.08			
20	16QAM	50	24	22.19	21.96	22.18			
20	16QAM	50	50	22.17	22.04	22.12	23.7		
20	16QAM	100	0	22.18	22.06	22.23			
20	64QAM	1	0	22.36	22.29	22.16			
20	64QAM	1	49	22.09	22.08	22.17			
20	64QAM	1	99	22.31	22.25	22.10	23.7		
20	64QAM	50	0	21.13	21.16	21.03			
20	64QAM	50	24	21.28	21.17	21.23			
20	64QAM	50	50	21.14	21.10	21.14			
20	64QAM	100	0	21.14	21.10	21.14	22.7		
Channel				132047	132322	132597			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.18	23.94	24.08	25.7		
15	QPSK	1	37	23.89	23.88	23.85			
15	QPSK	1	74	24.10	24.10	23.90			
15	QPSK	36	0	23.05	23.14	23.03			
15	QPSK	36	20	23.09	23.15	23.05	24.7		
15	QPSK	36	39	23.19	23.18	23.01			
15	QPSK	75	0	23.06	23.10	23.01			
15	16QAM	1	0	23.38	23.35	23.32			
15	16QAM	1	37	23.28	23.30	23.22	24.7		
15	16QAM	1	74	23.40	23.34	23.17			
15	16QAM	36	0	22.03	22.04	21.98			
15	16QAM	36	20	22.25	22.03	22.20			
15	16QAM	36	39	22.18	22.01	22.20	23.7		
15	16QAM	75	0	22.08	22.23	21.94			
15	64QAM	1	0	22.32	22.15	22.18			
15	64QAM	1	37	22.13	22.17	22.07			
15	64QAM	1	74	22.25	22.20	22.21	23.7		
15	64QAM	36	0	21.01	21.05	21.11			
15	64QAM	36	20	21.06	21.19	21.05			
15	64QAM	36	39	21.16	21.05	21.09			
15	64QAM	75	0	21.19	21.10	21.06	22.7		
Channel				132022	132322	132622			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	24.11	24.02	24.01	25.7		
10	QPSK	1	25	24.01	23.94	24.10			
10	QPSK	1	49	24.07	23.97	24.06			
10	QPSK	25	0	23.22	23.02	23.12			
10	QPSK	25	12	23.19	23.15	23.12	24.7		
10	QPSK	25	25	23.24	23.22	23.21			
10	QPSK	50	0	23.25	23.23	23.16			
10	16QAM	1	0	23.42	23.36	23.39			
10	16QAM	1	25	23.46	23.36	23.37	24.7		
10	16QAM	1	49	23.38	23.45	23.49			
10	16QAM	25	0	22.24	22.00	22.16			
10	16QAM	25	12	22.31	22.25	22.08			
10	16QAM	25	25	22.14	22.10	22.08	23.7		
10	16QAM	50	0	22.23	22.20	22.09			
10	64QAM	1	0	22.28	22.20	22.25			
10	64QAM	1	25	22.32	22.28	22.40			
10	64QAM	1	49	22.40	22.41	22.24	23.7		
10	64QAM	25	0	21.15	21.09	21.10			
10	64QAM	25	12	21.29	21.12	21.10			
10	64QAM	25	25	21.24	21.22	21.21			
10	64QAM	50	0	21.19	21.25	21.18	22.7		
Channel				131997	132322	132647			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.08	24.07	24.01	25.7		
5	QPSK	1	12	24.22	24.06	24.12			
5	QPSK	1	24	24.15	24.17	24.01			
5	QPSK	12	0	23.15	23.10	23.13			
5	QPSK	12	7	23.11	23.27	23.24	24.7		
5	QPSK	12	13	23.29	23.19	23.27			
5	QPSK	25	0	23.13	23.20	23.14			
5	16QAM	1	0	23.51	23.45	23.47			
5	16QAM	1	12	23.59	23.49	23.41	24.7		
5	16QAM	1	24	23.47	23.46	23.30			
5	16QAM	12	0	22.30	22.11	22.26			
5	16QAM	12	7	22.29	22.28	22.26			
5	16QAM	12	13	22.18	22.28	22.25	23.7		
5	16QAM	25	0	22.21	22.09	22.27			
5	64QAM	1	0	22.40	22.30	22.30			
5	64QAM	1	12	22.47	22.38	22.33			
5	64QAM	1	24	22.42	22.39	22.32	23.7		
5	64QAM	12	0	21.39	21.26	21.33			
5	64QAM	12	7	21.19	21.19	21.33			
5	64QAM	12	13	21.24	21.27	21.30			
5	64QAM	25	0	21.16	21.25	21.08	22.7		
Channel				131987	132322	132657			
Frequency (MHz)				1711.5	1745	1776.5			
3	QPSK	1	0	24.06	24.06	24.00	25.7		
3	QPSK	1	8	24.25	24.06	24.07			
3	QPSK	1	14	24.05	24.10	24.03			
3	QPSK	8	0	23.18	23.09	23.20			
3	QPSK	8	4	23.21	23.21	23.13	24.7		
3	QPSK	8	7	23.18	23.10	23.05			
3	QPSK	15	0	23.12	23.22	23.17			
3	16QAM	1	0	23.51	23.27	23.27			
3	16QAM	1	8	23.50	23.58	23.48	24.7		
3	16QAM	1	14	23.41	23.39	23.44			
3	16QAM	8	0	22.20	22.29	22.27			
3	16QAM	8	4	22.39	22.27	22.24			
3	16QAM	8	7	22.24	22.12	22.11	23.7		
3	16QAM	15	0	22.25	22.18	22.27			
3	64QAM	1	0	22.32	22.37	22.38			
3	64QAM	1	8	22.51	22.33	22.42			
3	64QAM	1	14	22.47	22.29	22.31	23.7		
3	64QAM	8	0	21.36	21.20	21.26			
3	64QAM	8	4	21.25	21.16	21.20			
3	64QAM	8	7	21.20	21.32	21.16			
3	64QAM	15	0	21.18	21.17	21.27	22.7		
Channel				131979	132322	132665			
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.01	24.08	23.94	25.7		
1.4	QPSK	1	3	24.15	23.99	24.13			
1.4	QPSK	1	5	23.95	23.98	23.92			
1.4	QPSK	3	0	24.16	23.99	24.13			
1.4	QPSK	3	1	24.08	24.06	24.13	24.7		
1.4	QPSK	3	3	23.98	24.03	24.03			
1.4	QPSK	6	0	23.18	23.00	23.09			
1.4	QPSK	3	3	23.19	23.22	23.12	24.7		
1.4	16QAM	1	0	23.42	23.46	23.43			
1.4	16QAM	1	5	23.33	23.35	23.32			
1.4	16QAM	3	0	23.19	23.17	23.10			
1.4	16QAM	3	1	23.20	23.08	23.01	23.7		
1.4	16QAM	3	3	23.21	23.15	23.08			
1.4	16QAM	1	0	22.24	22.15	22.06			
1.4	16QAM	1	5	22.30	22.20	22.30			
1.4	16QAM	1	3	22.31	22.20	22.32	23.7		
1.4	64QAM	1	5	22.19	22.20	22.32			
1.4	64QAM	3	0	22.19	22.20	22.22			
1.4	64QAM	3	1	22.40	22.38	22.37			
1.4	64QAM	3	3	22.36	22.12	22.21	23.7		
1.4	64QAM	3	6	22.24	22.15	22.08			
1.4	64QAM	1	0	22.30	22.20	22.30			
1.4	64QAM	1	3	22.31	22.21	22.32			
1.4	64QAM	1	5	22.19	22.17	22.27	22.7		



Band 71							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.35	24.17	24.20	25.7
20	QPSK	1	49	24.15	24.16	24.15	
20	QPSK	1	99	24.12	24.09	24.08	
20	QPSK	50	0	23.28	23.24	23.26	24.7
20	QPSK	50	24	23.33	23.28	23.17	
20	QPSK	50	50	23.32	23.27	23.27	
20	QPSK	100	0	23.33	23.32	23.28	24.7
20	16QAM	1	0	23.68	23.52	23.53	
20	16QAM	1	49	23.55	23.54	23.40	
20	16QAM	1	99	23.49	23.49	23.45	23.7
20	16QAM	50	0	22.34	22.30	22.30	
20	16QAM	50	24	22.34	22.27	22.24	
20	16QAM	50	50	22.30	22.25	22.28	22.7
20	16QAM	100	0	22.32	22.30	22.26	
20	64QAM	1	0	22.18	22.70	23.01	
20	64QAM	1	49	22.76	22.59	22.38	22.7
20	64QAM	1	99	23.01	22.51	22.88	
20	64QAM	50	0	20.92	21.86	21.50	
20	64QAM	50	24	21.49	21.70	21.76	22.7
20	64QAM	50	50	21.96	21.50	21.85	
20	64QAM	100	0	21.50	21.89	21.87	
Channel				133197	133287	133387	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.33	24.17	24.13	25.7
15	QPSK	1	37	24.01	24.14	24.11	
15	QPSK	1	74	24.16	24.11	24.11	
15	QPSK	36	0	23.24	23.26	23.27	24.7
15	QPSK	36	20	23.29	23.28	23.37	
15	QPSK	36	39	23.31	23.33	23.26	
15	QPSK	75	0	23.34	23.30	23.20	24.7
15	16QAM	1	0	23.56	23.53	23.49	
15	16QAM	1	37	23.28	23.50	23.41	
15	16QAM	1	74	23.38	23.43	23.38	23.7
15	16QAM	36	0	22.15	22.31	22.26	
15	16QAM	36	20	22.31	22.25	22.34	
15	16QAM	36	39	22.38	22.33	22.28	23.7
15	16QAM	75	0	22.37	22.19	22.18	
15	64QAM	1	0	22.13	22.80	22.90	
15	64QAM	1	37	21.73	23.04	23.04	23.7
15	64QAM	1	74	22.53	22.63	22.97	
15	64QAM	36	0	20.81	21.92	21.51	
15	64QAM	36	20	20.88	21.74	21.92	22.7
15	64QAM	36	39	21.49	21.44	21.88	
15	64QAM	75	0	21.38	21.79	21.77	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.30	24.14	24.17	25.7
10	QPSK	1	25	24.11	24.10	24.12	
10	QPSK	1	49	24.13	24.14	24.01	
10	QPSK	25	0	23.36	23.28	23.22	24.7
10	QPSK	25	12	23.13	23.25	23.22	
10	QPSK	25	25	23.19	23.31	23.23	
10	QPSK	50	0	23.29	23.18	23.16	24.7
10	16QAM	1	0	23.62	23.47	23.53	
10	16QAM	1	25	23.47	23.51	23.45	
10	16QAM	1	49	23.46	23.44	23.39	23.7
10	16QAM	25	0	22.05	22.17	22.16	
10	16QAM	25	12	22.07	22.24	22.20	
10	16QAM	25	25	22.00	22.24	22.19	23.7
10	16QAM	50	0	22.28	22.17	22.22	
10	64QAM	1	0	21.83	22.96	22.96	
10	64QAM	1	25	21.88	23.08	23.07	22.7
10	64QAM	1	49	22.12	22.23	22.55	
10	64QAM	25	0	20.70	21.87	21.82	
10	64QAM	25	12	20.70	21.74	21.85	22.7
10	64QAM	25	25	20.68	21.37	21.72	
10	64QAM	50	0	20.73	21.60	21.80	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.03	24.23	24.23	25.7
5	QPSK	1	12	24.13	24.24	24.12	
5	QPSK	1	24	24.11	24.10	24.10	
5	QPSK	12	0	23.15	23.26	23.19	24.7
5	QPSK	12	7	23.15	23.32	23.26	
5	QPSK	12	13	23.13	23.22	23.18	
5	QPSK	25	0	23.15	23.26	23.20	24.7
5	16QAM	1	0	23.29	23.53	23.52	
5	16QAM	1	12	23.38	23.54	23.50	
5	16QAM	1	24	23.40	23.49	23.42	23.7
5	16QAM	12	0	22.04	22.30	22.29	
5	16QAM	12	7	22.12	22.30	22.29	
5	16QAM	12	13	22.25	22.25	22.21	23.7
5	16QAM	25	0	22.06	22.21	22.22	
5	64QAM	1	0	21.70	22.98	23.00	
5	64QAM	1	12	21.82	22.93	22.81	22.7
5	64QAM	1	24	22.03	22.71	22.37	
5	64QAM	12	0	20.74	21.93	21.85	
5	64QAM	12	7	20.91	21.89	21.91	22.7
5	64QAM	12	13	20.87	21.70	21.89	
5	64QAM	25	0	20.69	21.73	21.61	



Band 2										
Art 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 18700	Power Middle Ch. / 18900	Power High Ch. / 19100	Tune-up limit (dBm)			
Channel				18600	18800	19000				
Frequency (MHz)				1860	1880	1900				
20	QPSK	1	0	24.49	24.54	24.52	25.7			
20	QPSK	1	49	24.45	24.53	24.43				
20	QPSK	1	99	24.45	24.47	24.40				
20	QPSK	50	0	23.55	23.59	23.58	24.7			
20	QPSK	50	24	23.64	23.63	23.59				
20	QPSK	50	50	23.62	23.57	23.59				
20	QPSK	100	0	23.65	23.58	23.59	24.7			
20	16QAM	1	0	23.84	23.88	23.82				
20	16QAM	1	49	23.83	23.86	23.76				
20	16QAM	1	99	23.75	23.82	23.70	23.7			
20	16QAM	50	0	22.58	22.60	22.61				
20	16QAM	50	24	22.66	22.64	22.61				
20	16QAM	50	50	22.65	22.60	22.59	23.7			
20	16QAM	100	0	22.62	22.59	22.59				
20	64QAM	1	0	22.68	22.77	22.74				
20	64QAM	1	49	22.73	22.73	22.40	23.7			
20	64QAM	1	99	22.66	22.67	22.63				
20	64QAM	50	0	21.59	21.61	21.60				
20	64QAM	50	24	21.68	21.66	21.56	22.7			
20	64QAM	50	50	21.66	21.61	21.61				
20	64QAM	100	0	21.65	21.64	21.59				
Channel				18675	18900	19125	Tune-up limit (dBm)			
Frequency (MHz)				1857.5	1880	1902.5				
15	QPSK	1	0	24.51	24.52	24.50	25.7			
15	QPSK	1	37	24.47	24.53	24.39				
15	QPSK	1	74	24.50	24.52	24.46				
15	QPSK	36	20	23.61	23.63	23.58	24.7			
15	QPSK	36	39	23.60	23.60	23.57				
15	QPSK	75	0	23.61	23.60	23.55				
15	16QAM	1	0	23.73	23.84	23.80	24.7			
15	16QAM	1	37	23.78	23.83	23.74				
15	16QAM	1	74	23.79	23.81	23.72				
15	16QAM	36	0	22.53	22.59	22.54	23.7			
15	16QAM	36	20	22.62	22.62	22.56				
15	16QAM	36	39	22.61	22.61	22.57				
15	16QAM	75	0	22.62	22.61	22.58	24.7			
15	64QAM	1	0	22.68	22.76	22.69				
15	64QAM	1	37	22.71	22.82	22.47				
15	64QAM	1	74	22.70	22.66	22.66	22.7			
15	64QAM	36	0	21.57	21.64	21.42				
15	64QAM	36	20	21.66	21.66	21.60				
15	64QAM	36	39	21.70	21.67	21.59	23.7			
15	64QAM	75	0	21.65	21.62	21.59				
15	64QAM	100	0	21.65	21.64	21.59				
Channel				18650	18900	19150	Tune-up limit (dBm)			
Frequency (MHz)				1855	1880	1905				
10	QPSK	1	0	24.43	24.53	24.44	25.7			
10	QPSK	1	25	24.44	24.49	24.38				
10	QPSK	1	49	24.45	24.50	24.43				
10	QPSK	25	0	23.55	23.55	23.49	24.7			
10	QPSK	25	12	23.59	23.59	23.55				
10	QPSK	25	25	23.60	23.58	23.58				
10	QPSK	50	0	23.59	23.59	23.55	24.7			
10	16QAM	1	0	23.83	23.89	23.79				
10	16QAM	1	25	23.81	23.93	23.77				
10	16QAM	1	49	23.80	23.87	23.76	23.7			
10	16QAM	25	0	22.57	22.55	22.52				
10	16QAM	25	12	22.61	22.62	22.53				
10	16QAM	25	25	22.54	22.59	22.56	23.7			
10	16QAM	50	0	22.58	22.57	22.55				
10	64QAM	1	0	22.67	22.71	22.48				
10	64QAM	1	25	22.75	22.79	22.68	23.7			
10	64QAM	1	49	22.71	22.72	22.70				
10	64QAM	25	0	21.60	21.59	21.51				
10	64QAM	25	12	21.63	21.64	21.58	22.7			
10	64QAM	25	25	21.62	21.62	21.59				
10	64QAM	50	0	21.64	21.64	21.55				
Channel				18625	18900	19175	Tune-up limit (dBm)			
Frequency (MHz)				1852.5	1880	1907.5				
5	QPSK	1	0	24.42	24.45	24.43	25.7			
5	QPSK	1	12	24.45	24.50	24.48				
5	QPSK	1	24	24.48	24.49	24.46				
5	QPSK	12	0	23.54	23.54	23.50	24.7			
5	QPSK	12	7	23.55	23.59	23.53				
5	QPSK	12	13	23.59	23.63	23.52				
5	QPSK	25	0	23.56	23.57	23.50	24.7			
5	16QAM	1	0	23.77	23.88	23.68				
5	16QAM	1	12	23.83	23.90	23.75				
5	16QAM	1	24	23.82	23.92	23.78	23.7			
5	16QAM	12	0	22.57	22.59	22.53				
5	16QAM	12	7	22.61	22.62	22.55				
5	16QAM	12	13	22.56	22.67	22.56	23.7			
5	16QAM	25	0	22.56	22.59	22.55				
5	64QAM	1	0	22.73	22.76	22.69				
5	64QAM	1	12	22.72	22.79	22.70	23.7			
5	64QAM	1	24	22.73	22.82	22.72				
5	64QAM	12	0	21.62	21.66	21.56				
5	64QAM	12	7	21.65	21.66	21.59	22.7			
5	64QAM	12	13	21.64	21.69	21.60				
5	64QAM	25	0	21.59	21.58	21.56				
Channel				18615	18900	19185	Tune-up limit (dBm)			
Frequency (MHz)				1851.5	1880	1908.5				
3	QPSK	1	0	24.46	24.46	24.35	25.7			
3	QPSK	1	8	24.46	24.49	24.49				
3	QPSK	1	14	24.47	24.53	24.44				
3	QPSK	8	0	23.55	23.58	23.47	24.7			
3	QPSK	8	4	23.56	23.67	23.50				
3	QPSK	8	7	23.51	23.60	23.48				
3	QPSK	15	0	23.55	23.57	23.49	24.7			
3	16QAM	1	0	23.78	23.79	23.68				
3	16QAM	1	8	23.80	23.96	23.80				
3	16QAM	1	14	23.82	23.89	23.77	23.7			
3	16QAM	8	0	22.62	22.61	22.55				
3	16QAM	8	4	22.63	22.73	22.59				
3	16QAM	8	7	22.61	22.69	22.56	23.7			
3	16QAM	15	0	22.56	22.59	22.53				
3	64QAM	1	0	22.71	22.74	22.66				
3	64QAM	1	8	22.78	22.89	22.76	23.7			
3	64QAM	1	14	22.72	22.82	22.70				
3	64QAM	8	0	21.61	21.60	21.56				
3	64QAM	8	4	21.61	21.69	21.62	22.7			
3	64QAM	8	7	21.62	21.66	21.58				
3	64QAM	15	0	21.58	21.58	21.53				
Channel				18607	18900	19193	Tune-up limit (dBm)			
Frequency (MHz)				1850.7	1880	1909.3				
1.4	QPSK	1	0	24.40	24.46	24.32	25.7			
1.4	QPSK	1	3	24.45	24.52	24.41				
1.4	QPSK	1	5	24.38	24.46	24.33				
1.4	QPSK	3	0	24.44	24.53	24.36	24.7			
1.4	QPSK	3	1	24.47	24.50	24.41				
1.4	QPSK	3	3	24.43	24.51	24.37				
1.4	QPSK	6	0	23.48	23.57	23.40	24.7			
1.4	QPSK	6	1	23.47	23.57	23.40				
1.4	QPSK	6	3	23.46	23.57	23.40				
1.4	16QAM	1	0	23.76	23.87	23.74	24.7			
1.4	16QAM	1	5	23.71	23.80	23.64				
1.4	16QAM	3	0	23.50	23.58	23.42				
1.4	16QAM	3	1	23.58	23.65	23.43	23.7			
1.4	16QAM	3	3	23.51	23.59	23.40				
1.4	16QAM	6	0	22.53	22.60	22.47				
1.4	16QAM	1	22.73	22.72	22.56		23.7			
1.4	64QAM	1	3	22.72	22.81	22.67				
1.4	64QAM	1	5	22.67	22.72	22.60				
1.4	64QAM	3	0	22.60	22.68	22.56	23.7			
1.4	64QAM	3	1	22.68	22.75	22.63				
1.4	64QAM	3	3	22.62	22.70	22.55				



Band 4									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	24.31	24.32	24.35	25.7		
20	QPSK	1	49	24.20	24.17	24.08			
20	QPSK	1	99	24.21	24.16	24.12			
20	QPSK	50	0	23.35	23.32	23.29			
20	QPSK	50	24	23.41	23.41	23.23	24.7		
20	QPSK	50	50	23.36	23.25	23.23			
20	QPSK	100	0	23.29	23.38	23.24			
20	16QAM	1	0	23.69	23.65	23.64			
20	16QAM	1	49	23.51	23.46	23.46	24.7		
20	16QAM	1	99	23.57	23.42	23.43			
20	16QAM	50	0	22.31	22.31	22.35			
20	16QAM	50	24	22.39	22.32	22.32			
20	16QAM	50	50	22.34	22.25	22.23	23.7		
20	16QAM	100	0	22.35	22.45	22.24			
20	64QAM	1	0	22.29	22.51	22.21			
20	64QAM	1	49	22.41	22.33	22.34			
20	64QAM	1	99	22.41	22.04	22.43	23.7		
20	64QAM	50	0	21.33	21.42	21.09			
20	64QAM	50	24	21.42	21.36	21.28			
20	64QAM	50	50	21.29	21.12	21.25			
20	64QAM	100	0	21.41	21.42	21.25	22.7		
Channel				20050	20175	20325			
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	24.34	24.33	24.33	25.7		
15	QPSK	1	37	24.12	24.14	24.11			
15	QPSK	1	74	24.21	24.22	24.14			
15	QPSK	36	0	23.38	23.29	23.31			
15	QPSK	36	20	23.38	23.33	23.20	24.7		
15	QPSK	36	39	23.34	23.33	23.30			
15	QPSK	75	0	23.36	23.42	23.23			
15	16QAM	1	0	23.56	23.59	23.62			
15	16QAM	1	37	23.47	23.50	23.44	24.7		
15	16QAM	1	74	23.53	23.47	23.42			
15	16QAM	36	0	22.39	22.39	22.33			
15	16QAM	36	20	22.31	22.37	22.30			
15	16QAM	36	39	22.29	22.34	22.22	23.7		
15	16QAM	75	0	22.36	22.41	22.24			
15	64QAM	1	0	22.33	22.52	22.27			
15	64QAM	1	37	22.48	22.46	22.44			
15	64QAM	1	74	22.42	22.13	22.33	23.7		
15	64QAM	36	0	21.42	21.36	21.54			
15	64QAM	36	20	21.33	21.48	21.30			
15	64QAM	36	39	21.35	21.07	21.28			
15	64QAM	75	0	21.36	21.36	21.30	22.7		
Channel				20000	20175	20350			
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.20	24.24	24.21	25.7		
10	QPSK	1	25	24.18	24.16	24.15			
10	QPSK	1	49	24.29	24.23	24.22			
10	QPSK	25	0	23.29	23.31	23.21			
10	QPSK	25	12	23.34	23.38	23.22	24.7		
10	QPSK	25	25	23.30	23.41	23.29			
10	QPSK	50	0	23.32	23.37	23.21			
10	16QAM	1	0	23.60	23.63	23.56			
10	16QAM	1	25	23.54	23.60	23.51	24.7		
10	16QAM	1	49	23.64	23.53	23.60			
10	16QAM	25	0	22.31	22.31	22.27			
10	16QAM	25	12	22.35	22.36	22.27			
10	16QAM	25	25	22.37	22.38	22.30	23.7		
10	16QAM	50	0	22.34	22.33	22.29			
10	64QAM	1	0	22.16	22.45	22.40			
10	64QAM	1	25	22.54	22.49	22.42			
10	64QAM	1	49	22.49	22.12	22.47	23.7		
10	64QAM	25	0	21.35	21.31	21.24			
10	64QAM	25	12	21.43	21.40	21.26			
10	64QAM	25	25	21.32	21.17	21.38			
10	64QAM	50	0	21.35	21.32	21.29	22.7		
Channel				19975	20175	20375			
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.21	24.19	24.17	25.7		
5	QPSK	1	12	24.27	24.26	24.18			
5	QPSK	1	24	24.24	24.25	24.16			
5	QPSK	12	0	23.35	23.31	23.23			
5	QPSK	12	7	23.39	23.36	23.32	24.7		
5	QPSK	12	13	23.41	23.39	23.24			
5	QPSK	25	0	23.27	23.38	23.20			
5	16QAM	1	0	23.50	23.54	23.53			
5	16QAM	1	12	23.62	23.63	23.56	24.7		
5	16QAM	1	24	23.57	23.57	23.50			
5	16QAM	12	0	22.41	22.32	22.34			
5	16QAM	12	7	22.39	22.37	22.28			
5	16QAM	12	13	22.37	22.42	22.36	23.7		
5	16QAM	25	0	22.39	22.31	22.29			
5	64QAM	1	0	22.20	22.51	22.47			
5	64QAM	1	12	22.43	22.47	22.50			
5	64QAM	1	24	22.55	22.09	22.44	23.7		
5	64QAM	12	0	21.17	21.28	21.39			
5	64QAM	12	7	21.40	21.46	21.31			
5	64QAM	12	13	21.38	21.22	21.36			
5	64QAM	25	0	21.32	21.44	21.24	22.7		
Channel				19965	20175	20385			
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.24	24.20	24.22	25.7		
3	QPSK	1	8	24.32	24.34	24.24			
3	QPSK	1	14	24.27	24.24	24.18			
3	QPSK	8	0	23.29	23.24	23.23			
3	QPSK	8	4	23.35	23.37	23.32	24.7		
3	QPSK	8	7	23.42	23.34	23.21			
3	QPSK	15	0	23.36	23.37	23.31			
3	16QAM	1	0	23.64	23.49	23.51			
3	16QAM	1	8	23.63	23.59	23.61	24.7		
3	16QAM	1	14	23.55	23.57	23.54			
3	16QAM	8	0	22.41	22.35	22.29			
3	16QAM	8	4	22.41	22.41	22.32			
3	16QAM	8	7	22.37	22.48	22.27	23.7		
3	16QAM	15	0	22.34	22.36	22.26			
3	64QAM	1	0	22.28	22.53	22.39			
3	64QAM	1	8	22.47	22.65	22.52			
3	64QAM	1	14	22.49	22.32	22.46	23.7		
3	64QAM	8	0	21.18	21.35	21.33			
3	64QAM	8	4	21.37	21.41	21.39			
3	64QAM	8	7	21.34	21.34	21.31			
3	64QAM	15	0	21.32	21.40	21.33	22.7		
Channel				19957	20175	20393			
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.15	24.15	24.12	25.7		
1.4	QPSK	1	3	24.27	24.30	24.13			
1.4	QPSK	1	5	24.24	24.23	24.07			
1.4	QPSK	3	0	24.25	24.16	24.10			
1.4	QPSK	3	1	24.28	24.31	24.17	24.7		
1.4	QPSK	3	3	24.15	24.24	24.12			
1.4	QPSK	6	0	23.25	23.26	23.20			
1.4	QPSK	3	3	23.35	23.37	23.32	24.7		
1.4	16QAM	1	0	23.29	23.25	23.26			
1.4	16QAM	1	3	23.25	23.35	23.30			
1.4	16QAM	1	5	23.56	23.47	23.50			
1.4	16QAM	3	0	23.42	23.31	23.23	24.7		
1.4	16QAM	3	1	23.32	23.36	23.29			
1.4	16QAM	3	3	22.38	23.32	23.20			
1.4	64QAM	1	0	22.24	22.52	22.27			
1.4	64QAM	1	1	22.15	22.45	22.36	23.7		
1.4	64QAM	1	3	22.21	22.44	22.48			
1.4	64QAM	1	5	22.22	22.44	22.32			
1.4	64QAM	3	0	22.18	22.38	22.27			
1.4	64QAM	3	1	22.29	22.43	22.43	23.7		
1.4	64QAM	3	3	22.28	22.37	22.38			
1.4	64QAM	3	5	21.35	21.37	21.31			
1.4	64QAM	3	7	21.35	21.35	21.11			



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.43	24.42	24.42	25.7
10	QPSK	1	25	24.34	24.44	24.43	
10	QPSK	1	49	24.44	24.54	24.20	
10	QPSK	25	0	23.47	23.49	23.49	24.7
10	QPSK	25	12	23.52	23.58	23.57	
10	QPSK	25	25	23.49	23.58	23.47	
10	QPSK	50	0	23.54	23.49	23.60	24.7
10	16QAM	1	0	23.81	23.83	23.86	
10	16QAM	1	25	23.70	23.84	23.83	
10	16QAM	1	49	23.81	23.92	23.71	23.7
10	16QAM	25	0	22.45	22.59	22.54	
10	16QAM	25	12	22.53	22.52	22.54	
10	16QAM	25	25	22.56	22.55	22.57	23.7
10	16QAM	50	0	22.51	22.50	22.49	
10	64QAM	1	0	22.59	22.66	22.64	
10	64QAM	1	25	22.70	22.74	22.76	22.7
10	64QAM	1	49	22.67	22.37	21.72	
10	64QAM	25	0	21.54	21.61	21.55	
10	64QAM	25	12	21.62	21.62	21.60	Tune-up limit (dBm)
10	64QAM	25	25	21.53	21.61	20.86	
10	64QAM	50	0	21.53	21.50	21.26	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.47	24.51	24.50	25.7
5	QPSK	1	12	24.47	24.45	24.31	
5	QPSK	1	24	24.41	24.52	24.20	
5	QPSK	12	0	23.55	23.64	23.59	24.7
5	QPSK	12	7	23.52	23.57	23.34	
5	QPSK	12	13	23.54	23.55	23.16	
5	QPSK	25	0	23.47	23.56	23.52	24.7
5	16QAM	1	0	23.83	23.83	23.79	
5	16QAM	1	12	23.77	23.83	23.57	
5	16QAM	1	24	23.68	23.85	23.46	23.7
5	16QAM	12	0	22.66	22.51	22.52	
5	16QAM	12	7	22.53	22.60	22.45	
5	16QAM	12	13	22.48	22.61	22.27	23.7
5	16QAM	25	0	22.56	22.52	22.56	
5	64QAM	1	0	22.75	22.73	22.50	
5	64QAM	1	12	22.64	22.69	21.78	22.7
5	64QAM	1	24	22.75	22.55	21.74	
5	64QAM	12	0	21.65	21.66	21.30	
5	64QAM	12	7	21.54	21.63	20.70	Tune-up limit (dBm)
5	64QAM	12	13	21.51	21.61	20.71	
5	64QAM	25	0	21.58	21.61	20.70	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.47	24.41	24.18	25.7
3	QPSK	1	8	24.50	24.48	24.04	
3	QPSK	1	14	24.40	24.49	24.13	
3	QPSK	8	0	23.54	23.58	23.04	24.7
3	QPSK	8	4	23.49	23.62	23.07	
3	QPSK	8	7	23.50	23.55	23.20	
3	QPSK	15	0	23.57	23.53	23.08	24.7
3	16QAM	1	0	23.83	23.81	23.53	
3	16QAM	1	8	23.83	23.86	23.38	
3	16QAM	1	14	23.69	23.78	23.46	23.7
3	16QAM	8	0	22.64	22.58	22.31	
3	16QAM	8	4	22.60	22.65	22.23	
3	16QAM	8	7	22.57	22.60	22.28	23.7
3	16QAM	15	0	22.60	22.62	22.19	
3	64QAM	1	0	22.63	22.73	21.70	
3	64QAM	1	8	22.75	22.75	21.72	22.7
3	64QAM	1	14	22.63	22.50	21.71	
3	64QAM	8	0	21.65	21.56	20.70	
3	64QAM	8	4	21.58	21.67	20.70	Tune-up limit (dBm)
3	64QAM	8	7	21.49	21.63	20.74	
3	64QAM	15	0	21.53	21.62	20.71	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.39	24.32	23.95	25.7
1.4	QPSK	1	3	24.42	24.47	24.10	
1.4	QPSK	1	5	24.29	24.38	24.09	
1.4	QPSK	3	0	24.41	24.36	24.12	24.7
1.4	QPSK	3	1	24.47	24.40	24.12	
1.4	QPSK	3	3	24.41	24.44	24.37	
1.4	QPSK	6	0	23.42	23.57	23.18	24.7
1.4	16QAM	1	0	23.68	23.69	23.34	
1.4	16QAM	1	3	23.69	23.85	23.50	
1.4	16QAM	1	5	23.61	23.69	23.58	24.7
1.4	16QAM	3	0	23.51	23.51	23.12	
1.4	16QAM	3	1	23.49	23.54	23.28	
1.4	16QAM	3	3	23.42	23.48	23.42	23.7
1.4	16QAM	6	0	22.55	22.62	22.27	
1.4	64QAM	1	0	22.60	22.60	21.70	
1.4	64QAM	1	3	22.68	22.75	21.72	23.7
1.4	64QAM	1	5	22.60	22.59	21.71	
1.4	64QAM	3	0	22.63	22.63	21.70	
1.4	64QAM	3	1	22.65	22.62	21.72	22.7
1.4	64QAM	3	3	22.55	22.58	21.71	
1.4	64QAM	6	0	21.45	21.48	20.72	



Band 7							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.42	24.46	24.29	25.7
20	QPSK	1	49	24.47	24.42	24.26	
20	QPSK	1	99	24.57	24.45	24.26	
20	QPSK	50	0	23.70	23.47	23.46	24.7
20	QPSK	50	24	23.67	23.48	23.39	
20	QPSK	50	50	23.63	23.56	23.41	
20	QPSK	100	0	23.65	23.54	23.41	24.7
20	16QAM	1	0	23.78	23.66	23.64	
20	16QAM	1	49	23.50	23.75	23.62	
20	16QAM	1	99	23.92	23.90	23.63	23.7
20	16QAM	50	0	22.63	22.47	22.42	
20	16QAM	50	24	22.62	22.52	22.45	
20	16QAM	50	50	22.67	22.54	22.47	23.7
20	16QAM	100	0	22.62	22.54	22.38	
20	64QAM	1	0	22.62	22.55	22.54	
20	64QAM	1	49	22.70	22.68	21.98	22.7
20	64QAM	1	99	22.80	22.64	22.33	
20	64QAM	50	0	21.70	21.49	21.27	
20	64QAM	50	24	21.76	21.56	21.21	22.7
20	64QAM	50	50	21.74	21.62	21.38	
20	64QAM	100	0	21.65	21.55	21.21	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.47	24.39	24.28	25.7
15	QPSK	1	37	24.53	24.47	24.21	
15	QPSK	1	74	24.56	24.48	24.31	
15	QPSK	36	0	23.55	23.46	23.42	24.7
15	QPSK	36	20	23.69	23.35	23.43	
15	QPSK	36	39	23.66	23.58	23.40	
15	QPSK	75	0	23.65	23.50	23.38	24.7
15	16QAM	1	0	23.77	23.74	23.63	
15	16QAM	1	37	23.89	23.87	23.62	
15	16QAM	1	74	23.67	23.81	23.66	23.7
15	16QAM	36	0	22.59	22.43	22.39	
15	16QAM	36	20	22.59	22.55	22.46	
15	16QAM	36	39	22.68	22.50	22.37	23.7
15	16QAM	75	0	22.62	22.50	22.40	
15	64QAM	1	0	22.74	22.60	22.49	
15	64QAM	1	37	22.76	22.74	22.01	23.7
15	64QAM	1	74	22.86	22.71	22.47	
15	64QAM	36	0	21.65	21.50	21.05	
15	64QAM	36	20	21.74	21.56	21.23	22.7
15	64QAM	36	39	21.74	21.62	21.47	
15	64QAM	75	0	21.73	21.57	21.18	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.39	24.39	24.21	25.7
10	QPSK	1	25	24.46	24.35	24.11	
10	QPSK	1	49	24.51	24.44	24.22	
10	QPSK	25	0	23.61	23.41	23.33	24.7
10	QPSK	25	12	23.67	23.45	23.39	
10	QPSK	25	25	23.63	23.54	23.38	
10	QPSK	50	0	23.58	23.48	23.27	24.7
10	16QAM	1	0	23.65	23.66	23.46	
10	16QAM	1	25	23.77	23.77	23.48	
10	16QAM	1	49	23.87	23.78	23.54	23.7
10	16QAM	25	0	22.56	22.38	22.28	
10	16QAM	25	12	22.65	22.45	22.36	
10	16QAM	25	25	22.66	22.51	22.30	23.7
10	16QAM	50	0	22.66	22.46	22.26	
10	64QAM	1	0	22.74	22.61	22.24	
10	64QAM	1	25	22.74	22.65	22.46	23.7
10	64QAM	1	49	22.82	22.67	22.50	
10	64QAM	25	0	21.64	21.45	21.27	
10	64QAM	25	12	21.63	21.57	21.34	22.7
10	64QAM	25	25	21.55	21.51	21.31	
10	64QAM	50	0	21.60	21.53	21.29	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.52	24.31	24.15	25.7
5	QPSK	1	12	24.53	24.50	24.27	
5	QPSK	1	24	24.51	24.44	24.20	
5	QPSK	12	0	23.55	23.47	23.28	24.7
5	QPSK	12	7	23.56	23.53	23.25	
5	QPSK	12	13	23.62	23.61	23.32	
5	QPSK	25	0	23.66	23.52	23.29	24.7
5	16QAM	1	0	23.79	23.64	23.45	
5	16QAM	1	12	23.80	23.76	23.46	
5	16QAM	1	24	23.90	23.74	23.55	23.7
5	16QAM	12	0	22.62	22.36	22.33	
5	16QAM	12	7	22.65	22.52	22.34	
5	16QAM	12	13	22.70	22.65	22.31	23.7
5	16QAM	25	0	22.67	22.57	22.33	
5	64QAM	1	0	22.81	22.68	22.42	
5	64QAM	1	12	22.79	22.69	22.40	23.7
5	64QAM	1	24	22.61	22.77	22.44	
5	64QAM	12	0	21.67	21.59	21.37	
5	64QAM	12	7	21.68	21.57	21.37	22.7
5	64QAM	12	13	21.74	21.63	21.40	
5	64QAM	25	0	21.68	21.48	21.35	



Band 12							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.34	24.12	24.24	25.7
10	QPSK	1	25	24.15	24.15	24.14	
10	QPSK	1	49	24.31	24.24	24.14	
10	QPSK	25	0	23.27	23.33	23.32	24.7
10	QPSK	25	12	23.38	23.34	23.35	
10	QPSK	25	25	23.31	23.30	23.35	
10	QPSK	50	0	23.34	23.28	23.32	24.7
10	16QAM	1	0	23.55	23.49	23.56	
10	16QAM	1	25	23.61	23.61	23.56	
10	16QAM	1	49	23.66	23.60	23.54	23.7
10	16QAM	25	0	22.32	22.28	22.33	
10	16QAM	25	12	22.40	22.35	22.36	
10	16QAM	25	25	22.37	22.36	22.34	23.7
10	16QAM	50	0	22.39	22.31	22.33	
10	64QAM	1	0	22.43	22.31	22.39	
10	64QAM	1	25	22.52	22.42	22.25	22.7
10	64QAM	1	49	22.61	22.54	22.53	
10	64QAM	25	0	21.31	21.33	21.22	
10	64QAM	25	12	21.46	21.39	21.33	21.7
10	64QAM	25	25	21.37	21.41	21.37	
10	64QAM	50	0	21.36	21.34	21.37	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.27	24.18	24.20	25.7
5	QPSK	1	12	24.27	24.28	24.27	
5	QPSK	1	24	24.23	24.21	24.24	
5	QPSK	12	0	23.38	23.32	23.26	24.7
5	QPSK	12	7	23.33	23.26	23.25	
5	QPSK	12	13	23.33	23.26	23.27	
5	QPSK	25	0	23.36	23.28	23.20	24.7
5	16QAM	1	0	23.59	23.56	23.50	
5	16QAM	1	12	23.60	23.59	23.55	
5	16QAM	1	24	23.61	23.61	23.50	23.7
5	16QAM	12	0	22.36	22.32	22.28	
5	16QAM	12	7	22.39	22.34	22.36	
5	16QAM	12	13	22.32	22.36	22.28	23.7
5	16QAM	25	0	22.40	22.35	22.32	
5	64QAM	1	0	22.37	22.24	22.40	
5	64QAM	1	12	22.51	22.44	22.40	22.7
5	64QAM	1	24	22.35	22.46	22.45	
5	64QAM	12	0	21.39	21.41	21.39	
5	64QAM	12	7	21.34	21.35	21.34	22.7
5	64QAM	12	13	21.43	21.38	21.28	
5	64QAM	25	0	21.42	21.39	21.32	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.31	24.21	24.28	25.7
3	QPSK	1	8	24.32	24.30	24.30	
3	QPSK	1	14	24.28	24.27	24.16	
3	QPSK	8	0	23.35	23.27	23.30	24.7
3	QPSK	8	4	23.37	23.40	23.35	
3	QPSK	8	7	23.38	23.38	23.25	
3	QPSK	15	0	23.39	23.28	23.21	24.7
3	16QAM	1	0	23.71	23.62	23.52	
3	16QAM	1	8	23.56	23.59	23.60	
3	16QAM	1	14	23.60	23.56	23.46	23.7
3	16QAM	8	0	22.42	22.42	22.32	
3	16QAM	8	4	22.41	22.40	22.36	
3	16QAM	8	7	22.33	22.41	22.27	23.7
3	16QAM	15	0	22.37	22.31	22.30	
3	64QAM	1	0	22.46	22.41	22.47	
3	64QAM	1	8	22.64	22.55	22.45	22.7
3	64QAM	1	14	22.47	22.49	22.43	
3	64QAM	8	0	21.41	21.39	21.36	
3	64QAM	8	4	21.44	21.51	21.40	22.7
3	64QAM	8	7	21.34	21.40	21.35	
3	64QAM	15	0	21.37	21.34	21.24	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.18	24.13	24.08	25.7
1.4	QPSK	1	3	24.23	24.21	24.18	
1.4	QPSK	1	5	24.19	24.20	24.02	
1.4	QPSK	3	0	24.26	24.09	24.16	24.7
1.4	QPSK	3	1	24.25	24.22	24.19	
1.4	QPSK	3	3	24.21	24.22	24.13	
1.4	QPSK	6	0	23.32	23.26	23.12	24.7
1.4	16QAM	1	0	23.60	23.49	23.46	
1.4	16QAM	1	3	23.57	23.57	23.48	
1.4	16QAM	1	5	23.53	23.52	23.43	24.7
1.4	16QAM	3	0	23.34	23.24	23.26	
1.4	16QAM	3	1	23.36	23.30	23.31	
1.4	16QAM	3	3	23.31	23.24	23.13	23.7
1.4	16QAM	6	0	22.32	22.23	22.22	
1.4	64QAM	1	0	22.48	22.42	22.36	
1.4	64QAM	1	3	22.46	22.50	22.42	23.7
1.4	64QAM	1	5	22.46	22.36	22.34	
1.4	64QAM	3	0	22.37	22.36	22.36	
1.4	64QAM	3	1	22.41	22.38	22.32	22.7
1.4	64QAM	3	3	22.40	22.38	22.31	
1.4	64QAM	6	0	21.27	21.21	21.21	



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.83			25.2
10	QPSK	1	25	23.84			
10	QPSK	1	49	23.97			
10	QPSK	25	0	22.96			24.2
10	QPSK	25	12	23.01			
10	QPSK	25	25	22.91			
10	QPSK	50	0	23.01			24.2
10	16QAM	1	0	23.16			
10	16QAM	1	25	23.16			
10	16QAM	1	49	23.15			23.2
10	16QAM	25	0	21.97			
10	16QAM	25	12	22.03			
10	16QAM	25	25	21.93			23.2
10	16QAM	50	0	21.95			
10	64QAM	1	0	22.01			
10	64QAM	1	25	22.13			23.2
10	64QAM	1	49	22.04			
10	64QAM	25	0	21.02			
10	64QAM	25	12	21.00			22.2
10	64QAM	25	25	21.04			
10	64QAM	50	0	20.99			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	794.5	
5	QPSK	1	0	23.75	23.76	23.86	25.2
5	QPSK	1	12	23.88	23.84	23.87	
5	QPSK	1	24	23.87	23.86	23.87	
5	QPSK	12	0	22.89	22.92	22.92	24.2
5	QPSK	12	7	22.93	22.97	22.83	
5	QPSK	12	13	23.02	23.01	22.92	
5	QPSK	25	0	23.01	22.99	22.91	24.2
5	16QAM	1	0	23.08	23.05	23.08	
5	16QAM	1	12	23.16	23.14	23.09	
5	16QAM	1	24	23.16	23.10	23.03	23.2
5	16QAM	12	0	21.99	21.97	21.98	
5	16QAM	12	7	22.05	21.98	21.96	
5	16QAM	12	13	22.02	21.94	21.97	23.2
5	16QAM	25	0	22.03	21.94	21.88	
5	64QAM	1	0	22.00	22.13	21.98	
5	64QAM	1	12	22.13	22.06	22.08	23.2
5	64QAM	1	24	22.07	22.15	22.00	
5	64QAM	12	0	21.03	21.06	20.99	
5	64QAM	12	7	21.07	21.01	20.92	22.2
5	64QAM	12	13	20.98	21.05	20.97	
5	64QAM	25	0	20.96	20.95	20.88	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.44			25.7
10	QPSK	1	25	24.49			
10	QPSK	1	49	24.32			
10	QPSK	25	0	23.51			24.7
10	QPSK	25	12	23.59			
10	QPSK	25	25	23.48			
10	QPSK	50	0	23.42			24.7
10	16QAM	1	0	23.87			
10	16QAM	1	25	23.84			
10	16QAM	1	49	23.71			23.7
10	16QAM	25	0	22.44			
10	16QAM	25	12	22.54			
10	16QAM	25	25	22.55			23.7
10	16QAM	50	0	22.44			
10	64QAM	1	0	22.75			
10	64QAM	1	25	22.58			23.7
10	64QAM	1	49	22.65			
10	64QAM	25	0	21.50			
10	64QAM	25	12	21.33			22.7
10	64QAM	25	25	21.48			
10	64QAM	50	0	21.55			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.48	24.40	24.42	25.7
5	QPSK	1	12	24.48	24.48	24.47	
5	QPSK	1	24	24.47	24.44	24.42	
5	QPSK	12	0	23.54	23.49	23.41	24.7
5	QPSK	12	7	23.60	23.32	23.47	
5	QPSK	12	13	23.50	23.55	23.45	
5	QPSK	25	0	23.59	23.48	23.43	24.7
5	16QAM	1	0	23.74	23.78	23.68	
5	16QAM	1	12	23.78	23.80	23.80	
5	16QAM	1	24	23.80	23.72	23.71	23.7
5	16QAM	12	0	22.51	22.57	22.48	
5	16QAM	12	7	22.62	22.60	22.49	
5	16QAM	12	13	22.59	22.55	22.51	23.7
5	16QAM	25	0	22.57	22.52	22.50	
5	64QAM	1	0	22.71	22.62	22.36	
5	64QAM	1	12	22.78	22.24	22.53	23.7
5	64QAM	1	24	22.33	22.27	22.70	
5	64QAM	12	0	21.61	21.26	21.16	
5	64QAM	12	7	21.68	21.24	21.54	22.7
5	64QAM	12	13	21.36	21.23	21.61	
5	64QAM	25	0	21.64	21.16	21.49	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.38	24.29	24.27	25.7
10	QPSK	1	25	24.35	24.27	24.31	
10	QPSK	1	49	24.33	24.40	24.28	
10	QPSK	25	0	23.34	23.38	23.37	24.7
10	QPSK	25	12	23.51	23.39	23.43	
10	QPSK	25	25	23.50	23.51	23.46	
10	QPSK	50	0	23.44	23.37	23.34	24.7
10	16QAM	1	0	23.64	23.67	23.59	
10	16QAM	1	25	23.73	23.67	23.67	
10	16QAM	1	49	23.70	23.70	23.73	23.7
10	16QAM	25	0	22.35	22.28	22.38	
10	16QAM	25	12	22.43	22.42	22.38	
10	16QAM	25	25	22.40	22.45	22.42	23.7
10	16QAM	50	0	22.50	22.55	22.41	
10	64QAM	1	0	22.59	22.53	22.57	
10	64QAM	1	25	22.67	22.66	22.50	22.7
10	64QAM	1	49	22.65	22.65	22.58	
10	64QAM	25	0	21.36	21.43	21.41	
10	64QAM	25	12	21.47	21.43	21.46	22.7
10	64QAM	25	25	21.51	21.55	21.51	
10	64QAM	50	0	21.54	21.40	21.44	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.24	24.27	24.26	25.7
5	QPSK	1	12	24.31	24.37	24.39	
5	QPSK	1	24	24.38	24.39	24.31	
5	QPSK	12	0	23.43	23.34	23.35	24.7
5	QPSK	12	7	23.48	23.47	23.43	
5	QPSK	12	13	23.46	23.44	23.40	
5	QPSK	25	0	23.49	23.45	23.42	24.7
5	16QAM	1	0	23.57	23.61	23.61	
5	16QAM	1	12	23.61	23.69	23.63	
5	16QAM	1	24	23.73	23.76	23.68	23.7
5	16QAM	12	0	22.40	22.39	22.36	
5	16QAM	12	7	22.45	22.40	22.38	
5	16QAM	12	13	22.51	22.44	22.43	23.7
5	16QAM	25	0	22.43	22.44	22.49	
5	64QAM	1	0	22.41	22.31	22.54	
5	64QAM	1	12	22.59	22.50	22.51	23.7
5	64QAM	1	24	22.61	22.53	22.49	
5	64QAM	12	0	21.43	21.40	21.44	
5	64QAM	12	7	21.47	21.45	21.53	22.7
5	64QAM	12	13	21.53	21.55	21.51	
5	64QAM	25	0	21.45	21.39	21.40	



Band 25										
Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				26140	26340	26590				
Frequency (MHz)				1860	1880	1905				
20	QPSK	1	0	24.56	24.54	24.48	25.7			
20	QPSK	1	49	24.46	24.52	24.36				
20	QPSK	1	99	24.44	24.45	24.39				
20	QPSK	50	0	23.63	23.64	23.50	24.7			
20	QPSK	50	24	23.70	23.69	23.51				
20	QPSK	50	50	23.65	23.65	23.58				
20	QPSK	100	0	23.70	23.67	23.51	24.7			
20	16QAM	1	0	23.83	23.80	23.79				
20	16QAM	1	49	23.85	23.86	23.74				
20	16QAM	1	99	23.76	23.84	23.69	23.7			
20	16QAM	50	0	22.65	22.65	22.53				
20	16QAM	50	24	22.72	22.71	22.53				
20	16QAM	50	50	22.65	22.67	22.57	23.7			
20	16QAM	100	0	22.68	22.69	22.55				
20	64QAM	1	0	22.74	22.72	22.64				
20	64QAM	1	49	22.69	22.71	22.65	23.7			
20	64QAM	1	99	22.68	22.71	22.47				
20	64QAM	50	0	21.65	21.66	21.55				
20	64QAM	50	24	21.72	21.76	21.55	22.7			
20	64QAM	50	50	21.67	21.68	21.59				
20	64QAM	100	0	21.70	21.73	21.54				
Channel				26115	26340	26615	Tune-up limit (dBm)			
Frequency (MHz)				1857.5	1880	1907.5				
15	QPSK	1	0	24.55	24.55	24.44	25.7			
15	QPSK	1	37	24.50	24.55	24.44				
15	QPSK	1	74	24.51	24.53	24.41				
15	QPSK	36	0	23.69	23.63	23.52	24.7			
15	QPSK	36	20	23.69	23.67	23.59				
15	QPSK	36	39	23.64	23.63	23.54				
15	QPSK	75	0	23.65	23.68	23.49	24.7			
15	16QAM	1	0	23.81	23.91	23.73				
15	16QAM	1	37	23.84	23.84	23.74				
15	16QAM	1	74	23.82	23.85	23.74	23.7			
15	16QAM	36	0	22.69	22.63	22.51				
15	16QAM	36	20	22.67	22.70	22.59				
15	16QAM	36	39	22.61	22.66	22.55	23.7			
15	16QAM	75	0	22.68	22.70	22.51				
15	64QAM	1	0	22.72	22.76	22.59				
15	64QAM	1	37	22.73	22.79	22.67	23.7			
15	64QAM	1	74	22.70	22.76	22.44				
15	64QAM	36	0	21.74	21.64	21.51				
15	64QAM	36	20	21.72	21.73	21.61	22.7			
15	64QAM	36	39	21.71	21.70	21.64				
15	64QAM	75	0	21.69	21.70	21.52				
Channel				26090	26340	26640	Tune-up limit (dBm)			
Frequency (MHz)				1855	1880	1910				
10	QPSK	1	0	24.51	24.48	24.35	25.7			
10	QPSK	1	25	24.48	24.50	24.39				
10	QPSK	1	49	24.45	24.48	24.30				
10	QPSK	25	0	23.62	23.56	23.52	24.7			
10	QPSK	25	12	23.68	23.67	23.59				
10	QPSK	25	25	23.67	23.68	23.60				
10	QPSK	50	0	23.67	23.67	23.58	24.7			
10	16QAM	1	0	23.80	23.87	23.74				
10	16QAM	1	25	23.84	23.88	23.80				
10	16QAM	1	49	23.87	23.89	23.79	23.7			
10	16QAM	25	0	22.64	22.59	22.54				
10	16QAM	25	12	22.69	22.69	22.58				
10	16QAM	25	25	22.62	22.68	22.52	23.7			
10	16QAM	50	0	22.65	22.69	22.56				
10	64QAM	1	0	22.77	22.74	22.64				
10	64QAM	1	25	22.82	22.79	22.72	23.7			
10	64QAM	1	49	22.79	22.78	22.51				
10	64QAM	25	0	21.65	21.60	21.57				
10	64QAM	25	12	21.72	21.71	21.62	22.7			
10	64QAM	25	25	21.69	21.70	21.63				
10	64QAM	50	0	21.66	21.70	21.62				
Channel				26065	26340	26665	Tune-up limit (dBm)			
Frequency (MHz)				1852.5	1880	1912.5				
5	QPSK	1	0	24.49	24.44	24.40	25.7			
5	QPSK	1	12	24.55	24.54	24.43				
5	QPSK	1	24	24.53	24.50	24.42				
5	QPSK	12	0	23.60	23.62	23.49	24.7			
5	QPSK	12	7	23.69	23.65	23.55				
5	QPSK	12	13	23.64	23.69	23.56				
5	QPSK	25	0	23.62	23.64	23.55	24.7			
5	16QAM	1	0	23.85	23.82	23.74				
5	16QAM	1	12	23.80	23.86	23.73				
5	16QAM	1	24	23.88	23.93	23.72	23.7			
5	16QAM	12	0	22.63	22.65	22.50				
5	16QAM	12	7	22.68	22.71	22.58				
5	16QAM	12	13	22.67	22.71	22.56	23.7			
5	16QAM	25	0	22.67	22.67	22.52				
5	64QAM	1	0	22.79	22.75	22.69				
5	64QAM	1	12	22.74	22.77	22.61	23.7			
5	64QAM	1	24	22.71	22.79	22.23				
5	64QAM	12	0	21.67	21.67	21.55				
5	64QAM	12	7	21.74	21.78	21.61	22.7			
5	64QAM	12	13	21.74	21.75	21.30				
5	64QAM	25	0	21.65	21.67	21.47				
Channel				26055	26340	26675	Tune-up limit (dBm)			
Frequency (MHz)				1851.5	1880	1913.5				
3	QPSK	1	0	24.41	24.39	24.35	25.7			
3	QPSK	1	8	24.50	24.40	24.48				
3	QPSK	1	14	24.52	24.51	24.45				
3	QPSK	8	0	23.57	23.62	23.47	24.7			
3	QPSK	8	4	23.67	23.66	23.55				
3	QPSK	8	7	23.65	23.66	23.57				
3	QPSK	15	0	23.63	23.62	23.53	24.7			
3	16QAM	1	0	23.79	23.71	23.69				
3	16QAM	1	8	23.93	23.95	23.81				
3	16QAM	1	14	23.90	23.91	23.78	23.7			
3	16QAM	8	0	22.66	22.65	22.53				
3	16QAM	8	4	22.74	22.75	22.61				
3	16QAM	8	7	22.73	22.75	22.62	23.7			
3	16QAM	15	0	22.68	22.66	22.54				
3	64QAM	1	0	22.70	22.66	22.56				
3	64QAM	1	8	22.82	22.87	22.44	23.7			
3	64QAM	1	14	22.80	22.83	22.21				
3	64QAM	8	0	21.66	21.67	21.53				
3	64QAM	8	4	21.74	21.75	21.37	22.7			
3	64QAM	8	7	21.72	21.75	21.25				
3	64QAM	15	0	21.66	21.67	21.36				
Channel				26047	26340	26683	Tune-up limit (dBm)			
Frequency (MHz)				1850.7	1880	1914.3				
1.4	QPSK	1	0	24.41	24.36	24.29	25.7			
1.4	QPSK	1	3	24.51	24.52	24.36				
1.4	QPSK	1	5	24.45	24.48	24.34				
1.4	QPSK	3	0	24.46	24.47	24.30	24.7			
1.4	QPSK	3	1	24.53	24.50	24.37				
1.4	QPSK	3	3	24.49	24.48	24.35				
1.4	QPSK	6	0	23.57	23.59	23.43	24.7			
1.4	16QAM	1	0	23.73	23.67	23.61				
1.4	16QAM	1	3	23.85	23.81	23.65				
1.4	16QAM	1	5	23.83	23.81	23.65	24.7			
1.4	16QAM	3	0	23.53	23.55	23.36				
1.4	16QAM	3	1	23.62	23.62	23.45				
1.4	16QAM	3	3	23.64	23.65	23.46	23.7			
1.4	16QAM	6	0	22.62	22.65	22.46				
1.4	16QAM	6	1	22.72	22.75	22.20				
1.4	64QAM	1	3	22.72	22.76	22.17	23.7			
1.4	64QAM	1	5	22.69	22.72	22.10				
1.4	64QAM	3	0	22.64	22.65	22.10				
1.4	64QAM	3	1	22.72	22.72	22.28	23.7			
1.4	64QAM	3	3	22.69	22.72	22.12				
1.4	64QAM	6	0	21.65	21.67	21.10				



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.28	24.16	24.24	25.7
15	QPSK	1	37	24.14	24.24	24.21	
15	QPSK	1	74	24.27	24.52	24.13	
15	QPSK	36	0	23.38	23.39	23.34	24.7
15	QPSK	36	20	23.40	23.31	23.37	
15	QPSK	36	39	23.33	23.34	23.29	
15	QPSK	75	0	23.39	23.35	23.35	24.7
15	16QAM	1	0	23.55	23.56	23.61	
15	16QAM	1	37	23.54	23.54	23.60	
15	16QAM	1	74	23.56	23.63	23.47	23.7
15	16QAM	36	0	22.36	22.42	22.34	
15	16QAM	36	20	22.34	22.33	22.30	
15	16QAM	36	39	22.36	22.36	22.33	23.7
15	16QAM	75	0	22.42	22.38	22.53	
15	64QAM	1	0	22.48	22.42	22.41	
15	64QAM	1	37	22.45	22.49	22.41	22.7
15	64QAM	1	74	22.48	22.48	21.70	
15	64QAM	36	0	21.43	21.46	21.41	
15	64QAM	36	20	21.47	21.43	21.37	22.7
15	64QAM	36	39	21.38	21.44	21.49	
15	64QAM	75	0	21.47	21.35	21.42	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.38	24.29	24.37	25.7
10	QPSK	1	25	24.22	24.25	24.23	
10	QPSK	1	49	24.28	24.29	24.20	
10	QPSK	25	0	23.50	23.36	23.44	24.7
10	QPSK	25	12	23.50	23.41	23.37	
10	QPSK	25	25	23.40	23.42	23.37	
10	QPSK	50	0	23.38	23.41	23.42	24.7
10	16QAM	1	0	23.77	23.60	23.75	
10	16QAM	1	25	23.61	23.73	23.64	
10	16QAM	1	49	23.64	23.67	23.62	23.7
10	16QAM	25	0	22.48	22.36	22.37	
10	16QAM	25	12	22.45	22.42	22.36	
10	16QAM	25	25	22.30	22.44	22.38	22.7
10	16QAM	50	0	22.46	22.37	22.33	
10	64QAM	1	0	22.64	22.51	22.57	
10	64QAM	1	25	22.54	22.66	22.66	22.7
10	64QAM	1	49	22.56	22.60	22.05	
10	64QAM	25	0	21.44	21.42	21.43	
10	64QAM	25	12	21.50	21.47	21.48	22.7
10	64QAM	25	25	21.37	21.41	21.29	
10	64QAM	50	0	21.47	21.37	21.36	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				616.5	631.5	646.5	
5	QPSK	1	0	24.45	24.32	24.35	25.7
5	QPSK	1	12	24.38	24.38	24.33	
5	QPSK	1	24	24.30	24.37	24.26	
5	QPSK	12	0	23.50	23.37	23.40	24.7
5	QPSK	12	7	23.51	23.41	23.44	
5	QPSK	12	13	23.44	23.36	23.33	
5	QPSK	25	0	23.44	23.40	23.38	24.7
5	16QAM	1	0	23.78	23.60	23.73	
5	16QAM	1	12	23.72	23.66	23.60	
5	16QAM	1	24	23.66	23.72	23.58	23.7
5	16QAM	12	0	22.49	22.38	22.41	
5	16QAM	12	7	22.45	22.45	22.41	
5	16QAM	12	13	22.44	22.37	22.30	23.7
5	16QAM	25	0	22.43	22.39	22.40	
5	64QAM	1	0	22.73	22.56	22.53	
5	64QAM	1	12	22.54	22.59	21.87	22.7
5	64QAM	1	24	22.56	22.57	21.82	
5	64QAM	12	0	21.58	21.56	21.51	
5	64QAM	12	7	21.59	21.50	20.86	22.7
5	64QAM	12	13	21.54	21.45	20.56	
5	64QAM	25	0	21.50	21.39	21.68	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.43	24.37	24.37	25.7
3	QPSK	1	8	24.41	24.37	24.32	
3	QPSK	1	14	24.30	24.35	24.26	
3	QPSK	8	0	23.51	23.43	23.27	24.7
3	QPSK	8	4	23.54	23.46	23.33	
3	QPSK	8	7	23.40	23.41	23.37	
3	QPSK	15	0	23.42	23.35	23.30	24.7
3	16QAM	1	0	23.79	23.62	23.67	
3	16QAM	1	8	23.80	23.76	23.49	
3	16QAM	1	14	23.68	23.71	23.56	23.7
3	16QAM	8	0	22.53	22.44	22.45	
3	16QAM	8	4	22.59	22.47	22.41	
3	16QAM	8	7	22.46	22.49	22.38	23.7
3	16QAM	15	0	22.56	22.36	22.37	
3	64QAM	1	0	22.61	22.57	21.91	
3	64QAM	1	8	22.68	22.58	21.70	22.7
3	64QAM	1	14	22.58	22.61	21.71	
3	64QAM	8	0	21.59	21.49	20.70	
3	64QAM	8	4	21.55	21.54	20.57	22.7
3	64QAM	8	7	21.49	21.52	20.57	
3	64QAM	15	0	21.50	21.48	20.64	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.37	24.27	24.21	25.7
1.4	QPSK	1	3	24.42	24.39	24.23	
1.4	QPSK	1	5	24.36	24.21	24.15	
1.4	QPSK	3	0	24.41	24.23	24.20	24.7
1.4	QPSK	3	1	24.41	24.33	24.21	
1.4	QPSK	3	3	24.40	24.32	24.20	
1.4	QPSK	6	0	23.41	23.38	23.30	24.7
1.4	16QAM	1	0	23.71	23.59	23.46	
1.4	16QAM	1	3	23.72	23.62	23.59	
1.4	16QAM	1	5	23.63	23.59	23.46	23.7
1.4	16QAM	3	0	23.56	23.29	23.30	
1.4	16QAM	3	1	23.60	23.39	23.30	
1.4	16QAM	3	3	23.50	23.35	23.24	23.7
1.4	16QAM	6	0	22.50	22.46	22.33	
1.4	64QAM	1	0	22.68	22.47	21.74	
1.4	64QAM	1	3	22.68	22.61	21.70	23.7
1.4	64QAM	1	5	22.62	22.46	21.71	
1.4	64QAM	3	0	22.64	22.46	21.72	
1.4	64QAM	3	1	22.57	22.47	21.71	22.7
1.4	64QAM	3	3	22.56	22.51	21.80	
1.4	64QAM	6	0	21.43	21.42	20.70	



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.18			23.7
10	QPSK	1	25	22.07			
10	QPSK	1	49	22.09			
10	QPSK	25	0	21.18			22.7
10	QPSK	25	12	21.14			
10	QPSK	25	25	21.23			
10	QPSK	50	0	21.14			22.7
10	16QAM	1	0	21.51			
10	16QAM	1	25	21.44			
10	16QAM	1	49	21.52			21.7
10	16QAM	25	0	20.18			
10	16QAM	25	12	20.25			
10	16QAM	25	25	20.19			21.7
10	16QAM	50	0	20.23			
10	64QAM	1	0	20.38			
10	64QAM	1	25	20.42			21.7
10	64QAM	1	49	20.39			
10	64QAM	25	0	19.24			
10	64QAM	25	12	19.21			20.7
10	64QAM	25	25	19.22			
10	64QAM	50	0	19.21			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.04	22.08	22.10	23.7
5	QPSK	1	12	22.18	22.10	22.13	
5	QPSK	1	24	22.11	22.12	22.14	
5	QPSK	12	0	21.14	21.18	21.17	22.7
5	QPSK	12	7	21.27	21.18	21.20	
5	QPSK	12	13	21.32	21.23	21.13	
5	QPSK	25	0	21.24	21.15	21.21	22.7
5	16QAM	1	0	21.36	21.35	21.42	
5	16QAM	1	12	21.47	21.47	21.42	
5	16QAM	1	24	21.55	21.44	21.44	21.7
5	16QAM	12	0	20.15	20.21	20.17	
5	16QAM	12	7	20.20	20.25	20.29	
5	16QAM	12	13	20.22	20.20	20.19	21.7
5	16QAM	25	0	20.24	20.17	20.23	
5	64QAM	1	0	20.27	20.34	20.47	
5	64QAM	1	12	20.39	20.35	20.37	21.7
5	64QAM	1	24	20.53	20.37	20.31	
5	64QAM	12	0	19.25	19.27	19.23	
5	64QAM	12	7	19.29	19.22	19.33	20.7
5	64QAM	12	13	19.31	19.33	19.25	
5	64QAM	25	0	19.27	19.21	19.27	



Band 66									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132047	132322	132597			
Frequency (MHz)				1720	1745	1772			
20	QPSK	1	0	24.14	24.20	24.01	25.7		
20	QPSK	1	49	24.00	23.99	23.95			
20	QPSK	1	99	24.13	24.01	23.91			
20	QPSK	50	0	23.15	23.19	23.14	24.7		
20	QPSK	50	24	23.24	23.14	23.13			
20	QPSK	50	50	23.25	23.13	23.13			
20	QPSK	100	0	23.22	23.22	23.17	24.7		
20	16QAM	1	0	23.49	23.42	23.32			
20	16QAM	1	49	23.36	23.24	23.23			
20	16QAM	1	99	23.49	23.28	23.19	23.7		
20	16QAM	50	0	22.19	22.20	22.09			
20	16QAM	50	24	22.29	22.15	22.19			
20	16QAM	50	50	22.29	22.19	22.19	23.7		
20	16QAM	100	0	22.28	22.13	22.25			
20	64QAM	1	0	22.35	22.39	22.29			
20	64QAM	1	49	22.23	22.15	22.21	23.7		
20	64QAM	1	99	22.34	22.29	22.09			
20	64QAM	50	0	21.15	21.16	21.21			
20	64QAM	50	24	21.23	21.15	21.15	22.7		
20	64QAM	50	50	21.25	21.18	21.13			
20	64QAM	100	0	21.34	21.22	21.24			
Channel				132047	132322	132597	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.10	24.08	24.03	25.7		
15	QPSK	1	37	24.06	24.00	23.96			
15	QPSK	1	74	24.13	24.11	23.95			
15	QPSK	36	0	23.14	23.19	23.11	24.7		
15	QPSK	36	20	23.18	23.25	23.14			
15	QPSK	36	39	23.19	23.18	23.14			
15	QPSK	75	0	23.20	23.21	23.04	24.7		
15	16QAM	1	0	23.37	23.39	23.40			
15	16QAM	1	37	23.33	23.32	23.31			
15	16QAM	1	74	23.45	23.30	23.25	23.7		
15	16QAM	36	0	22.19	22.19	22.07			
15	16QAM	36	20	22.22	22.14	22.13			
15	16QAM	36	39	22.22	22.17	22.16	23.7		
15	16QAM	75	0	22.24	22.19	22.06			
15	64QAM	1	0	22.26	22.22	22.19			
15	64QAM	1	37	22.30	22.29	22.15	23.7		
15	64QAM	1	74	22.36	22.26	22.18			
15	64QAM	36	0	21.20	21.19	21.11			
15	64QAM	36	20	21.22	21.20	21.13	22.7		
15	64QAM	36	39	21.22	21.18	21.12			
15	64QAM	75	0	21.23	21.16	21.07			
Channel				132022	132322	132622	Tune-up limit (dBm)		
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	24.09	24.03	24.07	25.7		
10	QPSK	1	25	24.08	24.07	24.06			
10	QPSK	1	49	24.14	24.08	24.07			
10	QPSK	25	0	23.16	23.15	23.15	24.7		
10	QPSK	25	12	23.19	23.22	23.13			
10	QPSK	25	25	23.19	23.19	23.14			
10	QPSK	50	0	23.20	23.23	23.06	24.7		
10	16QAM	1	0	23.59	23.46	23.51			
10	16QAM	1	25	23.44	23.45	23.45			
10	16QAM	1	49	23.54	23.39	23.44	23.7		
10	16QAM	25	0	22.18	22.16	22.08			
10	16QAM	25	12	22.23	22.16	22.11			
10	16QAM	25	25	22.21	22.20	22.21	23.7		
10	16QAM	50	0	22.23	22.23	22.08			
10	64QAM	1	0	22.37	22.29	22.29			
10	64QAM	1	25	22.42	22.34	22.40	23.7		
10	64QAM	1	49	22.36	22.38	22.34			
10	64QAM	25	0	21.20	21.16	21.19			
10	64QAM	25	12	21.30	21.22	21.19	22.7		
10	64QAM	25	25	21.24	21.21	21.15			
10	64QAM	50	0	21.30	21.24	21.13			
Channel				131997	132322	132647	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.07	24.10	24.08	25.7		
5	QPSK	1	12	24.12	24.06	24.05			
5	QPSK	1	24	24.09	24.11	24.08			
5	QPSK	12	0	23.22	23.13	23.12	24.7		
5	QPSK	12	7	23.25	23.15	23.14			
5	QPSK	12	13	23.17	23.22	23.17			
5	QPSK	25	0	23.16	23.20	23.17	24.7		
5	16QAM	1	0	23.46	23.36	23.34			
5	16QAM	1	12	23.53	23.43	23.47			
5	16QAM	1	24	23.47	23.38	23.32	23.7		
5	16QAM	12	0	22.24	22.17	22.17			
5	16QAM	12	7	22.24	22.21	22.25			
5	16QAM	12	13	22.25	22.23	22.16	23.7		
5	16QAM	25	0	22.18	22.22	22.14			
5	64QAM	1	0	22.35	22.31	22.33			
5	64QAM	1	12	22.38	22.38	22.34	23.7		
5	64QAM	1	24	22.45	22.31	22.32			
5	64QAM	12	0	21.26	21.19	21.23			
5	64QAM	12	7	21.23	21.28	21.28	22.7		
5	64QAM	12	13	21.32	21.21	21.23			
5	64QAM	25	0	21.20	21.22	21.19			
Channel				131987	132322	132657	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	24.10	24.13	24.08	25.7		
3	QPSK	1	8	24.11	24.13	24.16			
3	QPSK	1	14	24.15	24.07	24.11			
3	QPSK	8	0	23.23	23.12	23.17	24.7		
3	QPSK	8	4	23.22	23.20	23.19			
3	QPSK	8	7	23.28	23.20	23.12			
3	QPSK	15	0	23.16	23.23	23.18	24.7		
3	16QAM	1	0	23.52	23.35	23.45			
3	16QAM	1	8	23.54	23.53	23.47			
3	16QAM	1	14	23.49	23.45	23.45	23.7		
3	16QAM	8	0	22.25	22.14	22.17			
3	16QAM	8	4	22.35	22.21	22.20			
3	16QAM	8	7	22.29	22.23	22.22	23.7		
3	16QAM	15	0	22.32	22.19	22.16			
3	64QAM	1	0	22.39	22.32	22.35			
3	64QAM	1	8	22.54	22.45	22.38	23.7		
3	64QAM	1	14	22.42	22.35	22.40			
3	64QAM	8	0	21.28	21.15	21.14			
3	64QAM	8	4	21.36	21.27	21.20	22.7		
3	64QAM	8	7	21.31	21.27	21.24			
3	64QAM	15	0	21.21	21.17	21.23			
Channel				131979	132322	132665	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.12	23.98	23.97	25.7		
1.4	QPSK	1	3	24.17	24.09	24.04			
1.4	QPSK	1	5	24.10	24.08	24.05			
1.4	QPSK	3	0	24.11	24.14	24.05	24.7		
1.4	QPSK	3	1	24.19	24.13	24.10			
1.4	QPSK	3	3	24.17	24.07	24.04			
1.4	QPSK	6	0	23.18	23.09	23.19	24.7		
1.4	QPSK	6	3	23.23	23.20	23.19			
1.4	QPSK	6	5	23.25	23.13	23.17			
1.4	16QAM	1	0	23.52	23.35	23.45	24.7		
1.4	16QAM	1	5	23.42	23.36	23.32			
1.4	16QAM	1	3	23.24	23.20	23.16			
1.4	16QAM	3	0	22.25	22.21	22.24	23.7		
1.4	16QAM	3	3	22.27	22.22	22.27			
1.4	16QAM	3	5	22.37	22.27	22.25			
1.4	64QAM	1	0	22.34	22.24	22.25	23.7		
1.4	64QAM	1	3	22.37	22.24	22.29			
1.4	64QAM	3	3	22.27	22.27	22.22			
1.4	64QAM	3	5	22.31	22.23	22.19	23.7		



Band 71							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.39	24.32	24.28	25.7
20	QPSK	1	49	24.21	24.25	24.28	
20	QPSK	1	99	24.24	24.21	24.14	
20	QPSK	50	0	23.39	23.37	23.38	24.7
20	QPSK	50	24	23.50	23.42	23.32	
20	QPSK	50	50	23.45	23.39	23.33	
20	QPSK	100	0	23.46	23.30	23.37	24.7
20	16QAM	1	0	23.69	23.66	23.66	
20	16QAM	1	49	23.56	23.55	23.57	
20	16QAM	1	99	23.81	23.58	23.54	23.7
20	16QAM	50	0	22.46	22.32	22.40	
20	16QAM	50	24	22.42	22.33	22.39	
20	16QAM	50	50	22.42	22.39	22.39	23.7
20	16QAM	100	0	22.46	22.34	22.42	
20	64QAM	1	0	21.73	22.29	22.52	
20	64QAM	1	49	22.23	22.43	21.81	22.7
20	64QAM	1	99	22.50	22.00	22.43	
20	64QAM	50	0	20.70	21.36	21.01	
20	64QAM	50	24	20.85	21.40	21.15	22.7
20	64QAM	50	50	21.49	21.04	21.37	
20	64QAM	100	0	21.05	21.35	21.45	
Channel				133197	133287	133387	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.23	24.27	24.23	25.7
15	QPSK	1	37	24.23	24.18	24.22	
15	QPSK	1	74	24.28	24.26	24.14	
15	QPSK	36	0	23.41	23.31	23.37	24.7
15	QPSK	36	20	23.45	23.30	23.34	
15	QPSK	36	39	23.36	23.40	23.35	
15	QPSK	75	0	23.36	23.35	23.34	24.7
15	16QAM	1	0	23.68	23.64	23.56	
15	16QAM	1	37	23.38	23.54	23.52	
15	16QAM	1	74	23.54	23.51	23.54	23.7
15	16QAM	36	0	22.28	22.39	22.28	
15	16QAM	36	20	22.31	22.34	22.43	
15	16QAM	36	39	22.45	22.37	22.38	23.7
15	16QAM	75	0	22.45	22.32	22.35	
15	64QAM	1	0	21.71	22.45	22.43	
15	64QAM	1	37	21.70	22.51	22.51	23.7
15	64QAM	1	74	22.41	22.16	22.49	
15	64QAM	36	0	20.70	21.34	20.97	
15	64QAM	36	20	20.44	21.43	21.36	22.7
15	64QAM	36	39	21.00	20.91	21.37	
15	64QAM	75	0	20.86	21.39	21.33	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.27	24.17	24.29	25.7
10	QPSK	1	25	24.19	24.18	24.20	
10	QPSK	1	49	24.17	24.27	24.18	
10	QPSK	25	0	23.33	23.31	23.33	24.7
10	QPSK	25	12	23.33	23.43	23.26	
10	QPSK	25	25	23.24	23.30	23.27	
10	QPSK	50	0	23.41	23.40	23.28	24.7
10	16QAM	1	0	23.71	23.36	23.60	
10	16QAM	1	25	23.62	23.63	23.53	
10	16QAM	1	49	23.62	23.61	23.47	23.7
10	16QAM	25	0	22.27	22.28	22.30	
10	16QAM	25	12	22.28	22.38	22.33	
10	16QAM	25	25	22.14	22.38	22.23	23.7
10	16QAM	50	0	22.32	22.42	22.24	
10	64QAM	1	0	21.75	21.80	22.44	
10	64QAM	1	25	21.73	22.52	22.48	23.7
10	64QAM	1	49	21.70	22.46	22.13	
10	64QAM	25	0	20.70	21.34	21.35	
10	64QAM	25	12	20.33	21.41	21.36	22.7
10	64QAM	25	25	20.40	21.38	21.31	
10	64QAM	50	0	20.33	21.35	21.30	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.07	24.21	24.21	25.7
5	QPSK	1	12	24.33	24.20	24.17	
5	QPSK	1	24	24.22	24.20	24.18	
5	QPSK	12	0	23.33	23.35	23.25	24.7
5	QPSK	12	7	23.30	23.36	23.33	
5	QPSK	12	13	23.32	23.30	23.28	
5	QPSK	25	0	23.32	23.37	23.25	24.7
5	16QAM	1	0	23.51	23.53	23.57	
5	16QAM	1	12	23.51	23.55	23.55	
5	16QAM	1	24	23.48	23.53	23.47	23.7
5	16QAM	12	0	22.16	22.40	22.33	
5	16QAM	12	7	22.31	22.37	22.34	
5	16QAM	12	13	22.38	22.34	22.27	23.7
5	16QAM	25	0	22.24	22.39	22.29	
5	64QAM	1	0	21.78	21.74	22.47	
5	64QAM	1	12	21.72	22.51	22.39	23.7
5	64QAM	1	24	21.70	22.56	21.87	
5	64QAM	12	0	20.70	21.16	21.31	
5	64QAM	12	7	20.42	21.41	21.39	22.7
5	64QAM	12	13	20.40	21.40	21.19	
5	64QAM	25	0	20.23	21.10	21.23	



Band 2									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 18700	Power Middle Ch. / 18900	Power High Ch. / 19100	Tune-up limit (dbm)		
Channel				18600	18800	19000			
Frequency (MHz)				1860	1880	1900			
20	QPSK	1	0	24.25	24.10	24.15	25.7		
20	QPSK	1	49	24.12	24.04	24.04			
20	QPSK	1	99	24.03	24.11	24.05			
20	QPSK	50	0	23.16	23.10	23.15			
20	QPSK	50	24	23.34	23.19	23.14	24.7		
20	QPSK	50	50	23.22	23.21	23.22			
20	QPSK	100	0	23.29	23.27	23.18			
20	16QAM	1	0	23.43	23.43	23.45			
20	16QAM	1	49	23.41	23.40	23.35	24.7		
20	16QAM	1	99	23.34	23.43	23.47			
20	16QAM	50	0	22.18	22.17	22.17			
20	16QAM	50	24	22.26	22.28	22.18			
20	16QAM	50	50	22.32	22.24	22.22	23.7		
20	16QAM	100	0	22.21	22.24	22.13			
20	64QAM	1	0	22.35	22.29	22.33			
20	64QAM	1	49	22.35	22.31	21.77			
20	64QAM	1	99	22.27	22.31	21.86	22.7		
20	64QAM	50	0	21.19	21.19	21.00			
20	64QAM	50	24	21.28	21.32	20.92			
20	64QAM	50	50	21.26	21.24	20.90			
20	64QAM	100	0	21.25	21.25	20.96	Tune-up limit (dbm)		
Channel				1867.5	18900	19125			
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	24.14	24.04	24.06	25.7		
15	QPSK	1	37	24.08	24.01	23.95			
15	QPSK	1	74	24.01	24.03	23.97			
15	QPSK	36	0	23.10	23.05	23.10			
15	QPSK	36	39	23.12	23.11	23.16	24.7		
15	QPSK	75	0	23.20	23.25	23.10			
15	16QAM	1	0	23.37	23.35	23.40			
15	16QAM	1	37	23.37	23.33	23.30			
15	16QAM	1	74	23.27	23.38	23.46	24.7		
15	16QAM	36	0	22.13	22.07	22.14			
15	16QAM	36	20	22.17	22.18	22.14			
15	16QAM	36	39	22.25	22.16	22.13			
15	16QAM	75	0	22.20	22.19	22.08	23.7		
15	64QAM	1	0	22.31	22.23	22.29			
15	64QAM	1	37	22.31	22.26	21.73			
15	64QAM	1	74	22.20	22.24	21.77			
15	64QAM	36	0	21.18	21.19	20.97	22.7		
15	64QAM	36	20	21.28	21.24	20.88			
15	64QAM	36	39	21.20	21.18	20.85			
15	64QAM	75	0	21.22	21.16	20.87			
15	64QAM	50	0	21.25	21.20	20.89	Tune-up limit (dbm)		
Channel				18650	18900	19150			
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	24.19	24.06	24.13	25.7		
10	QPSK	1	25	24.12	24.03	23.95			
10	QPSK	1	49	24.01	24.05	23.99			
10	QPSK	25	0	23.13	23.10	23.05			
10	QPSK	25	12	23.30	23.13	23.10	24.7		
10	QPSK	25	25	23.14	23.17	23.17			
10	QPSK	50	0	23.19	23.22	23.09			
10	16QAM	1	0	23.39	23.42	23.42			
10	16QAM	1	25	23.35	23.32	23.28	24.7		
10	16QAM	1	49	23.31	23.40	23.42			
10	16QAM	25	0	22.17	22.07	22.12			
10	16QAM	25	12	22.23	22.20	22.13			
10	16QAM	25	25	22.32	22.21	22.15	23.7		
10	16QAM	50	0	22.19	22.24	22.12			
10	64QAM	1	0	22.29	22.22	22.26			
10	64QAM	1	25	22.31	22.29	21.70			
10	64QAM	1	49	22.24	22.31	21.84	22.7		
10	64QAM	25	0	21.10	21.13	20.94			
10	64QAM	25	12	21.16	21.32	20.92			
10	64QAM	25	25	21.18	21.21	20.88			
10	64QAM	50	0	21.25	21.20	20.89	Tune-up limit (dbm)		
Channel				1862.5	18900	19175			
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	24.15	24.05	24.07	25.7		
5	QPSK	1	12	24.20	24.15	24.18			
5	QPSK	1	24	24.13	24.16	24.16			
5	QPSK	12	0	23.23	23.13	23.24			
5	QPSK	12	7	23.38	23.28	23.21	24.7		
5	QPSK	12	13	23.27	23.27	23.21			
5	QPSK	25	0	23.28	23.21	23.20			
5	16QAM	1	0	23.44	23.30	23.38			
5	16QAM	1	12	23.48	23.48	23.46	24.7		
5	16QAM	1	24	23.54	23.47	23.42			
5	16QAM	12	0	22.32	22.24	22.21			
5	16QAM	12	7	22.32	22.35	22.31			
5	16QAM	12	13	22.27	22.27	22.24	23.7		
5	16QAM	25	0	22.30	22.28	22.20			
5	64QAM	1	0	22.47	22.31	21.86			
5	64QAM	1	12	22.35	22.36	21.97			
5	64QAM	1	24	22.36	22.44	21.87	23.7		
5	64QAM	12	0	21.32	21.23	20.96			
5	64QAM	12	7	21.35	21.36	20.95			
5	64QAM	12	13	21.39	21.40	20.89			
5	64QAM	25	0	21.30	21.33	20.83	Tune-up limit (dbm)		
Channel				18615	18900	19185			
Frequency (MHz)				1851.5	1880	1908.5			
3	QPSK	1	0	24.21	24.11	24.09	25.7		
3	QPSK	1	8	24.24	24.24	24.16			
3	QPSK	1	14	24.23	24.19	24.07			
3	QPSK	8	0	23.29	23.29	23.24			
3	QPSK	8	4	23.36	23.24	23.26	24.7		
3	QPSK	8	7	23.31	23.21	23.18			
3	QPSK	15	0	23.34	23.24	23.16			
3	16QAM	1	0	23.45	23.41	23.42			
3	16QAM	1	8	23.56	23.51	23.43	24.7		
3	16QAM	1	14	23.51	23.43	23.48			
3	16QAM	8	0	22.29	22.37	22.28			
3	16QAM	8	4	22.37	22.38	22.32			
3	16QAM	8	7	22.34	22.32	22.25	23.7		
3	16QAM	15	0	22.35	22.29	22.31			
3	64QAM	1	0	22.45	22.37	21.95			
3	64QAM	1	8	22.50	22.46	22.02			
3	64QAM	1	14	22.50	22.48	21.92	23.7		
3	64QAM	8	0	21.38	21.32	20.88			
3	64QAM	8	4	21.37	21.43	20.88			
3	64QAM	8	7	21.37	21.36	20.81			
3	64QAM	15	0	21.34	21.35	20.84	Tune-up limit (dbm)		
Channel				18607	18900	19193			
Frequency (MHz)				1850.7	1880	1909.3			
1.4	QPSK	1	0	24.11	23.99	23.98	25.7		
1.4	QPSK	1	3	24.20	24.14	24.13			
1.4	QPSK	1	5	24.15	24.04	24.07			
1.4	QPSK	3	0	24.11	24.06	23.99			
1.4	QPSK	3	1	24.20	24.13	24.15	24.7		
1.4	QPSK	3	3	24.19	24.06	24.01			
1.4	QPSK	6	0	23.26	23.13	23.13			
1.4	QPSK	3	3	23.34	23.13	23.16	24.7		
1.4	16QAM	1	3	23.55	23.55	23.45			
1.4	16QAM	1	5	23.52	23.43	23.36			
1.4	16QAM	3	0	23.20	23.13	23.16			
1.4	16QAM	3	3	23.18	23.24	23.14	23.7		
1.4	16QAM	6	0	22.22	22.20	22.20			
1.4	64QAM	1	3	22.36	22.36	22.14			
1.4	64QAM	1	5	22.36	22.36	22.14			
1.4	64QAM	3	3	22.33	22.42	22.00	23.7		
1.4	64QAM	3	5	22.36	22.41	21.89			
1.4	64QAM	3	7	22.37	22.35	22.05			
1.4	64QAM	3	9	22.37	22.34	21.96			



Band 4									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20050	Power Middle Ch. / 20175	Power High Ch. / 20300	Tune-up limit (dBm)		
Channel				1720	1732.5	1745			
Frequency (MHz)									
20	QPSK	1	0	24.19	24.13	24.23	25.7		
20	QPSK	1	49	24.02	23.94	23.98			
20	QPSK	1	99	24.06	24.04	24.04			
20	QPSK	50	0	23.20	23.16	23.22	24.7		
20	QPSK	50	24	23.27	23.18	23.16			
20	QPSK	50	50	23.13	23.10	23.11			
20	QPSK	100	0	23.18	23.23	23.06	24.7		
20	16QAM	1	0	23.51	23.50	23.48			
20	16QAM	1	49	23.40	23.31	23.32			
20	16QAM	1	99	23.47	23.33	23.32	23.7		
20	16QAM	50	0	22.25	22.22	22.17			
20	16QAM	50	24	22.27	22.17	22.14			
20	16QAM	50	50	22.20	22.15	22.19	22.7		
20	16QAM	100	0	22.17	22.27	22.13			
20	64QAM	1	0	22.32	22.38	22.07			
20	64QAM	1	49	22.21	22.20	22.29	22.7		
20	64QAM	1	99	22.28	22.04	22.25			
20	64QAM	50	0	21.18	21.28	21.24			
20	64QAM	50	24	21.29	21.20	21.10	22.7		
20	64QAM	50	50	21.20	21.13	21.14			
20	64QAM	100	0	21.22	21.24	21.19			
Channel				20025	20175	20325	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	24.21	24.17	24.22	25.7		
15	QPSK	1	37	24.07	24.08	24.05			
15	QPSK	1	74	24.04	24.09	24.08			
15	QPSK	36	0	23.33	23.31	23.16	24.7		
15	QPSK	36	20	23.27	23.20	23.10			
15	QPSK	36	39	23.27	23.16	23.14			
15	QPSK	75	0	23.24	23.22	23.15	24.7		
15	16QAM	1	0	23.49	23.51	23.55			
15	16QAM	1	37	23.41	23.39	23.38			
15	16QAM	1	74	23.48	23.39	23.31	23.7		
15	16QAM	36	0	22.30	22.16	22.24			
15	16QAM	36	20	22.20	22.25	22.12			
15	16QAM	36	39	22.20	22.20	22.17	23.7		
15	16QAM	75	0	22.23	22.28	22.14			
15	64QAM	1	0	22.43	22.38	22.34			
15	64QAM	1	37	22.30	22.18	22.26	23.7		
15	64QAM	1	74	22.37	22.07	22.20			
15	64QAM	36	0	21.27	21.29	21.27			
15	64QAM	36	20	21.25	21.13	21.21	22.7		
15	64QAM	36	39	21.27	21.05	21.20			
15	64QAM	75	0	21.32	21.21	21.20			
Channel				20000	20175	20350	Tune-up limit (dBm)		
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.16	24.09	24.14	25.7		
10	QPSK	1	25	24.14	24.09	24.08			
10	QPSK	1	49	24.15	24.17	24.10			
10	QPSK	25	0	23.24	23.19	23.15	24.7		
10	QPSK	25	12	23.31	23.27	23.19			
10	QPSK	25	25	23.30	23.29	23.28			
10	QPSK	50	0	23.32	23.25	23.15	24.7		
10	16QAM	1	0	23.57	23.54	23.47			
10	16QAM	1	25	23.43	23.51	23.48			
10	16QAM	1	49	23.52	23.45	23.56	23.7		
10	16QAM	25	0	22.25	22.14	22.15			
10	16QAM	25	12	22.27	22.23	22.24			
10	16QAM	25	25	22.24	22.23	22.24	23.7		
10	16QAM	50	0	22.31	22.29	22.14			
10	64QAM	1	0	22.36	22.33	22.38			
10	64QAM	1	25	22.46	22.28	22.46	23.7		
10	64QAM	1	49	22.42	22.07	22.45			
10	64QAM	25	0	21.30	21.23	21.23			
10	64QAM	25	12	21.30	21.14	21.25	22.7		
10	64QAM	25	25	21.35	20.96	21.26			
10	64QAM	50	0	21.30	21.11	21.20			
Channel				19975	20175	20375	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.19	24.12	24.06	25.7		
5	QPSK	1	12	24.19	24.19	24.16			
5	QPSK	1	24	24.22	24.12	24.15			
5	QPSK	12	0	23.28	23.19	23.19	24.7		
5	QPSK	12	7	23.36	23.28	23.23			
5	QPSK	12	13	23.28	23.23	23.14			
5	QPSK	25	0	23.30	23.24	23.23	24.7		
5	16QAM	1	0	23.53	23.36	23.43			
5	16QAM	1	12	23.55	23.48	23.47			
5	16QAM	1	24	23.56	23.45	23.44	23.7		
5	16QAM	12	0	22.25	22.15	22.29			
5	16QAM	12	7	22.32	22.31	22.21			
5	16QAM	12	13	22.28	22.32	22.28	23.7		
5	16QAM	25	0	22.28	22.29	22.26			
5	64QAM	1	0	22.32	22.38	22.44			
5	64QAM	1	12	22.47	22.29	22.39	23.7		
5	64QAM	1	24	22.55	22.04	22.40			
5	64QAM	12	0	21.33	21.25	21.33			
5	64QAM	12	7	21.35	21.25	21.29	22.7		
5	64QAM	12	13	21.36	21.12	21.27			
5	64QAM	25	0	21.32	21.08	21.24			
Channel				19965	20175	20385	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.14	24.04	24.07	25.7		
3	QPSK	1	8	24.23	24.20	24.15			
3	QPSK	1	14	24.19	24.20	24.10			
3	QPSK	8	0	23.25	23.18	23.17	24.7		
3	QPSK	8	4	23.28	23.26	23.28			
3	QPSK	8	7	23.26	23.29	23.18			
3	QPSK	15	0	23.31	23.31	23.21	24.7		
3	16QAM	1	0	23.51	23.42	23.42			
3	16QAM	1	8	23.59	23.56	23.46			
3	16QAM	1	14	23.49	23.41	23.43	23.7		
3	16QAM	8	0	22.30	22.21	22.21			
3	16QAM	8	4	22.39	22.33	22.33			
3	16QAM	8	7	22.37	22.27	22.25	23.7		
3	16QAM	15	0	22.32	22.22	22.26			
3	64QAM	1	0	22.37	22.24	22.33			
3	64QAM	1	8	22.57	22.28	22.45	23.7		
3	64QAM	1	14	22.53	22.19	22.42			
3	64QAM	8	0	21.36	21.16	21.30			
3	64QAM	8	4	21.37	21.17	21.27	22.7		
3	64QAM	8	7	21.35	21.09	21.22			
3	64QAM	15	0	21.29	21.14	21.20			
Channel				19957	20175	20393	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.02	24.07	24.05	25.7		
1.4	QPSK	1	3	24.21	24.16	24.08			
1.4	QPSK	1	5	24.09	24.07	23.98			
1.4	QPSK	3	0	24.17	24.02	24.08	24.7		
1.4	QPSK	3	1	24.17	24.16	24.09			
1.4	QPSK	3	3	24.14	24.12	24.05			
1.4	QPSK	6	0	23.23	23.14	23.06	24.7		
1.4	QPSK	6	3	23.28	23.26	23.28			
1.4	QPSK	6	3	23.50	23.42	23.34			
1.4	16QAM	3	0	23.52	23.41	23.37	24.7		
1.4	16QAM	3	3	23.22	23.16	23.13			
1.4	16QAM	3	3	23.22	23.28	23.24			
1.4	16QAM	3	3	23.23	23.16	23.13	23.7		
1.4	16QAM	3	3	23.26	23.21	23.21			
1.4	16QAM	3	3	23.24	23.23	23.28			
1.4	64QAM	1	3	22.37	22.28	22.42	23.7		
1.4	64QAM	1	3	22.34	22.21	22.33			
1.4	64QAM	1	3	22.36	22.28	22.23			
1.4	64QAM	3	1	22.36	22.34	22.30	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.34	22.21	22.33			
1.4	64QAM	3	3	22.36	22.21	22.33	23.7		
1.4	64QAM	3	3	22.34	22.21	22			



Band 5									
Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				20450	20525	20600			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	23.09	23.04	23.08	24.6		
10	QPSK	1	25	22.99	23.03	22.97			
10	QPSK	1	49	23.06	23.02	22.94			
10	QPSK	25	0	23.10	23.16	23.11	24.1		
10	QPSK	25	12	23.20	23.14	23.12			
10	QPSK	25	25	23.18	23.17	23.13			
10	QPSK	50	0	23.21	23.16	23.10	24.1		
10	16QAM	1	0	23.49	23.43	23.46			
10	16QAM	1	25	23.41	23.43	23.40			
10	16QAM	1	49	23.47	23.37	23.35	23.6		
10	16QAM	25	0	22.97	23.05	23.02			
10	16QAM	25	12	23.06	23.06	23.04			
10	16QAM	25	25	23.04	23.09	23.05	23.6		
10	16QAM	50	0	23.07	23.07	23.02			
10	64QAM	1	0	23.18	23.13	23.22	23.6		
10	64QAM	1	25	23.22	23.28	23.05			
10	64QAM	1	49	23.24	23.02	22.76			
10	64QAM	25	0	21.98	22.13	22.08	23.1		
10	64QAM	25	12	22.14	22.12	22.06			
10	64QAM	25	25	22.08	22.12	21.41			
10	64QAM	50	0	22.11	22.11	22.00	Tune-up limit (dBm)		
Channel				20425	20525	20625			
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	23.05	22.65	22.60	24.6		
5	QPSK	1	12	22.91	22.64	22.66			
5	QPSK	1	24	23.04	22.67	22.60			
5	QPSK	12	0	23.03	22.58	22.53	24.1		
5	QPSK	12	7	23.15	22.62	22.46			
5	QPSK	12	13	23.14	22.57	22.45			
5	QPSK	25	0	23.14	22.51	22.45	24.1		
5	16QAM	1	0	23.47	22.89	22.79			
5	16QAM	1	12	23.39	22.85	22.78			
5	16QAM	1	24	23.38	22.80	22.70	23.6		
5	16QAM	12	0	22.96	22.59	22.42			
5	16QAM	12	7	23.04	22.54	22.41			
5	16QAM	12	13	23.04	22.49	22.40	23.1		
5	16QAM	25	0	23.03	22.47	22.38			
5	64QAM	1	0	23.09	22.66	22.20			
5	64QAM	1	12	23.17	22.64	21.74	23.6		
5	64QAM	1	24	23.20	22.64	21.90			
5	64QAM	12	0	21.97	21.60	21.87			
5	64QAM	12	7	22.08	21.59	21.83	23.1		
5	64QAM	12	13	22.04	21.54	21.67			
5	64QAM	25	0	22.05	21.46	21.70		Tune-up limit (dBm)	
Channel				20415	20525	20635			
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	22.80	22.75	22.80	24.6		
3	QPSK	1	8	22.79	22.84	22.76			
3	QPSK	1	14	22.70	22.75	22.82			
3	QPSK	8	0	22.91	22.85	22.81	24.1		
3	QPSK	8	4	22.85	22.87	22.80			
3	QPSK	8	7	22.82	22.84	22.72			
3	QPSK	15	0	22.83	22.83	22.77	24.1		
3	16QAM	1	0	23.19	23.13	23.12			
3	16QAM	1	8	23.19	23.20	23.12			
3	16QAM	1	14	23.09	23.11	22.96	23.6		
3	16QAM	8	0	22.80	22.85	22.81			
3	16QAM	8	4	22.80	22.88	22.79			
3	16QAM	8	7	22.74	22.83	22.71	23.6		
3	16QAM	15	0	22.79	22.77	22.75			
3	64QAM	1	0	22.94	22.93	21.97			
3	64QAM	1	8	22.96	23.01	22.20	23.6		
3	64QAM	1	14	22.85	22.90	22.28			
3	64QAM	8	0	21.82	21.83	21.85			
3	64QAM	8	4	21.79	21.86	21.96	23.1		
3	64QAM	8	7	21.75	21.85	22.16			
3	64QAM	15	0	21.73	21.80	22.06		Tune-up limit (dBm)	
Channel				20407	20525	20643			
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	22.70	22.66	22.61	24.6		
1.4	QPSK	1	3	22.73	22.74	22.68			
1.4	QPSK	1	5	22.68	22.70	22.60			
1.4	QPSK	3	0	22.75	22.70	22.64	24.1		
1.4	QPSK	3	1	22.76	22.73	22.69			
1.4	QPSK	3	3	22.73	22.74	22.64			
1.4	QPSK	6	0	22.81	22.73	22.69	24.1		
1.4	16QAM	1	0	23.07	23.02	22.97			
1.4	16QAM	1	3	23.10	23.12	23.00			
1.4	16QAM	1	5	23.03	23.05	22.93	24.1		
1.4	16QAM	3	0	22.88	22.78	22.76			
1.4	16QAM	3	1	22.89	22.94	22.80			
1.4	16QAM	3	3	22.82	22.84	22.70	23.6		
1.4	16QAM	6	0	22.72	22.75	22.68			
1.4	64QAM	1	0	22.85	22.80	22.29			
1.4	64QAM	1	3	22.91	22.92	22.47	23.6		
1.4	64QAM	1	5	22.82	22.86	22.49			
1.4	64QAM	3	0	22.85	22.77	22.25			
1.4	64QAM	3	1	22.86	22.83	22.37	23.1		
1.4	64QAM	3	3	22.79	22.84	22.44			
1.4	64QAM	6	0	21.69	21.68	21.30	23.1		



Band 7							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.43	24.33	24.16	25.7
20	QPSK	1	49	24.40	24.36	24.21	
20	QPSK	1	99	24.53	24.43	24.20	
20	QPSK	50	0	23.80	23.46	23.37	24.7
20	QPSK	50	24	23.62	23.47	23.35	
20	QPSK	50	50	23.58	23.49	23.38	
20	QPSK	100	0	23.57	23.49	23.30	24.7
20	16QAM	1	0	23.72	23.69	23.53	
20	16QAM	1	49	23.75	23.65	23.47	
20	16QAM	1	99	23.89	23.74	23.52	23.7
20	16QAM	50	0	22.64	22.40	22.33	
20	16QAM	50	24	22.66	22.46	22.32	
20	16QAM	50	50	22.66	22.45	22.30	23.7
20	16QAM	100	0	22.58	22.45	22.52	
20	64QAM	1	0	22.63	22.49	22.44	
20	64QAM	1	49	22.62	22.65	22.46	22.7
20	64QAM	1	99	22.70	22.63	22.38	
20	64QAM	50	0	21.65	21.44	21.35	
20	64QAM	50	24	21.69	21.52	21.43	22.7
20	64QAM	50	50	21.66	21.44	21.39	
20	64QAM	100	0	21.67	21.51	21.40	
Channel				20925	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.41	24.35	24.22	25.7
15	QPSK	1	37	24.50	24.38	24.11	
15	QPSK	1	74	24.49	24.42	24.24	
15	QPSK	36	0	23.49	23.39	23.27	24.7
15	QPSK	36	20	23.64	23.46	23.32	
15	QPSK	36	39	23.64	23.46	23.32	
15	QPSK	75	0	23.58	23.40	23.35	24.7
15	16QAM	1	0	23.72	23.67	23.49	
15	16QAM	1	37	23.83	23.64	23.48	
15	16QAM	1	74	23.80	23.78	23.53	23.7
15	16QAM	36	0	22.50	22.47	22.29	
15	16QAM	36	20	22.60	22.50	22.35	
15	16QAM	36	39	22.65	22.48	22.34	23.7
15	16QAM	75	0	22.58	22.49	22.33	
15	64QAM	1	0	22.67	22.52	22.41	
15	64QAM	1	37	22.68	22.59	22.34	23.7
15	64QAM	1	74	22.80	22.60	22.41	
15	64QAM	36	0	21.49	21.41	21.39	
15	64QAM	36	20	21.66	21.55	21.32	22.7
15	64QAM	36	39	21.64	21.48	21.35	
15	64QAM	75	0	21.61	21.42	21.33	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.42	24.34	24.18	25.7
10	QPSK	1	25	24.48	24.37	24.08	
10	QPSK	1	49	24.42	24.34	24.20	
10	QPSK	25	0	23.43	23.29	23.24	24.7
10	QPSK	25	12	23.58	23.44	23.25	
10	QPSK	25	25	23.58	23.38	23.31	
10	QPSK	50	0	23.49	23.34	23.26	24.7
10	16QAM	1	0	23.65	23.57	23.43	
10	16QAM	1	25	23.81	23.62	23.38	
10	16QAM	1	49	23.72	23.72	23.47	23.7
10	16QAM	25	0	22.49	22.47	22.26	
10	16QAM	25	12	22.51	22.43	22.25	
10	16QAM	25	25	22.59	22.47	22.31	23.7
10	16QAM	50	0	22.57	22.46	22.24	
10	64QAM	1	0	22.65	22.45	22.36	
10	64QAM	1	25	22.68	22.53	22.25	22.7
10	64QAM	1	49	22.80	22.54	22.33	
10	64QAM	25	0	21.47	21.36	21.29	
10	64QAM	25	12	21.56	21.52	21.23	22.7
10	64QAM	25	25	21.52	21.45	21.33	
10	64QAM	50	0	21.61	21.33	21.23	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.45	24.33	24.22	25.7
5	QPSK	1	12	24.43	24.36	24.11	
5	QPSK	1	24	24.41	24.32	24.15	
5	QPSK	12	0	23.47	23.38	23.18	24.7
5	QPSK	12	7	23.62	23.39	23.31	
5	QPSK	12	13	23.61	23.38	23.24	
5	QPSK	25	0	23.48	23.32	23.26	24.7
5	16QAM	1	0	23.67	23.61	23.44	
5	16QAM	1	12	23.81	23.56	23.45	
5	16QAM	1	24	23.72	23.69	23.43	23.7
5	16QAM	12	0	22.47	22.45	22.20	
5	16QAM	12	7	22.56	22.41	22.33	
5	16QAM	12	13	22.62	22.48	22.25	23.7
5	16QAM	25	0	22.56	22.44	22.26	
5	64QAM	1	0	22.63	22.44	22.37	
5	64QAM	1	12	22.63	22.49	22.32	23.7
5	64QAM	1	24	22.76	22.55	22.37	
5	64QAM	12	0	21.41	21.34	21.30	
5	64QAM	12	7	21.83	21.52	21.24	22.7
5	64QAM	12	13	21.62	21.42	21.34	
5	64QAM	25	0	21.52	21.39	21.29	



Band 12										
Ant 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				23060	23090	23130				
Frequency (MHz)				704	707.5	711				
10	QPSK	1	0	23.76	23.70	23.73	25.7			
10	QPSK	1	25	23.71	23.76	23.75				
10	QPSK	1	49	23.81	23.85	23.79				
10	QPSK	25	0	23.45	23.47	23.47	24.7			
10	QPSK	25	12	23.54	23.47	23.46				
10	QPSK	25	25	23.52	23.54	23.54				
10	QPSK	50	0	23.53	23.47	23.46	24.7			
10	16QAM	1	0	23.74	23.68	23.67				
10	16QAM	1	25	23.70	23.73	23.71				
10	16QAM	1	49	23.79	23.79	23.72	24.7			
10	16QAM	25	0	22.43	22.48	22.46				
10	16QAM	25	12	22.51	22.49	22.46				
10	16QAM	25	25	22.47	22.52	22.56	23.7			
10	16QAM	50	0	22.53	22.45	22.45				
10	64QAM	1	0	22.55	22.51	22.54				
10	64QAM	1	25	22.63	22.56	22.67	23.7			
10	64QAM	1	49	22.69	22.73	22.65				
10	64QAM	25	0	21.46	21.46	21.49				
10	64QAM	25	12	21.55	21.51	21.49	22.7			
10	64QAM	25	25	21.53	21.57	21.56				
10	64QAM	50	0	21.53	21.51	21.52				
Channel				23035	23095	23155	Tune-up limit (dBm)			
Frequency (MHz)				701.5	707.5	713.5				
5	QPSK	1	0	23.78	23.76	23.74	25.7			
5	QPSK	1	12	23.77	23.82	23.80				
5	QPSK	1	24	23.78	23.83	23.82				
5	QPSK	12	0	23.43	23.46	23.51	24.7			
5	QPSK	12	7	23.48	23.46	23.50				
5	QPSK	12	13	23.47	23.48	23.47				
5	QPSK	25	0	23.46	23.44	23.46	24.7			
5	16QAM	1	0	23.75	23.70	23.65				
5	16QAM	1	12	23.73	23.73	23.75				
5	16QAM	1	24	23.70	23.72	23.72	23.7			
5	16QAM	12	0	22.50	22.52	22.51				
5	16QAM	12	7	22.49	22.47	22.52				
5	16QAM	12	13	22.48	22.52	22.49	23.7			
5	16QAM	25	0	22.52	22.47	22.46				
5	64QAM	1	0	22.60	22.59	22.60				
5	64QAM	1	12	22.61	22.64	22.66	23.7			
5	64QAM	1	24	22.65	22.70	22.66				
5	64QAM	12	0	21.54	21.54	21.54				
5	64QAM	12	7	21.55	21.54	21.54	22.7			
5	64QAM	12	13	21.53	21.57	21.52				
5	64QAM	25	0	21.51	21.50	21.48				
Channel				23025	23095	23165	Tune-up limit (dBm)			
Frequency (MHz)				700.5	707.5	714.5				
3	QPSK	1	0	23.82	23.77	23.79	25.7			
3	QPSK	1	8	23.80	23.86	23.82				
3	QPSK	1	14	23.73	23.78	23.76				
3	QPSK	8	0	23.51	23.44	23.47	24.7			
3	QPSK	8	4	23.49	23.50	23.49				
3	QPSK	8	7	23.42	23.49	23.47				
3	QPSK	15	0	23.49	23.42	23.45	24.7			
3	16QAM	1	0	23.77	23.70	23.75				
3	16QAM	1	8	23.75	23.82	23.79				
3	16QAM	1	14	23.66	23.73	23.68	23.7			
3	16QAM	8	0	22.55	22.53	22.51				
3	16QAM	8	4	22.55	22.61	22.57				
3	16QAM	8	7	22.53	22.55	22.53	23.7			
3	16QAM	15	0	22.54	22.49	22.46				
3	64QAM	1	0	22.66	22.66	22.68				
3	64QAM	1	8	22.71	22.70	22.69	23.7			
3	64QAM	1	14	22.64	22.66	22.61				
3	64QAM	8	0	21.59	21.52	21.54				
3	64QAM	8	4	21.54	21.62	21.56	22.7			
3	64QAM	8	7	21.50	21.55	21.53				
3	64QAM	15	0	21.52	21.45	21.47				
Channel				23017	23095	23173	Tune-up limit (dBm)			
Frequency (MHz)				699.7	707.5	715.3				
1.4	QPSK	1	0	23.73	23.69	23.71	25.7			
1.4	QPSK	1	3	23.75	23.76	23.74				
1.4	QPSK	1	5	23.69	23.73	23.68				
1.4	QPSK	3	0	23.75	23.70	23.73	24.7			
1.4	QPSK	3	1	23.78	23.75	23.77				
1.4	QPSK	3	3	23.69	23.73	23.70				
1.4	QPSK	6	0	23.40	23.43	23.40	24.7			
1.4	16QAM	1	0	23.65	23.58	23.64				
1.4	16QAM	1	3	23.69	23.71	23.71				
1.4	16QAM	1	5	23.61	23.64	23.60	24.7			
1.4	16QAM	3	0	23.43	23.41	23.41				
1.4	16QAM	3	1	23.50	23.44	23.47				
1.4	16QAM	3	3	23.40	23.41	23.39	23.7			
1.4	16QAM	6	0	22.46	22.49	22.46				
1.4	64QAM	1	0	22.57	22.53	22.57				
1.4	64QAM	1	3	22.61	22.65	22.62	23.7			
1.4	64QAM	1	5	22.53	22.56	22.50				
1.4	64QAM	3	0	22.54	22.50	22.55				
1.4	64QAM	3	1	22.58	22.55	22.58	22.7			
1.4	64QAM	3	3	22.52	22.55	22.51				
1.4	64QAM	6	0	21.44	21.44	21.44				



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.80			25.2
10	QPSK	1	25	23.47			
10	QPSK	1	49	23.51			
10	QPSK	25	0	22.58			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.56			
10	QPSK	50	0	22.58			24.2
10	16QAM	1	0	22.75			
10	16QAM	1	25	22.82			
10	16QAM	1	49	22.76			23.2
10	16QAM	25	0	21.59			
10	16QAM	25	12	21.62			
10	16QAM	25	25	21.61			23.2
10	16QAM	50	0	21.57			
10	64QAM	1	0	23.07			
10	64QAM	1	25	23.04			23.2
10	64QAM	1	49	23.01			
10	64QAM	25	0	22.07			
10	64QAM	25	12	22.06			22.2
10	64QAM	25	25	22.02			
10	64QAM	50	0	22.04			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.50	23.45	23.49	25.2
5	QPSK	1	12	23.45	23.54	23.52	
5	QPSK	1	24	23.50	23.51	23.52	
5	QPSK	12	0	22.63	22.56	22.61	24.2
5	QPSK	12	7	22.67	22.64	22.67	
5	QPSK	12	13	22.67	22.62	22.62	
5	QPSK	25	0	22.64	22.57	22.55	24.2
5	16QAM	1	0	22.71	22.71	22.78	
5	16QAM	1	12	22.78	22.85	22.79	
5	16QAM	1	24	22.62	22.85	22.72	23.2
5	16QAM	12	0	21.70	21.62	21.68	
5	16QAM	12	7	21.68	21.57	21.60	
5	16QAM	12	13	21.69	21.60	21.70	23.2
5	16QAM	25	0	21.63	21.64	21.54	
5	64QAM	1	0	22.14	22.25	22.17	
5	64QAM	1	12	22.26	22.30	22.21	23.2
5	64QAM	1	24	22.26	22.23	22.15	
5	64QAM	12	0	21.19	21.11	21.20	
5	64QAM	12	7	21.24	21.14	21.08	22.2
5	64QAM	12	13	21.15	21.17	21.08	
5	64QAM	25	0	21.21	21.11	21.10	



Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330	23330		
Frequency (MHz)				793			
10	QPSK	1	0	23.99			25.7
10	QPSK	1	25	23.82			
10	QPSK	1	49	23.75			
10	QPSK	25	0	23.69			24.7
10	QPSK	25	12	23.69			
10	QPSK	25	25	23.75			
10	QPSK	50	0	23.68			24.7
10	16QAM	1	0	23.82			
10	16QAM	1	25	23.85			
10	16QAM	1	49	23.85			23.7
10	16QAM	25	0	22.70			
10	16QAM	25	12	22.70			
10	16QAM	25	25	22.72			23.7
10	16QAM	50	0	22.71			
10	64QAM	1	0	22.84			
10	64QAM	1	25	22.80			23.7
10	64QAM	1	49	22.88			
10	64QAM	25	0	21.73			
10	64QAM	25	12	21.72			22.7
10	64QAM	25	25	21.76			
10	64QAM	50	0	21.72			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.78	23.70	23.70	25.7
5	QPSK	1	12	23.81	23.79	23.83	
5	QPSK	1	24	23.77	23.74	23.70	
5	QPSK	12	0	23.67	23.62	23.56	24.7
5	QPSK	12	7	23.68	23.65	23.63	
5	QPSK	12	13	23.63	23.65	23.58	
5	QPSK	25	0	23.63	23.57	23.54	24.7
5	16QAM	1	0	23.90	23.83	23.80	
5	16QAM	1	12	23.90	23.90	23.89	
5	16QAM	1	24	23.86	23.86	23.82	23.7
5	16QAM	12	0	22.70	22.63	22.59	
5	16QAM	12	7	22.71	22.65	22.68	
5	16QAM	12	13	22.68	22.64	22.63	23.7
5	16QAM	25	0	22.70	22.59	22.57	
5	64QAM	1	0	22.80	22.76	22.77	
5	64QAM	1	12	22.86	22.87	22.85	23.7
5	64QAM	1	24	22.88	22.83	22.78	
5	64QAM	12	0	21.75	21.68	21.65	
5	64QAM	12	7	21.76	21.69	21.71	22.7
5	64QAM	12	13	21.71	21.69	21.67	
5	64QAM	25	0	21.67	21.61	21.58	



Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.74	23.72	23.73	25.7
10	QPSK	1	25	23.78	23.79	23.78	
10	QPSK	1	49	23.91	23.92	23.82	
10	QPSK	25	0	23.42	23.44	23.42	24.7
10	QPSK	25	12	23.57	23.59	23.59	
10	QPSK	25	25	23.59	23.60	23.59	
10	QPSK	50	0	23.57	23.47	23.47	24.7
10	16QAM	1	0	23.71	23.69	23.71	
10	16QAM	1	25	23.79	23.81	23.80	
10	16QAM	1	49	23.88	23.88	23.82	23.7
10	16QAM	25	0	22.43	22.45	22.46	
10	16QAM	25	12	22.58	22.51	22.60	
10	16QAM	25	25	22.63	22.54	22.56	23.7
10	16QAM	50	0	22.54	22.48	22.44	
10	64QAM	1	0	22.55	22.56	22.57	23.7
10	64QAM	1	25	22.71	22.71	22.71	
10	64QAM	1	49	22.76	22.79	22.73	
10	64QAM	25	0	21.48	21.46	21.46	22.7
10	64QAM	25	12	21.64	21.56	21.63	
10	64QAM	25	25	21.61	21.64	21.63	
10	64QAM	50	0	21.60	21.54	21.54	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.75	23.74	23.77	25.7
5	QPSK	1	12	23.85	23.86	23.87	
5	QPSK	1	24	23.89	23.89	23.90	
5	QPSK	12	0	23.46	23.46	23.48	24.7
5	QPSK	12	7	23.53	23.59	23.53	
5	QPSK	12	13	23.52	23.54	23.50	
5	QPSK	25	0	23.51	23.51	23.53	24.7
5	16QAM	1	0	23.71	23.68	23.68	
5	16QAM	1	12	23.74	23.75	23.77	
5	16QAM	1	24	23.80	23.81	23.82	23.7
5	16QAM	12	0	22.50	22.51	22.52	
5	16QAM	12	7	22.55	22.57	22.56	
5	16QAM	12	13	22.54	22.59	22.58	23.7
5	16QAM	25	0	22.54	22.49	22.51	
5	64QAM	1	0	22.63	22.61	22.65	
5	64QAM	1	12	22.66	22.69	22.69	23.7
5	64QAM	1	24	22.73	22.76	22.74	
5	64QAM	12	0	21.52	21.56	21.55	
5	64QAM	12	7	21.63	21.65	21.57	22.7
5	64QAM	12	13	21.59	21.65	21.63	
5	64QAM	25	0	21.55	21.53	21.57	



Band 25									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	24.37	24.11	23.99	25.7		
20	QPSK	1	49	24.17	24.10	24.01			
20	QPSK	1	99	24.09	24.05	23.83			
20	QPSK	50	0	23.26	23.27	23.08	24.7		
20	QPSK	50	24	23.33	23.30	23.12			
20	QPSK	50	50	23.27	23.29	23.14			
20	QPSK	100	0	23.28	23.29	23.17	24.7		
20	16QAM	1	0	23.53	23.42	23.38			
20	16QAM	1	49	23.52	23.45	23.38			
20	16QAM	1	99	23.42	23.47	23.21	23.7		
20	16QAM	50	0	22.25	22.27	22.14			
20	16QAM	50	24	22.33	22.33	22.11			
20	16QAM	50	50	22.28	22.24	22.22	22.7		
20	16QAM	100	0	22.26	22.27	22.13			
20	64QAM	1	0	22.41	22.30	22.21			
20	64QAM	1	49	22.31	22.32	21.92	22.7		
20	64QAM	1	99	22.39	22.38	21.70			
20	64QAM	50	0	21.29	21.27	20.87			
20	64QAM	50	24	21.33	21.30	20.90	22.7		
20	64QAM	50	50	21.35	21.35	20.70			
20	64QAM	100	0	21.29	21.35	20.71			
Channel				26115	26340	26615	Tune-up limit (dBm)		
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	24.24	24.13	24.06	25.7		
15	QPSK	1	37	24.11	24.17	24.07			
15	QPSK	1	74	24.19	24.20	23.81			
15	QPSK	36	0	23.36	23.25	23.15	24.7		
15	QPSK	36	20	23.39	23.30	23.14			
15	QPSK	36	39	23.27	23.27	23.17			
15	QPSK	75	0	23.32	23.26	23.15	24.7		
15	16QAM	1	0	23.46	23.50	23.39			
15	16QAM	1	37	23.44	23.50	23.30			
15	16QAM	1	74	23.42	23.50	23.19	23.7		
15	16QAM	36	0	22.34	22.29	22.14			
15	16QAM	36	20	22.32	22.29	22.20			
15	16QAM	36	39	22.32	22.27	22.14	23.7		
15	16QAM	75	0	22.27	22.28	22.24			
15	64QAM	1	0	22.42	22.33	21.77			
15	64QAM	1	37	22.35	22.38	21.86	23.7		
15	64QAM	1	74	22.33	22.45	21.71			
15	64QAM	36	0	21.39	21.25	20.86			
15	64QAM	36	20	21.36	21.30	20.96	22.7		
15	64QAM	36	39	21.33	21.28	20.71			
15	64QAM	75	0	21.33	21.34	20.70			
Channel				26090	26340	26640	Tune-up limit (dBm)		
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	24.16	24.13	24.06	25.7		
10	QPSK	1	25	24.18	24.14	24.06			
10	QPSK	1	49	24.22	24.21	23.78			
10	QPSK	25	0	23.35	23.33	23.04	24.7		
10	QPSK	25	12	23.32	23.27	23.25			
10	QPSK	25	25	23.28	23.32	23.17			
10	QPSK	50	0	23.29	23.26	23.18	24.7		
10	16QAM	1	0	23.60	23.57	23.34			
10	16QAM	1	25	23.54	23.53	23.43			
10	16QAM	1	49	23.58	23.54	23.19	23.7		
10	16QAM	25	0	22.31	22.28	22.05			
10	16QAM	25	12	22.33	22.29	22.16			
10	16QAM	25	25	22.35	22.27	22.12	23.7		
10	16QAM	50	0	22.35	22.36	22.09			
10	64QAM	1	0	22.54	22.39	22.01			
10	64QAM	1	25	22.52	22.42	21.87	23.7		
10	64QAM	1	49	22.41	22.48	21.75			
10	64QAM	25	0	21.31	21.33	20.78			
10	64QAM	25	12	21.42	21.36	20.85	22.7		
10	64QAM	25	25	21.40	21.37	20.64			
10	64QAM	50	0	21.33	21.40	20.52			
Channel				26065	26340	26665	Tune-up limit (dBm)		
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	24.26	24.17	24.08	25.7		
5	QPSK	1	12	24.23	24.21	24.04			
5	QPSK	1	24	24.29	24.19	23.74			
5	QPSK	12	0	23.23	23.22	23.18	24.7		
5	QPSK	12	7	23.32	23.29	23.20			
5	QPSK	12	13	23.34	23.34	23.00			
5	QPSK	25	0	23.30	23.30	23.10	24.7		
5	16QAM	1	0	23.57	23.48	23.36			
5	16QAM	1	12	23.60	23.55	23.41			
5	16QAM	1	24	23.60	23.55	23.14	24.7		
5	16QAM	12	0	22.27	22.26	22.14			
5	16QAM	12	7	22.37	22.30	22.21			
5	16QAM	12	13	22.42	22.39	22.17	23.7		
5	16QAM	25	0	22.36	22.28	22.13			
5	64QAM	1	0	22.42	22.44	21.76			
5	64QAM	1	12	22.41	22.39	21.78	23.7		
5	64QAM	1	24	22.53	22.43	21.73			
5	64QAM	12	0	21.37	21.38	20.72			
5	64QAM	12	7	21.42	21.35	20.55	22.7		
5	64QAM	12	13	21.42	21.34	20.36			
5	64QAM	25	0	21.29	21.32	20.45			
Channel				26055	26340	26675	Tune-up limit (dBm)		
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	24.15	24.03	24.06	25.7		
3	QPSK	1	8	24.29	24.32	23.94			
3	QPSK	1	14	24.31	24.28	23.76			
3	QPSK	8	0	23.29	23.22	23.13	24.7		
3	QPSK	8	4	23.31	23.33	23.06			
3	QPSK	8	7	23.31	23.37	22.84			
3	QPSK	15	0	23.28	23.32	22.90	24.7		
3	16QAM	1	0	23.48	23.44	23.26			
3	16QAM	1	8	23.65	23.61	23.22			
3	16QAM	1	14	23.57	23.60	22.97	23.7		
3	16QAM	8	0	22.29	22.31	22.20			
3	16QAM	8	4	22.41	22.31	22.13			
3	16QAM	8	7	22.34	22.42	22.10	23.7		
3	16QAM	15	0	22.35	22.31	22.09			
3	64QAM	1	0	22.36	22.28	21.77			
3	64QAM	1	8	22.49	22.52	21.79	23.7		
3	64QAM	1	14	22.57	22.51	21.75			
3	64QAM	8	0	21.29	21.29	21.66			
3	64QAM	8	4	21.41	21.39	20.42	22.7		
3	64QAM	8	7	21.47	21.37	20.21			
3	64QAM	15	0	21.39	21.36	20.34			
Channel				26047	26340	26683	Tune-up limit (dBm)		
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	24.13	24.06	23.93	25.7		
1.4	QPSK	1	3	24.16	24.35	23.78			
1.4	QPSK	1	5	24.34	24.22	23.73			
1.4	QPSK	3	0	24.22	24.20	23.75	24.7		
1.4	QPSK	3	1	24.29	24.30	23.76			
1.4	QPSK	3	3	24.24	24.17	23.74			
1.4	QPSK	6	0	23.28	23.21	22.91	24.7		
1.4	QPSK	6	1	23.34	23.34	23.06			
1.4	16QAM	1	0	23.58	23.49	23.18			
1.4	16QAM	1	5	23.62	23.46	22.98	24.7		
1.4	16QAM	3	0	23.31	23.28	22.98			
1.4	16QAM	3	3	23.36	23.25	22.91			
1.4	16QAM	3	6	22.28	22.41	22.00	23.7		
1.4	64QAM	1	0	22.34	22.44	21.74			
1.4	64QAM	1	3	22.56	22.33	21.72			
1.4	64QAM	3	0	22.40	22.41	21.75	23.7		
1.4	64QAM	3	1	22.50	22.44	21.77			
1.4	64QAM	3	3	22.58	22.43	21.70			
1.4	64QAM	3	6	21.29	21.29	21.66	22.7		
1.4	64QAM	3	9	21.41	21.39	20.42			
1.4	64QAM	3	12	21.47	21.37	20.28			



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.76	22.65	22.66	24.6
15	QPSK	1	37	22.68	22.62	22.61	
15	QPSK	1	74	22.63	22.63	22.80	
15	QPSK	36	0	22.80	22.75	22.75	24.1
15	QPSK	36	20	22.86	22.80	22.74	
15	QPSK	36	39	22.77	22.77	22.73	
15	QPSK	75	0	22.84	22.82	22.73	24.1
15	16QAM	1	0	23.29	22.97	23.03	
15	16QAM	1	37	22.96	22.97	22.98	
15	16QAM	1	74	22.94	22.95	22.83	23.6
15	16QAM	36	0	22.73	22.70	22.70	
15	16QAM	36	20	22.74	22.70	22.62	
15	16QAM	36	39	22.68	22.68	22.65	23.6
15	16QAM	75	0	22.75	22.72	22.68	
15	64QAM	1	0	22.82	22.71	22.71	23.6
15	64QAM	1	37	22.78	22.78	22.78	
15	64QAM	1	74	22.74	22.72	22.43	
15	64QAM	36	0	21.51	21.72	21.72	23.1
15	64QAM	36	20	21.78	21.79	21.68	
15	64QAM	36	39	21.74	21.72	21.72	
15	64QAM	75	0	21.75	21.72	21.67	Tune-up limit (dBm)
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.81	22.76	22.80	24.6
10	QPSK	1	25	22.68	22.70	22.70	
10	QPSK	1	49	22.65	22.66	22.62	
10	QPSK	25	0	22.89	22.80	22.81	24.1
10	QPSK	25	12	22.84	22.78	22.81	
10	QPSK	25	25	22.77	22.78	22.77	
10	QPSK	50	0	22.82	22.84	22.74	24.1
10	16QAM	1	0	23.17	23.08	23.11	
10	16QAM	1	25	23.10	23.06	23.07	
10	16QAM	1	49	23.05	23.01	22.96	23.6
10	16QAM	25	0	22.78	22.66	22.66	
10	16QAM	25	12	22.78	22.65	22.65	
10	16QAM	25	25	22.66	22.67	22.62	23.6
10	16QAM	50	0	22.75	22.71	22.66	
10	64QAM	1	0	22.97	22.94	22.90	23.6
10	64QAM	1	25	22.74	22.92	22.92	
10	64QAM	1	49	22.86	22.84	22.83	
10	64QAM	25	0	21.50	21.69	21.70	23.1
10	64QAM	25	12	21.50	21.69	21.74	
10	64QAM	25	25	21.70	21.72	21.48	
10	64QAM	50	0	21.66	21.75	21.69	Tune-up limit (dBm)
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.85	22.71	22.75	24.6
5	QPSK	1	12	22.78	22.78	22.76	
5	QPSK	1	24	22.70	22.74	22.62	
5	QPSK	12	0	22.92	22.80	22.84	24.1
5	QPSK	12	7	22.89	22.86	22.79	
5	QPSK	12	13	22.81	22.78	22.73	
5	QPSK	25	0	22.88	22.84	22.79	24.1
5	16QAM	1	0	23.21	23.01	23.05	
5	16QAM	1	12	23.14	23.04	23.00	
5	16QAM	1	24	23.06	23.07	22.93	23.6
5	16QAM	12	0	22.84	22.68	22.70	
5	16QAM	12	7	22.84	22.71	22.73	
5	16QAM	12	13	22.75	22.66	22.62	23.6
5	16QAM	25	0	22.80	22.73	22.68	
5	64QAM	1	0	22.77	22.84	22.75	
5	64QAM	1	12	22.59	22.85	22.11	23.6
5	64QAM	1	24	22.45	22.87	22.44	
5	64QAM	12	0	21.70	21.77	21.30	
5	64QAM	12	7	21.59	21.80	21.12	23.1
5	64QAM	12	13	21.43	21.72	21.28	
5	64QAM	25	0	21.49	21.75	21.29	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.87	22.72	22.72	
3	QPSK	1	8	22.84	22.79	22.71	24.6
3	QPSK	1	14	22.72	22.76	22.64	
3	QPSK	8	0	22.92	22.83	22.76	24.1
3	QPSK	8	4	22.89	22.86	22.78	
3	QPSK	8	7	22.86	22.80	22.71	
3	QPSK	15	0	22.89	22.85	22.75	24.1
3	16QAM	1	0	23.22	23.00	23.03	
3	16QAM	1	8	23.20	23.09	23.05	
3	16QAM	1	14	23.07	23.05	22.96	23.6
3	16QAM	8	0	22.88	22.76	22.73	
3	16QAM	8	4	22.88	22.79	22.70	
3	16QAM	8	7	22.84	22.75	22.64	23.6
3	16QAM	15	0	22.83	22.72	22.70	
3	64QAM	1	0	22.80	22.83	22.28	
3	64QAM	1	8	22.83	22.92	22.34	23.6
3	64QAM	1	14	22.59	22.89	22.46	
3	64QAM	8	0	21.77	21.75	21.10	
3	64QAM	8	4	21.76	21.83	21.27	23.1
3	64QAM	8	7	21.64	21.75	21.48	
3	64QAM	15	0	21.68	21.78	21.33	
Channel				26897	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.74	22.62	22.61	
1.4	QPSK	1	3	22.62	22.71	22.62	24.6
1.4	QPSK	1	5	22.74	22.65	22.62	
1.4	QPSK	3	0	22.80	22.66	22.61	24.1
1.4	QPSK	3	1	22.80	22.70	22.62	
1.4	QPSK	3	3	22.75	22.69	22.68	
1.4	QPSK	6	0	22.84	22.76	22.67	24.1
1.4	16QAM	1	0	23.12	22.90	22.91	
1.4	16QAM	1	3	23.17	23.04	22.95	
1.4	16QAM	1	5	23.02	22.93	22.80	24.1
1.4	16QAM	3	0	22.91	22.72	22.68	
1.4	16QAM	3	1	22.92	22.76	22.73	
1.4	16QAM	3	3	22.82	22.73	22.63	23.6
1.4	16QAM	6	0	22.82	22.70	22.62	
1.4	64QAM	1	0	22.93	22.77	22.51	
1.4	64QAM	1	3	22.86	22.85	22.68	23.6
1.4	64QAM	1	5	22.80	22.73	22.64	
1.4	64QAM	3	0	22.85	22.73	22.52	
1.4	64QAM	3	1	22.92	22.77	22.67	23.1
1.4	64QAM	3	3	22.79	22.74	22.66	
1.4	64QAM	6	0	21.76	21.66	21.58	



Band 30							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.60			23.7
10	QPSK	1	25	22.58			
10	QPSK	1	49	22.57			
10	QPSK	25	0	21.40			22.7
10	QPSK	25	12	21.84			
10	QPSK	25	25	21.51			
10	QPSK	50	0	21.63			22.7
10	16QAM	1	0	21.91			
10	16QAM	1	25	21.92			
10	16QAM	1	49	21.84			21.7
10	16QAM	25	0	20.46			
10	16QAM	25	12	20.53			
10	16QAM	25	25	20.45			21.7
10	16QAM	50	0	20.55			
10	64QAM	1	0	20.69			
10	64QAM	1	25	20.70			21.7
10	64QAM	1	49	20.62			
10	64QAM	25	0	19.46			
10	64QAM	25	12	19.61			20.7
10	64QAM	25	25	19.67			
10	64QAM	50	0	19.60			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.40	22.33	22.46	23.7
5	QPSK	1	12	22.50	22.59	22.53	
5	QPSK	1	24	22.58	22.42	22.56	
5	QPSK	12	0	21.52	21.63	21.49	22.7
5	QPSK	12	7	21.56	21.57	21.60	
5	QPSK	12	13	21.55	21.61	21.44	
5	QPSK	25	0	21.68	21.45	21.51	22.7
5	16QAM	1	0	21.71	21.78	21.72	
5	16QAM	1	12	21.80	21.73	21.86	
5	16QAM	1	24	22.01	21.70	21.78	21.7
5	16QAM	12	0	20.58	20.56	20.55	
5	16QAM	12	7	20.71	20.64	20.67	
5	16QAM	12	13	20.59	20.54	20.63	21.7
5	16QAM	25	0	20.66	20.60	20.51	
5	64QAM	1	0	20.71	20.69	20.64	
5	64QAM	1	12	20.68	20.73	20.64	21.7
5	64QAM	1	24	20.85	20.83	20.70	
5	64QAM	12	0	19.54	19.66	19.68	
5	64QAM	12	7	19.70	19.57	19.60	20.7
5	64QAM	12	13	19.73	19.65	19.69	
5	64QAM	25	0	19.73	19.66	19.62	



Band 66									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132047	132322	132597			
Frequency (MHz)				1720	1745	1772			
20	QPSK	1	0	24.30	24.23	24.29	25.7		
20	QPSK	1	49	24.09	24.18	24.12			
20	QPSK	1	99	24.24	24.20	24.16			
20	QPSK	50	0	23.14	23.07	23.15			
20	QPSK	50	24	23.18	22.94	23.14	24.7		
20	QPSK	50	50	23.21	23.00	23.03			
20	QPSK	100	0	23.14	23.16	23.11			
20	16QAM	1	0	23.42	23.47	23.37			
20	16QAM	1	49	23.34	23.34	23.20	24.7		
20	16QAM	1	99	23.33	23.34	23.10			
20	16QAM	50	0	22.13	21.98	22.08			
20	16QAM	50	24	22.19	21.96	22.18			
20	16QAM	50	50	22.17	22.04	22.12	23.7		
20	16QAM	100	0	22.18	22.06	22.23			
20	64QAM	1	0	22.36	22.29	22.16			
20	64QAM	1	49	22.09	22.08	22.17			
20	64QAM	1	99	22.31	22.25	22.10	23.7		
20	64QAM	50	0	21.13	21.16	21.03			
20	64QAM	50	24	21.28	21.17	21.23			
20	64QAM	50	50	21.14	21.10	21.14			
20	64QAM	100	0	21.14	21.10	21.14	22.7		
Channel				132047	132322	132597			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.18	23.94	24.08	25.7		
15	QPSK	1	37	23.89	23.88	23.85			
15	QPSK	1	74	24.10	24.10	23.90			
15	QPSK	36	0	23.05	23.14	23.03			
15	QPSK	36	20	23.09	23.15	23.05	24.7		
15	QPSK	36	39	23.19	23.18	23.01			
15	QPSK	75	0	23.06	23.10	23.01			
15	16QAM	1	37	23.28	23.30	23.22			
15	16QAM	1	74	23.40	23.34	23.17	24.7		
15	16QAM	36	0	22.03	22.04	21.98			
15	16QAM	36	20	22.26	22.03	22.20			
15	16QAM	36	39	22.18	22.01	22.20			
15	16QAM	75	0	22.08	22.23	21.94	23.7		
15	64QAM	1	0	22.32	22.15	22.18			
15	64QAM	1	37	22.13	22.17	22.07			
15	64QAM	1	74	22.25	22.20	22.21			
15	64QAM	36	0	21.01	21.05	21.11	23.7		
15	64QAM	36	20	21.06	21.19	21.05			
15	64QAM	36	39	21.16	21.05	21.09			
15	64QAM	75	0	21.19	21.10	21.06			
15	64QAM	75	0	21.19	21.10	21.06	22.7		
Channel				132022	132322	132622			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	24.11	24.02	24.01	25.7		
10	QPSK	1	25	24.01	23.94	24.10			
10	QPSK	1	49	24.07	23.97	24.06			
10	QPSK	25	0	23.22	23.02	23.12			
10	QPSK	25	12	23.19	23.15	23.12	24.7		
10	QPSK	25	25	23.24	23.22	23.21			
10	QPSK	50	0	23.25	23.23	23.16			
10	16QAM	1	0	23.42	23.36	23.39			
10	16QAM	1	25	23.46	23.36	23.37	24.7		
10	16QAM	1	49	23.38	23.45	23.49			
10	16QAM	25	0	22.24	22.00	22.16			
10	16QAM	25	12	22.31	22.25	22.08			
10	16QAM	25	25	22.14	22.10	22.08	23.7		
10	16QAM	50	0	22.23	22.20	22.09			
10	64QAM	1	0	22.28	22.20	22.25			
10	64QAM	1	25	22.32	22.28	22.40			
10	64QAM	1	49	22.40	22.41	22.24	23.7		
10	64QAM	25	0	21.15	21.09	21.10			
10	64QAM	25	12	21.29	21.12	21.10			
10	64QAM	25	25	21.24	21.22	21.21			
10	64QAM	50	0	21.19	21.25	21.18	22.7		
Channel				131997	132322	132647			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.08	24.07	24.01	25.7		
5	QPSK	1	12	24.22	24.06	24.12			
5	QPSK	1	24	24.15	24.17	24.01			
5	QPSK	12	0	23.15	23.10	23.13			
5	QPSK	12	7	23.11	23.27	23.24	24.7		
5	QPSK	12	13	23.29	23.19	23.27			
5	QPSK	25	0	23.13	23.20	23.14			
5	16QAM	1	0	23.51	23.45	23.47			
5	16QAM	1	12	23.59	23.49	23.41	24.7		
5	16QAM	1	24	23.47	23.46	23.30			
5	16QAM	12	0	22.30	22.11	22.26			
5	16QAM	12	7	22.29	22.28	22.26			
5	16QAM	12	13	22.18	22.28	22.25	23.7		
5	16QAM	25	0	22.21	22.09	22.27			
5	64QAM	1	0	22.40	22.30	22.30			
5	64QAM	1	12	22.47	22.38	22.33			
5	64QAM	1	24	22.42	22.39	22.32	23.7		
5	64QAM	12	0	21.39	21.26	21.33			
5	64QAM	12	7	21.19	21.19	21.33			
5	64QAM	12	13	21.24	21.27	21.30			
5	64QAM	25	0	21.16	21.25	21.08	22.7		
Channel				131987	132322	132657			
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	24.06	24.06	24.00	25.7		
3	QPSK	1	8	24.25	24.06	24.07			
3	QPSK	1	14	24.05	24.10	24.03			
3	QPSK	8	0	23.18	23.09	23.20			
3	QPSK	8	4	23.21	23.21	23.13	24.7		
3	QPSK	8	7	23.18	23.10	23.05			
3	QPSK	15	0	23.12	23.22	23.17			
3	16QAM	1	0	23.51	23.27	23.27			
3	16QAM	1	8	23.50	23.58	23.48	24.7		
3	16QAM	1	14	23.41	23.39	23.44			
3	16QAM	8	0	22.20	22.29	22.27			
3	16QAM	8	4	22.39	22.27	22.24			
3	16QAM	8	7	22.24	22.12	22.11	23.7		
3	16QAM	15	0	22.25	22.18	22.27			
3	64QAM	1	0	22.32	22.37	22.38			
3	64QAM	1	8	22.51	22.33	22.42			
3	64QAM	1	14	22.47	22.29	22.31	23.7		
3	64QAM	8	0	21.36	21.20	21.26			
3	64QAM	8	4	21.25	21.16	21.20			
3	64QAM	8	7	21.20	21.32	21.16			
3	64QAM	15	0	21.18	21.17	21.27	22.7		
Channel				131979	132322	132665			
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.01	24.08	23.94	25.7		
1.4	QPSK	1	3	24.15	23.99	24.13			
1.4	QPSK	1	5	23.95	23.98	23.92			
1.4	QPSK	3	0	24.16	23.99	24.13			
1.4	QPSK	3	1	24.08	24.06	24.13	24.7		
1.4	QPSK	3	3	23.98	24.03	24.03			
1.4	QPSK	6	0	23.18	23.00	23.09			
1.4	QPSK	3	3	23.19	23.22	23.12	24.7		
1.4	16QAM	1	3	23.42	23.46	23.43			
1.4	16QAM	1	5	23.33	23.36	23.32			
1.4	16QAM	3	0	23.19	23.17	23.10			
1.4	16QAM	3	1	23.20	23.08	23.01	23.7		
1.4	16QAM	3	3	23.21	23.15	23.08			
1.4	16QAM	1	5	22.24	22.15	22.08			
1.4	16QAM	1	7	22.30	22.20	22.13			
1.4	16QAM	1	3	22.41	22.31	22.32	23.7		
1.4	64QAM	1	5	22.19	22.20	22.32			
1.4	64QAM	3	0	22.19	22.20	22.22			
1.4	64QAM	3	1	22.40	22.38	22.37			
1.4	64QAM	3	3	22.26	22.12	22.21	23.7		
1.4	64QAM	3	5	22.31	22.19	22.12			
1.4	64QAM	3	7	22.30	22.15	22.08			
1.4	64QAM	3	9	22.32	22.17	22.11			



Band 71							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.35	24.17	24.20	25.7
20	QPSK	1	49	24.15	24.16	24.15	
20	QPSK	1	99	24.12	24.09	24.08	
20	QPSK	50	0	23.28	23.24	23.28	24.7
20	QPSK	50	24	23.33	23.28	23.17	
20	QPSK	50	50	23.32	23.27	23.27	
20	QPSK	100	0	23.33	23.32	23.28	24.7
20	16QAM	1	0	23.68	23.52	23.53	
20	16QAM	1	49	23.55	23.54	23.40	
20	16QAM	1	99	23.49	23.49	23.45	23.7
20	16QAM	50	0	22.34	22.30	22.30	
20	16QAM	50	24	22.34	22.27	22.24	
20	16QAM	50	50	22.30	22.25	22.28	22.7
20	16QAM	100	0	22.32	22.30	22.26	
20	64QAM	1	0	22.18	22.70	23.01	
20	64QAM	1	49	22.76	22.59	22.38	22.7
20	64QAM	1	99	23.01	22.51	22.88	
20	64QAM	50	0	20.92	21.86	21.50	
20	64QAM	50	24	21.49	21.70	21.76	22.7
20	64QAM	50	50	21.96	21.50	21.85	
20	64QAM	100	0	21.50	21.89	21.87	
Channel				133197	133287	133387	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.33	24.17	24.13	25.7
15	QPSK	1	37	24.01	24.14	24.11	
15	QPSK	1	74	24.16	24.11	24.11	
15	QPSK	36	0	23.24	23.26	23.27	24.7
15	QPSK	36	20	23.29	23.28	23.37	
15	QPSK	36	39	23.31	23.33	23.26	
15	QPSK	75	0	23.34	23.30	23.20	24.7
15	16QAM	1	0	23.56	23.53	23.49	
15	16QAM	1	37	23.28	23.50	23.41	
15	16QAM	1	74	23.38	23.43	23.38	23.7
15	16QAM	36	0	22.15	22.31	22.26	
15	16QAM	36	20	22.31	22.25	22.34	
15	16QAM	36	39	22.38	22.33	22.28	23.7
15	16QAM	75	0	22.37	22.19	22.18	
15	64QAM	1	0	22.13	22.80	22.90	
15	64QAM	1	37	21.73	23.04	23.04	23.7
15	64QAM	1	74	22.53	22.63	22.97	
15	64QAM	36	0	20.81	21.92	21.51	
15	64QAM	36	20	20.88	21.74	21.92	22.7
15	64QAM	36	39	21.49	21.44	21.88	
15	64QAM	75	0	21.38	21.79	21.77	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.30	24.14	24.17	25.7
10	QPSK	1	25	24.11	24.10	24.12	
10	QPSK	1	49	24.13	24.14	24.01	
10	QPSK	25	0	23.36	23.28	23.22	24.7
10	QPSK	25	12	23.13	23.25	23.22	
10	QPSK	25	25	23.19	23.31	23.23	
10	QPSK	50	0	23.29	23.18	23.16	24.7
10	16QAM	1	0	23.62	23.47	23.53	
10	16QAM	1	25	23.47	23.51	23.45	
10	16QAM	1	49	23.46	23.44	23.39	23.7
10	16QAM	25	0	22.05	22.17	22.16	
10	16QAM	25	12	22.07	22.24	22.20	
10	16QAM	25	25	22.00	22.24	22.19	23.7
10	16QAM	50	0	22.28	22.17	22.22	
10	64QAM	1	0	21.83	22.96	22.96	
10	64QAM	1	25	21.88	23.08	23.07	22.7
10	64QAM	1	49	22.12	22.23	22.55	
10	64QAM	25	0	20.70	21.87	21.82	
10	64QAM	25	12	20.70	21.74	21.85	22.7
10	64QAM	25	25	20.68	21.37	21.72	
10	64QAM	50	0	20.73	21.60	21.80	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.03	24.23	24.23	25.7
5	QPSK	1	12	24.13	24.24	24.12	
5	QPSK	1	24	24.11	24.10	24.10	
5	QPSK	12	0	23.15	23.26	23.19	24.7
5	QPSK	12	7	23.15	23.32	23.26	
5	QPSK	12	13	23.13	23.22	23.18	
5	QPSK	25	0	23.15	23.28	23.20	24.7
5	16QAM	1	0	23.29	23.53	23.52	
5	16QAM	1	12	23.38	23.54	23.50	
5	16QAM	1	24	23.40	23.49	23.42	23.7
5	16QAM	12	0	22.04	22.30	22.29	
5	16QAM	12	7	22.12	22.30	22.29	
5	16QAM	12	13	22.25	22.25	22.21	23.7
5	16QAM	25	0	22.06	22.21	22.22	
5	64QAM	1	0	21.70	22.98	23.00	
5	64QAM	1	12	21.82	22.93	22.81	23.7
5	64QAM	1	24	22.03	22.71	22.37	
5	64QAM	12	0	20.74	21.93	21.85	
5	64QAM	12	7	20.91	21.89	21.91	22.7
5	64QAM	12	13	20.87	21.70	21.89	
5	64QAM	25	0	20.69	21.73	21.61	



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. 7	Power Middle Ch. 7	Power High Ch. 7	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.00	23.12	23.16	24.6
20	QPSK	1	49	23.01	23.13	23.07	
20	QPSK	1	99	23.03	23.15	23.10	
20	QPSK	50	0	23.07	23.17	23.24	
20	QPSK	50	24	23.19	23.22	23.26	
20	QPSK	50	50	23.23	23.23	23.29	24.6
20	QPSK	100	0	23.21	23.22	23.27	
20	16QAM	1	0	23.33	23.45	23.51	
20	16QAM	1	49	23.38	23.50	23.47	
20	16QAM	1	99	23.33	23.46	23.43	
20	16QAM	50	0	22.20	22.30	22.35	23.7
20	16QAM	50	24	22.31	22.35	22.38	
20	16QAM	50	50	22.32	22.38	22.38	
20	16QAM	100	0	22.30	22.35	22.37	
20	64QAM	1	0	22.32	22.42	22.48	
20	64QAM	1	49	22.30	22.47	22.19	23.7
20	64QAM	1	99	22.37	22.42	22.37	
20	64QAM	50	0	21.21	21.32	21.38	
20	64QAM	50	24	21.33	21.37	21.38	
20	64QAM	50	50	21.35	21.38	21.40	
20	64QAM	100	0	21.31	21.33	21.38	Tune-up limit (dBm)
Channel				1867.5	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.92	23.11	23.09	
15	QPSK	1	37	22.95	23.10	23.00	
15	QPSK	1	74	23.00	23.14	23.04	24.6
15	QPSK	36	0	22.97	23.16	23.16	
15	QPSK	36	20	23.15	23.20	23.24	
15	QPSK	36	39	23.22	23.19	23.25	
15	QPSK	75	0	23.17	23.13	23.19	
15	16QAM	1	0	23.28	23.35	23.47	24.6
15	16QAM	1	37	23.34	23.49	23.37	
15	16QAM	1	74	23.33	23.45	23.35	
15	16QAM	36	0	22.13	22.24	22.29	
15	16QAM	36	20	22.26	22.28	22.37	
15	16QAM	36	39	22.25	22.35	22.33	23.7
15	16QAM	75	0	22.26	22.26	22.35	
15	64QAM	1	0	22.31	22.41	22.48	
15	64QAM	1	37	22.28	22.38	22.11	
15	64QAM	1	74	22.33	22.40	22.28	
15	64QAM	36	0	21.16	21.27	21.31	22.7
15	64QAM	36	20	21.29	21.33	21.29	
15	64QAM	36	39	21.33	21.36	21.30	
15	64QAM	75	0	21.31	21.27	21.35	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.99	23.03	23.06	24.6
10	QPSK	1	25	22.99	23.11	23.03	
10	QPSK	1	49	23.02	23.08	23.09	
10	QPSK	25	0	22.99	23.12	23.15	
10	QPSK	25	12	23.18	23.17	23.22	
10	QPSK	25	25	23.18	23.15	23.20	24.6
10	QPSK	50	0	23.15	23.15	23.22	
10	16QAM	1	0	23.23	23.43	23.42	
10	16QAM	1	25	23.29	23.49	23.47	
10	16QAM	1	49	23.33	23.47	23.42	
10	16QAM	25	0	22.15	22.24	22.27	23.7
10	16QAM	25	12	22.28	22.32	22.36	
10	16QAM	25	25	22.25	22.35	22.36	
10	16QAM	50	0	22.29	22.28	22.32	
10	64QAM	1	0	22.25	22.35	22.39	
10	64QAM	1	25	22.22	22.39	22.18	23.7
10	64QAM	1	49	22.28	22.42	22.31	
10	64QAM	25	0	21.20	21.26	21.29	
10	64QAM	25	12	21.25	21.27	21.29	
10	64QAM	25	25	21.27	21.38	21.33	
10	64QAM	50	0	21.22	21.24	21.36	Tune-up limit (dBm)
Channel				1862.5	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.00	23.10	23.07	
5	QPSK	1	12	22.93	23.06	23.03	
5	QPSK	1	24	22.94	23.07	23.01	24.6
5	QPSK	12	0	23.07	23.11	23.14	
5	QPSK	12	7	23.19	23.15	23.22	
5	QPSK	12	13	23.17	23.17	23.22	
5	QPSK	25	0	23.16	23.21	23.18	
5	16QAM	1	0	23.32	23.37	23.44	24.6
5	16QAM	1	12	23.29	23.50	23.43	
5	16QAM	1	24	23.27	23.41	23.39	
5	16QAM	12	0	22.15	22.26	22.30	
5	16QAM	12	7	22.24	22.30	22.31	
5	16QAM	12	13	22.27	22.34	22.30	23.7
5	16QAM	25	0	22.29	22.34	22.30	
5	64QAM	1	0	22.25	22.41	22.46	
5	64QAM	1	12	22.25	22.40	22.13	
5	64QAM	1	24	22.37	22.36	22.27	
5	64QAM	12	0	21.14	21.26	21.30	22.7
5	64QAM	12	7	21.30	21.33	21.34	
5	64QAM	12	13	21.35	21.32	21.32	
5	64QAM	25	0	21.30	21.26	21.31	
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.99	23.04	23.07	24.6
3	QPSK	1	8	22.98	23.06	22.99	
3	QPSK	1	14	23.02	23.11	23.09	
3	QPSK	8	0	22.98	23.10	23.22	
3	QPSK	8	4	23.19	23.13	23.26	
3	QPSK	8	7	23.15	23.21	23.22	24.6
3	QPSK	15	0	23.14	23.19	23.21	
3	16QAM	1	0	23.26	23.39	23.44	
3	16QAM	1	8	23.32	23.44	23.44	
3	16QAM	1	14	23.30	23.40	23.37	
3	16QAM	8	0	22.15	22.26	22.25	23.7
3	16QAM	8	4	22.28	22.25	22.29	
3	16QAM	8	7	22.28	22.32	22.38	
3	16QAM	15	0	22.22	22.26	22.35	
3	64QAM	1	0	22.23	22.32	22.48	
3	64QAM	1	8	22.21	22.37	22.10	23.7
3	64QAM	1	14	22.33	22.35	22.28	
3	64QAM	8	0	21.13	21.27	21.29	
3	64QAM	8	4	21.27	21.33	21.37	
3	64QAM	8	7	21.26	21.34	21.40	
3	64QAM	15	0	21.27	21.24	21.28	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.88	23.08	22.98	24.6
1.4	QPSK	1	3	22.90	23.14	23.06	
1.4	QPSK	1	5	22.85	23.09	23.00	
1.4	QPSK	3	0	22.82	23.14	23.04	
1.4	QPSK	3	1	22.85	23.17	23.11	
1.4	QPSK	3	3	22.91	23.12	23.06	24.6
1.4	QPSK	6	0	22.97	23.19	23.12	
1.4	16QAM	1	0	23.18	23.40	23.33	
1.4	16QAM	1	3	23.30	23.49	23.40	
1.4	16QAM	1	5	23.25	23.42	23.33	
1.4	16QAM	3	0	22.99	23.21	23.12	23.7
1.4	16QAM	3	1	23.06	23.26	23.15	
1.4	16QAM	3	3	23.00	23.20	23.11	
1.4	16QAM	6	0	22.14	22.39	22.30	
1.4	64QAM	1	0	22.28	22.47	22.36	
1.4	64QAM	1	3	22.30	22.50	22.44	23.7
1.4	64QAM	1	5	22.28	22.45	22.36	
1.4	64QAM	3	0	22.22	22.40	22.35	
1.4	64QAM	3	1	22.29	22.46	22.39	
1.4	64QAM	3	3	22.21	22.41	22.34	
1.4	64QAM	6	0	21.09	21.34	21.26	22.7



Band 4											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)				
Channel				20050	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	23.63	24.08	23.86	25.7				
20	QPSK	1	49	23.72	23.70	23.71					
20	QPSK	1	99	23.73	23.71	23.72					
20	QPSK	50	0	23.37	23.36	23.27	24.7				
20	QPSK	50	24	23.43	23.38	23.26					
20	QPSK	50	50	23.35	23.30	23.20					
20	QPSK	100	0	23.36	23.43	23.15	24.7				
20	16QAM	1	0	23.65	23.66	23.60					
20	16QAM	1	49	23.52	23.48	23.38					
20	16QAM	1	99	23.59	23.44	23.32	23.7				
20	16QAM	50	0	22.37	22.38	22.28					
20	16QAM	50	24	22.40	22.39	22.28					
20	16QAM	50	50	22.35	22.31	22.20	22.7				
20	16QAM	100	0	22.37	22.41	22.17					
20	64QAM	1	0	22.48	22.50	22.44					
20	64QAM	1	49	22.37	22.38	22.27	22.7				
20	64QAM	1	99	22.50	22.37	22.31					
20	64QAM	50	0	21.39	21.40	21.30					
20	64QAM	50	24	21.41	21.41	21.29	22.7				
20	64QAM	50	50	21.37	21.30	21.22					
20	64QAM	100	0	21.42	21.38	21.22					
Channel				20050	20175	20300	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	23.72	23.74	23.70	25.7				
15	QPSK	1	37	23.74	23.72	23.70					
15	QPSK	1	74	23.72	23.70	23.71					
15	QPSK	36	0	23.39	23.40	23.23	24.7				
15	QPSK	36	20	23.39	23.35	23.16					
15	QPSK	36	39	23.35	23.28	23.16					
15	QPSK	75	0	23.38	23.40	23.18	24.7				
15	16QAM	1	0	23.64	23.65	23.55					
15	16QAM	1	37	23.50	23.47	23.39					
15	16QAM	1	74	23.55	23.45	23.33	23.7				
15	16QAM	36	0	22.43	22.36	22.24					
15	16QAM	36	20	22.37	22.34	22.16					
15	16QAM	36	39	22.34	22.28	22.20	23.7				
15	16QAM	75	0	22.38	22.41	22.18					
15	64QAM	1	0	22.52	22.49	22.43					
15	64QAM	1	37	22.42	22.36	22.31	22.7				
15	64QAM	1	74	22.43	22.38	22.25					
15	64QAM	36	0	21.44	21.44	21.27					
15	64QAM	36	20	21.38	21.43	21.19	22.7				
15	64QAM	36	39	21.38	21.32	21.21					
15	64QAM	75	0	21.40	21.36	21.19					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	23.74	23.74	23.70	25.7				
10	QPSK	1	25	23.71	23.71	23.70					
10	QPSK	1	49	23.73	23.74	23.70					
10	QPSK	25	0	23.34	23.29	23.10	24.7				
10	QPSK	25	12	23.38	23.39	23.16					
10	QPSK	25	25	23.38	23.38	23.21					
10	QPSK	50	0	23.40	23.38	23.17	24.7				
10	16QAM	1	0	23.65	23.61	23.49					
10	16QAM	1	25	23.61	23.59	23.44					
10	16QAM	1	49	23.65	23.60	23.47	23.7				
10	16QAM	25	0	22.35	22.25	22.12					
10	16QAM	25	12	22.40	22.40	22.17					
10	16QAM	25	25	22.38	22.31	22.22	23.7				
10	16QAM	50	0	22.38	22.37	22.16					
10	64QAM	1	0	22.52	22.48	22.35					
10	64QAM	1	25	22.51	22.52	22.38	23.7				
10	64QAM	1	49	22.57	22.50	22.35					
10	64QAM	25	0	21.36	21.32	21.16					
10	64QAM	25	12	21.43	21.45	21.19	22.7				
10	64QAM	25	25	21.42	21.39	21.26					
10	64QAM	50	0	21.43	21.42	21.22					
Channel				19975	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	23.74	23.71	23.70	25.7				
5	QPSK	1	12	23.72	23.70	23.70					
5	QPSK	1	24	23.70	23.74	23.72					
5	QPSK	12	0	23.37	23.30	23.20	24.7				
5	QPSK	12	7	23.39	23.37	23.21					
5	QPSK	12	13	23.37	23.36	23.21					
5	QPSK	25	0	23.35	23.37	23.22	24.7				
5	16QAM	1	0	23.61	23.53	23.44					
5	16QAM	1	12	23.63	23.58	23.45					
5	16QAM	1	24	23.65	23.60	23.45	23.7				
5	16QAM	12	0	22.38	22.29	22.21					
5	16QAM	12	7	22.45	22.38	22.23					
5	16QAM	12	13	22.41	22.38	22.20	23.7				
5	16QAM	25	0	22.40	22.37	22.22					
5	64QAM	1	0	22.53	22.49	22.35					
5	64QAM	1	12	22.55	22.50	22.34	23.7				
5	64QAM	1	24	22.60	22.54	22.36					
5	64QAM	12	0	21.45	21.35	21.27					
5	64QAM	12	7	21.45	21.44	21.30	22.7				
5	64QAM	12	13	21.47	21.39	21.27					
5	64QAM	25	0	21.39	21.39	21.21					
Channel				19965	20175	20385	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	23.70	23.71	23.72	25.7				
3	QPSK	1	8	23.70	23.70	23.70					
3	QPSK	1	14	23.70	23.71	23.72					
3	QPSK	8	0	23.28	23.24	23.19	24.7				
3	QPSK	8	4	23.29	23.36	23.20					
3	QPSK	8	7	23.33	23.28	23.13					
3	QPSK	15	0	23.31	23.35	23.13	24.7				
3	16QAM	1	0	23.59	23.48	23.43					
3	16QAM	1	8	23.53	23.58	23.44					
3	16QAM	1	14	23.63	23.60	23.39	23.7				
3	16QAM	8	0	22.30	22.27	22.14					
3	16QAM	8	4	22.35	22.35	22.20					
3	16QAM	8	7	22.31	22.31	22.20	23.7				
3	16QAM	15	0	22.37	22.32	22.15					
3	64QAM	1	0	22.50	22.41	22.28					
3	64QAM	1	8	22.49	22.48	22.27	23.7				
3	64QAM	1	14	22.54	22.46	22.31					
3	64QAM	8	0	21.36	21.27	21.17					
3	64QAM	8	4	21.43	21.38	21.21	22.7				
3	64QAM	8	7	21.38	21.36	21.25					
3	64QAM	15	0	21.39	21.35	21.18					
Channel				19967	20175	20393	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	23.72	23.70	23.70	25.7				
1.4	QPSK	1	3	23.73	23.71	23.71					
1.4	QPSK	1	5	23.72	23.71	23.70					
1.4	QPSK	3	0	23.73	23.70	23.70	24.7				
1.4	QPSK	3	1	23.75	23.73	23.72					
1.4	QPSK	3	3	23.74	23.74	23.71					
1.4	QPSK	6	0	23.24	23.17	23.01	23.7				
1.4	QPSK	6	4	23.24	23.35	23.27					
1.4	QPSK	6	7	23.29	23.24	23.12					
1.4	16QAM	1	3	23.53	23.54	23.34	24.7				
1.4	16QAM	1	5	23.47	23.45	23.28					
1.4	16QAM	3	0	23.25	23.27	23.07					
1.4	16QAM	3	1	23.31	23.26	23.12	23.7				
1.4	16QAM	3	3	23.24	23.24	23.08					
1.4	16QAM	6	0	22.22	22.22	22.12					
1.4	16QAM	1	0	22.38	22.36	22.21	22.7				
1.4	16QAM	1	3	22.46	22.41	22.27					
1.4	16QAM	3	0	22.39	22.32	22.16					
1.4	16QAM	3	1	22.42	22.39	22.26	22.7				
1.4	16QAM	3	3	22.39	22.35	22.20					
1.4	16QAM	6	0	21.22	21.22	21.03					



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.43	24.42	24.42	25.7
10	QPSK	1	25	24.34	24.44	24.43	
10	QPSK	1	49	24.44	24.54	24.20	
10	QPSK	25	0	23.47	23.49	23.49	24.7
10	QPSK	25	12	23.52	23.58	23.57	
10	QPSK	25	25	23.49	23.58	23.47	
10	QPSK	50	0	23.54	23.49	23.60	24.7
10	16QAM	1	0	23.81	23.83	23.86	
10	16QAM	1	25	23.70	23.84	23.83	
10	16QAM	1	49	23.81	23.92	23.71	23.7
10	16QAM	25	0	22.45	22.59	22.54	
10	16QAM	25	12	22.53	22.52	22.54	
10	16QAM	25	25	22.56	22.55	22.57	23.7
10	16QAM	50	0	22.51	22.50	22.49	
10	64QAM	1	0	22.59	22.66	22.64	
10	64QAM	1	25	22.70	22.74	22.76	22.7
10	64QAM	1	49	22.67	22.37	21.72	
10	64QAM	25	0	21.54	21.61	21.55	
10	64QAM	25	12	21.62	21.62	21.60	Tune-up limit (dBm)
10	64QAM	25	25	21.53	21.61	20.86	
10	64QAM	50	0	21.53	21.50	21.26	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.47	24.51	24.50	25.7
5	QPSK	1	12	24.47	24.45	24.31	
5	QPSK	1	24	24.41	24.52	24.20	
5	QPSK	12	0	23.55	23.64	23.59	24.7
5	QPSK	12	7	23.52	23.57	23.34	
5	QPSK	12	13	23.54	23.55	23.16	
5	QPSK	25	0	23.47	23.56	23.52	24.7
5	16QAM	1	0	23.83	23.83	23.79	
5	16QAM	1	12	23.77	23.83	23.57	
5	16QAM	1	24	23.68	23.85	23.46	23.7
5	16QAM	12	0	22.66	22.51	22.52	
5	16QAM	12	7	22.53	22.60	22.45	
5	16QAM	12	13	22.48	22.61	22.27	23.7
5	16QAM	25	0	22.56	22.52	22.56	
5	64QAM	1	0	22.75	22.73	22.50	
5	64QAM	1	12	22.64	22.69	21.78	22.7
5	64QAM	1	24	22.75	22.55	21.74	
5	64QAM	12	0	21.65	21.66	21.30	
5	64QAM	12	7	21.54	21.63	20.70	Tune-up limit (dBm)
5	64QAM	12	13	21.51	21.61	20.71	
5	64QAM	25	0	21.58	21.61	20.70	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.47	24.41	24.18	25.7
3	QPSK	1	8	24.50	24.48	24.04	
3	QPSK	1	14	24.40	24.49	24.13	
3	QPSK	8	0	23.54	23.58	23.04	24.7
3	QPSK	8	4	23.49	23.62	23.07	
3	QPSK	8	7	23.50	23.55	23.20	
3	QPSK	15	0	23.57	23.53	23.08	24.7
3	16QAM	1	0	23.83	23.81	23.53	
3	16QAM	1	8	23.83	23.86	23.38	
3	16QAM	1	14	23.69	23.78	23.46	23.7
3	16QAM	8	0	22.64	22.58	22.31	
3	16QAM	8	4	22.60	22.65	22.23	
3	16QAM	8	7	22.57	22.60	22.28	23.7
3	16QAM	15	0	22.60	22.62	22.19	
3	64QAM	1	0	22.63	22.73	21.70	
3	64QAM	1	8	22.75	22.75	21.72	22.7
3	64QAM	1	14	22.63	22.50	21.71	
3	64QAM	8	0	21.65	21.56	20.70	
3	64QAM	8	4	21.58	21.67	20.70	Tune-up limit (dBm)
3	64QAM	8	7	21.49	21.63	20.74	
3	64QAM	15	0	21.53	21.62	20.71	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.39	24.32	23.95	25.7
1.4	QPSK	1	3	24.42	24.47	24.10	
1.4	QPSK	1	5	24.29	24.38	24.09	
1.4	QPSK	3	0	24.41	24.36	24.12	24.7
1.4	QPSK	3	1	24.47	24.40	24.12	
1.4	QPSK	3	3	24.41	24.44	24.37	
1.4	QPSK	6	0	23.42	23.57	23.18	24.7
1.4	16QAM	1	0	23.68	23.69	23.34	
1.4	16QAM	1	3	23.69	23.85	23.50	
1.4	16QAM	1	5	23.61	23.69	23.58	24.7
1.4	16QAM	3	0	23.51	23.51	23.12	
1.4	16QAM	3	1	23.49	23.54	23.28	
1.4	16QAM	3	3	23.42	23.48	23.42	23.7
1.4	16QAM	6	0	22.55	22.62	22.27	
1.4	64QAM	1	0	22.60	22.60	21.70	
1.4	64QAM	1	3	22.68	22.75	21.72	23.7
1.4	64QAM	1	5	22.60	22.59	21.71	
1.4	64QAM	3	0	22.63	22.63	21.70	
1.4	64QAM	3	1	22.65	22.62	21.72	22.7
1.4	64QAM	3	3	22.55	22.58	21.71	
1.4	64QAM	6	0	21.45	21.48	20.72	



Band 7							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.26	23.31	23.30	25.2
20	QPSK	1	49	23.28	23.39	23.30	
20	QPSK	1	99	23.29	23.42	23.40	
20	QPSK	50	0	23.28	23.44	23.41	24.2
20	QPSK	50	24	23.29	23.48	23.43	
20	QPSK	50	50	23.32	23.55	23.44	
20	QPSK	100	0	23.29	23.45	23.41	24.2
20	16QAM	1	0	23.47	23.66	23.64	
20	16QAM	1	49	23.50	23.71	23.58	
20	16QAM	1	99	23.55	23.77	23.65	23.2
20	16QAM	50	0	22.61	22.79	22.73	
20	16QAM	50	24	22.64	22.76	22.72	
20	16QAM	50	50	22.62	22.84	22.76	22.2
20	16QAM	100	0	22.61	22.75	22.74	
20	64QAM	1	0	22.71	22.87	22.18	
20	64QAM	1	49	22.72	22.90	22.31	22.2
20	64QAM	1	99	22.74	22.90	22.40	
20	64QAM	50	0	21.66	21.82	21.15	
20	64QAM	50	24	21.68	21.83	21.29	22.2
20	64QAM	50	50	21.70	21.86	21.31	
20	64QAM	100	0	21.62	21.70	21.11	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.20	23.34	23.38	25.2
15	QPSK	1	37	23.23	23.40	23.37	
15	QPSK	1	74	23.31	23.49	23.40	
15	QPSK	36	0	23.25	23.43	23.44	24.2
15	QPSK	36	20	23.39	23.49	23.50	
15	QPSK	36	39	23.40	23.57	23.49	
15	QPSK	75	0	23.37	23.47	23.51	24.2
15	16QAM	1	0	23.47	23.65	23.68	
15	16QAM	1	37	23.53	23.74	23.49	
15	16QAM	1	74	23.62	23.81	23.69	23.2
15	16QAM	36	0	22.55	22.72	22.71	
15	16QAM	36	20	22.65	22.75	22.82	
15	16QAM	36	39	22.68	22.87	22.78	23.2
15	16QAM	75	0	22.65	22.78	22.81	
15	64QAM	1	0	22.65	22.76	22.20	
15	64QAM	1	37	22.75	22.90	21.52	22.2
15	64QAM	1	74	22.78	22.90	22.25	
15	64QAM	36	0	21.58	21.76	20.79	
15	64QAM	36	20	21.70	21.80	20.89	22.2
15	64QAM	36	39	21.74	21.89	21.10	
15	64QAM	75	0	21.67	21.77	20.84	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.22	23.29	23.22	25.2
10	QPSK	1	25	23.20	23.30	23.25	
10	QPSK	1	49	23.20	23.37	23.27	
10	QPSK	25	0	23.28	23.41	23.37	24.2
10	QPSK	25	12	23.33	23.44	23.39	
10	QPSK	25	25	23.34	23.53	23.44	
10	QPSK	50	0	23.33	23.46	23.39	24.2
10	16QAM	1	0	23.48	23.67	23.62	
10	16QAM	1	25	23.50	23.71	23.70	
10	16QAM	1	49	23.58	23.78	23.68	23.2
10	16QAM	25	0	22.58	22.70	22.68	
10	16QAM	25	12	22.64	22.76	22.69	
10	16QAM	25	25	22.61	22.83	22.74	23.2
10	16QAM	50	0	22.60	22.75	22.67	
10	64QAM	1	0	22.69	22.82	21.85	
10	64QAM	1	25	22.70	22.90	22.34	22.2
10	64QAM	1	49	22.79	22.90	22.61	
10	64QAM	25	0	21.61	21.75	20.84	
10	64QAM	25	12	21.65	21.79	21.05	22.2
10	64QAM	25	25	21.65	21.86	21.23	
10	64QAM	50	0	21.65	21.77	20.85	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.26	23.31	23.30	25.2
5	QPSK	1	12	23.28	23.39	23.30	
5	QPSK	1	24	23.29	23.42	23.29	
5	QPSK	12	0	23.28	23.44	23.41	24.2
5	QPSK	12	7	23.29	23.46	23.43	
5	QPSK	12	13	23.32	23.55	23.42	
5	QPSK	25	0	23.29	23.45	23.41	24.2
5	16QAM	1	0	23.47	23.66	23.64	
5	16QAM	1	12	23.50	23.71	23.58	
5	16QAM	1	24	23.55	23.77	23.65	23.2
5	16QAM	12	0	22.61	22.79	22.73	
5	16QAM	12	7	22.64	22.76	22.72	
5	16QAM	12	13	22.62	22.84	22.78	23.2
5	16QAM	25	0	22.61	22.75	22.74	
5	64QAM	1	0	22.71	22.87	22.18	
5	64QAM	1	12	22.72	22.90	22.31	23.2
5	64QAM	1	24	22.74	22.90	22.40	
5	64QAM	12	0	21.66	21.82	21.15	
5	64QAM	12	7	21.68	21.83	21.29	22.2
5	64QAM	12	13	21.70	21.86	21.31	
5	64QAM	25	0	21.62	21.79	21.11	



Band 12							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.34	24.12	24.24	25.7
10	QPSK	1	25	24.15	24.15	24.14	
10	QPSK	1	49	24.31	24.24	24.14	
10	QPSK	25	0	23.27	23.33	23.32	24.7
10	QPSK	25	12	23.38	23.34	23.35	
10	QPSK	25	25	23.31	23.30	23.35	
10	QPSK	50	0	23.34	23.28	23.32	24.7
10	16QAM	1	0	23.55	23.49	23.56	
10	16QAM	1	25	23.61	23.61	23.56	
10	16QAM	1	49	23.66	23.60	23.54	23.7
10	16QAM	25	0	22.32	22.28	22.33	
10	16QAM	25	12	22.40	22.35	22.36	
10	16QAM	25	25	22.37	22.36	22.34	23.7
10	16QAM	50	0	22.39	22.31	22.33	
10	64QAM	1	0	22.43	22.31	22.39	
10	64QAM	1	25	22.52	22.42	22.25	23.7
10	64QAM	1	49	22.61	22.54	22.53	
10	64QAM	25	0	21.31	21.33	21.22	
10	64QAM	25	12	21.46	21.39	21.33	22.7
10	64QAM	25	25	21.37	21.41	21.37	
10	64QAM	50	0	21.36	21.34	21.37	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.27	24.18	24.20	25.7
5	QPSK	1	12	24.27	24.28	24.27	
5	QPSK	1	24	24.23	24.21	24.24	
5	QPSK	12	0	23.38	23.32	23.26	24.7
5	QPSK	12	7	23.33	23.26	23.25	
5	QPSK	12	13	23.33	23.26	23.27	
5	QPSK	25	0	23.36	23.28	23.20	24.7
5	16QAM	1	0	23.59	23.56	23.50	
5	16QAM	1	12	23.60	23.59	23.55	
5	16QAM	1	24	23.61	23.61	23.50	23.7
5	16QAM	12	0	22.36	22.32	22.28	
5	16QAM	12	7	22.39	22.34	22.36	
5	16QAM	12	13	22.32	22.36	22.28	23.7
5	16QAM	25	0	22.40	22.35	22.32	
5	64QAM	1	0	22.37	22.24	22.40	
5	64QAM	1	12	22.51	22.44	22.40	23.7
5	64QAM	1	24	22.35	22.46	22.45	
5	64QAM	12	0	21.39	21.41	21.39	
5	64QAM	12	7	21.34	21.35	21.34	22.7
5	64QAM	12	13	21.43	21.38	21.28	
5	64QAM	25	0	21.42	21.39	21.32	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.31	24.21	24.28	25.7
3	QPSK	1	8	24.32	24.30	24.30	
3	QPSK	1	14	24.28	24.27	24.16	
3	QPSK	8	0	23.35	23.27	23.30	24.7
3	QPSK	8	4	23.37	23.40	23.35	
3	QPSK	8	7	23.38	23.38	23.25	
3	QPSK	15	0	23.39	23.28	23.21	24.7
3	16QAM	1	0	23.71	23.62	23.52	
3	16QAM	1	8	23.56	23.59	23.60	
3	16QAM	1	14	23.60	23.56	23.46	23.7
3	16QAM	8	0	22.42	22.42	22.32	
3	16QAM	8	4	22.41	22.40	22.36	
3	16QAM	8	7	22.33	22.41	22.27	23.7
3	16QAM	15	0	22.37	22.31	22.30	
3	64QAM	1	0	22.46	22.41	22.47	
3	64QAM	1	8	22.64	22.55	22.45	23.7
3	64QAM	1	14	22.47	22.49	22.43	
3	64QAM	8	0	21.41	21.39	21.36	
3	64QAM	8	4	21.44	21.51	21.40	22.7
3	64QAM	8	7	21.34	21.40	21.35	
3	64QAM	15	0	21.37	21.34	21.24	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.18	24.13	24.08	25.7
1.4	QPSK	1	3	24.23	24.21	24.18	
1.4	QPSK	1	5	24.19	24.20	24.02	
1.4	QPSK	3	0	24.26	24.09	24.16	24.7
1.4	QPSK	3	1	24.25	24.22	24.19	
1.4	QPSK	3	3	24.21	24.22	24.13	
1.4	QPSK	6	0	23.32	23.26	23.12	24.7
1.4	16QAM	1	0	23.60	23.49	23.46	
1.4	16QAM	1	3	23.57	23.57	23.48	
1.4	16QAM	1	5	23.53	23.52	23.43	24.7
1.4	16QAM	3	0	23.34	23.24	23.26	
1.4	16QAM	3	1	23.36	23.30	23.31	
1.4	16QAM	3	3	23.31	23.24	23.13	23.7
1.4	16QAM	6	0	22.32	22.23	22.22	
1.4	64QAM	1	0	22.48	22.42	22.36	
1.4	64QAM	1	3	22.46	22.50	22.42	23.7
1.4	64QAM	1	5	22.46	22.36	22.34	
1.4	64QAM	3	0	22.37	22.36	22.36	
1.4	64QAM	3	1	22.41	22.38	22.32	22.7
1.4	64QAM	3	3	22.40	22.38	22.31	
1.4	64QAM	6	0	21.27	21.21	21.21	



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.83			25.2
10	QPSK	1	25	23.84			
10	QPSK	1	49	23.97			
10	QPSK	25	0	22.96			24.2
10	QPSK	25	12	23.01			
10	QPSK	25	25	22.91			
10	QPSK	50	0	23.01			24.2
10	16QAM	1	0	23.16			
10	16QAM	1	25	23.15			
10	16QAM	1	49	23.15			23.2
10	16QAM	25	0	21.97			
10	16QAM	25	12	22.03			
10	16QAM	25	25	21.93			23.2
10	16QAM	50	0	21.95			
10	64QAM	1	0	22.01			
10	64QAM	1	25	22.13			23.2
10	64QAM	1	49	22.04			
10	64QAM	25	0	21.02			
10	64QAM	25	12	21.00			22.2
10	64QAM	25	25	21.04			
10	64QAM	50	0	20.99			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	794.5	
5	QPSK	1	0	23.75	23.76	23.86	25.2
5	QPSK	1	12	23.88	23.84	23.87	
5	QPSK	1	24	23.87	23.86	23.87	
5	QPSK	12	0	22.89	22.92	22.92	24.2
5	QPSK	12	7	22.93	22.97	22.83	
5	QPSK	12	13	23.02	23.01	22.92	
5	QPSK	25	0	23.01	22.99	22.91	24.2
5	16QAM	1	0	23.08	23.05	23.08	
5	16QAM	1	12	23.16	23.14	23.09	
5	16QAM	1	24	23.16	23.10	23.03	23.2
5	16QAM	12	0	21.99	21.97	21.98	
5	16QAM	12	7	22.05	21.96	21.96	
5	16QAM	12	13	22.02	21.94	21.97	23.2
5	16QAM	25	0	22.03	21.94	21.88	
5	64QAM	1	0	22.00	22.13	21.98	
5	64QAM	1	12	22.13	22.06	22.08	23.2
5	64QAM	1	24	22.07	22.15	22.00	
5	64QAM	12	0	21.03	21.06	20.99	
5	64QAM	12	7	21.07	21.01	20.92	22.2
5	64QAM	12	13	20.98	21.05	20.97	
5	64QAM	25	0	20.96	20.95	20.88	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.44		25.7
10	QPSK	1	25		24.49		
10	QPSK	1	49		24.32		
10	QPSK	25	0		23.51		24.7
10	QPSK	25	12		23.59		
10	QPSK	25	25		23.48		
10	QPSK	50	0		23.42		24.7
10	16QAM	1	0		23.87		
10	16QAM	1	25		23.84		
10	16QAM	1	49		23.71		24.7
10	16QAM	25	0		22.44		
10	16QAM	25	12		22.54		
10	16QAM	25	25		22.55		23.7
10	16QAM	50	0		22.44		
10	64QAM	1	0		22.75		
10	64QAM	1	25		22.58		23.7
10	64QAM	1	49		22.65		
10	64QAM	25	0		21.50		
10	64QAM	25	12		21.33		22.7
10	64QAM	25	25		21.48		
10	64QAM	50	0		21.55		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.48	24.44	24.42	25.7
5	QPSK	1	12	24.48	24.48	24.47	
5	QPSK	1	24	24.47	24.44	24.42	
5	QPSK	12	0	23.54	23.49	23.41	24.7
5	QPSK	12	7	23.60	23.52	23.47	
5	QPSK	12	13	23.50	23.55	23.45	
5	QPSK	25	0	23.59	23.48	23.43	24.7
5	16QAM	1	0	23.74	23.78	23.68	
5	16QAM	1	12	23.78	23.80	23.80	
5	16QAM	1	24	23.80	23.72	23.71	23.7
5	16QAM	12	0	22.51	22.57	22.48	
5	16QAM	12	7	22.62	22.60	22.49	
5	16QAM	12	13	22.59	22.55	22.51	23.7
5	16QAM	25	0	22.57	22.52	22.50	
5	64QAM	1	0	22.71	22.62	22.36	
5	64QAM	1	12	22.78	22.24	22.53	23.7
5	64QAM	1	24	22.33	22.27	22.70	
5	64QAM	12	0	21.61	21.26	21.16	
5	64QAM	12	7	21.68	21.24	21.54	22.7
5	64QAM	12	13	21.36	21.23	21.61	
5	64QAM	25	0	21.64	21.16	21.49	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.38	24.29	24.27	25.7
10	QPSK	1	25	24.35	24.27	24.31	
10	QPSK	1	49	24.33	24.40	24.28	
10	QPSK	25	0	23.34	23.36	23.37	24.7
10	QPSK	25	12	23.51	23.39	23.43	
10	QPSK	25	25	23.50	23.51	23.46	
10	QPSK	50	0	23.44	23.37	23.34	24.7
10	16QAM	1	0	23.64	23.67	23.59	
10	16QAM	1	25	23.73	23.67	23.67	
10	16QAM	1	49	23.70	23.70	23.73	23.7
10	16QAM	25	0	22.35	22.28	22.38	
10	16QAM	25	12	22.43	22.42	22.36	
10	16QAM	25	25	22.40	22.45	22.42	23.7
10	16QAM	50	0	22.50	22.55	22.41	
10	64QAM	1	0	22.59	22.53	22.57	
10	64QAM	1	25	22.67	22.66	22.50	22.7
10	64QAM	1	49	22.65	22.65	22.58	
10	64QAM	25	0	21.36	21.43	21.41	
10	64QAM	25	12	21.47	21.43	21.46	22.7
10	64QAM	25	25	21.51	21.55	21.51	
10	64QAM	50	0	21.54	21.40	21.44	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.24	24.27	24.26	25.7
5	QPSK	1	12	24.31	24.37	24.39	
5	QPSK	1	24	24.38	24.39	24.31	
5	QPSK	12	0	23.43	23.34	23.35	24.7
5	QPSK	12	7	23.48	23.47	23.43	
5	QPSK	12	13	23.46	23.44	23.40	
5	QPSK	25	0	23.49	23.45	23.42	24.7
5	16QAM	1	0	23.57	23.61	23.61	
5	16QAM	1	12	23.61	23.69	23.63	
5	16QAM	1	24	23.73	23.76	23.68	23.7
5	16QAM	12	0	22.40	22.39	22.36	
5	16QAM	12	7	22.45	22.40	22.38	
5	16QAM	12	13	22.51	22.44	22.43	23.7
5	16QAM	25	0	22.43	22.44	22.49	
5	64QAM	1	0	22.41	22.31	22.54	
5	64QAM	1	12	22.59	22.50	22.51	23.7
5	64QAM	1	24	22.61	22.53	22.49	
5	64QAM	12	0	21.43	21.40	21.44	
5	64QAM	12	7	21.47	21.45	21.53	22.7
5	64QAM	12	13	21.53	21.55	21.51	
5	64QAM	25	0	21.45	21.39	21.40	



Band 25										
Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				26140	26340	26590				
Frequency (MHz)				1860	1880	1905				
20	QPSK	1	0	22.86	22.93	22.90	24.6			
20	QPSK	1	49	22.85	22.94	22.88				
20	QPSK	1	99	22.86	22.99	22.92				
20	QPSK	50	0	22.96	23.04	22.96				
20	QPSK	50	24	23.04	23.12	22.98	24.6			
20	QPSK	50	50	23.07	23.17	23.07				
20	QPSK	100	0	23.06	23.11	22.98				
20	16QAM	1	0	23.18	23.29	23.26				
20	16QAM	1	49	23.18	23.29	23.20	24.6			
20	16QAM	1	99	23.17	23.33	23.25				
20	16QAM	50	0	22.07	22.15	22.08				
20	16QAM	50	24	22.16	22.23	22.10				
20	16QAM	50	50	22.15	22.22	22.17	23.7			
20	16QAM	100	0	22.15	22.21	22.10				
20	64QAM	1	0	22.18	22.21	22.22				
20	64QAM	1	49	22.08	22.26	22.22				
20	64QAM	1	99	22.18	22.29	22.03	22.7			
20	64QAM	50	0	21.09	21.16	21.10				
20	64QAM	50	24	21.19	21.26	21.13				
20	64QAM	50	50	21.16	21.24	21.19				
20	64QAM	100	0	21.17	21.24	21.11				
Channel				26115	26340	26615	Tune-up limit (dBm)			
Frequency (MHz)				1857.5	1880	1907.5				
15	QPSK	1	0	22.82	22.90	22.80	24.6			
15	QPSK	1	37	22.83	22.94	22.79				
15	QPSK	1	74	22.86	22.98	22.86				
15	QPSK	36	0	22.95	23.02	22.93				
15	QPSK	36	20	22.94	23.06	22.97	24.6			
15	QPSK	36	39	22.96	23.05	22.97				
15	QPSK	75	0	23.06	23.05	22.97				
15	16QAM	1	0	23.16	23.27	23.25				
15	16QAM	1	37	23.14	23.23	23.15	24.6			
15	16QAM	1	74	23.09	23.31	23.18				
15	16QAM	36	0	22.00	22.06	22.01				
15	16QAM	36	20	22.14	22.15	22.03				
15	16QAM	36	39	22.12	22.18	22.11	23.7			
15	16QAM	75	0	22.12	22.21	22.07				
15	64QAM	1	0	22.13	22.17	22.14				
15	64QAM	1	37	22.07	22.23	22.22				
15	64QAM	1	74	22.18	22.27	21.95	22.7			
15	64QAM	36	0	21.09	21.16	21.10				
15	64QAM	36	20	21.19	21.26	21.09				
15	64QAM	36	39	21.06	21.19	21.18				
15	64QAM	75	0	21.09	21.24	21.01				
Channel				26090	26340	26640	Tune-up limit (dBm)			
Frequency (MHz)				1855	1880	1910				
10	QPSK	1	0	22.77	22.91	22.80	24.6			
10	QPSK	1	25	22.80	22.89	22.85				
10	QPSK	1	49	22.86	22.91	22.86				
10	QPSK	25	0	22.90	22.97	22.96				
10	QPSK	25	12	23.04	23.02	22.93	24.6			
10	QPSK	25	25	22.97	23.05	23.01				
10	QPSK	50	0	22.96	23.08	22.97				
10	16QAM	1	0	23.12	23.24	23.22				
10	16QAM	1	25	23.11	23.28	23.18	24.6			
10	16QAM	1	49	23.10	23.32	23.25				
10	16QAM	25	0	22.06	22.05	22.07				
10	16QAM	25	12	22.07	22.19	22.03				
10	16QAM	25	25	22.15	22.16	22.12	23.7			
10	16QAM	50	0	22.11	22.17	22.01				
10	64QAM	1	0	22.11	22.21	22.19				
10	64QAM	1	25	22.01	22.26	22.17				
10	64QAM	1	49	22.12	22.19	22.00	23.7			
10	64QAM	25	0	21.06	21.06	21.06				
10	64QAM	25	12	21.12	21.24	21.10				
10	64QAM	25	25	21.15	21.20	21.17				
10	64QAM	50	0	21.17	21.23	21.07	22.7			
Channel				26065	26340	26665		Tune-up limit (dBm)		
Frequency (MHz)				1852.5	1880	1912.5				
5	QPSK	1	0	22.82	22.93	22.84		24.6		
5	QPSK	1	12	22.79	22.94	22.84				
5	QPSK	1	24	22.82	22.99	22.82				
5	QPSK	12	0	22.92	23.03	22.88				
5	QPSK	12	7	22.96	23.09	22.93	24.6			
5	QPSK	12	13	22.95	23.09	23.03				
5	QPSK	25	0	22.99	23.05	22.94				
5	16QAM	1	0	23.10	23.26	23.22				
5	16QAM	1	12	23.09	23.22	23.14	24.6			
5	16QAM	1	24	23.12	23.28	23.19				
5	16QAM	12	0	21.87	22.05	22.05				
5	16QAM	12	7	22.14	22.17	22.10				
5	16QAM	12	13	22.13	22.20	22.15	23.7			
5	16QAM	25	0	22.06	22.11	22.03				
5	64QAM	1	0	22.18	22.15	22.18				
5	64QAM	1	12	22.00	22.16	22.18				
5	64QAM	1	24	22.11	22.19	21.98	22.7			
5	64QAM	12	0	21.08	21.10	21.08				
5	64QAM	12	7	21.13	21.24	21.03				
5	64QAM	12	13	21.12	21.17	21.18				
5	64QAM	25	0	21.08	21.15	21.10				
Channel				26055	26340	26675	Tune-up limit (dBm)			
Frequency (MHz)				1851.5	1880	1913.5				
3	QPSK	1	0	22.77	22.90	22.84	24.6			
3	QPSK	1	8	22.75	22.92	22.87				
3	QPSK	1	14	22.79	22.90	22.83				
3	QPSK	8	0	22.89	22.98	22.86				
3	QPSK	8	4	23.02	23.06	22.90	24.6			
3	QPSK	8	7	22.96	23.11	23.02				
3	QPSK	15	0	23.04	23.06	22.96				
3	16QAM	1	0	23.11	23.24	23.22				
3	16QAM	1	8	23.13	23.26	23.10	24.6			
3	16QAM	1	14	23.17	23.31	23.25				
3	16QAM	8	0	22.06	22.09	22.08				
3	16QAM	8	4	22.14	22.22	22.09				
3	16QAM	8	7	22.09	22.17	22.17	23.7			
3	16QAM	15	0	22.05	22.16	22.09				
3	64QAM	1	0	22.16	22.12	22.14				
3	64QAM	1	8	22.02	22.20	22.22				
3	64QAM	1	14	22.13	22.28	21.98	23.7			
3	64QAM	8	0	21.02	21.10	21.02				
3	64QAM	8	4	21.10	21.22	21.05				
3	64QAM	8	7	21.14	21.16	21.12				
3	64QAM	15	0	21.08	21.19	21.10				
Channel				26047	26340	26683	Tune-up limit (dBm)			
Frequency (MHz)				1850.7	1880	1914.3				
1.4	QPSK	1	0	22.72	22.78	22.79	24.6			
1.4	QPSK	1	3	22.83	22.98	22.90				
1.4	QPSK	1	5	22.81	22.95	22.85				
1.4	QPSK	3	0	22.76	22.82	22.82				
1.4	QPSK	3	1	22.81	22.97	22.86	24.6			
1.4	QPSK	3	3	22.79	22.93	22.87				
1.4	QPSK	6	0	22.84	23.00	22.90				
1.4	16QAM	1	0	23.13	23.12	23.05	24.6			
1.4	16QAM	1	3	23.10	23.29	23.22				
1.4	16QAM	1	5	23.04	23.24	23.17				
1.4	16QAM	3	0	22.82	22.98	22.86				
1.4	16QAM	3	3	22.86	23.02	22.93	23.7			
1.4	16QAM	3	5	22.90	23.16	23.06				
1.4	16QAM	1	0	22.01	22.16	22.09				
1.4	16QAM	1	22.03	22.18	21.82					
1.4	64QAM	1	3	22.14	23.24	21.81	23.7			
1.4	64QAM	1	3	22.08	22.29	21.71				
1.4	64QAM	3	1	22.12	22.29	21.92				
1.4	64QAM	3	3	22.07	22.27	21.81				
1.4	64QAM	3	5	22.14	23.24	21.81				



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.28	24.16	24.24	25.7
15	QPSK	1	37	24.14	24.24	24.21	
15	QPSK	1	74	24.27	24.52	24.13	
15	QPSK	36	0	23.38	23.39	23.34	24.7
15	QPSK	36	20	23.40	23.31	23.37	
15	QPSK	36	39	23.33	23.34	23.29	
15	QPSK	75	0	23.39	23.35	23.35	24.7
15	16QAM	1	0	23.55	23.56	23.61	
15	16QAM	1	37	23.54	23.54	23.60	
15	16QAM	1	74	23.56	23.63	23.47	23.7
15	16QAM	36	0	22.36	22.42	22.34	
15	16QAM	36	20	22.34	22.33	22.30	
15	16QAM	36	39	22.36	22.36	22.33	23.7
15	16QAM	75	0	22.42	22.38	22.53	
15	64QAM	1	0	22.48	22.42	22.41	
15	64QAM	1	37	22.45	22.49	22.41	22.7
15	64QAM	1	74	22.48	22.48	21.70	
15	64QAM	36	0	21.43	21.46	21.41	
15	64QAM	36	20	21.47	21.43	21.37	21.42
15	64QAM	36	39	21.38	21.44	21.49	
15	64QAM	75	0	21.47	21.35	21.42	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.38	24.29	24.37	25.7
10	QPSK	1	25	24.22	24.25	24.23	
10	QPSK	1	49	24.28	24.29	24.20	
10	QPSK	25	0	23.50	23.36	23.44	24.7
10	QPSK	25	12	23.50	23.41	23.37	
10	QPSK	25	25	23.40	23.42	23.37	
10	QPSK	50	0	23.38	23.41	23.42	23.7
10	16QAM	1	0	23.77	23.60	23.75	
10	16QAM	1	25	23.61	23.73	23.64	
10	16QAM	1	49	23.64	23.67	23.62	23.7
10	16QAM	25	0	22.48	22.36	22.37	
10	16QAM	25	12	22.45	22.42	22.36	
10	16QAM	25	25	22.30	22.44	22.38	22.7
10	16QAM	50	0	22.46	22.37	22.33	
10	64QAM	1	0	22.64	22.51	22.57	
10	64QAM	1	25	22.54	22.66	22.66	21.42
10	64QAM	1	49	22.56	22.60	22.05	
10	64QAM	25	0	21.44	21.42	21.43	
10	64QAM	25	12	21.50	21.47	21.48	21.37
10	64QAM	25	25	21.37	21.41	21.29	
10	64QAM	50	0	21.47	21.37	21.36	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				616.5	631.5	646.5	
5	QPSK	1	0	24.45	24.32	24.35	25.7
5	QPSK	1	12	24.38	24.38	24.33	
5	QPSK	1	24	24.30	24.37	24.26	
5	QPSK	12	0	23.50	23.37	23.40	24.7
5	QPSK	12	7	23.51	23.41	23.44	
5	QPSK	12	13	23.44	23.36	23.33	
5	QPSK	25	0	23.44	23.40	23.38	24.7
5	16QAM	1	0	23.78	23.60	23.73	
5	16QAM	1	12	23.72	23.66	23.60	
5	16QAM	1	24	23.66	23.72	23.58	23.7
5	16QAM	12	0	22.49	22.38	22.41	
5	16QAM	12	7	22.45	22.45	22.41	
5	16QAM	12	13	22.44	22.37	22.30	23.7
5	16QAM	25	0	22.43	22.39	22.40	
5	64QAM	1	0	22.73	22.56	22.53	
5	64QAM	1	12	22.54	22.59	21.87	22.7
5	64QAM	1	24	22.56	22.57	21.82	
5	64QAM	12	0	21.58	21.56	21.51	
5	64QAM	12	7	21.59	21.50	20.86	21.68
5	64QAM	12	13	21.54	21.45	20.56	
5	64QAM	25	0	21.50	21.39	21.68	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.43	24.37	24.37	25.7
3	QPSK	1	8	24.41	24.37	24.32	
3	QPSK	1	14	24.30	24.35	24.26	
3	QPSK	8	0	23.51	23.43	23.27	24.7
3	QPSK	8	4	23.54	23.46	23.33	
3	QPSK	8	7	23.40	23.41	23.37	
3	QPSK	15	0	23.42	23.35	23.30	24.7
3	16QAM	1	0	23.79	23.62	23.67	
3	16QAM	1	8	23.80	23.76	23.49	
3	16QAM	1	14	23.68	23.71	23.56	23.7
3	16QAM	8	0	22.53	22.44	22.45	
3	16QAM	8	4	22.59	22.47	22.41	
3	16QAM	8	7	22.46	22.49	22.38	23.7
3	16QAM	15	0	22.56	22.36	22.37	
3	64QAM	1	0	22.61	22.57	21.91	
3	64QAM	1	8	22.68	22.58	21.70	22.7
3	64QAM	1	14	22.58	22.61	21.71	
3	64QAM	8	0	21.59	21.49	20.70	
3	64QAM	8	4	21.55	21.54	20.57	21.71
3	64QAM	8	7	21.49	21.52	20.57	
3	64QAM	15	0	21.50	21.48	20.64	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.37	24.27	24.21	25.7
1.4	QPSK	1	3	24.42	24.39	24.23	
1.4	QPSK	1	5	24.36	24.21	24.15	
1.4	QPSK	3	0	24.41	24.23	24.20	24.7
1.4	QPSK	3	1	24.41	24.33	24.21	
1.4	QPSK	3	3	24.40	24.32	24.20	
1.4	QPSK	6	0	23.41	23.38	23.30	24.7
1.4	16QAM	1	0	23.71	23.59	23.46	
1.4	16QAM	1	3	23.72	23.62	23.59	
1.4	16QAM	1	5	23.63	23.59	23.46	23.7
1.4	16QAM	3	0	23.56	23.29	23.30	
1.4	16QAM	3	1	23.60	23.39	23.30	
1.4	16QAM	3	3	23.50	23.35	23.24	23.7
1.4	16QAM	6	0	22.50	22.46	22.33	
1.4	64QAM	1	0	22.68	22.47	21.74	
1.4	64QAM	1	3	22.68	22.61	21.70	23.7
1.4	64QAM	1	5	22.62	22.46	21.71	
1.4	64QAM	3	0	22.64	22.46	21.72	
1.4	64QAM	3	1	22.57	22.47	21.71	22.7
1.4	64QAM	3	3	22.56	22.51	21.80	
1.4	64QAM	6	0	21.43	21.42	20.70	



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.18			23.7
10	QPSK	1	25	22.07			
10	QPSK	1	49	22.09			
10	QPSK	25	0	21.18			22.7
10	QPSK	25	12	21.14			
10	QPSK	25	25	21.23			
10	QPSK	50	0	21.14			22.7
10	16QAM	1	0	21.51			
10	16QAM	1	25	21.44			
10	16QAM	1	49	21.52			21.7
10	16QAM	25	0	20.18			
10	16QAM	25	12	20.25			
10	16QAM	25	25	20.19			21.7
10	16QAM	50	0	20.23			
10	64QAM	1	0	20.38			
10	64QAM	1	25	20.42			21.7
10	64QAM	1	49	20.39			
10	64QAM	25	0	19.24			
10	64QAM	25	12	19.21			20.7
10	64QAM	25	25	19.22			
10	64QAM	50	0	19.21			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.04	22.08	22.10	23.7
5	QPSK	1	12	22.18	22.10	22.13	
5	QPSK	1	24	22.11	22.12	22.14	
5	QPSK	12	0	21.14	21.18	21.17	22.7
5	QPSK	12	7	21.27	21.18	21.20	
5	QPSK	12	13	21.32	21.23	21.13	
5	QPSK	25	0	21.24	21.15	21.21	22.7
5	16QAM	1	0	21.36	21.35	21.42	
5	16QAM	1	12	21.47	21.47	21.42	
5	16QAM	1	24	21.55	21.44	21.44	21.7
5	16QAM	12	0	20.15	20.21	20.17	
5	16QAM	12	7	20.20	20.25	20.29	
5	16QAM	12	13	20.22	20.20	20.19	21.7
5	16QAM	25	0	20.24	20.17	20.23	
5	64QAM	1	0	20.27	20.34	20.47	
5	64QAM	1	12	20.39	20.35	20.37	21.7
5	64QAM	1	24	20.53	20.37	20.31	
5	64QAM	12	0	19.25	19.27	19.23	
5	64QAM	12	7	19.29	19.22	19.33	20.7
5	64QAM	12	13	19.31	19.33	19.25	
5	64QAM	25	0	19.27	19.21	19.27	



Band 66									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132047	132322	132597			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	23.95	23.87	23.78	25.7		
20	QPSK	1	49	23.82	23.71	23.70			
20	QPSK	1	99	23.90	23.75	23.72			
20	QPSK	50	0	23.58	23.46	23.44	24.7		
20	QPSK	50	24	23.65	23.51	23.52			
20	QPSK	50	50	23.59	23.44	23.46			
20	QPSK	100	0	23.66	23.48	23.44	24.7		
20	16QAM	1	0	23.84	23.76	23.74			
20	16QAM	1	49	23.76	23.58	23.60			
20	16QAM	1	99	23.86	23.63	23.54	23.7		
20	16QAM	50	0	22.59	22.47	22.48			
20	16QAM	50	24	22.65	22.49	22.52			
20	16QAM	50	50	22.63	22.46	22.47	23.7		
20	16QAM	100	0	22.64	22.49	22.45			
20	64QAM	1	0	22.73	22.62	22.56			
20	64QAM	1	49	22.68	22.49	22.53	22.7		
20	64QAM	1	99	22.74	22.56	22.48			
20	64QAM	50	0	21.61	21.49	21.49			
20	64QAM	50	24	21.67	21.52	21.53	22.7		
20	64QAM	50	50	21.66	21.49	21.49			
20	64QAM	100	0	21.67	21.50	21.44			
Channel				132047	132322	132597	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	23.91	23.81	23.79	25.7		
15	QPSK	1	37	23.81	23.70	23.70			
15	QPSK	1	74	23.94	23.74	23.74			
15	QPSK	36	0	23.67	23.46	23.45	24.7		
15	QPSK	36	20	23.65	23.46	23.42			
15	QPSK	36	39	23.62	23.44	23.47			
15	QPSK	75	0	23.65	23.50	23.46	24.7		
15	16QAM	1	0	23.82	23.70	23.73			
15	16QAM	1	37	23.74	23.60	23.64			
15	16QAM	1	74	23.85	23.63	23.61	23.7		
15	16QAM	36	0	22.66	22.45	22.46			
15	16QAM	36	20	22.65	22.46	22.42			
15	16QAM	36	39	22.63	22.47	22.49	23.7		
15	16QAM	75	0	22.65	22.51	22.45			
15	64QAM	1	0	22.66	22.61	22.53			
15	64QAM	1	37	22.62	22.50	22.49	23.7		
15	64QAM	1	74	22.74	22.57	22.53			
15	64QAM	36	0	21.66	21.50	21.53			
15	64QAM	36	20	21.66	21.49	21.46	22.7		
15	64QAM	36	39	21.68	21.50	21.50			
15	64QAM	75	0	21.66	21.51	21.47			
Channel				132022	132322	132622	Tune-up limit (dBm)		
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	23.94	23.77	23.81	25.7		
10	QPSK	1	25	23.89	23.75	23.79			
10	QPSK	1	49	23.92	23.75	23.80			
10	QPSK	25	0	23.63	23.43	23.44	24.7		
10	QPSK	25	12	23.64	23.50	23.44			
10	QPSK	25	25	23.65	23.47	23.52			
10	QPSK	50	0	23.67	23.52	23.48	24.7		
10	16QAM	1	0	23.63	23.79	23.80			
10	16QAM	1	25	23.89	23.73	23.77			
10	16QAM	1	49	23.89	23.71	23.78	23.7		
10	16QAM	25	0	22.61	22.43	22.44			
10	16QAM	25	12	22.70	22.52	22.47			
10	16QAM	25	25	22.62	22.46	22.51	23.7		
10	16QAM	50	0	22.65	22.46	22.45			
10	64QAM	1	0	22.79	22.63	22.61			
10	64QAM	1	25	22.82	22.63	22.70	23.7		
10	64QAM	1	49	22.84	22.64	22.67			
10	64QAM	25	0	21.66	21.48	21.49			
10	64QAM	25	12	21.70	21.54	21.50	22.7		
10	64QAM	25	25	21.64	21.50	21.55			
10	64QAM	50	0	21.68	21.56	21.49			
Channel				131997	132322	132647	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	23.94	23.73	23.81	25.7		
5	QPSK	1	12	23.94	23.80	23.85			
5	QPSK	1	24	23.93	23.75	23.79			
5	QPSK	12	0	23.63	23.42	23.50	24.7		
5	QPSK	12	7	23.69	23.52	23.52			
5	QPSK	12	13	23.64	23.45	23.47			
5	QPSK	25	0	23.63	23.45	23.50	24.7		
5	16QAM	1	0	23.86	23.71	23.76			
5	16QAM	1	12	23.89	23.74	23.75			
5	16QAM	1	24	23.86	23.71	23.75	23.7		
5	16QAM	12	0	22.67	22.46	22.54			
5	16QAM	12	7	22.69	22.50	22.56			
5	16QAM	12	13	22.66	22.52	22.54	23.7		
5	16QAM	25	0	22.68	22.52	22.54			
5	64QAM	1	0	22.82	22.63	22.72			
5	64QAM	1	12	22.82	22.64	22.68	23.7		
5	64QAM	1	24	22.84	22.64	22.67			
5	64QAM	12	0	21.71	21.50	21.59			
5	64QAM	12	7	21.72	21.57	21.62	22.7		
5	64QAM	12	13	21.73	21.52	21.59			
5	64QAM	25	0	21.66	21.50	21.54			
Channel				131987	132322	132657	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	23.88	23.73	23.77	25.7		
3	QPSK	1	8	23.83	23.74	23.83			
3	QPSK	1	14	23.84	23.73	23.74			
3	QPSK	8	0	23.57	23.35	23.45	24.7		
3	QPSK	8	4	23.64	23.45	23.46			
3	QPSK	8	7	23.61	23.43	23.40			
3	QPSK	15	0	23.63	23.36	23.47	24.7		
3	16QAM	1	0	23.77	23.61	23.73			
3	16QAM	1	8	23.83	23.64	23.70			
3	16QAM	1	14	23.79	23.61	23.74	23.7		
3	16QAM	8	0	22.66	22.38	22.52			
3	16QAM	8	4	22.64	22.40	22.54			
3	16QAM	8	7	22.59	22.49	22.50	23.7		
3	16QAM	15	0	22.66	22.50	22.47			
3	64QAM	1	0	22.73	22.55	22.71			
3	64QAM	1	8	22.77	22.62	22.59	23.7		
3	64QAM	1	14	22.84	22.54	22.65			
3	64QAM	8	0	21.71	21.46	21.56			
3	64QAM	8	4	21.66	21.51	21.56	22.7		
3	64QAM	8	7	21.71	21.47	21.58			
3	64QAM	15	0	21.56	21.45	21.51			
Channel				131979	132322	132665	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	23.85	23.74	23.70	25.7		
1.4	QPSK	1	3	23.86	23.72	23.77			
1.4	QPSK	1	5	23.84	23.76	23.72			
1.4	QPSK	3	0	23.86	23.71	23.78	24.7		
1.4	QPSK	3	1	23.81	23.74	23.80			
1.4	QPSK	3	3	23.82	23.71	23.74			
1.4	QPSK	6	0	23.54	23.38	23.48	24.7		
1.4	QPSK	6	3	23.61	23.45	23.46			
1.4	QPSK	6	5	23.62	23.46	23.43			
1.4	16QAM	1	0	23.82	23.66	23.76	24.7		
1.4	16QAM	1	5	23.73	23.62	23.67			
1.4	16QAM	3	0	23.54	23.41	23.43			
1.4	16QAM	3	3	23.60	23.45	23.46	23.7		
1.4	16QAM	3	5	23.63	23.43	23.44			
1.4	16QAM	6	0	22.56	22.42	22.51			
1.4	16QAM	1	0	22.70	22.57	22.60	23.7		
1.4	16QAM	1	3	22.75	22.62	22.63			
1.4	16QAM	1	5	22.67	22.54	22.57			
1.4	64QAM	3	0	22.67	22.54	22.58	23.7		
1.4	64QAM	3	1	22.71	22.57	22.61			
1.4	64QAM	3	3	22.87	22.51	22.56			
1.4	64QAM	6	0	21.57	21.43	21.44	22.7		



Band 71							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.39	24.32	24.28	25.7
20	QPSK	1	49	24.21	24.25	24.28	
20	QPSK	1	99	24.24	24.21	24.14	
20	QPSK	50	0	23.39	23.37	23.38	24.7
20	QPSK	50	24	23.50	23.42	23.32	
20	QPSK	50	50	23.45	23.39	23.33	
20	QPSK	100	0	23.46	23.30	23.37	24.7
20	16QAM	1	0	23.69	23.66	23.66	
20	16QAM	1	49	23.56	23.55	23.57	
20	16QAM	1	99	23.81	23.58	23.54	23.7
20	16QAM	50	0	22.46	22.32	22.40	
20	16QAM	50	24	22.42	22.33	22.38	
20	16QAM	50	50	22.42	22.39	22.39	23.7
20	16QAM	100	0	22.46	22.34	22.42	
20	64QAM	1	0	21.73	22.29	22.52	
20	64QAM	1	49	22.23	22.43	21.81	22.7
20	64QAM	1	99	22.50	22.00	22.43	
20	64QAM	50	0	20.70	21.36	21.01	
20	64QAM	50	24	20.85	21.40	21.15	Tune-up limit (dBm)
20	64QAM	50	50	21.49	21.04	21.37	
20	64QAM	100	0	21.05	21.35	21.45	
Channel				133197	133287	133387	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.23	24.27	24.23	25.7
15	QPSK	1	37	24.23	24.18	24.22	
15	QPSK	1	74	24.28	24.26	24.14	
15	QPSK	36	0	23.41	23.31	23.37	24.7
15	QPSK	36	20	23.45	23.30	23.34	
15	QPSK	36	39	23.36	23.40	23.35	
15	QPSK	75	0	23.36	23.35	23.34	24.7
15	16QAM	1	0	23.68	23.64	23.56	
15	16QAM	1	37	23.38	23.54	23.52	
15	16QAM	1	74	23.54	23.51	23.54	23.7
15	16QAM	36	0	22.28	22.39	22.28	
15	16QAM	36	20	22.31	22.34	22.43	
15	16QAM	36	39	22.45	22.37	22.38	23.7
15	16QAM	75	0	22.45	22.32	22.35	
15	64QAM	1	0	21.71	22.45	22.43	
15	64QAM	1	37	21.70	22.51	22.51	22.7
15	64QAM	1	74	22.41	22.16	22.49	
15	64QAM	36	0	20.70	21.34	20.97	
15	64QAM	36	20	20.44	21.43	21.36	Tune-up limit (dBm)
15	64QAM	36	39	21.00	20.91	21.37	
15	64QAM	75	0	20.86	21.39	21.33	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.27	24.17	24.29	25.7
10	QPSK	1	25	24.19	24.18	24.20	
10	QPSK	1	49	24.17	24.27	24.18	
10	QPSK	25	0	23.33	23.31	23.33	24.7
10	QPSK	25	12	23.33	23.43	23.26	
10	QPSK	25	25	23.24	23.30	23.27	
10	QPSK	50	0	23.41	23.40	23.28	24.7
10	16QAM	1	0	23.71	23.36	23.60	
10	16QAM	1	25	23.62	23.63	23.53	
10	16QAM	1	49	23.62	23.61	23.47	23.7
10	16QAM	25	0	22.27	22.28	22.30	
10	16QAM	25	12	22.28	22.38	22.33	
10	16QAM	25	25	22.14	22.38	22.23	23.7
10	16QAM	50	0	22.32	22.42	22.24	
10	64QAM	1	0	21.75	21.80	22.44	
10	64QAM	1	25	21.73	22.52	22.48	22.7
10	64QAM	1	49	21.70	22.46	22.13	
10	64QAM	25	0	20.70	21.34	21.35	
10	64QAM	25	12	20.33	21.41	21.36	Tune-up limit (dBm)
10	64QAM	25	25	20.40	21.38	21.31	
10	64QAM	50	0	20.33	21.35	21.30	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.07	24.21	24.21	25.7
5	QPSK	1	12	24.33	24.20	24.17	
5	QPSK	1	24	24.22	24.20	24.18	
5	QPSK	12	0	23.33	23.35	23.25	24.7
5	QPSK	12	7	23.30	23.36	23.33	
5	QPSK	12	13	23.32	23.30	23.28	
5	QPSK	25	0	23.32	23.37	23.25	24.7
5	16QAM	1	0	23.51	23.53	23.57	
5	16QAM	1	12	23.51	23.55	23.55	
5	16QAM	1	24	23.48	23.53	23.47	23.7
5	16QAM	12	0	22.16	22.40	22.33	
5	16QAM	12	7	22.31	22.37	22.34	
5	16QAM	12	13	22.38	22.34	22.27	22.7
5	16QAM	25	0	22.24	22.39	22.29	
5	64QAM	1	0	21.78	21.74	22.47	
5	64QAM	1	12	21.72	22.51	22.39	22.7
5	64QAM	1	24	21.70	22.56	21.87	
5	64QAM	12	0	20.70	21.16	21.31	
5	64QAM	12	7	20.42	21.41	21.39	Tune-up limit (dBm)
5	64QAM	12	13	20.40	21.40	21.19	
5	64QAM	25	0	20.23	21.10	21.23	



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. 7	Power Middle Ch. 7	Power High Ch. 7	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	18.50	18.46	18.43	19.7
20	QPSK	1	49	18.36	18.44	18.35	
20	QPSK	1	99	18.39	18.43	18.39	
20	QPSK	50	0	18.48	18.50	18.53	
20	QPSK	50	24	18.58	18.57	18.54	
20	QPSK	50	50	18.56	18.55	18.55	19.7
20	QPSK	100	0	18.58	18.52	18.55	
20	16QAM	1	0	18.76	18.81	18.78	
20	16QAM	1	49	18.74	18.83	18.70	
20	16QAM	1	99	18.69	18.80	18.70	
20	16QAM	50	0	18.48	18.53	18.53	19.7
20	16QAM	50	24	18.58	18.56	18.55	
20	16QAM	50	50	18.58	18.56	18.57	
20	16QAM	100	0	18.55	18.53	18.50	
20	64QAM	1	0	18.67	18.67	18.71	
20	64QAM	1	49	18.65	18.67	18.61	19.7
20	64QAM	1	99	18.67	18.63	18.63	
20	64QAM	50	0	18.51	18.53	18.57	
20	64QAM	50	24	18.61	18.61	18.56	
20	64QAM	50	50	18.60	18.61	18.57	
20	64QAM	100	0	18.56	18.57	18.53	Tune-up limit (dbm)
Channel				1867.5	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.50	18.41	18.34	19.7
15	QPSK	1	37	18.29	18.40	18.33	
15	QPSK	1	74	18.34	18.33	18.30	
15	QPSK	36	0	18.48	18.49	18.48	
15	QPSK	36	20	18.49	18.57	18.52	
15	QPSK	36	39	18.56	18.54	18.46	19.7
15	QPSK	75	0	18.54	18.44	18.52	
15	16QAM	1	0	18.66	18.76	18.69	
15	16QAM	1	37	18.68	18.73	18.65	
15	16QAM	1	74	18.62	18.80	18.68	
15	16QAM	36	0	18.39	18.43	18.53	19.7
15	16QAM	36	20	18.54	18.54	18.49	
15	16QAM	36	39	18.52	18.49	18.56	
15	16QAM	75	0	18.52	18.44	18.45	
15	64QAM	1	0	18.67	18.60	18.62	
15	64QAM	1	37	18.64	18.67	18.52	19.7
15	64QAM	1	74	18.67	18.53	18.61	
15	64QAM	36	0	18.47	18.51	18.51	
15	64QAM	36	20	18.61	18.51	18.48	
15	64QAM	36	39	18.54	18.61	18.47	
15	64QAM	75	0	18.55	18.56	18.53	Tune-up limit (dbm)
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	18.44	18.37	18.43	19.7
10	QPSK	1	25	18.33	18.41	18.25	
10	QPSK	1	49	18.30	18.38	18.38	
10	QPSK	25	0	18.39	18.48	18.53	
10	QPSK	25	12	18.62	18.53	18.47	
10	QPSK	25	25	18.53	18.46	18.55	19.7
10	QPSK	50	0	18.48	18.42	18.45	
10	16QAM	1	0	18.75	18.79	18.74	
10	16QAM	1	25	18.66	18.79	18.61	
10	16QAM	1	49	18.69	18.74	18.68	
10	16QAM	25	0	18.40	18.46	18.52	19.7
10	16QAM	25	12	18.48	18.46	18.55	
10	16QAM	25	25	18.54	18.51	18.56	
10	16QAM	50	0	18.47	18.45	18.41	
10	64QAM	1	0	18.63	18.66	18.54	
10	64QAM	1	25	18.64	18.61	18.53	19.7
10	64QAM	1	49	18.58	18.61	18.58	
10	64QAM	25	0	18.48	18.49	18.54	
10	64QAM	25	12	18.55	18.61	18.53	
10	64QAM	25	25	18.58	18.57	18.55	
10	64QAM	50	0	18.55	18.54	18.49	Tune-up limit (dbm)
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.42	18.37	18.34	19.7
5	QPSK	1	12	18.31	18.36	18.30	
5	QPSK	1	24	18.36	18.39	18.37	
5	QPSK	12	0	18.42	18.50	18.50	
5	QPSK	12	7	18.56	18.53	18.46	
5	QPSK	12	13	18.54	18.46	18.46	19.7
5	QPSK	25	0	18.55	18.45	18.55	
5	16QAM	1	0	18.71	18.78	18.70	
5	16QAM	1	12	18.71	18.83	18.62	
5	16QAM	1	24	18.68	18.78	18.64	
5	16QAM	12	0	18.39	18.52	18.53	19.7
5	16QAM	12	7	18.53	18.50	18.55	
5	16QAM	12	13	18.55	18.52	18.52	
5	16QAM	25	0	18.55	18.53	18.44	
5	64QAM	1	0	18.67	18.67	18.71	
5	64QAM	1	12	18.65	18.57	18.57	19.7
5	64QAM	1	24	18.57	18.57	18.56	
5	64QAM	12	0	18.49	18.48	18.51	
5	64QAM	12	7	18.52	18.56	18.56	
5	64QAM	12	13	18.57	18.51	18.47	
5	64QAM	25	0	18.52	18.47	18.53	Tune-up limit (dbm)
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.45	18.39	18.38	19.7
3	QPSK	1	8	18.30	18.44	18.34	
3	QPSK	1	14	18.29	18.38	18.31	
3	QPSK	8	0	18.39	18.42	18.45	
3	QPSK	8	4	18.50	18.54	18.53	
3	QPSK	8	7	18.56	18.53	18.53	19.7
3	QPSK	15	0	18.55	18.47	18.52	
3	16QAM	1	0	18.74	18.81	18.70	
3	16QAM	1	8	18.73	18.75	18.64	
3	16QAM	1	14	18.69	18.76	18.66	
3	16QAM	8	0	18.44	18.45	18.46	19.7
3	16QAM	8	4	18.54	18.50	18.48	
3	16QAM	8	7	18.48	18.48	18.48	
3	16QAM	15	0	18.47	18.52	18.45	
3	64QAM	1	0	18.62	18.65	18.65	
3	64QAM	1	8	18.60	18.57	18.51	19.7
3	64QAM	1	14	18.61	18.59	18.53	
3	64QAM	8	0	18.50	18.49	18.49	
3	64QAM	8	4	18.57	18.53	18.52	
3	64QAM	8	7	18.59	18.59	18.56	
3	64QAM	15	0	18.55	18.49	18.48	Tune-up limit (dbm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.31	18.40	18.29	19.7
1.4	QPSK	1	3	18.36	18.43	18.34	
1.4	QPSK	1	5	18.30	18.41	18.25	
1.4	QPSK	3	0	18.35	18.45	18.30	
1.4	QPSK	3	1	18.41	18.50	18.34	
1.4	QPSK	3	3	18.38	18.43	18.30	19.7
1.4	QPSK	6	0	18.39	18.50	18.37	
1.4	16QAM	1	0	18.62	18.74	18.60	
1.4	16QAM	1	3	18.70	18.79	18.70	
1.4	16QAM	1	5	18.63	18.73	18.61	
1.4	16QAM	3	0	18.41	18.52	18.39	19.7
1.4	16QAM	3	1	18.50	18.58	18.44	
1.4	16QAM	3	3	18.40	18.51	18.40	
1.4	16QAM	6	0	18.50	18.60	18.48	
1.4	64QAM	1	0	18.72	18.68	18.54	
1.4	64QAM	1	3	18.68	18.73	18.60	19.7
1.4	64QAM	1	5	18.58	18.66	18.53	
1.4	64QAM	3	0	18.54	18.64	18.53	
1.4	64QAM	3	1	18.60	18.67	18.56	
1.4	64QAM	3	3	18.56	18.65	18.53	
1.4	64QAM	6	0	18.45	18.55	18.41	19.7



Band 4							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	20.05	20.09	19.99	21.9
20	QPSK	1	49	19.93	19.92	19.91	
20	QPSK	1	99	19.95	19.92	19.90	
20	QPSK	50	0	20.10	20.09	20.01	
20	QPSK	50	24	20.16	20.08	20.00	21.9
20	QPSK	50	50	20.07	20.01	19.96	
20	QPSK	100	0	20.11	20.13	19.90	
20	16QAM	1	0	20.39	20.41	20.33	
20	16QAM	1	49	20.25	20.23	20.16	21.9
20	16QAM	1	99	20.30	20.17	20.07	
20	16QAM	50	0	20.13	20.11	20.02	
20	16QAM	50	24	20.15	20.13	20.05	
20	16QAM	50	50	20.10	20.04	19.96	21.9
20	16QAM	100	0	20.12	20.11	19.95	
20	64QAM	1	0	20.21	20.25	20.19	
20	64QAM	1	49	20.13	20.07	20.08	
20	64QAM	1	99	20.16	20.09	20.11	21.9
20	64QAM	50	0	20.14	20.16	20.07	
20	64QAM	50	24	20.15	20.11	20.07	
20	64QAM	50	50	20.09	20.04	19.99	
20	64QAM	100	0	20.12	20.10	19.96	Tune-up limit (dBm)
Channel				20050	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	20.03	20.00	19.92	21.9
15	QPSK	1	37	19.93	19.91	19.90	
15	QPSK	1	74	19.95	19.92	19.92	
15	QPSK	36	0	20.08	20.01	19.93	
15	QPSK	36	20	20.11	20.02	19.90	21.9
15	QPSK	36	39	19.99	19.99	19.90	
15	QPSK	75	0	20.02	20.12	19.91	
15	16QAM	1	0	20.39	20.32	20.23	
15	16QAM	1	37	20.26	20.23	20.06	21.9
15	16QAM	1	74	20.23	20.10	20.00	
15	16QAM	36	0	20.03	20.06	20.01	
15	16QAM	36	20	20.14	20.09	20.01	
15	16QAM	36	39	20.05	20.04	19.91	21.9
15	16QAM	75	0	20.09	20.05	19.96	
15	64QAM	1	0	20.12	20.20	20.14	
15	64QAM	1	37	20.04	19.98	19.98	
15	64QAM	1	74	20.14	20.04	20.07	21.9
15	64QAM	36	0	20.07	20.06	20.01	
15	64QAM	36	20	20.10	20.10	19.98	
15	64QAM	36	39	20.04	20.03	19.96	
15	64QAM	75	0	20.08	20.03	19.90	Tune-up limit (dBm)
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	20.01	20.03	19.98	21.9
10	QPSK	1	25	19.91	19.92	19.93	
10	QPSK	1	49	19.90	19.94	19.91	
10	QPSK	25	0	20.08	20.02	19.91	
10	QPSK	25	12	20.07	19.99	19.91	21.9
10	QPSK	25	25	19.98	20.00	19.96	
10	QPSK	50	0	20.10	20.05	19.92	
10	16QAM	1	0	20.34	20.32	20.27	
10	16QAM	1	25	20.17	20.21	20.08	21.9
10	16QAM	1	49	20.20	20.11	20.06	
10	16QAM	25	0	20.12	20.01	19.98	
10	16QAM	25	12	20.05	20.05	20.01	
10	16QAM	25	25	20.10	19.95	19.92	21.9
10	16QAM	50	0	20.05	20.07	19.93	
10	64QAM	1	0	20.16	20.18	20.13	
10	64QAM	1	25	20.10	19.99	20.01	
10	64QAM	1	49	20.07	20.05	20.07	21.9
10	64QAM	25	0	20.14	20.12	20.04	
10	64QAM	25	12	20.06	20.04	20.00	
10	64QAM	25	25	20.02	20.04	19.93	
10	64QAM	50	0	20.02	20.10	19.94	Tune-up limit (dBm)
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	19.95	20.09	19.90	21.9
5	QPSK	1	12	19.95	19.92	19.90	
5	QPSK	1	24	19.94	19.92	19.91	
5	QPSK	12	0	20.04	20.01	19.93	
5	QPSK	12	7	20.07	19.99	19.97	21.9
5	QPSK	12	13	20.00	19.95	19.92	
5	QPSK	25	0	20.10	20.06	19.91	
5	16QAM	1	0	20.37	20.41	20.30	
5	16QAM	1	12	20.24	20.16	20.12	21.9
5	16QAM	1	24	20.27	20.15	19.97	
5	16QAM	12	0	20.08	20.06	19.97	
5	16QAM	12	7	20.10	20.10	19.96	
5	16QAM	12	13	20.07	19.95	19.90	21.9
5	16QAM	25	0	20.07	20.06	19.93	
5	64QAM	1	0	20.15	20.25	20.16	
5	64QAM	1	12	20.03	20.01	20.08	
5	64QAM	1	24	20.13	20.03	20.06	21.9
5	64QAM	12	0	20.10	20.15	19.99	
5	64QAM	12	7	20.15	20.03	20.05	
5	64QAM	12	13	20.00	20.02	19.95	
5	64QAM	25	0	20.08	20.08	19.90	Tune-up limit (dBm)
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	19.98	20.07	19.95	21.9
3	QPSK	1	8	19.94	19.91	19.92	
3	QPSK	1	14	19.94	19.91	19.90	
3	QPSK	8	0	20.01	20.05	19.99	
3	QPSK	8	4	20.12	19.96	20.00	21.9
3	QPSK	8	7	20.04	19.96	19.93	
3	QPSK	15	0	20.03	20.12	19.91	
3	16QAM	1	0	20.33	20.36	20.26	
3	16QAM	1	8	20.17	20.14	20.14	21.9
3	16QAM	1	14	20.22	20.10	20.01	
3	16QAM	8	0	20.06	20.05	19.96	
3	16QAM	8	4	20.11	20.07	20.01	
3	16QAM	8	7	20.06	19.95	19.90	21.9
3	16QAM	15	0	20.04	20.06	19.95	
3	64QAM	1	0	20.14	20.25	20.16	
3	64QAM	1	8	20.06	19.97	20.07	
3	64QAM	1	14	20.14	20.06	20.05	21.9
3	64QAM	8	0	20.07	20.14	20.01	
3	64QAM	8	4	20.14	20.01	20.03	
3	64QAM	8	7	20.04	19.97	19.96	
3	64QAM	15	0	20.04	20.07	19.91	Tune-up limit (dBm)
Channel				19967	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	19.95	19.93	19.92	21.9
1.4	QPSK	1	3	20.01	19.97	19.94	
1.4	QPSK	1	5	19.91	19.94	19.90	
1.4	QPSK	3	0	19.98	19.91	19.90	
1.4	QPSK	3	1	20.02	19.95	19.90	21.9
1.4	QPSK	3	3	19.99	19.90	19.92	
1.4	QPSK	6	0	20.04	20.00	19.92	
1.4	16QAM	1	0	20.27	20.16	20.10	
1.4	16QAM	1	3	20.30	20.25	20.15	21.9
1.4	16QAM	1	5	20.25	20.21	20.08	
1.4	16QAM	3	0	20.02	19.95	19.93	
1.4	16QAM	3	1	20.05	20.01	19.96	
1.4	16QAM	3	3	20.01	19.94	19.91	21.9
1.4	16QAM	6	0	20.12	20.03	19.96	
1.4	64QAM	1	0	20.23	20.17	20.02	
1.4	64QAM	1	3	20.27	20.20	20.04	
1.4	64QAM	1	5	20.22	20.13	19.94	21.9
1.4	64QAM	3	0	20.18	20.12	19.98	
1.4	64QAM	3	1	20.23	20.18	20.04	
1.4	64QAM	3	3	20.17	20.13	19.98	
1.4	64QAM	6	0	20.04	20.00	19.90	21.9



Band 5									
Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				20450	20525	20600			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	24.09	24.12	24.20	25.7		
10	QPSK	1	25	23.99	24.14	24.15			
10	QPSK	1	49	24.18	24.24	24.16			
10	QPSK	25	0	23.22	23.22	23.21	24.7		
10	QPSK	25	12	23.27	23.24	23.31			
10	QPSK	25	25	23.26	23.28	23.27			
10	QPSK	50	0	23.24	23.26	23.25	24.7		
10	16QAM	1	0	23.42	23.48	23.50			
10	16QAM	1	25	23.44	23.49	23.59			
10	16QAM	1	49	23.55	23.64	23.48	23.7		
10	16QAM	25	0	22.17	22.28	22.24			
10	16QAM	25	12	22.32	22.27	22.30			
10	16QAM	25	25	22.19	22.25	22.38	23.7		
10	16QAM	50	0	22.31	22.26	22.33			
10	64QAM	1	0	22.88	22.77	22.89			
10	64QAM	1	25	22.95	22.74	22.89	23.7		
10	64QAM	1	49	22.95	22.56	22.14			
10	64QAM	25	0	21.70	21.80	21.85			
10	64QAM	25	12	21.81	21.83	21.85	22.7		
10	64QAM	25	25	21.83	21.79	21.64			
10	64QAM	50	0	21.68	21.80	21.51			
Channel				20425	20525	20625	Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	24.19	24.13	24.18	25.7		
5	QPSK	1	12	24.09	24.21	23.89			
5	QPSK	1	24	24.08	24.12	23.96			
5	QPSK	12	0	23.30	23.27	23.23	24.7		
5	QPSK	12	7	23.23	23.30	23.00			
5	QPSK	12	13	23.14	23.23	23.05			
5	QPSK	25	0	23.22	23.21	23.15	24.7		
5	16QAM	1	0	23.57	23.50	23.47			
5	16QAM	1	12	23.39	23.54	23.21			
5	16QAM	1	24	23.39	23.55	23.17	23.7		
5	16QAM	12	0	22.26	22.34	22.26			
5	16QAM	12	7	22.20	22.31	22.18			
5	16QAM	12	13	22.19	22.30	22.22	23.7		
5	16QAM	25	0	22.26	22.22	22.30			
5	64QAM	1	0	22.94	22.94	22.53			
5	64QAM	1	12	22.83	22.89	21.92	23.7		
5	64QAM	1	24	22.81	22.82	21.84			
5	64QAM	12	0	21.84	21.90	21.18			
5	64QAM	12	7	21.75	21.81	20.82	22.7		
5	64QAM	12	13	21.78	21.83	21.71			
5	64QAM	25	0	21.70	21.81	20.89			
Channel				20415	20525	20635	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	24.12	24.15	23.99	25.7		
3	QPSK	1	8	24.17	24.20	23.99			
3	QPSK	1	14	24.08	24.13	24.04			
3	QPSK	8	0	23.28	23.24	22.89	24.7		
3	QPSK	8	4	23.19	23.27	23.03			
3	QPSK	8	7	23.25	23.23	23.20			
3	QPSK	15	0	23.20	23.22	23.02	24.7		
3	16QAM	1	0	23.50	23.43	23.20			
3	16QAM	1	8	23.50	23.53	23.21			
3	16QAM	1	14	23.41	23.51	23.27	23.7		
3	16QAM	8	0	22.33	22.29	22.05			
3	16QAM	8	4	22.23	22.39	22.15			
3	16QAM	8	7	22.24	22.33	22.19	23.7		
3	16QAM	15	0	22.30	22.30	22.10			
3	64QAM	1	0	22.01	22.86	21.84			
3	64QAM	1	8	22.90	23.03	21.82	22.7		
3	64QAM	1	14	22.90	22.88	21.79			
3	64QAM	8	0	21.75	21.80	21.63			
3	64QAM	8	4	21.83	21.88	21.73	22.7		
3	64QAM	8	7	21.76	21.80	20.75			
3	64QAM	15	0	21.75	21.80	20.77			
Channel				20407	20525	20643	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.11	24.14	24.03	25.7		
1.4	QPSK	1	3	24.10	24.10	24.15			
1.4	QPSK	1	5	23.95	24.09	24.02			
1.4	QPSK	3	0	24.15	24.08	24.06	24.7		
1.4	QPSK	3	1	24.10	24.13	24.19			
1.4	QPSK	3	3	24.09	24.08	24.12			
1.4	QPSK	6	0	23.11	23.27	23.23	24.7		
1.4	16QAM	1	0	23.38	23.40	23.32			
1.4	16QAM	1	3	23.38	23.55	23.53			
1.4	16QAM	1	5	23.33	23.42	23.39	24.7		
1.4	16QAM	3	0	23.15	23.25	23.11			
1.4	16QAM	3	1	23.22	23.29	23.23			
1.4	16QAM	3	3	23.13	23.20	23.15	23.7		
1.4	16QAM	6	0	22.19	22.29	22.31			
1.4	64QAM	1	0	22.79	22.85	21.81			
1.4	64QAM	1	3	22.82	22.95	21.84	23.7		
1.4	64QAM	1	5	22.75	22.82	21.90			
1.4	64QAM	3	0	22.75	22.76	21.77			
1.4	64QAM	3	1	22.79	22.89	21.84	22.7		
1.4	64QAM	3	3	22.74	22.88	22.00			
1.4	64QAM	6	0	21.70	21.79	21.65			



Band 7							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.46	20.57	20.58	22.4
20	QPSK	1	49	20.52	20.66	20.62	
20	QPSK	1	99	20.62	20.72	20.83	
20	QPSK	50	0	20.58	20.71	20.69	22.4
20	QPSK	50	24	20.68	20.75	20.72	
20	QPSK	50	50	20.69	20.84	20.76	
20	QPSK	100	0	20.69	20.73	20.70	22.4
20	16QAM	1	0	20.80	20.89	20.96	
20	16QAM	1	49	20.88	21.02	20.95	
20	16QAM	1	99	21.02	21.11	21.00	22.4
20	16QAM	50	0	20.56	20.72	20.70	
20	16QAM	50	24	20.73	20.76	20.73	
20	16QAM	50	50	20.71	20.85	20.80	22.4
20	16QAM	100	0	20.87	20.73	20.70	
20	64QAM	1	0	20.61	20.75	20.76	
20	64QAM	1	49	20.73	20.82	20.79	22.4
20	64QAM	1	99	20.90	20.96	20.88	
20	64QAM	50	0	20.59	20.71	20.69	
20	64QAM	50	24	20.71	20.76	20.73	21.9
20	64QAM	50	50	20.73	20.84	20.77	
20	64QAM	100	0	20.71	20.75	20.69	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.47	20.42	20.43	22.4
15	QPSK	1	37	20.41	20.48	20.45	
15	QPSK	1	74	20.40	20.55	20.48	
15	QPSK	36	0	20.44	20.52	20.49	22.4
15	QPSK	36	20	20.49	20.56	20.63	
15	QPSK	36	39	20.50	20.63	20.57	
15	QPSK	75	0	20.45	20.54	20.58	22.4
15	16QAM	1	0	20.63	20.78	20.73	
15	16QAM	1	37	20.68	20.82	20.75	
15	16QAM	1	74	20.75	20.89	20.78	22.4
15	16QAM	36	0	20.46	20.53	20.49	
15	16QAM	36	20	20.49	20.55	20.58	
15	16QAM	36	39	20.48	20.64	20.57	22.4
15	16QAM	75	0	20.46	20.56	20.59	
15	64QAM	1	0	20.49	20.59	20.62	
15	64QAM	1	37	20.57	20.74	20.67	22.4
15	64QAM	1	74	20.59	20.78	20.70	
15	64QAM	36	0	20.39	20.56	20.52	
15	64QAM	36	20	20.52	20.59	20.59	21.9
15	64QAM	36	39	20.51	20.68	20.58	
15	64QAM	75	0	20.47	20.56	20.56	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.43	20.40	20.47	22.4
10	QPSK	1	25	20.45	20.40	20.46	
10	QPSK	1	49	20.53	20.48	20.40	
10	QPSK	25	0	20.43	20.52	20.47	22.4
10	QPSK	25	12	20.45	20.53	20.48	
10	QPSK	25	25	20.46	20.59	20.54	
10	QPSK	50	0	20.44	20.55	20.47	22.4
10	16QAM	1	0	20.62	20.74	20.71	
10	16QAM	1	25	20.64	20.81	20.73	
10	16QAM	1	49	20.67	20.85	20.77	22.4
10	16QAM	25	0	20.41	20.49	20.45	
10	16QAM	25	12	20.45	20.54	20.47	
10	16QAM	25	25	20.44	20.60	20.52	22.4
10	16QAM	50	0	20.45	20.52	20.47	
10	64QAM	1	0	20.52	20.62	20.61	
10	64QAM	1	25	20.56	20.76	20.70	22.4
10	64QAM	1	49	20.56	20.76	20.72	
10	64QAM	25	0	20.42	20.57	20.49	
10	64QAM	25	12	20.48	20.61	20.55	21.9
10	64QAM	25	25	20.46	20.66	20.59	
10	64QAM	50	0	20.47	20.59	20.53	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.40	20.40	20.40	22.4
5	QPSK	1	12	20.40	20.48	20.41	
5	QPSK	1	24	20.40	20.48	20.40	
5	QPSK	12	0	20.41	20.54	20.52	22.4
5	QPSK	12	7	20.47	20.53	20.54	
5	QPSK	12	13	20.44	20.61	20.51	
5	QPSK	25	0	20.44	20.55	20.52	22.4
5	16QAM	1	0	20.68	20.75	20.73	
5	16QAM	1	12	20.62	20.73	20.70	
5	16QAM	1	24	20.68	20.80	20.73	22.4
5	16QAM	12	0	20.49	20.58	20.56	
5	16QAM	12	7	20.46	20.54	20.51	
5	16QAM	12	13	20.43	20.66	20.52	22.4
5	16QAM	25	0	20.42	20.55	20.55	
5	64QAM	1	0	20.52	20.68	20.65	
5	64QAM	1	12	20.50	20.75	20.65	22.4
5	64QAM	1	24	20.54	20.74	20.65	
5	64QAM	12	0	20.49	20.65	20.60	
5	64QAM	12	7	20.48	20.60	20.58	21.9
5	64QAM	12	13	20.48	20.67	20.57	
5	64QAM	25	0	20.43	20.59	20.57	



Band 12											
Ant 1											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 23060	Power Middle Ch. / 23095	Power High Ch. / 23130	Tune-up limit (dBm)				
Channel				704	707.5	711					
Frequency (MHz)				704	707.5	711					
10	QPSK	1	0	23.86	23.82	23.80	25.7				
10	QPSK	1	25	23.75	23.83	23.77					
10	QPSK	1	49	23.69	23.89	23.81					
10	QPSK	25	0	22.95	22.92	22.90	24.7				
10	QPSK	25	12	23.03	22.92	22.96					
10	QPSK	25	25	23.01	22.94	22.95					
10	QPSK	50	0	22.97	22.99	22.97	24.7				
10	16QAM	1	0	23.25	23.19	23.14					
10	16QAM	1	25	23.26	23.24	23.15					
10	16QAM	1	49	23.30	23.28	23.19	24.7				
10	16QAM	25	0	21.94	21.92	21.86					
10	16QAM	25	12	22.01	21.86	21.92					
10	16QAM	25	25	21.88	22.00	21.87	23.7				
10	16QAM	50	0	22.02	21.94	21.98					
10	64QAM	1	0	22.58	22.53	22.59					
10	64QAM	1	25	22.63	22.67	22.64	23.7				
10	64QAM	1	49	22.68	22.68	22.58					
10	64QAM	25	0	21.49	21.44	21.40					
10	64QAM	25	12	21.58	21.43	21.57	22.7				
10	64QAM	25	25	21.47	21.47	21.41					
10	64QAM	50	0	21.59	21.45	21.45					
Channel				703.5	707.5	713.5	Tune-up limit (dBm)				
Frequency (MHz)				703.5	707.5	713.5					
5	QPSK	1	0	23.88	23.80	23.79	25.7				
5	QPSK	1	12	23.88	23.84	23.84					
5	QPSK	1	24	23.78	23.82	23.80					
5	QPSK	12	0	22.91	22.93	22.91	24.7				
5	QPSK	12	7	23.00	22.89	22.96					
5	QPSK	12	13	22.93	22.94	22.85					
5	QPSK	25	0	22.99	22.87	22.91	24.7				
5	16QAM	1	0	23.20	23.22	23.09					
5	16QAM	1	12	23.14	23.21	23.15					
5	16QAM	1	24	23.14	23.15	23.09	23.7				
5	16QAM	12	0	21.99	21.98	21.94					
5	16QAM	12	7	21.98	21.89	21.93					
5	16QAM	12	13	21.96	21.92	21.87	23.7				
5	16QAM	25	0	21.94	21.98	21.92					
5	64QAM	1	0	22.69	22.61	22.58					
5	64QAM	1	12	22.59	22.54	22.60	23.7				
5	64QAM	1	24	22.66	22.63	22.56					
5	64QAM	12	0	21.51	21.50	21.41					
5	64QAM	12	7	21.50	21.45	21.50	22.7				
5	64QAM	12	13	21.52	21.45	21.42					
5	64QAM	25	0	21.44	21.46	21.39					
Channel				23025	23095	23165	Tune-up limit (dBm)				
Frequency (MHz)				23025	23095	23165					
3	QPSK	1	0	23.84	23.80	23.81	25.7				
3	QPSK	1	8	23.85	23.84	23.80					
3	QPSK	1	14	23.85	23.83	23.77					
3	QPSK	8	4	23.01	22.94	22.90	24.7				
3	QPSK	8	4	22.92	22.95	22.91					
3	QPSK	8	7	22.90	22.87	22.84					
3	QPSK	15	0	22.90	22.92	22.84	24.7				
3	16QAM	1	0	23.24	23.13	23.17					
3	16QAM	1	8	23.19	23.23	23.16					
3	16QAM	1	14	23.23	23.22	23.18	23.7				
3	16QAM	8	4	22.06	21.94	21.94					
3	16QAM	8	4	22.01	22.06	22.01					
3	16QAM	8	7	22.03	21.92	21.88	23.7				
3	16QAM	15	0	22.01	21.88	21.86					
3	64QAM	1	0	22.70	22.60	22.53					
3	64QAM	1	8	22.68	22.72	22.60	23.7				
3	64QAM	1	14	22.66	22.60	22.57					
3	64QAM	8	4	21.60	21.44	21.47					
3	64QAM	8	4	21.60	21.50	21.53	22.7				
3	64QAM	8	7	21.47	21.45	21.41					
3	64QAM	15	0	21.45	21.39	21.36					
Channel				23017	23095	23173	Tune-up limit (dBm)				
Frequency (MHz)				699.7	707.5	715.3					
1.4	QPSK	1	0	23.80	23.74	23.79	25.7				
1.4	QPSK	1	3	23.81	23.79	23.77					
1.4	QPSK	1	5	23.80	23.74	23.70					
1.4	QPSK	3	0	23.82	23.73	23.71	24.7				
1.4	QPSK	3	1	23.84	23.75	23.79					
1.4	QPSK	3	3	23.76	23.75	23.71					
1.4	QPSK	6	0	22.97	22.78	22.79	24.7				
1.4	16QAM	1	0	23.15	23.06	23.09					
1.4	16QAM	1	3	23.18	23.21	23.09					
1.4	16QAM	1	5	23.08	23.08	22.98	24.7				
1.4	16QAM	3	0	22.96	22.81	22.80					
1.4	16QAM	3	1	22.96	22.87	22.88					
1.4	16QAM	3	3	22.92	22.88	22.78	23.7				
1.4	16QAM	6	0	21.94	21.86	21.82					
1.4	64QAM	1	0	22.59	22.48	22.43					
1.4	64QAM	1	3	22.69	22.57	22.48	23.7				
1.4	64QAM	1	5	22.55	22.41	22.45					
1.4	64QAM	3	0	22.57	22.45	22.53					
1.4	64QAM	3	1	22.55	22.45	22.53	22.7				
1.4	64QAM	3	3	22.57	22.57	22.46					
1.4	64QAM	6	0	21.40	21.32	21.31					



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.60			25.2
10	QPSK	1	25	23.47			
10	QPSK	1	49	23.51			
10	QPSK	25	0	22.56			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.56			
10	QPSK	50	0	22.58			24.2
10	16QAM	1	0	22.75			
10	16QAM	1	25	22.82			
10	16QAM	1	49	22.76			23.2
10	16QAM	25	0	21.59			
10	16QAM	25	12	21.62			
10	16QAM	25	25	21.61			23.2
10	16QAM	50	0	21.57			
10	64QAM	1	0	23.07			
10	64QAM	1	25	23.04			23.2
10	64QAM	1	49	23.01			
10	64QAM	25	0	22.07			
10	64QAM	25	12	22.06			22.2
10	64QAM	25	25	22.02			
10	64QAM	50	0	22.04			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.50	23.45	23.49	25.2
5	QPSK	1	12	23.45	23.54	23.52	
5	QPSK	1	24	23.50	23.51	23.52	
5	QPSK	12	0	22.63	22.56	22.61	24.2
5	QPSK	12	7	22.67	22.64	22.67	
5	QPSK	12	13	22.67	22.62	22.62	
5	QPSK	25	0	22.64	22.57	22.55	24.2
5	16QAM	1	0	22.71	22.71	22.78	
5	16QAM	1	12	22.78	22.85	22.79	
5	16QAM	1	24	22.62	22.85	22.72	23.2
5	16QAM	12	0	21.70	21.62	21.68	
5	16QAM	12	7	21.68	21.57	21.60	
5	16QAM	12	13	21.69	21.60	21.70	23.2
5	16QAM	25	0	21.63	21.64	21.54	
5	64QAM	1	0	22.14	22.25	22.17	
5	64QAM	1	12	22.26	22.30	22.21	23.2
5	64QAM	1	24	22.26	22.23	22.15	
5	64QAM	12	0	21.19	21.11	21.20	
5	64QAM	12	7	21.24	21.14	21.08	22.2
5	64QAM	12	13	21.15	21.17	21.08	
5	64QAM	25	0	21.21	21.11	21.10	



Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.12			
10	QPSK	1	49	24.04			
10	QPSK	25	0	23.11			24.7
10	QPSK	25	12	23.18			
10	QPSK	25	25	23.16			
10	QPSK	50	0	23.15			24.7
10	16QAM	1	0	23.49			
10	16QAM	1	25	23.41			
10	16QAM	1	49	23.37			24.7
10	16QAM	25	0	22.10			
10	16QAM	25	12	22.09			
10	16QAM	25	25	22.19			23.7
10	16QAM	50	0	22.16			
10	64QAM	1	0	22.81			
10	64QAM	1	25	22.86			23.7
10	64QAM	1	49	22.73			
10	64QAM	25	0	21.72			
10	64QAM	25	12	21.81			22.7
10	64QAM	25	25	21.67			
10	64QAM	50	0	21.68			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.98	24.04	24.05	25.7
5	QPSK	1	12	24.14	24.19	24.14	
5	QPSK	1	24	24.08	24.07	24.05	
5	QPSK	12	0	23.13	23.12	23.08	24.7
5	QPSK	12	7	23.21	23.21	23.14	
5	QPSK	12	13	23.14	23.16	23.12	
5	QPSK	25	0	23.11	23.12	23.03	24.7
5	16QAM	1	0	23.40	23.37	23.34	
5	16QAM	1	12	23.47	23.44	23.43	
5	16QAM	1	24	23.45	23.34	23.39	24.7
5	16QAM	12	0	22.13	22.09	22.10	
5	16QAM	12	7	22.24	22.13	22.18	
5	16QAM	12	13	22.15	22.19	22.15	23.7
5	16QAM	25	0	22.17	22.07	22.08	
5	64QAM	1	0	22.75	22.83	22.82	
5	64QAM	1	12	22.89	22.72	22.82	23.7
5	64QAM	1	24	22.71	22.89	22.80	
5	64QAM	12	0	21.63	21.70	21.65	
5	64QAM	12	7	21.69	21.72	21.71	22.7
5	64QAM	12	13	21.75	21.67	21.65	
5	64QAM	25	0	21.71	21.66	21.61	



Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.25	24.20	24.11	25.7
10	QPSK	1	25	24.30	24.36	24.15	
10	QPSK	1	49	24.30	24.21	24.20	
10	QPSK	25	0	23.29	23.30	23.28	24.7
10	QPSK	25	12	23.40	23.30	23.28	
10	QPSK	25	25	23.38	23.36	23.44	
10	QPSK	50	0	23.35	23.29	23.30	24.7
10	16QAM	1	0	23.62	23.59	23.59	
10	16QAM	1	25	23.66	23.61	23.58	
10	16QAM	1	49	23.60	23.63	23.62	23.7
10	16QAM	25	0	22.29	22.27	22.30	
10	16QAM	25	12	22.41	22.37	22.28	
10	16QAM	25	25	22.44	22.35	22.45	23.7
10	16QAM	50	0	22.37	22.35	22.25	
10	64QAM	1	0	23.01	22.91	22.99	
10	64QAM	1	25	23.11	23.02	23.01	22.7
10	64QAM	1	49	23.05	23.02	22.93	
10	64QAM	25	0	21.81	21.82	21.78	
10	64QAM	25	12	21.95	21.88	21.82	22.7
10	64QAM	25	25	21.89	21.92	21.97	
10	64QAM	50	0	21.05	21.82	21.85	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.16	24.23	24.17	25.7
5	QPSK	1	12	24.32	24.33	24.24	
5	QPSK	1	24	24.30	24.32	24.28	
5	QPSK	12	0	23.28	23.30	23.29	24.7
5	QPSK	12	7	23.31	23.30	23.32	
5	QPSK	12	13	23.40	23.37	23.34	
5	QPSK	25	0	23.34	23.27	23.38	24.7
5	16QAM	1	0	23.61	23.57	23.51	
5	16QAM	1	12	23.64	23.63	23.59	
5	16QAM	1	24	23.62	23.61	23.59	23.7
5	16QAM	12	0	22.38	22.40	22.27	
5	16QAM	12	7	22.39	22.35	22.30	
5	16QAM	12	13	22.34	22.35	22.30	23.7
5	16QAM	25	0	22.35	22.38	22.37	
5	64QAM	1	0	22.76	22.83	23.01	
5	64QAM	1	12	23.01	23.08	22.96	23.7
5	64QAM	1	24	23.04	23.07	22.97	
5	64QAM	12	0	21.93	21.92	21.91	
5	64QAM	12	7	21.96	21.91	21.94	22.7
5	64QAM	12	13	21.92	21.96	21.92	
5	64QAM	25	0	21.86	21.84	21.91	



Band 25									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	17.99	18.00	17.88	19.7		
20	QPSK	1	49	17.89	17.96	17.84			
20	QPSK	1	99	17.92	17.94	17.86			
20	QPSK	50	0	18.04	18.02	17.93			
20	QPSK	50	24	18.09	18.14	17.93	19.7		
20	QPSK	50	50	18.05	18.08	17.92			
20	QPSK	100	0	18.11	18.11	17.95			
20	16QAM	1	0	18.35	18.39	18.24			
20	16QAM	1	49	18.30	18.33	18.17	19.7		
20	16QAM	1	99	18.27	18.34	18.22			
20	16QAM	50	0	18.05	18.07	17.96			
20	16QAM	50	24	18.12	18.15	17.98			
20	16QAM	50	50	18.08	18.12	18.03	19.7		
20	16QAM	100	0	18.09	18.11	17.93			
20	64QAM	1	0	18.18	18.16	18.09			
20	64QAM	1	49	18.07	18.17	18.06			
20	64QAM	1	99	18.14	18.18	18.16	19.7		
20	64QAM	50	0	18.08	18.07	17.98			
20	64QAM	50	24	18.15	18.15	17.97			
20	64QAM	50	50	18.09	18.11	18.05			
20	64QAM	100	0	18.10	18.10	17.97	19.7		
Channel				26115	26340	26615			
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	17.93	17.95	17.81	19.7		
15	QPSK	1	37	17.83	17.89	17.77			
15	QPSK	1	74	17.91	17.84	17.83			
15	QPSK	36	0	18.00	18.02	17.88			
15	QPSK	36	20	18.08	18.06	17.87	19.7		
15	QPSK	36	39	17.95	18.07	17.98			
15	QPSK	75	0	18.03	18.06	17.95			
15	16QAM	1	0	18.31	18.29	18.14			
15	16QAM	1	37	18.29	18.27	18.12	19.7		
15	16QAM	1	74	18.27	18.27	18.14			
15	16QAM	36	0	17.99	17.98	17.93			
15	16QAM	36	20	18.05	18.09	17.93			
15	16QAM	36	39	18.03	18.11	17.99	19.7		
15	16QAM	75	0	18.03	18.04	17.88			
15	64QAM	1	0	18.11	18.13	18.05			
15	64QAM	1	37	18.00	18.07	18.03			
15	64QAM	1	74	18.10	18.13	18.11	19.7		
15	64QAM	36	0	18.05	18.05	17.94			
15	64QAM	36	20	18.05	18.13	17.94			
15	64QAM	36	39	18.03	18.05	18.00			
15	64QAM	75	0	18.06	18.02	17.91	19.7		
Channel				26090	26340	26640			
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	17.95	17.96	17.87	19.7		
10	QPSK	1	25	17.87	17.90	17.84			
10	QPSK	1	49	17.82	17.90	17.76			
10	QPSK	25	0	18.02	17.95	17.91			
10	QPSK	25	12	18.01	18.04	17.90	19.7		
10	QPSK	25	25	18.05	18.02	18.01			
10	QPSK	50	0	18.10	18.02	17.90			
10	16QAM	1	0	18.35	18.30	18.17			
10	16QAM	1	25	18.26	18.27	18.16	19.7		
10	16QAM	1	49	18.19	18.27	18.14			
10	16QAM	25	0	18.04	18.06	17.94			
10	16QAM	25	12	18.08	18.11	17.98			
10	16QAM	25	25	18.08	18.08	17.98	19.7		
10	16QAM	50	0	18.06	18.02	17.90			
10	64QAM	1	0	18.17	18.15	18.03			
10	64QAM	1	25	17.98	18.11	18.03			
10	64QAM	1	49	18.13	18.11	18.16	19.7		
10	64QAM	25	0	18.02	18.05	17.94			
10	64QAM	25	12	18.11	18.07	17.95			
10	64QAM	25	25	18.08	18.04	18.02			
10	64QAM	50	0	18.08	18.09	17.85	19.7		
Channel				26065	26340	26665			
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	17.95	17.94	17.87	19.7		
5	QPSK	1	12	17.86	17.86	17.84			
5	QPSK	1	24	17.90	17.84	17.77			
5	QPSK	12	0	17.96	17.99	17.89			
5	QPSK	12	7	18.09	18.10	17.92	19.7		
5	QPSK	12	13	18.04	18.03	17.98			
5	QPSK	25	0	18.09	18.07	17.90			
5	16QAM	1	0	18.35	18.37	18.17			
5	16QAM	1	12	18.29	18.25	18.12	19.7		
5	16QAM	1	24	18.17	18.27	18.14			
5	16QAM	12	0	17.99	18.02	17.93			
5	16QAM	12	7	18.06	18.14	17.89			
5	16QAM	12	13	18.04	18.04	17.95	19.7		
5	16QAM	25	0	18.01	18.07	17.83			
5	64QAM	1	0	18.11	18.10	18.01			
5	64QAM	1	12	18.01	18.13	18.06			
5	64QAM	1	24	18.04	18.12	18.06	19.7		
5	64QAM	12	0	18.08	18.01	17.93			
5	64QAM	12	7	18.05	18.13	17.93			
5	64QAM	12	13	18.05	18.08	17.97			
5	64QAM	25	0	18.00	18.00	17.88	19.7		
Channel				26055	26340	26675			
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	17.86	17.91	17.86	19.7		
3	QPSK	1	8	17.88	17.90	17.79			
3	QPSK	1	14	17.84	17.93	17.84			
3	QPSK	8	0	17.94	17.94	17.87			
3	QPSK	8	4	18.03	18.06	17.86	19.7		
3	QPSK	8	7	18.05	18.04	17.94			
3	QPSK	15	0	18.02	18.01	17.94			
3	16QAM	1	0	18.31	18.34	18.20			
3	16QAM	1	8	18.23	18.32	18.13	19.7		
3	16QAM	1	14	18.18	18.31	18.14			
3	16QAM	8	0	17.98	18.02	17.87			
3	16QAM	8	4	18.02	18.07	17.96			
3	16QAM	8	7	18.06	18.09	18.02	19.7		
3	16QAM	15	0	18.04	18.09	17.90			
3	64QAM	1	0	18.11	18.07	18.03			
3	64QAM	1	8	18.04	18.17	17.97			
3	64QAM	1	14	18.10	18.15	18.06	19.7		
3	64QAM	8	0	18.03	18.03	17.93			
3	64QAM	8	4	18.06	18.10	17.90			
3	64QAM	8	7	18.02	18.11	18.02			
3	64QAM	15	0	18.07	18.04	17.91	19.7		
Channel				26047	26340	26683			
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	17.87	17.86	17.76	19.7		
1.4	QPSK	1	3	18.00	18.03	17.88			
1.4	QPSK	1	5	17.94	17.99	17.83			
1.4	QPSK	3	0	17.81	17.82	17.78			
1.4	QPSK	3	1	17.82	18.05	17.81	19.7		
1.4	QPSK	3	3	17.97	18.00	17.85			
1.4	QPSK	6	0	18.02	18.02	17.88			
1.4	16QAM	1	0	18.10	18.10	18.00	19.7		
1.4	16QAM	1	3	18.32	18.33	18.17			
1.4	16QAM	1	5	18.21	18.26	18.11			
1.4	16QAM	3	0	17.94	17.95	17.87	19.7		
1.4	16QAM	3	1	18.00	18.03	17.92			
1.4	16QAM	3	3	17.88	18.02	17.90			
1.4	16QAM	6	0	18.12	18.12	17.97	19.7		
1.4	16QAM	1	0	18.10	18.06	18.00			
1.4	16QAM	1	3	18.19	18.21	18.07			
1.4	64QAM	3	1	18.14	18.14	18.01	19.7		
1.4	64QAM	3	1	18.18	18.18	18.04			
1.4	64QAM	3	1	18.13	18.16	18.05			



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.04	24.05	24.03	25.7
15	QPSK	1	37	23.98	24.02	24.02	
15	QPSK	1	74	24.10	24.33	23.96	
15	QPSK	36	0	23.17	23.22	23.18	24.7
15	QPSK	36	20	23.23	23.18	23.12	
15	QPSK	36	39	23.19	23.19	23.15	
15	QPSK	75	0	23.23	23.17	23.12	24.7
15	16QAM	1	0	23.36	23.36	23.38	
15	16QAM	1	37	23.38	23.42	23.42	
15	16QAM	1	74	23.43	23.44	23.29	23.7
15	16QAM	36	0	22.16	22.22	22.16	
15	16QAM	36	20	22.17	22.15	22.16	
15	16QAM	36	39	22.14	22.17	22.23	23.7
15	16QAM	75	0	22.17	22.15	22.22	
15	64QAM	1	0	22.79	22.70	22.74	
15	64QAM	1	37	22.72	22.80	22.79	22.7
15	64QAM	1	74	22.80	22.76	22.16	
15	64QAM	36	0	21.64	21.76	21.77	
15	64QAM	36	20	21.66	21.73	21.65	22.7
15	64QAM	36	39	21.67	21.79	21.78	
15	64QAM	75	0	21.76	21.65	21.77	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.13	24.13	24.21	25.7
10	QPSK	1	25	24.03	24.13	24.12	
10	QPSK	1	49	24.09	24.17	24.09	
10	QPSK	25	0	23.22	23.12	23.21	24.7
10	QPSK	25	12	23.20	23.20	23.20	
10	QPSK	25	25	23.16	23.23	23.25	
10	QPSK	50	0	23.23	23.14	23.16	24.7
10	16QAM	1	0	23.45	23.52	23.59	
10	16QAM	1	25	23.55	23.51	23.52	
10	16QAM	1	49	23.53	23.49	23.45	23.7
10	16QAM	25	0	22.22	22.20	22.21	
10	16QAM	25	12	22.23	22.21	22.15	
10	16QAM	25	25	22.17	22.23	22.08	23.7
10	16QAM	50	0	22.20	22.19	22.19	
10	64QAM	1	0	22.96	22.76	22.91	
10	64QAM	1	25	22.81	22.91	22.98	23.7
10	64QAM	1	49	22.55	22.91	22.96	
10	64QAM	25	0	21.76	21.73	21.75	
10	64QAM	25	12	21.62	21.75	21.78	22.7
10	64QAM	25	25	21.70	21.75	21.48	
10	64QAM	50	0	21.74	21.68	21.72	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.31	24.13	24.11	25.7
5	QPSK	1	12	24.24	24.19	24.09	
5	QPSK	1	24	24.07	24.24	24.16	
5	QPSK	12	0	23.33	23.23	23.21	24.7
5	QPSK	12	7	23.27	23.27	23.22	
5	QPSK	12	13	23.26	23.24	23.11	
5	QPSK	25	0	23.28	23.13	23.20	24.7
5	16QAM	1	0	23.63	23.43	23.45	
5	16QAM	1	12	23.43	23.51	23.32	
5	16QAM	1	24	23.44	23.49	23.31	23.7
5	16QAM	12	0	22.38	22.22	22.22	
5	16QAM	12	7	22.32	22.24	22.21	
5	16QAM	12	13	22.21	22.25	22.18	23.7
5	16QAM	25	0	22.22	22.21	22.21	
5	64QAM	1	0	23.02	22.85	22.89	
5	64QAM	1	12	22.84	22.89	22.19	23.7
5	64QAM	1	24	22.68	22.92	22.34	
5	64QAM	12	0	21.90	21.94	21.65	
5	64QAM	12	7	21.89	21.81	21.18	22.7
5	64QAM	12	13	21.75	21.82	21.02	
5	64QAM	25	0	21.82	21.69	21.36	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.19	24.16	24.20	25.7
3	QPSK	1	8	24.24	24.27	24.13	
3	QPSK	1	14	24.07	24.18	24.11	
3	QPSK	8	0	23.34	23.18	23.17	24.7
3	QPSK	8	4	23.25	23.25	23.22	
3	QPSK	8	7	23.29	23.24	23.10	
3	QPSK	15	0	23.24	23.18	23.13	24.7
3	16QAM	1	0	23.53	23.45	23.50	
3	16QAM	1	8	23.59	23.51	23.39	
3	16QAM	1	14	23.50	23.53	23.35	23.7
3	16QAM	8	0	22.35	22.23	22.26	
3	16QAM	8	4	22.30	22.37	22.25	
3	16QAM	8	7	22.27	22.33	22.13	23.7
3	16QAM	15	0	22.38	22.17	22.16	
3	64QAM	1	0	22.92	22.87	22.25	
3	64QAM	1	8	23.00	22.93	22.12	23.7
3	64QAM	1	14	22.89	22.94	22.30	
3	64QAM	8	0	21.87	21.79	21.08	
3	64QAM	8	4	21.84	21.88	21.07	22.7
3	64QAM	8	7	21.88	21.80	21.14	
3	64QAM	15	0	21.81	21.79	21.12	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.16	24.04	24.05	25.7
1.4	QPSK	1	3	24.24	24.13	24.07	
1.4	QPSK	1	5	24.12	24.08	23.93	
1.4	QPSK	3	0	24.23	24.06	24.02	24.7
1.4	QPSK	3	1	24.21	24.05	24.03	
1.4	QPSK	3	3	24.16	24.14	23.99	
1.4	QPSK	6	0	23.25	23.20	23.04	24.7
1.4	16QAM	1	0	23.52	23.37	23.36	
1.4	16QAM	1	3	23.54	23.47	23.35	
1.4	16QAM	1	5	23.41	23.39	23.29	24.7
1.4	16QAM	3	0	23.23	23.16	23.12	
1.4	16QAM	3	1	23.23	23.20	23.14	
1.4	16QAM	3	3	23.27	23.11	23.09	23.7
1.4	16QAM	6	0	22.34	22.26	22.14	
1.4	64QAM	1	0	22.85	22.81	22.16	
1.4	64QAM	1	3	22.96	22.89	22.39	23.7
1.4	64QAM	1	5	22.79	22.75	22.41	
1.4	64QAM	3	0	22.92	22.75	22.11	
1.4	64QAM	3	1	22.90	22.81	22.20	22.7
1.4	64QAM	3	3	22.84	22.75	22.38	
1.4	64QAM	6	0	21.75	21.73	21.14	



Band 30							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		21.11		
10	QPSK	1	25		21.10		
10	QPSK	1	49		21.07		
10	QPSK	25	0		21.14		
10	QPSK	25	12		21.19		
10	QPSK	25	25		21.27		
10	QPSK	50	0		21.30		22.4
10	16QAM	1	0		21.40		
10	16QAM	1	25		21.39		
10	16QAM	1	49		21.38		21.4
10	16QAM	25	0		20.33		
10	16QAM	25	12		20.37		
10	16QAM	25	25		20.37		21.4
10	16QAM	50	0		20.37		
10	64QAM	1	0		20.54		
10	64QAM	1	25		20.66		21.4
10	64QAM	1	49		20.49		
10	64QAM	25	0		19.37		
10	64QAM	25	12		19.44		20.4
10	64QAM	25	25		19.45		
10	64QAM	50	0		19.43		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.90	20.93	20.99	22.4
5	QPSK	1	12	21.04	21.09	21.01	
5	QPSK	1	24	21.08	21.00	21.03	
5	QPSK	12	0	21.05	21.04	21.06	22.4
5	QPSK	12	7	21.16	21.09	21.12	
5	QPSK	12	13	21.15	21.08	21.11	
5	QPSK	25	0	21.13	21.08	21.11	21.4
5	16QAM	1	0	21.26	21.32	21.31	
5	16QAM	1	12	21.36	21.39	21.34	
5	16QAM	1	24	21.39	21.37	21.39	21.4
5	16QAM	12	0	20.35	20.38	20.40	
5	16QAM	12	7	20.47	20.44	20.46	
5	16QAM	12	13	20.46	20.41	20.43	20.4
5	16QAM	25	0	20.44	20.41	20.40	
5	64QAM	1	0	20.50	20.53	20.58	
5	64QAM	1	12	20.57	20.59	20.58	21.4
5	64QAM	1	24	20.64	20.60	20.61	
5	64QAM	12	0	19.41	19.42	19.43	
5	64QAM	12	7	19.52	19.48	19.50	20.4
5	64QAM	12	13	19.50	19.46	19.47	
5	64QAM	25	0	19.47	19.43	19.45	



Band 66											
Ant 0											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1775					
20	QPSK	1	0	20.05	19.96	19.93	21.9				
20	QPSK	1	49	19.91	19.90	19.92					
20	QPSK	1	99	19.92	19.91	19.90					
20	QPSK	50	0	19.98	19.93	19.90					
20	QPSK	50	24	20.17	20.00	20.03	21.9				
20	QPSK	50	50	20.05	19.90	19.91					
20	QPSK	100	0	20.02	19.90	19.90					
20	16QAM	1	0	20.29	20.20	20.14					
20	16QAM	1	49	20.21	20.05	20.08	21.9				
20	16QAM	1	99	20.29	20.05	19.96					
20	16QAM	50	0	20.00	19.92	19.91					
20	16QAM	50	24	20.06	19.93	19.97					
20	16QAM	50	50	20.05	19.90	19.92	21.9				
20	16QAM	100	0	20.06	19.91	19.92					
20	64QAM	1	0	20.12	20.01	19.98					
20	64QAM	1	49	20.01	19.92	19.92					
20	64QAM	1	99	20.11	19.98	19.92	21.9				
20	64QAM	50	0	20.00	19.92	19.92					
20	64QAM	50	24	20.07	19.93	19.97					
20	64QAM	50	50	20.05	19.91	19.93					
20	64QAM	100	0	20.04	19.90	19.87					
Channel				132047	132322	132597	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	19.97	19.97	19.92	21.9				
15	QPSK	1	37	19.91	19.95	19.94					
15	QPSK	1	74	19.92	19.94	19.93					
15	QPSK	36	0	20.07	19.93	19.96					
15	QPSK	36	20	20.12	20.00	19.96	21.9				
15	QPSK	36	39	20.08	19.99	19.95					
15	QPSK	75	0	20.02	19.96	19.96					
15	16QAM	1	0	20.22	20.18	20.18					
15	16QAM	1	37	20.21	20.15	20.18	21.9				
15	16QAM	1	74	20.20	20.08	20.02					
15	16QAM	36	0	20.06	19.97	19.92					
15	16QAM	36	20	20.15	19.95	20.02					
15	16QAM	36	39	20.12	19.93	20.02	21.9				
15	16QAM	75	0	20.07	19.96	20.00					
15	64QAM	1	0	20.17	20.09	19.98					
15	64QAM	1	37	20.05	20.00	20.01					
15	64QAM	1	74	20.19	20.00	19.93	21.9				
15	64QAM	36	0	20.02	19.90	19.95					
15	64QAM	36	20	20.14	19.93	20.07					
15	64QAM	36	39	20.12	19.99	19.98					
15	64QAM	75	0	20.09	19.96	19.95					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	19.99	19.96	19.91	21.9				
10	QPSK	1	25	19.91	19.92	19.92					
10	QPSK	1	49	19.95	19.90	19.92					
10	QPSK	25	0	20.03	19.90	20.00					
10	QPSK	25	12	20.12	19.97	19.99	21.9				
10	QPSK	25	25	20.13	19.97	19.95					
10	QPSK	50	0	20.04	19.91	19.96					
10	16QAM	1	0	20.22	20.22	20.23					
10	16QAM	1	25	20.21	20.07	20.09	21.9				
10	16QAM	1	49	20.25	20.12	20.02					
10	16QAM	25	0	20.00	19.97	19.97					
10	16QAM	25	12	20.07	20.03	20.06					
10	16QAM	25	25	20.06	19.95	20.00	21.9				
10	16QAM	50	0	20.14	19.93	19.95					
10	64QAM	1	0	20.13	20.10	20.08					
10	64QAM	1	25	20.04	20.02	19.92					
10	64QAM	1	49	20.21	19.98	19.92	21.9				
10	64QAM	25	0	20.02	19.90	19.99					
10	64QAM	25	12	20.12	19.95	20.03					
10	64QAM	25	25	20.11	19.93	19.93					
10	64QAM	50	0	20.05	19.91	19.93					
Channel				131997	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	20.02	19.95	19.91	21.9				
5	QPSK	1	12	19.91	19.90	19.91					
5	QPSK	1	24	19.96	19.91	19.92					
5	QPSK	12	0	20.08	19.97	19.97					
5	QPSK	12	7	20.10	19.94	20.00	21.9				
5	QPSK	12	13	20.10	19.91	19.95					
5	QPSK	25	0	20.10	19.92	19.93					
5	16QAM	1	0	20.26	20.26	20.24					
5	16QAM	1	12	20.24	20.11	20.09	21.9				
5	16QAM	1	24	20.25	20.12	20.06					
5	16QAM	12	0	20.02	19.95	19.94					
5	16QAM	12	7	20.13	20.00	20.06					
5	16QAM	12	13	20.07	19.99	20.02	21.9				
5	16QAM	25	0	20.14	19.95	19.99					
5	64QAM	1	0	20.17	20.04	20.04					
5	64QAM	1	12	20.02	19.92	19.97					
5	64QAM	1	24	20.19	20.00	19.96	21.9				
5	64QAM	12	0	20.09	19.97	20.00					
5	64QAM	12	7	20.17	19.99	19.97					
5	64QAM	12	13	20.15	19.97	20.03					
5	64QAM	25	0	20.11	19.93	19.94					
Channel				131987	132322	132657	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	19.97	19.92	19.91	21.9				
3	QPSK	1	8	19.95	19.90	19.91					
3	QPSK	1	14	19.92	19.90	19.91					
3	QPSK	8	0	20.03	19.96	19.92					
3	QPSK	8	4	20.11	19.96	19.99	21.9				
3	QPSK	8	7	20.09	19.95	20.00					
3	QPSK	15	0	20.04	19.97	19.98					
3	16QAM	1	0	20.23	20.25	20.15					
3	16QAM	1	8	20.27	20.08	20.18	21.9				
3	16QAM	1	14	20.24	20.07	20.03					
3	16QAM	8	0	20.00	19.98	20.01					
3	16QAM	8	4	20.12	19.99	20.02					
3	16QAM	8	7	20.06	19.98	19.92	21.9				
3	16QAM	15	0	20.16	20.00	19.94					
3	64QAM	1	0	20.22	20.04	20.08					
3	64QAM	1	8	20.04	20.02	19.96					
3	64QAM	1	14	20.21	19.98	20.01	21.9				
3	64QAM	8	0	20.07	19.92	19.97					
3	64QAM	8	4	20.14	20.01	20.04					
3	64QAM	8	7	20.08	19.95	19.93					
3	64QAM	15	0	20.14	19.92	19.88					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	19.96	19.91	19.92	21.9				
1.4	QPSK	1	3	20.04	19.90	19.95					
1.4	QPSK	1	5	19.97	19.91	19.93					
1.4	QPSK	3	0	20.01	19.92	19.93					
1.4	QPSK	3	1	20.07	19.90	19.93	21.9				
1.4	QPSK	3	3	20.01	19.90	19.91					
1.4	QPSK	6	0	20.09	19.94	19.95					
1.4	16QAM	1	0	20.2							



Band 71							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.35	24.17	24.20	25.7
20	QPSK	1	49	24.15	24.16	24.15	
20	QPSK	1	99	24.12	24.09	24.08	
20	QPSK	50	0	23.28	23.24	23.26	24.7
20	QPSK	50	24	23.33	23.28	23.17	
20	QPSK	50	50	23.32	23.27	23.27	
20	QPSK	100	0	23.33	23.32	23.28	24.7
20	16QAM	1	0	23.68	23.52	23.53	
20	16QAM	1	49	23.55	23.54	23.40	
20	16QAM	1	99	23.49	23.49	23.45	23.7
20	16QAM	50	0	22.34	22.30	22.30	
20	16QAM	50	24	22.34	22.27	22.24	
20	16QAM	50	50	22.30	22.25	22.28	22.7
20	16QAM	100	0	22.32	22.30	22.26	
20	64QAM	1	0	22.18	22.70	23.01	
20	64QAM	1	49	22.76	22.59	22.38	22.7
20	64QAM	1	99	23.01	22.51	22.88	
20	64QAM	50	0	20.92	21.86	21.50	
20	64QAM	50	24	21.49	21.70	21.76	22.7
20	64QAM	50	50	21.96	21.50	21.85	
20	64QAM	100	0	21.50	21.89	21.87	
Channel				133197	133287	133387	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.33	24.17	24.13	25.7
15	QPSK	1	37	24.01	24.14	24.11	
15	QPSK	1	74	24.16	24.11	24.11	
15	QPSK	36	0	23.24	23.26	23.27	24.7
15	QPSK	36	20	23.29	23.28	23.37	
15	QPSK	36	39	23.31	23.33	23.26	
15	QPSK	75	0	23.34	23.30	23.20	24.7
15	16QAM	1	0	23.56	23.53	23.49	
15	16QAM	1	37	23.28	23.50	23.41	
15	16QAM	1	74	23.38	23.43	23.38	23.7
15	16QAM	36	0	22.15	22.31	22.26	
15	16QAM	36	20	22.31	22.25	22.34	
15	16QAM	36	39	22.38	22.33	22.28	23.7
15	16QAM	75	0	22.37	22.19	22.18	
15	64QAM	1	0	22.13	22.80	22.90	
15	64QAM	1	37	21.73	23.04	23.04	23.7
15	64QAM	1	74	22.53	22.63	22.97	
15	64QAM	36	0	20.81	21.92	21.51	
15	64QAM	36	20	20.88	21.74	21.92	22.7
15	64QAM	36	39	21.49	21.44	21.88	
15	64QAM	75	0	21.38	21.79	21.77	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.30	24.14	24.17	25.7
10	QPSK	1	25	24.11	24.10	24.12	
10	QPSK	1	49	24.13	24.14	24.01	
10	QPSK	25	0	23.36	23.28	23.22	24.7
10	QPSK	25	12	23.13	23.25	23.22	
10	QPSK	25	25	23.19	23.31	23.23	
10	QPSK	50	0	23.29	23.18	23.16	24.7
10	16QAM	1	0	23.62	23.47	23.53	
10	16QAM	1	25	23.47	23.51	23.45	
10	16QAM	1	49	23.46	23.44	23.39	23.7
10	16QAM	25	0	22.05	22.17	22.16	
10	16QAM	25	12	22.07	22.24	22.20	
10	16QAM	25	25	22.00	22.24	22.19	23.7
10	16QAM	50	0	22.28	22.17	22.22	
10	64QAM	1	0	21.83	22.96	22.96	
10	64QAM	1	25	21.88	23.08	23.07	22.7
10	64QAM	1	49	22.12	22.23	22.55	
10	64QAM	25	0	20.70	21.87	21.82	
10	64QAM	25	12	20.70	21.74	21.85	22.7
10	64QAM	25	25	20.68	21.37	21.72	
10	64QAM	50	0	20.73	21.60	21.80	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.03	24.23	24.23	25.7
5	QPSK	1	12	24.13	24.24	24.12	
5	QPSK	1	24	24.11	24.10	24.10	
5	QPSK	12	0	23.15	23.26	23.19	24.7
5	QPSK	12	7	23.15	23.32	23.26	
5	QPSK	12	13	23.13	23.22	23.18	
5	QPSK	25	0	23.15	23.26	23.20	24.7
5	16QAM	1	0	23.29	23.53	23.52	
5	16QAM	1	12	23.38	23.54	23.50	
5	16QAM	1	24	23.40	23.49	23.42	23.7
5	16QAM	12	0	22.04	22.30	22.29	
5	16QAM	12	7	22.12	22.30	22.29	
5	16QAM	12	13	22.25	22.25	22.21	23.7
5	16QAM	25	0	22.06	22.21	22.22	
5	64QAM	1	0	21.70	22.98	23.00	
5	64QAM	1	12	21.82	22.93	22.81	22.7
5	64QAM	1	24	22.03	22.71	22.37	
5	64QAM	12	0	20.74	21.93	21.85	
5	64QAM	12	7	20.91	21.89	21.91	22.7
5	64QAM	12	13	20.87	21.70	21.89	
5	64QAM	25	0	20.69	21.73	21.61	



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. 7	Power Middle Ch. 7	Power High Ch. 7	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.34	22.34	22.37	23.8
20	QPSK	1	49	22.32	22.38	22.35	
20	QPSK	1	99	22.34	22.39	22.35	
20	QPSK	50	0	22.38	22.44	22.47	23.8
20	QPSK	50	24	22.47	22.49	22.49	
20	QPSK	50	50	22.47	22.50	22.51	
20	QPSK	100	0	22.50	22.47	22.50	23.8
20	16QAM	1	0	22.59	22.69	22.69	
20	16QAM	1	49	22.63	22.76	22.63	
20	16QAM	1	99	22.65	22.68	22.64	23.7
20	16QAM	50	0	22.25	22.33	22.38	
20	16QAM	50	24	22.35	22.37	22.40	
20	16QAM	50	50	22.38	22.40	22.41	23.7
20	16QAM	100	0	22.35	22.35	22.40	
20	64QAM	1	0	22.36	22.46	22.51	
20	64QAM	1	49	22.39	22.52	22.35	23.7
20	64QAM	1	99	22.43	22.47	22.42	
20	64QAM	50	0	21.26	21.36	21.39	
20	64QAM	50	24	21.35	21.39	21.41	22.7
20	64QAM	50	50	21.37	21.39	21.44	
20	64QAM	100	0	21.37	21.38	21.41	
Channel				1867.5	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.23	22.38	22.37	23.8
15	QPSK	1	37	22.22	22.39	22.31	
15	QPSK	1	74	22.30	22.40	22.38	
15	QPSK	36	0	22.27	22.41	22.44	23.8
15	QPSK	36	20	22.41	22.48	22.47	
15	QPSK	36	39	22.40	22.47	22.51	
15	QPSK	75	0	22.38	22.47	22.47	23.8
15	16QAM	1	0	22.47	22.67	22.64	
15	16QAM	1	37	22.52	22.70	22.58	
15	16QAM	1	74	22.60	22.69	22.63	23.7
15	16QAM	36	0	22.15	22.31	22.33	
15	16QAM	36	20	22.28	22.37	22.37	
15	16QAM	36	39	22.29	22.37	22.39	23.7
15	16QAM	75	0	22.27	22.36	22.38	
15	64QAM	1	0	22.28	22.47	22.47	
15	64QAM	1	37	22.31	22.52	22.29	23.7
15	64QAM	1	74	22.40	22.46	22.49	
15	64QAM	36	0	21.19	21.35	21.33	
15	64QAM	36	20	21.32	21.36	21.38	22.7
15	64QAM	36	39	21.37	21.44	21.43	
15	64QAM	75	0	21.28	21.38	21.38	
Channel				18650	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.21	22.39	22.33	23.8
10	QPSK	1	25	22.17	22.36	22.28	
10	QPSK	1	49	22.25	22.39	22.35	
10	QPSK	25	0	22.28	22.40	22.40	23.8
10	QPSK	25	12	22.36	22.45	22.46	
10	QPSK	25	25	22.39	22.46	22.51	
10	QPSK	50	0	22.34	22.47	22.47	23.8
10	16QAM	1	0	22.54	22.71	22.71	
10	16QAM	1	25	22.54	22.72	22.68	
10	16QAM	1	49	22.61	22.75	22.75	23.7
10	16QAM	25	0	22.18	22.34	22.34	
10	16QAM	25	12	22.23	22.39	22.41	
10	16QAM	25	25	22.29	22.41	22.38	23.7
10	16QAM	50	0	22.23	22.37	22.39	
10	64QAM	1	0	22.39	22.49	22.40	
10	64QAM	1	25	22.40	22.58	22.49	23.7
10	64QAM	1	49	22.40	22.53	22.52	
10	64QAM	25	0	21.23	21.38	21.38	
10	64QAM	25	12	21.27	21.42	21.41	22.7
10	64QAM	25	25	21.29	21.41	21.44	
10	64QAM	50	0	21.27	21.41	21.42	
Channel				1862.5	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.18	22.31	22.30	23.8
5	QPSK	1	12	22.27	22.43	22.38	
5	QPSK	1	24	22.23	22.47	22.39	
5	QPSK	12	0	22.29	22.43	22.41	23.8
5	QPSK	12	7	22.35	22.48	22.49	
5	QPSK	12	13	22.33	22.52	22.46	
5	QPSK	25	0	22.33	22.43	22.43	23.8
5	16QAM	1	0	22.50	22.68	22.67	
5	16QAM	1	12	22.54	22.73	22.74	
5	16QAM	1	24	22.56	22.74	22.72	23.7
5	16QAM	12	0	22.20	22.38	22.37	
5	16QAM	12	7	22.26	22.40	22.40	
5	16QAM	12	13	22.23	22.50	22.41	23.7
5	16QAM	25	0	22.19	22.39	22.37	
5	64QAM	1	0	22.37	22.56	22.51	
5	64QAM	1	12	22.34	22.57	22.50	23.7
5	64QAM	1	24	22.39	22.61	22.54	
5	64QAM	12	0	21.23	21.41	21.39	
5	64QAM	12	7	21.29	21.48	21.47	22.7
5	64QAM	12	13	21.26	21.51	21.43	
5	64QAM	25	0	21.21	21.38	21.39	
Channel				18615	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.15	22.26	22.21	23.8
3	QPSK	1	8	22.24	22.36	22.36	
3	QPSK	1	14	22.18	22.46	22.39	
3	QPSK	8	0	22.28	22.41	22.41	23.8
3	QPSK	8	4	22.28	22.48	22.39	
3	QPSK	8	7	22.30	22.42	22.43	
3	QPSK	15	0	22.28	22.39	22.36	23.8
3	16QAM	1	0	22.48	22.62	22.61	
3	16QAM	1	8	22.54	22.71	22.68	
3	16QAM	1	14	22.52	22.73	22.75	23.7
3	16QAM	8	0	22.11	22.37	22.37	
3	16QAM	8	4	22.19	22.32	22.36	
3	16QAM	8	7	22.17	22.49	22.39	23.7
3	16QAM	15	0	22.15	22.30	22.27	
3	64QAM	1	0	22.29	22.47	22.43	
3	64QAM	1	8	22.29	22.53	22.46	23.7
3	64QAM	1	14	22.36	22.52	22.51	
3	64QAM	8	0	21.21	21.33	21.29	
3	64QAM	8	4	21.24	21.46	21.41	22.7
3	64QAM	8	7	21.18	21.41	21.35	
3	64QAM	15	0	21.18	21.28	21.34	
Channel				18607	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.08	22.28	22.19	23.8
1.4	QPSK	1	3	22.13	22.30	22.25	
1.4	QPSK	1	5	22.07	22.26	22.24	
1.4	QPSK	3	0	22.10	22.32	22.25	23.8
1.4	QPSK	3	1	22.17	22.36	22.27	
1.4	QPSK	3	3	22.11	22.33	22.24	
1.4	QPSK	6	0	22.17	22.38	22.30	23.8
1.4	16QAM	1	0	22.42	22.61	22.56	
1.4	16QAM	1	3	22.49	22.66	22.64	
1.4	16QAM	1	5	22.43	22.62	22.58	23.8
1.4	16QAM	3	0	22.23	22.43	22.34	
1.4	16QAM	3	1	22.29	22.50	22.41	
1.4	16QAM	3	3	22.21	22.42	22.36	23.7
1.4	16QAM	6	0	22.10	22.37	22.28	
1.4	64QAM	1	0	22.21	22.45	22.37	
1.4	64QAM	1	3	22.27	22.51	22.41	23.7
1.4	64QAM	1	5	22.21	22.45	22.37	
1.4	64QAM	3	0	22.17	22.39	22.33	
1.4	64QAM	3	1	22.26	22.44	22.37	23.7
1.4	64QAM	3	3	22.20	22.40	22.34	
1.4	64QAM	6	0	21.06	21.29	21.26	



Band 4											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)				
Channel				20050	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	23.63	24.08	23.86	25.1				
20	QPSK	1	49	23.72	23.70	23.71					
20	QPSK	1	99	23.73	23.71	23.72					
20	QPSK	50	0	23.37	23.36	23.27	24.7				
20	QPSK	50	24	23.43	23.38	23.26					
20	QPSK	50	50	23.35	23.27	23.20					
20	QPSK	100	0	23.36	23.43	23.15	24.7				
20	16QAM	1	0	23.65	23.66	23.60					
20	16QAM	1	49	23.52	23.46	23.38					
20	16QAM	1	99	23.59	23.44	23.32	23.7				
20	16QAM	50	0	22.37	22.38	22.28					
20	16QAM	50	24	22.40	22.39	22.28					
20	16QAM	50	50	22.35	22.31	22.20	22.7				
20	16QAM	100	0	22.37	22.41	22.17					
20	64QAM	1	0	22.46	22.50	22.44					
20	64QAM	1	49	22.37	22.38	22.27	22.7				
20	64QAM	1	99	22.50	22.37	22.31					
20	64QAM	50	0	21.39	21.40	21.30					
20	64QAM	50	24	21.41	21.41	21.29	22.7				
20	64QAM	50	50	21.37	21.30	21.22					
20	64QAM	100	0	21.42	21.35	21.22					
Channel				20050	20175	20300	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	23.72	23.74	23.70	25.1				
15	QPSK	1	37	23.74	23.72	23.70					
15	QPSK	1	74	23.72	23.70	23.71					
15	QPSK	36	0	23.39	23.40	23.23	24.7				
15	QPSK	36	20	23.39	23.35	23.16					
15	QPSK	36	39	23.35	23.28	23.16					
15	QPSK	75	0	23.38	23.40	23.18	24.7				
15	16QAM	1	0	23.64	23.65	23.55					
15	16QAM	1	37	23.50	23.47	23.39					
15	16QAM	1	74	23.55	23.45	23.33	23.7				
15	16QAM	36	0	22.43	22.36	22.24					
15	16QAM	36	20	22.37	22.34	22.16					
15	16QAM	36	39	22.34	22.28	22.20	23.7				
15	16QAM	75	0	22.38	22.41	22.18					
15	64QAM	1	0	22.52	22.49	22.43					
15	64QAM	1	37	22.42	22.36	22.31	22.7				
15	64QAM	1	74	22.43	22.38	22.25					
15	64QAM	36	0	21.44	21.44	21.27					
15	64QAM	36	20	21.38	21.43	21.19	22.7				
15	64QAM	36	39	21.38	21.32	21.21					
15	64QAM	75	0	21.40	21.36	21.19					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	23.74	23.74	23.70	25.1				
10	QPSK	1	25	23.71	23.71	23.70					
10	QPSK	1	49	23.73	23.74	23.70					
10	QPSK	25	0	23.34	23.29	23.10	24.7				
10	QPSK	25	12	23.38	23.39	23.16					
10	QPSK	25	25	23.38	23.38	23.21					
10	QPSK	50	0	23.40	23.38	23.17	24.7				
10	16QAM	1	0	23.65	23.61	23.49					
10	16QAM	1	25	23.61	23.59	23.44					
10	16QAM	1	49	23.65	23.60	23.47	23.7				
10	16QAM	25	0	22.35	22.25	22.12					
10	16QAM	25	12	22.40	22.40	22.17					
10	16QAM	25	25	22.38	22.31	22.22	23.7				
10	16QAM	50	0	22.38	22.37	22.16					
10	64QAM	1	0	22.52	22.49	22.35					
10	64QAM	1	25	22.51	22.52	22.38	22.7				
10	64QAM	1	49	22.57	22.50	22.35					
10	64QAM	25	0	21.36	21.32	21.16					
10	64QAM	25	12	21.43	21.45	21.19	22.7				
10	64QAM	25	25	21.42	21.39	21.26					
10	64QAM	50	0	21.43	21.42	21.22					
Channel				19975	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	23.74	23.71	23.70	25.1				
5	QPSK	1	12	23.72	23.70	23.70					
5	QPSK	1	24	23.70	23.74	23.72					
5	QPSK	12	0	23.37	23.30	23.20	24.7				
5	QPSK	12	7	23.39	23.37	23.21					
5	QPSK	12	13	23.37	23.36	23.21					
5	QPSK	25	0	23.35	23.37	23.22	24.7				
5	16QAM	1	0	23.61	23.53	23.44					
5	16QAM	1	12	23.63	23.58	23.45					
5	16QAM	1	24	23.65	23.60	23.45	23.7				
5	16QAM	12	0	22.38	22.29	22.21					
5	16QAM	12	7	22.45	22.38	22.23					
5	16QAM	12	13	22.41	22.38	22.20	23.7				
5	16QAM	25	0	22.40	22.37	22.22					
5	64QAM	1	0	22.53	22.49	22.35					
5	64QAM	1	12	22.55	22.50	22.34	22.7				
5	64QAM	1	24	22.60	22.54	22.36					
5	64QAM	12	0	21.45	21.35	21.27					
5	64QAM	12	7	21.45	21.44	21.30	22.7				
5	64QAM	12	13	21.47	21.39	21.27					
5	64QAM	25	0	21.39	21.39	21.21					
Channel				19965	20175	20385	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	23.70	23.71	23.72	25.1				
3	QPSK	1	8	23.70	23.70	23.70					
3	QPSK	1	14	23.70	23.71	23.72					
3	QPSK	8	0	23.28	23.24	23.19	24.7				
3	QPSK	8	4	23.29	23.36	23.20					
3	QPSK	8	7	23.33	23.28	23.13					
3	QPSK	15	0	23.31	23.35	23.13	24.7				
3	16QAM	1	0	23.59	23.46	23.43					
3	16QAM	1	8	23.53	23.58	23.44					
3	16QAM	1	14	23.63	23.60	23.39	23.7				
3	16QAM	8	0	22.30	22.27	22.14					
3	16QAM	8	4	22.35	22.35	22.20					
3	16QAM	8	7	22.31	22.31	22.20	23.7				
3	16QAM	15	0	22.37	22.32	22.15					
3	64QAM	1	0	22.50	22.41	22.28					
3	64QAM	1	8	22.49	22.48	22.27	22.7				
3	64QAM	1	14	22.54	22.46	22.31					
3	64QAM	8	0	21.36	21.27	21.17					
3	64QAM	8	4	21.43	21.38	21.21	22.7				
3	64QAM	8	7	21.38	21.36	21.25					
3	64QAM	15	0	21.39	21.35	21.18					
Channel				19957	20175	20393	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	23.72	23.70	23.70	25.1				
1.4	QPSK	1	3	23.73	23.71	23.71					
1.4	QPSK	1	5	23.72	23.71	23.70					
1.4	QPSK	3	0	23.73	23.70	23.70	24.7				
1.4	QPSK	3	1	23.75	23.70	23.72					
1.4	QPSK	3	3	23.74	23.74	23.71					



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.43	24.42	24.42	25.7
10	QPSK	1	25	24.34	24.44	24.43	
10	QPSK	1	49	24.44	24.54	24.20	
10	QPSK	25	0	23.47	23.49	23.49	24.7
10	QPSK	25	12	23.52	23.58	23.57	
10	QPSK	25	25	23.49	23.58	23.47	
10	QPSK	50	0	23.54	23.49	23.60	24.7
10	16QAM	1	0	23.81	23.83	23.86	
10	16QAM	1	25	23.70	23.84	23.83	
10	16QAM	1	49	23.81	23.92	23.71	23.7
10	16QAM	25	0	22.45	22.59	22.54	
10	16QAM	25	12	22.53	22.52	22.54	
10	16QAM	25	25	22.56	22.55	22.57	23.7
10	16QAM	50	0	22.51	22.50	22.49	
10	64QAM	1	0	22.59	22.66	22.64	
10	64QAM	1	25	22.70	22.74	22.76	22.7
10	64QAM	1	49	22.67	22.37	21.72	
10	64QAM	25	0	21.54	21.61	21.55	
10	64QAM	25	12	21.62	21.62	21.60	22.7
10	64QAM	25	25	21.53	21.61	20.86	
10	64QAM	50	0	21.53	21.50	21.26	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.47	24.51	24.50	25.7
5	QPSK	1	12	24.47	24.45	24.31	
5	QPSK	1	24	24.41	24.52	24.20	
5	QPSK	12	0	23.55	23.64	23.59	24.7
5	QPSK	12	7	23.52	23.57	23.34	
5	QPSK	12	13	23.54	23.55	23.16	
5	QPSK	25	0	23.47	23.56	23.52	24.7
5	16QAM	1	0	23.83	23.83	23.79	
5	16QAM	1	12	23.77	23.83	23.57	
5	16QAM	1	24	23.68	23.85	23.46	23.7
5	16QAM	12	0	22.66	22.51	22.52	
5	16QAM	12	7	22.53	22.60	22.45	
5	16QAM	12	13	22.48	22.61	22.27	23.7
5	16QAM	25	0	22.56	22.52	22.56	
5	64QAM	1	0	22.75	22.73	22.50	
5	64QAM	1	12	22.64	22.69	21.78	22.7
5	64QAM	1	24	22.75	22.55	21.74	
5	64QAM	12	0	21.65	21.66	21.30	
5	64QAM	12	7	21.54	21.63	20.70	22.7
5	64QAM	12	13	21.51	21.61	20.71	
5	64QAM	25	0	21.58	21.61	20.70	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.47	24.41	24.18	25.7
3	QPSK	1	8	24.50	24.48	24.04	
3	QPSK	1	14	24.40	24.49	24.13	
3	QPSK	8	0	23.54	23.58	23.04	24.7
3	QPSK	8	4	23.49	23.62	23.07	
3	QPSK	8	7	23.50	23.55	23.20	
3	QPSK	15	0	23.57	23.53	23.08	24.7
3	16QAM	1	0	23.83	23.81	23.53	
3	16QAM	1	8	23.83	23.86	23.38	
3	16QAM	1	14	23.69	23.78	23.46	23.7
3	16QAM	8	0	22.64	22.58	22.31	
3	16QAM	8	4	22.60	22.65	22.23	
3	16QAM	8	7	22.57	22.60	22.28	23.7
3	16QAM	15	0	22.60	22.62	22.19	
3	64QAM	1	0	22.63	22.73	21.70	
3	64QAM	1	8	22.75	22.75	21.72	22.7
3	64QAM	1	14	22.63	22.50	21.71	
3	64QAM	8	0	21.65	21.56	20.70	
3	64QAM	8	4	21.58	21.67	20.70	22.7
3	64QAM	8	7	21.49	21.63	20.74	
3	64QAM	15	0	21.53	21.62	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.39	24.32	23.95	25.7
1.4	QPSK	1	3	24.42	24.47	24.10	
1.4	QPSK	1	5	24.29	24.38	24.09	
1.4	QPSK	3	0	24.41	24.36	24.12	24.7
1.4	QPSK	3	1	24.47	24.40	24.12	
1.4	QPSK	3	3	24.41	24.44	24.37	
1.4	QPSK	6	0	23.42	23.57	23.18	24.7
1.4	16QAM	1	0	23.68	23.69	23.34	
1.4	16QAM	1	3	23.69	23.85	23.50	
1.4	16QAM	1	5	23.61	23.69	23.58	24.7
1.4	16QAM	3	0	23.51	23.51	23.12	
1.4	16QAM	3	1	23.49	23.54	23.28	
1.4	16QAM	3	3	23.42	23.48	23.42	23.7
1.4	16QAM	6	0	22.55	22.62	22.27	
1.4	64QAM	1	0	22.60	22.60	21.70	
1.4	64QAM	1	3	22.68	22.75	21.72	23.7
1.4	64QAM	1	5	22.60	22.59	21.71	
1.4	64QAM	3	0	22.63	22.63	21.70	
1.4	64QAM	3	1	22.65	22.62	21.72	22.7
1.4	64QAM	3	3	22.55	22.58	21.71	
1.4	64QAM	6	0	21.45	21.48	20.72	



Band 7							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.26	23.31	23.30	24.4
20	QPSK	1	49	23.28	23.39	23.30	
20	QPSK	1	99	23.29	23.42	23.40	
20	QPSK	50	0	23.28	23.44	23.41	23.9
20	QPSK	50	24	23.29	23.48	23.43	
20	QPSK	50	50	23.32	23.55	23.44	
20	QPSK	100	0	23.29	23.45	23.41	23.9
20	16QAM	1	0	23.47	23.66	23.64	
20	16QAM	1	49	23.50	23.71	23.68	
20	16QAM	1	99	23.55	23.77	23.65	22.9
20	16QAM	50	0	22.61	22.79	22.73	
20	16QAM	50	24	22.64	22.76	22.72	
20	16QAM	50	50	22.62	22.84	22.76	22.9
20	16QAM	100	0	22.61	22.75	22.74	
20	64QAM	1	0	22.71	22.87	22.18	
20	64QAM	1	49	22.72	22.90	22.31	21.9
20	64QAM	1	99	22.74	22.90	22.40	
20	64QAM	50	0	21.66	21.82	21.15	
20	64QAM	50	24	21.68	21.83	21.29	21.9
20	64QAM	50	50	21.70	21.86	21.31	
20	64QAM	100	0	21.62	21.70	21.11	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.20	23.34	23.38	24.4
15	QPSK	1	37	23.23	23.40	23.37	
15	QPSK	1	74	23.31	23.49	23.40	
15	QPSK	36	0	23.25	23.43	23.44	23.9
15	QPSK	36	20	23.39	23.49	23.50	
15	QPSK	36	39	23.40	23.57	23.49	
15	QPSK	75	0	23.37	23.47	23.51	23.9
15	16QAM	1	0	23.47	23.65	23.68	
15	16QAM	1	37	23.53	23.74	23.49	
15	16QAM	1	74	23.62	23.81	23.69	22.9
15	16QAM	36	0	22.55	22.72	22.71	
15	16QAM	36	20	22.65	22.75	22.82	
15	16QAM	36	39	22.68	22.87	22.78	22.9
15	16QAM	75	0	22.65	22.78	22.81	
15	64QAM	1	0	22.65	22.76	22.20	
15	64QAM	1	37	22.75	22.90	21.52	21.9
15	64QAM	1	74	22.78	22.90	22.25	
15	64QAM	36	0	21.58	21.76	20.79	
15	64QAM	36	20	21.70	21.80	20.89	21.9
15	64QAM	36	39	21.74	21.89	21.10	
15	64QAM	75	0	21.67	21.77	20.84	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.22	23.29	23.22	24.4
10	QPSK	1	25	23.20	23.30	23.25	
10	QPSK	1	49	23.20	23.37	23.27	
10	QPSK	25	0	23.28	23.41	23.37	23.9
10	QPSK	25	12	23.33	23.44	23.39	
10	QPSK	25	25	23.34	23.53	23.44	
10	QPSK	50	0	23.33	23.46	23.39	23.9
10	16QAM	1	0	23.48	23.67	23.62	
10	16QAM	1	25	23.50	23.71	23.70	
10	16QAM	1	49	23.58	23.78	23.68	22.9
10	16QAM	25	0	22.58	22.70	22.68	
10	16QAM	25	12	22.64	22.76	22.69	
10	16QAM	25	25	22.61	22.83	22.74	22.9
10	16QAM	50	0	22.60	22.75	22.67	
10	64QAM	1	0	22.69	22.82	21.85	
10	64QAM	1	25	22.70	22.90	22.34	21.9
10	64QAM	1	49	22.79	22.90	22.61	
10	64QAM	25	0	21.61	21.75	20.84	
10	64QAM	25	12	21.65	21.79	21.05	21.9
10	64QAM	25	25	21.65	21.86	21.23	
10	64QAM	50	0	21.65	21.77	20.85	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.26	23.31	23.30	24.4
5	QPSK	1	12	23.28	23.39	23.30	
5	QPSK	1	24	23.29	23.42	23.29	
5	QPSK	12	0	23.28	23.44	23.41	23.9
5	QPSK	12	7	23.29	23.46	23.43	
5	QPSK	12	13	23.32	23.55	23.42	
5	QPSK	25	0	23.29	23.45	23.41	23.9
5	16QAM	1	0	23.47	23.66	23.64	
5	16QAM	1	12	23.50	23.71	23.68	
5	16QAM	1	24	23.55	23.77	23.65	22.9
5	16QAM	12	0	22.61	22.79	22.73	
5	16QAM	12	7	22.64	22.76	22.72	
5	16QAM	12	13	22.62	22.84	22.78	22.9
5	16QAM	25	0	22.61	22.75	22.74	
5	64QAM	1	0	22.71	22.87	22.18	
5	64QAM	1	12	22.72	22.90	22.31	21.9
5	64QAM	1	24	22.74	22.90	22.40	
5	64QAM	12	0	21.66	21.82	21.15	
5	64QAM	12	7	21.68	21.83	21.29	21.9
5	64QAM	12	13	21.70	21.86	21.31	
5	64QAM	25	0	21.62	21.79	21.11	



Band 12									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.34	24.12	24.24	25.7		
10	QPSK	1	25	24.15	24.15	24.14			
10	QPSK	1	49	24.31	24.24	24.14			
10	QPSK	25	0	23.27	23.33	23.32	24.7		
10	QPSK	25	12	23.38	23.34	23.35			
10	QPSK	25	25	23.31	23.30	23.35			
10	QPSK	50	0	23.34	23.28	23.32	24.7		
10	16QAM	1	0	23.55	23.49	23.56			
10	16QAM	1	25	23.61	23.61	23.56			
10	16QAM	1	49	23.66	23.60	23.54	23.7		
10	16QAM	25	0	22.32	22.28	22.33			
10	16QAM	25	12	22.40	22.35	22.36			
10	16QAM	25	25	22.37	22.36	22.34	23.7		
10	16QAM	50	0	22.39	22.31	22.33			
10	64QAM	1	0	22.43	22.31	22.36			
10	64QAM	1	25	22.52	22.42	22.25	23.7		
10	64QAM	1	49	22.61	22.54	22.53			
10	64QAM	25	0	21.31	21.33	21.22			
10	64QAM	25	12	21.38	21.32	21.28	22.7		
10	64QAM	25	25	21.37	21.41	21.37			
10	64QAM	50	0	21.36	21.34	21.37			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.27	24.18	24.20	25.7		
5	QPSK	1	12	24.27	24.28	24.27			
5	QPSK	1	24	24.23	24.21	24.24			
5	QPSK	12	0	23.38	23.32	23.26	24.7		
5	QPSK	12	7	23.33	23.26	23.25			
5	QPSK	12	13	23.33	23.26	23.27			
5	QPSK	25	0	23.36	23.28	23.20	24.7		
5	16QAM	1	0	23.59	23.56	23.50			
5	16QAM	1	12	23.60	23.59	23.55			
5	16QAM	1	24	23.61	23.61	23.50	23.7		
5	16QAM	12	0	22.36	22.32	22.28			
5	16QAM	12	7	22.39	22.34	22.36			
5	16QAM	12	13	22.32	22.36	22.28	23.7		
5	16QAM	25	0	22.40	22.35	22.32			
5	64QAM	1	0	22.37	22.24	22.40			
5	64QAM	1	12	22.51	22.44	22.40	23.7		
5	64QAM	1	24	22.35	22.46	22.45			
5	64QAM	12	0	21.39	21.41	21.39			
5	64QAM	12	7	21.34	21.35	21.34	22.7		
5	64QAM	12	13	21.43	21.38	21.28			
5	64QAM	25	0	21.42	21.39	21.32			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.31	24.21	24.28	25.7		
3	QPSK	1	8	24.32	24.30	24.30			
3	QPSK	1	14	24.28	24.27	24.16			
3	QPSK	8	0	23.35	23.27	23.30	24.7		
3	QPSK	8	4	23.37	23.40	23.35			
3	QPSK	8	7	23.38	23.38	23.25			
3	QPSK	15	0	23.39	23.28	23.21	24.7		
3	16QAM	1	0	23.71	23.62	23.52			
3	16QAM	1	8	23.56	23.59	23.60			
3	16QAM	1	14	23.60	23.56	23.46	23.7		
3	16QAM	8	0	22.42	22.42	22.32			
3	16QAM	8	4	22.41	22.40	22.36			
3	16QAM	8	7	22.33	22.41	22.27	23.7		
3	16QAM	15	0	22.37	22.31	22.30			
3	64QAM	1	0	22.46	22.41	22.47			
3	64QAM	1	8	22.64	22.55	22.45	23.7		
3	64QAM	1	14	22.47	22.49	22.43			
3	64QAM	8	0	21.41	21.39	21.36			
3	64QAM	8	4	21.44	21.51	21.40	22.7		
3	64QAM	8	7	21.34	21.40	21.35			
3	64QAM	15	0	21.37	21.34	21.24			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.18	24.13	24.08	25.7		
1.4	QPSK	1	3	24.23	24.21	24.18			
1.4	QPSK	1	5	24.19	24.20	24.02			
1.4	QPSK	3	0	24.26	24.09	24.16	24.7		
1.4	QPSK	3	1	24.25	24.22	24.19			
1.4	QPSK	3	3	24.21	24.22	24.13			
1.4	QPSK	6	0	23.32	23.26	23.12	24.7		
1.4	16QAM	1	0	23.60	23.49	23.46			
1.4	16QAM	1	3	23.57	23.57	23.48			
1.4	16QAM	1	5	23.53	23.52	23.43	24.7		
1.4	16QAM	3	0	23.34	23.24	23.26			
1.4	16QAM	3	1	23.36	23.30	23.31			
1.4	16QAM	3	3	23.31	23.24	23.13	23.7		
1.4	16QAM	6	0	22.32	22.23	22.22			
1.4	64QAM	1	0	22.48	22.42	22.36			
1.4	64QAM	1	3	22.46	22.50	22.42	23.7		
1.4	64QAM	1	5	22.46	22.36	22.34			
1.4	64QAM	3	0	22.37	22.36	22.36			
1.4	64QAM	3	1	22.41	22.38	22.32	22.7		
1.4	64QAM	3	3	22.40	22.38	22.31			
1.4	64QAM	6	0	21.27	21.21	21.21			



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.83			25.2
10	QPSK	1	25	23.84			
10	QPSK	1	49	23.97			
10	QPSK	25	0	22.96			24.2
10	QPSK	25	12	23.01			
10	QPSK	25	25	22.91			
10	QPSK	50	0	23.01			24.2
10	16QAM	1	0	23.16			
10	16QAM	1	25	23.16			
10	16QAM	1	49	23.15			23.2
10	16QAM	25	0	21.97			
10	16QAM	25	12	22.03			
10	16QAM	25	25	21.93			23.2
10	16QAM	50	0	21.95			
10	64QAM	1	0	22.01			
10	64QAM	1	25	22.13			23.2
10	64QAM	1	49	22.04			
10	64QAM	25	0	21.02			
10	64QAM	25	12	21.00			22.2
10	64QAM	25	25	21.04			
10	64QAM	50	0	20.99			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	794.5	
5	QPSK	1	0	23.75	23.76	23.86	25.2
5	QPSK	1	12	23.88	23.84	23.87	
5	QPSK	1	24	23.87	23.86	23.87	
5	QPSK	12	0	22.89	22.92	22.92	24.2
5	QPSK	12	7	22.93	22.97	22.83	
5	QPSK	12	13	23.02	23.01	22.92	
5	QPSK	25	0	23.01	22.99	22.91	24.2
5	16QAM	1	0	23.08	23.05	23.08	
5	16QAM	1	12	23.16	23.14	23.09	
5	16QAM	1	24	23.16	23.10	23.03	23.2
5	16QAM	12	0	21.99	21.97	21.98	
5	16QAM	12	7	22.05	21.98	21.96	
5	16QAM	12	13	22.02	21.94	21.97	23.2
5	16QAM	25	0	22.03	21.94	21.88	
5	64QAM	1	0	22.00	22.13	21.98	
5	64QAM	1	12	22.13	22.06	22.08	23.2
5	64QAM	1	24	22.07	22.15	22.00	
5	64QAM	12	0	21.03	21.06	20.99	
5	64QAM	12	7	21.07	21.01	20.92	22.2
5	64QAM	12	13	20.98	21.05	20.97	
5	64QAM	25	0	20.96	20.95	20.88	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.44		25.7
10	QPSK	1	25		24.49		
10	QPSK	1	49		24.32		
10	QPSK	25	0		23.51		24.7
10	QPSK	25	12		23.59		
10	QPSK	25	25		23.48		
10	QPSK	50	0		23.42		24.7
10	16QAM	1	0		23.87		
10	16QAM	1	25		23.84		
10	16QAM	1	49		23.71		23.7
10	16QAM	25	0		22.44		
10	16QAM	25	12		22.54		
10	16QAM	25	25		22.55		23.7
10	16QAM	50	0		22.44		
10	64QAM	1	0		22.75		
10	64QAM	1	25		22.58		23.7
10	64QAM	1	49		22.65		
10	64QAM	25	0		21.50		
10	64QAM	25	12		21.33		22.7
10	64QAM	25	25		21.48		
10	64QAM	50	0		21.55		
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.48	24.40	24.42	25.7
5	QPSK	1	12	24.48	24.48	24.47	
5	QPSK	1	24	24.47	24.44	24.42	
5	QPSK	12	0	23.54	23.49	23.41	24.7
5	QPSK	12	7	23.60	23.32	23.47	
5	QPSK	12	13	23.50	23.55	23.45	
5	QPSK	25	0	23.59	23.48	23.43	24.7
5	16QAM	1	0	23.74	23.78	23.68	
5	16QAM	1	12	23.78	23.80	23.80	
5	16QAM	1	24	23.80	23.72	23.71	23.7
5	16QAM	12	0	22.51	22.57	22.48	
5	16QAM	12	7	22.62	22.60	22.49	
5	16QAM	12	13	22.59	22.55	22.51	23.7
5	16QAM	25	0	22.57	22.52	22.50	
5	64QAM	1	0	22.71	22.62	22.36	
5	64QAM	1	12	22.78	22.24	22.53	23.7
5	64QAM	1	24	22.33	22.27	22.70	
5	64QAM	12	0	21.61	21.26	21.16	
5	64QAM	12	7	21.68	21.24	21.54	22.7
5	64QAM	12	13	21.36	21.23	21.61	
5	64QAM	25	0	21.64	21.16	21.49	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.38	24.29	24.27	25.7
10	QPSK	1	25	24.35	24.27	24.31	
10	QPSK	1	49	24.33	24.40	24.28	
10	QPSK	25	0	23.34	23.38	23.37	24.7
10	QPSK	25	12	23.51	23.39	23.43	
10	QPSK	25	25	23.50	23.51	23.46	
10	QPSK	50	0	23.44	23.37	23.34	24.7
10	16QAM	1	0	23.64	23.67	23.59	
10	16QAM	1	25	23.73	23.67	23.67	
10	16QAM	1	49	23.70	23.70	23.73	23.7
10	16QAM	25	0	22.35	22.28	22.38	
10	16QAM	25	12	22.43	22.42	22.38	
10	16QAM	25	25	22.40	22.45	22.42	23.7
10	16QAM	50	0	22.50	22.55	22.41	
10	64QAM	1	0	22.59	22.53	22.57	
10	64QAM	1	25	22.67	22.66	22.50	22.7
10	64QAM	1	49	22.65	22.65	22.58	
10	64QAM	25	0	21.36	21.43	21.41	
10	64QAM	25	12	21.47	21.43	21.46	22.7
10	64QAM	25	25	21.51	21.55	21.51	
10	64QAM	50	0	21.54	21.40	21.44	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.24	24.27	24.26	25.7
5	QPSK	1	12	24.31	24.37	24.39	
5	QPSK	1	24	24.38	24.39	24.31	
5	QPSK	12	0	23.43	23.34	23.35	24.7
5	QPSK	12	7	23.48	23.47	23.43	
5	QPSK	12	13	23.46	23.44	23.40	
5	QPSK	25	0	23.49	23.45	23.42	24.7
5	16QAM	1	0	23.57	23.61	23.61	
5	16QAM	1	12	23.61	23.69	23.63	
5	16QAM	1	24	23.73	23.76	23.68	23.7
5	16QAM	12	0	22.40	22.39	22.36	
5	16QAM	12	7	22.45	22.40	22.38	
5	16QAM	12	13	22.51	22.44	22.43	23.7
5	16QAM	25	0	22.43	22.44	22.49	
5	64QAM	1	0	22.41	22.31	22.54	
5	64QAM	1	12	22.59	22.50	22.51	23.7
5	64QAM	1	24	22.61	22.53	22.49	
5	64QAM	12	0	21.43	21.40	21.44	
5	64QAM	12	7	21.47	21.45	21.53	22.7
5	64QAM	12	13	21.53	21.55	21.51	
5	64QAM	25	0	21.45	21.39	21.40	



Band 25									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	22.29	22.36	22.34	23.8		
20	QPSK	1	49	22.27	22.37	22.29			
20	QPSK	1	99	22.32	22.38	22.34			
20	QPSK	50	0	22.38	22.42	22.39			
20	QPSK	50	24	22.48	22.55	22.41	23.8		
20	QPSK	50	50	22.44	22.53	22.48			
20	QPSK	100	0	22.48	22.56	22.42			
20	16QAM	1	0	22.60	22.71	22.70			
20	16QAM	1	49	22.68	22.72	22.66	23.8		
20	16QAM	1	99	22.66	22.78	22.64			
20	16QAM	50	0	22.29	22.36	22.30			
20	16QAM	50	24	22.39	22.50	22.32			
20	16QAM	50	50	22.38	22.46	22.42	23.7		
20	16QAM	100	0	22.36	22.43	22.32			
20	64QAM	1	0	22.39	22.46	22.40			
20	64QAM	1	49	22.32	22.50	22.41			
20	64QAM	1	99	22.40	22.54	22.35	23.7		
20	64QAM	50	0	21.33	21.36	21.32			
20	64QAM	50	24	21.40	21.48	21.35			
20	64QAM	50	50	21.38	21.47	21.42			
20	64QAM	100	0	21.40	21.45	21.34	22.7		
Channel				26115	26340	26615			
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	22.29	22.41	22.38	23.8		
15	QPSK	1	37	22.28	22.39	22.31			
15	QPSK	1	74	22.34	22.42	22.39			
15	QPSK	36	0	22.45	22.47	22.40			
15	QPSK	36	20	22.44	22.53	22.48	23.8		
15	QPSK	36	39	22.44	22.51	22.45			
15	QPSK	75	0	22.42	22.54	22.38			
15	16QAM	1	0	22.57	22.70	22.65			
15	16QAM	1	37	22.62	22.74	22.67	23.8		
15	16QAM	1	74	22.64	22.77	22.68			
15	16QAM	36	0	22.36	22.37	22.32			
15	16QAM	36	20	22.38	22.45	22.41			
15	16QAM	36	39	22.31	22.43	22.37	23.7		
15	16QAM	75	0	22.35	22.45	22.32			
15	64QAM	1	0	22.34	22.48	22.40			
15	64QAM	1	37	22.42	22.56	22.50			
15	64QAM	1	74	22.46	22.55	22.32	23.7		
15	64QAM	36	0	21.41	21.42	21.35			
15	64QAM	36	20	21.40	21.47	21.42			
15	64QAM	36	39	21.36	21.45	21.43			
15	64QAM	75	0	21.36	21.46	21.33	22.7		
Channel				26090	26340	26640			
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	22.23	22.33	22.34	23.8		
10	QPSK	1	25	22.22	22.35	22.34			
10	QPSK	1	49	22.27	22.42	22.39			
10	QPSK	25	0	22.37	22.40	22.43			
10	QPSK	25	12	22.39	22.52	22.49	23.8		
10	QPSK	25	25	22.44	22.51	22.51			
10	QPSK	50	0	22.41	22.52	22.49			
10	16QAM	1	0	22.70	22.73	22.69			
10	16QAM	1	25	22.63	22.73	22.69	23.8		
10	16QAM	1	49	22.67	22.78	22.75			
10	16QAM	25	0	22.28	22.34	22.37			
10	16QAM	25	12	22.31	22.45	22.39			
10	16QAM	25	25	22.29	22.43	22.39	23.7		
10	16QAM	50	0	22.30	22.43	22.39			
10	64QAM	1	0	22.39	22.46	22.51			
10	64QAM	1	25	22.40	22.60	22.55			
10	64QAM	1	49	22.43	22.61	22.34	23.7		
10	64QAM	25	0	21.30	21.34	21.37			
10	64QAM	25	12	21.36	21.46	21.42			
10	64QAM	25	25	21.34	21.46	21.43			
10	64QAM	50	0	21.34	21.46	21.42	22.7		
Channel				26055	26340	26655			
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	22.22	22.31	22.33	23.8		
5	QPSK	1	12	22.30	22.43	22.36			
5	QPSK	1	24	22.30	22.43	22.37			
5	QPSK	12	0	22.29	22.45	22.42			
5	QPSK	12	7	22.40	22.55	22.48	23.8		
5	QPSK	12	13	22.42	22.53	22.49			
5	QPSK	25	0	22.36	22.52	22.45			
5	16QAM	1	0	22.59	22.69	22.68			
5	16QAM	1	12	22.62	22.75	22.67	23.8		
5	16QAM	1	24	22.62	22.77	22.72			
5	16QAM	12	0	22.25	22.36	22.34			
5	16QAM	12	7	22.32	22.45	22.37			
5	16QAM	12	13	22.34	22.46	22.40	23.7		
5	16QAM	25	0	22.28	22.41	22.33			
5	64QAM	1	0	22.41	22.51	22.53			
5	64QAM	1	12	22.39	22.55	22.48			
5	64QAM	1	24	22.43	22.63	22.22	23.7		
5	64QAM	12	0	21.30	21.41	21.37			
5	64QAM	12	7	21.37	21.49	21.43			
5	64QAM	12	13	21.36	21.52	21.26			
5	64QAM	25	0	21.30	21.43	21.36	22.7		
Channel				26055	26340	26675			
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	22.12	22.24	22.28	23.8		
3	QPSK	1	8	22.29	22.37	22.27			
3	QPSK	1	14	22.25	22.33	22.35			
3	QPSK	8	0	22.29	22.41	22.35			
3	QPSK	8	4	22.31	22.52	22.41	23.8		
3	QPSK	8	7	22.37	22.45	22.45			
3	QPSK	15	0	22.35	22.49	22.41			
3	16QAM	1	0	22.58	22.63	22.63			
3	16QAM	1	8	22.56	22.74	22.62	23.8		
3	16QAM	1	14	22.52	22.72	22.70			
3	16QAM	8	0	22.15	22.38	22.26			
3	16QAM	8	4	22.30	22.41	22.36			
3	16QAM	8	7	22.31	22.40	22.37	23.7		
3	16QAM	15	0	22.19	22.35	22.32			
3	64QAM	1	0	22.35	22.47	22.53			
3	64QAM	1	8	22.38	22.52	22.41			
3	64QAM	1	14	22.43	22.57	22.15	23.7		
3	64QAM	8	0	21.28	21.37	21.28			
3	64QAM	8	4	21.28	21.42	21.42			
3	64QAM	8	7	21.36	21.44	21.16			
3	64QAM	15	0	21.25	21.39	21.29	22.7		
Channel				26047	26340	26683			
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	22.09	22.22	22.16	23.8		
1.4	QPSK	1	3	22.23	22.36	22.27			
1.4	QPSK	1	5	22.19	22.33	22.26			
1.4	QPSK	3	0	22.14	22.30	22.23			
1.4	QPSK	3	1	22.21	22.37	22.28	23.8		
1.4	QPSK	3	3	22.20	22.36	22.27			
1.4	QPSK	6	0	22.21	22.38	22.32			
1.4</									



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.28	24.16	24.24	25.7
15	QPSK	1	37	24.14	24.24	24.21	
15	QPSK	1	74	24.27	24.52	24.13	
15	QPSK	36	0	23.38	23.39	23.34	24.7
15	QPSK	36	20	23.40	23.31	23.37	
15	QPSK	36	39	23.33	23.34	23.29	
15	QPSK	75	0	23.39	23.35	23.35	24.7
15	16QAM	1	0	23.55	23.56	23.61	
15	16QAM	1	37	23.54	23.54	23.60	
15	16QAM	1	74	23.56	23.63	23.47	23.7
15	16QAM	36	0	22.36	22.42	22.34	
15	16QAM	36	20	22.34	22.33	22.30	
15	16QAM	36	39	22.36	22.36	22.33	23.7
15	16QAM	75	0	22.42	22.38	22.53	
15	64QAM	1	0	22.48	22.42	22.41	
15	64QAM	1	37	22.45	22.49	22.41	22.7
15	64QAM	1	74	22.48	22.48	21.70	
15	64QAM	36	0	21.43	21.46	21.41	
15	64QAM	36	20	21.47	21.43	21.37	22.7
15	64QAM	36	39	21.38	21.44	21.49	
15	64QAM	75	0	21.47	21.35	21.42	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.38	24.29	24.37	25.7
10	QPSK	1	25	24.22	24.25	24.23	
10	QPSK	1	49	24.28	24.29	24.20	
10	QPSK	25	0	23.50	23.36	23.44	24.7
10	QPSK	25	12	23.50	23.41	23.37	
10	QPSK	25	25	23.40	23.42	23.37	
10	QPSK	50	0	23.38	23.41	23.42	24.7
10	16QAM	1	0	23.77	23.60	23.75	
10	16QAM	1	25	23.61	23.73	23.64	
10	16QAM	1	49	23.64	23.67	23.62	23.7
10	16QAM	25	0	22.48	22.36	22.37	
10	16QAM	25	12	22.45	22.42	22.36	
10	16QAM	25	25	22.30	22.44	22.38	22.7
10	16QAM	50	0	22.46	22.37	22.33	
10	64QAM	1	0	22.64	22.51	22.57	
10	64QAM	1	25	22.54	22.66	22.66	22.7
10	64QAM	1	49	22.56	22.60	22.05	
10	64QAM	25	0	21.44	21.42	21.43	
10	64QAM	25	12	21.50	21.47	21.48	22.7
10	64QAM	25	25	21.37	21.41	21.29	
10	64QAM	50	0	21.47	21.37	21.36	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				616.5	631.5	646.5	
5	QPSK	1	0	24.45	24.32	24.35	25.7
5	QPSK	1	12	24.38	24.38	24.33	
5	QPSK	1	24	24.30	24.37	24.26	
5	QPSK	12	0	23.50	23.37	23.40	24.7
5	QPSK	12	7	23.51	23.41	23.44	
5	QPSK	12	13	23.44	23.36	23.33	
5	QPSK	25	0	23.44	23.40	23.38	24.7
5	16QAM	1	0	23.78	23.60	23.73	
5	16QAM	1	12	23.72	23.66	23.60	
5	16QAM	1	24	23.66	23.72	23.58	23.7
5	16QAM	12	0	22.49	22.38	22.41	
5	16QAM	12	7	22.45	22.45	22.41	
5	16QAM	12	13	22.44	22.37	22.30	23.7
5	16QAM	25	0	22.43	22.39	22.40	
5	64QAM	1	0	22.73	22.56	22.53	
5	64QAM	1	12	22.54	22.59	21.87	22.7
5	64QAM	1	24	22.56	22.57	21.82	
5	64QAM	12	0	21.58	21.56	21.51	
5	64QAM	12	7	21.59	21.50	20.86	22.7
5	64QAM	12	13	21.54	21.45	20.56	
5	64QAM	25	0	21.50	21.39	21.68	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.43	24.37	24.37	25.7
3	QPSK	1	8	24.41	24.37	24.32	
3	QPSK	1	14	24.30	24.35	24.26	
3	QPSK	8	0	23.51	23.43	23.27	24.7
3	QPSK	8	4	23.54	23.46	23.33	
3	QPSK	8	7	23.40	23.41	23.37	
3	QPSK	15	0	23.42	23.35	23.30	24.7
3	16QAM	1	0	23.79	23.62	23.67	
3	16QAM	1	8	23.80	23.76	23.49	
3	16QAM	1	14	23.68	23.71	23.56	23.7
3	16QAM	8	0	22.53	22.44	22.45	
3	16QAM	8	4	22.59	22.47	22.41	
3	16QAM	8	7	22.46	22.49	22.38	23.7
3	16QAM	15	0	22.56	22.36	22.37	
3	64QAM	1	0	22.61	22.57	21.91	
3	64QAM	1	8	22.68	22.58	21.70	22.7
3	64QAM	1	14	22.58	22.61	21.71	
3	64QAM	8	0	21.59	21.49	20.70	
3	64QAM	8	4	21.55	21.54	20.57	22.7
3	64QAM	8	7	21.49	21.52	20.57	
3	64QAM	15	0	21.50	21.48	20.64	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.37	24.27	24.21	25.7
1.4	QPSK	1	3	24.42	24.39	24.23	
1.4	QPSK	1	5	24.36	24.21	24.15	
1.4	QPSK	3	0	24.41	24.23	24.20	24.7
1.4	QPSK	3	1	24.41	24.33	24.21	
1.4	QPSK	3	3	24.40	24.32	24.20	
1.4	QPSK	6	0	23.41	23.38	23.30	24.7
1.4	16QAM	1	0	23.71	23.59	23.46	
1.4	16QAM	1	3	23.72	23.62	23.59	
1.4	16QAM	1	5	23.63	23.59	23.46	23.7
1.4	16QAM	3	0	23.56	23.29	23.30	
1.4	16QAM	3	1	23.60	23.39	23.30	
1.4	16QAM	3	3	23.50	23.35	23.24	23.7
1.4	16QAM	6	0	22.50	22.46	22.33	
1.4	64QAM	1	0	22.68	22.47	21.74	
1.4	64QAM	1	3	22.68	22.61	21.70	23.7
1.4	64QAM	1	5	22.62	22.46	21.71	
1.4	64QAM	3	0	22.64	22.46	21.72	
1.4	64QAM	3	1	22.57	22.47	21.71	22.7
1.4	64QAM	3	3	22.56	22.51	21.80	
1.4	64QAM	6	0	21.43	21.42	20.70	



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.18			23.7
10	QPSK	1	25	22.07			
10	QPSK	1	49	22.09			
10	QPSK	25	0	21.18			22.7
10	QPSK	25	12	21.14			
10	QPSK	25	25	21.23			
10	QPSK	50	0	21.14			22.7
10	16QAM	1	0	21.51			
10	16QAM	1	25	21.44			
10	16QAM	1	49	21.52			21.7
10	16QAM	25	0	20.18			
10	16QAM	25	12	20.25			
10	16QAM	25	25	20.19			21.7
10	16QAM	50	0	20.23			
10	64QAM	1	0	20.38			
10	64QAM	1	25	20.42			21.7
10	64QAM	1	49	20.39			
10	64QAM	25	0	19.24			
10	64QAM	25	12	19.21			20.7
10	64QAM	25	25	19.22			
10	64QAM	50	0	19.21			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.04	22.08	22.10	23.7
5	QPSK	1	12	22.18	22.10	22.13	
5	QPSK	1	24	22.11	22.12	22.14	
5	QPSK	12	0	21.14	21.18	21.17	22.7
5	QPSK	12	7	21.27	21.18	21.20	
5	QPSK	12	13	21.32	21.23	21.13	
5	QPSK	25	0	21.24	21.15	21.21	22.7
5	16QAM	1	0	21.36	21.35	21.42	
5	16QAM	1	12	21.47	21.47	21.42	
5	16QAM	1	24	21.55	21.44	21.44	21.7
5	16QAM	12	0	20.15	20.21	20.17	
5	16QAM	12	7	20.20	20.25	20.29	
5	16QAM	12	13	20.22	20.20	20.19	21.7
5	16QAM	25	0	20.24	20.17	20.23	
5	64QAM	1	0	20.27	20.34	20.47	
5	64QAM	1	12	20.39	20.35	20.37	21.7
5	64QAM	1	24	20.53	20.37	20.31	
5	64QAM	12	0	19.25	19.27	19.23	
5	64QAM	12	7	19.29	19.22	19.33	20.7
5	64QAM	12	13	19.31	19.33	19.25	
5	64QAM	25	0	19.27	19.21	19.27	



Band 66											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	23.95	23.87	23.78	25.1				
20	QPSK	1	49	23.82	23.71	23.70					
20	QPSK	1	99	23.90	23.75	23.72					
20	QPSK	50	0	23.58	23.46	23.44	24.7				
20	QPSK	50	24	23.65	23.51	23.52					
20	QPSK	50	50	23.64	23.48	23.46					
20	QPSK	100	0	23.66	23.48	23.44	24.7				
20	16QAM	1	0	23.54	23.76	23.74					
20	16QAM	1	49	23.75	23.55	23.60					
20	16QAM	1	99	23.86	23.63	23.54	23.7				
20	16QAM	50	0	22.59	22.47	22.48					
20	16QAM	50	24	22.67	22.52	22.52					
20	16QAM	50	50	22.63	22.46	22.47	23.7				
20	16QAM	100	0	22.54	22.49	22.45					
20	64QAM	1	0	22.73	22.62	22.56					
20	64QAM	1	49	22.68	22.49	22.53	22.7				
20	64QAM	1	99	22.74	22.56	22.48					
20	64QAM	50	0	21.61	21.49	21.49					
20	64QAM	50	24	21.67	21.52	21.53	22.7				
20	64QAM	50	50	21.66	21.49	21.49					
20	64QAM	100	0	21.67	21.50	21.44					
Channel				132047	132322	132597	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	23.91	23.81	23.79	25.1				
15	QPSK	1	37	23.81	23.70	23.70					
15	QPSK	1	74	23.94	23.74	23.74					
15	QPSK	36	0	23.67	23.46	23.45	24.7				
15	QPSK	36	20	23.65	23.46	23.42					
15	QPSK	36	39	23.62	23.44	23.47					
15	QPSK	75	0	23.65	23.50	23.46	24.7				
15	16QAM	1	0	23.82	23.70	23.73					
15	16QAM	1	37	23.74	23.60	23.64					
15	16QAM	1	74	23.85	23.63	23.61	23.7				
15	16QAM	36	0	22.66	22.45	22.46					
15	16QAM	36	20	22.65	22.46	22.42					
15	16QAM	36	39	22.63	22.47	22.45	23.7				
15	16QAM	75	0	22.65	22.51	22.45					
15	64QAM	1	0	22.66	22.61	22.53					
15	64QAM	1	37	22.62	22.50	22.49	22.7				
15	64QAM	1	74	22.74	22.57	22.53					
15	64QAM	36	0	21.66	21.50	21.53					
15	64QAM	36	20	21.66	21.49	21.46	22.7				
15	64QAM	36	39	21.68	21.50	21.50					
15	64QAM	75	0	21.66	21.51	21.47					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	23.94	23.77	23.81	25.1				
10	QPSK	1	25	23.89	23.75	23.79					
10	QPSK	1	49	23.92	23.75	23.80					
10	QPSK	25	0	23.63	23.43	23.44	24.7				
10	QPSK	25	12	23.64	23.50	23.44					
10	QPSK	25	25	23.65	23.47	23.52					
10	QPSK	50	0	23.67	23.52	23.48	24.7				
10	16QAM	1	0	23.63	23.79	23.80					
10	16QAM	1	25	23.89	23.73	23.77					
10	16QAM	1	49	23.89	23.71	23.78	23.7				
10	16QAM	25	0	22.61	22.43	22.44					
10	16QAM	25	12	22.70	22.52	22.47					
10	16QAM	25	25	22.62	22.46	22.51	23.7				
10	16QAM	50	0	22.65	22.46	22.45					
10	64QAM	1	0	22.79	22.63	22.61					
10	64QAM	1	25	22.82	22.63	22.70	23.7				
10	64QAM	1	49	22.84	22.64	22.67					
10	64QAM	25	0	21.66	21.48	21.49					
10	64QAM	25	12	21.70	21.54	21.50	22.7				
10	64QAM	25	25	21.64	21.50	21.55					
10	64QAM	50	0	21.68	21.55	21.49					
Channel				131997	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	23.94	23.73	23.81	25.1				
5	QPSK	1	12	23.94	23.80	23.85					
5	QPSK	1	24	23.93	23.75	23.79					
5	QPSK	12	0	23.63	23.42	23.50	24.7				
5	QPSK	12	7	23.69	23.52	23.52					
5	QPSK	12	13	23.64	23.45	23.47					
5	QPSK	25	0	23.63	23.45	23.50	24.7				
5	16QAM	1	0	23.86	23.71	23.76					
5	16QAM	1	12	23.89	23.74	23.75					
5	16QAM	1	24	23.86	23.71	23.75	23.7				
5	16QAM	12	0	22.67	22.46	22.54					
5	16QAM	12	7	22.69	22.50	22.56					
5	16QAM	12	13	22.66	22.52	22.54	23.7				
5	16QAM	25	0	22.68	22.52	22.54					
5	64QAM	1	0	22.82	22.63	22.72					
5	64QAM	1	12	22.82	22.64	22.68	23.7				
5	64QAM	1	24	22.84	22.64	22.67					
5	64QAM	12	0	21.71	21.50	21.59					
5	64QAM	12	7	21.72	21.57	21.62	22.7				
5	64QAM	12	13	21.73	21.52	21.59					
5	64QAM	25	0	21.66	21.50	21.54					
Channel				131987	132322	132657	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1776.5					
3	QPSK	1	0	23.88	23.73	23.77	25.1				
3	QPSK	1	8	23.83	23.74	23.83					
3	QPSK	1	14	23.84	23.73	23.74					
3	QPSK	8	0	23.57	23.35	23.45	24.7				
3	QPSK	8	4	23.64	23.45	23.46					
3	QPSK	8	7	23.61	23.43	23.40					
3	QPSK	15	0	23.63	23.36	23.47	24.7				
3	16QAM	1	0	23.77	23.61	23.73					
3	16QAM	1	8	23.83	23.64	23.70					
3	16QAM	1	14	23.79	23.61	23.74	23.7				
3	16QAM	8	0	22.66	22.38	22.52					
3	16QAM	8	4	22.64	22.40	22.54					
3	16QAM	8	7	22.59	22.49	22.50	23.7				
3	16QAM	15	0	22.66	22.50	22.47					
3	64QAM	1	0	22.73	22.55	22.71					
3	64QAM	1	8	22.77	22.62	22.59	23.7				
3	64QAM	1	14	22.84	22.54	22.65					
3	64QAM	8	0	21.71	21.46	21.56					
3	64QAM	8	4	21.66	21.51	21.56	22.7				
3	64QAM	8	7	21.71	21.47	21.58					
3	64QAM	15	0	21.56	21.45	21.51					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	23.85	23.74	23.70	25.1				
1.4	QPSK	1	3	23.86	23.72	23.77					
1.4	QPSK	1	5	23.84	23.76	23.72					
1.4	QPSK	3	0	23.86	23.71	23.76	24.7				
1.4	QPSK	3	1	23.81	23.74	23.80					
1.4	QPSK	3	3	23.82	23.71	23.74					



Band 71							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.39	24.32	24.28	25.7
20	QPSK	1	49	24.21	24.25	24.28	
20	QPSK	1	99	24.24	24.21	24.14	
20	QPSK	50	0	23.39	23.37	23.38	24.7
20	QPSK	50	24	23.50	23.42	23.32	
20	QPSK	50	50	23.45	23.39	23.33	
20	QPSK	100	0	23.46	23.30	23.37	24.7
20	16QAM	1	0	23.69	23.66	23.66	
20	16QAM	1	49	23.56	23.55	23.57	
20	16QAM	1	99	23.81	23.58	23.54	23.7
20	16QAM	50	0	22.46	22.32	22.40	
20	16QAM	50	24	22.42	22.33	22.39	
20	16QAM	50	50	22.42	22.39	22.39	23.7
20	16QAM	100	0	22.46	22.34	22.42	
20	64QAM	1	0	21.73	22.29	22.52	
20	64QAM	1	49	22.23	22.43	21.81	22.7
20	64QAM	1	99	22.50	22.00	22.43	
20	64QAM	50	0	20.70	21.36	21.01	
20	64QAM	50	24	20.85	21.40	21.15	22.7
20	64QAM	50	50	21.49	21.04	21.37	
20	64QAM	100	0	21.05	21.35	21.45	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.23	24.27	24.23	25.7
15	QPSK	1	37	24.23	24.18	24.22	
15	QPSK	1	74	24.28	24.26	24.14	
15	QPSK	36	0	23.41	23.31	23.37	24.7
15	QPSK	36	20	23.45	23.30	23.34	
15	QPSK	36	39	23.36	23.40	23.35	
15	QPSK	75	0	23.36	23.35	23.34	24.7
15	16QAM	1	0	23.68	23.64	23.56	
15	16QAM	1	37	23.38	23.54	23.52	
15	16QAM	1	74	23.54	23.51	23.54	23.7
15	16QAM	36	0	22.28	22.39	22.28	
15	16QAM	36	20	22.31	22.34	22.43	
15	16QAM	36	39	22.45	22.37	22.38	23.7
15	16QAM	75	0	22.45	22.32	22.35	
15	64QAM	1	0	21.71	22.45	22.43	
15	64QAM	1	37	21.70	22.51	22.51	22.7
15	64QAM	1	74	22.41	22.16	22.49	
15	64QAM	36	0	20.70	21.34	20.97	
15	64QAM	36	20	20.44	21.43	21.36	22.7
15	64QAM	36	39	21.00	20.91	21.37	
15	64QAM	75	0	20.86	21.39	21.33	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.27	24.17	24.29	25.7
10	QPSK	1	25	24.19	24.18	24.20	
10	QPSK	1	49	24.17	24.27	24.18	
10	QPSK	25	0	23.33	23.31	23.33	24.7
10	QPSK	25	12	23.33	23.43	23.26	
10	QPSK	25	25	23.24	23.30	23.27	
10	QPSK	50	0	23.41	23.40	23.28	24.7
10	16QAM	1	0	23.71	23.36	23.60	
10	16QAM	1	25	23.62	23.63	23.53	
10	16QAM	1	49	23.62	23.61	23.47	23.7
10	16QAM	25	0	22.27	22.28	22.30	
10	16QAM	25	12	22.28	22.38	22.33	
10	16QAM	25	25	22.14	22.38	22.23	23.7
10	16QAM	50	0	22.32	22.42	22.24	
10	64QAM	1	0	21.75	21.80	22.44	
10	64QAM	1	25	21.73	22.52	22.48	22.7
10	64QAM	1	49	21.70	22.46	22.13	
10	64QAM	25	0	20.70	21.34	21.35	
10	64QAM	25	12	20.33	21.41	21.36	22.7
10	64QAM	25	25	20.40	21.38	21.31	
10	64QAM	50	0	20.33	21.35	21.30	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.07	24.21	24.21	25.7
5	QPSK	1	12	24.33	24.20	24.17	
5	QPSK	1	24	24.22	24.20	24.18	
5	QPSK	12	0	23.33	23.35	23.25	24.7
5	QPSK	12	7	23.30	23.36	23.33	
5	QPSK	12	13	23.32	23.30	23.28	
5	QPSK	25	0	23.32	23.37	23.25	24.7
5	16QAM	1	0	23.51	23.53	23.57	
5	16QAM	1	12	23.51	23.55	23.55	
5	16QAM	1	24	23.48	23.53	23.47	23.7
5	16QAM	12	0	22.16	22.40	22.33	
5	16QAM	12	7	22.31	22.37	22.34	
5	16QAM	12	13	22.38	22.34	22.27	23.7
5	16QAM	25	0	22.24	22.39	22.29	
5	64QAM	1	0	21.78	21.74	22.47	
5	64QAM	1	12	21.72	22.51	22.39	23.7
5	64QAM	1	24	21.70	22.56	21.87	
5	64QAM	12	0	20.70	21.16	21.31	
5	64QAM	12	7	20.42	21.41	21.39	22.7
5	64QAM	12	13	20.40	21.40	21.19	
5	64QAM	25	0	20.23	21.10	21.23	



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	17.61	17.61	17.62	18.9
20	QPSK	1	49	17.55	17.62	17.50	
20	QPSK	1	99	17.56	17.62	17.56	
20	QPSK	50	0	17.63	17.69	17.73	18.9
20	QPSK	50	24	17.77	17.74	17.75	
20	QPSK	50	50	17.72	17.74	17.71	
20	QPSK	100	0	17.74	17.71	17.72	18.9
20	16QAM	1	0	17.97	17.96	17.96	
20	16QAM	1	49	17.93	17.95	17.89	
20	16QAM	1	99	17.86	17.93	17.88	18.9
20	16QAM	50	0	17.88	17.70	17.72	
20	16QAM	50	24	17.76	17.76	17.75	
20	16QAM	50	50	17.73	17.74	17.74	18.9
20	16QAM	100	0	17.72	17.71	17.71	
20	64QAM	1	0	17.81	17.77	17.87	
20	64QAM	1	49	17.75	17.84	17.78	18.9
20	64QAM	1	99	17.80	17.81	17.74	
20	64QAM	50	0	17.67	17.73	17.74	
20	64QAM	50	24	17.76	17.76	17.77	18.9
20	64QAM	50	50	17.75	17.74	17.76	
20	64QAM	100	0	17.73	17.72	17.74	
Channel				1867.5	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	17.54	17.57	17.56	18.9
15	QPSK	1	37	17.45	17.52	17.45	
15	QPSK	1	74	17.54	17.52	17.52	
15	QPSK	36	0	17.58	17.65	17.63	18.9
15	QPSK	36	20	17.68	17.66	17.67	
15	QPSK	36	39	17.64	17.72	17.71	
15	QPSK	75	0	17.72	17.65	17.71	18.9
15	16QAM	1	0	17.93	17.96	17.94	
15	16QAM	1	37	17.88	17.87	17.89	
15	16QAM	1	74	17.84	17.84	17.81	18.9
15	16QAM	36	0	17.58	17.70	17.62	
15	16QAM	36	20	17.74	17.77	17.72	
15	16QAM	36	39	17.73	17.70	17.66	18.9
15	16QAM	75	0	17.64	17.69	17.65	
15	64QAM	1	0	17.76	17.73	17.79	
15	64QAM	1	37	17.69	17.74	17.70	18.9
15	64QAM	1	74	17.72	17.80	17.72	
15	64QAM	36	0	17.64	17.66	17.73	
15	64QAM	36	20	17.68	17.72	17.68	18.9
15	64QAM	36	39	17.67	17.73	17.74	
15	64QAM	75	0	17.64	17.66	17.73	
Channel				18650	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	17.52	17.61	17.55	18.9
10	QPSK	1	25	17.51	17.52	17.42	
10	QPSK	1	49	17.53	17.53	17.49	
10	QPSK	25	0	17.59	17.61	17.63	18.9
10	QPSK	25	12	17.74	17.73	17.70	
10	QPSK	25	25	17.72	17.70	17.68	
10	QPSK	50	0	17.70	17.65	17.67	18.9
10	16QAM	1	0	17.91	17.97	17.95	
10	16QAM	1	25	17.91	17.96	17.98	
10	16QAM	1	49	17.84	17.93	17.82	18.9
10	16QAM	25	0	17.67	17.65	17.63	
10	16QAM	25	12	17.75	17.75	17.66	
10	16QAM	25	25	17.71	17.73	17.64	18.9
10	16QAM	50	0	17.67	17.64	17.69	
10	64QAM	1	0	17.76	17.76	17.77	
10	64QAM	1	25	17.74	17.84	17.74	18.9
10	64QAM	1	49	17.71	17.81	17.69	
10	64QAM	25	0	17.64	17.69	17.73	
10	64QAM	25	12	17.74	17.72	17.68	18.9
10	64QAM	25	25	17.69	17.69	17.70	
10	64QAM	50	0	17.69	17.71	17.65	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	17.54	17.52	17.58	18.9
5	QPSK	1	12	17.46	17.58	17.40	
5	QPSK	1	24	17.51	17.54	17.49	
5	QPSK	12	0	17.63	17.67	17.68	18.9
5	QPSK	12	7	17.68	17.69	17.70	
5	QPSK	12	13	17.66	17.73	17.69	
5	QPSK	25	0	17.69	17.62	17.70	18.9
5	16QAM	1	0	17.96	17.96	17.98	
5	16QAM	1	12	17.90	17.94	17.88	
5	16QAM	1	24	17.85	17.86	17.85	18.9
5	16QAM	12	0	17.69	17.66	17.71	
5	16QAM	12	7	17.73	17.76	17.75	
5	16QAM	12	13	17.72	17.65	17.66	18.9
5	16QAM	25	0	17.69	17.62	17.69	
5	64QAM	1	0	17.75	17.77	17.84	
5	64QAM	1	12	17.65	17.77	17.76	18.9
5	64QAM	1	24	17.76	17.78	17.74	
5	64QAM	12	0	17.64	17.72	17.70	
5	64QAM	12	7	17.68	17.68	17.71	18.9
5	64QAM	12	13	17.68	17.74	17.67	
5	64QAM	25	0	17.69	17.64	17.65	
Channel				18615	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	17.54	17.56	17.55	18.9
3	QPSK	1	8	17.45	17.55	17.43	
3	QPSK	1	14	17.47	17.58	17.47	
3	QPSK	8	0	17.60	17.65	17.72	18.9
3	QPSK	8	4	17.70	17.73	17.75	
3	QPSK	8	7	17.67	17.67	17.65	
3	QPSK	15	0	17.71	17.67	17.64	18.9
3	16QAM	1	0	17.91	17.91	17.98	
3	16QAM	1	8	17.89	17.85	17.82	
3	16QAM	1	14	17.86	17.93	17.88	18.9
3	16QAM	8	0	17.60	17.62	17.68	
3	16QAM	8	4	17.66	17.78	17.74	
3	16QAM	8	7	17.70	17.69	17.64	18.9
3	16QAM	15	0	17.67	17.71	17.71	
3	64QAM	1	0	17.73	17.67	17.66	
3	64QAM	1	8	17.67	17.75	17.77	18.9
3	64QAM	1	14	17.71	17.78	17.71	
3	64QAM	8	0	17.67	17.64	17.74	
3	64QAM	8	4	17.76	17.69	17.70	18.9
3	64QAM	8	7	17.71	17.69	17.76	
3	64QAM	15	0	17.71	17.72	17.69	
Channel				18607	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	17.49	17.58	17.46	18.9
1.4	QPSK	1	3	17.54	17.65	17.58	
1.4	QPSK	1	5	17.53	17.61	17.49	
1.4	QPSK	3	0	17.55	17.63	17.50	18.9
1.4	QPSK	3	1	17.61	17.67	17.63	
1.4	QPSK	3	3	17.59	17.64	17.54	
1.4	QPSK	6	0	17.64	17.67	17.58	18.9
1.4	16QAM	1	0	17.81	17.90	17.81	
1.4	16QAM	1	3	17.84	17.97	17.84	
1.4	16QAM	1	5	17.78	17.90	17.78	18.9
1.4	16QAM	3	0	17.65	17.74	17.63	
1.4	16QAM	3	1	17.71	17.79	17.64	
1.4	16QAM	3	3	17.62	17.74	17.63	18.9
1.4	16QAM	6	0	17.71	17.75	17.65	
1.4	64QAM	1	0	17.74	17.86	17.69	
1.4	64QAM	1	3	17.81	17.90	17.80	18.9
1.4	64QAM	1	5	17.73	17.83	17.72	
1.4	64QAM	3	0	17.72	17.82	17.70	
1.4	64QAM	3	1	17.79	17.88	17.74	18.9
1.4	64QAM	3	3	17.73	17.82	17.72	
1.4	64QAM	6	0	17.65	17.73	17.60	



Band 4							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	20.05	20.09	19.99	21.1
20	QPSK	1	49	19.93	19.92	19.91	
20	QPSK	1	99	19.95	19.92	19.90	
20	QPSK	50	0	20.10	20.09	20.01	
20	QPSK	50	24	20.16	20.08	20.00	21.1
20	QPSK	50	50	20.07	20.01	19.96	
20	QPSK	100	0	20.11	20.13	19.90	
20	16QAM	1	0	20.39	20.41	20.33	
20	16QAM	1	49	20.25	20.23	20.16	21.1
20	16QAM	1	99	20.30	20.17	20.07	
20	16QAM	50	0	20.13	20.11	20.02	
20	16QAM	50	24	20.15	20.13	20.05	
20	16QAM	50	50	20.10	20.04	19.96	21.1
20	16QAM	100	0	20.12	20.11	19.95	
20	64QAM	1	0	20.21	20.25	20.19	
20	64QAM	1	49	20.13	20.07	20.08	
20	64QAM	1	99	20.16	20.09	20.11	21.1
20	64QAM	50	0	20.14	20.16	20.07	
20	64QAM	50	24	20.15	20.11	20.07	
20	64QAM	50	50	20.09	20.04	19.99	
20	64QAM	100	0	20.12	20.10	19.96	Tune-up limit (dBm)
Channel				20050	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	20.03	20.00	19.92	21.1
15	QPSK	1	37	19.93	19.91	19.90	
15	QPSK	1	74	19.95	19.92	19.92	
15	QPSK	36	0	20.08	20.01	19.93	
15	QPSK	36	20	20.11	20.02	19.90	21.1
15	QPSK	36	39	19.99	19.99	19.90	
15	QPSK	75	0	20.02	20.12	19.91	
15	16QAM	1	0	20.39	20.32	20.23	
15	16QAM	1	37	20.26	20.23	20.06	21.1
15	16QAM	1	74	20.23	20.10	20.00	
15	16QAM	36	0	20.03	20.06	20.01	
15	16QAM	36	20	20.14	20.09	20.01	
15	16QAM	36	39	20.05	20.04	19.91	21.1
15	16QAM	75	0	20.09	20.05	19.96	
15	64QAM	1	0	20.12	20.20	20.14	
15	64QAM	1	37	20.04	19.98	19.98	
15	64QAM	1	74	20.14	20.04	20.07	21.1
15	64QAM	36	0	20.07	20.06	20.01	
15	64QAM	36	20	20.10	20.10	19.98	
15	64QAM	36	39	20.04	20.03	19.96	
15	64QAM	75	0	20.08	20.03	19.90	Tune-up limit (dBm)
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	20.01	20.03	19.98	21.1
10	QPSK	1	25	19.91	19.92	19.93	
10	QPSK	1	49	19.90	19.94	19.91	
10	QPSK	25	0	20.08	20.02	19.91	
10	QPSK	25	12	20.07	19.99	19.91	21.1
10	QPSK	25	25	19.98	20.00	19.96	
10	QPSK	50	0	20.10	20.05	19.92	
10	16QAM	1	0	20.34	20.32	20.27	
10	16QAM	1	25	20.17	20.21	20.08	21.1
10	16QAM	1	49	20.20	20.11	20.06	
10	16QAM	25	0	20.12	20.01	19.98	
10	16QAM	25	12	20.05	20.05	20.01	
10	16QAM	25	25	20.10	19.95	19.92	21.1
10	16QAM	50	0	20.05	20.07	19.93	
10	64QAM	1	0	20.16	20.18	20.13	
10	64QAM	1	25	20.10	19.99	20.01	
10	64QAM	1	49	20.07	20.05	20.07	21.1
10	64QAM	25	0	20.14	20.12	20.04	
10	64QAM	25	12	20.06	20.04	20.00	
10	64QAM	25	25	20.02	20.04	19.93	
10	64QAM	50	0	20.02	20.10	19.94	Tune-up limit (dBm)
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	19.95	20.09	19.90	21.1
5	QPSK	1	12	19.95	19.92	19.90	
5	QPSK	1	24	19.94	19.92	19.91	
5	QPSK	12	0	20.04	20.01	19.93	
5	QPSK	12	7	20.07	19.99	19.97	21.1
5	QPSK	12	13	20.00	19.95	19.92	
5	QPSK	25	0	20.10	20.06	19.91	
5	16QAM	1	0	20.37	20.41	20.30	
5	16QAM	1	12	20.24	20.16	20.12	21.1
5	16QAM	1	24	20.27	20.15	19.97	
5	16QAM	12	0	20.08	20.06	19.97	
5	16QAM	12	7	20.10	20.10	19.96	
5	16QAM	12	13	20.07	19.95	19.90	21.1
5	16QAM	25	0	20.07	20.06	19.93	
5	64QAM	1	0	20.15	20.25	20.16	
5	64QAM	1	12	20.03	20.01	20.08	
5	64QAM	1	24	20.13	20.03	20.06	21.1
5	64QAM	12	0	20.10	20.15	19.99	
5	64QAM	12	7	20.15	20.03	20.05	
5	64QAM	12	13	20.00	20.02	19.95	
5	64QAM	25	0	20.08	20.08	19.90	Tune-up limit (dBm)
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	19.98	20.07	19.95	21.1
3	QPSK	1	8	19.94	19.91	19.92	
3	QPSK	1	14	19.94	19.91	19.90	
3	QPSK	8	0	20.01	20.05	19.99	
3	QPSK	8	4	20.12	19.96	20.00	21.1
3	QPSK	8	7	20.04	19.96	19.93	
3	QPSK	15	0	20.03	20.12	19.91	
3	16QAM	1	0	20.33	20.36	20.26	
3	16QAM	1	8	20.17	20.14	20.14	21.1
3	16QAM	1	14	20.22	20.10	20.01	
3	16QAM	8	0	20.06	20.05	19.96	
3	16QAM	8	4	20.11	20.07	20.01	
3	16QAM	8	7	20.06	19.95	19.90	21.1
3	16QAM	15	0	20.04	20.06	19.95	
3	64QAM	1	0	20.14	20.25	20.16	
3	64QAM	1	8	20.06	19.97	20.07	
3	64QAM	1	14	20.14	20.06	20.05	21.1
3	64QAM	8	0	20.07	20.14	20.01	
3	64QAM	8	4	20.14	20.01	20.03	
3	64QAM	8	7	20.04	19.97	19.96	
3	64QAM	15	0	20.04	20.07	19.91	Tune-up limit (dBm)
Channel				19967	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	19.95	19.93	19.92	21.1
1.4	QPSK	1	3	20.01	19.97	19.94	
1.4	QPSK	1	5	19.91	19.94	19.90	
1.4	QPSK	3	0	19.98	19.91	19.90	
1.4	QPSK	3	1	20.02	19.95	19.90	21.1
1.4	QPSK	3	3	19.99	19.90	19.92	
1.4	QPSK	6	0	20.04	20.00	19.92	
1.4	16QAM	1	0	20.27	20.16	20.10	
1.4	16QAM	1	3	20.30	20.25	20.15	21.1
1.4	16QAM	1	5	20.25	20.21	20.08	
1.4	16QAM	3	0	20.02	19.95	19.93	
1.4	16QAM	3	1	20.05	20.01	19.96	
1.4	16QAM	3	3	20.01	19.94	19.91	21.1
1.4	16QAM	6	0	20.12	20.03	19.96	
1.4	64QAM	1	0	20.23	20.17	20.02	
1.4	64QAM	1	3	20.27	20.20	20.04	
1.4	64QAM	1	5	20.22	20.13	19.94	21.1
1.4	64QAM	3	0	20.18	20.12	19.98	
1.4	64QAM	3	1	20.23	20.18	20.04	
1.4	64QAM	3	3	20.17	20.13	19.98	
1.4	64QAM	6	0	20.04	20.00	19.90	21.1



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.09	24.12	24.20	25.7
10	QPSK	1	25	23.99	24.14	24.15	
10	QPSK	1	49	24.18	24.24	24.16	
10	QPSK	25	0	23.22	23.22	23.21	24.7
10	QPSK	25	12	23.27	23.24	23.31	
10	QPSK	25	25	23.26	23.28	23.27	
10	QPSK	50	0	23.24	23.26	23.25	24.7
10	16QAM	1	0	23.42	23.46	23.50	
10	16QAM	1	25	23.44	23.49	23.50	
10	16QAM	1	49	23.55	23.64	23.48	23.7
10	16QAM	25	0	22.17	22.28	22.24	
10	16QAM	25	12	22.32	22.27	22.30	
10	16QAM	25	25	22.19	22.25	22.38	23.7
10	16QAM	50	0	22.31	22.26	22.33	
10	64QAM	1	0	22.88	22.77	22.89	
10	64QAM	1	25	22.95	22.74	22.89	22.7
10	64QAM	1	49	22.95	22.56	22.14	
10	64QAM	25	0	21.70	21.80	21.85	
10	64QAM	25	12	21.81	21.83	21.85	21.51
10	64QAM	25	25	21.83	21.79	21.64	
10	64QAM	50	0	21.88	21.80	21.51	
Channel				20455	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.19	24.13	24.18	25.7
5	QPSK	1	12	24.09	24.21	23.89	
5	QPSK	1	24	24.08	24.12	23.96	
5	QPSK	12	0	23.30	23.27	23.23	24.7
5	QPSK	12	7	23.23	23.30	23.00	
5	QPSK	12	13	23.14	23.23	23.05	
5	QPSK	25	0	23.22	23.21	23.15	24.7
5	16QAM	1	0	23.57	23.50	23.47	
5	16QAM	1	12	23.39	23.54	23.21	
5	16QAM	1	24	23.39	23.55	23.17	23.7
5	16QAM	12	0	22.26	22.34	22.26	
5	16QAM	12	7	22.20	22.31	22.18	
5	16QAM	12	13	22.19	22.30	22.22	23.7
5	16QAM	25	0	22.26	22.22	22.30	
5	64QAM	1	0	22.94	22.94	22.53	
5	64QAM	1	12	22.83	22.89	21.92	22.7
5	64QAM	1	24	22.81	22.62	21.84	
5	64QAM	12	0	21.84	21.90	21.18	
5	64QAM	12	7	21.75	21.81	20.82	21.71
5	64QAM	12	13	21.78	21.83	21.71	
5	64QAM	25	0	21.70	21.81	20.89	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.12	24.15	23.99	25.7
3	QPSK	1	8	24.17	24.20	23.99	
3	QPSK	1	14	24.08	24.13	24.04	
3	QPSK	8	0	23.28	23.24	22.89	24.7
3	QPSK	8	4	23.19	23.27	23.03	
3	QPSK	8	7	23.25	23.23	23.20	
3	QPSK	15	0	23.20	23.22	23.02	24.7
3	16QAM	1	0	23.50	23.43	23.20	
3	16QAM	1	8	23.50	23.53	23.21	
3	16QAM	1	14	23.41	23.51	23.27	23.7
3	16QAM	8	0	22.33	22.29	22.05	
3	16QAM	8	4	22.23	22.39	22.15	
3	16QAM	8	7	22.24	22.33	22.19	23.7
3	16QAM	15	0	22.30	22.30	22.10	
3	64QAM	1	0	22.01	22.86	21.84	
3	64QAM	1	8	22.90	23.03	21.82	22.7
3	64QAM	1	14	22.90	22.88	21.79	
3	64QAM	8	0	21.75	21.80	21.63	
3	64QAM	8	4	21.83	21.88	21.73	22.7
3	64QAM	8	7	21.76	21.80	20.75	
3	64QAM	15	0	21.76	21.80	20.77	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.11	24.14	24.03	25.7
1.4	QPSK	1	3	24.10	24.10	24.15	
1.4	QPSK	1	5	23.95	24.09	24.02	
1.4	QPSK	3	0	24.15	24.08	24.06	24.7
1.4	QPSK	3	1	24.10	24.13	24.19	
1.4	QPSK	3	3	24.09	24.08	24.12	
1.4	QPSK	6	0	23.11	23.27	23.23	24.7
1.4	16QAM	1	0	23.38	23.40	23.32	
1.4	16QAM	1	3	23.38	23.55	23.53	
1.4	16QAM	1	5	23.33	23.42	23.39	23.7
1.4	16QAM	3	0	23.15	23.25	23.11	
1.4	16QAM	3	1	23.22	23.29	23.23	
1.4	16QAM	3	3	23.13	23.20	23.15	23.7
1.4	16QAM	6	0	22.19	22.29	22.31	
1.4	64QAM	1	0	22.79	22.85	21.81	
1.4	64QAM	1	3	22.82	22.95	21.84	22.7
1.4	64QAM	1	5	22.75	22.82	21.90	
1.4	64QAM	3	0	22.75	22.76	21.77	
1.4	64QAM	3	1	22.79	22.89	21.84	22.7
1.4	64QAM	3	3	22.74	22.88	22.00	
1.4	64QAM	6	0	21.70	21.79	21.65	



Band 7							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.46	20.57	20.58	21.6
20	QPSK	1	49	20.52	20.66	20.62	
20	QPSK	1	99	20.62	20.72	20.83	
20	QPSK	50	0	20.58	20.71	20.69	21.6
20	QPSK	50	24	20.68	20.75	20.72	
20	QPSK	50	50	20.69	20.84	20.76	
20	QPSK	100	0	20.69	20.73	20.70	21.6
20	16QAM	1	0	20.80	20.89	20.96	
20	16QAM	1	49	20.88	21.02	20.95	
20	16QAM	1	99	21.02	21.11	21.00	21.6
20	16QAM	50	0	20.56	20.72	20.70	
20	16QAM	50	24	20.73	20.76	20.73	
20	16QAM	50	50	20.71	20.85	20.80	21.6
20	16QAM	100	0	20.87	20.73	20.70	
20	64QAM	1	0	20.61	20.75	20.76	
20	64QAM	1	49	20.73	20.82	20.79	21.6
20	64QAM	1	99	20.90	20.96	20.88	
20	64QAM	50	0	20.59	20.71	20.69	
20	64QAM	50	24	20.71	20.76	20.73	21.6
20	64QAM	50	50	20.73	20.84	20.77	
20	64QAM	100	0	20.71	20.75	20.69	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.47	20.42	20.43	21.6
15	QPSK	1	37	20.41	20.48	20.45	
15	QPSK	1	74	20.40	20.55	20.48	
15	QPSK	36	0	20.44	20.52	20.49	21.6
15	QPSK	36	20	20.49	20.56	20.63	
15	QPSK	36	39	20.50	20.63	20.57	
15	QPSK	75	0	20.45	20.54	20.58	21.6
15	16QAM	1	0	20.63	20.78	20.73	
15	16QAM	1	37	20.68	20.82	20.75	
15	16QAM	1	74	20.75	20.89	20.78	21.6
15	16QAM	36	0	20.46	20.53	20.49	
15	16QAM	36	20	20.49	20.55	20.58	
15	16QAM	36	39	20.48	20.64	20.57	21.6
15	16QAM	75	0	20.46	20.56	20.59	
15	64QAM	1	0	20.49	20.59	20.62	
15	64QAM	1	37	20.57	20.74	20.67	21.6
15	64QAM	1	74	20.59	20.78	20.70	
15	64QAM	36	0	20.39	20.56	20.52	
15	64QAM	36	20	20.52	20.59	20.59	21.6
15	64QAM	36	39	20.51	20.68	20.58	
15	64QAM	75	0	20.47	20.56	20.56	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.43	20.40	20.47	21.6
10	QPSK	1	25	20.45	20.40	20.46	
10	QPSK	1	49	20.53	20.48	20.40	
10	QPSK	25	0	20.43	20.52	20.47	21.6
10	QPSK	25	12	20.45	20.53	20.48	
10	QPSK	25	25	20.46	20.59	20.54	
10	QPSK	50	0	20.44	20.55	20.47	21.6
10	16QAM	1	0	20.62	20.74	20.71	
10	16QAM	1	25	20.64	20.81	20.73	
10	16QAM	1	49	20.67	20.85	20.77	21.6
10	16QAM	25	0	20.41	20.49	20.45	
10	16QAM	25	12	20.45	20.54	20.47	
10	16QAM	25	25	20.44	20.60	20.52	21.6
10	16QAM	50	0	20.45	20.52	20.47	
10	64QAM	1	0	20.52	20.62	20.61	
10	64QAM	1	25	20.56	20.76	20.70	21.6
10	64QAM	1	49	20.56	20.78	20.72	
10	64QAM	25	0	20.42	20.57	20.49	
10	64QAM	25	12	20.48	20.61	20.55	21.6
10	64QAM	25	25	20.46	20.66	20.59	
10	64QAM	50	0	20.47	20.59	20.53	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.40	20.40	20.40	21.6
5	QPSK	1	12	20.40	20.48	20.41	
5	QPSK	1	24	20.40	20.48	20.40	
5	QPSK	12	0	20.41	20.54	20.52	21.6
5	QPSK	12	7	20.47	20.53	20.54	
5	QPSK	12	13	20.44	20.61	20.51	
5	QPSK	25	0	20.44	20.55	20.52	21.6
5	16QAM	1	0	20.68	20.75	20.73	
5	16QAM	1	12	20.62	20.73	20.70	
5	16QAM	1	24	20.68	20.80	20.73	21.6
5	16QAM	12	0	20.49	20.58	20.56	
5	16QAM	12	7	20.46	20.54	20.51	
5	16QAM	12	13	20.43	20.66	20.52	21.6
5	16QAM	25	0	20.42	20.55	20.55	
5	64QAM	1	0	20.52	20.68	20.65	
5	64QAM	1	12	20.50	20.75	20.65	21.6
5	64QAM	1	24	20.54	20.74	20.65	
5	64QAM	12	0	20.49	20.65	20.60	
5	64QAM	12	7	20.48	20.60	20.58	21.6
5	64QAM	12	13	20.48	20.67	20.57	
5	64QAM	25	0	20.43	20.59	20.57	



Band 12							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.86	23.82	23.80	25.7
10	QPSK	1	25	23.75	23.83	23.77	
10	QPSK	1	49	23.69	23.89	23.81	
10	QPSK	25	0	22.95	22.92	22.90	24.7
10	QPSK	25	12	23.03	22.92	22.96	
10	QPSK	25	25	23.01	22.94	22.95	
10	QPSK	50	0	22.97	22.99	22.97	24.7
10	16QAM	1	0	23.25	23.19	23.14	
10	16QAM	1	25	23.25	23.24	23.10	
10	16QAM	1	49	23.30	23.28	23.19	23.7
10	16QAM	25	0	21.94	21.92	21.86	
10	16QAM	25	12	22.01	21.86	21.92	
10	16QAM	25	25	21.88	22.00	21.87	23.7
10	16QAM	50	0	22.02	21.94	21.98	
10	64QAM	1	0	22.58	22.53	22.59	
10	64QAM	1	25	22.63	22.67	22.64	23.7
10	64QAM	1	49	22.68	22.68	22.58	
10	64QAM	25	0	21.49	21.44	21.40	
10	64QAM	25	12	21.58	21.43	21.57	22.7
10	64QAM	25	25	21.47	21.47	21.41	
10	64QAM	50	0	21.59	21.45	21.45	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.88	23.80	23.79	25.7
5	QPSK	1	12	23.88	23.84	23.84	
5	QPSK	1	24	23.78	23.82	23.80	
5	QPSK	12	0	22.91	22.93	22.91	24.7
5	QPSK	12	7	23.00	22.89	22.96	
5	QPSK	12	13	22.93	22.94	22.85	
5	QPSK	25	0	22.99	22.87	22.91	24.7
5	16QAM	1	0	23.20	23.22	23.09	
5	16QAM	1	12	23.14	23.21	23.15	
5	16QAM	1	24	23.14	23.15	23.09	23.7
5	16QAM	12	0	21.99	21.98	21.94	
5	16QAM	12	7	21.98	21.89	21.93	
5	16QAM	12	13	21.96	21.92	21.87	23.7
5	16QAM	25	0	21.94	21.98	21.92	
5	64QAM	1	0	22.69	22.61	22.58	
5	64QAM	1	12	22.59	22.54	22.60	23.7
5	64QAM	1	24	22.66	22.63	22.56	
5	64QAM	12	0	21.51	21.50	21.41	
5	64QAM	12	7	21.50	21.45	21.50	22.7
5	64QAM	12	13	21.52	21.45	21.42	
5	64QAM	25	0	21.44	21.46	21.39	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.84	23.80	23.81	25.7
3	QPSK	1	8	23.85	23.94	23.80	
3	QPSK	1	14	23.85	23.83	23.77	
3	QPSK	8	0	23.01	22.94	22.90	24.7
3	QPSK	8	4	22.92	22.95	22.91	
3	QPSK	8	7	22.90	22.87	22.84	
3	QPSK	15	0	22.90	22.92	22.84	24.7
3	16QAM	1	0	23.24	23.13	23.17	
3	16QAM	1	8	23.19	23.23	23.16	
3	16QAM	1	14	23.23	23.22	23.18	23.7
3	16QAM	8	0	22.06	21.94	21.94	
3	16QAM	8	4	22.01	22.06	22.01	
3	16QAM	8	7	22.03	21.92	21.88	23.7
3	16QAM	15	0	22.01	21.96	21.86	
3	64QAM	1	0	22.70	22.60	22.53	
3	64QAM	1	8	22.68	22.72	22.60	23.7
3	64QAM	1	14	22.66	22.60	22.57	
3	64QAM	8	0	21.60	21.44	21.47	
3	64QAM	8	4	21.60	21.50	21.53	22.7
3	64QAM	8	7	21.47	21.45	21.41	
3	64QAM	15	0	21.45	21.39	21.36	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.80	23.74	23.79	25.7
1.4	QPSK	1	3	23.81	23.79	23.77	
1.4	QPSK	1	5	23.80	23.74	23.70	
1.4	QPSK	3	0	23.82	23.73	23.71	24.7
1.4	QPSK	3	1	23.84	23.75	23.79	
1.4	QPSK	3	3	23.76	23.75	23.71	
1.4	QPSK	6	0	22.97	22.78	22.79	24.7
1.4	16QAM	1	0	23.15	23.06	23.09	
1.4	16QAM	1	3	23.18	23.21	23.09	
1.4	16QAM	1	5	23.08	23.08	22.98	24.7
1.4	16QAM	3	0	22.96	22.81	22.80	
1.4	16QAM	3	1	22.96	22.87	22.89	
1.4	16QAM	3	3	22.92	22.88	22.78	23.7
1.4	16QAM	6	0	21.94	21.86	21.82	
1.4	64QAM	1	0	22.59	22.48	22.43	
1.4	64QAM	1	3	22.69	22.57	22.48	23.7
1.4	64QAM	1	5	22.55	22.46	22.43	
1.4	64QAM	3	0	22.57	22.51	22.45	
1.4	64QAM	3	1	22.55	22.45	22.53	22.7
1.4	64QAM	3	3	22.55	22.57	22.46	
1.4	64QAM	6	0	21.40	21.32	21.31	



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.60			25.2
10	QPSK	1	25	23.47			
10	QPSK	1	49	23.51			
10	QPSK	25	0	22.58			24.2
10	QPSK	25	12	22.65			
10	QPSK	25	25	22.56			
10	QPSK	50	0	22.58			24.2
10	16QAM	1	0	22.75			
10	16QAM	1	25	22.82			
10	16QAM	1	49	22.76			23.2
10	16QAM	25	0	21.59			
10	16QAM	25	12	21.62			
10	16QAM	25	25	21.61			23.2
10	16QAM	50	0	21.57			
10	64QAM	1	0	23.07			
10	64QAM	1	25	23.04			23.2
10	64QAM	1	49	23.01			
10	64QAM	25	0	22.07			
10	64QAM	25	12	22.06			22.2
10	64QAM	25	25	22.02			
10	64QAM	50	0	22.04			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	794.5	
5	QPSK	1	0	23.50	23.45	23.49	25.2
5	QPSK	1	12	23.45	23.54	23.52	
5	QPSK	1	24	23.50	23.51	23.52	
5	QPSK	12	0	22.63	22.56	22.61	24.2
5	QPSK	12	7	22.67	22.64	22.67	
5	QPSK	12	13	22.67	22.62	22.62	
5	QPSK	25	0	22.64	22.57	22.55	24.2
5	16QAM	1	0	22.71	22.71	22.78	
5	16QAM	1	12	22.78	22.85	22.79	
5	16QAM	1	24	22.62	22.85	22.72	23.2
5	16QAM	12	0	21.70	21.62	21.68	
5	16QAM	12	7	21.68	21.57	21.60	
5	16QAM	12	13	21.69	21.60	21.70	23.2
5	16QAM	25	0	21.63	21.64	21.54	
5	64QAM	1	0	22.14	22.25	22.17	
5	64QAM	1	12	22.26	22.30	22.21	23.2
5	64QAM	1	24	22.26	22.23	22.15	
5	64QAM	12	0	21.19	21.11	21.20	
5	64QAM	12	7	21.24	21.14	21.08	22.2
5	64QAM	12	13	21.15	21.17	21.08	
5	64QAM	25	0	21.21	21.11	21.10	

Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.12			
10	QPSK	1	49	24.04			
10	QPSK	25	0	23.11			24.7
10	QPSK	25	12	23.18			
10	QPSK	25	25	23.16			
10	QPSK	50	0	23.15			24.7
10	16QAM	1	0	23.49			
10	16QAM	1	25	23.41			
10	16QAM	1	49	23.37			23.7
10	16QAM	25	0	22.10			
10	16QAM	25	12	22.09			
10	16QAM	25	25	22.19			23.7
10	16QAM	50	0	22.16			
10	64QAM	1	0	22.81			
10	64QAM	1	25	22.86			23.7
10	64QAM	1	49	22.73			
10	64QAM	25	0	21.72			
10	64QAM	25	12	21.81			22.7
10	64QAM	25	25	21.67			
10	64QAM	50	0	21.68			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.98	24.04	24.05	25.7
5	QPSK	1	12	24.14	24.19	24.14	
5	QPSK	1	24	24.08	24.07	24.05	
5	QPSK	12	0	23.13	23.12	23.08	24.7
5	QPSK	12	7	23.21	23.21	23.14	
5	QPSK	12	13	23.14	23.16	23.12	
5	QPSK	25	0	23.11	23.12	23.03	24.7
5	16QAM	1	0	23.40	23.37	23.34	
5	16QAM	1	12	23.47	23.44	23.43	
5	16QAM	1	24	23.45	23.34	23.39	23.7
5	16QAM	12	0	22.13	22.09	22.10	
5	16QAM	12	7	22.24	22.13	22.18	
5	16QAM	12	13	22.15	22.19	22.15	23.7
5	16QAM	25	0	22.17	22.07	22.08	
5	64QAM	1	0	22.75	22.83	22.82	
5	64QAM	1	12	22.89	22.72	22.82	23.7
5	64QAM	1	24	22.71	22.89	22.80	
5	64QAM	12	0	21.63	21.70	21.65	
5	64QAM	12	7	21.69	21.72	21.71	22.7
5	64QAM	12	13	21.75	21.67	21.65	
5	64QAM	25	0	21.71	21.66	21.61	



Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.25	24.20	24.11	25.7
10	QPSK	1	25	24.30	24.36	24.15	
10	QPSK	1	49	24.30	24.21	24.20	
10	QPSK	25	0	23.29	23.30	23.28	24.7
10	QPSK	25	12	23.40	23.30	23.28	
10	QPSK	25	25	23.38	23.36	23.44	
10	QPSK	50	0	23.35	23.29	23.30	24.7
10	16QAM	1	0	23.62	23.59	23.59	
10	16QAM	1	25	23.66	23.61	23.58	
10	16QAM	1	49	23.60	23.63	23.62	23.7
10	16QAM	25	0	22.29	22.27	22.30	
10	16QAM	25	12	22.41	22.37	22.28	
10	16QAM	25	25	22.44	22.35	22.45	23.7
10	16QAM	50	0	22.37	22.35	22.25	
10	64QAM	1	0	23.01	22.91	22.99	
10	64QAM	1	25	23.11	23.02	23.01	22.7
10	64QAM	1	49	23.05	23.02	22.93	
10	64QAM	25	0	21.81	21.82	21.78	
10	64QAM	25	12	21.95	21.88	21.82	22.7
10	64QAM	25	25	21.89	21.92	21.97	
10	64QAM	50	0	21.05	21.82	21.85	
Channel				23755	23760	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.16	24.23	24.17	25.7
5	QPSK	1	12	24.32	24.33	24.24	
5	QPSK	1	24	24.30	24.32	24.28	
5	QPSK	12	0	23.28	23.30	23.29	24.7
5	QPSK	12	7	23.31	23.30	23.32	
5	QPSK	12	13	23.40	23.37	23.34	
5	QPSK	25	0	23.34	23.27	23.38	24.7
5	16QAM	1	0	23.61	23.57	23.51	
5	16QAM	1	12	23.64	23.63	23.59	
5	16QAM	1	24	23.62	23.61	23.59	23.7
5	16QAM	12	0	22.38	22.40	22.27	
5	16QAM	12	7	22.39	22.35	22.30	
5	16QAM	12	13	22.34	22.35	22.30	23.7
5	16QAM	25	0	22.35	22.38	22.37	
5	64QAM	1	0	22.76	22.83	23.01	
5	64QAM	1	12	23.01	23.08	22.96	23.7
5	64QAM	1	24	23.04	23.07	22.97	
5	64QAM	12	0	21.93	21.92	21.91	
5	64QAM	12	7	21.96	21.91	21.94	22.7
5	64QAM	12	13	21.92	21.96	21.92	
5	64QAM	25	0	21.86	21.84	21.91	



Band 25									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	17.68	17.70	17.58	18.9		
20	QPSK	1	49	17.56	17.66	17.56			
20	QPSK	1	99	17.59	17.66	17.55			
20	QPSK	50	0	17.74	17.77	17.68			
20	QPSK	50	24	17.83	17.82	17.89	18.9		
20	QPSK	50	50	17.78	17.78	17.75			
20	QPSK	100	0	17.81	17.78	17.64			
20	16QAM	1	0	18.01	17.98	17.98			
20	16QAM	1	49	17.93	17.95	17.93	18.9		
20	16QAM	1	99	17.91	17.95	17.92			
20	16QAM	50	0	17.77	17.77	17.85			
20	16QAM	50	24	17.80	17.83	17.70			
20	16QAM	50	50	17.77	17.84	17.73	18.9		
20	16QAM	100	0	17.77	17.78	17.63			
20	64QAM	1	0	17.91	17.84	17.75			
20	64QAM	1	49	17.80	17.88	17.77			
20	64QAM	1	99	17.81	17.91	17.79	18.9		
20	64QAM	50	0	17.78	17.76	17.70			
20	64QAM	50	24	17.82	17.86	17.70			
20	64QAM	50	50	17.80	17.83	17.79			
20	64QAM	100	0	17.79	17.82	17.68	18.9		
Channel				26115	26340	26615			
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	17.60	17.61	17.52	18.9		
15	QPSK	1	37	17.53	17.64	17.48			
15	QPSK	1	74	17.52	17.57	17.54			
15	QPSK	36	0	17.66	17.71	17.63			
15	QPSK	36	20	17.73	17.77	17.61	18.9		
15	QPSK	36	39	17.71	17.77	17.75			
15	QPSK	75	0	17.72	17.73	17.57			
15	16QAM	1	0	18.01	17.95	17.88			
15	16QAM	1	37	17.89	17.95	17.85	18.9		
15	16QAM	1	74	17.90	17.92	17.84			
15	16QAM	36	0	17.73	17.76	17.57			
15	16QAM	36	20	17.79	17.77	17.70			
15	16QAM	36	39	17.76	17.74	17.69	18.9		
15	16QAM	75	0	17.69	17.71	17.61			
15	64QAM	1	0	17.84	17.75	17.72			
15	64QAM	1	37	17.71	17.78	17.70			
15	64QAM	1	74	17.72	17.85	17.70	18.9		
15	64QAM	36	0	17.76	17.78	17.60			
15	64QAM	36	20	17.72	17.83	17.69			
15	64QAM	36	39	17.70	17.78	17.78			
15	64QAM	75	0	17.75	17.76	17.63	18.9		
Channel				26090	26340	26640			
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	17.58	17.70	17.55	18.9		
10	QPSK	1	25	17.54	17.66	17.56			
10	QPSK	1	49	17.51	17.62	17.54			
10	QPSK	25	0	17.74	17.76	17.60			
10	QPSK	25	12	17.74	17.81	17.65	18.9		
10	QPSK	25	25	17.78	17.71	17.67			
10	QPSK	50	0	17.74	17.75	17.63			
10	16QAM	1	0	18.01	17.92	17.94			
10	16QAM	1	25	17.96	17.92	17.83	18.9		
10	16QAM	1	49	17.91	17.89	17.91			
10	16QAM	25	0	17.73	17.67	17.59			
10	16QAM	25	12	17.79	17.80	17.65			
10	16QAM	25	25	17.75	17.75	17.67	18.9		
10	16QAM	50	0	17.73	17.72	17.63			
10	64QAM	1	0	17.83	17.80	17.75			
10	64QAM	1	25	17.74	17.83	17.76			
10	64QAM	1	49	17.81	17.85	17.71	18.9		
10	64QAM	25	0	17.74	17.71	17.66			
10	64QAM	25	12	17.77	17.79	17.64			
10	64QAM	25	25	17.74	17.76	17.78			
10	64QAM	50	0	17.72	17.70	17.66	18.9		
Channel				26065	26340	26665			
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	17.68	17.66	17.50	18.9		
5	QPSK	1	12	17.46	17.58	17.53			
5	QPSK	1	24	17.52	17.60	17.52			
5	QPSK	12	0	17.67	17.74	17.65			
5	QPSK	12	7	17.60	17.79	17.68	18.9		
5	QPSK	12	13	17.75	17.70	17.75			
5	QPSK	25	0	17.80	17.78	17.54			
5	16QAM	1	0	17.93	17.95	17.91			
5	16QAM	1	12	17.87	17.88	17.90	18.9		
5	16QAM	1	24	17.84	17.88	17.92			
5	16QAM	12	0	17.77	17.86	17.55			
5	16QAM	12	7	17.75	17.75	17.86			
5	16QAM	12	13	17.74	17.80	17.72	18.9		
5	16QAM	25	0	17.70	17.73	17.59			
5	64QAM	1	0	17.81	17.76	17.68			
5	64QAM	1	12	17.79	17.87	17.75			
5	64QAM	1	24	17.74	17.83	17.75	18.9		
5	64QAM	12	0	17.74	17.77	17.83			
5	64QAM	12	7	17.80	17.81	17.70			
5	64QAM	12	13	17.76	17.75	17.71			
5	64QAM	25	0	17.72	17.80	17.68	18.9		
Channel				26055	26340	26675			
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	17.68	17.64	17.53	18.9		
3	QPSK	1	8	17.46	17.63	17.53			
3	QPSK	1	14	17.51	17.63	17.53			
3	QPSK	8	0	17.74	17.71	17.67			
3	QPSK	8	4	17.80	17.72	17.60	18.9		
3	QPSK	8	7	17.78	17.71	17.69			
3	QPSK	15	0	17.78	17.76	17.63			
3	16QAM	1	0	17.98	17.91	17.93			
3	16QAM	1	8	17.84	17.93	17.84	18.9		
3	16QAM	1	14	17.85	17.90	17.90			
3	16QAM	8	0	17.70	17.77	17.56			
3	16QAM	8	4	17.71	17.75	17.65			
3	16QAM	8	7	17.71	17.78	17.73	18.9		
3	16QAM	15	0	17.71	17.68	17.57			
3	64QAM	1	0	17.91	17.76	17.85			
3	64QAM	1	8	17.73	17.82	17.71			
3	64QAM	1	14	17.79	17.90	17.75	18.9		
3	64QAM	8	0	17.68	17.78	17.67			
3	64QAM	8	4	17.78	17.81	17.64			
3	64QAM	8	7	17.79	17.73	17.73			
3	64QAM	15	0	17.74	17.78	17.58	18.9		
Channel				26047	26340	26683			
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	17.53	17.50	17.43	18.9		
1.4	QPSK	1	3	17.65	17.65	17.55			
1.4	QPSK	1	5	17.61	17.61	17.49			
1.4	QPSK	3	0	17.59	17.59	17.47			
1.4	QPSK	3	1	17.66	17.65	17.50	18.9		
1.4	QPSK	3	3	17.65	17.64	17.51			
1.4	QPSK	6	0	17.69	17.68	17.55			
1.4	QPSK	6	4	17.78	17.77	17.57	18.9		
1.4	QPSK	6	7	17.77	17.72	17.65			
1.4	16QAM	1	0	17.99	18.01	17.92			
1.4	16QAM	1	5	17.95	17.97	17.81			
1.4	16QAM	3	0	17.68	17.71	17.55	18.9		
1.4	16QAM	3	1	17.72	17.81	17.59			
1.4	16QAM	3	3	17.70	17.71	17.58			
1.4	16QAM	6	0	17.78	17.78	17.67			
1.4	16QAM	6	4	17.77	17.79	17.68	18.9		
1.4	16QAM	6	7	17.72	17.76	17.78			
1.4	16QAM	1	5	17.81	17.83	17.74			
1.4	16QAM	3	0	17.77	17.80	17.66			
1.4	16QAM	3	1	17.85	17.88	17.77	18.9		
1.4	16QAM	3	3	17.81	17.83	17.70			
1.4	16QAM	6	0	17.84	17.84	17.63			
1.4	16QAM	6	4	17.82	17.82	17.71			



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.04	24.05	24.03	25.7
15	QPSK	1	37	23.98	24.02	24.02	
15	QPSK	1	74	24.10	24.33	23.96	
15	QPSK	36	0	23.17	23.22	23.18	24.7
15	QPSK	36	20	23.23	23.18	23.12	
15	QPSK	36	39	23.19	23.19	23.15	
15	QPSK	75	0	23.23	23.17	23.12	24.7
15	16QAM	1	0	23.36	23.36	23.38	
15	16QAM	1	37	23.38	23.42	23.42	
15	16QAM	1	74	23.43	23.44	23.29	23.7
15	16QAM	36	0	22.16	22.22	22.16	
15	16QAM	36	20	22.17	22.15	22.16	
15	16QAM	36	39	22.14	22.17	22.23	23.7
15	16QAM	75	0	22.17	22.15	22.22	
15	64QAM	1	0	22.79	22.70	22.74	
15	64QAM	1	37	22.72	22.80	22.79	22.7
15	64QAM	1	74	22.80	22.76	22.16	
15	64QAM	36	0	21.64	21.76	21.77	
15	64QAM	36	20	21.66	21.73	21.65	22.7
15	64QAM	36	39	21.67	21.76	21.78	
15	64QAM	75	0	21.76	21.65	21.77	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.13	24.13	24.21	25.7
10	QPSK	1	25	24.03	24.13	24.12	
10	QPSK	1	49	24.09	24.17	24.09	
10	QPSK	25	0	23.22	23.12	23.21	24.7
10	QPSK	25	12	23.20	23.20	23.20	
10	QPSK	25	25	23.16	23.23	23.25	
10	QPSK	50	0	23.23	23.14	23.16	24.7
10	16QAM	1	0	23.45	23.52	23.59	
10	16QAM	1	25	23.55	23.51	23.52	
10	16QAM	1	49	23.53	23.49	23.45	23.7
10	16QAM	25	0	22.22	22.20	22.21	
10	16QAM	25	12	22.23	22.21	22.15	
10	16QAM	25	25	22.17	22.23	22.08	23.7
10	16QAM	50	0	22.20	22.19	22.19	
10	64QAM	1	0	22.96	22.76	22.91	
10	64QAM	1	25	22.81	22.91	22.98	23.7
10	64QAM	1	49	22.55	22.91	22.96	
10	64QAM	25	0	21.76	21.73	21.75	
10	64QAM	25	12	21.62	21.75	21.78	22.7
10	64QAM	25	25	21.70	21.75	21.48	
10	64QAM	50	0	21.74	21.68	21.72	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.31	24.13	24.11	25.7
5	QPSK	1	12	24.24	24.19	24.09	
5	QPSK	1	24	24.07	24.24	24.16	
5	QPSK	12	0	23.33	23.23	23.21	24.7
5	QPSK	12	7	23.27	23.27	23.22	
5	QPSK	12	13	23.26	23.24	23.11	
5	QPSK	25	0	23.28	23.13	23.20	24.7
5	16QAM	1	0	23.63	23.43	23.45	
5	16QAM	1	12	23.43	23.51	23.32	
5	16QAM	1	24	23.44	23.49	23.31	23.7
5	16QAM	12	0	22.38	22.22	22.22	
5	16QAM	12	7	22.32	22.24	22.21	
5	16QAM	12	13	22.21	22.25	22.18	23.7
5	16QAM	25	0	22.22	22.21	22.21	
5	64QAM	1	0	23.02	22.85	22.89	
5	64QAM	1	12	22.84	22.89	22.19	23.7
5	64QAM	1	24	22.68	22.92	22.34	
5	64QAM	12	0	21.90	21.94	21.65	
5	64QAM	12	7	21.89	21.81	21.18	22.7
5	64QAM	12	13	21.75	21.82	21.02	
5	64QAM	25	0	21.82	21.69	21.36	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.19	24.16	24.20	25.7
3	QPSK	1	8	24.24	24.27	24.13	
3	QPSK	1	14	24.07	24.18	24.11	
3	QPSK	8	0	23.34	23.18	23.17	24.7
3	QPSK	8	4	23.25	23.25	23.22	
3	QPSK	8	7	23.29	23.24	23.10	
3	QPSK	15	0	23.24	23.18	23.13	24.7
3	16QAM	1	0	23.53	23.45	23.50	
3	16QAM	1	8	23.59	23.51	23.39	
3	16QAM	1	14	23.50	23.53	23.35	23.7
3	16QAM	8	0	22.35	22.23	22.26	
3	16QAM	8	4	22.30	22.37	22.25	
3	16QAM	8	7	22.27	22.33	22.13	23.7
3	16QAM	15	0	22.38	22.17	22.16	
3	64QAM	1	0	22.92	22.87	22.25	
3	64QAM	1	8	23.00	22.93	22.12	23.7
3	64QAM	1	14	22.89	22.94	22.30	
3	64QAM	8	0	21.87	21.79	21.08	
3	64QAM	8	4	21.84	21.88	21.07	22.7
3	64QAM	8	7	21.88	21.80	21.14	
3	64QAM	15	0	21.81	21.79	21.12	
Channel				26897	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.16	24.04	24.05	25.7
1.4	QPSK	1	3	24.24	24.13	24.07	
1.4	QPSK	1	5	24.12	24.08	23.93	
1.4	QPSK	3	0	24.23	24.06	24.02	24.7
1.4	QPSK	3	1	24.21	24.05	24.03	
1.4	QPSK	3	3	24.16	24.14	23.99	
1.4	QPSK	6	0	23.25	23.20	23.04	24.7
1.4	16QAM	1	0	23.52	23.37	23.36	
1.4	16QAM	1	3	23.54	23.47	23.35	
1.4	16QAM	1	5	23.41	23.39	23.29	24.7
1.4	16QAM	3	0	23.23	23.16	23.12	
1.4	16QAM	3	1	23.23	23.20	23.14	
1.4	16QAM	3	3	23.27	23.11	23.09	23.7
1.4	16QAM	6	0	22.34	22.26	22.14	
1.4	64QAM	1	0	22.85	22.81	22.16	
1.4	64QAM	1	3	22.96	22.89	22.39	23.7
1.4	64QAM	1	5	22.79	22.75	22.41	
1.4	64QAM	3	0	22.92	22.75	22.11	
1.4	64QAM	3	1	22.90	22.81	22.20	22.7
1.4	64QAM	3	3	22.84	22.75	22.38	
1.4	64QAM	6	0	21.75	21.73	21.14	



Band 30							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		20.54		21.6
10	QPSK	1	25		20.50		
10	QPSK	1	49		20.51		
10	QPSK	25	0		20.55		21.6
10	QPSK	25	12		20.60		
10	QPSK	25	25		20.59		
10	QPSK	50	0		20.75		21.6
10	16QAM	1	0		20.65		
10	16QAM	1	25		20.67		
10	16QAM	1	49		20.65		21.6
10	16QAM	25	0		20.33		
10	16QAM	25	12		20.37		
10	16QAM	25	25		20.34		21.6
10	16QAM	50	0		20.40		
10	64QAM	1	0		20.54		
10	64QAM	1	25		20.63		21.6
10	64QAM	1	49		20.49		
10	64QAM	25	0		19.46		
10	64QAM	25	12		19.53		20.6
10	64QAM	25	25		19.55		
10	64QAM	50	0		19.52		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.10	20.15	20.19	21.6
5	QPSK	1	12	20.26	20.30	20.24	
5	QPSK	1	24	20.28	20.22	20.25	
5	QPSK	12	0	20.24	20.28	20.28	21.6
5	QPSK	12	7	20.35	20.29	20.31	
5	QPSK	12	13	20.33	20.32	20.31	
5	QPSK	25	0	20.31	20.28	20.28	21.6
5	16QAM	1	0	20.42	20.42	20.56	
5	16QAM	1	12	20.50	20.55	20.46	
5	16QAM	1	24	20.56	20.53	20.56	21.6
5	16QAM	12	0	20.26	20.29	20.27	
5	16QAM	12	7	20.38	20.34	20.33	
5	16QAM	12	13	20.38	20.31	20.34	21.6
5	16QAM	25	0	20.30	20.29	20.33	
5	64QAM	1	0	20.36	20.43	20.44	
5	64QAM	1	12	20.47	20.50	20.46	21.6
5	64QAM	1	24	20.55	20.49	20.50	
5	64QAM	12	0	19.41	19.44	19.46	
5	64QAM	12	7	19.51	19.47	19.49	20.6
5	64QAM	12	13	19.51	19.44	19.49	
5	64QAM	25	0	19.46	19.42	19.42	



Band 66											
Ant 0											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1775					
20	QPSK	1	0	20.05	19.96	19.93	21.1				
20	QPSK	1	49	19.91	19.90	19.92					
20	QPSK	1	99	19.92	19.91	19.90					
20	QPSK	50	0	19.98	19.93	19.90					
20	QPSK	50	24	20.17	20.00	20.03	21.1				
20	QPSK	50	50	20.05	19.90	19.91					
20	QPSK	100	0	20.02	19.90	19.90					
20	16QAM	1	0	20.29	20.20	20.14					
20	16QAM	1	49	20.21	20.05	20.08	21.1				
20	16QAM	1	99	20.29	20.05	19.96					
20	16QAM	50	0	20.00	19.92	19.91					
20	16QAM	50	24	20.06	19.93	19.97					
20	16QAM	50	50	20.05	19.90	19.92	21.1				
20	16QAM	100	0	20.06	19.91	19.92					
20	64QAM	1	0	20.12	20.01	19.98					
20	64QAM	1	49	20.01	19.92	19.92					
20	64QAM	1	99	20.11	19.98	19.92	21.1				
20	64QAM	50	0	20.00	19.92	19.92					
20	64QAM	50	24	20.07	19.93	19.97					
20	64QAM	50	50	20.05	19.91	19.93					
20	64QAM	100	0	20.04	19.89	19.87	Tune-up limit (dBm)				
Channel				132047	132322	132597					
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	19.97	19.97	19.92	21.1				
15	QPSK	1	37	19.91	19.95	19.94					
15	QPSK	1	74	19.92	19.94	19.93					
15	QPSK	36	0	20.07	19.93	19.96					
15	QPSK	36	20	20.12	20.00	19.96	21.1				
15	QPSK	36	39	20.08	19.99	19.95					
15	QPSK	75	0	20.02	19.96	19.96					
15	16QAM	1	0	20.22	20.18	20.18					
15	16QAM	1	37	20.21	20.15	20.18	21.1				
15	16QAM	1	74	20.20	20.08	20.02					
15	16QAM	36	0	20.06	19.97	19.92					
15	16QAM	36	20	20.15	19.95	20.02					
15	16QAM	36	39	20.12	19.93	20.02	21.1				
15	16QAM	75	0	20.07	19.96	20.00					
15	64QAM	1	0	20.17	20.09	19.98					
15	64QAM	1	37	20.05	20.00	20.01					
15	64QAM	1	74	20.19	20.00	19.93	21.1				
15	64QAM	36	0	20.02	19.90	19.95					
15	64QAM	36	20	20.14	19.93	20.07					
15	64QAM	36	39	20.12	19.99	19.98					
15	64QAM	75	0	20.09	19.96	19.95	Tune-up limit (dBm)				
Channel				132022	132322	132622					
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	19.99	19.96	19.91	21.1				
10	QPSK	1	25	19.91	19.92	19.92					
10	QPSK	1	49	19.95	19.90	19.92					
10	QPSK	25	0	20.03	19.90	20.00					
10	QPSK	25	12	20.12	19.97	19.99	21.1				
10	QPSK	25	25	20.13	19.97	19.95					
10	QPSK	50	0	20.04	19.91	19.96					
10	16QAM	1	0	20.22	20.22	20.23					
10	16QAM	1	25	20.21	20.07	20.09	21.1				
10	16QAM	1	49	20.25	20.12	20.02					
10	16QAM	25	0	20.00	19.97	19.97					
10	16QAM	25	12	20.07	20.03	20.06					
10	16QAM	25	25	20.06	19.95	20.00	21.1				
10	16QAM	50	0	20.14	19.93	19.95					
10	64QAM	1	0	20.13	20.10	20.08					
10	64QAM	1	25	20.04	20.02	19.92					
10	64QAM	1	49	20.21	19.98	19.92	21.1				
10	64QAM	25	0	20.02	19.90	19.99					
10	64QAM	25	12	20.12	19.95	20.03					
10	64QAM	25	25	20.11	19.93	19.93					
10	64QAM	50	0	20.05	19.91	19.93	Tune-up limit (dBm)				
Channel				131997	132322	132647					
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	20.02	19.95	19.91	21.1				
5	QPSK	1	12	19.91	19.90	19.91					
5	QPSK	1	24	19.96	19.91	19.92					
5	QPSK	12	0	20.08	19.97	19.97					
5	QPSK	12	7	20.10	19.94	20.00	21.1				
5	QPSK	12	13	20.10	19.91	19.95					
5	QPSK	25	0	20.10	19.92	19.93					
5	16QAM	1	0	20.26	20.26	20.24					
5	16QAM	1	12	20.24	20.11	20.09	21.1				
5	16QAM	1	24	20.25	20.12	20.06					
5	16QAM	12	0	20.02	19.95	19.94					
5	16QAM	12	7	20.13	20.00	20.06					
5	16QAM	12	13	20.07	19.99	20.02	21.1				
5	16QAM	25	0	20.14	19.95	19.99					
5	64QAM	1	0	20.17	20.04	20.04					
5	64QAM	1	12	20.02	19.92	19.97					
5	64QAM	1	24	20.19	20.00	19.96	21.1				
5	64QAM	12	0	20.09	19.97	20.00					
5	64QAM	12	7	20.17	19.99	19.97					
5	64QAM	12	13	20.15	19.97	20.03					
5	64QAM	25	0	20.11	19.93	19.94	Tune-up limit (dBm)				
Channel				131987	132322	132657					
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	19.97	19.92	19.91	21.1				
3	QPSK	1	8	19.95	19.90	19.91					
3	QPSK	1	14	19.92	19.90	19.91					
3	QPSK	8	0	20.03	19.96	19.92					
3	QPSK	8	4	20.11	19.96	19.99	21.1				
3	QPSK	8	7	20.09	19.95	20.00					
3	QPSK	15	0	20.04	19.97	19.98					
3	16QAM	1	0	20.23	20.25	20.15					
3	16QAM	1	8	20.27	20.08	20.18	21.1				
3	16QAM	1	14	20.24	20.07	20.03					
3	16QAM	8	0	20.00	19.98	20.01					
3	16QAM	8	4	20.12	19.99	20.02					
3	16QAM	8	7	20.06	19.98	19.92	21.1				
3	16QAM	15	0	20.16	20.00	19.94					
3	64QAM	1	0	20.22	20.04	20.08					
3	64QAM	1	8	20.04	20.02	19.96					
3	64QAM	1	14	20.21	19.98	20.01	21.1				
3	64QAM	8	0	20.07	19.92	19.97					
3	64QAM	8	4	20.14	20.01	20.04					
3	64QAM	8	7	20.08	19.95	19.93					
3	64QAM	15	0	20.14	19.92	19.98	Tune-up limit (dBm)				
Channel				131979	132322	132665					
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	19.96	19.91	19.92	21.1				
1.4	QPSK	1	3	20.04	19.90	19.95					
1.4	QPSK	1	5	19.97	19.91	19.93					
1.4	QPSK	3	0	20.01	19.92	19.93					
1.4	QPSK	3	1	20.07	19.90	19.93	21.1				
1.4	QPSK	3	3	20.01	19.90	19.91					
1.4	QPSK	6	0	20.09	19.94	19.95					
1.4	16QAM	1	0	20.21							



Band 71							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.35	24.17	24.20	25.7
20	QPSK	1	49	24.15	24.16	24.15	
20	QPSK	1	99	24.12	24.09	24.08	
20	QPSK	50	0	23.28	23.24	23.28	24.7
20	QPSK	50	24	23.33	23.28	23.17	
20	QPSK	50	50	23.32	23.27	23.27	
20	QPSK	100	0	23.33	23.32	23.28	24.7
20	16QAM	1	0	23.68	23.52	23.53	
20	16QAM	1	49	23.55	23.54	23.40	
20	16QAM	1	99	23.49	23.49	23.45	23.7
20	16QAM	50	0	22.34	22.30	22.30	
20	16QAM	50	24	22.34	22.27	22.24	
20	16QAM	50	50	22.30	22.25	22.28	22.7
20	16QAM	100	0	22.32	22.30	22.26	
20	64QAM	1	0	22.18	22.70	23.01	
20	64QAM	1	49	22.76	22.59	22.38	22.7
20	64QAM	1	99	23.01	22.51	22.88	
20	64QAM	50	0	20.92	21.86	21.50	
20	64QAM	50	24	21.49	21.70	21.76	22.7
20	64QAM	50	50	21.96	21.50	21.85	
20	64QAM	100	0	21.50	21.89	21.87	
Channel				133197	133287	133387	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.33	24.17	24.13	25.7
15	QPSK	1	37	24.01	24.14	24.11	
15	QPSK	1	74	24.16	24.11	24.11	
15	QPSK	36	0	23.24	23.26	23.27	24.7
15	QPSK	36	20	23.29	23.28	23.37	
15	QPSK	36	39	23.31	23.33	23.26	
15	QPSK	75	0	23.34	23.30	23.20	24.7
15	16QAM	1	0	23.56	23.53	23.49	
15	16QAM	1	37	23.28	23.50	23.41	
15	16QAM	1	74	23.38	23.43	23.38	23.7
15	16QAM	36	0	22.15	22.31	22.26	
15	16QAM	36	20	22.31	22.25	22.34	
15	16QAM	36	39	22.38	22.33	22.28	23.7
15	16QAM	75	0	22.37	22.19	22.18	
15	64QAM	1	0	22.13	22.80	22.90	
15	64QAM	1	37	21.73	23.04	23.04	23.7
15	64QAM	1	74	22.53	22.63	22.97	
15	64QAM	36	0	20.81	21.92	21.51	
15	64QAM	36	20	20.88	21.74	21.92	22.7
15	64QAM	36	39	21.49	21.44	21.88	
15	64QAM	75	0	21.38	21.79	21.77	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.30	24.14	24.17	25.7
10	QPSK	1	25	24.11	24.10	24.12	
10	QPSK	1	49	24.13	24.14	24.01	
10	QPSK	25	0	23.36	23.28	23.22	24.7
10	QPSK	25	12	23.13	23.25	23.22	
10	QPSK	25	25	23.19	23.31	23.23	
10	QPSK	50	0	23.29	23.18	23.16	24.7
10	16QAM	1	0	23.62	23.47	23.53	
10	16QAM	1	25	23.47	23.51	23.45	
10	16QAM	1	49	23.46	23.44	23.39	23.7
10	16QAM	25	0	22.05	22.17	22.16	
10	16QAM	25	12	22.07	22.24	22.20	
10	16QAM	25	25	22.00	22.24	22.19	23.7
10	16QAM	50	0	22.28	22.17	22.22	
10	64QAM	1	0	21.83	22.96	22.96	
10	64QAM	1	25	21.88	23.08	23.07	22.7
10	64QAM	1	49	22.12	22.23	22.55	
10	64QAM	25	0	20.70	21.87	21.82	
10	64QAM	25	12	20.70	21.74	21.85	22.7
10	64QAM	25	25	20.68	21.37	21.72	
10	64QAM	50	0	20.73	21.60	21.80	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.03	24.23	24.23	25.7
5	QPSK	1	12	24.13	24.24	24.12	
5	QPSK	1	24	24.11	24.10	24.10	
5	QPSK	12	0	23.15	23.26	23.19	24.7
5	QPSK	12	7	23.15	23.32	23.26	
5	QPSK	12	13	23.13	23.22	23.18	
5	QPSK	25	0	23.15	23.26	23.20	24.7
5	16QAM	1	0	23.29	23.53	23.52	
5	16QAM	1	12	23.38	23.54	23.50	
5	16QAM	1	24	23.40	23.49	23.42	23.7
5	16QAM	12	0	22.04	22.30	22.29	
5	16QAM	12	7	22.12	22.30	22.29	
5	16QAM	12	13	22.25	22.25	22.21	23.7
5	16QAM	25	0	22.06	22.21	22.22	
5	64QAM	1	0	21.70	22.98	23.00	
5	64QAM	1	12	21.82	22.93	22.81	23.7
5	64QAM	1	24	22.03	22.71	22.37	
5	64QAM	12	0	20.74	21.93	21.85	
5	64QAM	12	7	20.91	21.89	21.91	22.7
5	64QAM	12	13	20.87	21.70	21.89	
5	64QAM	25	0	20.69	21.73	21.61	



Band 2								
Art 2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. 7	Power Middle Ch. 7	Power High Ch. 7	Tune-up limit (dbm)	
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	24.49	24.54	24.52	25.7	
20	QPSK	1	49	24.45	24.53	24.43		
20	QPSK	1	99	24.45	24.47	24.40		
20	QPSK	50	0	23.55	23.59	23.58	24.7	
20	QPSK	50	24	23.64	23.63	23.59		
20	QPSK	50	50	23.62	23.57	23.59		
20	QPSK	100	0	23.65	23.58	23.59	24.7	
20	16QAM	1	0	23.84	23.86	23.82		
20	16QAM	1	49	23.83	23.86	23.76		
20	16QAM	1	99	23.75	23.82	23.70	23.7	
20	16QAM	50	0	22.58	22.60	22.61		
20	16QAM	50	24	22.66	22.64	22.61		
20	16QAM	50	50	22.65	22.60	22.59	23.7	
20	16QAM	100	0	22.62	22.59	22.59		
20	64QAM	1	0	22.68	22.77	22.74		
20	64QAM	1	49	22.73	22.73	22.40	23.7	
20	64QAM	1	99	22.66	22.67	22.63		
20	64QAM	50	0	21.59	21.61	21.60		
20	64QAM	50	24	21.68	21.66	21.56	22.7	
20	64QAM	50	50	21.66	21.61	21.61		
20	64QAM	100	0	21.65	21.64	21.59		
Channel				1867.5	18900	19125	Tune-up limit (dbm)	
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	24.51	24.52	24.50	25.7	
15	QPSK	1	37	24.47	24.53	24.39		
15	QPSK	1	74	24.50	24.52	24.46		
15	QPSK	36	0	23.51	23.57	23.54	24.7	
15	QPSK	36	20	23.61	23.63	23.56		
15	QPSK	36	39	23.60	23.60	23.57		
15	QPSK	75	0	23.61	23.60	23.55	24.7	
15	16QAM	1	0	23.73	23.84	23.80		
15	16QAM	1	37	23.78	23.83	23.74		
15	16QAM	1	74	23.79	23.81	23.72	23.7	
15	16QAM	36	0	22.53	22.59	22.54		
15	16QAM	36	20	22.62	22.62	22.56		
15	16QAM	36	39	22.61	22.61	22.57	23.7	
15	16QAM	75	0	22.62	22.61	22.58		
15	64QAM	1	0	22.68	22.76	22.69		
15	64QAM	1	37	22.71	22.82	22.47	23.7	
15	64QAM	1	74	22.70	22.66	22.66		
15	64QAM	36	0	21.57	21.64	21.42		
15	64QAM	36	20	21.66	21.66	21.60	22.7	
15	64QAM	36	39	21.70	21.67	21.59		
15	64QAM	75	0	21.65	21.62	21.59		
Channel				18650	18900	19150	Tune-up limit (dbm)	
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	24.43	24.53	24.44	25.7	
10	QPSK	1	25	24.44	24.49	24.38		
10	QPSK	1	49	24.45	24.50	24.43		
10	QPSK	25	0	23.55	23.55	23.49	24.7	
10	QPSK	25	12	23.59	23.59	23.55		
10	QPSK	25	25	23.60	23.58	23.58		
10	QPSK	50	0	23.59	23.59	23.55	24.7	
10	16QAM	1	0	23.83	23.89	23.79		
10	16QAM	1	25	23.81	23.93	23.77		
10	16QAM	1	49	23.80	23.87	23.76	23.7	
10	16QAM	25	0	22.57	22.55	22.52		
10	16QAM	25	12	22.61	22.62	22.53		
10	16QAM	25	25	22.54	22.59	22.56	23.7	
10	16QAM	50	0	22.58	22.57	22.55		
10	64QAM	1	0	22.87	22.71	22.48		
10	64QAM	1	25	22.75	22.79	22.68	23.7	
10	64QAM	1	49	22.71	22.72	22.70		
10	64QAM	25	0	21.60	21.59	21.51		
10	64QAM	25	12	21.63	21.64	21.58	22.7	
10	64QAM	25	25	21.62	21.62	21.59		
10	64QAM	50	0	21.64	21.64	21.55		
Channel				18625	18900	19175	Tune-up limit (dbm)	
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	24.42	24.45	24.43	25.7	
5	QPSK	1	12	24.45	24.50	24.48		
5	QPSK	1	24	24.48	24.49	24.46		
5	QPSK	12	0	23.54	23.54	23.50	24.7	
5	QPSK	12	7	23.55	23.59	23.53		
5	QPSK	12	13	23.59	23.63	23.52		
5	QPSK	25	0	23.56	23.57	23.50	24.7	
5	16QAM	1	0	23.77	23.88	23.68		
5	16QAM	1	12	23.83	23.90	23.75		
5	16QAM	1	24	23.82	23.92	23.78	23.7	
5	16QAM	12	0	22.57	22.59	22.53		
5	16QAM	12	7	22.61	22.62	22.55		
5	16QAM	12	13	22.56	22.67	22.56	23.7	
5	16QAM	25	0	22.56	22.59	22.55		
5	64QAM	1	0	22.73	22.76	22.69		
5	64QAM	1	12	22.72	22.79	22.70	23.7	
5	64QAM	1	24	22.73	22.82	22.72		
5	64QAM	12	0	21.62	21.66	21.56		
5	64QAM	12	7	21.65	21.66	21.59	22.7	
5	64QAM	12	13	21.64	21.69	21.60		
5	64QAM	25	0	21.59	21.58	21.56		
Channel				18615	18900	19185	Tune-up limit (dbm)	
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	24.46	24.46	24.35	25.7	
3	QPSK	1	8	24.46	24.49	24.49		
3	QPSK	1	14	24.47	24.53	24.44		
3	QPSK	8	0	23.55	23.58	23.47	24.7	
3	QPSK	8	4	23.56	23.67	23.50		
3	QPSK	8	7	23.51	23.60	23.48		
3	QPSK	15	0	23.55	23.57	23.49	24.7	
3	16QAM	1	0	23.78	23.79	23.68		
3	16QAM	1	8	23.80	23.96	23.80		
3	16QAM	1	14	23.82	23.89	23.77	23.7	
3	16QAM	8	0	22.62	22.61	22.55		
3	16QAM	8	4	22.63	22.73	22.59		
3	16QAM	8	7	22.61	22.69	22.56	23.7	
3	16QAM	15	0	22.56	22.59	22.53		
3	64QAM	1	0	22.71	22.74	22.66		
3	64QAM	1	8	22.78	22.89	22.76	23.7	
3	64QAM	1	14	22.72	22.82	22.70		
3	64QAM	8	0	21.61	21.60	21.56		
3	64QAM	8	4	21.61	21.69	21.62	22.7	
3	64QAM	8	7	21.62	21.66	21.58		
3	64QAM	15	0	21.58	21.58	21.53		
Channel				18607	18900	19193	Tune-up limit (dbm)	
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	24.40	24.46	24.32	25.7	
1.4	QPSK	1	3	24.45	24.52	24.41		
1.4	QPSK	1	5	24.38	24.46	24.33		
1.4	QPSK	3	0	24.44	24.53	24.36	24.7	
1.4	QPSK	3	1	24.47	24.50	24.41		
1.4	QPSK	3	3	24.43	24.51	24.37		
1.4	QPSK	6	0	23.48	23.57	23.40	24.7	
1.4	16QAM	1	0	23.72	23.77	23.63		
1.4	16QAM	1	3	23.76	23.87	23.74		
1.4	16QAM	1	5	23.71	23.80	23.64	24.7	
1.4	16QAM	3	0	23.50	23.58	23.42		
1.4	16QAM	3	1	23.58	23.65	23.50		
1.4	16QAM	3	3	23.51	23.59	23.43	23.7	
1.4	16QAM	6	0	22.53	22.60	22.47		
1.4	64QAM	1	0	22.65	22.73	22.56		
1.4	64QAM	1	3	22.72	22.81	22.67	23.7	
1.4	64QAM	1	5	22.67	22.72	22.60		
1.4	64QAM	3	0	22.60	22.68	22.56		
1.4	64QAM	3	1	22.68	22.75	22.63	23.7	
1.4	64QAM	3	3	22.62	22.70	22.55		
1.4	64QAM	6	0	21.50	21.57	21.43		



Band 4										
Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				20050	20175	20300				
Frequency (MHz)				1720	1732.5	1745				
20	QPSK	1	0	24.31	24.32	24.35	25.7			
20	QPSK	1	49	24.20	24.17	24.08				
20	QPSK	1	99	24.21	24.16	24.12				
20	QPSK	50	0	23.35	23.32	23.29	24.7			
20	QPSK	50	24	23.41	23.41	23.23				
20	QPSK	50	50	23.36	23.25	23.23				
20	QPSK	100	0	23.29	23.38	23.24	24.7			
20	16QAM	1	0	23.69	23.65	23.64				
20	16QAM	1	49	23.51	23.46	23.46				
20	16QAM	1	99	23.57	23.42	23.43	23.7			
20	16QAM	50	0	22.31	22.31	22.35				
20	16QAM	50	24	22.39	22.32	22.32				
20	16QAM	50	50	22.34	22.25	22.23	23.7			
20	16QAM	100	0	22.35	22.45	22.24				
20	64QAM	1	0	22.29	22.51	22.11				
20	64QAM	1	49	22.41	22.33	22.34	23.7			
20	64QAM	1	99	22.41	22.04	22.43				
20	64QAM	50	0	21.33	21.42	21.09				
20	64QAM	50	24	21.42	21.36	21.28	22.7			
20	64QAM	50	50	21.29	21.12	21.25				
20	64QAM	100	0	21.41	21.42	21.25				
Channel				20050	20175	20325	Tune-up limit (dBm)			
Frequency (MHz)				1717.5	1732.5	1747.5				
15	QPSK	1	0	24.34	24.33	24.33	25.7			
15	QPSK	1	37	24.12	24.14	24.11				
15	QPSK	1	74	24.21	24.22	24.14				
15	QPSK	36	0	23.38	23.29	23.31	24.7			
15	QPSK	36	20	23.38	23.33	23.20				
15	QPSK	36	39	23.34	23.33	23.30				
15	QPSK	75	0	23.36	23.42	23.23	24.7			
15	16QAM	1	0	23.56	23.59	23.62				
15	16QAM	1	37	23.47	23.50	23.44				
15	16QAM	1	74	23.53	23.47	23.42	23.7			
15	16QAM	36	0	22.39	22.39	22.33				
15	16QAM	36	20	22.31	22.37	22.30				
15	16QAM	36	39	22.29	22.34	22.22	23.7			
15	16QAM	75	0	22.36	22.41	22.24				
15	64QAM	1	0	22.33	22.52	22.27				
15	64QAM	1	37	22.48	22.46	22.44	23.7			
15	64QAM	1	74	22.42	22.13	22.33				
15	64QAM	36	0	21.42	21.36	21.34				
15	64QAM	36	20	21.33	21.48	21.30	22.7			
15	64QAM	36	39	21.35	21.07	21.28				
15	64QAM	75	0	21.36	21.36	21.30				
Channel				20000	20175	20350	Tune-up limit (dBm)			
Frequency (MHz)				1715	1732.5	1750				
10	QPSK	1	0	24.20	24.24	24.21	25.7			
10	QPSK	1	25	24.18	24.16	24.15				
10	QPSK	1	49	24.29	24.23	24.22				
10	QPSK	25	0	23.29	23.31	23.21	24.7			
10	QPSK	25	12	23.34	23.38	23.22				
10	QPSK	25	25	23.30	23.41	23.29				
10	QPSK	50	0	23.32	23.37	23.21	24.7			
10	16QAM	1	0	23.60	23.63	23.56				
10	16QAM	1	25	23.54	23.60	23.51				
10	16QAM	1	49	23.64	23.53	23.60	24.7			
10	16QAM	25	0	22.31	22.31	22.27				
10	16QAM	25	12	22.35	22.36	22.27				
10	16QAM	25	25	22.37	22.38	22.30	23.7			
10	16QAM	50	0	22.34	22.33	22.29				
10	64QAM	1	0	22.16	22.45	22.40				
10	64QAM	1	25	22.54	22.49	22.42	23.7			
10	64QAM	1	49	22.49	22.12	22.47				
10	64QAM	25	0	21.35	21.31	21.24				
10	64QAM	25	12	21.43	21.40	21.26	22.7			
10	64QAM	25	25	21.32	21.17	21.38				
10	64QAM	50	0	21.35	21.32	21.29				
Channel				19975	20175	20375	Tune-up limit (dBm)			
Frequency (MHz)				1712.5	1732.5	1752.5				
5	QPSK	1	0	24.21	24.19	24.17	25.7			
5	QPSK	1	12	24.27	24.28	24.18				
5	QPSK	1	24	24.24	24.25	24.16				
5	QPSK	12	0	23.35	23.31	23.23	24.7			
5	QPSK	12	7	23.39	23.36	23.32				
5	QPSK	12	13	23.41	23.39	23.24				
5	QPSK	25	0	23.27	23.38	23.20	24.7			
5	16QAM	1	0	23.50	23.54	23.53				
5	16QAM	1	12	23.62	23.63	23.56				
5	16QAM	1	24	23.57	23.57	23.50	23.7			
5	16QAM	12	0	22.41	22.32	22.34				
5	16QAM	12	7	22.39	22.37	22.28				
5	16QAM	12	13	22.37	22.42	22.36	23.7			
5	16QAM	25	0	22.39	22.31	22.29				
5	64QAM	1	0	22.20	22.51	22.47				
5	64QAM	1	12	22.43	22.47	22.50	23.7			
5	64QAM	1	24	22.55	22.09	22.44				
5	64QAM	12	0	21.17	21.28	21.39				
5	64QAM	12	7	21.40	21.46	21.31	22.7			
5	64QAM	12	13	21.38	21.22	21.36				
5	64QAM	25	0	21.32	21.44	21.24				
Channel				19965	20175	20385	Tune-up limit (dBm)			
Frequency (MHz)				1711.5	1732.5	1753.5				
3	QPSK	1	0	24.24	24.20	24.22	25.7			
3	QPSK	1	8	24.32	24.34	24.24				
3	QPSK	1	14	24.27	24.24	24.18				
3	QPSK	8	0	23.29	23.24	23.23	24.7			
3	QPSK	8	4	23.35	23.37	23.32				
3	QPSK	8	7	23.42	23.34	23.21				
3	QPSK	15	0	23.36	23.37	23.31	24.7			
3	16QAM	1	0	23.64	23.49	23.51				
3	16QAM	1	8	23.63	23.59	23.61				
3	16QAM	1	14	23.55	23.57	23.54	24.7			
3	16QAM	8	0	22.41	22.35	22.29				
3	16QAM	8	4	22.41	22.41	22.32				
3	16QAM	8	7	22.37	22.48	22.27	23.7			
3	16QAM	15	0	22.34	22.36	22.28				
3	64QAM	1	0	22.28	22.53	22.39				
3	64QAM	1	8	22.47	22.65	22.52	23.7			
3	64QAM	1	14	22.49	22.32	22.46				
3	64QAM	8	0	21.18	21.35	21.33				
3	64QAM	8	4	21.37	21.41	21.39	22.7			
3	64QAM	8	7	21.34	21.34	21.31				
3	64QAM	15	0	21.32	21.40	21.33				
Channel				19957	20175	20393	Tune-up limit (dBm)			
Frequency (MHz)				1710.7	1732.5	1754.3				
1.4	QPSK	1	0	24.15	24.15	24.12	25.7			
1.4	QPSK	1	3	24.27	24.30	24.13				
1.4	QPSK	1	5	24.24	24.23	24.07				
1.4	QPSK	3	0	24.25	24.16	24.10	24.7			
1.4	QPSK	3	1	24.28	24.31	24.17				
1.4	QPSK	3	3	24.15	24.24	24.12				
1.4	QPSK	6	0	23.25	23.26	23.26	24.7			
1.4	QPSK	6	4	23.33	23.37	23.30				
1.4	QPSK	6	7	23.39	23.37	23.32				
1.4	16QAM	1	3	23.59	23.55	23.50	24.7			
1.4	16QAM	1	5	23.66	23.47	23.50				
1.4	16QAM	3	0	23.42	23.31	23.23				
1.4	16QAM	3	1	23.32	23.36	23.29	23.7			
1.4	16QAM	3	3	22.34	22.32	22.27				
1.4	64QAM	1	0	22.15	22.46	22.36				
1.4	64QAM	1	3	22.22	22.44	22.32	23.7			
1.4	64QAM	3	0	22.18	22.38	22.27				
1.4	64QAM	3	1	22.29	22.43	22.43				
1.4	64QAM	3	3	22.28	22.37	22.38	23.7			
1.4	64QAM	3	5	22.35	22.37	22.32				
1.4	64QAM	3	7	22.31	22.35	22.31				



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.43	24.42	24.42	25.7
10	QPSK	1	25	24.34	24.44	24.43	
10	QPSK	1	49	24.44	24.54	24.20	
10	QPSK	25	0	23.47	23.49	23.49	24.7
10	QPSK	25	12	23.52	23.58	23.57	
10	QPSK	25	25	23.49	23.58	23.47	
10	QPSK	50	0	23.54	23.49	23.60	24.7
10	16QAM	1	0	23.81	23.83	23.86	
10	16QAM	1	25	23.70	23.84	23.83	
10	16QAM	1	49	23.81	23.92	23.71	23.7
10	16QAM	25	0	22.45	22.59	22.54	
10	16QAM	25	12	22.53	22.52	22.54	
10	16QAM	25	25	22.56	22.55	22.57	23.7
10	16QAM	50	0	22.51	22.50	22.49	
10	64QAM	1	0	22.59	22.66	22.64	
10	64QAM	1	25	22.70	22.74	22.76	22.7
10	64QAM	1	49	22.67	22.37	21.72	
10	64QAM	25	0	21.54	21.61	21.55	
10	64QAM	25	12	21.62	21.62	21.60	Tune-up limit (dBm)
10	64QAM	25	25	21.53	21.61	20.86	
10	64QAM	50	0	21.53	21.50	21.26	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.47	24.51	24.50	25.7
5	QPSK	1	12	24.47	24.45	24.31	
5	QPSK	1	24	24.41	24.52	24.20	
5	QPSK	12	0	23.55	23.64	23.59	24.7
5	QPSK	12	7	23.52	23.57	23.34	
5	QPSK	12	13	23.54	23.55	23.16	
5	QPSK	25	0	23.47	23.56	23.52	24.7
5	16QAM	1	0	23.83	23.83	23.79	
5	16QAM	1	12	23.77	23.83	23.57	
5	16QAM	1	24	23.68	23.85	23.46	23.7
5	16QAM	12	0	22.66	22.51	22.52	
5	16QAM	12	7	22.53	22.60	22.45	
5	16QAM	12	13	22.48	22.61	22.27	23.7
5	16QAM	25	0	22.56	22.52	22.56	
5	64QAM	1	0	22.75	22.73	22.50	
5	64QAM	1	12	22.64	22.69	21.78	22.7
5	64QAM	1	24	22.75	22.55	21.74	
5	64QAM	12	0	21.65	21.66	21.30	
5	64QAM	12	7	21.54	21.63	20.70	Tune-up limit (dBm)
5	64QAM	12	13	21.51	21.61	20.71	
5	64QAM	25	0	21.58	21.61	20.70	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.47	24.41	24.18	25.7
3	QPSK	1	8	24.50	24.48	24.04	
3	QPSK	1	14	24.40	24.49	24.13	
3	QPSK	8	0	23.54	23.58	23.04	24.7
3	QPSK	8	4	23.49	23.62	23.07	
3	QPSK	8	7	23.50	23.55	23.20	
3	QPSK	15	0	23.57	23.53	23.08	24.7
3	16QAM	1	0	23.83	23.81	23.53	
3	16QAM	1	8	23.83	23.86	23.38	
3	16QAM	1	14	23.69	23.78	23.46	23.7
3	16QAM	8	0	22.64	22.58	22.31	
3	16QAM	8	4	22.60	22.65	22.23	
3	16QAM	8	7	22.57	22.60	22.28	23.7
3	16QAM	15	0	22.60	22.62	22.19	
3	64QAM	1	0	22.63	22.73	21.70	
3	64QAM	1	8	22.75	22.75	21.72	22.7
3	64QAM	1	14	22.63	22.50	21.71	
3	64QAM	8	0	21.65	21.56	20.70	
3	64QAM	8	4	21.58	21.67	20.70	Tune-up limit (dBm)
3	64QAM	8	7	21.49	21.63	20.74	
3	64QAM	15	0	21.53	21.62	20.71	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.39	24.32	23.95	25.7
1.4	QPSK	1	3	24.42	24.47	24.10	
1.4	QPSK	1	5	24.29	24.38	24.09	
1.4	QPSK	3	0	24.41	24.36	24.12	24.7
1.4	QPSK	3	1	24.47	24.40	24.12	
1.4	QPSK	3	3	24.41	24.44	24.37	
1.4	QPSK	6	0	23.42	23.57	23.18	24.7
1.4	16QAM	1	0	23.68	23.69	23.34	
1.4	16QAM	1	3	23.69	23.85	23.50	
1.4	16QAM	1	5	23.61	23.69	23.58	24.7
1.4	16QAM	3	0	23.51	23.51	23.12	
1.4	16QAM	3	1	23.49	23.54	23.28	
1.4	16QAM	3	3	23.42	23.48	23.42	23.7
1.4	16QAM	6	0	22.55	22.62	22.27	
1.4	64QAM	1	0	22.60	22.60	21.70	
1.4	64QAM	1	3	22.68	22.75	21.72	23.7
1.4	64QAM	1	5	22.60	22.59	21.71	
1.4	64QAM	3	0	22.63	22.63	21.70	
1.4	64QAM	3	1	22.65	22.62	21.72	22.7
1.4	64QAM	3	3	22.55	22.58	21.71	
1.4	64QAM	6	0	21.45	21.48	20.72	



Band 7							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.42	24.46	24.29	25.7
20	QPSK	1	49	24.47	24.42	24.26	
20	QPSK	1	99	24.57	24.45	24.26	
20	QPSK	50	0	23.70	23.47	23.46	24.7
20	QPSK	50	24	23.67	23.48	23.39	
20	QPSK	50	50	23.63	23.56	23.41	
20	QPSK	100	0	23.65	23.54	23.41	24.7
20	16QAM	1	0	23.78	23.66	23.64	
20	16QAM	1	49	23.50	23.75	23.62	
20	16QAM	1	99	23.92	23.90	23.63	23.7
20	16QAM	50	0	22.63	22.47	22.42	
20	16QAM	50	24	22.62	22.52	22.45	
20	16QAM	50	50	22.67	22.54	22.47	23.7
20	16QAM	100	0	22.62	22.54	22.38	
20	64QAM	1	0	22.62	22.55	22.54	
20	64QAM	1	49	22.70	22.68	21.98	22.7
20	64QAM	1	99	22.80	22.64	22.33	
20	64QAM	50	0	21.70	21.49	21.27	
20	64QAM	50	24	21.76	21.56	21.21	22.7
20	64QAM	50	50	21.74	21.62	21.38	
20	64QAM	100	0	21.65	21.55	21.21	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.47	24.39	24.28	25.7
15	QPSK	1	37	24.53	24.47	24.21	
15	QPSK	1	74	24.56	24.48	24.31	
15	QPSK	36	0	23.55	23.46	23.42	24.7
15	QPSK	36	20	23.69	23.35	23.43	
15	QPSK	36	39	23.66	23.58	23.40	
15	QPSK	75	0	23.65	23.50	23.38	24.7
15	16QAM	1	0	23.77	23.74	23.63	
15	16QAM	1	37	23.89	23.87	23.62	
15	16QAM	1	74	23.67	23.81	23.66	23.7
15	16QAM	36	0	22.59	22.43	22.39	
15	16QAM	36	20	22.59	22.55	22.46	
15	16QAM	36	39	22.68	22.50	22.37	23.7
15	16QAM	75	0	22.62	22.50	22.40	
15	64QAM	1	0	22.74	22.60	22.49	
15	64QAM	1	37	22.76	22.74	22.01	23.7
15	64QAM	1	74	22.86	22.71	22.47	
15	64QAM	36	0	21.65	21.50	21.05	
15	64QAM	36	20	21.74	21.56	21.23	22.7
15	64QAM	36	39	21.74	21.62	21.47	
15	64QAM	75	0	21.73	21.57	21.18	
Channel				20860	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.39	24.39	24.21	25.7
10	QPSK	1	25	24.46	24.35	24.11	
10	QPSK	1	49	24.51	24.44	24.22	
10	QPSK	25	0	23.61	23.41	23.33	24.7
10	QPSK	25	12	23.67	23.45	23.39	
10	QPSK	25	25	23.63	23.54	23.38	
10	QPSK	50	0	23.58	23.48	23.27	24.7
10	16QAM	1	0	23.65	23.66	23.46	
10	16QAM	1	25	23.77	23.77	23.48	
10	16QAM	1	49	23.87	23.78	23.54	23.7
10	16QAM	25	0	22.56	22.38	22.28	
10	16QAM	25	12	22.65	22.45	22.36	
10	16QAM	25	25	22.66	22.51	22.30	23.7
10	16QAM	50	0	22.66	22.46	22.26	
10	64QAM	1	0	22.74	22.61	22.24	
10	64QAM	1	25	22.74	22.65	22.46	23.7
10	64QAM	1	49	22.82	22.67	22.50	
10	64QAM	25	0	21.64	21.45	21.27	
10	64QAM	25	12	21.63	21.57	21.34	22.7
10	64QAM	25	25	21.55	21.51	21.31	
10	64QAM	50	0	21.60	21.53	21.29	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.52	24.31	24.15	25.7
5	QPSK	1	12	24.53	24.50	24.27	
5	QPSK	1	24	24.51	24.44	24.20	
5	QPSK	12	0	23.55	23.47	23.28	24.7
5	QPSK	12	7	23.56	23.53	23.25	
5	QPSK	12	13	23.62	23.61	23.32	
5	QPSK	25	0	23.66	23.52	23.29	24.7
5	16QAM	1	0	23.79	23.64	23.45	
5	16QAM	1	12	23.80	23.76	23.46	
5	16QAM	1	24	23.90	23.74	23.55	23.7
5	16QAM	12	0	22.62	22.36	22.33	
5	16QAM	12	7	22.65	22.52	22.34	
5	16QAM	12	13	22.70	22.65	22.31	23.7
5	16QAM	25	0	22.67	22.57	22.33	
5	64QAM	1	0	22.81	22.68	22.42	
5	64QAM	1	12	22.79	22.69	22.40	23.7
5	64QAM	1	24	22.81	22.77	22.44	
5	64QAM	12	0	21.67	21.59	21.37	
5	64QAM	12	7	21.68	21.57	21.37	22.7
5	64QAM	12	13	21.74	21.63	21.40	
5	64QAM	25	0	21.68	21.48	21.35	



Band 12									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.34	24.12	24.24	25.7		
10	QPSK	1	25	24.15	24.15	24.14			
10	QPSK	1	49	24.31	24.24	24.14			
10	QPSK	25	0	23.27	23.33	23.32	24.7		
10	QPSK	25	12	23.38	23.34	23.35			
10	QPSK	25	25	23.31	23.30	23.35			
10	QPSK	50	0	23.34	23.28	23.32	24.7		
10	16QAM	1	0	23.55	23.49	23.56			
10	16QAM	1	25	23.61	23.61	23.56			
10	16QAM	1	49	23.66	23.60	23.54	23.7		
10	16QAM	25	0	22.32	22.28	22.33			
10	16QAM	25	12	22.40	22.35	22.36			
10	16QAM	25	25	22.37	22.36	22.34	23.7		
10	16QAM	50	0	22.39	22.31	22.33			
10	64QAM	1	0	22.43	22.31	22.39			
10	64QAM	1	25	22.52	22.42	22.25	23.7		
10	64QAM	1	49	22.61	22.54	22.53			
10	64QAM	25	0	21.31	21.33	21.22			
10	64QAM	25	12	21.38	21.32	21.28	22.7		
10	64QAM	25	25	21.37	21.41	21.37			
10	64QAM	50	0	21.36	21.34	21.37			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.27	24.18	24.20	25.7		
5	QPSK	1	12	24.27	24.28	24.27			
5	QPSK	1	24	24.23	24.21	24.24			
5	QPSK	12	0	23.38	23.32	23.26	24.7		
5	QPSK	12	7	23.33	23.26	23.25			
5	QPSK	12	13	23.33	23.26	23.27			
5	QPSK	25	0	23.36	23.28	23.20	24.7		
5	16QAM	1	0	23.59	23.56	23.50			
5	16QAM	1	12	23.60	23.59	23.55			
5	16QAM	1	24	23.61	23.61	23.50	23.7		
5	16QAM	12	0	22.36	22.32	22.28			
5	16QAM	12	7	22.39	22.34	22.36			
5	16QAM	12	13	22.32	22.36	22.28	23.7		
5	16QAM	25	0	22.40	22.35	22.32			
5	64QAM	1	0	22.37	22.24	22.40			
5	64QAM	1	12	22.51	22.44	22.40	23.7		
5	64QAM	1	24	22.35	22.46	22.45			
5	64QAM	12	0	21.39	21.41	21.39			
5	64QAM	12	7	21.34	21.35	21.34	22.7		
5	64QAM	12	13	21.43	21.38	21.28			
5	64QAM	25	0	21.42	21.39	21.32			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.31	24.21	24.28	25.7		
3	QPSK	1	8	24.32	24.30	24.30			
3	QPSK	1	14	24.28	24.27	24.16			
3	QPSK	8	0	23.35	23.27	23.30	24.7		
3	QPSK	8	4	23.37	23.40	23.35			
3	QPSK	8	7	23.38	23.38	23.25			
3	QPSK	15	0	23.39	23.28	23.21	24.7		
3	16QAM	1	0	23.71	23.62	23.52			
3	16QAM	1	8	23.56	23.59	23.60			
3	16QAM	1	14	23.60	23.56	23.46	23.7		
3	16QAM	8	0	22.42	22.42	22.32			
3	16QAM	8	4	22.41	22.40	22.36			
3	16QAM	8	7	22.33	22.41	22.27	23.7		
3	16QAM	15	0	22.37	22.31	22.30			
3	64QAM	1	0	22.46	22.41	22.47			
3	64QAM	1	8	22.64	22.55	22.45	23.7		
3	64QAM	1	14	22.47	22.49	22.43			
3	64QAM	8	0	21.41	21.39	21.36			
3	64QAM	8	4	21.44	21.51	21.40	22.7		
3	64QAM	8	7	21.34	21.40	21.35			
3	64QAM	15	0	21.37	21.34	21.24			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.18	24.13	24.08	25.7		
1.4	QPSK	1	3	24.23	24.21	24.18			
1.4	QPSK	1	5	24.19	24.20	24.02			
1.4	QPSK	3	0	24.26	24.09	24.16	24.7		
1.4	QPSK	3	1	24.25	24.22	24.19			
1.4	QPSK	3	3	24.21	24.22	24.13			
1.4	QPSK	6	0	23.32	23.26	23.12	24.7		
1.4	16QAM	1	0	23.60	23.49	23.46			
1.4	16QAM	1	3	23.57	23.57	23.48			
1.4	16QAM	1	5	23.53	23.52	23.43	24.7		
1.4	16QAM	3	0	23.34	23.24	23.26			
1.4	16QAM	3	1	23.36	23.30	23.31			
1.4	16QAM	3	3	23.31	23.24	23.13	23.7		
1.4	16QAM	6	0	22.32	22.23	22.22			
1.4	64QAM	1	0	22.48	22.42	22.36			
1.4	64QAM	1	3	22.46	22.50	22.42	23.7		
1.4	64QAM	1	5	22.46	22.36	22.34			
1.4	64QAM	3	0	22.37	22.36	22.36			
1.4	64QAM	3	1	22.41	22.38	22.32	22.7		
1.4	64QAM	3	3	22.40	22.38	22.31			
1.4	64QAM	6	0	21.27	21.21	21.21			



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.83			25.2
10	QPSK	1	25	23.84			
10	QPSK	1	49	23.97			
10	QPSK	25	0	22.96			24.2
10	QPSK	25	12	23.01			
10	QPSK	25	25	22.91			
10	QPSK	50	0	23.01			24.2
10	16QAM	1	0	23.16			
10	16QAM	1	25	23.16			
10	16QAM	1	49	23.15			23.2
10	16QAM	25	0	21.97			
10	16QAM	25	12	22.03			
10	16QAM	25	25	21.93			23.2
10	16QAM	50	0	21.95			
10	64QAM	1	0	22.01			
10	64QAM	1	25	22.13			23.2
10	64QAM	1	49	22.04			
10	64QAM	25	0	21.02			
10	64QAM	25	12	21.00			22.2
10	64QAM	25	25	21.04			
10	64QAM	50	0	20.99			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	794.5	
5	QPSK	1	0	23.75	23.76	23.86	25.2
5	QPSK	1	12	23.88	23.84	23.87	
5	QPSK	1	24	23.87	23.86	23.87	
5	QPSK	12	0	22.89	22.92	22.92	24.2
5	QPSK	12	7	22.93	22.97	22.83	
5	QPSK	12	13	23.02	23.01	22.92	
5	QPSK	25	0	23.01	22.99	22.91	24.2
5	16QAM	1	0	23.08	23.05	23.08	
5	16QAM	1	12	23.16	23.14	23.09	
5	16QAM	1	24	23.16	23.10	23.03	23.2
5	16QAM	12	0	21.99	21.97	21.98	
5	16QAM	12	7	22.05	21.98	21.96	
5	16QAM	12	13	22.02	21.94	21.97	23.2
5	16QAM	25	0	22.03	21.94	21.88	
5	64QAM	1	0	22.00	22.13	21.98	
5	64QAM	1	12	22.13	22.06	22.08	23.2
5	64QAM	1	24	22.07	22.15	22.00	
5	64QAM	12	0	21.03	21.06	20.99	
5	64QAM	12	7	21.07	21.01	20.92	22.2
5	64QAM	12	13	20.98	21.05	20.97	
5	64QAM	25	0	20.96	20.95	20.88	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.44		25.7
10	QPSK	1	25		24.49		
10	QPSK	1	49		24.32		
10	QPSK	25	0		23.51		24.7
10	QPSK	25	12		23.59		
10	QPSK	25	25		23.48		
10	QPSK	50	0		23.42		24.7
10	16QAM	1	0		23.87		
10	16QAM	1	25		23.84		
10	16QAM	1	49		23.71		24.7
10	16QAM	25	0		22.44		
10	16QAM	25	12		22.54		
10	16QAM	25	25		22.55		23.7
10	16QAM	50	0		22.44		
10	64QAM	1	0		22.75		
10	64QAM	1	25		22.58		23.7
10	64QAM	1	49		22.65		
10	64QAM	25	0		21.50		
10	64QAM	25	12		21.33		22.7
10	64QAM	25	25		21.48		
10	64QAM	50	0		21.55		
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.48	24.40	24.42	25.7
5	QPSK	1	12	24.48	24.48	24.47	
5	QPSK	1	24	24.47	24.44	24.42	
5	QPSK	12	0	23.54	23.49	23.41	24.7
5	QPSK	12	7	23.60	23.52	23.47	
5	QPSK	12	13	23.50	23.55	23.45	
5	QPSK	25	0	23.59	23.48	23.43	24.7
5	16QAM	1	0	23.74	23.78	23.68	
5	16QAM	1	12	23.78	23.80	23.80	
5	16QAM	1	24	23.80	23.72	23.71	23.7
5	16QAM	12	0	22.51	22.57	22.48	
5	16QAM	12	7	22.62	22.60	22.49	
5	16QAM	12	13	22.59	22.55	22.51	23.7
5	16QAM	25	0	22.57	22.52	22.50	
5	64QAM	1	0	22.71	22.62	22.36	
5	64QAM	1	12	22.78	22.24	22.53	23.7
5	64QAM	1	24	22.33	22.27	22.70	
5	64QAM	12	0	21.61	21.26	21.16	
5	64QAM	12	7	21.68	21.24	21.54	22.7
5	64QAM	12	13	21.36	21.23	21.61	
5	64QAM	25	0	21.64	21.16	21.49	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.38	24.29	24.27	25.7
10	QPSK	1	25	24.35	24.27	24.31	
10	QPSK	1	49	24.33	24.40	24.28	
10	QPSK	25	0	23.34	23.36	23.37	24.7
10	QPSK	25	12	23.51	23.39	23.43	
10	QPSK	25	25	23.50	23.51	23.46	
10	QPSK	50	0	23.44	23.37	23.34	24.7
10	16QAM	1	0	23.64	23.67	23.59	
10	16QAM	1	25	23.73	23.67	23.67	
10	16QAM	1	49	23.70	23.70	23.73	23.7
10	16QAM	25	0	22.35	22.28	22.38	
10	16QAM	25	12	22.43	22.42	22.36	
10	16QAM	25	25	22.40	22.45	22.42	23.7
10	16QAM	50	0	22.50	22.55	22.41	
10	64QAM	1	0	22.59	22.53	22.57	
10	64QAM	1	25	22.67	22.66	22.50	22.7
10	64QAM	1	49	22.65	22.65	22.58	
10	64QAM	25	0	21.36	21.43	21.41	
10	64QAM	25	12	21.47	21.43	21.46	22.7
10	64QAM	25	25	21.51	21.55	21.51	
10	64QAM	50	0	21.54	21.40	21.44	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.24	24.27	24.26	25.7
5	QPSK	1	12	24.31	24.37	24.39	
5	QPSK	1	24	24.38	24.39	24.31	
5	QPSK	12	0	23.43	23.34	23.35	24.7
5	QPSK	12	7	23.48	23.47	23.43	
5	QPSK	12	13	23.46	23.44	23.40	
5	QPSK	25	0	23.49	23.45	23.42	24.7
5	16QAM	1	0	23.57	23.61	23.61	
5	16QAM	1	12	23.61	23.69	23.63	
5	16QAM	1	24	23.73	23.76	23.68	23.7
5	16QAM	12	0	22.40	22.39	22.36	
5	16QAM	12	7	22.45	22.40	22.38	
5	16QAM	12	13	22.51	22.44	22.43	23.7
5	16QAM	25	0	22.43	22.44	22.49	
5	64QAM	1	0	22.41	22.31	22.54	
5	64QAM	1	12	22.59	22.50	22.51	23.7
5	64QAM	1	24	22.61	22.53	22.49	
5	64QAM	12	0	21.43	21.40	21.44	
5	64QAM	12	7	21.47	21.45	21.53	22.7
5	64QAM	12	13	21.53	21.55	21.51	
5	64QAM	25	0	21.45	21.39	21.40	



Band 25											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)				
Channel				26140	26340	26590					
Frequency (MHz)				1860	1880	1905					
20	QPSK	1	0	24.56	24.54	24.48	25.7				
20	QPSK	1	49	24.46	24.52	24.36					
20	QPSK	1	99	24.44	24.45	24.39					
20	QPSK	50	0	23.63	23.64	23.50	24.7				
20	QPSK	50	24	23.70	23.69	23.51					
20	QPSK	50	50	23.65	23.65	23.58					
20	QPSK	100	0	23.70	23.67	23.51	24.7				
20	16QAM	1	0	23.83	23.80	23.79					
20	16QAM	1	49	23.85	23.86	23.74					
20	16QAM	1	99	23.76	23.84	23.69	23.7				
20	16QAM	50	0	22.65	22.65	22.53					
20	16QAM	50	24	22.72	22.71	22.53					
20	16QAM	50	50	22.65	22.67	22.57	23.7				
20	16QAM	100	0	22.68	22.69	22.55					
20	64QAM	1	0	22.74	22.72	22.64					
20	64QAM	1	49	22.69	22.71	22.65	23.7				
20	64QAM	1	99	22.68	22.71	22.47					
20	64QAM	50	0	21.65	21.66	21.56					
20	64QAM	50	24	21.72	21.76	21.55	22.7				
20	64QAM	50	50	21.67	21.68	21.59					
20	64QAM	100	0	21.70	21.73	21.54					
Channel				26115	26340	26615	Tune-up limit (dBm)				
Frequency (MHz)				1857.5	1880	1907.5					
15	QPSK	1	0	24.55	24.55	24.44	25.7				
15	QPSK	1	37	24.50	24.54	24.43					
15	QPSK	1	74	24.51	24.53	24.41					
15	QPSK	36	0	23.69	23.63	23.52	24.7				
15	QPSK	36	20	23.69	23.67	23.59					
15	QPSK	36	39	23.64	23.63	23.54					
15	QPSK	75	0	23.65	23.68	23.49	24.7				
15	16QAM	1	0	23.81	23.91	23.73					
15	16QAM	1	37	23.84	23.83	23.73					
15	16QAM	1	74	23.82	23.85	23.74	23.7				
15	16QAM	36	0	22.69	22.63	22.51					
15	16QAM	36	20	22.67	22.70	22.59					
15	16QAM	36	39	22.61	22.66	22.55	23.7				
15	16QAM	75	0	22.68	22.70	22.51					
15	64QAM	1	0	22.72	22.76	22.59					
15	64QAM	1	37	22.73	22.79	22.67	23.7				
15	64QAM	1	74	22.70	22.76	22.44					
15	64QAM	36	0	21.74	21.64	21.51					
15	64QAM	36	20	21.72	21.73	21.61	22.7				
15	64QAM	36	39	21.71	21.70	21.64					
15	64QAM	75	0	21.69	21.70	21.52					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1855	1880	1910					
10	QPSK	1	0	24.51	24.48	24.35	25.7				
10	QPSK	1	25	24.48	24.50	24.39					
10	QPSK	1	49	24.45	24.48	24.30					
10	QPSK	25	0	23.62	23.56	23.52	24.7				
10	QPSK	25	12	23.68	23.67	23.59					
10	QPSK	25	25	23.67	23.68	23.60					
10	QPSK	50	0	23.67	23.67	23.58	24.7				
10	16QAM	1	0	23.80	23.87	23.74					
10	16QAM	1	25	23.84	23.88	23.80					
10	16QAM	1	49	23.87	23.89	23.79	23.7				
10	16QAM	25	0	22.64	22.59	22.54					
10	16QAM	25	12	22.69	22.69	22.58					
10	16QAM	25	25	22.62	22.68	22.52	23.7				
10	16QAM	50	0	22.65	22.69	22.56					
10	64QAM	1	0	22.77	22.74	22.64					
10	64QAM	1	25	22.82	22.79	22.72	23.7				
10	64QAM	1	49	22.79	22.78	22.51					
10	64QAM	25	0	21.65	21.60	21.57					
10	64QAM	25	12	21.72	21.71	21.62	22.7				
10	64QAM	25	25	21.69	21.70	21.63					
10	64QAM	50	0	21.65	21.70	21.62					
Channel				26065	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1913.5					
5	QPSK	1	0	24.49	24.44	24.40	25.7				
5	QPSK	1	12	24.55	24.54	24.43					
5	QPSK	1	24	24.53	24.50	24.42					
5	QPSK	12	0	23.60	23.62	23.49	24.7				
5	QPSK	12	7	23.69	23.65	23.55					
5	QPSK	12	13	23.64	23.69	23.56					
5	QPSK	25	0	23.62	23.64	23.55	24.7				
5	16QAM	1	0	23.85	23.82	23.74					
5	16QAM	1	12	23.80	23.86	23.73					
5	16QAM	1	24	23.88	23.93	23.72	23.7				
5	16QAM	12	0	22.63	22.65	22.50					
5	16QAM	12	7	22.68	22.71	22.59					
5	16QAM	12	13	22.67	22.71	22.56	23.7				
5	16QAM	25	0	22.67	22.67	22.52					
5	64QAM	1	0	22.79	22.75	22.69					
5	64QAM	1	12	22.74	22.77	22.61	23.7				
5	64QAM	1	24	22.71	22.79	22.23					
5	64QAM	12	0	21.67	21.67	21.55					
5	64QAM	12	7	21.74	21.78	21.61	22.7				
5	64QAM	12	13	21.74	21.75	21.30					
5	64QAM	25	0	21.65	21.67	21.47					
Channel				26055	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1913.5					
3	QPSK	1	0	24.41	24.39	24.35	25.7				
3	QPSK	1	8	24.50	24.40	24.48					
3	QPSK	1	14	24.52	24.51	24.45					
3	QPSK	8	0	23.57	23.62	23.47	24.7				
3	QPSK	8	4	23.67	23.66	23.55					
3	QPSK	8	7	23.65	23.66	23.57					
3	QPSK	15	0	23.63	23.62	23.53	24.7				
3	16QAM	1	0	23.79	23.71	23.69					
3	16QAM	1	8	23.93	23.95	23.81					
3	16QAM	1	14	23.90	23.91	23.78	23.7				
3	16QAM	8	0	22.66	22.65	22.53					
3	16QAM	8	4	22.74	22.75	22.61					
3	16QAM	8	7	22.73	22.75	22.62	23.7				
3	16QAM	15	0	22.68	22.66	22.54					
3	64QAM	1	0	22.70	22.66	22.56					
3	64QAM	1	8	22.82	22.87	22.44	23.7				
3	64QAM	1	14	22.80	22.83	22.21					
3	64QAM	8	0	21.66	21.67	21.53					
3	64QAM	8	4	21.74	21.75	21.37	22.7				
3	64QAM	8	7	21.72	21.75	21.25					
3	64QAM	15	0	21.66	21.67	21.36					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1880	1914.3					
1.4	QPSK	1	0	24.41	24.36	24.29	25.7				
1.4	QPSK	1	3	24.51	24.52	24.36					
1.4	QPSK	1	5	24.45	24.48	24.34					
1.4	QPSK	3	0	24.46	24.47	24.30	24.7				
1.4	QPSK	3	1	24.53	24.50	24.37					
1.4	QPSK	3	3	24.49	24.48	24.35					
1.4	QPSK	6	0	23.57	23.59	23.43	24.7				
1.4	QPSK	6	4	23.65	23.65	23.51					
1.4	QPSK	6	7	23.63	23.65	23.55					
1.4	16QAM	1	3	23.85	23.85	23.73	24.7				
1.4	16QAM	1	5	23.83	23.81	23.65					
1.4	16QAM	1	3	23.83	23.85	23.36					
1.4	16QAM	3	3	23.62	23.62	23.38	24.7				
1.4	16QAM	3	5	23.64	23.58	23.39					
1.4	16QAM	6	0	22.68	22.67	22.49					
1.4	16QAM	6	1	22.63	22.58	22.20	23.7				
1.4	16QAM	1	3	22.72	22.78	22.17					
1.4	16QAM	1	5	22.69	22.72	22.10					
1.4	64QAM	3	3	22.64	22.65	22.29	23.7				
1.4	64QAM	3	5	22.72	22.72	22.28					
1.4	64QAM	6	0	22.68	22.68	22.12					
1.4	64QAM	3	3	21.87	21.58	21.10	22.7				



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.28	24.16	24.24	25.7
15	QPSK	1	37	24.14	24.24	24.21	
15	QPSK	1	74	24.27	24.52	24.13	
15	QPSK	36	0	23.38	23.39	23.34	24.7
15	QPSK	36	20	23.40	23.31	23.37	
15	QPSK	36	39	23.33	23.34	23.29	
15	QPSK	75	0	23.39	23.35	23.35	24.7
15	16QAM	1	0	23.55	23.56	23.61	
15	16QAM	1	37	23.54	23.54	23.60	
15	16QAM	1	74	23.56	23.63	23.47	23.7
15	16QAM	36	0	22.36	22.42	22.34	
15	16QAM	36	20	22.34	22.33	22.30	
15	16QAM	36	39	22.36	22.36	22.33	23.7
15	16QAM	75	0	22.42	22.38	22.53	
15	64QAM	1	0	22.48	22.42	22.41	
15	64QAM	1	37	22.45	22.49	22.41	22.7
15	64QAM	1	74	22.48	22.48	21.70	
15	64QAM	36	0	21.43	21.46	21.41	
15	64QAM	36	20	21.47	21.43	21.37	22.7
15	64QAM	36	39	21.38	21.44	21.49	
15	64QAM	75	0	21.47	21.35	21.42	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.38	24.29	24.37	25.7
10	QPSK	1	25	24.22	24.25	24.23	
10	QPSK	1	49	24.28	24.29	24.20	
10	QPSK	25	0	23.50	23.36	23.44	24.7
10	QPSK	25	12	23.50	23.41	23.37	
10	QPSK	25	25	23.40	23.42	23.37	
10	QPSK	50	0	23.38	23.41	23.42	24.7
10	16QAM	1	0	23.77	23.60	23.75	
10	16QAM	1	25	23.61	23.73	23.64	
10	16QAM	1	49	23.64	23.67	23.62	23.7
10	16QAM	25	0	22.48	22.36	22.37	
10	16QAM	25	12	22.45	22.42	22.36	
10	16QAM	25	25	22.30	22.44	22.38	22.7
10	16QAM	50	0	22.46	22.37	22.33	
10	64QAM	1	0	22.64	22.51	22.57	
10	64QAM	1	25	22.54	22.66	22.66	22.7
10	64QAM	1	49	22.56	22.60	22.05	
10	64QAM	25	0	21.44	21.42	21.43	
10	64QAM	25	12	21.50	21.47	21.48	22.7
10	64QAM	25	25	21.37	21.41	21.29	
10	64QAM	50	0	21.47	21.37	21.36	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				616.5	631.5	646.5	
5	QPSK	1	0	24.45	24.32	24.35	25.7
5	QPSK	1	12	24.38	24.38	24.33	
5	QPSK	1	24	24.30	24.37	24.26	
5	QPSK	12	0	23.50	23.37	23.40	24.7
5	QPSK	12	7	23.51	23.41	23.44	
5	QPSK	12	13	23.44	23.36	23.33	
5	QPSK	25	0	23.44	23.40	23.38	24.7
5	16QAM	1	0	23.78	23.60	23.73	
5	16QAM	1	12	23.72	23.66	23.60	
5	16QAM	1	24	23.66	23.72	23.58	23.7
5	16QAM	12	0	22.49	22.38	22.41	
5	16QAM	12	7	22.45	22.45	22.41	
5	16QAM	12	13	22.44	22.37	22.30	23.7
5	16QAM	25	0	22.43	22.39	22.40	
5	64QAM	1	0	22.73	22.56	22.53	
5	64QAM	1	12	22.54	22.59	21.87	22.7
5	64QAM	1	24	22.56	22.57	21.82	
5	64QAM	12	0	21.58	21.56	21.51	
5	64QAM	12	7	21.59	21.50	20.86	22.7
5	64QAM	12	13	21.54	21.45	20.56	
5	64QAM	25	0	21.50	21.39	21.68	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.43	24.37	24.37	25.7
3	QPSK	1	8	24.41	24.37	24.32	
3	QPSK	1	14	24.30	24.35	24.26	
3	QPSK	8	0	23.51	23.43	23.27	24.7
3	QPSK	8	4	23.54	23.46	23.33	
3	QPSK	8	7	23.40	23.41	23.37	
3	QPSK	15	0	23.42	23.35	23.30	24.7
3	16QAM	1	0	23.79	23.62	23.67	
3	16QAM	1	8	23.80	23.76	23.49	
3	16QAM	1	14	23.68	23.71	23.56	23.7
3	16QAM	8	0	22.53	22.41	22.45	
3	16QAM	8	4	22.59	22.47	22.41	
3	16QAM	8	7	22.46	22.49	22.38	23.7
3	16QAM	15	0	22.56	22.36	22.37	
3	64QAM	1	0	22.61	22.57	21.91	
3	64QAM	1	8	22.68	22.58	21.70	22.7
3	64QAM	1	14	22.58	22.61	21.71	
3	64QAM	8	0	21.59	21.49	20.70	
3	64QAM	8	4	21.55	21.54	20.57	22.7
3	64QAM	8	7	21.49	21.52	20.57	
3	64QAM	15	0	21.50	21.48	20.64	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.37	24.27	24.21	25.7
1.4	QPSK	1	3	24.42	24.39	24.23	
1.4	QPSK	1	5	24.36	24.21	24.15	
1.4	QPSK	3	0	24.41	24.23	24.20	24.7
1.4	QPSK	3	1	24.41	24.33	24.21	
1.4	QPSK	3	3	24.40	24.32	24.20	
1.4	QPSK	6	0	23.41	23.38	23.30	24.7
1.4	16QAM	1	0	23.71	23.59	23.46	
1.4	16QAM	1	3	23.72	23.62	23.59	
1.4	16QAM	1	5	23.63	23.59	23.46	23.7
1.4	16QAM	3	0	23.56	23.29	23.30	
1.4	16QAM	3	1	23.60	23.39	23.30	
1.4	16QAM	3	3	23.50	23.35	23.24	23.7
1.4	16QAM	6	0	22.50	22.46	22.33	
1.4	64QAM	1	0	22.68	22.47	21.74	
1.4	64QAM	1	3	22.68	22.61	21.70	23.7
1.4	64QAM	1	5	22.62	22.46	21.71	
1.4	64QAM	3	0	22.64	22.46	21.72	
1.4	64QAM	3	1	22.57	22.47	21.71	22.7
1.4	64QAM	3	3	22.56	22.51	21.80	
1.4	64QAM	6	0	21.43	21.42	20.70	



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		22.18		23.7
10	QPSK	1	25		22.07		
10	QPSK	1	49		22.09		
10	QPSK	25	0		21.18		22.7
10	QPSK	25	12		21.14		
10	QPSK	25	25		21.23		
10	QPSK	50	0		21.14		22.7
10	16QAM	1	0		21.51		
10	16QAM	1	25		21.44		
10	16QAM	1	49		21.52		21.7
10	16QAM	25	0		20.18		
10	16QAM	25	12		20.25		
10	16QAM	25	25		20.19		21.7
10	16QAM	50	0		20.23		
10	64QAM	1	0		20.38		
10	64QAM	1	25		20.42		21.7
10	64QAM	1	49		20.39		
10	64QAM	25	0		19.24		
10	64QAM	25	12		19.21		20.7
10	64QAM	25	25		19.22		
10	64QAM	50	0		19.21		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.04	22.08	22.10	23.7
5	QPSK	1	12	22.18	22.10	22.13	
5	QPSK	1	24	22.11	22.12	22.14	
5	QPSK	12	0	21.14	21.18	21.17	22.7
5	QPSK	12	7	21.27	21.18	21.20	
5	QPSK	12	13	21.32	21.23	21.13	
5	QPSK	25	0	21.24	21.15	21.21	22.7
5	16QAM	1	0	21.36	21.35	21.42	
5	16QAM	1	12	21.47	21.47	21.42	
5	16QAM	1	24	21.55	21.44	21.44	21.7
5	16QAM	12	0	20.15	20.21	20.17	
5	16QAM	12	7	20.20	20.25	20.29	
5	16QAM	12	13	20.22	20.20	20.19	21.7
5	16QAM	25	0	20.24	20.17	20.23	
5	64QAM	1	0	20.27	20.34	20.47	
5	64QAM	1	12	20.39	20.35	20.37	21.7
5	64QAM	1	24	20.53	20.37	20.31	
5	64QAM	12	0	19.25	19.27	19.23	
5	64QAM	12	7	19.29	19.22	19.33	20.7
5	64QAM	12	13	19.31	19.33	19.25	
5	64QAM	25	0	19.27	19.21	19.27	



Band 66										
Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				132047	132322	132597				
Frequency (MHz)				1720	1745	1772				
20	QPSK	1	0	24.14	24.20	24.01	25.7			
20	QPSK	1	49	24.00	23.99	23.95				
20	QPSK	1	99	24.13	24.01	23.91				
20	QPSK	50	0	23.15	23.19	23.14				
20	QPSK	50	24	23.24	23.14	23.13	24.7			
20	QPSK	50	50	23.23	23.13	23.13				
20	QPSK	100	0	23.22	23.22	23.17				
20	16QAM	1	0	23.49	23.42	23.32				
20	16QAM	1	49	23.36	23.24	23.23	24.7			
20	16QAM	1	99	23.49	23.28	23.19				
20	16QAM	50	0	22.19	22.20	22.09				
20	16QAM	50	24	22.29	22.15	22.19				
20	16QAM	50	50	22.29	22.19	22.19	23.7			
20	16QAM	100	0	22.28	22.13	22.25				
20	64QAM	1	0	22.35	22.39	22.29				
20	64QAM	1	49	22.23	22.15	22.21				
20	64QAM	1	99	22.34	22.29	22.09	22.7			
20	64QAM	50	0	21.15	21.16	21.21				
20	64QAM	50	24	21.23	21.15	21.15				
20	64QAM	50	50	21.25	21.18	21.13				
20	64QAM	100	0	21.34	21.22	21.24				
Channel				132047	132322	132597	Tune-up limit (dBm)			
Frequency (MHz)				1717.5	1745	1772.5				
15	QPSK	1	0	24.10	24.08	24.03	25.7			
15	QPSK	1	37	24.06	24.00	23.96				
15	QPSK	1	74	24.13	24.11	23.95				
15	QPSK	36	0	23.14	23.19	23.11				
15	QPSK	36	20	23.18	23.25	23.14	24.7			
15	QPSK	36	39	23.19	23.18	23.14				
15	QPSK	75	0	23.20	23.21	23.04				
15	16QAM	1	37	23.33	23.33	23.33				
15	16QAM	1	74	23.45	23.30	23.25	24.7			
15	16QAM	36	0	22.19	22.19	22.07				
15	16QAM	36	20	22.22	22.14	22.13				
15	16QAM	36	39	22.22	22.17	22.16				
15	16QAM	75	0	22.24	22.19	22.06	23.7			
15	16QAM	1	0	22.26	22.22	22.19				
15	64QAM	1	37	22.30	22.29	22.15				
15	64QAM	1	74	22.36	22.26	22.18				
15	64QAM	36	0	21.20	21.19	21.11	22.7			
15	64QAM	36	20	21.22	21.20	21.13				
15	64QAM	36	39	21.22	21.18	21.12				
15	64QAM	75	0	21.23	21.18	21.07				
Channel				131997	132322	132647	Tune-up limit (dBm)			
Frequency (MHz)				1715	1745	1775				
10	QPSK	1	0	24.09	24.03	24.07	25.7			
10	QPSK	1	25	24.08	24.07	24.06				
10	QPSK	1	49	24.14	24.08	24.07				
10	QPSK	25	0	23.16	23.15	23.15				
10	QPSK	25	12	23.19	23.22	23.13	24.7			
10	QPSK	25	25	23.19	23.19	23.14				
10	QPSK	50	0	23.20	23.23	23.06				
10	16QAM	1	0	23.59	23.48	23.51				
10	16QAM	1	25	23.44	23.45	23.45	24.7			
10	16QAM	1	49	23.54	23.39	23.44				
10	16QAM	25	0	22.18	22.16	22.08				
10	16QAM	25	12	22.23	22.16	22.11				
10	16QAM	25	25	22.21	22.20	22.21	23.7			
10	16QAM	50	0	22.23	22.23	22.08				
10	64QAM	1	0	22.37	22.29	22.29				
10	64QAM	1	25	22.42	22.34	22.40				
10	64QAM	1	49	22.36	22.38	22.34	23.7			
10	64QAM	25	0	21.20	21.18	21.19				
10	64QAM	25	12	21.30	21.22	21.19				
10	64QAM	25	25	21.24	21.21	21.15				
10	64QAM	50	0	21.30	21.24	21.13	22.7			
Channel				131997	132322	132647		Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5				
5	QPSK	1	0	24.07	24.10	24.08		25.7		
5	QPSK	1	12	24.12	24.08	24.05				
5	QPSK	1	24	24.09	24.11	24.08				
5	QPSK	12	0	23.22	23.13	23.12				
5	QPSK	12	7	23.25	23.15	23.14	24.7			
5	QPSK	12	13	23.17	23.22	23.17				
5	QPSK	25	0	23.16	23.20	23.17				
5	16QAM	1	0	23.46	23.36	23.34				
5	16QAM	1	12	23.53	23.43	23.47	24.7			
5	16QAM	1	24	23.47	23.38	23.32				
5	16QAM	12	0	22.24	22.17	22.17				
5	16QAM	12	7	22.24	22.21	22.25				
5	16QAM	12	13	22.25	22.23	22.16	23.7			
5	16QAM	25	0	22.18	22.22	22.14				
5	64QAM	1	0	22.35	22.31	22.33				
5	64QAM	1	12	22.38	22.38	22.34				
5	64QAM	1	24	22.45	22.31	22.32	22.7			
5	64QAM	12	0	21.26	21.19	21.23				
5	64QAM	12	7	21.23	21.28	21.28				
5	64QAM	12	13	21.32	21.21	21.23				
5	64QAM	25	0	21.20	21.22	21.19				
Channel				131987	132322	132657	Tune-up limit (dBm)			
Frequency (MHz)				1711.5	1745	1778.5				
3	QPSK	1	0	24.10	24.13	24.08	25.7			
3	QPSK	1	8	24.11	24.13	24.18				
3	QPSK	1	14	24.15	24.07	24.11				
3	QPSK	8	0	23.23	23.12	23.17				
3	QPSK	8	4	23.22	23.20	23.19	24.7			
3	QPSK	8	7	23.28	23.20	23.12				
3	QPSK	15	0	23.16	23.23	23.18				
3	16QAM	1	0	23.52	23.35	23.45				
3	16QAM	1	8	23.54	23.53	23.47	24.7			
3	16QAM	1	14	23.49	23.45	23.45				
3	16QAM	8	0	22.25	22.14	22.17				
3	16QAM	8	4	22.35	22.21	22.20				
3	16QAM	8	7	22.29	22.23	22.22	23.7			
3	16QAM	15	0	22.32	22.19	22.18				
3	64QAM	1	0	22.39	22.32	22.35				
3	64QAM	1	8	22.54	22.45	22.38				
3	64QAM	1	14	22.42	22.35	22.40	22.7			
3	64QAM	8	0	21.28	21.15	21.14				
3	64QAM	8	4	21.36	21.27	21.20				
3	64QAM	8	7	21.31	21.27	21.24				
3	64QAM	15	0	21.21	21.17	21.23				
Channel				131979	132322	132665	Tune-up limit (dBm)			
Frequency (MHz)				1710.7	1745	1779.3				
1.4	QPSK	1	0	24.12	23.98	23.97	25.7			
1.4	QPSK	1	3	24.17	24.09	24.04				
1.4	QPSK	1	5	24.10	24.08	24.05				
1.4	QPSK	3	0	24.11	24.14	24.05				
1.4	QPSK	3	1	24.19	24.13	24.10	24.7			
1.4	QPSK	3	3	24.17	24.07	24.04				
1.4	QPSK	6	0	23.18	23.09	23.19				
1.4	QPSK	3	3	23.32	23.20	23.19	24.7			
1.4	16QAM	1	3	23.52	23.43	23.46				
1.4	16QAM	1	5	23.42	23.36	23.32				
1.4	16QAM	3	0	23.24	23.20	23.16				
1.4	16QAM	3	1	23.28	23.19	23.24	23.7			
1.4	16QAM	3	3	22.25	22.21	22.24				
1.4	16QAM	6	0	22.22	22.21	22.22				
1.4	16QAM	6	3	22.27	22.23	22.27				
1.4	64QAM	1	5	22.37	22.27	22.25	23.7			
1.4	64QAM	3	0	22.34	22.24	22.25				
1.4	64QAM	3	1	22.33	22.24	22.29				
1.4	64QAM	3	3	22.27	22.27	22.22				
1.4	64QAM	3	5	21.21	21.18	21.19				



Band 71							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.39	24.32	24.28	25.7
20	QPSK	1	49	24.21	24.25	24.28	
20	QPSK	1	99	24.24	24.21	24.14	
20	QPSK	50	0	23.39	23.37	23.38	24.7
20	QPSK	50	24	23.50	23.42	23.32	
20	QPSK	50	50	23.45	23.39	23.33	
20	QPSK	100	0	23.46	23.30	23.37	24.7
20	16QAM	1	0	23.69	23.66	23.66	
20	16QAM	1	49	23.56	23.55	23.57	
20	16QAM	1	99	23.81	23.58	23.54	23.7
20	16QAM	50	0	22.46	22.32	22.40	
20	16QAM	50	24	22.42	22.33	22.39	
20	16QAM	50	50	22.42	22.39	22.39	23.7
20	16QAM	100	0	22.46	22.34	22.42	
20	64QAM	1	0	21.73	22.29	22.52	
20	64QAM	1	49	22.23	22.43	21.81	23.7
20	64QAM	1	99	22.50	22.00	22.43	
20	64QAM	50	0	20.70	21.36	21.01	
20	64QAM	50	24	20.85	21.40	21.15	22.7
20	64QAM	50	50	21.49	21.04	21.37	
20	64QAM	100	0	21.05	21.35	21.45	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.23	24.27	24.23	25.7
15	QPSK	1	37	24.23	24.18	24.22	
15	QPSK	1	74	24.28	24.26	24.14	
15	QPSK	36	0	23.41	23.31	23.37	24.7
15	QPSK	36	20	23.45	23.30	23.34	
15	QPSK	36	39	23.36	23.40	23.35	
15	QPSK	75	0	23.36	23.35	23.34	24.7
15	16QAM	1	0	23.68	23.64	23.56	
15	16QAM	1	37	23.38	23.54	23.52	
15	16QAM	1	74	23.54	23.51	23.54	23.7
15	16QAM	36	0	22.28	22.39	22.28	
15	16QAM	36	20	22.31	22.34	22.43	
15	16QAM	36	39	22.45	22.37	22.38	23.7
15	16QAM	75	0	22.45	22.32	22.35	
15	64QAM	1	0	21.71	22.45	22.43	
15	64QAM	1	37	21.70	22.51	22.51	23.7
15	64QAM	1	74	22.41	22.16	22.49	
15	64QAM	36	0	20.70	21.34	20.97	
15	64QAM	36	20	20.44	21.43	21.36	22.7
15	64QAM	36	39	21.00	20.91	21.37	
15	64QAM	75	0	20.86	21.39	21.33	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.27	24.17	24.29	25.7
10	QPSK	1	25	24.19	24.18	24.20	
10	QPSK	1	49	24.17	24.27	24.18	
10	QPSK	25	0	23.33	23.31	23.33	24.7
10	QPSK	25	12	23.33	23.43	23.26	
10	QPSK	25	25	23.24	23.30	23.27	
10	QPSK	50	0	23.41	23.40	23.28	24.7
10	16QAM	1	0	23.71	23.36	23.60	
10	16QAM	1	25	23.62	23.63	23.53	
10	16QAM	1	49	23.62	23.61	23.47	23.7
10	16QAM	25	0	22.27	22.28	22.30	
10	16QAM	25	12	22.28	22.38	22.33	
10	16QAM	25	25	22.14	22.38	22.23	23.7
10	16QAM	50	0	22.32	22.42	22.24	
10	64QAM	1	0	21.75	21.80	22.44	
10	64QAM	1	25	21.73	22.52	22.48	23.7
10	64QAM	1	49	21.70	22.46	22.13	
10	64QAM	25	0	20.70	21.34	21.35	
10	64QAM	25	12	20.33	21.41	21.36	22.7
10	64QAM	25	25	20.40	21.38	21.31	
10	64QAM	50	0	20.33	21.35	21.30	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.07	24.21	24.21	25.7
5	QPSK	1	12	24.33	24.20	24.17	
5	QPSK	1	24	24.22	24.20	24.18	
5	QPSK	12	0	23.33	23.35	23.25	24.7
5	QPSK	12	7	23.30	23.36	23.33	
5	QPSK	12	13	23.32	23.30	23.28	
5	QPSK	25	0	23.32	23.37	23.25	24.7
5	16QAM	1	0	23.51	23.53	23.57	
5	16QAM	1	12	23.51	23.55	23.55	
5	16QAM	1	24	23.48	23.53	23.47	23.7
5	16QAM	12	0	22.16	22.40	22.33	
5	16QAM	12	7	22.31	22.37	22.34	
5	16QAM	12	13	22.38	22.34	22.27	23.7
5	16QAM	25	0	22.24	22.39	22.29	
5	64QAM	1	0	21.78	21.74	22.47	
5	64QAM	1	12	21.72	22.51	22.39	23.7
5	64QAM	1	24	21.70	22.56	21.87	
5	64QAM	12	0	20.70	21.16	21.31	
5	64QAM	12	7	20.42	21.41	21.39	22.7
5	64QAM	12	13	20.40	21.40	21.19	
5	64QAM	25	0	20.23	21.10	21.23	



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. 7	Power Middle Ch. 7	Power High Ch. 7	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.25	24.10	24.15	25.7
20	QPSK	1	49	24.12	24.04	24.04	
20	QPSK	1	99	24.03	24.11	24.05	
20	QPSK	50	0	23.16	23.10	23.15	
20	QPSK	50	24	23.34	23.19	23.14	
20	QPSK	50	50	23.22	23.21	23.22	24.7
20	QPSK	100	0	23.29	23.27	23.16	
20	16QAM	1	0	23.43	23.43	23.45	
20	16QAM	1	49	23.41	23.40	23.35	
20	16QAM	1	99	23.34	23.43	23.47	
20	16QAM	50	0	22.18	22.17	22.17	23.7
20	16QAM	50	24	22.26	22.28	22.18	
20	16QAM	50	50	22.32	22.24	22.22	
20	16QAM	100	0	22.21	22.24	22.13	
20	64QAM	1	0	22.35	22.29	22.33	
20	64QAM	1	49	22.35	22.31	21.77	23.7
20	64QAM	1	99	22.27	22.31	21.86	
20	64QAM	50	0	21.19	21.19	21.00	
20	64QAM	50	24	21.28	21.32	20.92	
20	64QAM	50	50	21.26	21.24	20.90	
20	64QAM	100	0	21.25	21.25	20.96	Tune-up limit (dBm)
Channel				1867.5	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.14	24.04	24.06	
15	QPSK	1	37	24.08	24.01	23.95	
15	QPSK	1	74	24.01	24.03	23.97	24.7
15	QPSK	36	0	23.10	23.05	23.10	
15	QPSK	36	20	23.33	23.16	23.04	
15	QPSK	36	39	23.12	23.11	23.16	
15	QPSK	75	0	23.20	23.25	23.10	
15	16QAM	1	0	23.37	23.35	23.40	24.7
15	16QAM	1	37	23.37	23.33	23.30	
15	16QAM	1	74	23.27	23.38	23.46	
15	16QAM	36	0	22.13	22.07	22.14	
15	16QAM	36	20	22.17	22.18	22.14	
15	16QAM	36	39	22.25	22.16	22.13	23.7
15	16QAM	75	0	22.20	22.19	22.08	
15	64QAM	1	0	22.31	22.23	22.29	
15	64QAM	1	37	22.31	22.26	21.73	
15	64QAM	1	74	22.20	22.24	21.77	
15	64QAM	36	0	21.16	21.19	20.97	22.7
15	64QAM	36	20	21.28	21.24	20.88	
15	64QAM	36	39	21.20	21.18	20.85	
15	64QAM	75	0	21.22	21.16	20.87	
15	64QAM	75	0	21.22	21.16	20.87	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.19	24.06	24.13	
10	QPSK	1	25	24.12	24.03	23.95	
10	QPSK	1	49	24.01	24.05	23.99	24.7
10	QPSK	25	0	23.13	23.10	23.05	
10	QPSK	25	12	23.30	23.13	23.10	
10	QPSK	25	25	23.14	23.17	23.17	
10	QPSK	50	0	23.19	23.22	23.09	
10	16QAM	1	0	23.39	23.42	23.42	24.7
10	16QAM	1	25	23.35	23.32	23.28	
10	16QAM	1	49	23.31	23.40	23.42	
10	16QAM	25	0	22.17	22.07	22.12	
10	16QAM	25	12	22.23	22.20	22.13	
10	16QAM	25	25	22.32	22.21	22.15	23.7
10	16QAM	50	0	22.19	22.24	22.12	
10	64QAM	1	0	22.29	22.22	22.26	
10	64QAM	1	25	22.31	22.29	21.70	
10	64QAM	1	49	22.24	22.31	21.84	
10	64QAM	25	0	21.10	21.13	20.94	22.7
10	64QAM	25	12	21.16	21.32	20.92	
10	64QAM	25	25	21.18	21.21	20.88	
10	64QAM	50	0	21.25	21.20	20.89	
10	64QAM	50	0	21.25	21.20	20.89	
Channel				1862.5	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.15	24.05	24.07	
5	QPSK	1	12	24.20	24.15	24.18	
5	QPSK	1	24	24.13	24.16	24.16	24.7
5	QPSK	12	0	23.23	23.13	23.24	
5	QPSK	12	7	23.38	23.28	23.21	
5	QPSK	12	13	23.27	23.27	23.21	
5	QPSK	25	0	23.28	23.21	23.20	
5	16QAM	1	0	23.44	23.30	23.38	24.7
5	16QAM	1	12	23.48	23.48	23.46	
5	16QAM	1	24	23.54	23.47	23.42	
5	16QAM	12	0	22.32	22.24	22.21	
5	16QAM	12	7	22.32	22.35	22.31	
5	16QAM	12	13	22.27	22.27	22.24	23.7
5	16QAM	25	0	22.30	22.28	22.20	
5	64QAM	1	0	22.47	22.31	21.86	
5	64QAM	1	12	22.35	22.36	21.97	
5	64QAM	1	24	22.36	22.44	21.87	
5	64QAM	12	0	21.32	21.23	20.96	22.7
5	64QAM	12	7	21.35	21.36	20.95	
5	64QAM	12	13	21.39	21.40	20.89	
5	64QAM	25	0	21.30	21.33	20.83	
5	64QAM	25	0	21.30	21.33	20.83	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.21	24.11	24.09	
3	QPSK	1	8	24.24	24.24	24.16	
3	QPSK	1	14	24.23	24.19	24.07	24.7
3	QPSK	8	0	23.29	23.29	23.24	
3	QPSK	8	4	23.36	23.24	23.26	
3	QPSK	8	7	23.31	23.21	23.18	
3	QPSK	15	0	23.34	23.24	23.16	
3	16QAM	1	0	23.45	23.41	23.42	24.7
3	16QAM	1	8	23.56	23.51	23.43	
3	16QAM	1	14	23.51	23.43	23.48	
3	16QAM	8	0	22.29	22.37	22.28	
3	16QAM	8	4	22.37	22.38	22.32	
3	16QAM	8	7	22.34	22.32	22.25	23.7
3	16QAM	15	0	22.35	22.29	22.31	
3	64QAM	1	0	22.45	22.37	21.95	
3	64QAM	1	8	22.50	22.46	22.02	
3	64QAM	1	14	22.50	22.48	21.92	
3	64QAM	8	0	21.38	21.32	20.88	22.7
3	64QAM	8	4	21.37	21.43	20.88	
3	64QAM	8	7	21.37	21.36	20.81	
3	64QAM	15	0	21.34	21.35	20.84	
3	64QAM	15	0	21.34	21.35	20.84	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.11	23.99	23.98	
1.4	QPSK	1	3	24.20	24.14	24.13	
1.4	QPSK	1	5	24.15	24.04	24.07	25.7
1.4	QPSK	3	0	24.11	24.06	23.99	
1.4	QPSK	3	1	24.20	24.13	24.15	
1.4	QPSK	3	3	24.19	24.06	24.01	
1.4	QPSK	6	0	23.26	23.13	23.13	
1.4	16QAM	1	0	23.46	23.42	23.35	24.7
1.4	16QAM	1	3	23.55	23.53	23.49	
1.4	16QAM	1	5	23.52	23.43	23.36	
1.4	16QAM	3	0	23.20	23.13	23.16	
1.4	16QAM	3	1	23.23	23.24	23.14	
1.4	16QAM	3	3	23.18	23.16	23.06	23.7
1.4	16QAM	6	0	22.30	22.30	22.26	
1.4	64QAM	1	0	22.38	22.35	21.94	
1.4	64QAM	1	3	22.43	22.42	22.00	
1.4	64QAM	1	5	22.36	22.41	21.89	
1.4	64QAM	3	0	22.30	22.24	21.89	23.7
1.4	64QAM	3	1	22.37	22.35	22.05	
1.4	64QAM	3	3	22.37	22.34	21.96	
1.4	64QAM	6	0	21.28	21.25	20.78	
1.4	64QAM	6	0	21.28	21.25	20.78	



Band 4									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	24.19	24.13	24.23	25.7		
20	QPSK	1	49	24.02	23.94	23.98			
20	QPSK	1	99	24.06	24.04	24.04			
20	QPSK	50	0	23.20	23.16	23.22	24.7		
20	QPSK	50	24	23.27	23.16	23.16			
20	QPSK	50	50	23.13	23.10	23.11			
20	QPSK	100	0	23.18	23.23	23.06	24.7		
20	16QAM	1	0	23.51	23.50	23.48			
20	16QAM	1	49	23.40	23.31	23.32			
20	16QAM	1	99	23.47	23.33	23.32	23.7		
20	16QAM	50	0	22.25	22.22	22.17			
20	16QAM	50	24	22.27	22.17	22.14			
20	16QAM	50	50	22.20	22.15	22.19	22.7		
20	16QAM	100	0	22.17	22.27	22.13			
20	64QAM	1	0	22.32	22.38	22.07			
20	64QAM	1	49	22.21	22.20	22.29	22.7		
20	64QAM	1	99	22.28	22.04	22.25			
20	64QAM	50	0	21.18	21.26	21.24			
20	64QAM	50	24	21.29	21.20	21.10	22.7		
20	64QAM	50	50	21.20	21.13	21.14			
20	64QAM	100	0	21.22	21.24	21.19			
Channel				20050	20175	20325	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	24.21	24.17	24.22	25.7		
15	QPSK	1	37	24.07	24.08	24.05			
15	QPSK	1	74	24.04	24.09	24.08			
15	QPSK	36	0	23.33	23.31	23.16	24.7		
15	QPSK	36	20	23.27	23.20	23.10			
15	QPSK	36	39	23.27	23.16	23.14			
15	QPSK	75	0	23.24	23.22	23.15	24.7		
15	16QAM	1	0	23.49	23.51	23.55			
15	16QAM	1	37	23.41	23.39	23.38			
15	16QAM	1	74	23.48	23.39	23.31	24.7		
15	16QAM	36	0	22.30	22.16	22.24			
15	16QAM	36	20	22.20	22.25	22.12			
15	16QAM	36	39	22.20	22.20	22.17	23.7		
15	16QAM	75	0	22.23	22.28	22.14			
15	64QAM	1	0	22.43	22.38	22.34			
15	64QAM	1	37	22.30	22.18	22.26	23.7		
15	64QAM	1	74	22.37	22.07	22.20			
15	64QAM	36	0	21.27	21.29	21.27			
15	64QAM	36	20	21.25	21.13	21.21	22.7		
15	64QAM	36	39	21.27	21.05	21.20			
15	64QAM	75	0	21.32	21.21	21.20			
Channel				20000	20175	20350	Tune-up limit (dBm)		
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.16	24.09	24.14	25.7		
10	QPSK	1	25	24.14	24.09	24.08			
10	QPSK	1	49	24.15	24.17	24.10			
10	QPSK	25	0	23.24	23.19	23.15	24.7		
10	QPSK	25	12	23.31	23.27	23.19			
10	QPSK	25	25	23.30	23.29	23.28			
10	QPSK	50	0	23.32	23.25	23.15	24.7		
10	16QAM	1	0	23.57	23.54	23.47			
10	16QAM	1	25	23.43	23.51	23.48			
10	16QAM	1	49	23.52	23.45	23.56	23.7		
10	16QAM	25	0	22.25	22.14	22.15			
10	16QAM	25	12	22.27	22.25	22.16			
10	16QAM	25	25	22.24	22.23	22.24	23.7		
10	16QAM	50	0	22.31	22.29	22.14			
10	64QAM	1	0	22.36	22.33	22.38			
10	64QAM	1	25	22.46	22.28	22.46	23.7		
10	64QAM	1	49	22.42	22.07	22.45			
10	64QAM	25	0	21.30	21.23	21.23			
10	64QAM	25	12	21.30	21.14	21.25	22.7		
10	64QAM	25	25	21.35	20.96	21.26			
10	64QAM	50	0	21.30	21.11	21.20			
Channel				19975	20175	20375	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.19	24.12	24.06	25.7		
5	QPSK	1	12	24.19	24.19	24.16			
5	QPSK	1	24	24.22	24.12	24.15			
5	QPSK	12	0	23.28	23.19	23.19	24.7		
5	QPSK	12	7	23.36	23.28	23.23			
5	QPSK	12	13	23.28	23.23	23.14			
5	QPSK	25	0	23.30	23.24	23.23	24.7		
5	16QAM	1	0	23.53	23.36	23.43			
5	16QAM	1	12	23.55	23.48	23.47			
5	16QAM	1	24	23.56	23.45	23.44	23.7		
5	16QAM	12	0	22.25	22.15	22.29			
5	16QAM	12	7	22.32	22.31	22.21			
5	16QAM	12	13	22.28	22.32	22.28	23.7		
5	16QAM	25	0	22.28	22.29	22.26			
5	64QAM	1	0	22.32	22.38	22.44			
5	64QAM	1	12	22.47	22.29	22.39	22.7		
5	64QAM	1	24	22.55	22.04	22.40			
5	64QAM	12	0	21.33	21.25	21.33			
5	64QAM	12	7	21.35	21.25	21.29	22.7		
5	64QAM	12	13	21.36	21.12	21.27			
5	64QAM	25	0	21.32	21.08	21.24			
Channel				19965	20175	20385	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.14	24.04	24.07	25.7		
3	QPSK	1	8	24.23	24.20	24.15			
3	QPSK	1	14	24.19	24.20	24.10			
3	QPSK	8	0	23.25	23.18	23.17	24.7		
3	QPSK	8	4	23.28	23.26	23.28			
3	QPSK	8	7	23.26	23.29	23.18			
3	QPSK	15	0	23.31	23.31	23.21	24.7		
3	16QAM	1	0	23.51	23.42	23.42			
3	16QAM	1	8	23.59	23.56	23.46			
3	16QAM	1	14	23.49	23.41	23.43	23.7		
3	16QAM	8	0	22.30	22.21	22.21			
3	16QAM	8	4	22.39	22.33	22.33			
3	16QAM	8	7	22.37	22.27	22.25	23.7		
3	16QAM	15	0	22.32	22.22	22.26			
3	64QAM	1	0	22.37	22.24	22.33			
3	64QAM	1	8	22.57	22.28	22.45	23.7		
3	64QAM	1	14	22.53	22.19	22.42			
3	64QAM	8	0	21.36	21.16	21.30			
3	64QAM	8	4	21.37	21.17	21.27	22.7		
3	64QAM	8	7	21.35	21.09	21.22			
3	64QAM	15	0	21.29	21.14	21.20			
Channel				19957	20175	20393	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.02	24.07	24.05	25.7		
1.4	QPSK	1	3	24.21	24.16	24.08			
1.4	QPSK	1	5	24.09	24.07	23.98			
1.4	QPSK	3	0	24.17	24.02	24.08	24.7		
1.4	QPSK	3	1	24.17	24.16	24.09			
1.4	QPSK	3	3	24.14	24.12	24.05			
1.4	QPSK	6	0	23.22	23.14	23.06	24.7		
1.4	QPSK	6	4	23.28	23.26	23.28			
1.4	QPSK	6	7	23.26	23.29	23.17			
1.4	16QAM	1	0	23.50	23.42	23.42	24.7		
1.4	16QAM	1	5	23.45	23.41	23.37			
1.4	16QAM	1	3	23.22	23.16	23.13			
1.4	16QAM	3	0	22.26	22.21	22.14	23.7		
1.4	16QAM	3	1	22.33	22.31	22.28			
1.4	16QAM	3	3	22.32	22.28	22.24			
1.4	16QAM	1	5	22.34	22.21	22.33	23.7		
1.4	16QAM	1	3	22.36	22.28	22.22			
1.4	16QAM	3	1	22.36	22.34	22.30			
1.4	16QAM	3	3	22.34	22.21	22.33	22.7		
1.4	16QAM	3	5	22.38	22.25	22.38			
1.4	16QAM	3	7	22.41	22.19	22.31			



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.09	23.04	23.08	23.8
10	QPSK	1	25	22.99	23.03	22.97	
10	QPSK	1	49	23.06	23.02	22.94	
10	QPSK	25	0	23.10	23.16	23.11	23.8
10	QPSK	25	12	23.20	23.14	23.12	
10	QPSK	25	25	23.18	23.17	23.13	
10	QPSK	50	0	23.21	23.16	23.10	23.8
10	16QAM	1	0	23.49	23.43	23.46	
10	16QAM	1	25	23.41	23.43	23.40	
10	16QAM	1	49	23.47	23.37	23.35	23.3
10	16QAM	25	0	22.97	23.05	23.02	
10	16QAM	25	12	23.06	23.06	23.04	
10	16QAM	25	25	23.04	23.09	23.05	23.3
10	16QAM	50	0	23.07	23.07	23.02	
10	64QAM	1	0	23.18	23.13	23.22	
10	64QAM	1	25	23.22	23.28	23.05	23.3
10	64QAM	1	49	23.24	23.02	22.76	
10	64QAM	25	0	21.98	22.13	22.08	
10	64QAM	25	12	22.14	22.12	22.06	22.3
10	64QAM	25	25	22.08	22.12	21.41	
10	64QAM	50	0	22.11	22.11	22.00	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.05	22.65	22.60	23.8
5	QPSK	1	12	22.91	22.64	22.66	
5	QPSK	1	24	23.04	22.67	22.60	
5	QPSK	12	0	23.03	22.58	22.53	23.8
5	QPSK	12	7	23.15	22.62	22.46	
5	QPSK	12	13	23.14	22.57	22.46	
5	QPSK	25	0	23.14	22.51	22.45	23.8
5	16QAM	1	0	23.47	22.89	22.79	
5	16QAM	1	12	23.39	22.85	22.78	
5	16QAM	1	24	23.38	22.80	22.70	23.3
5	16QAM	12	0	22.96	22.59	22.42	
5	16QAM	12	7	23.04	22.54	22.41	
5	16QAM	12	13	23.04	22.49	22.40	23.3
5	16QAM	25	0	23.03	22.47	22.38	
5	64QAM	1	0	23.09	22.66	22.20	
5	64QAM	1	12	23.17	22.64	21.74	23.3
5	64QAM	1	24	23.20	22.64	21.90	
5	64QAM	12	0	21.97	21.60	21.87	
5	64QAM	12	7	22.08	21.59	21.83	22.3
5	64QAM	12	13	22.04	21.54	21.67	
5	64QAM	25	0	22.05	21.46	21.70	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.80	22.75	22.80	23.8
3	QPSK	1	8	22.79	22.94	22.76	
3	QPSK	1	14	22.70	22.75	22.82	
3	QPSK	8	0	22.91	22.85	22.81	23.8
3	QPSK	8	4	22.85	22.87	22.80	
3	QPSK	8	7	22.82	22.84	22.72	
3	QPSK	15	0	22.83	22.83	22.77	23.8
3	16QAM	1	0	23.19	23.13	23.12	
3	16QAM	1	8	23.19	23.20	23.12	
3	16QAM	1	14	23.09	23.11	22.96	23.3
3	16QAM	8	0	22.80	22.85	22.81	
3	16QAM	8	4	22.80	22.88	22.79	
3	16QAM	8	7	22.74	22.83	22.71	23.3
3	16QAM	15	0	22.79	22.77	22.75	
3	64QAM	1	0	22.94	22.93	21.97	
3	64QAM	1	8	22.96	23.01	22.20	23.3
3	64QAM	1	14	22.85	22.90	22.28	
3	64QAM	8	0	21.82	21.83	21.85	
3	64QAM	8	4	21.79	21.86	21.96	22.3
3	64QAM	8	7	21.75	21.85	22.16	
3	64QAM	15	0	21.73	21.80	22.06	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.70	22.66	22.61	23.8
1.4	QPSK	1	3	22.73	22.74	22.68	
1.4	QPSK	1	5	22.68	22.70	22.60	
1.4	QPSK	3	0	22.75	22.70	22.64	23.8
1.4	QPSK	3	1	22.78	22.73	22.69	
1.4	QPSK	3	3	22.73	22.74	22.64	
1.4	QPSK	6	0	22.81	22.73	22.69	23.8
1.4	16QAM	1	0	23.07	23.02	22.97	
1.4	16QAM	1	3	23.10	23.12	23.00	
1.4	16QAM	1	5	23.03	23.05	22.93	23.8
1.4	16QAM	3	0	22.88	22.78	22.76	
1.4	16QAM	3	1	22.89	22.94	22.80	
1.4	16QAM	3	3	22.82	22.84	22.70	23.3
1.4	16QAM	6	0	22.72	22.75	22.68	
1.4	64QAM	1	0	22.85	22.80	22.29	
1.4	64QAM	1	3	22.91	22.92	22.47	23.3
1.4	64QAM	1	5	22.82	22.96	22.49	
1.4	64QAM	3	0	22.85	22.77	22.25	
1.4	64QAM	3	1	22.86	22.83	22.37	22.3
1.4	64QAM	3	3	22.79	22.84	22.44	
1.4	64QAM	6	0	21.69	21.68	21.30	



Band 7							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.43	24.33	24.16	25.7
20	QPSK	1	49	24.40	24.36	24.21	
20	QPSK	1	99	24.53	24.43	24.20	
20	QPSK	50	0	23.80	23.46	23.37	24.7
20	QPSK	50	24	23.62	23.47	23.35	
20	QPSK	50	50	23.58	23.49	23.38	
20	QPSK	100	0	23.57	23.49	23.30	24.7
20	16QAM	1	0	23.72	23.69	23.53	
20	16QAM	1	49	23.75	23.65	23.47	
20	16QAM	1	99	23.89	23.74	23.52	23.7
20	16QAM	50	0	22.64	22.40	22.33	
20	16QAM	50	24	22.66	22.46	22.32	
20	16QAM	50	50	22.66	22.45	22.30	23.7
20	16QAM	100	0	22.56	22.45	22.52	
20	64QAM	1	0	22.63	22.49	22.44	
20	64QAM	1	49	22.62	22.65	22.46	22.7
20	64QAM	1	99	22.70	22.63	22.38	
20	64QAM	50	0	21.65	21.44	21.35	
20	64QAM	50	24	21.69	21.52	21.43	22.7
20	64QAM	50	50	21.66	21.44	21.39	
20	64QAM	100	0	21.67	21.51	21.40	
Channel				20925	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.41	24.35	24.22	25.7
15	QPSK	1	37	24.50	24.38	24.11	
15	QPSK	1	74	24.49	24.42	24.24	
15	QPSK	36	0	23.49	23.39	23.27	24.7
15	QPSK	36	20	23.64	23.46	23.32	
15	QPSK	36	39	23.64	23.46	23.32	
15	QPSK	75	0	23.58	23.40	23.35	24.7
15	16QAM	1	0	23.72	23.67	23.49	
15	16QAM	1	37	23.83	23.64	23.48	
15	16QAM	1	74	23.80	23.78	23.53	23.7
15	16QAM	36	0	22.50	22.47	22.29	
15	16QAM	36	20	22.60	22.50	22.35	
15	16QAM	36	39	22.65	22.48	22.34	23.7
15	16QAM	75	0	22.58	22.49	22.33	
15	64QAM	1	0	22.67	22.52	22.41	
15	64QAM	1	37	22.68	22.59	22.34	23.7
15	64QAM	1	74	22.80	22.60	22.41	
15	64QAM	36	0	21.49	21.41	21.39	
15	64QAM	36	20	21.66	21.55	21.32	22.7
15	64QAM	36	39	21.64	21.48	21.35	
15	64QAM	75	0	21.61	21.42	21.33	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.42	24.34	24.18	25.7
10	QPSK	1	25	24.48	24.37	24.08	
10	QPSK	1	49	24.42	24.34	24.20	
10	QPSK	25	0	23.43	23.29	23.24	24.7
10	QPSK	25	12	23.58	23.44	23.25	
10	QPSK	25	25	23.58	23.38	23.31	
10	QPSK	50	0	23.49	23.34	23.26	24.7
10	16QAM	1	0	23.65	23.57	23.43	
10	16QAM	1	25	23.81	23.62	23.38	
10	16QAM	1	49	23.72	23.72	23.47	23.7
10	16QAM	25	0	22.49	22.47	22.26	
10	16QAM	25	12	22.51	22.43	22.25	
10	16QAM	25	25	22.59	22.47	22.31	23.7
10	16QAM	50	0	22.57	22.46	22.24	
10	64QAM	1	0	22.65	22.45	22.36	
10	64QAM	1	25	22.68	22.53	22.25	22.7
10	64QAM	1	49	22.80	22.54	22.33	
10	64QAM	25	0	21.47	21.36	21.29	
10	64QAM	25	12	21.56	21.52	21.23	22.7
10	64QAM	25	25	21.52	21.45	21.33	
10	64QAM	50	0	21.61	21.33	21.23	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.45	24.33	24.22	25.7
5	QPSK	1	12	24.43	24.36	24.11	
5	QPSK	1	24	24.41	24.32	24.15	
5	QPSK	12	0	23.47	23.38	23.18	24.7
5	QPSK	12	7	23.62	23.39	23.31	
5	QPSK	12	13	23.61	23.38	23.24	
5	QPSK	25	0	23.48	23.32	23.26	24.7
5	16QAM	1	0	23.67	23.61	23.44	
5	16QAM	1	12	23.81	23.56	23.45	
5	16QAM	1	24	23.72	23.69	23.43	23.7
5	16QAM	12	0	22.47	22.45	22.20	
5	16QAM	12	7	22.56	22.41	22.33	
5	16QAM	12	13	22.62	22.48	22.25	23.7
5	16QAM	25	0	22.56	22.44	22.26	
5	64QAM	1	0	22.63	22.44	22.37	
5	64QAM	1	12	22.63	22.49	22.32	23.7
5	64QAM	1	24	22.76	22.55	22.37	
5	64QAM	12	0	21.41	21.34	21.30	
5	64QAM	12	7	21.83	21.52	21.24	22.7
5	64QAM	12	13	21.62	21.42	21.34	
5	64QAM	25	0	21.52	21.39	21.29	



Band 12									
Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	23.76	23.70	23.73	25.1		
10	QPSK	1	25	23.71	23.76	23.75			
10	QPSK	1	49	23.81	23.85	23.79			
10	QPSK	25	0	23.45	23.47	23.47	24.1		
10	QPSK	25	12	23.54	23.47	23.46			
10	QPSK	25	25	23.52	23.54	23.54			
10	QPSK	50	0	23.53	23.47	23.46	24.1		
10	16QAM	1	0	23.74	23.66	23.67			
10	16QAM	1	25	23.70	23.73	23.71			
10	16QAM	1	49	23.79	23.79	23.72	23.1		
10	16QAM	25	0	22.43	22.48	22.46			
10	16QAM	25	12	22.51	22.49	22.46			
10	16QAM	25	25	22.47	22.52	22.56	23.1		
10	16QAM	50	0	22.53	22.45	22.45			
10	64QAM	1	0	22.55	22.51	22.54			
10	64QAM	1	25	22.63	22.66	22.67	23.1		
10	64QAM	1	49	22.69	22.73	22.65			
10	64QAM	25	0	21.46	21.48	21.49			
10	64QAM	25	12	21.55	21.51	21.49	22.1		
10	64QAM	25	25	21.53	21.57	21.56			
10	64QAM	50	0	21.53	21.51	21.52			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	23.78	23.76	23.74	25.1		
5	QPSK	1	12	23.77	23.82	23.80			
5	QPSK	1	24	23.78	23.83	23.82			
5	QPSK	12	0	23.43	23.46	23.51	24.1		
5	QPSK	12	7	23.48	23.46	23.50			
5	QPSK	12	13	23.47	23.48	23.47			
5	QPSK	25	0	23.46	23.44	23.46	24.1		
5	16QAM	1	0	23.75	23.70	23.65			
5	16QAM	1	12	23.73	23.73	23.75			
5	16QAM	1	24	23.70	23.72	23.72	23.1		
5	16QAM	12	0	22.50	22.52	22.51			
5	16QAM	12	7	22.49	22.47	22.52			
5	16QAM	12	13	22.48	22.52	22.49	23.1		
5	16QAM	25	0	22.52	22.47	22.46			
5	64QAM	1	0	22.60	22.59	22.60			
5	64QAM	1	12	22.61	22.64	22.66	23.1		
5	64QAM	1	24	22.65	22.70	22.66			
5	64QAM	12	0	21.54	21.54	21.54			
5	64QAM	12	7	21.55	21.54	21.54	22.1		
5	64QAM	12	13	21.53	21.57	21.52			
5	64QAM	25	0	21.51	21.50	21.48			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	23.62	23.77	23.79	25.1		
3	QPSK	1	8	23.60	23.66	23.62			
3	QPSK	1	14	23.73	23.78	23.76			
3	QPSK	8	0	23.51	23.44	23.47	24.1		
3	QPSK	8	4	23.48	23.50	23.49			
3	QPSK	8	7	23.42	23.49	23.47			
3	QPSK	15	0	23.49	23.42	23.45	24.1		
3	16QAM	1	0	23.77	23.70	23.75			
3	16QAM	1	8	23.75	23.62	23.79			
3	16QAM	1	14	23.66	23.73	23.68	23.1		
3	16QAM	8	0	22.55	22.53	22.51			
3	16QAM	8	4	22.55	22.61	22.57			
3	16QAM	8	7	22.53	22.55	22.53	23.1		
3	16QAM	15	0	22.54	22.49	22.46			
3	64QAM	1	0	22.66	22.66	22.68			
3	64QAM	1	8	22.71	22.70	22.69	23.1		
3	64QAM	1	14	22.64	22.66	22.61			
3	64QAM	8	0	21.59	21.52	21.54			
3	64QAM	8	4	21.54	21.62	21.56	22.1		
3	64QAM	8	7	21.50	21.55	21.53			
3	64QAM	15	0	21.52	21.45	21.47			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7 <th>707.5</th> <th>715.3</th> <th colspan="3"></th>	707.5	715.3			
1.4	QPSK	1	0	23.73	23.69	23.71	25.1		
1.4	QPSK	1	3	23.75	23.76	23.74			
1.4	QPSK	1	5	23.69	23.73	23.68			
1.4	QPSK	3	0	23.75	23.70	23.73	24.1		
1.4	QPSK	3	1	23.78	23.75	23.77			
1.4	QPSK	3	3	23.69	23.73	23.70			
1.4	QPSK	6	0	23.40	23.43	23.40	24.1		
1.4	16QAM	1	0	23.65	23.58	23.64			
1.4	16QAM	1	3	23.69	23.71	23.71			
1.4	16QAM	1	5	23.61	23.64	23.60	24.1		
1.4	16QAM	3	0	23.43	23.41	23.41			
1.4	16QAM	3	1	23.50	23.44	23.47			
1.4	16QAM	3	3	23.40	23.41	23.39	23.1		
1.4	16QAM	6	0	22.46	22.49	22.46			
1.4	64QAM	1	0	22.57	22.53	22.57			
1.4	64QAM	1	3	22.61	22.65	22.62	23.1		
1.4	64QAM	1	5	22.53	22.56	22.50			
1.4	64QAM	3	0	22.54	22.50	22.55			
1.4	64QAM	3	1	22.58	22.55	22.58	22.1		
1.4	64QAM	3	3	22.52	22.55	22.51			
1.4	64QAM	6	0	21.44	21.44	21.44			



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.60			25.2
10	QPSK	1	25	23.47			
10	QPSK	1	49	23.51			
10	QPSK	25	0	22.56			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.56			
10	QPSK	50	0	22.58			24.2
10	16QAM	1	0	22.75			
10	16QAM	1	25	22.82			
10	16QAM	1	49	22.76			23.2
10	16QAM	25	0	21.59			
10	16QAM	25	12	21.62			
10	16QAM	25	25	21.61			23.2
10	16QAM	50	0	21.57			
10	64QAM	1	0	23.07			
10	64QAM	1	25	23.04			23.2
10	64QAM	1	49	23.01			
10	64QAM	25	0	22.07			
10	64QAM	25	12	22.06			22.2
10	64QAM	25	25	22.02			
10	64QAM	50	0	22.04			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.50	23.45	23.49	25.2
5	QPSK	1	12	23.45	23.54	23.52	
5	QPSK	1	24	23.50	23.51	23.52	
5	QPSK	12	0	22.63	22.56	22.61	24.2
5	QPSK	12	7	22.67	22.64	22.57	
5	QPSK	12	13	22.67	22.62	22.52	
5	QPSK	25	0	22.64	22.57	22.55	24.2
5	16QAM	1	0	22.71	22.71	22.78	
5	16QAM	1	12	22.78	22.85	22.79	
5	16QAM	1	24	22.62	22.85	22.72	23.2
5	16QAM	12	0	21.70	21.62	21.68	
5	16QAM	12	7	21.68	21.57	21.60	
5	16QAM	12	13	21.69	21.60	21.70	23.2
5	16QAM	25	0	21.63	21.64	21.54	
5	64QAM	1	0	22.14	22.25	22.17	
5	64QAM	1	12	22.26	22.30	22.21	23.2
5	64QAM	1	24	22.26	22.23	22.15	
5	64QAM	12	0	21.19	21.11	21.20	
5	64QAM	12	7	21.24	21.14	21.08	22.2
5	64QAM	12	13	21.15	21.17	21.08	
5	64QAM	25	0	21.21	21.11	21.10	

Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	23.99			24.9
10	QPSK	1	25	23.82			
10	QPSK	1	49	23.78			
10	QPSK	25	0	23.69			23.9
10	QPSK	25	12	23.69			
10	QPSK	25	25	23.75			
10	QPSK	50	0	23.68			23.9
10	16QAM	1	0	23.82			
10	16QAM	1	25	23.85			
10	16QAM	1	49	23.85			22.9
10	16QAM	25	0	22.70			
10	16QAM	25	12	22.70			
10	16QAM	25	25	22.72			22.9
10	16QAM	50	0	22.71			
10	64QAM	1	0	22.84			
10	64QAM	1	25	22.80			22.9
10	64QAM	1	49	22.88			
10	64QAM	25	0	21.73			
10	64QAM	25	12	21.72			21.9
10	64QAM	25	25	21.76			
10	64QAM	50	0	21.72			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.78	23.70	23.70	24.9
5	QPSK	1	12	23.81	23.79	23.83	
5	QPSK	1	24	23.77	23.74	23.70	
5	QPSK	12	0	23.67	23.62	23.56	23.9
5	QPSK	12	7	23.68	23.65	23.63	
5	QPSK	12	13	23.63	23.65	23.58	
5	QPSK	25	0	23.63	23.57	23.54	23.9
5	16QAM	1	0	23.90	23.83	23.80	
5	16QAM	1	12	23.90	23.90	23.89	
5	16QAM	1	24	23.86	23.86	23.82	22.9
5	16QAM	12	0	22.70	22.63	22.59	
5	16QAM	12	7	22.71	22.65	22.68	
5	16QAM	12	13	22.68	22.64	22.63	22.9
5	16QAM	25	0	22.70	22.59	22.57	
5	64QAM	1	0	22.80	22.76	22.77	
5	64QAM	1	12	22.86	22.87	22.85	22.9
5	64QAM	1	24	22.88	22.83	22.78	
5	64QAM	12	0	21.75	21.68	21.65	
5	64QAM	12	7	21.76	21.69	21.71	21.9
5	64QAM	12	13	21.71	21.69	21.67	
5	64QAM	25	0	21.67	21.61	21.58	



Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.74	23.72	23.73	25.1
10	QPSK	1	25	23.78	23.79	23.78	
10	QPSK	1	49	23.91	23.92	23.82	
10	QPSK	25	0	23.42	23.44	23.42	24.1
10	QPSK	25	12	23.57	23.59	23.59	
10	QPSK	25	25	23.59	23.60	23.59	
10	QPSK	50	0	23.57	23.47	23.47	24.1
10	16QAM	1	0	23.71	23.69	23.71	
10	16QAM	1	25	23.79	23.81	23.80	
10	16QAM	1	49	23.88	23.88	23.82	23.1
10	16QAM	25	0	22.43	22.45	22.46	
10	16QAM	25	12	22.58	22.51	22.60	
10	16QAM	25	25	22.63	22.54	22.56	23.1
10	16QAM	50	0	22.54	22.48	22.44	
10	64QAM	1	0	22.55	22.56	22.57	23.1
10	64QAM	1	25	22.71	22.71	22.71	
10	64QAM	1	49	22.76	22.79	22.73	
10	64QAM	25	0	21.48	21.46	21.46	22.1
10	64QAM	25	12	21.64	21.56	21.63	
10	64QAM	25	25	21.61	21.64	21.63	
10	64QAM	50	0	21.60	21.54	21.54	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.75	23.74	23.77	25.1
5	QPSK	1	12	23.85	23.86	23.87	
5	QPSK	1	24	23.89	23.89	23.90	
5	QPSK	12	0	23.46	23.46	23.48	24.1
5	QPSK	12	7	23.53	23.59	23.53	
5	QPSK	12	13	23.52	23.54	23.50	
5	QPSK	25	0	23.51	23.51	23.53	24.1
5	16QAM	1	0	23.71	23.68	23.68	
5	16QAM	1	12	23.74	23.75	23.77	
5	16QAM	1	24	23.80	23.81	23.82	23.1
5	16QAM	12	0	22.50	22.51	22.52	
5	16QAM	12	7	22.55	22.57	22.56	
5	16QAM	12	13	22.54	22.59	22.58	23.1
5	16QAM	25	0	22.54	22.49	22.51	
5	64QAM	1	0	22.63	22.61	22.65	
5	64QAM	1	12	22.66	22.69	22.69	23.1
5	64QAM	1	24	22.73	22.76	22.74	
5	64QAM	12	0	21.52	21.56	21.55	
5	64QAM	12	7	21.63	21.65	21.57	22.1
5	64QAM	12	13	21.59	21.65	21.63	
5	64QAM	25	0	21.55	21.53	21.57	



Band 25										
Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				26140	26340	26590				
Frequency (MHz)				1860	1880	1905				
20	QPSK	1	0	24.17	24.11	23.99	25.7			
20	QPSK	1	49	24.17	24.10	24.01				
20	QPSK	1	99	24.09	24.05	23.83				
20	QPSK	50	0	23.26	23.27	23.08	24.7			
20	QPSK	50	24	23.33	23.30	23.12				
20	QPSK	50	50	23.27	23.29	23.14				
20	QPSK	100	0	23.28	23.29	23.17	24.7			
20	16QAM	1	0	23.53	23.42	23.38				
20	16QAM	1	49	23.52	23.45	23.38				
20	16QAM	1	99	23.42	23.47	23.21	23.7			
20	16QAM	50	0	22.25	22.27	22.14				
20	16QAM	50	24	22.33	22.33	22.11				
20	16QAM	50	50	22.28	22.24	22.22	22.7			
20	16QAM	100	0	22.26	22.27	22.13				
20	64QAM	1	0	22.41	22.30	22.21				
20	64QAM	1	49	22.31	22.32	21.92	22.7			
20	64QAM	1	99	22.39	22.38	21.70				
20	64QAM	50	0	21.29	21.27	20.87				
20	64QAM	50	24	21.33	21.30	20.90	22.7			
20	64QAM	50	50	21.35	21.35	20.70				
20	64QAM	100	0	21.29	21.35	20.71				
Channel				26115	26340	26615	Tune-up limit (dBm)			
Frequency (MHz)				1857.5	1880	1907.5				
15	QPSK	1	0	24.24	24.13	24.06	25.7			
15	QPSK	1	37	24.11	24.17	24.07				
15	QPSK	1	74	24.19	24.20	23.81				
15	QPSK	36	0	23.36	23.25	23.15	24.7			
15	QPSK	36	20	23.36	23.30	23.14				
15	QPSK	36	39	23.27	23.27	23.17				
15	QPSK	75	0	23.32	23.26	23.15	24.7			
15	16QAM	1	0	23.46	23.50	23.38				
15	16QAM	1	37	23.44	23.50	23.30				
15	16QAM	1	74	23.42	23.50	23.19	23.7			
15	16QAM	36	0	22.34	22.29	22.14				
15	16QAM	36	20	22.32	22.29	22.20				
15	16QAM	36	39	22.32	22.27	22.14	23.7			
15	16QAM	75	0	22.27	22.28	22.24				
15	64QAM	1	0	22.42	22.33	21.77				
15	64QAM	1	37	22.35	22.38	21.86	23.7			
15	64QAM	1	74	22.33	22.45	21.71				
15	64QAM	36	0	21.39	21.25	20.86				
15	64QAM	36	20	21.36	21.30	20.96	22.7			
15	64QAM	36	39	21.33	21.28	20.71				
15	64QAM	75	0	21.33	21.34	20.70				
Channel				26090	26340	26640	Tune-up limit (dBm)			
Frequency (MHz)				1855	1880	1910				
10	QPSK	1	0	24.16	24.13	24.06	25.7			
10	QPSK	1	25	24.18	24.14	24.06				
10	QPSK	1	49	24.22	24.21	23.78				
10	QPSK	25	0	23.35	23.33	23.04	24.7			
10	QPSK	25	12	23.32	23.27	23.25				
10	QPSK	25	25	23.28	23.32	23.17				
10	QPSK	50	0	23.29	23.26	23.18	24.7			
10	16QAM	1	0	23.60	23.57	23.34				
10	16QAM	1	25	23.54	23.53	23.43				
10	16QAM	1	49	23.58	23.54	23.19	23.7			
10	16QAM	25	0	22.31	22.28	22.05				
10	16QAM	25	12	22.33	22.29	22.16				
10	16QAM	25	25	22.35	22.27	22.12	23.7			
10	16QAM	50	0	22.35	22.36	22.09				
10	64QAM	1	0	22.54	22.39	22.01				
10	64QAM	1	25	22.52	22.42	21.87	23.7			
10	64QAM	1	49	22.41	22.48	21.75				
10	64QAM	25	0	21.31	21.33	20.78				
10	64QAM	25	12	21.42	21.36	20.85	22.7			
10	64QAM	25	25	21.40	21.37	20.64				
10	64QAM	50	0	21.33	21.40	20.52				
Channel				26065	26340	26665	Tune-up limit (dBm)			
Frequency (MHz)				1852.5	1880	1912.5				
5	QPSK	1	0	24.26	24.17	24.08	25.7			
5	QPSK	1	12	24.23	24.21	24.04				
5	QPSK	1	24	24.29	24.19	23.74				
5	QPSK	12	0	23.23	23.22	23.18	24.7			
5	QPSK	12	7	23.32	23.29	23.20				
5	QPSK	12	13	23.34	23.34	23.00				
5	QPSK	25	0	23.30	23.30	23.10	24.7			
5	16QAM	1	0	23.57	23.48	23.36				
5	16QAM	1	12	23.60	23.55	23.41				
5	16QAM	1	24	23.60	23.55	23.14	23.7			
5	16QAM	12	0	22.27	22.26	22.14				
5	16QAM	12	7	22.37	22.30	22.21				
5	16QAM	12	13	22.42	22.39	22.17	23.7			
5	16QAM	25	0	22.36	22.28	22.13				
5	64QAM	1	0	22.42	22.44	21.76				
5	64QAM	1	12	22.41	22.39	21.78	23.7			
5	64QAM	1	24	22.53	22.43	21.73				
5	64QAM	12	0	21.37	21.38	20.72				
5	64QAM	12	7	21.42	21.35	20.55	22.7			
5	64QAM	12	13	21.42	21.34	20.36				
5	64QAM	25	0	21.29	21.32	20.45				
Channel				26055	26340	26675	Tune-up limit (dBm)			
Frequency (MHz)				1851.5	1880	1913.5				
3	QPSK	1	0	24.15	24.03	24.06	25.7			
3	QPSK	1	8	24.29	24.32	23.94				
3	QPSK	1	14	24.31	24.28	23.76				
3	QPSK	8	0	23.29	23.22	23.13	24.7			
3	QPSK	8	4	23.31	23.33	23.06				
3	QPSK	8	7	23.31	23.37	22.84				
3	QPSK	15	0	23.28	23.32	22.90	24.7			
3	16QAM	1	0	23.48	23.44	23.26				
3	16QAM	1	8	23.65	23.61	23.22				
3	16QAM	1	14	23.57	23.60	22.97	23.7			
3	16QAM	8	0	22.29	22.31	22.20				
3	16QAM	8	4	22.41	22.31	22.13				
3	16QAM	8	7	22.34	22.42	22.10	23.7			
3	16QAM	15	0	22.35	22.31	22.09				
3	64QAM	1	0	22.36	22.28	21.77				
3	64QAM	1	8	22.49	22.52	21.79	23.7			
3	64QAM	1	14	22.57	22.51	21.75				
3	64QAM	8	0	21.29	21.29	21.66				
3	64QAM	8	4	21.41	21.39	20.42	22.7			
3	64QAM	8	7	21.47	21.37	20.21				
3	64QAM	15	0	21.39	21.36	20.34				
Channel				26047	26340	26683	Tune-up limit (dBm)			
Frequency (MHz)				1850.7	1880	1914.3				
1.4	QPSK	1	0	24.13	24.06	23.93	25.7			
1.4	QPSK	1	3	24.16	24.35	23.78				
1.4	QPSK	1	5	24.34	24.22	23.73				
1.4	QPSK	3	0	24.22	24.20	23.75	24.7			
1.4	QPSK	3	1	24.29	24.30	23.76				
1.4	QPSK	3	3	24.24	24.17	23.74				
1.4	QPSK	6	0	23.28	23.21	22.91	24.7			
1.4	QPSK	3	3	23.34	23.30	23.10				
1.4	16QAM	1	0	23.55	23.49	23.18				
1.4	16QAM	1	5	23.62	23.46	22.98	24.7			
1.4	16QAM	3	0	23.31	23.28	22.98				
1.4	16QAM	3	3	23.36	23.25	22.91				
1.4	16QAM	3	6	22.28	22.41	22.00	23.7			
1.4	64QAM	1	0	22.34	22.44	21.74				
1.4	64QAM	1	3	22.56	22.33	21.72				
1.4	64QAM	3	0	22.40	22.41	21.75	23.7			
1.4	64QAM	3	1	22.50	22.44	21.77				
1.4	64QAM	3	3	22.58	22.43	21.70				
1.4	64QAM	3	6	21.29	21.29	21.66	22.7			
1.4	64QAM	3	9	21.39	21.36	20.34				
1.4	64QAM	3	12	21.47	21.37	20.21				



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.76	22.65	22.66	23.8
15	QPSK	1	37	22.68	22.62	22.61	
15	QPSK	1	74	22.63	22.63	22.60	
15	QPSK	36	0	22.80	22.75	22.75	23.8
15	QPSK	36	20	22.86	22.80	22.74	
15	QPSK	36	39	22.77	22.77	22.73	
15	QPSK	75	0	22.84	22.82	22.73	23.8
15	16QAM	1	0	23.29	22.97	23.03	
15	16QAM	1	37	22.96	22.97	22.98	
15	16QAM	1	74	22.94	22.95	22.83	23.3
15	16QAM	36	0	22.73	22.70	22.70	
15	16QAM	36	20	22.74	22.70	22.62	
15	16QAM	36	39	22.68	22.68	22.65	23.3
15	16QAM	75	0	22.75	22.72	22.68	
15	64QAM	1	0	22.82	22.71	22.71	23.3
15	64QAM	1	37	22.78	22.78	22.78	
15	64QAM	1	74	22.74	22.72	22.43	
15	64QAM	36	0	21.51	21.72	21.72	22.3
15	64QAM	36	20	21.78	21.79	21.68	
15	64QAM	36	39	21.74	21.72	21.72	
15	64QAM	75	0	21.75	21.72	21.67	Tune-up limit (dBm)
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.81	22.76	22.80	23.8
10	QPSK	1	25	22.68	22.70	22.70	
10	QPSK	1	49	22.65	22.66	22.62	
10	QPSK	25	0	22.89	22.80	22.81	23.8
10	QPSK	25	12	22.84	22.78	22.81	
10	QPSK	25	25	22.77	22.78	22.77	
10	QPSK	50	0	22.82	22.84	22.74	23.8
10	16QAM	1	0	23.17	23.08	23.11	
10	16QAM	1	25	23.10	23.06	23.07	
10	16QAM	1	49	23.05	23.01	22.96	23.3
10	16QAM	25	0	22.78	22.66	22.66	
10	16QAM	25	12	22.78	22.65	22.65	
10	16QAM	25	25	22.66	22.67	22.62	23.3
10	16QAM	50	0	22.75	22.71	22.66	
10	64QAM	1	0	22.97	22.94	22.90	23.3
10	64QAM	1	25	22.74	22.92	22.92	
10	64QAM	1	49	22.86	22.84	22.83	
10	64QAM	25	0	21.50	21.69	21.70	22.3
10	64QAM	25	12	21.50	21.69	21.74	
10	64QAM	25	25	21.70	21.72	21.48	
10	64QAM	50	0	21.66	21.75	21.69	Tune-up limit (dBm)
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.85	22.71	22.75	23.8
5	QPSK	1	12	22.78	22.78	22.76	
5	QPSK	1	24	22.70	22.74	22.62	
5	QPSK	12	0	22.92	22.80	22.84	23.8
5	QPSK	12	7	22.89	22.86	22.79	
5	QPSK	12	13	22.81	22.78	22.73	
5	QPSK	25	0	22.88	22.84	22.79	23.8
5	16QAM	1	0	23.21	23.01	23.05	
5	16QAM	1	12	23.14	23.04	23.00	
5	16QAM	1	24	23.06	23.07	22.93	23.3
5	16QAM	12	0	22.84	22.68	22.70	
5	16QAM	12	7	22.84	22.71	22.73	
5	16QAM	12	13	22.75	22.66	22.62	23.3
5	16QAM	25	0	22.80	22.73	22.68	
5	64QAM	1	0	22.77	22.84	22.75	
5	64QAM	1	12	22.59	22.85	22.11	23.3
5	64QAM	1	24	22.45	22.87	22.44	
5	64QAM	12	0	21.70	21.77	21.30	
5	64QAM	12	7	21.59	21.80	21.12	22.3
5	64QAM	12	13	21.43	21.72	21.28	
5	64QAM	25	0	21.49	21.75	21.29	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.87	22.72	22.72	
3	QPSK	1	8	22.84	22.79	22.71	23.8
3	QPSK	1	14	22.72	22.76	22.64	
3	QPSK	8	0	22.92	22.83	22.76	23.8
3	QPSK	8	4	22.89	22.86	22.78	
3	QPSK	8	7	22.86	22.80	22.71	
3	QPSK	15	0	22.89	22.85	22.75	23.8
3	16QAM	1	0	23.22	23.00	23.03	
3	16QAM	1	8	23.20	23.09	23.05	
3	16QAM	1	14	23.07	23.05	22.96	23.3
3	16QAM	8	0	22.88	22.76	22.73	
3	16QAM	8	4	22.88	22.79	22.70	
3	16QAM	8	7	22.84	22.75	22.64	23.3
3	16QAM	15	0	22.83	22.72	22.70	
3	64QAM	1	0	22.80	22.83	22.28	
3	64QAM	1	8	22.83	22.92	22.34	23.3
3	64QAM	1	14	22.59	22.89	22.46	
3	64QAM	8	0	21.77	21.75	21.10	
3	64QAM	8	4	21.76	21.83	21.27	22.3
3	64QAM	8	7	21.64	21.75	21.48	
3	64QAM	15	0	21.68	21.78	21.33	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.74	22.62	22.61	
1.4	QPSK	1	3	22.62	22.71	22.62	23.8
1.4	QPSK	1	5	22.74	22.65	22.62	
1.4	QPSK	3	0	22.80	22.66	22.61	23.8
1.4	QPSK	3	1	22.80	22.70	22.62	
1.4	QPSK	3	3	22.75	22.69	22.68	
1.4	QPSK	6	0	22.84	22.76	22.67	23.8
1.4	16QAM	1	0	23.12	22.90	22.91	
1.4	16QAM	1	3	23.17	23.04	22.95	
1.4	16QAM	1	5	23.02	22.93	22.80	23.8
1.4	16QAM	3	0	22.91	22.72	22.68	
1.4	16QAM	3	1	22.92	22.76	22.73	
1.4	16QAM	3	3	22.82	22.73	22.63	23.3
1.4	16QAM	6	0	22.82	22.70	22.62	
1.4	64QAM	1	0	22.93	22.77	22.51	
1.4	64QAM	1	3	22.86	22.85	22.68	23.3
1.4	64QAM	1	5	22.80	22.73	22.64	
1.4	64QAM	3	0	22.85	22.73	22.52	
1.4	64QAM	3	1	22.92	22.77	22.67	22.3
1.4	64QAM	3	3	22.79	22.74	22.66	
1.4	64QAM	6	0	21.76	21.66	21.58	



Band 30							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.60			23.7
10	QPSK	1	25	22.58			
10	QPSK	1	49	22.57			
10	QPSK	25	0	21.40			22.7
10	QPSK	25	12	21.84			
10	QPSK	25	25	21.51			
10	QPSK	50	0	21.63			22.7
10	16QAM	1	0	21.91			
10	16QAM	1	25	21.92			
10	16QAM	1	49	21.84			21.7
10	16QAM	25	0	20.46			
10	16QAM	25	12	20.53			
10	16QAM	25	25	20.45			21.7
10	16QAM	50	0	20.55			
10	64QAM	1	0	20.69			
10	64QAM	1	25	20.70			21.7
10	64QAM	1	49	20.62			
10	64QAM	25	0	19.46			
10	64QAM	25	12	19.61			20.7
10	64QAM	25	25	19.67			
10	64QAM	50	0	19.60			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.40	22.33	22.46	23.7
5	QPSK	1	12	22.50	22.59	22.53	
5	QPSK	1	24	22.58	22.42	22.56	
5	QPSK	12	0	21.52	21.63	21.49	22.7
5	QPSK	12	7	21.56	21.57	21.60	
5	QPSK	12	13	21.55	21.61	21.44	
5	QPSK	25	0	21.68	21.45	21.51	22.7
5	16QAM	1	0	21.71	21.78	21.72	
5	16QAM	1	12	21.80	21.73	21.86	
5	16QAM	1	24	22.01	21.70	21.78	21.7
5	16QAM	12	0	20.58	20.56	20.55	
5	16QAM	12	7	20.71	20.64	20.67	
5	16QAM	12	13	20.59	20.54	20.63	21.7
5	16QAM	25	0	20.66	20.60	20.51	
5	64QAM	1	0	20.71	20.69	20.64	
5	64QAM	1	12	20.68	20.73	20.64	21.7
5	64QAM	1	24	20.85	20.83	20.70	
5	64QAM	12	0	19.54	19.66	19.68	
5	64QAM	12	7	19.70	19.57	19.60	20.7
5	64QAM	12	13	19.73	19.65	19.69	
5	64QAM	25	0	19.73	19.66	19.62	



Band 66									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132047	132322	132597			
Frequency (MHz)				1720	1745	1772			
20	QPSK	1	0	24.30	24.23	24.29	25.7		
20	QPSK	1	49	24.09	24.18	24.12			
20	QPSK	1	99	24.24	24.20	24.16			
20	QPSK	50	0	23.14	23.07	23.15			
20	QPSK	50	24	23.18	22.94	23.14	24.7		
20	QPSK	50	50	23.21	23.00	23.03			
20	QPSK	100	0	23.14	23.16	23.11			
20	16QAM	1	0	23.42	23.47	23.37			
20	16QAM	1	49	23.34	23.34	23.20	24.7		
20	16QAM	1	99	23.33	23.34	23.10			
20	16QAM	50	0	22.13	21.98	22.08			
20	16QAM	50	24	22.19	21.96	22.18			
20	16QAM	50	50	22.17	22.04	22.12	23.7		
20	16QAM	100	0	22.18	22.06	22.23			
20	64QAM	1	0	22.36	22.29	22.16			
20	64QAM	1	49	22.09	22.08	22.17			
20	64QAM	1	99	22.31	22.25	22.10	23.7		
20	64QAM	50	0	21.13	21.16	21.03			
20	64QAM	50	24	21.28	21.17	21.23			
20	64QAM	50	50	21.14	21.10	21.14			
20	64QAM	100	0	21.14	21.10	21.14	22.7		
Channel				132047	132322	132597			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.18	23.94	24.08	25.7		
15	QPSK	1	37	23.89	23.88	23.85			
15	QPSK	1	74	24.10	24.10	23.90			
15	QPSK	36	0	23.05	23.14	23.03			
15	QPSK	36	20	23.09	23.15	23.05	24.7		
15	QPSK	36	39	23.19	23.18	23.01			
15	QPSK	75	0	23.06	23.10	23.01			
15	16QAM	1	0	23.38	23.35	23.32			
15	16QAM	1	37	23.28	23.30	23.22	24.7		
15	16QAM	1	74	23.40	23.34	23.17			
15	16QAM	36	0	22.03	22.04	21.98			
15	16QAM	36	20	22.25	22.03	22.20			
15	16QAM	36	39	22.18	22.01	22.20	23.7		
15	16QAM	75	0	22.08	22.23	21.94			
15	64QAM	1	0	22.32	22.15	22.18			
15	64QAM	1	37	22.13	22.17	22.07			
15	64QAM	1	74	22.25	22.20	22.21	23.7		
15	64QAM	36	0	21.01	21.05	21.11			
15	64QAM	36	20	21.06	21.19	21.05			
15	64QAM	36	39	21.16	21.05	21.09			
15	64QAM	75	0	21.19	21.10	21.06	22.7		
Channel				132022	132322	132622			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	24.11	24.02	24.01	25.7		
10	QPSK	1	25	24.01	23.94	24.10			
10	QPSK	1	49	24.07	23.97	24.06			
10	QPSK	25	0	23.22	23.02	23.12			
10	QPSK	25	12	23.19	23.15	23.12	24.7		
10	QPSK	25	25	23.24	23.22	23.21			
10	QPSK	50	0	23.25	23.23	23.16			
10	16QAM	1	0	23.42	23.36	23.39			
10	16QAM	1	25	23.46	23.36	23.37	24.7		
10	16QAM	1	49	23.38	23.45	23.49			
10	16QAM	25	0	22.24	22.00	22.16			
10	16QAM	25	12	22.31	22.25	22.08			
10	16QAM	25	25	22.14	22.10	22.08	23.7		
10	16QAM	50	0	22.23	22.20	22.09			
10	64QAM	1	0	22.28	22.20	22.25			
10	64QAM	1	25	22.32	22.28	22.40			
10	64QAM	1	49	22.40	22.41	22.24	23.7		
10	64QAM	25	0	21.15	21.09	21.10			
10	64QAM	25	12	21.29	21.12	21.10			
10	64QAM	25	25	21.24	21.22	21.21			
10	64QAM	50	0	21.19	21.25	21.18	22.7		
Channel				131997	132322	132647			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.08	24.07	24.01	25.7		
5	QPSK	1	12	24.22	24.06	24.12			
5	QPSK	1	24	24.15	24.17	24.01			
5	QPSK	12	0	23.15	23.10	23.13			
5	QPSK	12	7	23.11	23.27	23.24	24.7		
5	QPSK	12	13	23.29	23.19	23.27			
5	QPSK	25	0	23.13	23.20	23.14			
5	16QAM	1	0	23.51	23.45	23.47			
5	16QAM	1	12	23.59	23.49	23.41	24.7		
5	16QAM	1	24	23.47	23.46	23.30			
5	16QAM	12	0	22.30	22.11	22.26			
5	16QAM	12	7	22.29	22.28	22.26			
5	16QAM	12	13	22.18	22.28	22.25	23.7		
5	16QAM	25	0	22.21	22.09	22.27			
5	64QAM	1	0	22.40	22.30	22.30			
5	64QAM	1	12	22.47	22.38	22.33			
5	64QAM	1	24	22.42	22.39	22.32	23.7		
5	64QAM	12	0	21.39	21.26	21.33			
5	64QAM	12	7	21.19	21.19	21.33			
5	64QAM	12	13	21.24	21.27	21.30			
5	64QAM	25	0	21.16	21.25	21.08	22.7		
Channel				131987	132322	132657			
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	24.06	24.06	24.00	25.7		
3	QPSK	1	8	24.25	24.06	24.07			
3	QPSK	1	14	24.05	24.10	24.03			
3	QPSK	8	0	23.18	23.09	23.20			
3	QPSK	8	4	23.21	23.21	23.13	24.7		
3	QPSK	8	7	23.18	23.10	23.05			
3	QPSK	15	0	23.12	23.22	23.17			
3	16QAM	1	0	23.51	23.27	23.27			
3	16QAM	1	8	23.50	23.58	23.48	24.7		
3	16QAM	1	14	23.41	23.39	23.44			
3	16QAM	8	0	22.20	22.29	22.27			
3	16QAM	8	4	22.39	22.27	22.24			
3	16QAM	8	7	22.24	22.12	22.11	23.7		
3	16QAM	15	0	22.25	22.18	22.27			
3	64QAM	1	0	22.32	22.37	22.38			
3	64QAM	1	8	22.51	22.33	22.42			
3	64QAM	1	14	22.47	22.29	22.31	23.7		
3	64QAM	8	0	21.36	21.20	21.26			
3	64QAM	8	4	21.25	21.16	21.20			
3	64QAM	8	7	21.20	21.32	21.16			
3	64QAM	15	0	21.18	21.17	21.27	22.7		
Channel				131979	132322	132665			
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.01	24.08	23.94	25.7		
1.4	QPSK	1	3	24.15	23.99	24.13			
1.4	QPSK	1	5	23.95	23.98	23.92			
1.4	QPSK	3	0	24.16	23.99	24.13			
1.4	QPSK	3	1	24.08	24.06	24.13	24.7		
1.4	QPSK	3	3	23.98	24.03	24.03			
1.4	QPSK	6	0	23.18	23.00	23.09			
1.4	QPSK	3	3	23.19	23.22	23.12	24.7		
1.4	16QAM	1	0	23.42	23.46	23.43			
1.4	16QAM	1	5	23.33	23.36	23.32			
1.4	16QAM	3	0	23.19	23.17	23.10			
1.4	16QAM	3	1	23.20	23.08	23.01	23.7		
1.4	16QAM	3	3	23.21	23.15	23.08			
1.4	16QAM	6	0	22.24	22.15	22.08			
1.4	16QAM	6	1	22.30	22.20	22.30			
1.4	16QAM	1	3	22.41	22.31	22.32	23.7		
1.4	64QAM	1	5	22.19	22.20	22.32			
1.4	64QAM	3	0	22.19	22.20	22.22			
1.4	64QAM	3	1	22.40	22.38	22.37			
1.4	64QAM	3	3	22.36	22.12	22.21	23.7		
1.4	64QAM	6	0	21.21	21.10	21.12			
1.4	64QAM	6	1	21.26	21.16	21.18			
1.4	64QAM	6	3	21.27	21.27	21.27			



Band 71							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.35	24.17	24.20	25.7
20	QPSK	1	49	24.15	24.16	24.15	
20	QPSK	1	99	24.12	24.09	24.08	
20	QPSK	50	0	23.28	23.24	23.26	24.7
20	QPSK	50	24	23.33	23.28	23.17	
20	QPSK	50	50	23.32	23.27	23.27	
20	QPSK	100	0	23.33	23.32	23.28	24.7
20	16QAM	1	0	23.68	23.52	23.53	
20	16QAM	1	49	23.55	23.54	23.40	
20	16QAM	1	99	23.49	23.49	23.45	23.7
20	16QAM	50	0	22.34	22.30	22.30	
20	16QAM	50	24	22.34	22.27	22.24	
20	16QAM	50	50	22.30	22.25	22.28	22.7
20	16QAM	100	0	22.32	22.30	22.26	
20	64QAM	1	0	22.18	22.70	23.01	
20	64QAM	1	49	22.76	22.59	22.38	22.7
20	64QAM	1	99	23.01	22.51	22.88	
20	64QAM	50	0	20.92	21.86	21.50	
20	64QAM	50	24	21.49	21.70	21.76	22.7
20	64QAM	50	50	21.96	21.50	21.85	
20	64QAM	100	0	21.50	21.89	21.87	
Channel				133197	133287	133387	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.33	24.17	24.13	25.7
15	QPSK	1	37	24.01	24.14	24.11	
15	QPSK	1	74	24.16	24.11	24.11	
15	QPSK	36	0	23.24	23.26	23.27	24.7
15	QPSK	36	20	23.29	23.28	23.37	
15	QPSK	36	39	23.31	23.33	23.26	
15	QPSK	75	0	23.34	23.30	23.20	24.7
15	16QAM	1	0	23.56	23.53	23.49	
15	16QAM	1	37	23.28	23.50	23.41	
15	16QAM	1	74	23.38	23.43	23.38	23.7
15	16QAM	36	0	22.15	22.31	22.26	
15	16QAM	36	20	22.31	22.25	22.34	
15	16QAM	36	39	22.38	22.33	22.28	23.7
15	16QAM	75	0	22.37	22.19	22.18	
15	64QAM	1	0	22.13	22.80	22.90	
15	64QAM	1	37	21.73	23.04	23.04	23.7
15	64QAM	1	74	22.53	22.63	22.97	
15	64QAM	36	0	20.81	21.92	21.51	
15	64QAM	36	20	20.88	21.74	21.92	22.7
15	64QAM	36	39	21.49	21.44	21.88	
15	64QAM	75	0	21.38	21.79	21.77	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.30	24.14	24.17	25.7
10	QPSK	1	25	24.11	24.10	24.12	
10	QPSK	1	49	24.13	24.14	24.01	
10	QPSK	25	0	23.36	23.28	23.22	24.7
10	QPSK	25	12	23.13	23.25	23.22	
10	QPSK	25	25	23.19	23.31	23.23	
10	QPSK	50	0	23.29	23.18	23.16	24.7
10	16QAM	1	0	23.62	23.47	23.53	
10	16QAM	1	25	23.47	23.51	23.45	
10	16QAM	1	49	23.46	23.44	23.39	23.7
10	16QAM	25	0	22.05	22.17	22.16	
10	16QAM	25	12	22.07	22.24	22.20	
10	16QAM	25	25	22.00	22.24	22.19	23.7
10	16QAM	50	0	22.28	22.17	22.22	
10	64QAM	1	0	21.83	22.96	22.96	
10	64QAM	1	25	21.88	23.08	23.07	22.7
10	64QAM	1	49	22.12	22.23	22.55	
10	64QAM	25	0	20.70	21.87	21.82	
10	64QAM	25	12	20.70	21.74	21.85	22.7
10	64QAM	25	25	20.68	21.37	21.72	
10	64QAM	50	0	20.73	21.60	21.80	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.03	24.23	24.23	25.7
5	QPSK	1	12	24.13	24.24	24.12	
5	QPSK	1	24	24.11	24.10	24.10	
5	QPSK	12	0	23.15	23.26	23.19	24.7
5	QPSK	12	7	23.15	23.32	23.26	
5	QPSK	12	13	23.13	23.22	23.18	
5	QPSK	25	0	23.15	23.26	23.20	24.7
5	16QAM	1	0	23.29	23.53	23.52	
5	16QAM	1	12	23.38	23.54	23.50	
5	16QAM	1	24	23.40	23.49	23.42	23.7
5	16QAM	12	0	22.04	22.30	22.29	
5	16QAM	12	7	22.12	22.30	22.29	
5	16QAM	12	13	22.25	22.25	22.21	23.7
5	16QAM	25	0	22.06	22.21	22.22	
5	64QAM	1	0	21.70	22.98	23.00	
5	64QAM	1	12	21.82	22.93	22.81	22.7
5	64QAM	1	24	22.03	22.71	22.37	
5	64QAM	12	0	20.74	21.93	21.85	
5	64QAM	12	7	20.91	21.89	21.91	22.7
5	64QAM	12	13	20.87	21.70	21.89	
5	64QAM	25	0	20.69	21.73	21.61	



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 18700	Power Middle Ch. / 18900	Power High Ch. / 19100	Tune-up limit (dBm)
Channel							
Frequency (MHz)							
20	QPSK	1	0	22.34	22.34	22.37	23.8
20	QPSK	1	49	22.32	22.38	22.32	
20	QPSK	1	99	22.34	22.39	22.35	
20	QPSK	50	0	22.36	22.44	22.47	
20	QPSK	50	24	22.47	22.49	22.49	23.8
20	QPSK	50	50	22.47	22.50	22.51	
20	QPSK	100	0	22.50	22.47	22.50	
20	16QAM	1	0	22.59	22.69	22.69	
20	16QAM	1	49	22.63	22.76	22.63	23.8
20	16QAM	1	99	22.65	22.68	22.64	
20	16QAM	50	0	22.25	22.33	22.38	
20	16QAM	50	24	22.35	22.37	22.40	
20	16QAM	50	50	22.38	22.40	22.41	23.7
20	16QAM	100	0	22.35	22.35	22.40	
20	64QAM	1	0	22.35	22.46	22.51	
20	64QAM	1	49	22.39	22.52	22.35	
20	64QAM	1	99	22.43	22.47	22.42	23.7
20	64QAM	50	0	21.26	21.36	21.39	
20	64QAM	50	24	21.35	21.39	21.41	
20	64QAM	50	50	21.37	21.39	21.44	
20	64QAM	100	0	21.37	21.38	21.41	22.7
Channel							
Frequency (MHz)							
15	QPSK	1	0	22.23	22.38	22.37	23.8
15	QPSK	1	37	22.22	22.39	22.31	
15	QPSK	1	74	22.30	22.40	22.38	
15	QPSK	36	0	22.27	22.41	22.44	
15	QPSK	36	20	22.41	22.48	22.47	23.8
15	QPSK	36	39	22.40	22.47	22.51	
15	QPSK	75	0	22.38	22.47	22.47	
15	16QAM	1	0	22.47	22.67	22.64	
15	16QAM	1	37	22.52	22.70	22.58	23.8
15	16QAM	1	74	22.60	22.69	22.63	
15	16QAM	36	0	22.15	22.31	22.33	
15	16QAM	36	20	22.28	22.37	22.37	
15	16QAM	36	39	22.29	22.37	22.39	23.7
15	16QAM	75	0	22.27	22.36	22.38	
15	64QAM	1	0	22.28	22.47	22.47	
15	64QAM	1	37	22.31	22.52	22.29	
15	64QAM	1	74	22.40	22.46	22.49	23.7
15	64QAM	36	0	21.19	21.35	21.33	
15	64QAM	36	20	21.32	21.36	21.38	
15	64QAM	36	39	21.37	21.44	21.43	
15	64QAM	75	0	21.28	21.38	21.38	22.7
Channel							
Frequency (MHz)							
10	QPSK	1	0	22.21	22.39	22.33	23.8
10	QPSK	1	25	22.17	22.36	22.28	
10	QPSK	1	49	22.25	22.39	22.35	
10	QPSK	25	0	22.28	22.40	22.40	
10	QPSK	25	12	22.36	22.45	22.46	23.8
10	QPSK	25	25	22.39	22.46	22.51	
10	QPSK	50	0	22.34	22.47	22.47	
10	16QAM	1	0	22.54	22.71	22.71	
10	16QAM	1	25	22.54	22.72	22.68	23.8
10	16QAM	1	49	22.61	22.75	22.75	
10	16QAM	25	0	22.18	22.34	22.34	
10	16QAM	25	12	22.23	22.39	22.41	23.7
10	16QAM	25	25	22.29	22.41	22.38	
10	16QAM	50	0	22.23	22.37	22.39	
10	64QAM	1	0	22.39	22.49	22.40	
10	64QAM	1	25	22.40	22.58	22.49	23.7
10	64QAM	1	49	22.40	22.53	22.52	
10	64QAM	25	0	21.23	21.38	21.38	
10	64QAM	25	12	21.27	21.42	21.41	
10	64QAM	25	25	21.29	21.41	21.44	22.7
10	64QAM	50	0	21.27	21.41	21.42	
Channel							
Frequency (MHz)							
5	QPSK	1	0	22.18	22.31	22.30	23.8
5	QPSK	1	12	22.27	22.43	22.38	
5	QPSK	1	24	22.23	22.47	22.39	
5	QPSK	12	0	22.29	22.43	22.41	
5	QPSK	12	7	22.35	22.48	22.49	23.8
5	QPSK	12	13	22.33	22.52	22.46	
5	QPSK	25	0	22.33	22.43	22.43	
5	16QAM	1	0	22.50	22.68	22.67	
5	16QAM	1	12	22.54	22.73	22.74	23.8
5	16QAM	1	24	22.56	22.74	22.72	
5	16QAM	12	0	22.20	22.38	22.37	
5	16QAM	12	7	22.26	22.40	22.40	
5	16QAM	12	13	22.23	22.50	22.41	23.7
5	16QAM	25	0	22.19	22.39	22.37	
5	64QAM	1	0	22.37	22.56	22.51	
5	64QAM	1	12	22.34	22.57	22.50	
5	64QAM	1	24	22.39	22.61	22.54	23.7
5	64QAM	12	0	21.23	21.41	21.39	
5	64QAM	12	7	21.29	21.48	21.47	
5	64QAM	12	13	21.26	21.51	21.43	
5	64QAM	25	0	21.21	21.38	21.39	22.7
Channel							
Frequency (MHz)							
3	QPSK	1	0	22.15	22.26	22.21	23.8
3	QPSK	1	8	22.24	22.36	22.36	
3	QPSK	1	14	22.18	22.46	22.39	
3	QPSK	8	0	22.28	22.41	22.41	
3	QPSK	8	4	22.28	22.48	22.39	23.8
3	QPSK	8	7	22.30	22.42	22.43	
3	QPSK	15	0	22.28	22.39	22.36	
3	16QAM	1	0	22.48	22.62	22.61	
3	16QAM	1	8	22.54	22.71	22.68	23.8
3	16QAM	1	14	22.52	22.73	22.75	
3	16QAM	8	0	22.11	22.37	22.37	
3	16QAM	8	4	22.19	22.32	22.36	
3	16QAM	8	7	22.17	22.49	22.39	23.7
3	16QAM	15	0	22.15	22.30	22.27	
3	64QAM	1	0	22.28	22.47	22.43	
3	64QAM	1	8	22.29	22.53	22.46	
3	64QAM	1	14	22.36	22.52	22.51	23.7
3	64QAM	8	0	21.21	21.33	21.29	
3	64QAM	8	4	21.24	21.46	21.41	
3	64QAM	8	7	21.18	21.41	21.35	
3	64QAM	15	0	21.18	21.28	21.34	22.7
Channel							
Frequency (MHz)							
1.4	QPSK	1	0	22.08	22.28	22.19	23.8
1.4	QPSK	1	3	22.13	22.30	22.25	
1.4	QPSK	1	5	22.07	22.26	22.24	
1.4	QPSK	3	0	22.10	22.32	22.25	
1.4	QPSK	3	1	22.17	22.36	22.27	23.8
1.4	QPSK	3	3	22.11	22.33	22.24	
1.4	QPSK	6	0	22.17	22.38	22.30	
1.4	16QAM	1	0	22.42	22.61	22.56	
1.4	16QAM	1	3	22.49	22.66	22.64	23.8
1.4	16QAM	1	5	22.43	22.62	22.58	
1.4	16QAM	3	0	22.23	22.43	22.34	
1.4	16QAM	3	1	22.28	22.50	22.41	
1.4	16QAM	3	3	22.21	22.42	22.36	23.7
1.4	16QAM	6	0	22.10	22.37	22.28	
1.4	64QAM	1	0	22.21	22.45	22.37	
1.4	64QAM	1	3	22.27	22.51	22.41	
1.4	64QAM	1	5	22.21	22.45	22.37	23.7
1.4	64QAM	3	0	22.17	22.39	22.33	
1.4	64QAM	3	1	22.26	22.44	22.37	
1.4	64QAM	3	3	22.20	22.40	22.34	
1.4	64QAM	6	0	21.06	21.29	21.26	22.7



Band 4										
Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)			
Channel				20050	20175	20300				
Frequency (MHz)				1720	1732.5	1745				
20	QPSK	1	0	23.63	24.08	23.86	25.1			
20	QPSK	1	49	23.72	23.70	23.71				
20	QPSK	1	99	23.73	23.71	23.72				
20	QPSK	50	0	23.37	23.36	23.27	24.7			
20	QPSK	50	24	23.43	23.38	23.26				
20	QPSK	50	50	23.35	23.20	23.20				
20	QPSK	100	0	23.36	23.43	23.15	24.7			
20	16QAM	1	0	23.65	23.66	23.60				
20	16QAM	1	49	23.52	23.48	23.39				
20	16QAM	1	99	23.59	23.44	23.32	23.7			
20	16QAM	50	0	22.37	22.38	22.28				
20	16QAM	50	24	22.40	22.39	22.28				
20	16QAM	50	50	22.35	22.31	22.20	23.7			
20	16QAM	100	0	22.37	22.41	22.17				
20	64QAM	1	0	22.48	22.50	22.44				
20	64QAM	1	49	22.37	22.38	22.27	23.7			
20	64QAM	1	99	22.50	22.37	22.31				
20	64QAM	50	0	21.39	21.40	21.30				
20	64QAM	50	24	21.41	21.41	21.29	22.7			
20	64QAM	50	50	21.37	21.30	21.22				
20	64QAM	100	0	21.42	21.38	21.22				
Channel				20050	20175	20325	Tune-up limit (dBm)			
Frequency (MHz)				1717.5	1732.5	1747.5				
15	QPSK	1	0	23.72	23.74	23.70	25.1			
15	QPSK	1	37	23.74	23.72	23.70				
15	QPSK	1	74	23.72	23.70	23.71				
15	QPSK	36	0	23.39	23.40	23.23	24.7			
15	QPSK	36	20	23.39	23.35	23.16				
15	QPSK	36	39	23.35	23.28	23.16				
15	QPSK	75	0	23.38	23.40	23.18	24.7			
15	16QAM	1	0	23.64	23.65	23.55				
15	16QAM	1	37	23.50	23.47	23.39				
15	16QAM	1	74	23.55	23.45	23.33	23.7			
15	16QAM	36	0	22.43	22.36	22.24				
15	16QAM	36	20	22.37	22.34	22.16				
15	16QAM	36	39	22.34	22.28	22.20	23.7			
15	16QAM	75	0	22.38	22.41	22.18				
15	64QAM	1	0	22.52	22.49	22.43				
15	64QAM	1	37	22.42	22.36	22.31	23.7			
15	64QAM	1	74	22.43	22.38	22.25				
15	64QAM	36	0	21.44	21.44	21.27				
15	64QAM	36	20	21.38	21.43	21.19	22.7			
15	64QAM	36	39	21.38	21.32	21.21				
15	64QAM	75	0	21.40	21.36	21.19				
Channel				20000	20175	20350	Tune-up limit (dBm)			
Frequency (MHz)				1715	1732.5	1750				
10	QPSK	1	0	23.74	23.74	23.70	25.1			
10	QPSK	1	25	23.71	23.71	23.70				
10	QPSK	1	49	23.73	23.74	23.70				
10	QPSK	25	0	23.34	23.29	23.10	24.7			
10	QPSK	25	12	23.38	23.39	23.16				
10	QPSK	25	25	23.38	23.38	23.21				
10	QPSK	50	0	23.40	23.38	23.17	24.7			
10	16QAM	1	0	23.65	23.61	23.49				
10	16QAM	1	25	23.61	23.59	23.44				
10	16QAM	1	49	23.65	23.60	23.47	23.7			
10	16QAM	25	0	22.35	22.25	22.12				
10	16QAM	25	12	22.40	22.40	22.17				
10	16QAM	25	25	22.38	22.31	22.22	23.7			
10	16QAM	50	0	22.38	22.37	22.16				
10	64QAM	1	0	22.52	22.48	22.35				
10	64QAM	1	25	22.51	22.52	22.38	23.7			
10	64QAM	1	49	22.57	22.50	22.35				
10	64QAM	25	0	21.36	21.32	21.16				
10	64QAM	25	12	21.43	21.45	21.19	22.7			
10	64QAM	25	25	21.42	21.39	21.26				
10	64QAM	50	0	21.43	21.42	21.22				
Channel				19975	20175	20375	Tune-up limit (dBm)			
Frequency (MHz)				1712.5	1732.5	1752.5				
5	QPSK	1	0	23.74	23.71	23.70	25.1			
5	QPSK	1	12	23.72	23.70	23.70				
5	QPSK	1	24	23.70	23.74	23.72				
5	QPSK	12	0	23.37	23.30	23.20	24.7			
5	QPSK	12	7	23.39	23.37	23.21				
5	QPSK	12	13	23.37	23.36	23.21				
5	QPSK	25	0	23.35	23.37	23.22	24.7			
5	16QAM	1	0	23.61	23.53	23.44				
5	16QAM	1	12	23.63	23.58	23.45				
5	16QAM	1	24	23.65	23.60	23.45	23.7			
5	16QAM	12	0	22.38	22.29	22.21				
5	16QAM	12	7	22.45	22.38	22.23				
5	16QAM	12	13	22.41	22.38	22.20	23.7			
5	16QAM	25	0	22.40	22.37	22.22				
5	64QAM	1	0	22.53	22.49	22.35				
5	64QAM	1	12	22.55	22.50	22.34	23.7			
5	64QAM	1	24	22.60	22.54	22.36				
5	64QAM	12	0	21.45	21.35	21.27				
5	64QAM	12	7	21.45	21.44	21.30	22.7			
5	64QAM	12	13	21.47	21.39	21.27				
5	64QAM	25	0	21.39	21.39	21.21				
Channel				19965	20175	20385	Tune-up limit (dBm)			
Frequency (MHz)				1711.5	1732.5	1753.5				
3	QPSK	1	0	23.70	23.71	23.72	25.1			
3	QPSK	1	8	23.70	23.70	23.70				
3	QPSK	1	14	23.70	23.71	23.72				
3	QPSK	8	0	23.28	23.24	23.19	24.7			
3	QPSK	8	4	23.29	23.36	23.20				
3	QPSK	8	7	23.33	23.28	23.13				
3	QPSK	15	0	23.31	23.35	23.13	24.7			
3	16QAM	1	0	23.59	23.48	23.43				
3	16QAM	1	8	23.53	23.58	23.44				
3	16QAM	1	14	23.63	23.60	23.39	23.7			
3	16QAM	8	0	22.30	22.27	22.14				
3	16QAM	8	4	22.35	22.35	22.20				
3	16QAM	8	7	22.31	22.31	22.20	23.7			
3	16QAM	15	0	22.37	22.32	22.15				
3	64QAM	1	0	22.50	22.41	22.28				
3	64QAM	1	8	22.49	22.48	22.27	23.7			
3	64QAM	1	14	22.54	22.46	22.31				
3	64QAM	8	0	21.36	21.27	21.17				
3	64QAM	8	4	21.43	21.38	21.21	22.7			
3	64QAM	8	7	21.38	21.36	21.25				
3	64QAM	15	0	21.39	21.35	21.18				
Channel				19957	20175	20393	Tune-up limit (dBm)			
Frequency (MHz)				1710.7	1732.5	1754.3				
1.4	QPSK	1	0	23.72	23.70	23.70	25.1			
1.4	QPSK	1	3	23.73	23.71	23.71				
1.4	QPSK	1	5	23.72	23.71	23.70				
1.4	QPSK	3	0	23.73	23.70	23.70	24.7			
1.4	QPSK	3	1	23.75	23.73	23.72				
1.4	QPSK	3	3	23.74	23.74	23.71				
1.4	QPSK	6	0	23.34	23.37	23.01	24.7			
1.4	QPSK	6	4	23.36	23.40	23.27				
1.4	16QAM	1	3	23.53	23.54	23.34				
1.4	16QAM	1	5	23.47	23.45	23.28	24.7			
1.4	16QAM	3	0	23.25	23.27	23.07				
1.4	16QAM	3	3	23.31	23.26	23.12				
1.4	16QAM	3	5	23.24	23.24	23.08	23.7			
1.4	16QAM	6	0	22.32	22.32	22.12				
1.4	16QAM	6	1	22.38	22.36	22.21				
1.4	16QAM	3	3	22.46	22.41	22.27	23.7			
1.4	16QAM	3	5	22.39	22.36	22.21				
1.4	16QAM	3	1	22.42	22.39	22.26				
1.4	16QAM	3	3	22.32	22.32	22.20	22.7			
1.4	16QAM	3	5	21.22	21.22	21.03				



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.43	24.42	24.42	25.7
10	QPSK	1	25	24.34	24.44	24.43	
10	QPSK	1	49	24.44	24.54	24.20	
10	QPSK	25	0	23.47	23.49	23.49	24.7
10	QPSK	25	12	23.52	23.58	23.57	
10	QPSK	25	25	23.49	23.58	23.47	
10	QPSK	50	0	23.54	23.49	23.60	24.7
10	16QAM	1	0	23.81	23.83	23.86	
10	16QAM	1	25	23.70	23.84	23.83	
10	16QAM	1	49	23.81	23.92	23.71	23.7
10	16QAM	25	0	22.45	22.59	22.54	
10	16QAM	25	12	22.53	22.52	22.54	
10	16QAM	25	25	22.56	22.55	22.57	23.7
10	16QAM	50	0	22.51	22.50	22.49	
10	64QAM	1	0	22.59	22.66	22.64	
10	64QAM	1	25	22.70	22.74	22.76	22.7
10	64QAM	1	49	22.67	22.37	21.72	
10	64QAM	25	0	21.54	21.61	21.55	
10	64QAM	25	12	21.62	21.62	21.60	Tune-up limit (dBm)
10	64QAM	25	25	21.53	21.61	20.86	
10	64QAM	50	0	21.53	21.50	21.26	
Channel				20455	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.47	24.51	24.50	25.7
5	QPSK	1	12	24.47	24.45	24.31	
5	QPSK	1	24	24.41	24.52	24.20	
5	QPSK	12	0	23.55	23.64	23.59	24.7
5	QPSK	12	7	23.52	23.57	23.34	
5	QPSK	12	13	23.54	23.55	23.16	
5	QPSK	25	0	23.47	23.56	23.52	24.7
5	16QAM	1	0	23.83	23.83	23.79	
5	16QAM	1	12	23.77	23.83	23.57	
5	16QAM	1	24	23.68	23.85	23.46	23.7
5	16QAM	12	0	22.66	22.51	22.52	
5	16QAM	12	7	22.53	22.60	22.45	
5	16QAM	12	13	22.48	22.61	22.27	23.7
5	16QAM	25	0	22.56	22.52	22.56	
5	64QAM	1	0	22.75	22.73	22.50	
5	64QAM	1	12	22.64	22.69	21.78	22.7
5	64QAM	1	24	22.75	22.55	21.74	
5	64QAM	12	0	21.65	21.66	21.30	
5	64QAM	12	7	21.54	21.63	20.70	Tune-up limit (dBm)
5	64QAM	12	13	21.51	21.61	20.71	
5	64QAM	25	0	21.58	21.61	20.70	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.47	24.41	24.18	25.7
3	QPSK	1	8	24.50	24.48	24.04	
3	QPSK	1	14	24.40	24.49	24.13	
3	QPSK	8	0	23.54	23.58	23.04	24.7
3	QPSK	8	4	23.49	23.62	23.07	
3	QPSK	8	7	23.50	23.55	23.20	
3	QPSK	15	0	23.57	23.53	23.08	24.7
3	16QAM	1	0	23.83	23.81	23.53	
3	16QAM	1	8	23.83	23.86	23.38	
3	16QAM	1	14	23.69	23.78	23.46	23.7
3	16QAM	8	0	22.64	22.58	22.31	
3	16QAM	8	4	22.60	22.65	22.23	
3	16QAM	8	7	22.57	22.60	22.28	23.7
3	16QAM	15	0	22.60	22.62	22.19	
3	64QAM	1	0	22.63	22.73	21.70	
3	64QAM	1	8	22.75	22.75	21.72	22.7
3	64QAM	1	14	22.63	22.50	21.71	
3	64QAM	8	0	21.65	21.56	20.70	
3	64QAM	8	4	21.58	21.67	20.70	Tune-up limit (dBm)
3	64QAM	8	7	21.49	21.63	20.74	
3	64QAM	15	0	21.53	21.62	20.71	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.39	24.32	23.95	25.7
1.4	QPSK	1	3	24.42	24.47	24.10	
1.4	QPSK	1	5	24.29	24.38	24.09	
1.4	QPSK	3	0	24.41	24.36	24.12	24.7
1.4	QPSK	3	1	24.47	24.40	24.12	
1.4	QPSK	3	3	24.41	24.44	24.37	
1.4	QPSK	6	0	23.42	23.57	23.18	24.7
1.4	16QAM	1	0	23.68	23.69	23.34	
1.4	16QAM	1	3	23.69	23.85	23.50	
1.4	16QAM	1	5	23.61	23.69	23.58	24.7
1.4	16QAM	3	0	23.51	23.51	23.12	
1.4	16QAM	3	1	23.49	23.54	23.28	
1.4	16QAM	3	3	23.42	23.48	23.42	23.7
1.4	16QAM	6	0	22.55	22.62	22.27	
1.4	64QAM	1	0	22.60	22.60	21.70	
1.4	64QAM	1	3	22.68	22.75	21.72	23.7
1.4	64QAM	1	5	22.60	22.59	21.71	
1.4	64QAM	3	0	22.63	22.63	21.70	
1.4	64QAM	3	1	22.65	22.62	21.72	22.7
1.4	64QAM	3	3	22.55	22.58	21.71	
1.4	64QAM	6	0	21.45	21.48	20.72	

Band 7							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.26	23.31	23.30	24.4
20	QPSK	1	49	23.28	23.39	23.30	
20	QPSK	1	99	23.29	23.42	23.40	
20	QPSK	50	0	23.28	23.44	23.41	23.9
20	QPSK	50	24	23.29	23.48	23.43	
20	QPSK	50	50	23.32	23.55	23.44	
20	QPSK	100	0	23.29	23.45	23.41	23.9
20	16QAM	1	0	23.47	23.66	23.64	
20	16QAM	1	49	23.50	23.71	23.68	
20	16QAM	1	99	23.55	23.77	23.65	22.9
20	16QAM	50	0	22.61	22.79	22.73	
20	16QAM	50	24	22.64	22.76	22.72	
20	16QAM	50	50	22.62	22.84	22.76	22.9
20	16QAM	100	0	22.61	22.75	22.74	
20	64QAM	1	0	22.71	22.87	22.18	
20	64QAM	1	49	22.72	22.90	22.31	21.9
20	64QAM	1	99	22.74	22.90	22.40	
20	64QAM	50	0	21.66	21.82	21.15	
20	64QAM	50	24	21.68	21.83	21.29	21.9
20	64QAM	50	50	21.70	21.86	21.31	
20	64QAM	100	0	21.62	21.70	21.11	
Channel				20855	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.20	23.34	23.38	24.4
15	QPSK	1	37	23.23	23.40	23.37	
15	QPSK	1	74	23.31	23.49	23.40	
15	QPSK	36	0	23.25	23.43	23.44	23.9
15	QPSK	36	20	23.39	23.49	23.50	
15	QPSK	36	39	23.40	23.57	23.49	
15	QPSK	75	0	23.37	23.47	23.51	23.9
15	16QAM	1	0	23.47	23.65	23.68	
15	16QAM	1	37	23.53	23.74	23.49	
15	16QAM	1	74	23.62	23.81	23.69	22.9
15	16QAM	36	0	22.55	22.72	22.71	
15	16QAM	36	20	22.65	22.75	22.82	
15	16QAM	36	39	22.68	22.87	22.78	22.9
15	16QAM	75	0	22.65	22.78	22.81	
15	64QAM	1	0	22.65	22.76	22.20	
15	64QAM	1	37	22.75	22.90	21.52	21.9
15	64QAM	1	74	22.78	22.90	22.25	
15	64QAM	36	0	21.58	21.76	20.79	
15	64QAM	36	20	21.70	21.80	20.89	21.9
15	64QAM	36	39	21.74	21.89	21.10	
15	64QAM	75	0	21.67	21.77	20.84	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.22	23.29	23.22	24.4
10	QPSK	1	25	23.20	23.30	23.25	
10	QPSK	1	49	23.20	23.37	23.27	
10	QPSK	25	0	23.28	23.41	23.37	23.9
10	QPSK	25	12	23.33	23.44	23.39	
10	QPSK	25	25	23.34	23.53	23.44	
10	QPSK	50	0	23.33	23.46	23.39	23.9
10	16QAM	1	0	23.48	23.67	23.62	
10	16QAM	1	25	23.50	23.71	23.70	
10	16QAM	1	49	23.58	23.78	23.68	22.9
10	16QAM	25	0	22.58	22.70	22.68	
10	16QAM	25	12	22.64	22.76	22.69	
10	16QAM	25	25	22.61	22.83	22.74	22.9
10	16QAM	50	0	22.60	22.75	22.67	
10	64QAM	1	0	22.69	22.82	21.85	
10	64QAM	1	25	22.70	22.90	22.34	21.9
10	64QAM	1	49	22.79	22.90	22.61	
10	64QAM	25	0	21.61	21.75	20.84	
10	64QAM	25	12	21.65	21.79	21.05	21.9
10	64QAM	25	25	21.55	21.86	21.23	
10	64QAM	50	0	21.65	21.77	20.85	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.26	23.31	23.30	24.4
5	QPSK	1	12	23.28	23.39	23.30	
5	QPSK	1	24	23.29	23.42	23.29	
5	QPSK	12	0	23.28	23.44	23.41	23.9
5	QPSK	12	7	23.29	23.46	23.43	
5	QPSK	12	13	23.32	23.55	23.42	
5	QPSK	25	0	23.29	23.45	23.41	23.9
5	16QAM	1	0	23.47	23.66	23.64	
5	16QAM	1	12	23.50	23.71	23.58	
5	16QAM	1	24	23.55	23.77	23.65	22.9
5	16QAM	12	0	22.61	22.79	22.73	
5	16QAM	12	7	22.64	22.76	22.72	
5	16QAM	12	13	22.62	22.84	22.78	22.9
5	16QAM	25	0	22.61	22.75	22.74	
5	64QAM	1	0	22.71	22.87	22.18	
5	64QAM	1	12	22.72	22.90	22.31	21.9
5	64QAM	1	24	22.74	22.90	22.40	
5	64QAM	12	0	21.66	21.82	21.15	
5	64QAM	12	7	21.68	21.83	21.29	21.9
5	64QAM	12	13	21.70	21.86	21.31	
5	64QAM	25	0	21.62	21.79	21.11	



Band 12							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.34	24.12	24.24	25.7
10	QPSK	1	25	24.15	24.15	24.14	
10	QPSK	1	49	24.31	24.24	24.14	
10	QPSK	25	0	23.27	23.33	23.32	24.7
10	QPSK	25	12	23.38	23.34	23.35	
10	QPSK	25	25	23.31	23.30	23.35	
10	QPSK	50	0	23.34	23.28	23.32	24.7
10	16QAM	1	0	23.55	23.49	23.56	
10	16QAM	1	25	23.61	23.61	23.56	
10	16QAM	1	49	23.66	23.60	23.54	23.7
10	16QAM	25	0	22.32	22.28	22.33	
10	16QAM	25	12	22.40	22.35	22.36	
10	16QAM	25	25	22.37	22.36	22.34	23.7
10	16QAM	50	0	22.39	22.31	22.33	
10	64QAM	1	0	22.43	22.31	22.39	
10	64QAM	1	25	22.52	22.42	22.25	23.7
10	64QAM	1	49	22.61	22.54	22.53	
10	64QAM	25	0	21.31	21.33	21.22	
10	64QAM	25	12	21.46	21.39	21.33	22.7
10	64QAM	25	25	21.37	21.41	21.37	
10	64QAM	50	0	21.36	21.34	21.37	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.27	24.18	24.20	25.7
5	QPSK	1	12	24.27	24.28	24.27	
5	QPSK	1	24	24.23	24.21	24.24	
5	QPSK	12	0	23.38	23.32	23.26	24.7
5	QPSK	12	7	23.33	23.26	23.25	
5	QPSK	12	13	23.33	23.26	23.27	
5	QPSK	25	0	23.36	23.28	23.20	24.7
5	16QAM	1	0	23.59	23.56	23.50	
5	16QAM	1	12	23.60	23.59	23.55	
5	16QAM	1	24	23.61	23.61	23.50	23.7
5	16QAM	12	0	22.36	22.32	22.28	
5	16QAM	12	7	22.39	22.34	22.36	
5	16QAM	12	13	22.32	22.36	22.28	23.7
5	16QAM	25	0	22.40	22.35	22.32	
5	64QAM	1	0	22.37	22.24	22.40	
5	64QAM	1	12	22.51	22.44	22.40	23.7
5	64QAM	1	24	22.35	22.46	22.45	
5	64QAM	12	0	21.39	21.41	21.39	
5	64QAM	12	7	21.34	21.35	21.34	22.7
5	64QAM	12	13	21.43	21.38	21.28	
5	64QAM	25	0	21.42	21.39	21.32	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.31	24.21	24.28	25.7
3	QPSK	1	8	24.32	24.30	24.30	
3	QPSK	1	14	24.28	24.27	24.16	
3	QPSK	8	0	23.35	23.27	23.30	24.7
3	QPSK	8	4	23.37	23.40	23.35	
3	QPSK	8	7	23.38	23.38	23.25	
3	QPSK	15	0	23.39	23.28	23.21	24.7
3	16QAM	1	0	23.71	23.62	23.52	
3	16QAM	1	8	23.56	23.59	23.60	
3	16QAM	1	14	23.60	23.56	23.46	23.7
3	16QAM	8	0	22.42	22.42	22.32	
3	16QAM	8	4	22.41	22.40	22.36	
3	16QAM	8	7	22.33	22.41	22.27	23.7
3	16QAM	15	0	22.37	22.31	22.30	
3	64QAM	1	0	22.46	22.41	22.47	
3	64QAM	1	8	22.64	22.55	22.45	23.7
3	64QAM	1	14	22.47	22.49	22.43	
3	64QAM	8	0	21.41	21.39	21.36	
3	64QAM	8	4	21.44	21.51	21.40	22.7
3	64QAM	8	7	21.34	21.40	21.35	
3	64QAM	15	0	21.37	21.34	21.24	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.18	24.13	24.08	25.7
1.4	QPSK	1	3	24.23	24.21	24.18	
1.4	QPSK	1	5	24.19	24.20	24.02	
1.4	QPSK	3	0	24.26	24.09	24.16	24.7
1.4	QPSK	3	1	24.25	24.22	24.19	
1.4	QPSK	3	3	24.21	24.22	24.13	
1.4	QPSK	6	0	23.32	23.26	23.12	24.7
1.4	16QAM	1	0	23.60	23.49	23.46	
1.4	16QAM	1	3	23.57	23.57	23.48	
1.4	16QAM	1	5	23.53	23.52	23.43	24.7
1.4	16QAM	3	0	23.34	23.24	23.26	
1.4	16QAM	3	1	23.36	23.30	23.31	
1.4	16QAM	3	3	23.31	23.24	23.13	23.7
1.4	16QAM	6	0	22.32	22.23	22.22	
1.4	64QAM	1	0	22.48	22.42	22.36	
1.4	64QAM	1	3	22.46	22.50	22.42	23.7
1.4	64QAM	1	5	22.46	22.36	22.34	
1.4	64QAM	3	0	22.37	22.36	22.36	
1.4	64QAM	3	1	22.41	22.38	22.32	22.7
1.4	64QAM	3	3	22.40	22.38	22.31	
1.4	64QAM	6	0	21.27	21.21	21.21	22.7



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0		23.83		25.2
10	QPSK	1	25		23.84		
10	QPSK	1	49		23.97		
10	QPSK	25	0		22.96		24.2
10	QPSK	25	12		23.01		
10	QPSK	25	25		22.91		
10	QPSK	50	0		23.01		24.2
10	16QAM	1	0		23.16		
10	16QAM	1	25		23.16		
10	16QAM	1	49		23.15		23.2
10	16QAM	25	0		21.97		
10	16QAM	25	12		22.03		
10	16QAM	25	25		21.93		23.2
10	16QAM	50	0		21.95		
10	64QAM	1	0		22.01		
10	64QAM	1	25		22.13		23.2
10	64QAM	1	49		22.04		
10	64QAM	25	0		21.02		
10	64QAM	25	12		21.00		22.2
10	64QAM	25	25		21.04		
10	64QAM	50	0		20.99		
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	794.5	
5	QPSK	1	0	23.75	23.76	23.86	25.2
5	QPSK	1	12	23.88	23.84	23.87	
5	QPSK	1	24	23.87	23.86	23.87	
5	QPSK	12	0	22.89	22.92	22.92	24.2
5	QPSK	12	7	22.93	22.97	22.83	
5	QPSK	12	13	23.02	23.01	22.92	
5	QPSK	25	0	23.01	22.99	22.91	23.2
5	16QAM	1	0	23.08	23.05	23.08	
5	16QAM	1	12	23.16	23.14	23.09	
5	16QAM	1	24	23.16	23.10	23.03	23.2
5	16QAM	12	0	21.99	21.97	21.98	
5	16QAM	12	7	22.05	21.95	21.96	
5	16QAM	12	13	22.02	21.94	21.97	22.2
5	16QAM	25	0	22.03	21.94	21.88	
5	64QAM	1	0	22.00	22.13	21.98	
5	64QAM	1	12	22.13	22.06	22.08	23.2
5	64QAM	1	24	22.07	22.15	22.00	
5	64QAM	12	0	21.03	21.06	20.99	
5	64QAM	12	7	21.07	21.01	20.92	22.2
5	64QAM	12	13	20.98	21.05	20.97	
5	64QAM	25	0	20.96	20.95	20.88	

Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.44			25.7
10	QPSK	1	25	24.49			
10	QPSK	1	49	24.32			
10	QPSK	25	0	23.51			24.7
10	QPSK	25	12	23.59			
10	QPSK	25	25	23.48			
10	QPSK	50	0	23.42			24.7
10	16QAM	1	0	23.87			
10	16QAM	1	25	23.84			
10	16QAM	1	49	23.71			24.7
10	16QAM	25	0	22.44			
10	16QAM	25	12	22.54			
10	16QAM	25	25	22.55			23.7
10	16QAM	50	0	22.44			
10	64QAM	1	0	22.75			
10	64QAM	1	25	22.58			23.7
10	64QAM	1	49	22.65			
10	64QAM	25	0	21.50			
10	64QAM	25	12	21.33			22.7
10	64QAM	25	25	21.48			
10	64QAM	50	0	21.55			
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.48	24.40	24.42	25.7
5	QPSK	1	12	24.48	24.48	24.47	
5	QPSK	1	24	24.47	24.44	24.42	
5	QPSK	12	0	23.54	23.49	23.41	24.7
5	QPSK	12	7	23.60	23.52	23.47	
5	QPSK	12	13	23.50	23.55	23.45	
5	QPSK	25	0	23.59	23.48	23.43	24.7
5	16QAM	1	0	23.74	23.78	23.68	
5	16QAM	1	12	23.78	23.80	23.80	
5	16QAM	1	24	23.80	23.72	23.71	24.7
5	16QAM	12	0	22.51	22.57	22.48	
5	16QAM	12	7	22.62	22.60	22.49	
5	16QAM	12	13	22.59	22.55	22.51	23.7
5	16QAM	25	0	22.57	22.52	22.50	
5	64QAM	1	0	22.71	22.62	22.36	
5	64QAM	1	12	22.78	22.24	22.53	23.7
5	64QAM	1	24	22.33	22.27	22.70	
5	64QAM	12	0	21.61	21.26	21.16	
5	64QAM	12	7	21.68	21.24	21.54	22.7
5	64QAM	12	13	21.36	21.23	21.61	
5	64QAM	25	0	21.64	21.16	21.49	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.38	24.29	24.27	25.7
10	QPSK	1	25	24.35	24.27	24.31	
10	QPSK	1	49	24.33	24.40	24.28	
10	QPSK	25	0	23.34	23.38	23.37	24.7
10	QPSK	25	12	23.51	23.39	23.43	
10	QPSK	25	25	23.50	23.51	23.46	
10	QPSK	50	0	23.44	23.37	23.34	24.7
10	16QAM	1	0	23.64	23.67	23.59	
10	16QAM	1	25	23.73	23.67	23.67	
10	16QAM	1	49	23.70	23.70	23.73	23.7
10	16QAM	25	0	22.35	22.28	22.38	
10	16QAM	25	12	22.43	22.42	22.38	
10	16QAM	25	25	22.40	22.45	22.42	23.7
10	16QAM	50	0	22.50	22.55	22.41	
10	64QAM	1	0	22.59	22.53	22.57	
10	64QAM	1	25	22.67	22.66	22.50	22.7
10	64QAM	1	49	22.65	22.65	22.58	
10	64QAM	25	0	21.36	21.43	21.41	
10	64QAM	25	12	21.47	21.43	21.46	22.7
10	64QAM	25	25	21.51	21.55	21.51	
10	64QAM	50	0	21.54	21.40	21.44	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.24	24.27	24.26	25.7
5	QPSK	1	12	24.31	24.37	24.39	
5	QPSK	1	24	24.38	24.39	24.31	
5	QPSK	12	0	23.43	23.34	23.35	24.7
5	QPSK	12	7	23.48	23.47	23.43	
5	QPSK	12	13	23.46	23.44	23.40	
5	QPSK	25	0	23.49	23.45	23.42	24.7
5	16QAM	1	0	23.57	23.61	23.61	
5	16QAM	1	12	23.61	23.69	23.63	
5	16QAM	1	24	23.73	23.76	23.68	23.7
5	16QAM	12	0	22.40	22.39	22.36	
5	16QAM	12	7	22.45	22.40	22.38	
5	16QAM	12	13	22.51	22.44	22.43	23.7
5	16QAM	25	0	22.43	22.44	22.49	
5	64QAM	1	0	22.41	22.31	22.54	
5	64QAM	1	12	22.59	22.50	22.51	22.7
5	64QAM	1	24	22.61	22.53	22.49	
5	64QAM	12	0	21.43	21.40	21.44	
5	64QAM	12	7	21.47	21.45	21.53	22.7
5	64QAM	12	13	21.53	21.55	21.51	
5	64QAM	25	0	21.45	21.39	21.40	



Band 25									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)		
Channel				1860	1880	1905			
Frequency (MHz)									
20	QPSK	1	0	22.29	22.36	22.34	23.8		
20	QPSK	1	49	22.27	22.37	22.29			
20	QPSK	1	99	22.32	22.38	22.34			
20	QPSK	50	0	22.38	22.42	22.39			
20	QPSK	50	24	22.48	22.55	22.41	23.8		
20	QPSK	50	50	22.44	22.53	22.48			
20	QPSK	100	0	22.48	22.56	22.42			
20	16QAM	1	0	22.60	22.71	22.70			
20	16QAM	1	49	22.68	22.72	22.66	23.8		
20	16QAM	1	99	22.66	22.78	22.64			
20	16QAM	50	0	22.29	22.36	22.30			
20	16QAM	50	24	22.39	22.50	22.32			
20	16QAM	50	50	22.38	22.46	22.42	23.7		
20	16QAM	100	0	22.36	22.43	22.32			
20	64QAM	1	0	22.39	22.46	22.40			
20	64QAM	1	49	22.32	22.50	22.41			
20	64QAM	1	99	22.40	22.54	22.35	23.7		
20	64QAM	50	0	21.33	21.36	21.32			
20	64QAM	50	24	21.40	21.48	21.35			
20	64QAM	50	50	21.38	21.47	21.42			
20	64QAM	100	0	21.40	21.45	21.34	22.7		
Channel				26115	26340	26615			
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	22.29	22.41	22.36	23.8		
15	QPSK	1	37	22.28	22.39	22.31			
15	QPSK	1	74	22.34	22.42	22.39			
15	QPSK	36	0	22.45	22.47	22.40			
15	QPSK	36	20	22.44	22.53	22.48	23.8		
15	QPSK	36	39	22.44	22.51	22.45			
15	QPSK	75	0	22.42	22.54	22.38			
15	16QAM	1	0	22.57	22.70	22.65			
15	16QAM	1	37	22.62	22.74	22.67	23.8		
15	16QAM	1	74	22.64	22.77	22.68			
15	16QAM	36	0	22.36	22.37	22.32			
15	16QAM	36	20	22.38	22.45	22.41			
15	16QAM	36	39	22.31	22.43	22.37	23.7		
15	16QAM	75	0	22.35	22.45	22.32			
15	64QAM	1	0	22.34	22.48	22.40			
15	64QAM	1	37	22.42	22.56	22.50			
15	64QAM	1	74	22.46	22.55	22.32	23.7		
15	64QAM	36	0	21.41	21.42	21.35			
15	64QAM	36	20	21.40	21.47	21.42			
15	64QAM	36	39	21.36	21.45	21.43			
15	64QAM	75	0	21.36	21.46	21.33	22.7		
Channel				26090	26340	26640			
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	22.23	22.33	22.34	23.8		
10	QPSK	1	25	22.22	22.35	22.34			
10	QPSK	1	49	22.27	22.42	22.39			
10	QPSK	25	0	22.37	22.40	22.43			
10	QPSK	25	12	22.39	22.52	22.49	23.8		
10	QPSK	25	25	22.44	22.51	22.51			
10	QPSK	50	0	22.41	22.52	22.49			
10	16QAM	1	0	22.70	22.73	22.69			
10	16QAM	1	25	22.63	22.73	22.69	23.8		
10	16QAM	1	49	22.67	22.78	22.75			
10	16QAM	25	0	22.28	22.34	22.37			
10	16QAM	25	12	22.31	22.45	22.39			
10	16QAM	25	25	22.29	22.43	22.39	23.7		
10	16QAM	50	0	22.30	22.43	22.39			
10	64QAM	1	0	22.39	22.46	22.51			
10	64QAM	1	25	22.40	22.60	22.55			
10	64QAM	1	49	22.43	22.61	22.34	23.7		
10	64QAM	25	0	21.30	21.34	21.37			
10	64QAM	25	12	21.36	21.46	21.42			
10	64QAM	25	25	21.34	21.46	21.43			
10	64QAM	50	0	21.34	21.46	21.42	22.7		
Channel				26065	26340	26665			
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	22.22	22.31	22.33	23.8		
5	QPSK	1	12	22.30	22.43	22.36			
5	QPSK	1	24	22.30	22.43	22.37			
5	QPSK	12	0	22.29	22.45	22.42			
5	QPSK	12	7	22.40	22.55	22.48	23.8		
5	QPSK	12	13	22.42	22.53	22.49			
5	QPSK	25	0	22.36	22.52	22.45			
5	16QAM	1	0	22.59	22.69	22.68			
5	16QAM	1	12	22.62	22.75	22.67	23.8		
5	16QAM	1	24	22.62	22.77	22.72			
5	16QAM	12	0	22.25	22.36	22.34			
5	16QAM	12	7	22.32	22.45	22.37			
5	16QAM	12	13	22.34	22.46	22.40	23.7		
5	16QAM	25	0	22.28	22.41	22.33			
5	64QAM	1	0	22.41	22.51	22.53			
5	64QAM	1	12	22.39	22.55	22.48			
5	64QAM	1	24	22.43	22.63	22.22	23.7		
5	64QAM	12	0	21.30	21.41	21.37			
5	64QAM	12	7	21.37	21.49	21.43			
5	64QAM	12	13	21.36	21.52	21.26			
5	64QAM	25	0	21.30	21.43	21.36	22.7		
Channel				26055	26340	26675			
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	22.12	22.24	22.28	23.8		
3	QPSK	1	8	22.29	22.37	22.27			
3	QPSK	1	14	22.25	22.33	22.35			
3	QPSK	8	0	22.29	22.41	22.35			
3	QPSK	8	4	22.31	22.52	22.41	23.8		
3	QPSK	8	7	22.37	22.45	22.45			
3	QPSK	15	0	22.35	22.49	22.41			
3	16QAM	1	0	22.58	22.63	22.63			
3	16QAM	1	8	22.56	22.74	22.62	23.8		
3	16QAM	1	14	22.52	22.72	22.70			
3	16QAM	8	0	22.15	22.38	22.26			
3	16QAM	8	4	22.30	22.41	22.36			
3	16QAM	8	7	22.31	22.40	22.37	23.7		
3	16QAM	15	0	22.19	22.35	22.32			
3	64QAM	1	0	22.35	22.47	22.53			
3	64QAM	1	8	22.38	22.52	22.41			
3	64QAM	1	14	22.43	22.57	22.15	23.7		
3	64QAM	8	0	21.28	21.37	21.28			
3	64QAM	8	4	21.28	21.42	21.42			
3	64QAM	8	7	21.36	21.44	21.16			
3	64QAM	15	0	21.26	21.39	21.29	22.7		
Channel				26047	26340	26683			
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	22.09	22.22	22.16	23.8		
1.4	QPSK	1	3	22.23	22.36	22.27			
1.4	QPSK	1	5	22.19	22.33	22.26			
1.4	QPSK	3	0	22.14	22.30	22.23			
1.4	QPSK	3	1	22.21	22.37	22.28	23.8		
1.4	QPSK	3	3	22.20	22.36	22.27			
1.4	QPSK	6	0	22.21	22.38	22.32			
1.4	QPSK	3	3	22.21	22.38	22.32	23.8		
1.4	16QAM	1	0	22.35	22.47	22.52			
1.4	16QAM	1	3	22.58	22.70	22.62			
1.4	16QAM	1	5	22.51	22.68	22.58			
1.4	16QAM	3	0	22.26	22.41	22.31	23.8		
1.4	16QAM	3	1	22.31	22.47	22.38			
1.4	16QAM	3	3	22.29	22.44	22.35			
1.4	64QAM	1	0	22.21	22.37	22.28			
1.4	64QAM	1	3	22.23	22.40	22.14	23.7		
1.4	64QAM	1	5	22.23	22.53	22.04			
1.4	64QAM	3	0	22.24	22.42	22.15			
1.4	64QAM	3	1	22.26	22.48	22.21			
1.4	64QAM	3	3	22.28	22.46	22.12	23.7		
1.4	64QAM	6	0	22.21	22.37	22.28			
1.4	64QAM	6	3	22.23	22.40	22.14			
1.4	64QAM	1	3	22.23	22.53	22.04			
1.4	64QAM	3	3	22.24	22.42	22.15	23.7		
1.4	64QAM	3	1	22.26	22.48	22.21			
1.4	64QAM	3	3	22.28	22.46	22.12			
1.4	64QAM	6	0	22.21	22.37	22.28			
1.4	64QAM	6	3	22.23	22.40	22.14	23.7		
1.4	64QAM	1	3	22.23	22.53	22.04			
1.4	64QAM	3	3	22.24	22.42	22.15			
1.4	64QAM	3	1	22.26	22.48	22.21			
1.4	64QAM	3	3	22.28	22.46	22.12	23.7		
1.4	64QAM	6	0	22.21	22.37	22.28			
1.4	64QAM	6	3	22.23	22.40	22.14			
1.4	64QAM	1	3	22.23	22.53	22.04			
1.4	64QAM	3	3	22.24	22.42	22.15	23.7		
1.4	64QAM	3	1	22.26	22.48	22.21			
1.4	64QAM	3	3	22.28	22.46	22.12			
1.4	64QAM	6	0	22.21	22.37	22.28			
1.4	64QAM	6	3	22.23	22.40	22.14	23.7		
1.4	64QAM	1	3	22.23	22.53	22.04			
1.4	64QAM	3	3	22.24	22.42	22.15			
1.4	64QAM	3	1	22.26	22.48	22.21			
1.4	64QAM	3	3	22.28	22.46	22.12	23.7		
1.4	64QAM	6	0	22.21	22.37	22.28			
1.4	64QAM	6	3	22.23	22.40	22.14			
1.4	64QAM	1	3	22.23	22.53	22.04			
1.4	64QAM	3	3	22.24	22.42	22.15	23.7		
1.4	64QAM	3	1	22.26	22.48	22.21			
1.4	64QAM	3	3	22.28	22.46	22.12			
1.4	64QAM	6	0	22.21	22.37	22.28			
1.4	64QAM	6	3	22.23	22.40	22.14	23.7		
1.4	64QAM	1	3	22.23	22.53	22.04			
1.4	64QAM	3	3	22.24	22.42	22.15			
1.4	64QAM	3	1	22.26	22.48	22.21			
1.4	64QAM								



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.28	24.16	24.24	25.7
15	QPSK	1	37	24.14	24.24	24.21	
15	QPSK	1	74	24.27	24.52	24.13	
15	QPSK	36	0	23.38	23.39	23.34	24.7
15	QPSK	36	20	23.40	23.31	23.37	
15	QPSK	36	39	23.33	23.34	23.29	
15	QPSK	75	0	23.39	23.35	23.35	24.7
15	16QAM	1	0	23.55	23.56	23.61	
15	16QAM	1	37	23.54	23.54	23.60	
15	16QAM	1	74	23.56	23.63	23.47	23.7
15	16QAM	36	0	22.36	22.42	22.34	
15	16QAM	36	20	22.34	22.33	22.30	
15	16QAM	36	39	22.36	22.36	22.33	23.7
15	16QAM	75	0	22.42	22.38	22.53	
15	64QAM	1	0	22.48	22.42	22.41	
15	64QAM	1	37	22.45	22.49	22.41	22.7
15	64QAM	1	74	22.48	22.48	21.70	
15	64QAM	36	0	21.43	21.46	21.41	
15	64QAM	36	20	21.47	21.43	21.37	22.7
15	64QAM	36	39	21.38	21.44	21.49	
15	64QAM	75	0	21.47	21.35	21.42	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.38	24.29	24.37	25.7
10	QPSK	1	25	24.22	24.25	24.23	
10	QPSK	1	49	24.28	24.29	24.20	
10	QPSK	25	0	23.50	23.36	23.44	24.7
10	QPSK	25	12	23.50	23.41	23.37	
10	QPSK	25	25	23.40	23.42	23.37	
10	QPSK	50	0	23.38	23.41	23.42	24.7
10	16QAM	1	0	23.77	23.60	23.75	
10	16QAM	1	25	23.61	23.73	23.64	
10	16QAM	1	49	23.64	23.67	23.62	23.7
10	16QAM	25	0	22.46	22.36	22.37	
10	16QAM	25	12	22.45	22.42	22.36	
10	16QAM	25	25	22.30	22.44	22.38	22.7
10	16QAM	50	0	22.46	22.37	22.33	
10	64QAM	1	0	22.64	22.51	22.57	
10	64QAM	1	25	22.54	22.66	22.66	22.7
10	64QAM	1	49	22.56	22.60	22.05	
10	64QAM	25	0	21.44	21.42	21.43	
10	64QAM	25	12	21.50	21.47	21.48	22.7
10	64QAM	25	25	21.37	21.41	21.29	
10	64QAM	50	0	21.47	21.37	21.36	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				616.5	631.5	646.5	
5	QPSK	1	0	24.45	24.32	24.35	25.7
5	QPSK	1	12	24.38	24.38	24.33	
5	QPSK	1	24	24.30	24.37	24.26	
5	QPSK	12	0	23.50	23.37	23.40	24.7
5	QPSK	12	7	23.51	23.41	23.44	
5	QPSK	12	13	23.44	23.36	23.33	
5	QPSK	25	0	23.44	23.40	23.38	24.7
5	16QAM	1	0	23.78	23.60	23.73	
5	16QAM	1	12	23.72	23.66	23.60	
5	16QAM	1	24	23.66	23.72	23.58	23.7
5	16QAM	12	0	22.49	22.38	22.41	
5	16QAM	12	7	22.45	22.45	22.41	
5	16QAM	12	13	22.44	22.37	22.30	23.7
5	16QAM	25	0	22.43	22.39	22.40	
5	64QAM	1	0	22.73	22.56	22.53	
5	64QAM	1	12	22.54	22.59	21.87	22.7
5	64QAM	1	24	22.56	22.57	21.82	
5	64QAM	12	0	21.58	21.56	21.51	
5	64QAM	12	7	21.59	21.50	20.86	22.7
5	64QAM	12	13	21.54	21.45	20.56	
5	64QAM	25	0	21.50	21.39	21.68	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.43	24.37	24.37	25.7
3	QPSK	1	8	24.41	24.37	24.32	
3	QPSK	1	14	24.30	24.35	24.26	
3	QPSK	8	0	23.51	23.43	23.27	24.7
3	QPSK	8	4	23.54	23.46	23.33	
3	QPSK	8	7	23.40	23.41	23.37	
3	QPSK	15	0	23.42	23.35	23.30	24.7
3	16QAM	1	0	23.79	23.62	23.67	
3	16QAM	1	8	23.80	23.76	23.49	
3	16QAM	1	14	23.68	23.71	23.56	23.7
3	16QAM	8	0	22.53	22.44	22.45	
3	16QAM	8	4	22.59	22.47	22.41	
3	16QAM	8	7	22.46	22.49	22.38	23.7
3	16QAM	15	0	22.56	22.36	22.37	
3	64QAM	1	0	22.61	22.57	21.91	
3	64QAM	1	8	22.68	22.58	21.70	22.7
3	64QAM	1	14	22.58	22.61	21.71	
3	64QAM	8	0	21.59	21.49	20.70	
3	64QAM	8	4	21.55	21.54	20.57	22.7
3	64QAM	8	7	21.49	21.52	20.57	
3	64QAM	15	0	21.50	21.48	20.64	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.37	24.27	24.21	25.7
1.4	QPSK	1	3	24.42	24.39	24.23	
1.4	QPSK	1	5	24.36	24.21	24.15	
1.4	QPSK	3	0	24.41	24.23	24.20	24.7
1.4	QPSK	3	1	24.41	24.33	24.21	
1.4	QPSK	3	3	24.40	24.32	24.20	
1.4	QPSK	6	0	23.41	23.38	23.30	24.7
1.4	16QAM	1	0	23.71	23.59	23.46	
1.4	16QAM	1	3	23.72	23.62	23.59	
1.4	16QAM	1	5	23.63	23.59	23.46	23.7
1.4	16QAM	3	0	23.56	23.29	23.30	
1.4	16QAM	3	1	23.60	23.39	23.30	
1.4	16QAM	3	3	23.50	23.35	23.24	23.7
1.4	16QAM	6	0	22.50	22.46	22.33	
1.4	64QAM	1	0	22.68	22.47	21.74	
1.4	64QAM	1	3	22.68	22.61	21.70	23.7
1.4	64QAM	1	5	22.62	22.46	21.71	
1.4	64QAM	3	0	22.64	22.46	21.72	
1.4	64QAM	3	1	22.57	22.47	21.71	22.7
1.4	64QAM	3	3	22.56	22.51	21.80	
1.4	64QAM	6	0	21.43	21.42	20.70	



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.18			23.7
10	QPSK	1	25	22.07			
10	QPSK	1	49	22.09			
10	QPSK	25	0	21.18			22.7
10	QPSK	25	12	21.14			
10	QPSK	25	25	21.23			
10	QPSK	50	0	21.14			22.7
10	16QAM	1	0	21.51			
10	16QAM	1	25	21.44			
10	16QAM	1	49	21.52			21.7
10	16QAM	25	0	20.18			
10	16QAM	25	12	20.25			
10	16QAM	25	25	20.19			21.7
10	16QAM	50	0	20.23			
10	64QAM	1	0	20.38			
10	64QAM	1	25	20.42			21.7
10	64QAM	1	49	20.39			
10	64QAM	25	0	19.24			
10	64QAM	25	12	19.21			20.7
10	64QAM	25	25	19.22			
10	64QAM	50	0	19.21			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.04	22.08	22.10	23.7
5	QPSK	1	12	22.18	22.10	22.13	
5	QPSK	1	24	22.11	22.12	22.14	
5	QPSK	12	0	21.14	21.18	21.17	22.7
5	QPSK	12	7	21.27	21.18	21.20	
5	QPSK	12	13	21.32	21.23	21.13	
5	QPSK	25	0	21.24	21.15	21.21	22.7
5	16QAM	1	0	21.36	21.35	21.42	
5	16QAM	1	12	21.47	21.47	21.42	
5	16QAM	1	24	21.55	21.44	21.44	21.7
5	16QAM	12	0	20.15	20.21	20.17	
5	16QAM	12	7	20.20	20.25	20.29	
5	16QAM	12	13	20.22	20.20	20.19	21.7
5	16QAM	25	0	20.24	20.17	20.23	
5	64QAM	1	0	20.27	20.34	20.47	
5	64QAM	1	12	20.39	20.35	20.37	21.7
5	64QAM	1	24	20.53	20.37	20.31	
5	64QAM	12	0	19.25	19.27	19.23	
5	64QAM	12	7	19.29	19.22	19.33	20.7
5	64QAM	12	13	19.31	19.33	19.25	
5	64QAM	25	0	19.27	19.21	19.27	



Band 66											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	23.95	23.87	23.78	25.1				
20	QPSK	1	49	23.82	23.71	23.70					
20	QPSK	1	99	23.90	23.75	23.72					
20	QPSK	50	0	23.58	23.46	23.44					
20	QPSK	50	24	23.65	23.51	23.52	24.7				
20	QPSK	50	50	23.59	23.44	23.44					
20	QPSK	100	0	23.66	23.48	23.44					
20	16QAM	1	0	23.84	23.76	23.74					
20	16QAM	1	49	23.76	23.58	23.60	24.7				
20	16QAM	1	99	23.86	23.63	23.54					
20	16QAM	50	0	22.59	22.47	22.45					
20	16QAM	50	24	22.67	22.52	22.45					
20	16QAM	50	50	22.63	22.46	22.47	23.7				
20	16QAM	100	0	22.64	22.49	22.45					
20	64QAM	1	0	22.73	22.62	22.56					
20	64QAM	1	49	22.68	22.49	22.53					
20	64QAM	1	99	22.74	22.56	22.48	22.7				
20	64QAM	50	0	21.61	21.49	21.49					
20	64QAM	50	24	21.67	21.52	21.53					
20	64QAM	50	50	21.66	21.49	21.49					
20	64QAM	100	0	21.67	21.50	21.44					
Channel				132047	132322	132597	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	23.91	23.81	23.79	25.1				
15	QPSK	1	37	23.81	23.70	23.70					
15	QPSK	1	74	23.94	23.74	23.74					
15	QPSK	36	0	23.67	23.46	23.45					
15	QPSK	36	20	23.65	23.46	23.42	24.7				
15	QPSK	36	39	23.62	23.44	23.47					
15	QPSK	75	0	23.65	23.50	23.46					
15	16QAM	1	0	23.82	23.70	23.73					
15	16QAM	1	37	23.74	23.60	23.64	24.7				
15	16QAM	1	74	23.85	23.63	23.61					
15	16QAM	36	0	22.66	22.45	22.46					
15	16QAM	36	20	22.65	22.46	22.42					
15	16QAM	36	39	22.63	22.47	22.45	23.7				
15	16QAM	75	0	22.65	22.51	22.45					
15	64QAM	1	0	22.66	22.61	22.53					
15	64QAM	1	37	22.62	22.50	22.49					
15	64QAM	1	74	22.74	22.57	22.53	22.7				
15	64QAM	36	0	21.66	21.50	21.53					
15	64QAM	36	20	21.66	21.49	21.46					
15	64QAM	36	39	21.68	21.50	21.50					
15	64QAM	75	0	21.66	21.51	21.47					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	23.94	23.77	23.81	25.1				
10	QPSK	1	25	23.89	23.75	23.79					
10	QPSK	1	49	23.92	23.75	23.80					
10	QPSK	25	0	23.63	23.43	23.44					
10	QPSK	25	12	23.64	23.50	23.44	24.7				
10	QPSK	25	25	23.65	23.47	23.52					
10	QPSK	50	0	23.67	23.52	23.48					
10	16QAM	1	0	23.63	23.79	23.80					
10	16QAM	1	25	23.89	23.73	23.77	24.7				
10	16QAM	1	49	23.89	23.71	23.78					
10	16QAM	25	0	22.61	22.43	22.44					
10	16QAM	25	12	22.70	22.52	22.47					
10	16QAM	25	25	22.62	22.46	22.51	23.7				
10	16QAM	50	0	22.65	22.46	22.45					
10	64QAM	1	0	22.79	22.63	22.61					
10	64QAM	1	25	22.82	22.63	22.70					
10	64QAM	1	49	22.84	22.64	22.67	22.7				
10	64QAM	25	0	21.66	21.48	21.49					
10	64QAM	25	12	21.70	21.54	21.50					
10	64QAM	25	25	21.64	21.50	21.55					
10	64QAM	50	0	21.68	21.56	21.49					
Channel				131997	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	23.94	23.73	23.81	25.1				
5	QPSK	1	12	23.94	23.80	23.85					
5	QPSK	1	24	23.93	23.75	23.79					
5	QPSK	12	0	23.63	23.42	23.50					
5	QPSK	12	7	23.69	23.52	23.52	24.7				
5	QPSK	12	13	23.64	23.45	23.47					
5	QPSK	25	0	23.63	23.45	23.50					
5	16QAM	1	0	23.86	23.71	23.76					
5	16QAM	1	12	23.89	23.74	23.75	24.7				
5	16QAM	1	24	23.86	23.71	23.75					
5	16QAM	12	0	22.67	22.46	22.54					
5	16QAM	12	7	22.69	22.50	22.56					
5	16QAM	12	13	22.66	22.52	22.54	23.7				
5	16QAM	25	0	22.68	22.52	22.54					
5	64QAM	1	0	22.82	22.63	22.72					
5	64QAM	1	12	22.82	22.64	22.68					
5	64QAM	1	24	22.84	22.64	22.67	22.7				
5	64QAM	12	0	21.71	21.50	21.59					
5	64QAM	12	7	21.72	21.57	21.62					
5	64QAM	12	13	21.73	21.52	21.59					
5	64QAM	25	0	21.66	21.50	21.54					
Channel				131987	132322	132657	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1779.3					
3	QPSK	1	0	23.88	23.73	23.77	25.1				
3	QPSK	1	8	23.83	23.74	23.83					
3	QPSK	1	14	23.84	23.73	23.74					
3	QPSK	8	0	23.57	23.35	23.45					
3	QPSK	8	4	23.64	23.45	23.46	24.7				
3	QPSK	8	7	23.61	23.43	23.40					
3	QPSK	15	0	23.63	23.36	23.47					
3	16QAM	1	0	23.77	23.61	23.73					
3	16QAM	1	8	23.83	23.64	23.70	24.7				
3	16QAM	1	14	23.79	23.61	23.74					
3	16QAM	8	0	22.66	22.38	22.52					
3	16QAM	8	4	22.64	22.40	22.54					
3	16QAM	8	7	22.59	22.49	22.50	23.7				
3	16QAM	15	0	22.66	22.50	22.47					
3	64QAM	1	0	22.73	22.55	22.71					
3	64QAM	1	8	22.77	22.62	22.59					
3	64QAM	1	14	22.84	22.54	22.65	22.7				
3	64QAM	8	0	21.71	21.46	21.56					
3	64QAM	8	4	21.66	21.51	21.56					
3	64QAM	8	7	21.71	21.47	21.58					
3	64QAM	15	0	21.56	21.45	21.51					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	23.85	23.74	23.70	25.1				
1.4	QPSK	1	3	23.86	23.72	23.77					
1.4	QPSK	1	5	23.84	23.76	23.72					
1.4	QPSK	3	0	23.86	23.71	23.78					
1.4	QPSK	3	1	23.61	23.74	23.80	24.7				
1.4	QPSK	3	3	23.82	23.71	23.74					
1.4	QPSK	6	0	23.54	23.38	23.40					
1.4	16QAM	1	0	23.73	23.60	23.68					
1.4	16QAM	1	3	23.82	23.66	23.76	24.7				
1.4	16QAM	1	5	23.73	23.62	23.67					
1.4	16QAM	3	0	23.54	23.41	23.43	23.7				
1.4	16QAM	3	3	23.60	23.45	23.46					
1.4	16QAM	6	0	22.56	22.32	22.35					
1.4	16QAM	1	0	22.70	22.57	22.60					
1.4	16QAM	1	3	22.75	22.62	22.63	22.7				
1.4	16QAM	1	5	22.67	22.54	22.57					
1.4	64QAM	3	0	22.67	22.54	22.58					
1.4	64QAM	3	1	22.71	22.57	22.61					
1.4	64QAM	3	3	22.87	22.51	22.56	22.7				
1.4	64QAM	3	5	22.83	22.46	22.51					
1.4	64QAM	6	0	21.69	21.45	21.44					
1.4	64QAM	3	3	22.87	22.51	22.56					



Band 71							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.39	24.32	24.28	25.7
20	QPSK	1	49	24.21	24.25	24.28	
20	QPSK	1	99	24.24	24.21	24.14	
20	QPSK	50	0	23.39	23.37	23.38	24.7
20	QPSK	50	24	23.50	23.42	23.32	
20	QPSK	50	50	23.45	23.39	23.33	
20	QPSK	100	0	23.46	23.30	23.37	24.7
20	16QAM	1	0	23.69	23.66	23.66	
20	16QAM	1	49	23.56	23.55	23.57	
20	16QAM	1	99	23.81	23.58	23.54	23.7
20	16QAM	50	0	22.46	22.32	22.40	
20	16QAM	50	24	22.42	22.33	22.39	
20	16QAM	50	50	22.42	22.39	22.39	23.7
20	16QAM	100	0	22.46	22.34	22.42	
20	64QAM	1	0	21.73	22.29	22.52	
20	64QAM	1	49	22.23	22.43	21.81	23.7
20	64QAM	1	99	22.50	22.00	22.43	
20	64QAM	50	0	20.70	21.36	21.01	
20	64QAM	50	24	20.85	21.40	21.15	22.7
20	64QAM	50	50	21.49	21.04	21.37	
20	64QAM	100	0	21.05	21.35	21.45	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.23	24.27	24.23	25.7
15	QPSK	1	37	24.23	24.18	24.22	
15	QPSK	1	74	24.28	24.26	24.14	
15	QPSK	36	0	23.41	23.31	23.37	24.7
15	QPSK	36	20	23.45	23.30	23.34	
15	QPSK	36	39	23.36	23.40	23.35	
15	QPSK	75	0	23.36	23.35	23.34	24.7
15	16QAM	1	0	23.68	23.64	23.56	
15	16QAM	1	37	23.38	23.54	23.52	
15	16QAM	1	74	23.54	23.51	23.54	23.7
15	16QAM	36	0	22.28	22.39	22.28	
15	16QAM	36	20	22.31	22.34	22.43	
15	16QAM	36	39	22.45	22.37	22.38	23.7
15	16QAM	75	0	22.45	22.32	22.35	
15	64QAM	1	0	21.71	22.45	22.43	
15	64QAM	1	37	21.70	22.51	22.51	23.7
15	64QAM	1	74	22.41	22.16	22.49	
15	64QAM	36	0	20.70	21.34	20.97	
15	64QAM	36	20	20.44	21.43	21.36	22.7
15	64QAM	36	39	21.00	20.91	21.37	
15	64QAM	75	0	20.86	21.39	21.33	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.27	24.17	24.29	25.7
10	QPSK	1	25	24.19	24.16	24.20	
10	QPSK	1	49	24.17	24.27	24.18	
10	QPSK	25	0	23.33	23.31	23.33	24.7
10	QPSK	25	12	23.33	23.43	23.26	
10	QPSK	25	25	23.24	23.30	23.27	
10	QPSK	50	0	23.41	23.40	23.28	24.7
10	16QAM	1	0	23.71	23.36	23.60	
10	16QAM	1	25	23.62	23.63	23.53	
10	16QAM	1	49	23.62	23.61	23.47	23.7
10	16QAM	25	0	22.27	22.28	22.30	
10	16QAM	25	12	22.28	22.38	22.33	
10	16QAM	25	25	22.14	22.38	22.23	23.7
10	16QAM	50	0	22.32	22.42	22.24	
10	64QAM	1	0	21.75	21.80	22.44	
10	64QAM	1	25	21.73	22.52	22.48	23.7
10	64QAM	1	49	21.70	22.46	22.13	
10	64QAM	25	0	20.70	21.34	21.35	
10	64QAM	25	12	20.33	21.41	21.36	22.7
10	64QAM	25	25	20.40	21.38	21.31	
10	64QAM	50	0	20.33	21.35	21.30	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.07	24.21	24.21	25.7
5	QPSK	1	12	24.33	24.20	24.17	
5	QPSK	1	24	24.22	24.20	24.18	
5	QPSK	12	0	23.33	23.35	23.25	24.7
5	QPSK	12	7	23.30	23.36	23.33	
5	QPSK	12	13	23.32	23.30	23.28	
5	QPSK	25	0	23.32	23.37	23.25	24.7
5	16QAM	1	0	23.51	23.53	23.57	
5	16QAM	1	12	23.51	23.55	23.55	
5	16QAM	1	24	23.48	23.53	23.47	23.7
5	16QAM	12	0	22.16	22.40	22.33	
5	16QAM	12	7	22.31	22.37	22.34	
5	16QAM	12	13	22.38	22.34	22.27	23.7
5	16QAM	25	0	22.24	22.39	22.29	
5	64QAM	1	0	21.78	21.74	22.47	
5	64QAM	1	12	21.72	22.51	22.39	23.7
5	64QAM	1	24	21.70	22.56	21.87	
5	64QAM	12	0	20.70	21.16	21.31	
5	64QAM	12	7	20.42	21.41	21.39	22.7
5	64QAM	12	13	20.40	21.40	21.19	
5	64QAM	25	0	20.23	21.10	21.23	



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. 7	Power Middle Ch. 7	Power High Ch. 7	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	17.61	17.61	17.62	18.9
20	QPSK	1	49	17.55	17.62	17.50	
20	QPSK	1	99	17.56	17.62	17.56	
20	QPSK	50	0	17.63	17.69	17.73	18.9
20	QPSK	50	24	17.77	17.74	17.75	
20	QPSK	50	50	17.72	17.74	17.71	
20	QPSK	100	0	17.74	17.71	17.72	18.9
20	16QAM	1	0	17.97	17.96	17.96	
20	16QAM	1	49	17.93	17.95	17.89	
20	16QAM	1	99	17.86	17.93	17.88	18.9
20	16QAM	50	0	17.88	17.70	17.72	
20	16QAM	50	24	17.76	17.76	17.75	
20	16QAM	50	50	17.73	17.74	17.74	18.9
20	16QAM	100	0	17.72	17.71	17.71	
20	64QAM	1	0	17.81	17.77	17.87	
20	64QAM	1	49	17.75	17.84	17.78	18.9
20	64QAM	1	99	17.80	17.81	17.74	
20	64QAM	50	0	17.67	17.73	17.74	
20	64QAM	50	24	17.76	17.76	17.77	18.9
20	64QAM	50	50	17.75	17.74	17.76	
20	64QAM	100	0	17.73	17.72	17.74	
Channel				1867.5	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	17.54	17.57	17.56	18.9
15	QPSK	1	37	17.45	17.52	17.45	
15	QPSK	1	74	17.54	17.52	17.52	
15	QPSK	36	0	17.58	17.65	17.63	18.9
15	QPSK	36	20	17.68	17.66	17.67	
15	QPSK	36	39	17.64	17.72	17.71	
15	QPSK	75	0	17.72	17.65	17.71	18.9
15	16QAM	1	0	17.93	17.96	17.94	
15	16QAM	1	37	17.88	17.87	17.89	
15	16QAM	1	74	17.84	17.84	17.81	18.9
15	16QAM	36	0	17.58	17.70	17.62	
15	16QAM	36	20	17.74	17.77	17.72	
15	16QAM	36	39	17.73	17.70	17.66	18.9
15	16QAM	75	0	17.64	17.69	17.65	
15	64QAM	1	0	17.76	17.73	17.79	
15	64QAM	1	37	17.69	17.74	17.70	18.9
15	64QAM	1	74	17.72	17.80	17.72	
15	64QAM	36	0	17.64	17.66	17.73	
15	64QAM	36	20	17.68	17.72	17.68	18.9
15	64QAM	36	39	17.67	17.73	17.74	
15	64QAM	75	0	17.64	17.66	17.73	
Channel				18650	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	17.52	17.61	17.55	18.9
10	QPSK	1	25	17.51	17.52	17.42	
10	QPSK	1	49	17.53	17.53	17.49	
10	QPSK	25	0	17.59	17.61	17.63	18.9
10	QPSK	25	12	17.74	17.73	17.70	
10	QPSK	25	25	17.72	17.70	17.68	
10	QPSK	50	0	17.70	17.65	17.67	18.9
10	16QAM	1	0	17.91	17.97	17.95	
10	16QAM	1	25	17.91	17.96	17.98	
10	16QAM	1	49	17.84	17.93	17.82	18.9
10	16QAM	25	0	17.67	17.65	17.63	
10	16QAM	25	12	17.75	17.75	17.66	
10	16QAM	25	25	17.71	17.73	17.64	18.9
10	16QAM	50	0	17.67	17.64	17.69	
10	64QAM	1	0	17.76	17.76	17.77	
10	64QAM	1	25	17.74	17.84	17.74	18.9
10	64QAM	1	49	17.71	17.81	17.69	
10	64QAM	25	0	17.64	17.69	17.73	
10	64QAM	25	12	17.74	17.72	17.68	18.9
10	64QAM	25	25	17.69	17.69	17.70	
10	64QAM	50	0	17.69	17.71	17.65	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	17.54	17.52	17.58	18.9
5	QPSK	1	12	17.46	17.58	17.40	
5	QPSK	1	24	17.51	17.54	17.49	
5	QPSK	12	0	17.63	17.67	17.68	18.9
5	QPSK	12	7	17.68	17.69	17.70	
5	QPSK	12	13	17.66	17.73	17.69	
5	QPSK	25	0	17.69	17.62	17.70	18.9
5	16QAM	1	0	17.96	17.96	17.98	
5	16QAM	1	12	17.90	17.94	17.88	
5	16QAM	1	24	17.85	17.86	17.85	18.9
5	16QAM	12	0	17.69	17.66	17.71	
5	16QAM	12	7	17.73	17.76	17.75	
5	16QAM	12	13	17.72	17.65	17.66	18.9
5	16QAM	25	0	17.69	17.62	17.69	
5	64QAM	1	0	17.75	17.77	17.84	
5	64QAM	1	12	17.65	17.77	17.76	18.9
5	64QAM	1	24	17.76	17.78	17.74	
5	64QAM	12	0	17.64	17.72	17.70	
5	64QAM	12	7	17.68	17.68	17.71	18.9
5	64QAM	12	13	17.68	17.74	17.67	
5	64QAM	25	0	17.69	17.64	17.65	
Channel				18615	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	17.54	17.56	17.55	18.9
3	QPSK	1	8	17.45	17.55	17.43	
3	QPSK	1	14	17.47	17.58	17.47	
3	QPSK	8	0	17.60	17.65	17.72	18.9
3	QPSK	8	4	17.70	17.73	17.75	
3	QPSK	8	7	17.67	17.67	17.65	
3	QPSK	15	0	17.71	17.67	17.64	18.9
3	16QAM	1	0	17.91	17.91	17.98	
3	16QAM	1	8	17.89	17.85	17.82	
3	16QAM	1	14	17.86	17.93	17.88	18.9
3	16QAM	8	0	17.60	17.62	17.68	
3	16QAM	8	4	17.66	17.78	17.74	
3	16QAM	8	7	17.70	17.69	17.64	18.9
3	16QAM	15	0	17.67	17.71	17.71	
3	64QAM	1	0	17.73	17.67	17.66	
3	64QAM	1	8	17.67	17.75	17.77	18.9
3	64QAM	1	14	17.71	17.78	17.71	
3	64QAM	8	0	17.67	17.64	17.74	
3	64QAM	8	4	17.76	17.69	17.70	18.9
3	64QAM	8	7	17.71	17.69	17.76	
3	64QAM	15	0	17.71	17.72	17.69	
Channel				18607	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	17.49	17.58	17.46	18.9
1.4	QPSK	1	3	17.54	17.65	17.58	
1.4	QPSK	1	5	17.53	17.61	17.49	
1.4	QPSK	3	0	17.55	17.63	17.50	18.9
1.4	QPSK	3	1	17.61	17.67	17.63	
1.4	QPSK	3	3	17.59	17.64	17.54	
1.4	QPSK	6	0	17.64	17.67	17.58	18.9
1.4	16QAM	1	0	17.81	17.90	17.81	
1.4	16QAM	1	3	17.84	17.97	17.84	
1.4	16QAM	1	5	17.78	17.90	17.78	18.9
1.4	16QAM	3	0	17.65	17.74	17.53	
1.4	16QAM	3	1	17.71	17.79	17.64	
1.4	16QAM	3	3	17.62	17.74	17.53	18.9
1.4	16QAM	6	0	17.71	17.75	17.65	
1.4	64QAM	1	0	17.74	17.86	17.69	
1.4	64QAM	1	3	17.81	17.90	17.80	18.9
1.4	64QAM	1	5	17.73	17.83	17.72	
1.4	64QAM	3	0	17.72	17.82	17.70	
1.4	64QAM	3	1	17.79	17.88	17.74	18.9
1.4	64QAM	3	3	17.73	17.82	17.72	
1.4	64QAM	6	0	17.65	17.73	17.60	



Band 4							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	20.05	20.09	19.99	21.1
20	QPSK	1	49	19.93	19.92	19.91	
20	QPSK	1	99	19.95	19.92	19.90	
20	QPSK	50	0	20.10	20.09	20.01	
20	QPSK	50	24	20.16	20.08	20.00	21.1
20	QPSK	50	50	20.07	20.01	19.96	
20	QPSK	100	0	20.11	20.13	19.90	
20	16QAM	1	0	20.39	20.41	20.33	
20	16QAM	1	49	20.25	20.23	20.16	21.1
20	16QAM	1	99	20.30	20.17	20.07	
20	16QAM	50	0	20.13	20.11	20.02	
20	16QAM	50	24	20.15	20.13	20.05	
20	16QAM	50	50	20.10	20.04	19.96	21.1
20	16QAM	100	0	20.12	20.11	19.95	
20	64QAM	1	0	20.21	20.25	20.19	
20	64QAM	1	49	20.13	20.07	20.08	
20	64QAM	1	99	20.16	20.09	20.11	21.1
20	64QAM	50	0	20.14	20.16	20.07	
20	64QAM	50	24	20.15	20.11	20.07	
20	64QAM	50	50	20.09	20.04	19.99	
20	64QAM	100	0	20.12	20.10	19.96	Tune-up limit (dBm)
Channel				20050	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	20.03	20.00	19.92	21.1
15	QPSK	1	37	19.93	19.91	19.90	
15	QPSK	1	74	19.95	19.92	19.92	
15	QPSK	36	0	20.08	20.01	19.93	
15	QPSK	36	20	20.11	20.02	19.90	21.1
15	QPSK	36	39	19.99	19.99	19.90	
15	QPSK	75	0	20.02	20.12	19.91	
15	16QAM	1	0	20.39	20.32	20.23	
15	16QAM	1	37	20.26	20.23	20.06	21.1
15	16QAM	1	74	20.23	20.10	20.00	
15	16QAM	36	0	20.03	20.06	20.01	
15	16QAM	36	20	20.14	20.09	20.01	
15	16QAM	36	39	20.05	20.04	19.91	21.1
15	16QAM	75	0	20.09	20.05	19.96	
15	64QAM	1	0	20.12	20.20	20.14	
15	64QAM	1	37	20.04	19.98	19.98	
15	64QAM	1	74	20.14	20.04	20.07	21.1
15	64QAM	36	0	20.07	20.06	20.01	
15	64QAM	36	20	20.10	20.10	19.98	
15	64QAM	36	39	20.04	20.03	19.96	
15	64QAM	75	0	20.08	20.03	19.90	Tune-up limit (dBm)
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	20.01	20.03	19.98	21.1
10	QPSK	1	25	19.91	19.92	19.93	
10	QPSK	1	49	19.90	19.94	19.91	
10	QPSK	25	0	20.08	20.02	19.91	
10	QPSK	25	12	20.07	19.99	19.91	21.1
10	QPSK	25	25	19.98	20.00	19.96	
10	QPSK	50	0	20.10	20.05	19.92	
10	16QAM	1	0	20.34	20.32	20.27	
10	16QAM	1	25	20.17	20.21	20.08	21.1
10	16QAM	1	49	20.20	20.11	20.06	
10	16QAM	25	0	20.12	20.01	19.98	
10	16QAM	25	12	20.05	20.05	20.01	
10	16QAM	25	25	20.10	19.95	19.92	21.1
10	16QAM	50	0	20.05	20.07	19.93	
10	64QAM	1	0	20.16	20.18	20.13	
10	64QAM	1	25	20.10	19.99	20.01	
10	64QAM	1	49	20.07	20.05	20.07	21.1
10	64QAM	25	0	20.14	20.12	20.04	
10	64QAM	25	12	20.06	20.04	20.00	
10	64QAM	25	25	20.02	20.04	19.93	
10	64QAM	50	0	20.02	20.10	19.94	Tune-up limit (dBm)
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	19.95	20.09	19.90	21.1
5	QPSK	1	12	19.95	19.92	19.90	
5	QPSK	1	24	19.94	19.92	19.91	
5	QPSK	12	0	20.04	20.01	19.93	
5	QPSK	12	7	20.07	19.99	19.97	21.1
5	QPSK	12	13	20.00	19.95	19.92	
5	QPSK	25	0	20.10	20.06	19.91	
5	16QAM	1	0	20.37	20.41	20.30	
5	16QAM	1	12	20.24	20.16	20.12	21.1
5	16QAM	1	24	20.27	20.15	19.97	
5	16QAM	12	0	20.08	20.06	19.97	
5	16QAM	12	7	20.10	20.10	19.96	
5	16QAM	12	13	20.07	19.95	19.90	21.1
5	16QAM	25	0	20.07	20.06	19.93	
5	64QAM	1	0	20.15	20.25	20.16	
5	64QAM	1	12	20.03	20.01	20.08	
5	64QAM	1	24	20.13	20.03	20.06	21.1
5	64QAM	12	0	20.10	20.15	19.99	
5	64QAM	12	7	20.15	20.03	20.05	
5	64QAM	12	13	20.00	20.02	19.95	
5	64QAM	25	0	20.08	20.08	19.90	Tune-up limit (dBm)
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	19.98	20.07	19.95	21.1
3	QPSK	1	8	19.94	19.91	19.92	
3	QPSK	1	14	19.94	19.91	19.90	
3	QPSK	8	0	20.01	20.05	19.99	
3	QPSK	8	4	20.12	19.96	20.00	21.1
3	QPSK	8	7	20.04	19.96	19.93	
3	QPSK	15	0	20.03	20.12	19.91	
3	16QAM	1	0	20.33	20.36	20.26	
3	16QAM	1	8	20.17	20.14	20.14	21.1
3	16QAM	1	14	20.22	20.10	20.01	
3	16QAM	8	0	20.06	20.05	19.96	
3	16QAM	8	4	20.11	20.07	20.01	
3	16QAM	8	7	20.06	19.95	19.90	21.1
3	16QAM	15	0	20.04	20.06	19.95	
3	64QAM	1	0	20.14	20.25	20.16	
3	64QAM	1	8	20.06	19.97	20.07	
3	64QAM	1	14	20.14	20.06	20.05	21.1
3	64QAM	8	0	20.07	20.14	20.01	
3	64QAM	8	4	20.14	20.01	20.03	
3	64QAM	8	7	20.04	19.97	19.96	
3	64QAM	15	0	20.04	20.07	19.91	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	19.95	19.93	19.92	21.1
1.4	QPSK	1	3	20.01	19.97	19.94	
1.4	QPSK	1	5	19.91	19.94	19.90	
1.4	QPSK	3	0	19.98	19.91	19.90	
1.4	QPSK	3	1	20.02	19.95	19.90	21.1
1.4	QPSK	3	3	19.99	19.90	19.92	
1.4	QPSK	6	0	20.04	20.00	19.92	
1.4	16QAM	1	0	20.27	20.16	20.10	
1.4	16QAM	1	3	20.30	20.25	20.15	21.1
1.4	16QAM	1	5	20.25	20.21	20.08	
1.4	16QAM	3	0	20.02	19.95	19.93	
1.4	16QAM	3	1	20.05	20.01	19.96	
1.4	16QAM	3	3	20.01	19.94	19.91	21.1
1.4	16QAM	6	0	20.12	20.03	19.96	
1.4	64QAM	1	0	20.23	20.17	20.02	
1.4	64QAM	1	3	20.27	20.20	20.04	
1.4	64QAM	1	5	20.22	20.13	19.94	21.1
1.4	64QAM	3	0	20.18	20.12	19.98	
1.4	64QAM	3	1	20.23	20.18	20.04	
1.4	64QAM	3	3	20.17	20.13	19.98	
1.4	64QAM	6	0	20.04	20.00	19.90	21.1



Band 5									
Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				20450	20525	20600			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	24.09	24.12	24.20	25.7		
10	QPSK	1	25	23.99	24.14	24.15			
10	QPSK	1	49	24.18	24.24	24.16			
10	QPSK	25	0	23.22	23.22	23.21	24.7		
10	QPSK	25	12	23.27	23.24	23.31			
10	QPSK	25	25	23.28	23.28	23.27			
10	QPSK	50	0	23.24	23.26	23.25	24.7		
10	16QAM	1	0	23.42	23.48	23.50			
10	16QAM	1	25	23.44	23.49	23.50			
10	16QAM	1	49	23.55	23.64	23.48	24.7		
10	16QAM	25	0	22.17	22.28	22.24			
10	16QAM	25	12	22.32	22.27	22.30			
10	16QAM	25	25	22.19	22.25	22.38	23.7		
10	16QAM	50	0	22.31	22.26	22.33			
10	64QAM	1	0	22.88	22.77	22.89			
10	64QAM	1	25	22.95	22.74	22.89	23.7		
10	64QAM	1	49	22.95	22.56	22.14			
10	64QAM	25	0	21.70	21.80	21.85			
10	64QAM	25	12	21.81	21.83	21.85	22.7		
10	64QAM	25	25	21.83	21.79	21.64			
10	64QAM	50	0	21.88	21.80	21.51			
Channel				20425	20525	20625	Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	24.19	24.13	24.18	25.7		
5	QPSK	1	12	24.09	24.21	23.89			
5	QPSK	1	24	24.08	24.12	23.96			
5	QPSK	12	0	23.30	23.27	23.23	24.7		
5	QPSK	12	7	23.23	23.30	23.00			
5	QPSK	12	13	23.14	23.23	23.05			
5	QPSK	25	0	23.22	23.21	23.15	24.7		
5	16QAM	1	0	23.57	23.50	23.47			
5	16QAM	1	12	23.39	23.54	23.21			
5	16QAM	1	24	23.39	23.55	23.17	24.7		
5	16QAM	12	0	22.28	22.34	22.26			
5	16QAM	12	7	22.20	22.31	22.18			
5	16QAM	12	13	22.19	22.30	22.22	23.7		
5	16QAM	25	0	22.26	22.22	22.30			
5	64QAM	1	0	22.94	22.94	22.53			
5	64QAM	1	12	22.83	22.89	21.92	23.7		
5	64QAM	1	24	22.81	22.82	21.84			
5	64QAM	12	0	21.84	21.90	21.18			
5	64QAM	12	7	21.75	21.81	20.82	22.7		
5	64QAM	12	13	21.78	21.83	21.71			
5	64QAM	25	0	21.70	21.81	20.89			
Channel				20415	20525	20635	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	24.12	24.15	23.99	25.7		
3	QPSK	1	8	24.17	24.20	23.99			
3	QPSK	1	14	24.08	24.13	24.04			
3	QPSK	8	0	23.28	23.24	22.89	24.7		
3	QPSK	8	4	23.19	23.27	23.03			
3	QPSK	8	7	23.25	23.23	23.20			
3	QPSK	15	0	23.20	23.22	23.02	24.7		
3	16QAM	1	0	23.50	23.43	23.20			
3	16QAM	1	8	23.50	23.53	23.21			
3	16QAM	1	14	23.41	23.51	23.27	23.7		
3	16QAM	8	0	22.33	22.29	22.05			
3	16QAM	8	4	22.23	22.39	22.15			
3	16QAM	8	7	22.24	22.33	22.19	23.7		
3	16QAM	15	0	22.30	22.30	22.10			
3	64QAM	1	0	22.01	22.88	21.84			
3	64QAM	1	8	22.90	23.03	21.82	23.7		
3	64QAM	1	14	22.90	22.88	21.79			
3	64QAM	8	0	21.75	21.80	21.63			
3	64QAM	8	4	21.83	21.88	21.73	22.7		
3	64QAM	8	7	21.76	21.80	20.75			
3	64QAM	15	0	21.76	21.80	20.77			
Channel				20407	20525	20643	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.11	24.14	24.03	25.7		
1.4	QPSK	1	3	24.10	24.10	24.15			
1.4	QPSK	1	5	23.95	24.09	24.02			
1.4	QPSK	3	0	24.15	24.08	24.06	24.7		
1.4	QPSK	3	1	24.10	24.13	24.19			
1.4	QPSK	3	3	24.09	24.08	24.12			
1.4	QPSK	6	0	23.11	23.27	23.23	24.7		
1.4	16QAM	1	0	23.38	23.40	23.32			
1.4	16QAM	1	3	23.38	23.55	23.53			
1.4	16QAM	1	5	23.33	23.42	23.39	24.7		
1.4	16QAM	3	0	23.15	23.25	23.11			
1.4	16QAM	3	1	23.22	23.29	23.23			
1.4	16QAM	3	3	23.13	23.20	23.15	23.7		
1.4	16QAM	6	0	22.19	22.29	22.31			
1.4	64QAM	1	0	22.79	22.85	21.81			
1.4	64QAM	1	3	22.82	22.95	21.84	23.7		
1.4	64QAM	1	5	22.75	22.82	21.90			
1.4	64QAM	3	0	22.75	22.76	21.77			
1.4	64QAM	3	1	22.79	22.89	21.84	23.7		
1.4	64QAM	3	3	22.74	22.88	22.00			
1.4	64QAM	6	0	21.70	21.79	21.65			



Band 7							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.46	20.57	20.58	21.6
20	QPSK	1	49	20.52	20.66	20.62	
20	QPSK	1	99	20.62	20.72	20.83	
20	QPSK	50	0	20.58	20.71	20.69	
20	QPSK	50	24	20.68	20.75	20.72	21.6
20	QPSK	50	50	20.69	20.84	20.76	
20	QPSK	100	0	20.69	20.73	20.70	
20	16QAM	1	0	20.80	20.89	20.96	
20	16QAM	1	49	20.88	21.02	20.95	21.6
20	16QAM	1	99	21.02	21.11	21.00	
20	16QAM	50	0	20.56	20.72	20.70	
20	16QAM	50	24	20.73	20.76	20.73	
20	16QAM	50	50	20.71	20.85	20.80	21.6
20	16QAM	100	0	20.87	20.73	20.70	
20	64QAM	1	0	20.61	20.70	20.76	
20	64QAM	1	49	20.73	20.82	20.79	
20	64QAM	1	99	20.90	20.96	20.88	21.6
20	64QAM	50	0	20.59	20.71	20.69	
20	64QAM	50	24	20.71	20.76	20.73	
20	64QAM	50	50	20.73	20.84	20.77	
20	64QAM	100	0	20.71	20.75	20.69	Tune-up limit (dBm)
Channel				20855	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.47	20.42	20.43	21.6
15	QPSK	1	37	20.41	20.48	20.45	
15	QPSK	1	74	20.40	20.55	20.48	
15	QPSK	36	0	20.44	20.52	20.49	
15	QPSK	36	20	20.49	20.56	20.63	21.6
15	QPSK	36	39	20.50	20.63	20.57	
15	QPSK	75	0	20.45	20.54	20.58	
15	16QAM	1	0	20.63	20.78	20.73	
15	16QAM	1	37	20.68	20.82	20.75	21.6
15	16QAM	1	74	20.75	20.89	20.78	
15	16QAM	36	0	20.46	20.53	20.49	
15	16QAM	36	20	20.49	20.55	20.58	
15	16QAM	36	39	20.48	20.64	20.57	21.6
15	16QAM	75	0	20.46	20.56	20.59	
15	64QAM	1	0	20.49	20.59	20.62	
15	64QAM	1	37	20.57	20.74	20.67	
15	64QAM	1	74	20.59	20.78	20.70	21.6
15	64QAM	36	0	20.39	20.56	20.52	
15	64QAM	36	20	20.52	20.59	20.59	
15	64QAM	36	39	20.51	20.68	20.58	
15	64QAM	75	0	20.47	20.56	20.56	Tune-up limit (dBm)
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.43	20.40	20.47	21.6
10	QPSK	1	25	20.45	20.40	20.46	
10	QPSK	1	49	20.53	20.48	20.40	
10	QPSK	25	0	20.43	20.52	20.47	
10	QPSK	25	12	20.45	20.53	20.48	21.6
10	QPSK	25	25	20.46	20.59	20.54	
10	QPSK	50	0	20.44	20.55	20.47	
10	16QAM	1	0	20.62	20.74	20.71	
10	16QAM	1	25	20.64	20.81	20.73	21.6
10	16QAM	1	49	20.67	20.85	20.77	
10	16QAM	25	0	20.41	20.49	20.45	
10	16QAM	25	12	20.45	20.54	20.47	
10	16QAM	25	25	20.44	20.60	20.52	21.6
10	16QAM	50	0	20.45	20.52	20.47	
10	64QAM	1	0	20.52	20.62	20.61	
10	64QAM	1	25	20.56	20.76	20.70	
10	64QAM	1	49	20.56	20.76	20.72	21.6
10	64QAM	25	0	20.42	20.57	20.49	
10	64QAM	25	12	20.48	20.61	20.55	
10	64QAM	25	25	20.46	20.66	20.59	
10	64QAM	50	0	20.47	20.59	20.53	Tune-up limit (dBm)
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.40	20.40	20.40	21.6
5	QPSK	1	12	20.40	20.48	20.41	
5	QPSK	1	24	20.40	20.48	20.40	
5	QPSK	12	0	20.41	20.54	20.52	
5	QPSK	12	7	20.47	20.53	20.54	21.6
5	QPSK	12	13	20.44	20.61	20.51	
5	QPSK	25	0	20.44	20.55	20.52	
5	16QAM	1	0	20.68	20.75	20.73	
5	16QAM	1	12	20.62	20.73	20.70	21.6
5	16QAM	1	24	20.68	20.80	20.73	
5	16QAM	12	0	20.49	20.58	20.56	
5	16QAM	12	7	20.46	20.54	20.51	
5	16QAM	12	13	20.43	20.66	20.52	21.6
5	16QAM	25	0	20.42	20.55	20.55	
5	64QAM	1	0	20.52	20.68	20.65	
5	64QAM	1	12	20.50	20.75	20.65	
5	64QAM	1	24	20.54	20.74	20.65	21.6
5	64QAM	12	0	20.49	20.65	20.60	
5	64QAM	12	7	20.48	20.60	20.58	
5	64QAM	12	13	20.48	20.67	20.57	
5	64QAM	25	0	20.43	20.59	20.57	



Band 12							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.86	23.82	23.80	25.7
10	QPSK	1	25	23.75	23.83	23.77	
10	QPSK	1	49	23.69	23.89	23.81	
10	QPSK	25	0	22.95	22.92	22.90	24.7
10	QPSK	25	12	23.03	22.92	22.96	
10	QPSK	25	25	23.01	22.94	22.95	
10	QPSK	50	0	22.97	22.99	22.97	24.7
10	16QAM	1	0	23.25	23.19	23.16	
10	16QAM	1	25	23.25	23.24	23.10	
10	16QAM	1	49	23.30	23.28	23.19	23.7
10	16QAM	25	0	21.94	21.92	21.86	
10	16QAM	25	12	22.01	21.86	21.92	
10	16QAM	25	25	21.88	22.00	21.87	23.7
10	16QAM	50	0	22.02	21.94	21.98	
10	64QAM	1	0	22.58	22.53	22.59	
10	64QAM	1	25	22.63	22.67	22.64	23.7
10	64QAM	1	49	22.68	22.68	22.58	
10	64QAM	25	0	21.49	21.44	21.40	
10	64QAM	25	12	21.58	21.43	21.57	22.7
10	64QAM	25	25	21.47	21.47	21.41	
10	64QAM	50	0	21.59	21.45	21.45	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.88	23.80	23.79	25.7
5	QPSK	1	12	23.88	23.84	23.84	
5	QPSK	1	24	23.78	23.82	23.80	
5	QPSK	12	0	22.91	22.93	22.91	24.7
5	QPSK	12	7	23.00	22.89	22.96	
5	QPSK	12	13	22.93	22.94	22.85	
5	QPSK	25	0	22.99	22.87	22.91	24.7
5	16QAM	1	0	23.20	23.22	23.09	
5	16QAM	1	12	23.14	23.21	23.15	
5	16QAM	1	24	23.14	23.15	23.09	23.7
5	16QAM	12	0	21.99	21.98	21.94	
5	16QAM	12	7	21.98	21.89	21.93	
5	16QAM	12	13	21.96	21.92	21.87	23.7
5	16QAM	25	0	21.94	21.98	21.92	
5	64QAM	1	0	22.69	22.61	22.58	
5	64QAM	1	12	22.59	22.54	22.60	23.7
5	64QAM	1	24	22.66	22.63	22.56	
5	64QAM	12	0	21.51	21.50	21.41	
5	64QAM	12	7	21.50	21.45	21.50	22.7
5	64QAM	12	13	21.52	21.45	21.42	
5	64QAM	25	0	21.44	21.46	21.39	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.84	23.80	23.81	25.7
3	QPSK	1	8	23.85	23.94	23.80	
3	QPSK	1	14	23.85	23.83	23.77	
3	QPSK	8	0	23.01	22.94	22.90	24.7
3	QPSK	8	4	22.92	22.95	22.91	
3	QPSK	8	7	22.90	22.87	22.84	
3	QPSK	15	0	22.90	22.92	22.84	24.7
3	16QAM	1	0	23.24	23.13	23.17	
3	16QAM	1	8	23.19	23.23	23.16	
3	16QAM	1	14	23.23	23.22	23.18	23.7
3	16QAM	8	0	22.06	21.94	21.94	
3	16QAM	8	4	22.01	22.06	22.01	
3	16QAM	8	7	22.03	21.92	21.88	23.7
3	16QAM	15	0	22.01	21.96	21.86	
3	64QAM	1	0	22.70	22.60	22.53	
3	64QAM	1	8	22.68	22.72	22.60	23.7
3	64QAM	1	14	22.66	22.60	22.57	
3	64QAM	8	0	21.60	21.44	21.47	
3	64QAM	8	4	21.60	21.50	21.53	22.7
3	64QAM	8	7	21.47	21.45	21.41	
3	64QAM	15	0	21.45	21.39	21.36	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.80	23.74	23.79	25.7
1.4	QPSK	1	3	23.81	23.79	23.77	
1.4	QPSK	1	5	23.80	23.74	23.70	
1.4	QPSK	3	0	23.82	23.73	23.71	24.7
1.4	QPSK	3	1	23.84	23.75	23.79	
1.4	QPSK	3	3	23.76	23.75	23.71	
1.4	QPSK	6	0	22.97	22.78	22.79	24.7
1.4	16QAM	1	0	23.15	23.06	23.09	
1.4	16QAM	1	3	23.18	23.21	23.09	
1.4	16QAM	1	5	23.08	23.08	22.98	24.7
1.4	16QAM	3	0	22.96	22.81	22.80	
1.4	16QAM	3	1	22.96	22.87	22.88	
1.4	16QAM	3	3	22.92	22.88	22.78	23.7
1.4	16QAM	6	0	21.94	21.86	21.82	
1.4	64QAM	1	0	22.59	22.48	22.43	
1.4	64QAM	1	3	22.69	22.57	22.48	23.7
1.4	64QAM	1	5	22.55	22.46	22.43	
1.4	64QAM	3	0	22.57	22.51	22.45	
1.4	64QAM	3	1	22.55	22.45	22.53	22.7
1.4	64QAM	3	3	22.55	22.57	22.46	
1.4	64QAM	6	0	21.40	21.32	21.31	



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.60			25.2
10	QPSK	1	25	23.47			
10	QPSK	1	49	23.51			
10	QPSK	25	0	22.56			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.56			
10	QPSK	50	0	22.58			24.2
10	16QAM	1	0	22.75			
10	16QAM	1	25	22.82			
10	16QAM	1	49	22.76			23.2
10	16QAM	25	0	21.59			
10	16QAM	25	12	21.62			
10	16QAM	25	25	21.61			23.2
10	16QAM	50	0	21.57			
10	64QAM	1	0	23.07			
10	64QAM	1	25	23.04			23.2
10	64QAM	1	49	23.01			
10	64QAM	25	0	22.07			
10	64QAM	25	12	22.06			22.2
10	64QAM	25	25	22.02			
10	64QAM	50	0	22.04			
Channel				23206	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.50	23.45	23.49	25.2
5	QPSK	1	12	23.45	23.54	23.52	
5	QPSK	1	24	23.50	23.51	23.52	
5	QPSK	12	0	22.63	22.56	22.61	24.2
5	QPSK	12	7	22.67	22.64	22.67	
5	QPSK	12	13	22.67	22.62	22.62	
5	QPSK	25	0	22.64	22.57	22.55	24.2
5	16QAM	1	0	22.71	22.71	22.78	
5	16QAM	1	12	22.78	22.85	22.79	
5	16QAM	1	24	22.62	22.85	22.72	23.2
5	16QAM	12	0	21.70	21.62	21.68	
5	16QAM	12	7	21.68	21.57	21.60	
5	16QAM	12	13	21.69	21.60	21.70	23.2
5	16QAM	25	0	21.63	21.64	21.54	
5	64QAM	1	0	22.14	22.25	22.17	
5	64QAM	1	12	22.26	22.30	22.21	23.2
5	64QAM	1	24	22.26	22.23	22.15	
5	64QAM	12	0	21.19	21.11	21.20	
5	64QAM	12	7	21.24	21.14	21.08	22.2
5	64QAM	12	13	21.15	21.17	21.08	
5	64QAM	25	0	21.21	21.11	21.10	

Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.23		25.7
10	QPSK	1	25		24.12		
10	QPSK	1	49		24.04		
10	QPSK	25	0		23.11		24.7
10	QPSK	25	12		23.18		
10	QPSK	25	25		23.16		
10	QPSK	50	0		23.15		24.7
10	16QAM	1	0		23.49		
10	16QAM	1	25		23.41		
10	16QAM	1	49		23.37		23.7
10	16QAM	25	0		22.10		
10	16QAM	25	12		22.09		
10	16QAM	25	25		22.19		23.7
10	16QAM	50	0		22.16		
10	64QAM	1	0		22.81		
10	64QAM	1	25		22.86		23.7
10	64QAM	1	49		22.73		
10	64QAM	25	0		21.72		
10	64QAM	25	12		21.81		22.7
10	64QAM	25	25		21.67		
10	64QAM	50	0		21.68		
Channel				23306	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.98	24.04	24.05	25.7
5	QPSK	1	12	24.14	24.19	24.14	
5	QPSK	1	24	24.08	24.07	24.05	
5	QPSK	12	0	23.13	23.12	23.08	24.7
5	QPSK	12	7	23.21	23.21	23.14	
5	QPSK	12	13	23.14	23.16	23.12	
5	QPSK	25	0	23.11	23.12	23.03	24.7
5	16QAM	1	0	23.40	23.37	23.34	
5	16QAM	1	12	23.47	23.44	23.43	
5	16QAM	1	24	23.45	23.34	23.39	23.7
5	16QAM	12	0	22.13	22.09	22.10	
5	16QAM	12	7	22.24	22.13	22.18	
5	16QAM	12	13	22.15	22.19	22.15	23.7
5	16QAM	25	0	22.17	22.07	22.08	
5	64QAM	1	0	22.75	22.83	22.82	
5	64QAM	1	12	22.89	22.72	22.82	23.7
5	64QAM	1	24	22.71	22.89	22.80	
5	64QAM	12	0	21.63	21.70	21.65	
5	64QAM	12	7	21.69	21.72	21.71	22.7
5	64QAM	12	13	21.75	21.67	21.65	
5	64QAM	25	0	21.71	21.66	21.61	



Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.25	24.20	24.11	25.7
10	QPSK	1	25	24.30	24.36	24.15	
10	QPSK	1	49	24.30	24.21	24.20	
10	QPSK	25	0	23.29	23.30	23.28	24.7
10	QPSK	25	12	23.40	23.30	23.28	
10	QPSK	25	25	23.38	23.36	23.44	
10	QPSK	50	0	23.35	23.29	23.30	24.7
10	16QAM	1	0	23.62	23.59	23.59	
10	16QAM	1	25	23.66	23.61	23.58	
10	16QAM	1	49	23.60	23.63	23.62	23.7
10	16QAM	25	0	22.29	22.27	22.30	
10	16QAM	25	12	22.41	22.37	22.28	
10	16QAM	25	25	22.44	22.35	22.45	23.7
10	16QAM	50	0	22.37	22.35	22.25	
10	64QAM	1	0	23.01	22.91	22.99	
10	64QAM	1	25	23.11	23.02	23.01	22.7
10	64QAM	1	49	23.05	23.02	22.93	
10	64QAM	25	0	21.81	21.82	21.78	
10	64QAM	25	12	21.95	21.88	21.82	22.7
10	64QAM	25	25	21.89	21.92	21.97	
10	64QAM	50	0	21.05	21.82	21.85	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.16	24.23	24.17	25.7
5	QPSK	1	12	24.32	24.33	24.24	
5	QPSK	1	24	24.30	24.32	24.28	
5	QPSK	12	0	23.28	23.30	23.29	24.7
5	QPSK	12	7	23.31	23.30	23.32	
5	QPSK	12	13	23.40	23.37	23.34	
5	QPSK	25	0	23.34	23.27	23.38	24.7
5	16QAM	1	0	23.61	23.57	23.51	
5	16QAM	1	12	23.64	23.63	23.59	
5	16QAM	1	24	23.62	23.61	23.59	23.7
5	16QAM	12	0	22.38	22.40	22.27	
5	16QAM	12	7	22.39	22.35	22.30	
5	16QAM	12	13	22.34	22.35	22.30	23.7
5	16QAM	25	0	22.35	22.38	22.37	
5	64QAM	1	0	22.76	22.83	23.01	
5	64QAM	1	12	23.01	23.08	22.96	23.7
5	64QAM	1	24	23.04	23.07	22.97	
5	64QAM	12	0	21.93	21.92	21.91	
5	64QAM	12	7	21.96	21.91	21.94	22.7
5	64QAM	12	13	21.92	21.96	21.92	
5	64QAM	25	0	21.86	21.84	21.91	



Band 25									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	17.68	17.70	17.58	18.9		
20	QPSK	1	49	17.56	17.66	17.56			
20	QPSK	1	99	17.59	17.66	17.55			
20	QPSK	50	0	17.74	17.77	17.68			
20	QPSK	50	24	17.83	17.82	17.89	18.9		
20	QPSK	50	50	17.78	17.78	17.75			
20	QPSK	100	0	17.81	17.78	17.64			
20	16QAM	1	0	18.01	17.98	17.98			
20	16QAM	1	49	17.93	17.95	17.93	18.9		
20	16QAM	1	99	17.91	17.95	17.92			
20	16QAM	50	0	17.77	17.77	17.85			
20	16QAM	50	24	17.80	17.83	17.70			
20	16QAM	50	50	17.77	17.84	17.73	18.9		
20	16QAM	100	0	17.77	17.78	17.63			
20	64QAM	1	0	17.91	17.84	17.75			
20	64QAM	1	49	17.80	17.88	17.77			
20	64QAM	1	99	17.81	17.91	17.79	18.9		
20	64QAM	50	0	17.78	17.76	17.70			
20	64QAM	50	24	17.82	17.86	17.70			
20	64QAM	50	50	17.80	17.83	17.79			
20	64QAM	100	0	17.79	17.82	17.68	Tune-up limit (dBm)		
Channel				26115	26340	26615			
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	17.60	17.61	17.52	18.9		
15	QPSK	1	37	17.53	17.64	17.48			
15	QPSK	1	74	17.52	17.57	17.54			
15	QPSK	36	0	17.66	17.71	17.63			
15	QPSK	36	20	17.73	17.77	17.61	18.9		
15	QPSK	36	39	17.71	17.77	17.75			
15	QPSK	75	0	17.72	17.73	17.57			
15	16QAM	1	0	18.01	17.95	17.88			
15	16QAM	1	37	17.89	17.95	17.85	18.9		
15	16QAM	1	74	17.90	17.92	17.84			
15	16QAM	36	0	17.73	17.76	17.57			
15	16QAM	36	20	17.79	17.77	17.70			
15	16QAM	36	39	17.76	17.74	17.69	18.9		
15	16QAM	75	0	17.69	17.71	17.61			
15	64QAM	1	0	17.84	17.75	17.72			
15	64QAM	1	37	17.71	17.78	17.70			
15	64QAM	1	74	17.72	17.85	17.70	18.9		
15	64QAM	36	0	17.76	17.78	17.60			
15	64QAM	36	20	17.72	17.83	17.69			
15	64QAM	36	39	17.70	17.78	17.78			
15	64QAM	75	0	17.75	17.76	17.63	Tune-up limit (dBm)		
Channel				26090	26340	26640			
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	17.58	17.70	17.55	18.9		
10	QPSK	1	25	17.54	17.66	17.56			
10	QPSK	1	49	17.51	17.62	17.54			
10	QPSK	25	0	17.74	17.76	17.60			
10	QPSK	25	12	17.74	17.81	17.65	18.9		
10	QPSK	25	25	17.78	17.71	17.67			
10	QPSK	50	0	17.74	17.75	17.63			
10	16QAM	1	0	18.01	17.92	17.94			
10	16QAM	1	25	17.96	17.92	17.83	18.9		
10	16QAM	1	49	17.91	17.89	17.91			
10	16QAM	25	0	17.73	17.67	17.59			
10	16QAM	25	12	17.79	17.80	17.65			
10	16QAM	25	25	17.75	17.75	17.67	18.9		
10	16QAM	50	0	17.73	17.72	17.63			
10	64QAM	1	0	17.83	17.80	17.75			
10	64QAM	1	25	17.74	17.83	17.76			
10	64QAM	1	49	17.81	17.85	17.71	18.9		
10	64QAM	25	0	17.74	17.71	17.66			
10	64QAM	25	12	17.77	17.79	17.64			
10	64QAM	25	25	17.74	17.76	17.78			
10	64QAM	50	0	17.72	17.70	17.66	Tune-up limit (dBm)		
Channel				26065	26340	26665			
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	17.68	17.66	17.50	18.9		
5	QPSK	1	12	17.46	17.58	17.53			
5	QPSK	1	24	17.52	17.60	17.52			
5	QPSK	12	0	17.67	17.74	17.65			
5	QPSK	12	7	17.60	17.79	17.68	18.9		
5	QPSK	12	13	17.75	17.70	17.75			
5	QPSK	25	0	17.80	17.78	17.54			
5	16QAM	1	0	17.93	17.95	17.91			
5	16QAM	1	12	17.87	17.88	17.90	18.9		
5	16QAM	1	24	17.84	17.88	17.92			
5	16QAM	12	0	17.77	17.86	17.75			
5	16QAM	12	7	17.75	17.75	17.86			
5	16QAM	12	13	17.74	17.80	17.72	18.9		
5	16QAM	25	0	17.70	17.73	17.59			
5	64QAM	1	0	17.81	17.76	17.68			
5	64QAM	1	12	17.79	17.87	17.75			
5	64QAM	1	24	17.74	17.83	17.75	18.9		
5	64QAM	12	0	17.74	17.77	17.83			
5	64QAM	12	7	17.80	17.81	17.70			
5	64QAM	12	13	17.76	17.75	17.71			
5	64QAM	25	0	17.72	17.80	17.68	Tune-up limit (dBm)		
Channel				26055	26340	26675			
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	17.68	17.64	17.53	18.9		
3	QPSK	1	8	17.46	17.63	17.53			
3	QPSK	1	14	17.51	17.63	17.53			
3	QPSK	8	0	17.74	17.71	17.67			
3	QPSK	8	4	17.80	17.72	17.60	18.9		
3	QPSK	8	7	17.78	17.71	17.69			
3	QPSK	15	0	17.78	17.76	17.63			
3	16QAM	1	0	17.98	17.91	17.93			
3	16QAM	1	8	17.84	17.93	17.84	18.9		
3	16QAM	1	14	17.85	17.90	17.90			
3	16QAM	8	0	17.70	17.77	17.56			
3	16QAM	8	4	17.71	17.75	17.65			
3	16QAM	8	7	17.71	17.78	17.73	18.9		
3	16QAM	15	0	17.71	17.68	17.57			
3	64QAM	1	0	17.91	17.76	17.85			
3	64QAM	1	8	17.73	17.82	17.71			
3	64QAM	1	14	17.79	17.90	17.75	18.9		
3	64QAM	8	0	17.68	17.78	17.67			
3	64QAM	8	4	17.78	17.81	17.64			
3	64QAM	8	7	17.79	17.73	17.73			
3	64QAM	15	0	17.74	17.78	17.58	Tune-up limit (dBm)		
Channel				26047	26340	26683			
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	17.53	17.50	17.43	18.9		
1.4	QPSK	1	3	17.65	17.65	17.55			
1.4	QPSK	1	5	17.61	17.61	17.49			
1.4	QPSK	3	0	17.59	17.59	17.47			
1.4	QPSK	3	1	17.66	17.65	17.50	18.9		
1.4	QPSK	3	3	17.65	17.64	17.51			
1.4	QPSK	6	0	17.69	17.68	17.55			
1.4	16QAM	1	0	17.90	17.85	17.77	18.9		
1.4	16QAM	1	3	17.78	17.77	17.67			
1.4	16QAM	1	3	17.69	17.80	17.92			
1.4	16QAM	1	5	17.95	17.97	17.81			
1.4	16QAM	3	0	17.68	17.71	17.55	18.9		
1.4	16QAM	3	1	17.72	17.81	17.59			
1.4	16QAM	3	3	17.70	17.71	17.58			
1.4	16QAM	6	0	17.78	17.78	17.67			
1.4	64QAM	1	0	17.72	17.69	17.68	18.9		
1.4	64QAM	1	3	17.74	17.87	17.78			
1.4	64QAM	1	5	17.81	17.83	17.74			
1.4	64QAM	3	0	17.77	17.80	17.66			
1.4	64QAM	3	1	17.85	17.88	17.70	18.9		
1.4	64QAM	3	3	17.81	17.83	17.70			
1.4	64QAM	6	0	17.84	17.84	17.63			
1.4	64QAM	6	3	17.82	17.82	17.63			



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.04	24.05	24.03	25.7
15	QPSK	1	37	23.98	24.02	24.02	
15	QPSK	1	74	24.10	24.33	23.96	
15	QPSK	36	0	23.17	23.22	23.18	24.7
15	QPSK	36	20	23.23	23.18	23.12	
15	QPSK	36	39	23.19	23.19	23.15	
15	QPSK	75	0	23.23	23.17	23.12	24.7
15	16QAM	1	0	23.36	23.36	23.38	
15	16QAM	1	37	23.38	23.42	23.42	
15	16QAM	1	74	23.43	23.44	23.29	23.7
15	16QAM	36	0	22.16	22.22	22.16	
15	16QAM	36	20	22.17	22.15	22.16	
15	16QAM	36	39	22.14	22.17	22.23	23.7
15	16QAM	75	0	22.17	22.15	22.22	
15	64QAM	1	0	22.79	22.70	22.74	
15	64QAM	1	37	22.72	22.80	22.79	22.7
15	64QAM	1	74	22.80	22.76	22.16	
15	64QAM	36	0	21.64	21.76	21.77	
15	64QAM	36	20	21.66	21.73	21.65	22.7
15	64QAM	36	39	21.67	21.76	21.78	
15	64QAM	75	0	21.76	21.65	21.77	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.13	24.13	24.21	25.7
10	QPSK	1	25	24.03	24.13	24.12	
10	QPSK	1	49	24.09	24.17	24.09	
10	QPSK	25	0	23.22	23.12	23.21	24.7
10	QPSK	25	12	23.20	23.20	23.20	
10	QPSK	25	25	23.16	23.23	23.25	
10	QPSK	50	0	23.23	23.14	23.16	24.7
10	16QAM	1	0	23.45	23.52	23.59	
10	16QAM	1	25	23.55	23.51	23.52	
10	16QAM	1	49	23.53	23.49	23.45	23.7
10	16QAM	25	0	22.22	22.20	22.21	
10	16QAM	25	12	22.23	22.21	22.15	
10	16QAM	25	25	22.17	22.23	22.08	23.7
10	16QAM	50	0	22.20	22.19	22.19	
10	64QAM	1	0	22.96	22.76	22.91	
10	64QAM	1	25	22.81	22.91	22.98	23.7
10	64QAM	1	49	22.55	22.91	22.96	
10	64QAM	25	0	21.76	21.73	21.75	
10	64QAM	25	12	21.62	21.75	21.78	22.7
10	64QAM	25	25	21.70	21.75	21.48	
10	64QAM	50	0	21.74	21.68	21.72	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.31	24.13	24.11	25.7
5	QPSK	1	12	24.24	24.19	24.09	
5	QPSK	1	24	24.07	24.24	24.16	
5	QPSK	12	0	23.33	23.23	23.21	24.7
5	QPSK	12	7	23.27	23.27	23.22	
5	QPSK	12	13	23.26	23.24	23.11	
5	QPSK	25	0	23.28	23.13	23.20	24.7
5	16QAM	1	0	23.63	23.43	23.45	
5	16QAM	1	12	23.43	23.51	23.32	
5	16QAM	1	24	23.44	23.49	23.31	23.7
5	16QAM	12	0	22.38	22.22	22.22	
5	16QAM	12	7	22.32	22.24	22.21	
5	16QAM	12	13	22.21	22.25	22.18	23.7
5	16QAM	25	0	22.22	22.21	22.21	
5	64QAM	1	0	23.02	22.85	22.89	
5	64QAM	1	12	22.84	22.89	22.19	23.7
5	64QAM	1	24	22.68	22.92	22.34	
5	64QAM	12	0	21.90	21.94	21.65	
5	64QAM	12	7	21.89	21.81	21.18	22.7
5	64QAM	12	13	21.75	21.82	21.02	
5	64QAM	25	0	21.82	21.69	21.36	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.19	24.16	24.20	25.7
3	QPSK	1	8	24.24	24.27	24.13	
3	QPSK	1	14	24.07	24.18	24.11	
3	QPSK	8	0	23.34	23.18	23.17	24.7
3	QPSK	8	4	23.25	23.25	23.22	
3	QPSK	8	7	23.29	23.24	23.10	
3	QPSK	15	0	23.24	23.18	23.13	24.7
3	16QAM	1	0	23.53	23.45	23.50	
3	16QAM	1	8	23.59	23.51	23.39	
3	16QAM	1	14	23.50	23.53	23.35	23.7
3	16QAM	8	0	22.35	22.23	22.26	
3	16QAM	8	4	22.30	22.37	22.25	
3	16QAM	8	7	22.27	22.33	22.13	23.7
3	16QAM	15	0	22.38	22.17	22.16	
3	64QAM	1	0	22.92	22.87	22.25	
3	64QAM	1	8	23.00	22.93	22.12	23.7
3	64QAM	1	14	22.89	22.94	22.30	
3	64QAM	8	0	21.87	21.79	21.08	
3	64QAM	8	4	21.84	21.88	21.07	22.7
3	64QAM	8	7	21.88	21.80	21.14	
3	64QAM	15	0	21.81	21.79	21.12	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.16	24.04	24.05	25.7
1.4	QPSK	1	3	24.24	24.13	24.07	
1.4	QPSK	1	5	24.12	24.08	23.93	
1.4	QPSK	3	0	24.23	24.06	24.02	24.7
1.4	QPSK	3	1	24.21	24.05	24.03	
1.4	QPSK	3	3	24.16	24.14	23.99	
1.4	QPSK	6	0	23.25	23.20	23.04	24.7
1.4	16QAM	1	0	23.52	23.37	23.36	
1.4	16QAM	1	3	23.54	23.47	23.35	
1.4	16QAM	1	5	23.41	23.39	23.29	24.7
1.4	16QAM	3	0	23.23	23.16	23.12	
1.4	16QAM	3	1	23.23	23.20	23.14	
1.4	16QAM	3	3	23.27	23.11	23.09	23.7
1.4	16QAM	6	0	22.34	22.26	22.14	
1.4	64QAM	1	0	22.85	22.81	22.16	
1.4	64QAM	1	3	22.96	22.89	22.39	23.7
1.4	64QAM	1	5	22.79	22.75	22.41	
1.4	64QAM	3	0	22.92	22.75	22.11	
1.4	64QAM	3	1	22.90	22.81	22.20	22.7
1.4	64QAM	3	3	22.84	22.75	22.38	
1.4	64QAM	6	0	21.75	21.73	21.14	



Band 30							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		20.54		21.6
10	QPSK	1	25		20.50		
10	QPSK	1	49		20.51		
10	QPSK	25	0		20.55		21.6
10	QPSK	25	12		20.60		
10	QPSK	25	25		20.59		
10	QPSK	50	0		20.75		21.6
10	16QAM	1	0		20.65		
10	16QAM	1	25		20.67		
10	16QAM	1	49		20.65		21.6
10	16QAM	25	0		20.33		
10	16QAM	25	12		20.37		
10	16QAM	25	25		20.34		21.6
10	16QAM	50	0		20.40		
10	64QAM	1	0		20.54		
10	64QAM	1	25		20.63		21.6
10	64QAM	1	49		20.49		
10	64QAM	25	0		19.46		
10	64QAM	25	12		19.53		20.6
10	64QAM	25	25		19.55		
10	64QAM	50	0		19.52		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.10	20.15	20.19	21.6
5	QPSK	1	12	20.26	20.30	20.24	
5	QPSK	1	24	20.28	20.22	20.25	
5	QPSK	12	0	20.24	20.28	20.28	21.6
5	QPSK	12	7	20.35	20.29	20.31	
5	QPSK	12	13	20.33	20.32	20.31	
5	QPSK	25	0	20.31	20.28	20.28	21.6
5	16QAM	1	0	20.42	20.42	20.56	
5	16QAM	1	12	20.50	20.55	20.46	
5	16QAM	1	24	20.56	20.53	20.56	21.6
5	16QAM	12	0	20.26	20.29	20.27	
5	16QAM	12	7	20.38	20.34	20.33	
5	16QAM	12	13	20.38	20.31	20.34	21.6
5	16QAM	25	0	20.30	20.29	20.33	
5	64QAM	1	0	20.36	20.43	20.44	
5	64QAM	1	12	20.47	20.50	20.46	21.6
5	64QAM	1	24	20.55	20.49	20.50	
5	64QAM	12	0	19.41	19.44	19.46	
5	64QAM	12	7	19.51	19.47	19.49	20.6
5	64QAM	12	13	19.51	19.44	19.49	
5	64QAM	25	0	19.46	19.42	19.42	



Band 66									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132047	132322	132597			
Frequency (MHz)				1720	1745	1772			
20	QPSK	1	0	20.05	19.96	19.93	21.1		
20	QPSK	1	49	19.91	19.90	19.92			
20	QPSK	1	99	19.92	19.91	19.90			
20	QPSK	50	0	19.98	19.93	19.90			
20	QPSK	50	24	20.17	20.00	20.03	21.1		
20	QPSK	50	50	20.05	19.90	19.91			
20	QPSK	100	0	20.02	19.90	19.90			
20	16QAM	1	0	20.29	20.20	20.14			
20	16QAM	1	49	20.21	20.05	20.08	21.1		
20	16QAM	1	99	20.29	20.05	19.96			
20	16QAM	50	0	20.00	19.92	19.91			
20	16QAM	50	24	20.06	19.93	19.97			
20	16QAM	50	50	20.05	19.90	19.92	21.1		
20	16QAM	100	0	20.06	19.91	19.92			
20	64QAM	1	0	20.12	20.01	19.98			
20	64QAM	1	49	20.01	19.92	19.92			
20	64QAM	1	99	20.11	19.98	19.92	21.1		
20	64QAM	50	0	20.00	19.92	19.92			
20	64QAM	50	24	20.07	19.93	19.97			
20	64QAM	50	50	20.05	19.91	19.93			
20	64QAM	100	0	20.04	19.90	19.87	Tune-up limit (dBm)		
Channel				132047	132322	132597			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	19.97	19.97	19.92	21.1		
15	QPSK	1	37	19.91	19.95	19.94			
15	QPSK	1	74	19.92	19.94	19.93			
15	QPSK	36	0	20.07	19.93	19.96			
15	QPSK	36	20	20.12	20.00	19.96	21.1		
15	QPSK	36	39	20.08	19.99	19.95			
15	QPSK	75	0	20.02	19.96	19.96			
15	16QAM	1	0	20.22	20.18	20.18			
15	16QAM	1	37	20.21	20.15	20.18	21.1		
15	16QAM	1	74	20.20	20.08	20.02			
15	16QAM	36	0	20.06	19.97	19.92			
15	16QAM	36	20	20.15	19.96	20.02			
15	16QAM	36	39	20.12	19.93	20.02	21.1		
15	16QAM	75	0	20.07	19.96	20.00			
15	64QAM	1	0	20.17	20.09	19.98			
15	64QAM	1	37	20.05	20.00	20.01			
15	64QAM	1	74	20.19	20.00	19.93	21.1		
15	64QAM	36	0	20.02	19.90	19.95			
15	64QAM	36	20	20.14	19.93	20.07			
15	64QAM	36	39	20.12	19.99	19.98			
15	64QAM	75	0	20.09	19.96	19.95	Tune-up limit (dBm)		
Channel				132022	132322	132622			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	19.99	19.96	19.91	21.1		
10	QPSK	1	25	19.91	19.92	19.92			
10	QPSK	1	49	19.95	19.90	19.92			
10	QPSK	25	0	20.03	19.90	20.00			
10	QPSK	25	12	20.12	19.97	19.99	21.1		
10	QPSK	25	25	20.13	19.97	19.95			
10	QPSK	50	0	20.04	19.91	19.96			
10	16QAM	1	0	20.22	20.22	20.23			
10	16QAM	1	25	20.21	20.07	20.09	21.1		
10	16QAM	1	49	20.25	20.12	20.02			
10	16QAM	25	0	20.00	19.97	19.97			
10	16QAM	25	12	20.07	20.03	20.06			
10	16QAM	25	25	20.06	19.95	20.00	21.1		
10	16QAM	50	0	20.14	19.93	19.95			
10	64QAM	1	0	20.13	20.10	20.08			
10	64QAM	1	25	20.04	20.02	19.92			
10	64QAM	1	49	20.21	19.98	19.92	21.1		
10	64QAM	25	0	20.02	19.90	19.99			
10	64QAM	25	12	20.12	19.95	20.03			
10	64QAM	25	25	20.11	19.93	19.94			
10	64QAM	50	0	20.06	19.91	19.93	Tune-up limit (dBm)		
Channel				131997	132322	132647			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	20.02	19.95	19.91	21.1		
5	QPSK	1	12	19.91	19.90	19.91			
5	QPSK	1	24	19.96	19.91	19.92			
5	QPSK	12	0	20.08	19.97	19.97			
5	QPSK	12	7	20.10	19.94	20.00	21.1		
5	QPSK	12	13	20.10	19.91	19.95			
5	QPSK	25	0	20.10	19.92	19.93			
5	16QAM	1	0	20.26	20.26	20.24			
5	16QAM	1	12	20.24	20.11	20.09	21.1		
5	16QAM	1	24	20.25	20.12	20.06			
5	16QAM	12	0	20.02	19.95	19.94			
5	16QAM	12	7	20.13	20.00	20.06			
5	16QAM	12	13	20.07	19.99	20.02	21.1		
5	16QAM	25	0	20.14	19.95	19.99			
5	64QAM	1	0	20.17	20.04	20.04			
5	64QAM	1	12	20.02	19.92	19.97			
5	64QAM	1	24	20.19	20.00	19.96	21.1		
5	64QAM	12	0	20.09	19.97	20.00			
5	64QAM	12	7	20.17	19.99	19.97			
5	64QAM	12	13	20.15	19.97	20.03			
5	64QAM	25	0	20.11	19.93	19.94	Tune-up limit (dBm)		
Channel				131987	132322	132657			
Frequency (MHz)				1711.5	1745	1779.3			
3	QPSK	1	0	19.97	19.92	19.91	21.1		
3	QPSK	1	8	19.95	19.90	19.91			
3	QPSK	1	14	19.92	19.90	19.91			
3	QPSK	8	0	20.03	19.96	19.92			
3	QPSK	8	4	20.11	19.96	19.99	21.1		
3	QPSK	8	7	20.09	19.95	20.00			
3	QPSK	15	0	20.04	19.97	19.98			
3	16QAM	1	0	20.23	20.25	20.15			
3	16QAM	1	8	20.27	20.08	20.18	21.1		
3	16QAM	1	14	20.24	20.07	20.03			
3	16QAM	8	0	20.00	19.98	20.01			
3	16QAM	8	4	20.12	19.99	20.02			
3	16QAM	8	7	20.06	19.98	19.92	21.1		
3	16QAM	15	0	20.16	20.00	19.94			
3	64QAM	1	0	20.22	20.04	20.08			
3	64QAM	1	8	20.04	20.02	19.96			
3	64QAM	1	14	20.21	19.98	20.01	21.1		
3	64QAM	8	0	20.07	19.92	19.97			
3	64QAM	8	4	20.14	20.01	20.04			
3	64QAM	8	7	20.08	19.95	19.93			
3	64QAM	15	0	20.14	19.92	19.88	Tune-up limit (dBm)		
Channel				131979	132322	132665			
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	19.96	19.91	19.92	21.1		
1.4	QPSK	1	3	20.04	19.90	19.95			
1.4	QPSK	1	5	19.97	19.91	19.93			
1.4	QPSK	3	0	20.01	19.92	19.93			
1.4	QPSK	3	1	20.07	19.90	19.93	21.1		
1.4	QPSK	3	3	20.01	19.90	19.91			
1.4	QPSK	6	0	20.09	19.94	19.95			
1.4	16QAM	1	0	20.21	20.20	20.21	21.1		
1.4	16QAM	1	3	20.23	20.25	20.27			
1.4	16QAM	1	5	20.28	20.14	20.18			
1.4	16QAM	3	0	20.08	19.98	20.00			
1.4	16QAM	3	1	20.16	20.02	20.03	21.1		
1.4	16QAM	3	3	20.06	19.95	19.96			
1.4	16QAM	6	0	20.20	20.02	20.08			
1.4	16QAM	6	1	20.23	20.13	20.16			
1.4	16QAM	1	3	20.28	20.16	20.19	21.1		
1.4	64QAM	1	5	20.18	20.10	20.14			
1.4	64QAM	3	0	20.20	20.10	20.11			
1.4	64QAM	3	1	20.24	20.14	20.18			
1.4	64QAM	3	3	20.19	20.10	20.11	21.1		
1.4	64QAM	6	0	20.16	20.08	20.09			
1.4	64QAM	6	1	20.23	20.13	20.16			
1.4	64QAM	1	3	20.28	20.16	20.19	21.1		
1.4	64QAM	3	5	20.20	20.10	20.14			
1.4	64QAM	3	1	20.24	20.14	20.18			
1.4	64QAM	3	3	20.19	20.10	20.11			



Band 71							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.35	24.17	24.20	25.7
20	QPSK	1	49	24.15	24.16	24.15	
20	QPSK	1	99	24.12	24.09	24.08	
20	QPSK	50	0	23.28	23.24	23.26	24.7
20	QPSK	50	24	23.33	23.28	23.17	
20	QPSK	50	50	23.32	23.27	23.27	
20	QPSK	100	0	23.33	23.32	23.28	24.7
20	16QAM	1	0	23.68	23.52	23.53	
20	16QAM	1	49	23.55	23.54	23.40	
20	16QAM	1	99	23.49	23.49	23.45	23.7
20	16QAM	50	0	22.34	22.30	22.30	
20	16QAM	50	24	22.34	22.27	22.24	
20	16QAM	50	50	22.30	22.25	22.28	22.7
20	16QAM	100	0	22.32	22.30	22.26	
20	64QAM	1	0	22.18	22.70	23.01	
20	64QAM	1	49	22.76	22.59	22.38	22.7
20	64QAM	1	99	23.01	22.51	22.88	
20	64QAM	50	0	20.92	21.86	21.50	
20	64QAM	50	24	21.49	21.70	21.76	22.7
20	64QAM	50	50	21.96	21.50	21.85	
20	64QAM	100	0	21.50	21.89	21.87	
Channel				133197	133287	133387	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.33	24.17	24.13	25.7
15	QPSK	1	37	24.01	24.14	24.11	
15	QPSK	1	74	24.16	24.11	24.11	
15	QPSK	36	0	23.24	23.26	23.27	24.7
15	QPSK	36	20	23.29	23.28	23.37	
15	QPSK	36	39	23.31	23.33	23.26	
15	QPSK	75	0	23.34	23.30	23.20	24.7
15	16QAM	1	0	23.56	23.53	23.49	
15	16QAM	1	37	23.28	23.50	23.41	
15	16QAM	1	74	23.38	23.43	23.38	23.7
15	16QAM	36	0	22.15	22.31	22.26	
15	16QAM	36	20	22.31	22.25	22.34	
15	16QAM	36	39	22.38	22.33	22.28	23.7
15	16QAM	75	0	22.37	22.19	22.18	
15	64QAM	1	0	22.13	22.80	22.90	
15	64QAM	1	37	21.73	23.04	23.04	23.7
15	64QAM	1	74	22.53	22.63	22.97	
15	64QAM	36	0	20.81	21.92	21.51	
15	64QAM	36	20	20.88	21.74	21.92	22.7
15	64QAM	36	39	21.49	21.44	21.88	
15	64QAM	75	0	21.38	21.79	21.77	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.30	24.14	24.17	25.7
10	QPSK	1	25	24.11	24.10	24.12	
10	QPSK	1	49	24.13	24.14	24.01	
10	QPSK	25	0	23.36	23.28	23.22	24.7
10	QPSK	25	12	23.13	23.25	23.22	
10	QPSK	25	25	23.19	23.31	23.23	
10	QPSK	50	0	23.29	23.18	23.16	24.7
10	16QAM	1	0	23.62	23.47	23.53	
10	16QAM	1	25	23.47	23.51	23.45	
10	16QAM	1	49	23.46	23.44	23.39	23.7
10	16QAM	25	0	22.05	22.17	22.16	
10	16QAM	25	12	22.07	22.24	22.20	
10	16QAM	25	25	22.00	22.24	22.19	23.7
10	16QAM	50	0	22.28	22.17	22.22	
10	64QAM	1	0	21.83	22.96	22.96	
10	64QAM	1	25	21.88	23.08	23.07	22.7
10	64QAM	1	49	22.12	22.23	22.55	
10	64QAM	25	0	20.70	21.87	21.82	
10	64QAM	25	12	20.70	21.74	21.85	22.7
10	64QAM	25	25	20.68	21.37	21.72	
10	64QAM	50	0	20.73	21.60	21.80	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.03	24.23	24.23	25.7
5	QPSK	1	12	24.13	24.24	24.12	
5	QPSK	1	24	24.11	24.10	24.10	
5	QPSK	12	0	23.15	23.26	23.19	24.7
5	QPSK	12	7	23.15	23.32	23.26	
5	QPSK	12	13	23.13	23.22	23.18	
5	QPSK	25	0	23.15	23.26	23.20	24.7
5	16QAM	1	0	23.29	23.53	23.52	
5	16QAM	1	12	23.38	23.54	23.50	
5	16QAM	1	24	23.40	23.49	23.42	23.7
5	16QAM	12	0	22.04	22.30	22.29	
5	16QAM	12	7	22.12	22.30	22.29	
5	16QAM	12	13	22.25	22.25	22.21	23.7
5	16QAM	25	0	22.06	22.21	22.22	
5	64QAM	1	0	21.70	22.98	23.00	
5	64QAM	1	12	21.82	22.93	22.81	22.7
5	64QAM	1	24	22.03	22.71	22.37	
5	64QAM	12	0	20.74	21.93	21.85	
5	64QAM	12	7	20.91	21.89	21.91	22.7
5	64QAM	12	13	20.87	21.70	21.89	
5	64QAM	25	0	20.69	21.73	21.61	



Band 38 HPUE								
Art 2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				37850	38000	38150		
Frequency (MHz)				2569	2595	2610		
20	QPSK	1	0	26.05	26.04	26.01	27.5	
20	QPSK	1	49	26.04	26.09	26.03		
20	QPSK	1	99	26.16	26.12	26.04		
20	QPSK	50	0	25.27	25.32	25.27		
20	QPSK	50	24	25.34	25.33	25.28	26.5	
20	QPSK	50	50	25.34	25.40	25.34		
20	QPSK	100	0	25.36	25.34	25.28		
20	16QAM	1	0	25.37	25.38	25.32		
20	16QAM	1	49	25.43	25.47	25.35	26.5	
20	16QAM	1	99	25.43	25.49	25.38		
20	16QAM	50	0	24.28	24.34	24.31		
20	16QAM	50	24	24.36	24.35	24.32		
20	16QAM	50	50	24.37	24.42	24.37	25.5	
20	16QAM	100	0	24.37	24.35	24.28		
20	64QAM	1	0	24.20	24.22	24.17		
20	64QAM	1	49	24.27	24.28	24.24		
20	64QAM	1	99	24.28	24.31	24.26	24.5	
20	64QAM	50	0	23.28	23.33	23.29		
20	64QAM	50	24	23.37	23.36	23.31		
20	64QAM	50	50	23.38	23.42	23.37		
20	64QAM	100	0	23.34	23.34	23.29	Tune-up limit (dBm)	
Channel				37855	38000	38175		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	26.06	26.10	26.10	27.5	
15	QPSK	1	37	26.04	26.09	26.08		
15	QPSK	1	74	26.11	26.13	26.11		
15	QPSK	36	0	25.31	25.26	25.28		
15	QPSK	36	20	25.30	25.25	25.37	26.5	
15	QPSK	36	39	25.31	25.32	25.33		
15	QPSK	75	0	25.29	25.24	25.27		
15	16QAM	1	0	25.38	25.37	25.38		
15	16QAM	1	37	25.38	25.42	25.35	26.5	
15	16QAM	1	74	25.41	25.44	25.38		
15	16QAM	36	0	24.29	24.22	24.23		
15	16QAM	36	20	24.29	24.22	24.32		
15	16QAM	36	39	24.30	24.32	24.31	25.5	
15	16QAM	75	0	24.33	24.27	24.25		
15	64QAM	1	0	24.18	24.18	24.14		
15	64QAM	1	37	24.27	24.30	24.26	25.5	
15	64QAM	1	74	24.31	24.34	24.26		
15	64QAM	36	0	23.33	23.28	23.29		
15	64QAM	36	20	23.33	23.26	23.36		
15	64QAM	36	39	23.34	23.36	23.36	24.5	
15	64QAM	75	0	23.33	23.27	23.28		
Channel				37800	38000	38200		
Frequency (MHz)				2575	2595	2615	Tune-up limit (dBm)	
10	QPSK	1	0	26.14	26.06	26.02		
10	QPSK	1	25	26.07	26.12	26.06		
10	QPSK	1	49	26.15	26.14	26.09		
10	QPSK	25	0	25.32	25.29	25.23	26.5	
10	QPSK	25	12	25.33	25.30	25.24		
10	QPSK	25	25	25.35	25.35	25.32		
10	QPSK	50	0	25.36	25.29	25.25		
10	16QAM	1	0	25.51	25.46	25.48	26.5	
10	16QAM	1	25	25.46	25.50	25.45		
10	16QAM	1	49	25.53	25.49	25.49		
10	16QAM	25	0	24.35	24.25	24.23		
10	16QAM	25	12	24.37	24.34	24.27	25.5	
10	16QAM	25	25	24.34	24.35	24.29		
10	16QAM	50	0	24.36	24.31	24.26		
10	64QAM	1	0	24.46	24.35	24.35		
10	64QAM	1	25	24.42	24.49	24.43	25.5	
10	64QAM	1	49	24.38	24.45	24.40		
10	64QAM	25	0	23.42	23.38	23.35		
10	64QAM	25	12	23.43	23.36	23.34		
10	64QAM	25	25	23.44	23.43	23.40	24.5	
10	64QAM	50	0	23.38	23.34	23.30		
Channel				37775	38000	38225		
Frequency (MHz)				2572.5	2595	2617.5	Tune-up limit (dBm)	
5	QPSK	1	0	26.13	26.09	26.11		
5	QPSK	1	12	26.08	26.09	26.06		
5	QPSK	1	24	26.11	26.15	26.10		
5	QPSK	12	0	25.31	25.25	25.27	26.5	
5	QPSK	12	7	25.29	25.36	25.30		
5	QPSK	12	13	25.28	25.32	25.28		
5	QPSK	25	0	25.30	25.25	25.25		
5	16QAM	1	0	25.40	25.42	25.42	26.5	
5	16QAM	1	12	25.43	25.46	25.41		
5	16QAM	1	24	25.45	25.47	25.46		
5	16QAM	12	0	24.34	24.30	24.32		
5	16QAM	12	7	24.37	24.38	24.38	25.5	
5	16QAM	12	13	24.33	24.34	24.32		
5	16QAM	25	0	24.33	24.32	24.34		
5	64QAM	1	0	24.36	24.30	24.33		
5	64QAM	1	12	24.33	24.37	24.30	25.5	
5	64QAM	1	24	24.37	24.40	24.38		
5	64QAM	12	0	23.38	23.33	23.30		
5	64QAM	12	7	23.39	23.39	23.38		
5	64QAM	12	13	23.33	23.36	23.32	24.5	
5	64QAM	25	0	23.36	23.33	23.33		

Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2590	2595	2610	
20	QPSK	1	0	24.27	24.23	24.31	25.7
20	QPSK	1	49	24.32	24.24	24.23	
20	QPSK	1	99	24.25	24.27	24.22	
20	QPSK	50	0	23.46	23.35	23.38	24.7
20	QPSK	50	24	23.42	23.38	23.44	
20	QPSK	50	50	23.38	23.39	23.40	
20	QPSK	100	0	23.50	23.46	23.34	24.7
20	16QAM	1	0	23.43	23.43	23.40	
20	16QAM	1	49	23.31	23.34	23.31	
20	16QAM	1	99	23.37	23.30	23.33	23.7
20	16QAM	50	0	22.49	22.44	22.42	
20	16QAM	50	24	22.48	22.45	22.51	
20	16QAM	50	50	22.48	22.39	22.43	23.7
20	16QAM	100	0	22.47	22.40	22.32	
20	64QAM	1	0	22.17	22.09	22.03	
20	64QAM	1	49	22.05	22.01	22.03	22.7
20	64QAM	1	99	22.05	22.05	22.03	
20	64QAM	50	0	21.46	21.38	21.41	
20	64QAM	50	24	21.52	21.45	21.46	22.7
20	64QAM	50	50	21.49	21.48	21.40	
20	64QAM	100	0	21.47	21.50	21.43	
Channel				37825	38000	38175	100% up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.29	24.28	24.21	25.7
15	QPSK	1	37	24.25	24.20	24.25	
15	QPSK	1	74	24.19	24.29	24.25	
15	QPSK	36	0	23.48	23.31	23.40	24.7
15	QPSK	36	20	23.39	23.47	23.42	
15	QPSK	36	39	23.42	23.43	23.34	
15	QPSK	75	0	23.41	23.44	23.37	24.7
15	16QAM	1	0	23.36	23.34	23.31	
15	16QAM	1	37	23.25	23.20	23.28	
15	16QAM	1	74	23.36	23.36	23.30	23.7
15	16QAM	36	0	22.42	22.34	22.34	
15	16QAM	36	20	22.36	22.35	22.35	
15	16QAM	36	39	22.39	22.40	22.31	22.7
15	16QAM	75	0	22.41	22.41	22.31	
15	64QAM	1	0	22.13	22.05	22.04	
15	64QAM	1	37	22.17	22.13	22.06	22.7
15	64QAM	1	74	22.08	22.04	22.03	
15	64QAM	36	0	21.49	21.34	21.34	
15	64QAM	36	20	21.42	21.44	21.45	22.7
15	64QAM	36	39	21.43	21.39	21.47	
15	64QAM	75	0	21.42	21.43	21.33	
Channel				37800	38000	38200	100% up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.16	24.19	24.22	25.7
10	QPSK	1	25	24.19	24.18	24.21	
10	QPSK	1	49	24.08	24.18	24.20	
10	QPSK	25	0	23.38	23.36	23.35	24.7
10	QPSK	25	12	23.33	23.45	23.39	
10	QPSK	25	25	23.35	23.38	23.29	
10	QPSK	50	0	23.39	23.42	23.28	24.7
10	16QAM	1	0	23.38	23.37	23.31	
10	16QAM	1	25	23.24	23.15	23.22	
10	16QAM	1	49	23.25	23.31	23.30	23.7
10	16QAM	25	0	22.37	22.19	22.32	
10	16QAM	25	12	22.38	22.31	22.36	
10	16QAM	25	25	22.32	22.27	22.36	23.7
10	64QAM	1	0	22.04	22.01	22.02	
10	64QAM	1	25	22.12	22.02	22.04	
10	64QAM	1	49	22.06	22.04	22.02	22.7
10	64QAM	25	0	21.48	21.32	21.35	
10	64QAM	25	12	21.40	21.41	21.39	
10	64QAM	25	25	21.47	21.26	21.37	22.7
10	64QAM	50	0	21.42	21.43	21.31	
Channel				37775	38000	38225	100% up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.30	24.19	24.17	25.7
5	QPSK	1	12	24.16	24.21	24.20	
5	QPSK	1	24	24.16	24.12	24.25	
5	QPSK	12	0	23.35	23.30	23.41	24.7
5	QPSK	12	7	23.39	23.43	23.40	
5	QPSK	12	13	23.43	23.32	23.29	
5	QPSK	25	0	23.41	23.39	23.33	24.7
5	16QAM	1	0	23.45	23.28	23.42	
5	16QAM	1	12	23.34	23.37	23.31	
5	16QAM	1	24	23.39	23.44	23.35	23.7
5	16QAM	12	0	22.38	22.24	22.39	
5	16QAM	12	7	22.34	22.38	22.35	
5	16QAM	12	13	22.38	22.30	22.29	23.7
5	16QAM	25	0	22.43	22.39	22.39	
5	64QAM	1	0	22.14	22.09	22.09	
5	64QAM	1	12	22.20	22.09	22.09	22.7
5	64QAM	1	24	22.13	22.17	22.05	
5	64QAM	12	0	21.43	21.35	21.38	
5	64QAM	12	7	21.44	21.37	21.36	22.7
5	64QAM	12	13	21.44	21.42	21.37	
5	64QAM	25	0	21.46	21.42	21.36	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.11	24.14	24.18	24.13	23.98	25.7	
20	QPSK	1	49	24.05	24.13	24.05	24.37	24.31		
20	QPSK	1	99	24.09	24.13	24.10	23.93	24.17		
20	QPSK	50	0	23.19	23.23	23.17	23.31	23.32	24.7	
20	QPSK	50	24	23.28	23.32	23.22	23.44	23.41		
20	QPSK	50	50	23.25	23.27	23.20	23.28	23.39		
20	QPSK	100	0	23.27	23.30	23.24	23.34	23.34	24.7	
20	16QAM	1	0	23.26	23.27	23.31	23.22	23.08		
20	16QAM	1	49	23.16	23.22	23.13	23.46	23.43		
20	16QAM	1	99	23.15	23.27	23.21	23.03	23.26	23.7	
20	16QAM	50	0	22.23	22.25	22.19	22.32	22.32		
20	16QAM	50	24	22.31	22.34	22.25	22.45	22.45		
20	16QAM	50	50	22.29	22.31	22.22	22.29	22.41	23.7	
20	16QAM	100	0	22.30	22.34	22.25	22.35	22.35		
20	64QAM	1	0	21.95	21.91	21.92	21.85	21.76		
20	64QAM	1	49	21.88	21.99	21.85	22.25	22.16	23.7	
20	64QAM	1	99	21.87	22.07	21.80	21.80	21.83		
20	64QAM	50	0	21.25	21.27	21.19	21.34	21.29		
20	64QAM	50	24	21.33	21.36	21.29	21.44	21.44	22.7	
20	64QAM	50	50	21.29	21.31	21.22	21.30	21.43		
20	64QAM	100	0	21.31	21.35	21.24	21.36	21.36		
Channel				39720	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.7	2682.5		
15	QPSK	1	0	24.11	24.07	24.14	24.04	23.89	25.7	
15	QPSK	1	37	23.95	24.11	23.99	24.27	24.25		
15	QPSK	1	74	24.02	24.09	24.10	23.91	24.16		
15	QPSK	36	0	23.17	23.21	23.13	23.30	23.26	24.7	
15	QPSK	36	20	23.25	23.30	23.22	23.36	23.31		
15	QPSK	36	39	23.15	23.27	23.19	23.23	23.31		
15	QPSK	75	0	23.21	23.29	23.21	23.33	23.30	24.7	
15	16QAM	1	0	23.21	23.27	23.27	23.13	23.00		
15	16QAM	1	37	23.16	23.20	23.08	23.44	23.37		
15	16QAM	1	74	23.12	23.27	23.21	23.00	23.21	23.7	
15	16QAM	36	0	22.20	22.19	22.15	22.30	22.23		
15	16QAM	36	20	22.25	22.26	22.19	22.41	22.45		
15	16QAM	36	39	22.20	22.27	22.15	22.28	22.37	22.7	
15	16QAM	75	0	22.21	22.30	22.20	22.29	22.35		
15	64QAM	1	0	21.81	21.89	21.89	21.82	21.75		
15	64QAM	1	37	21.87	21.99	21.79	22.22	22.15	23.7	
15	64QAM	1	74	21.85	22.03	21.79	21.76	21.87		
15	64QAM	36	0	21.21	21.20	21.12	21.33	21.23		
15	64QAM	36	20	21.24	21.27	21.26	21.38	21.37	22.7	
15	64QAM	36	39	21.23	21.26	21.12	21.22	21.43		
15	64QAM	75	0	21.27	21.27	21.21	21.34	21.27		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.10	24.12	24.15	24.12	23.93	25.7	
10	QPSK	1	25	24.02	24.04	23.97	24.37	24.31		
10	QPSK	1	49	24.00	24.05	24.04	23.83	24.12		
10	QPSK	25	0	23.18	23.20	23.08	23.23	23.23	24.7	
10	QPSK	25	12	23.28	23.30	23.17	23.40	23.35		
10	QPSK	25	25	23.15	23.19	23.18	23.18	23.36		
10	QPSK	50	0	23.25	23.30	23.22	23.34	23.27	24.7	
10	16QAM	1	0	23.26	23.25	23.26	23.20	23.00		
10	16QAM	1	25	23.07	23.20	23.07	23.45	23.43		
10	16QAM	1	49	23.14	23.18	23.11	23.01	23.17	23.7	
10	16QAM	25	0	22.14	22.24	22.14	22.31	22.30		
10	16QAM	25	12	22.22	22.26	22.16	22.45	22.40		
10	16QAM	25	25	22.24	22.30	22.12	22.22	22.40	22.7	
10	16QAM	50	0	22.24	22.27	22.16	22.28	22.28		
10	64QAM	1	0	21.89	21.99	21.83	21.85	21.75		
10	64QAM	1	25	21.80	21.95	21.78	22.15	22.07	23.7	
10	64QAM	1	49	21.81	22.07	21.80	21.78	21.90		
10	64QAM	25	0	21.24	21.21	21.19	21.30	21.21		
10	64QAM	25	12	21.32	21.26	21.26	21.36	21.44	22.7	
10	64QAM	25	25	21.23	21.27	21.16	21.28	21.35		
10	64QAM	50	0	21.29	21.30	21.22	21.34	21.34		
Channel				39875	40148	40620	41083	41665		
Frequency (MHz)				2496.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	24.02	24.10	24.14	24.11	23.91	25.7	
5	QPSK	1	12	23.99	24.06	23.99	24.28	24.25		
5	QPSK	1	24	24.07	24.06	24.10	23.87	24.11		
5	QPSK	12	0	23.11	23.17	23.08	23.22	23.28	24.7	
5	QPSK	12	7	23.18	23.30	23.14	23.37	23.40		
5	QPSK	12	13	23.21	23.17	23.12	23.22	23.33		
5	QPSK	25	0	23.23	23.28	23.20	23.33	23.24	24.7	
5	16QAM	1	0	23.22	23.26	23.31	23.17	23.02		
5	16QAM	1	12	23.16	23.15	23.08	23.40	23.35		
5	16QAM	1	24	23.05	23.24	23.19	23.02	23.20	23.7	
5	16QAM	12	0	22.21	22.16	22.13	22.26	22.29		
5	16QAM	12	7	22.29	22.34	22.16	22.37	22.40		
5	16QAM	12	13	22.20	22.21	22.17	22.21	22.35	23.7	
5	16QAM	25	0	22.20	22.25	22.23	22.31	22.29		
5	64QAM	1	0	21.90	21.90	21.85	21.76	21.70		
5	64QAM	1	12	21.86	21.93	21.81	22.17	22.07	23.7	
5	64QAM	1	24	21.82	22.01	21.72	21.74	21.83		
5	64QAM	12	0	21.18	21.18	21.14	21.25	21.25		
5	64QAM	12	7	21.24	21.31	21.26	21.35	21.35	22.7	
5	64QAM	12	13	21.26	21.22	21.19	21.29	21.33		
5	64QAM	25	0	21.30	21.32	21.19	21.28	21.33		



Band 48										
Ant 7										
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)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	23.07	23.00	23.01	23.11	24.2		
20	QPSK	1	49	22.79	22.81	22.78	22.89			
20	QPSK	1	99	22.82	22.79	22.76	22.89			
20	QPSK	50	0	22.09	22.06	22.03	22.09			
20	QPSK	50	24	22.05	21.92	22.01	22.07	23.2		
20	QPSK	50	50	21.85	21.86	21.96	22.07			
20	QPSK	100	0	22.06	21.93	22.03	22.07			
20	16QAM	1	0	22.11	22.21	22.15	22.29	23.2		
20	16QAM	1	49	21.96	21.88	21.96	21.93			
20	16QAM	1	99	21.98	21.86	21.95	21.95			
20	16QAM	50	0	21.07	21.11	21.09	21.16			
20	16QAM	50	24	21.01	20.93	21.02	21.06	22.2		
20	16QAM	50	50	20.93	20.94	20.92	21.01			
20	16QAM	100	0	21.04	20.89	21.01	21.08			
20	64QAM	1	0	20.88	20.89	20.84	20.93	22.2		
20	64QAM	1	49	20.69	20.72	20.71	20.71			
20	64QAM	1	99	20.65	20.58	20.67	20.78			
20	64QAM	50	0	20.15	20.05	20.10	20.14			
20	64QAM	50	24	20.11	20.00	20.01	20.15	21.2		
20	64QAM	50	50	19.92	19.91	19.94	20.01			
20	64QAM	100	0	20.05	19.98	20.03	20.14			
Channel				55315	55820	56160	56655	Tune-up limit (dBm)		
Frequency (MHz)				3597.5	3606	3642	3692.5			
15	QPSK	1	0	22.93	22.89	22.97	23.00	24.2		
15	QPSK	1	37	22.83	22.78	22.81	22.91			
15	QPSK	1	74	22.82	22.78	22.83	22.92			
15	QPSK	36	0	22.01	22.07	21.98	22.11			
15	QPSK	36	20	21.90	21.90	22.03	22.06	23.2		
15	QPSK	36	39	21.89	21.89	21.92	22.00			
15	QPSK	75	0	21.99	21.88	21.98	22.08			
15	16QAM	1	0	22.06	22.06	22.14	22.20	23.2		
15	16QAM	1	37	21.87	21.85	21.87	21.96			
15	16QAM	1	74	22.04	21.93	21.96	22.08			
15	16QAM	36	0	20.96	20.95	20.99	21.02			
15	16QAM	36	20	20.88	20.82	21.00	21.03	22.2		
15	16QAM	36	39	20.80	20.85	20.93	21.01			
15	16QAM	75	0	21.00	20.89	21.03	21.12			
15	64QAM	1	0	20.82	20.89	20.85	20.86	22.2		
15	64QAM	1	37	20.76	20.64	20.72	20.75			
15	64QAM	1	74	20.67	20.70	20.69	20.83			
15	64QAM	36	0	20.08	20.08	20.02	20.18			
15	64QAM	36	20	19.91	19.94	19.95	20.08	21.2		
15	64QAM	36	39	19.82	19.95	19.94	20.03			
15	64QAM	75	0	19.99	20.00	20.03	20.02			
Channel				55200	55815	56165	56690	Tune-up limit (dBm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	23.05	22.99	22.95	23.04	24.2		
10	QPSK	1	25	22.79	22.81	22.71	22.85			
10	QPSK	1	49	22.72	22.78	22.72	22.81			
10	QPSK	25	0	21.98	22.07	22.01	22.03			
10	QPSK	25	12	21.95	21.90	21.99	21.97	23.2		
10	QPSK	25	25	21.79	21.78	21.84	21.96			
10	QPSK	50	0	21.95	21.83	22.00	22.01			
10	16QAM	1	0	22.01	22.04	22.06	22.24	23.2		
10	16QAM	1	25	21.95	21.92	21.87	21.96			
10	16QAM	1	49	21.89	21.89	21.91	21.88			
10	16QAM	25	0	21.09	20.98	20.99	21.16			
10	16QAM	25	12	20.91	20.86	20.93	21.02	22.2		
10	16QAM	25	25	20.89	20.81	20.91	21.05			
10	16QAM	50	0	20.96	20.90	21.05	21.06			
10	64QAM	1	0	20.74	20.88	20.87	20.87	22.2		
10	64QAM	1	25	20.59	20.64	20.66	20.65			
10	64QAM	1	49	20.69	20.64	20.64	20.71			
10	64QAM	25	0	20.14	20.05	20.10	20.10			
10	64QAM	25	12	20.01	19.93	19.99	20.03	21.2		
10	64QAM	25	25	19.94	19.82	19.97	19.97			
10	64QAM	50	0	19.94	19.92	19.88	20.05			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	22.89	22.98	22.97	23.04	24.2		
5	QPSK	1	12	22.88	22.9	22.9	22.95			
5	QPSK	1	24	22.88	22.78	22.85	22.97			
5	QPSK	12	0	22.06	22.03	22.02	22.15			
5	QPSK	12	7	22.02	22.03	22.05	22.14	23.2		
5	QPSK	12	13	22	21.95	22	22.09			
5	QPSK	25	0	21.99	22.02	22.01	22.1			
5	16QAM	1	0	22.05	21.99	22.09	22.14	23.2		
5	16QAM	1	12	22.15	22.08	22.12	22.18			
5	16QAM	1	24	22.11	22.02	22.08	22.07			
5	16QAM	12	0	21.03	20.93	21.02	21.11	22.2		
5	16QAM	12	7	21.1	20.98	20.98	21.06			
5	16QAM	12	13	21.07	20.95	21.04	21.01			
5	16QAM	25	0	21.12	21.08	21.02	21.12			
5	64QAM	1	0	20.81	20.83	20.84	20.93	22.2		
5	64QAM	1	12	20.89	20.74	20.75	20.83			
5	64QAM	1	24	20.85	20.75	20.79	20.82			
5	64QAM	12	0	20.17	20.07	20.07	20.15			
5	64QAM	12	7	20.09	20.03	20.12	20.22	21.2		
5	64QAM	12	13	20.06	20.08	20.05	20.1			
5	64QAM	25	0	20.09	20.05	20.09	20.11			



Band 38 HPUE							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2572.5	2595	2610	
20	QPSK	1	0	26.10	26.07	26.00	27.5
20	QPSK	1	49	26.20	26.08	25.99	
20	QPSK	1	99	26.14	26.09	26.00	
20	QPSK	50	0	25.35	25.32	25.23	
20	QPSK	50	24	25.45	25.33	25.24	
20	QPSK	50	50	25.43	25.38	25.27	26.5
20	QPSK	100	0	25.44	25.34	25.25	
20	16QAM	1	0	25.46	25.44	25.34	
20	16QAM	1	49	25.49	25.45	25.34	
20	16QAM	1	99	25.47	25.43	25.34	
20	16QAM	50	0	24.37	24.35	24.25	25.5
20	16QAM	50	24	24.45	24.33	24.26	
20	16QAM	50	50	24.45	24.42	24.32	
20	16QAM	100	0	24.46	24.35	24.23	
20	64QAM	1	0	24.29	24.27	24.18	
20	64QAM	1	49	24.31	24.27	24.23	25.5
20	64QAM	1	99	24.20	24.32	24.21	
20	64QAM	50	0	23.22	23.14	23.17	
20	64QAM	50	24	23.19	23.17	23.17	
20	64QAM	50	50	23.17	23.20	23.13	
20	64QAM	100	0	23.11	23.00	22.93	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2572.5	2595	2612.5	
15	QPSK	1	0	26.12	26.12	26.03	
15	QPSK	1	37	26.19	26.11	26.05	
15	QPSK	1	74	26.15	26.10	26.04	27.5
15	QPSK	36	0	25.38	25.30	25.19	
15	QPSK	36	20	25.35	25.27	25.25	
15	QPSK	36	39	25.37	25.34	25.23	
15	QPSK	75	0	25.38	25.28	25.18	
15	16QAM	1	0	25.46	25.43	25.29	26.5
15	16QAM	1	37	25.43	25.41	25.31	
15	16QAM	1	74	25.44	25.42	25.33	
15	16QAM	36	0	24.38	24.27	24.18	
15	16QAM	36	20	24.37	24.24	24.22	
15	16QAM	36	39	24.35	24.31	24.21	25.5
15	16QAM	75	0	24.38	24.30	24.19	
15	64QAM	1	0	24.13	24.15	24.11	
15	64QAM	1	37	24.22	24.15	24.22	
15	64QAM	1	74	24.01	24.21	24.13	
15	64QAM	36	0	23.17	23.13	23.13	24.5
15	64QAM	36	20	23.19	23.14	23.24	
15	64QAM	36	39	23.12	23.12	23.12	
15	64QAM	75	0	23.20	23.14	23.12	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.17	26.11	26.00	27.5
10	QPSK	1	25	26.10	26.08	26.01	
10	QPSK	1	49	26.19	26.15	26.00	
10	QPSK	25	0	25.36	25.24	25.17	
10	QPSK	25	12	25.37	25.27	25.19	
10	QPSK	25	25	25.38	25.32	25.25	26.5
10	QPSK	50	0	25.36	25.27	25.19	
10	16QAM	1	0	25.57	25.49	25.42	
10	16QAM	1	25	25.50	25.48	25.41	
10	16QAM	1	49	25.55	25.49	25.37	
10	16QAM	25	0	24.40	24.27	24.17	25.5
10	16QAM	25	12	24.43	24.32	24.22	
10	16QAM	25	25	24.39	24.35	24.26	
10	16QAM	50	0	24.43	24.31	24.21	
10	64QAM	1	0	24.18	24.27	24.32	
10	64QAM	1	25	24.22	24.14	24.14	25.5
10	64QAM	1	49	24.04	24.13	24.17	
10	64QAM	25	0	23.29	23.15	23.18	
10	64QAM	25	12	23.30	23.20	23.19	
10	64QAM	25	25	23.25	23.13	23.12	
10	64QAM	50	0	23.18	23.07	23.06	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.17	26.11	26.10	27.5
5	QPSK	1	12	26.15	26.16	26.03	
5	QPSK	1	24	26.16	26.17	26.07	
5	QPSK	12	0	25.40	25.28	25.26	
5	QPSK	12	7	25.41	25.34	25.26	
5	QPSK	12	13	25.36	25.36	25.25	26.5
5	QPSK	25	0	25.34	25.28	25.22	
5	16QAM	1	0	25.51	25.44	25.43	
5	16QAM	1	12	25.51	25.50	25.36	
5	16QAM	1	24	25.54	25.50	25.42	
5	16QAM	12	0	24.43	24.31	24.28	25.5
5	16QAM	12	7	24.41	24.44	24.32	
5	16QAM	12	13	24.43	24.40	24.30	
5	16QAM	25	0	24.40	24.32	24.29	
5	64QAM	1	0	24.17	24.18	24.16	
5	64QAM	1	12	24.20	24.26	24.29	25.5
5	64QAM	1	24	24.15	24.24	24.32	
5	64QAM	12	0	23.25	23.23	23.27	
5	64QAM	12	7	23.29	23.32	23.36	
5	64QAM	12	13	23.26	23.27	23.30	
5	64QAM	25	0	23.29	23.28	23.25	



Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2590	2595	2610	
20	QPSK	1	0	24.59	24.55	24.54	25.7
20	QPSK	1	49	24.57	24.56	24.49	
20	QPSK	1	99	24.56	24.54	24.47	
20	QPSK	50	0	23.68	23.71	23.63	24.7
20	QPSK	50	24	23.77	23.67	23.61	
20	QPSK	50	50	23.73	23.72	23.65	
20	QPSK	100	0	23.75	23.67	23.61	24.7
20	16QAM	1	0	23.71	23.71	23.64	
20	16QAM	1	49	23.61	23.62	23.58	
20	16QAM	1	99	23.65	23.64	23.59	23.7
20	16QAM	50	0	22.72	22.71	22.65	
20	16QAM	50	24	22.77	22.69	22.63	
20	16QAM	50	50	22.76	22.75	22.68	23.7
20	16QAM	100	0	22.76	22.69	22.62	
20	64QAM	1	0	22.43	22.40	22.31	
20	64QAM	1	49	22.39	22.37	22.31	23.7
20	64QAM	1	99	22.37	22.39	22.30	
20	64QAM	50	0	21.74	21.73	21.67	
20	64QAM	50	24	21.77	21.73	21.64	22.7
20	64QAM	50	50	21.75	21.75	21.67	
20	64QAM	100	0	21.78	21.69	21.64	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.59	24.57	24.51	25.7
15	QPSK	1	37	24.54	24.54	24.49	
15	QPSK	1	74	24.54	24.53	24.47	
15	QPSK	36	0	23.79	23.69	23.63	24.7
15	QPSK	36	20	23.72	23.65	23.68	
15	QPSK	36	39	23.72	23.70	23.64	
15	QPSK	75	0	23.75	23.67	23.58	24.7
15	16QAM	1	0	23.71	23.70	23.64	
15	16QAM	1	37	23.60	23.59	23.49	
15	16QAM	1	74	23.67	23.66	23.57	23.7
15	16QAM	36	0	22.75	22.67	22.57	
15	16QAM	36	20	22.71	22.61	22.62	
15	16QAM	36	39	22.69	22.66	22.59	23.7
15	16QAM	75	0	22.77	22.69	22.60	
15	64QAM	1	0	22.41	22.38	22.30	
15	64QAM	1	37	22.42	22.39	22.34	23.7
15	64QAM	1	74	22.36	22.40	22.31	
15	64QAM	36	0	21.79	21.71	21.63	
15	64QAM	36	20	21.76	21.63	21.67	22.7
15	64QAM	36	39	21.76	21.73	21.66	
15	64QAM	75	0	21.77	21.70	21.61	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.58	24.57	24.47	25.7
10	QPSK	1	25	24.52	24.52	24.43	
10	QPSK	1	49	24.51	24.48	24.42	
10	QPSK	25	0	23.77	23.59	23.58	24.7
10	QPSK	25	12	23.68	23.62	23.68	
10	QPSK	25	25	23.62	23.70	23.60	
10	QPSK	50	0	23.67	23.58	23.56	24.7
10	16QAM	1	0	23.70	23.67	23.54	
10	16QAM	1	25	23.50	23.53	23.43	
10	16QAM	1	49	23.67	23.66	23.48	23.7
10	16QAM	25	0	22.75	22.67	22.55	
10	16QAM	25	12	22.65	22.54	22.59	
10	16QAM	25	25	22.59	22.61	22.56	23.7
10	16QAM	50	0	22.77	22.65	22.55	
10	64QAM	1	0	22.33	22.29	22.30	
10	64QAM	1	25	22.38	22.30	22.31	23.7
10	64QAM	1	49	22.31	22.39	22.26	
10	64QAM	25	0	21.71	21.62	21.54	
10	64QAM	25	12	21.67	21.58	21.58	22.7
10	64QAM	25	25	21.73	21.66	21.57	
10	64QAM	50	0	21.76	21.63	21.54	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.64	24.59	24.53	25.7
5	QPSK	1	12	24.62	24.63	24.50	
5	QPSK	1	24	24.62	24.57	24.50	
5	QPSK	12	0	23.76	23.69	23.62	24.7
5	QPSK	12	7	23.76	23.77	23.67	
5	QPSK	12	13	23.72	23.73	23.63	
5	QPSK	25	0	23.72	23.67	23.63	24.7
5	16QAM	1	0	23.82	23.72	23.71	
5	16QAM	1	12	23.83	23.85	23.68	
5	16QAM	1	24	23.82	23.78	23.67	23.7
5	16QAM	12	0	22.71	22.67	22.62	
5	16QAM	12	7	22.73	22.73	22.62	
5	16QAM	12	13	22.69	22.72	22.60	23.7
5	16QAM	25	0	22.76	22.66	22.64	
5	64QAM	1	0	22.96	22.47	22.42	
5	64QAM	1	12	22.55	22.51	22.40	23.7
5	64QAM	1	24	22.55	22.54	22.43	
5	64QAM	12	0	21.76	21.68	21.66	
5	64QAM	12	7	21.77	21.77	21.70	22.7
5	64QAM	12	13	21.80	21.75	21.67	
5	64QAM	25	0	21.81	21.74	21.70	



Band 41										
Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39760	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.07	24.02	24.07	24.22	23.73	25.7	
20	QPSK	1	49	23.99	24.01	23.97	24.21	24.09		
20	QPSK	1	99	23.99	24.01	24.00	23.76	23.96		
20	QPSK	50	0	23.14	23.10	23.08	23.20	23.07	24.7	
20	QPSK	50	24	23.22	23.20	23.14	23.31	23.18		
20	QPSK	50	50	23.17	23.18	23.12	23.15	23.13		
20	QPSK	100	0	23.21	23.19	23.15	23.22	23.11	24.7	
20	16QAM	1	0	23.21	23.13	23.20	23.12	22.84		
20	16QAM	1	49	23.09	23.12	23.08	23.32	23.18		
20	16QAM	1	99	23.10	23.14	23.13	22.86	23.04	23.7	
20	16QAM	50	0	22.17	22.15	22.13	22.22	22.07		
20	16QAM	50	24	22.23	22.24	22.17	22.35	22.19		
20	16QAM	50	50	22.20	22.20	22.17	22.17	22.17	23.7	
20	16QAM	100	0	22.23	22.20	22.17	22.24	22.12		
20	64QAM	1	0	21.92	21.83	21.83	21.78	21.54		
20	64QAM	1	49	21.83	21.87	21.79	22.11	21.95	23.7	
20	64QAM	1	99	21.85	21.89	21.84	21.56	21.78		
20	64QAM	50	0	21.21	21.16	21.13	21.24	21.11		
20	64QAM	50	24	21.27	21.24	21.20	21.33	21.21	22.7	
20	64QAM	50	50	21.22	21.22	21.17	21.17	21.19		
20	64QAM	100	0	21.25	21.22	21.18	21.27	21.13		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.7	2682.5		
15	QPSK	1	0	24.04	24.03	24.00	24.12	23.88	25.7	
15	QPSK	1	37	24.00	23.95	23.96	24.20	24.04		
15	QPSK	1	74	23.99	24.07	24.05	23.94	24.01		
15	QPSK	36	0	23.20	23.09	23.07	23.20	23.06	24.7	
15	QPSK	36	20	23.20	23.16	23.13	23.22	23.18		
15	QPSK	36	39	23.16	23.16	23.10	23.17	23.15		
15	QPSK	75	0	23.20	23.18	23.13	23.17	23.11	24.7	
15	16QAM	1	0	23.22	23.15	23.14	23.25	22.97		
15	16QAM	1	37	23.06	23.04	23.04	23.30	23.16		
15	16QAM	1	74	23.15	23.22	23.16	23.08	23.17	23.7	
15	16QAM	36	0	22.19	22.07	22.03	22.16	22.04		
15	16QAM	36	20	22.18	22.13	22.08	22.20	22.12		
15	16QAM	36	39	22.13	22.14	22.11	22.14	22.11	23.7	
15	16QAM	75	0	22.24	22.19	22.16	22.19	22.14		
15	64QAM	1	0	21.87	21.83	21.77	21.83	21.70		
15	64QAM	1	37	21.88	21.87	21.79	22.08	21.85	23.7	
15	64QAM	1	74	21.86	21.98	21.90	21.82	21.92		
15	64QAM	36	0	21.23	21.15	21.09	21.22	21.12		
15	64QAM	36	20	21.22	21.18	21.14	21.26	21.21	22.7	
15	64QAM	36	39	21.17	21.19	21.13	21.23	21.17		
15	64QAM	75	0	21.24	21.22	21.15	21.19	21.16		
Channel				39700	40180	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.00	23.96	23.98	24.12	23.82	25.7	
10	QPSK	1	25	23.99	23.92	23.90	24.16	24.00		
10	QPSK	1	49	23.89	24.00	24.04	23.85	23.99		
10	QPSK	25	0	23.15	23.09	23.02	23.12	23.06	24.7	
10	QPSK	25	12	23.13	23.15	23.10	23.16	23.18		
10	QPSK	25	25	23.08	23.15	23.04	23.11	23.05		
10	QPSK	50	0	23.16	23.16	23.05	23.09	23.08	24.7	
10	16QAM	1	0	23.16	23.15	23.09	23.17	22.94		
10	16QAM	1	25	23.02	23.01	23.04	23.20	23.11		
10	16QAM	1	49	23.09	23.14	23.10	22.98	23.17	23.7	
10	16QAM	25	0	22.09	22.01	22.03	22.13	21.95		
10	16QAM	25	12	22.17	22.12	22.05	22.18	22.06		
10	16QAM	25	25	22.08	22.04	22.10	22.08	22.05	23.7	
10	16QAM	50	0	22.23	22.19	22.10	22.13	22.13		
10	64QAM	1	0	21.84	21.76	21.76	21.90	21.70		
10	64QAM	1	25	21.81	21.80	21.71	22.04	21.91	23.7	
10	64QAM	1	49	21.86	21.93	21.85	21.74	21.88		
10	64QAM	25	0	21.16	21.15	21.00	21.12	21.11		
10	64QAM	25	12	21.12	21.16	21.10	21.19	21.13	22.7	
10	64QAM	25	25	21.13	21.13	21.13	21.16	21.15		
10	64QAM	50	0	21.23	21.12	21.15	21.09	21.15		
Channel				39875	40148	40620	41083	41665		
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.13	23.95	23.96	24.20	24.06	25.7	
5	QPSK	1	12	24.09	24.01	24.00	24.17	24.06		
5	QPSK	1	24	24.01	24.00	23.95	24.15	24.01		
5	QPSK	12	0	23.20	23.17	23.13	23.33	23.20	24.7	
5	QPSK	12	7	23.24	23.19	23.17	23.34	23.21		
5	QPSK	12	13	23.18	23.17	23.14	23.28	23.18		
5	QPSK	25	0	23.20	23.18	23.14	23.32	23.17	24.7	
5	16QAM	1	0	23.27	23.11	23.09	23.37	23.21		
5	16QAM	1	12	23.26	23.20	23.24	23.42	23.28		
5	16QAM	1	24	23.24	23.17	23.18	23.34	23.19	23.7	
5	16QAM	12	0	22.20	22.15	22.14	22.30	22.17		
5	16QAM	12	7	22.23	22.16	22.14	22.31	22.18		
5	16QAM	12	13	22.21	22.14	22.11	22.27	22.17	23.7	
5	16QAM	25	0	22.24	22.20	22.15	22.35	22.25		
5	64QAM	1	0	22.04	21.85	21.85	22.12	21.92		
5	64QAM	1	12	21.96	21.91	21.89	22.14	21.92	23.7	
5	64QAM	1	24	21.98	21.95	21.92	22.08	21.92		
5	64QAM	12	0	21.27	21.18	21.21	21.35	21.23		
5	64QAM	12	7	21.29	21.22	21.22	21.37	21.25	22.7	
5	64QAM	12	13	21.24	21.19	21.18	21.35	21.22		
5	64QAM	25	0	21.25	21.22	21.22	21.38	21.27		



Band 48										
Ant 2										
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)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3550	3609	3641	3690			
20	QPSK	1	0	21.54	21.64	21.61	21.48	22.6		
20	QPSK	1	49	21.40	21.44	21.41	21.19			
20	QPSK	1	99	21.39	21.42	21.33	21.07			
20	QPSK	50	0	20.63	20.65	20.64	20.47			
20	QPSK	50	24	20.60	20.60	20.56	20.36	21.6		
20	QPSK	50	50	20.52	20.54	20.49	20.26			
20	QPSK	100	0	20.55	20.51	20.54	20.35			
20	16QAM	1	0	20.68	20.76	20.73	20.59	21.6		
20	16QAM	1	49	20.51	20.52	20.51	20.28			
20	16QAM	1	99	20.52	20.50	20.42	20.18			
20	16QAM	50	0	19.65	19.70	19.68	19.49			
20	16QAM	50	24	19.61	19.66	19.62	19.43	20.6		
20	16QAM	50	50	19.57	19.59	19.53	19.29			
20	16QAM	100	0	19.59	19.65	19.58	19.40			
20	64QAM	1	0	19.44	19.48	19.45	19.32	20.6		
20	64QAM	1	49	19.26	19.28	19.23	19.02			
20	64QAM	1	99	19.41	19.24	19.15	18.93			
20	64QAM	50	0	18.64	18.70	18.67	18.51			
20	64QAM	50	24	18.63	18.67	18.64	18.42	19.6		
20	64QAM	50	50	18.57	18.58	18.54	18.31			
20	64QAM	100	0	18.61	18.64	18.60	18.41			
Channel				55315	55820	56160	56660	Tune-up limit (dbm)		
Frequency (MHz)				3597.5	3606	3642	3692.5			
15	QPSK	1	0	21.50	21.56	21.53	21.34	22.6		
15	QPSK	1	37	21.39	21.41	21.40	21.14			
15	QPSK	1	74	21.43	21.39	21.32	21.09			
15	QPSK	36	0	20.61	20.64	20.62	20.43			
15	QPSK	36	20	20.57	20.58	20.57	20.32	21.6		
15	QPSK	36	39	20.55	20.57	20.51	20.27			
15	QPSK	75	0	20.57	20.63	20.54	20.34			
15	16QAM	1	0	20.63	20.68	20.66	20.51	21.6		
15	16QAM	1	37	20.45	20.49	20.39	20.21			
15	16QAM	1	74	20.69	20.59	20.51	20.26			
15	16QAM	36	0	19.58	19.60	19.56	19.39			
15	16QAM	36	20	19.53	19.56	19.51	19.31	20.6		
15	16QAM	36	39	19.51	19.53	19.49	19.22			
15	16QAM	75	0	19.60	19.61	19.58	19.37			
15	64QAM	1	0	19.37	19.44	19.39	19.24	20.6		
15	64QAM	1	37	19.29	19.29	19.25	19.03			
15	64QAM	1	74	19.32	19.34	19.19	18.99			
15	64QAM	36	0	18.62	18.66	18.64	18.44			
15	64QAM	36	20	18.59	18.62	18.56	18.34	19.6		
15	64QAM	36	39	18.55	18.59	18.51	18.26			
15	64QAM	75	0	18.59	18.63	18.60	18.37			
Channel				55200	55815	56165	56690	Tune-up limit (dbm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	21.50	21.56	21.52	21.31	22.6		
10	QPSK	1	25	21.30	21.31	21.31	21.14			
10	QPSK	1	49	21.34	21.37	21.24	21.01			
10	QPSK	25	0	20.57	20.60	20.61	20.43			
10	QPSK	25	12	20.49	20.53	20.57	20.25	21.6		
10	QPSK	25	25	20.53	20.54	20.44	20.26			
10	QPSK	50	0	20.53	20.60	20.53	20.30			
10	16QAM	1	0	20.61	20.64	20.58	20.45	21.6		
10	16QAM	1	25	20.36	20.45	20.36	20.11			
10	16QAM	1	49	20.59	20.59	20.44	20.23			
10	16QAM	25	0	19.55	19.53	19.49	19.34			
10	16QAM	25	12	19.50	19.48	19.44	19.31	20.6		
10	16QAM	25	25	19.42	19.50	19.43	19.14			
10	16QAM	50	0	19.53	19.56	19.57	19.31			
10	64QAM	1	0	19.29	19.40	19.39	19.17	20.6		
10	64QAM	1	25	19.29	19.19	19.22	18.97			
10	64QAM	1	49	19.24	19.32	19.14	18.90			
10	64QAM	25	0	18.56	18.59	18.59	18.41			
10	64QAM	25	12	18.59	18.62	18.51	18.31	19.6		
10	64QAM	25	25	18.54	18.56	18.47	18.26			
10	64QAM	50	0	18.49	18.55	18.53	18.37			
Channel				55265	55810	56170	56715	Tune-up limit (dbm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	21.46	21.52	21.47	21.27	22.6		
5	QPSK	1	12	21.41	21.47	21.41	21.18			
5	QPSK	1	24	21.40	21.40	21.37	21.11			
5	QPSK	12	0	20.54	20.64	20.63	20.38			
5	QPSK	12	7	20.62	20.66	20.60	20.44	21.6		
5	QPSK	12	13	20.54	20.56	20.54	20.28			
5	QPSK	25	0	20.58	20.58	20.57	20.30			
5	16QAM	1	0	20.55	20.62	20.58	20.36	21.6		
5	16QAM	1	12	20.64	20.67	20.64	20.36			
5	16QAM	1	24	20.56	20.63	20.55	20.30			
5	16QAM	12	0	19.55	19.59	19.62	19.31			
5	16QAM	12	7	19.55	19.62	19.58	19.33	20.6		
5	16QAM	12	13	19.55	19.60	19.54	19.31			
5	16QAM	25	0	19.58	19.63	19.60	19.38			
5	64QAM	1	0	19.36	19.41	19.36	19.10	20.6		
5	64QAM	1	12	19.36	19.40	19.33	19.08			
5	64QAM	1	24	19.33	19.37	19.32	19.04			
5	64QAM	12	0	18.62	18.66	18.61	18.40			
5	64QAM	12	7	18.65	18.69	18.64	18.42	19.6		
5	64QAM	12	13	18.64	18.62	18.62	18.31			
5	64QAM	25	0	18.66	18.70	18.63	18.40			



Band 38 HPUE							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2575.5	2595	2610	
20	QPSK	1	0	26.05	26.04	26.01	27.5
20	QPSK	1	49	26.04	26.09	26.03	
20	QPSK	1	99	26.16	26.12	26.04	
20	QPSK	50	0	25.27	25.32	25.27	
20	QPSK	50	24	25.34	25.33	25.28	26.5
20	QPSK	50	50	25.34	25.40	25.34	
20	QPSK	100	0	25.36	25.34	25.28	
20	16QAM	1	0	25.37	25.38	25.32	
20	16QAM	1	49	25.43	25.47	25.35	26.5
20	16QAM	1	99	25.43	25.49	25.38	
20	16QAM	50	0	24.28	24.34	24.31	
20	16QAM	50	24	24.36	24.35	24.32	
20	16QAM	50	50	24.37	24.42	24.37	25.5
20	16QAM	100	0	24.37	24.35	24.28	
20	64QAM	1	0	24.20	24.22	24.17	
20	64QAM	1	49	24.27	24.28	24.24	
20	64QAM	1	99	24.28	24.31	24.26	25.5
20	64QAM	50	0	23.28	23.33	23.29	
20	64QAM	50	24	23.37	23.36	23.31	
20	64QAM	50	50	23.38	23.42	23.37	
20	64QAM	100	0	23.34	23.34	23.29	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.06	26.10	26.10	27.5
15	QPSK	1	37	26.04	26.09	26.08	
15	QPSK	1	74	26.11	26.13	26.11	
15	QPSK	36	0	25.31	25.26	25.28	
15	QPSK	36	20	25.30	25.25	25.37	26.5
15	QPSK	36	39	25.31	25.32	25.33	
15	QPSK	75	0	25.29	25.24	25.27	
15	16QAM	1	0	25.38	25.37	25.38	
15	16QAM	1	37	25.38	25.42	25.35	26.5
15	16QAM	1	74	25.41	25.44	25.38	
15	16QAM	36	0	24.29	24.22	24.23	
15	16QAM	36	20	24.29	24.22	24.32	
15	16QAM	36	39	24.30	24.32	24.31	25.5
15	16QAM	75	0	24.33	24.27	24.25	
15	64QAM	1	0	24.18	24.18	24.14	
15	64QAM	1	37	24.27	24.30	24.26	
15	64QAM	1	74	24.31	24.34	24.26	25.5
15	64QAM	36	0	23.33	23.28	23.29	
15	64QAM	36	20	23.33	23.26	23.36	
15	64QAM	36	39	23.34	23.36	23.36	
15	64QAM	75	0	23.33	23.27	23.28	24.5
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.14	26.06	26.02	27.5
10	QPSK	1	25	26.07	26.12	26.06	
10	QPSK	1	49	26.15	26.14	26.09	
10	QPSK	25	0	25.32	25.29	25.23	
10	QPSK	25	12	25.33	25.30	25.24	26.5
10	QPSK	25	25	25.35	25.35	25.32	
10	QPSK	50	0	25.36	25.29	25.25	
10	16QAM	1	0	25.51	25.46	25.48	
10	16QAM	1	25	25.46	25.50	25.45	26.5
10	16QAM	1	49	25.53	25.49	25.49	
10	16QAM	25	0	24.35	24.25	24.23	
10	16QAM	25	12	24.37	24.34	24.27	
10	16QAM	25	25	24.34	24.35	24.29	25.5
10	16QAM	50	0	24.36	24.31	24.26	
10	64QAM	1	0	24.46	24.35	24.35	
10	64QAM	1	25	24.42	24.49	24.43	
10	64QAM	1	49	24.38	24.45	24.40	24.5
10	64QAM	25	0	23.42	23.38	23.35	
10	64QAM	25	12	23.43	23.36	23.34	
10	64QAM	25	25	23.44	23.43	23.40	
10	64QAM	50	0	23.38	23.34	23.30	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.13	26.09	26.11	27.5
5	QPSK	1	12	26.08	26.09	26.06	
5	QPSK	1	24	26.11	26.15	26.10	
5	QPSK	12	0	25.31	25.25	25.27	
5	QPSK	12	7	25.29	25.36	25.30	26.5
5	QPSK	12	13	25.28	25.32	25.28	
5	QPSK	25	0	25.30	25.25	25.25	
5	16QAM	1	0	25.40	25.42	25.42	
5	16QAM	1	12	25.43	25.46	25.41	26.5
5	16QAM	1	24	25.45	25.47	25.46	
5	16QAM	12	0	24.34	24.30	24.32	
5	16QAM	12	7	24.37	24.38	24.38	
5	16QAM	12	13	24.33	24.34	24.32	25.5
5	16QAM	25	0	24.33	24.32	24.34	
5	64QAM	1	0	24.36	24.30	24.33	
5	64QAM	1	12	24.33	24.37	24.30	
5	64QAM	1	24	24.37	24.40	24.38	24.5
5	64QAM	12	0	23.38	23.33	23.30	
5	64QAM	12	7	23.39	23.39	23.38	
5	64QAM	12	13	23.33	23.36	23.32	
5	64QAM	25	0	23.36	23.33	23.33	

Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2593	2595	2610	
20	QPSK	1	0	24.27	24.23	24.31	25.7
20	QPSK	1	49	24.32	24.24	24.23	
20	QPSK	1	99	24.25	24.27	24.22	
20	QPSK	50	0	23.46	23.35	23.38	24.7
20	QPSK	50	24	23.42	23.38	23.44	
20	QPSK	50	50	23.38	23.39	23.40	
20	QPSK	100	0	23.50	23.45	23.34	24.7
20	16QAM	1	0	23.43	23.43	23.40	
20	16QAM	1	49	23.31	23.34	23.31	
20	16QAM	1	99	23.37	23.30	23.33	23.7
20	16QAM	50	0	22.49	22.44	22.42	
20	16QAM	50	24	22.48	22.45	22.51	
20	16QAM	50	50	22.48	22.39	22.43	23.7
20	16QAM	100	0	22.47	22.40	22.32	
20	64QAM	1	0	22.17	22.09	22.03	
20	64QAM	1	49	22.05	22.01	22.03	22.7
20	64QAM	1	99	22.05	22.05	22.03	
20	64QAM	50	0	21.46	21.38	21.41	
20	64QAM	50	24	21.52	21.45	21.46	22.7
20	64QAM	50	50	21.49	21.48	21.40	
20	64QAM	100	0	21.47	21.50	21.43	
Channel				37825	38000	38175	100% up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.29	24.28	24.21	25.7
15	QPSK	1	37	24.25	24.20	24.25	
15	QPSK	1	74	24.19	24.29	24.25	
15	QPSK	36	0	23.48	23.31	23.40	24.7
15	QPSK	36	20	23.39	23.47	23.42	
15	QPSK	36	39	23.42	23.43	23.34	
15	QPSK	75	0	23.41	23.44	23.37	24.7
15	16QAM	1	0	23.36	23.34	23.31	
15	16QAM	1	37	23.25	23.20	23.28	
15	16QAM	1	74	23.36	23.36	23.30	23.7
15	16QAM	36	0	22.42	22.34	22.34	
15	16QAM	36	20	22.36	22.35	22.35	
15	16QAM	36	39	22.39	22.40	22.31	22.7
15	16QAM	75	0	22.41	22.41	22.31	
15	64QAM	1	0	22.13	22.05	22.04	
15	64QAM	1	37	22.17	22.13	22.06	22.7
15	64QAM	1	74	22.08	22.04	22.03	
15	64QAM	36	0	21.49	21.34	21.34	
15	64QAM	36	20	21.42	21.44	21.45	22.7
15	64QAM	36	39	21.43	21.39	21.47	
15	64QAM	75	0	21.42	21.43	21.33	
Channel				37800	38000	38200	100% up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.16	24.19	24.22	25.7
10	QPSK	1	25	24.19	24.18	24.21	
10	QPSK	1	49	24.08	24.18	24.20	
10	QPSK	25	0	23.38	23.36	23.35	24.7
10	QPSK	25	12	23.33	23.45	23.39	
10	QPSK	25	25	23.35	23.38	23.29	
10	QPSK	50	0	23.39	23.42	23.28	24.7
10	16QAM	1	0	23.38	23.37	23.31	
10	16QAM	1	25	23.24	23.15	23.22	
10	16QAM	1	49	23.25	23.31	23.30	23.7
10	16QAM	25	0	22.37	22.19	22.32	
10	16QAM	25	12	22.38	22.31	22.36	
10	16QAM	25	25	22.32	22.27	22.36	23.7
10	64QAM	1	0	22.04	22.01	22.02	
10	64QAM	1	25	22.12	22.02	22.04	
10	64QAM	1	49	22.06	22.04	22.02	22.7
10	64QAM	25	0	21.48	21.32	21.35	
10	64QAM	25	12	21.40	21.41	21.39	
10	64QAM	25	25	21.47	21.26	21.37	22.7
10	64QAM	50	0	21.42	21.43	21.31	
Channel				37775	38000	38225	100% up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.30	24.19	24.17	25.7
5	QPSK	1	12	24.16	24.21	24.20	
5	QPSK	1	24	24.16	24.12	24.25	
5	QPSK	12	0	23.35	23.30	23.41	24.7
5	QPSK	12	7	23.39	23.43	23.40	
5	QPSK	12	13	23.43	23.32	23.29	
5	QPSK	25	0	23.41	23.39	23.33	24.7
5	16QAM	1	0	23.45	23.28	23.42	
5	16QAM	1	12	23.34	23.37	23.31	
5	16QAM	1	24	23.39	23.44	23.35	23.7
5	16QAM	12	0	22.38	22.24	22.39	
5	16QAM	12	7	22.34	22.38	22.35	
5	16QAM	12	13	22.38	22.30	22.29	23.7
5	16QAM	25	0	22.43	22.39	22.39	
5	64QAM	1	0	22.14	22.09	22.09	
5	64QAM	1	12	22.20	22.09	22.09	22.7
5	64QAM	1	24	22.13	22.17	22.05	
5	64QAM	12	0	21.43	21.35	21.38	
5	64QAM	12	7	21.44	21.37	21.36	22.7
5	64QAM	12	13	21.44	21.42	21.37	
5	64QAM	25	0	21.46	21.42	21.36	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.11	24.14	24.18	24.13	23.98	25.7	
20	QPSK	1	49	24.05	24.13	24.05	24.37	24.31		
20	QPSK	1	99	24.09	24.13	24.10	23.93	24.17		
20	QPSK	50	0	23.19	23.23	23.17	23.31	23.32	24.7	
20	QPSK	50	24	23.28	23.32	23.22	23.44	23.41		
20	QPSK	50	50	23.25	23.27	23.20	23.28	23.39		
20	QPSK	100	0	23.27	23.30	23.24	23.34	23.34	24.7	
20	16QAM	1	0	23.26	23.27	23.31	23.22	23.08		
20	16QAM	1	49	23.16	23.22	23.13	23.46	23.43		
20	16QAM	1	99	23.15	23.27	23.21	23.03	23.26	23.7	
20	16QAM	50	0	22.23	22.25	22.19	22.32	22.32		
20	16QAM	50	24	22.31	22.34	22.25	22.45	22.45		
20	16QAM	50	50	22.29	22.31	22.22	22.29	22.41	23.7	
20	16QAM	100	0	22.30	22.34	22.25	22.35	22.35		
20	64QAM	1	0	21.95	21.91	21.92	21.85	21.76		
20	64QAM	1	49	21.88	21.99	21.85	22.25	22.16	23.7	
20	64QAM	1	99	21.87	22.07	21.80	21.80	21.83		
20	64QAM	50	0	21.25	21.27	21.19	21.34	21.29		
20	64QAM	50	24	21.33	21.36	21.29	21.44	21.44	22.7	
20	64QAM	50	50	21.29	21.31	21.22	21.30	21.43		
20	64QAM	100	0	21.31	21.35	21.24	21.36	21.36		
Channel				39720	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.7	2682.5		
15	QPSK	1	0	24.11	24.07	24.14	24.04	23.89	25.7	
15	QPSK	1	37	23.95	24.11	23.99	24.27	24.25		
15	QPSK	1	74	24.02	24.09	24.10	23.91	24.16		
15	QPSK	36	0	23.17	23.21	23.13	23.30	23.26	24.7	
15	QPSK	36	20	23.25	23.30	23.22	23.36	23.31		
15	QPSK	36	39	23.15	23.27	23.19	23.23	23.31		
15	QPSK	75	0	23.21	23.29	23.21	23.33	23.30	24.7	
15	16QAM	1	0	23.21	23.27	23.27	23.13	23.00		
15	16QAM	1	37	23.16	23.20	23.08	23.44	23.37		
15	16QAM	1	74	23.12	23.27	23.21	23.00	23.21	23.7	
15	16QAM	36	0	22.20	22.19	22.15	22.30	22.23		
15	16QAM	36	20	22.25	22.26	22.19	22.41	22.45		
15	16QAM	36	39	22.20	22.27	22.15	22.28	22.37	22.7	
15	16QAM	75	0	22.21	22.30	22.20	22.29	22.35		
15	64QAM	1	0	21.81	21.89	21.89	21.82	21.75		
15	64QAM	1	37	21.87	21.99	21.79	22.22	22.15	23.7	
15	64QAM	1	74	21.85	22.03	21.79	21.76	21.87		
15	64QAM	36	0	21.21	21.20	21.12	21.33	21.23		
15	64QAM	36	20	21.24	21.27	21.26	21.38	21.37	22.7	
15	64QAM	36	39	21.23	21.26	21.12	21.22	21.43		
15	64QAM	75	0	21.27	21.27	21.21	21.34	21.27		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.10	24.12	24.15	24.12	23.93	25.7	
10	QPSK	1	25	24.02	24.04	23.97	24.37	24.31		
10	QPSK	1	49	24.00	24.05	24.04	23.83	24.12		
10	QPSK	25	0	23.18	23.20	23.08	23.23	23.23	24.7	
10	QPSK	25	12	23.28	23.30	23.17	23.40	23.35		
10	QPSK	25	25	23.15	23.19	23.18	23.18	23.36		
10	QPSK	50	0	23.25	23.30	23.22	23.34	23.27	24.7	
10	16QAM	1	0	23.26	23.25	23.26	23.20	23.00		
10	16QAM	1	25	23.07	23.20	23.07	23.45	23.43		
10	16QAM	1	49	23.14	23.18	23.11	23.01	23.17	23.7	
10	16QAM	25	0	22.14	22.24	22.14	22.31	22.30		
10	16QAM	25	12	22.22	22.26	22.16	22.45	22.40		
10	16QAM	25	25	22.24	22.30	22.12	22.22	22.40	23.7	
10	16QAM	50	0	22.24	22.27	22.16	22.28	22.28		
10	64QAM	1	0	21.89	21.99	21.83	21.85	21.75		
10	64QAM	1	25	21.80	21.95	21.78	22.15	22.07	22.7	
10	64QAM	1	49	21.81	22.07	21.80	21.78	21.90		
10	64QAM	25	0	21.24	21.21	21.19	21.30	21.21		
10	64QAM	25	12	21.32	21.26	21.26	21.36	21.44	25.7	
10	64QAM	25	25	21.23	21.27	21.16	21.28	21.35		
10	64QAM	50	0	21.29	21.30	21.22	21.34	21.34		
Channel				39875	40148	40620	41083	41665		
Frequency (MHz)				2496.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	24.02	24.10	24.14	24.11	23.91	25.7	
5	QPSK	1	12	23.99	24.06	23.99	24.28	24.25		
5	QPSK	1	24	24.07	24.06	24.10	23.87	24.11		
5	QPSK	12	0	23.11	23.17	23.08	23.22	23.28	24.7	
5	QPSK	12	7	23.18	23.30	23.14	23.37	23.40		
5	QPSK	12	13	23.21	23.17	23.12	23.22	23.33		
5	QPSK	25	0	23.23	23.28	23.20	23.33	23.24	24.7	
5	16QAM	1	0	23.22	23.26	23.31	23.17	23.02		
5	16QAM	1	12	23.16	23.15	23.08	23.40	23.35		
5	16QAM	1	24	23.05	23.24	23.19	23.02	23.20	23.7	
5	16QAM	12	0	22.21	22.16	22.13	22.26	22.29		
5	16QAM	12	7	22.29	22.34	22.16	22.37	22.40		
5	16QAM	12	13	22.20	22.21	22.17	22.21	22.35	23.7	
5	16QAM	25	0	22.20	22.25	22.23	22.31	22.29		
5	64QAM	1	0	21.90	21.90	21.85	21.76	21.70		
5	64QAM	1	12	21.86	21.93	21.81	22.17	22.07	23.7	
5	64QAM	1	24	21.82	22.01	21.72	21.74	21.83		
5	64QAM	12	0	21.18	21.18	21.14	21.25	21.25		
5	64QAM	12	7	21.24	21.31	21.26	21.35	21.35	22.7	
5	64QAM	12	13	21.26	21.22	21.19	21.29	21.33		
5	64QAM	25	0	21.30	21.32	21.19	21.28	21.33		



Band 48										
Ant 7										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dbm)		
Channel				55540	55830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	23.07	23.00	23.01	23.11	24.2		
20	QPSK	1	49	22.79	22.81	22.78	22.89			
20	QPSK	1	99	22.82	22.79	22.76	22.89			
20	QPSK	50	0	22.09	22.06	22.03	22.09			
20	QPSK	50	24	22.05	21.92	22.01	22.07	23.2		
20	QPSK	50	50	21.85	21.86	21.96	22.07			
20	QPSK	100	0	22.06	21.93	22.03	22.07			
20	16QAM	1	0	22.11	22.21	22.15	22.29	23.2		
20	16QAM	1	49	21.96	21.88	21.96	21.93			
20	16QAM	1	99	21.98	21.86	21.95	21.95			
20	16QAM	50	0	21.07	21.11	21.09	21.16			
20	16QAM	50	24	21.01	20.93	21.02	21.07	22.2		
20	16QAM	50	50	20.93	20.94	20.92	21.01			
20	16QAM	100	0	21.04	20.89	21.01	21.08			
20	64QAM	1	0	20.88	20.89	20.84	20.93	22.2		
20	64QAM	1	49	20.69	20.72	20.71	20.71			
20	64QAM	1	99	20.65	20.56	20.67	20.78			
20	64QAM	50	0	20.15	20.05	20.10	20.14			
20	64QAM	50	24	20.11	20.00	20.01	20.15	21.2		
20	64QAM	50	50	19.92	19.91	19.94	20.01			
20	64QAM	100	0	20.05	19.98	20.03	20.14			
Channel				55515	55820	56160	56655	Tune-up limit (dbm)		
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	22.93	22.89	22.97	23.00	24.2		
15	QPSK	1	37	22.83	22.78	22.81	22.91			
15	QPSK	1	74	22.82	22.78	22.83	22.92			
15	QPSK	36	0	22.01	22.07	21.98	22.11			
15	QPSK	36	20	21.90	21.90	22.03	22.06	23.2		
15	QPSK	36	39	21.89	21.89	21.92	22.00			
15	QPSK	75	0	21.99	21.88	21.98	22.08			
15	16QAM	1	0	22.06	22.06	22.14	22.20	23.2		
15	16QAM	1	37	21.87	21.85	21.87	21.96			
15	16QAM	1	74	22.04	21.93	21.98	22.08			
15	16QAM	36	0	20.96	20.95	20.99	21.02			
15	16QAM	36	20	20.88	20.82	21.00	21.03	22.2		
15	16QAM	36	39	20.80	20.85	20.93	21.01			
15	16QAM	75	0	21.00	20.89	21.03	21.12			
15	64QAM	1	0	20.82	20.89	20.85	20.86	22.2		
15	64QAM	1	37	20.76	20.64	20.72	20.75			
15	64QAM	1	74	20.67	20.70	20.69	20.83			
15	64QAM	36	0	20.08	20.08	20.02	20.18			
15	64QAM	36	20	19.91	19.94	19.95	20.08	21.2		
15	64QAM	36	39	19.82	19.95	19.94	20.03			
15	64QAM	75	0	19.99	20.00	20.03	20.02			
Channel				55200	55615	56165	56690	Tune-up limit (dbm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	23.05	22.99	22.95	23.04	24.2		
10	QPSK	1	25	22.79	22.81	22.71	22.85			
10	QPSK	1	49	22.72	22.78	22.72	22.81			
10	QPSK	25	0	21.98	22.07	22.01	22.03			
10	QPSK	25	12	21.95	21.90	21.99	21.97	23.2		
10	QPSK	25	25	21.79	21.78	21.84	21.96			
10	QPSK	50	0	21.95	21.83	22.00	22.01			
10	16QAM	1	0	22.01	22.04	22.06	22.24	23.2		
10	16QAM	1	25	21.95	21.92	21.87	21.96			
10	16QAM	1	49	21.89	21.89	21.91	21.88			
10	16QAM	25	0	21.09	20.98	20.99	21.16			
10	16QAM	25	12	20.91	20.86	20.93	21.02	22.2		
10	16QAM	25	25	20.89	20.81	20.91	21.05			
10	16QAM	50	0	20.96	20.90	21.05	21.06			
10	64QAM	1	0	20.74	20.88	20.87	20.87	22.2		
10	64QAM	1	25	20.59	20.64	20.67	20.65			
10	64QAM	1	49	20.69	20.64	20.64	20.71			
10	64QAM	25	0	20.14	20.05	20.10	20.10			
10	64QAM	25	12	20.01	19.93	19.99	20.03	21.2		
10	64QAM	25	25	19.94	19.82	19.97	19.97			
10	64QAM	50	0	19.94	19.92	19.88	20.05			
Channel				55265	55610	56170	56715	Tune-up limit (dbm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	22.89	22.98	22.97	23.04	24.2		
5	QPSK	1	12	22.88	22.90	22.90	22.95			
5	QPSK	1	24	22.88	22.78	22.85	22.97			
5	QPSK	12	0	22.06	22.03	22.02	22.15			
5	QPSK	12	7	22.02	22.03	22.05	22.14	23.2		
5	QPSK	12	13	22.00	21.95	22.00	22.09			
5	QPSK	25	0	21.99	22.02	22.01	22.10			
5	16QAM	1	0	22.05	21.99	22.09	22.14	23.2		
5	16QAM	1	12	22.15	22.08	22.12	22.18			
5	16QAM	1	24	22.11	22.02	22.08	22.07			
5	16QAM	12	0	21.03	20.93	21.02	21.11	22.2		
5	16QAM	12	7	21.10	20.98	20.98	21.06			
5	16QAM	12	13	21.07	20.95	21.04	21.01			
5	16QAM	25	0	21.12	21.08	21.02	21.12			
5	64QAM	1	0	20.81	20.83	20.84	20.93	22.2		
5	64QAM	1	12	20.89	20.74	20.76	20.83			
5	64QAM	1	24	20.85	20.75	20.79	20.82			
5	64QAM	12	0	20.17	20.07	20.07	20.15			
5	64QAM	12	7	20.09	20.03	20.12	20.22	21.2		
5	64QAM	12	13	20.06	20.08	20.06	20.10			
5	64QAM	25	0	20.09	20.06	20.09	20.11			



Band 38 HPUE							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2572.5	2595	2610	
20	QPSK	1	0	26.10	26.07	26.00	27.5
20	QPSK	1	49	26.20	26.08	25.99	
20	QPSK	1	99	26.14	26.09	26.00	
20	QPSK	50	0	25.35	25.32	25.23	
20	QPSK	50	24	25.45	25.33	25.24	
20	QPSK	50	50	25.43	25.38	25.27	26.5
20	QPSK	100	0	25.44	25.34	25.25	
20	16QAM	1	0	25.46	25.44	25.34	
20	16QAM	1	49	25.49	25.45	25.34	
20	16QAM	1	99	25.47	25.43	25.34	
20	16QAM	50	0	24.37	24.35	24.25	25.5
20	16QAM	50	24	24.45	24.33	24.26	
20	16QAM	50	50	24.45	24.42	24.32	
20	16QAM	100	0	24.46	24.35	24.23	
20	64QAM	1	0	24.29	24.27	24.18	
20	64QAM	1	49	24.31	24.27	24.23	25.5
20	64QAM	1	99	24.20	24.32	24.21	
20	64QAM	50	0	23.22	23.14	23.17	
20	64QAM	50	24	23.19	23.17	23.17	
20	64QAM	50	50	23.17	23.20	23.13	
20	64QAM	100	0	23.11	23.00	22.93	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2572.5	2595	2612.5	
15	QPSK	1	0	26.12	26.12	26.03	
15	QPSK	1	37	26.19	26.11	26.05	
15	QPSK	1	74	26.15	26.10	26.04	27.5
15	QPSK	36	0	25.38	25.30	25.19	
15	QPSK	36	20	25.35	25.27	25.25	
15	QPSK	36	39	25.37	25.34	25.23	
15	QPSK	75	0	25.38	25.28	25.18	
15	16QAM	1	0	25.46	25.43	25.29	26.5
15	16QAM	1	37	25.43	25.41	25.31	
15	16QAM	1	74	25.44	25.42	25.33	
15	16QAM	36	0	24.38	24.27	24.18	
15	16QAM	36	20	24.37	24.24	24.22	
15	16QAM	36	39	24.35	24.31	24.21	25.5
15	16QAM	75	0	24.38	24.30	24.19	
15	64QAM	1	0	24.13	24.15	24.11	
15	64QAM	1	37	24.22	24.15	24.22	
15	64QAM	1	74	24.01	24.21	24.13	
15	64QAM	36	0	23.17	23.13	23.13	24.5
15	64QAM	36	20	23.19	23.14	23.24	
15	64QAM	36	39	23.12	23.12	23.12	
15	64QAM	75	0	23.20	23.14	23.12	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.17	26.11	26.00	27.5
10	QPSK	1	25	26.10	26.08	26.01	
10	QPSK	1	49	26.19	26.15	26.00	
10	QPSK	25	0	25.36	25.24	25.17	
10	QPSK	25	12	25.37	25.27	25.19	
10	QPSK	25	25	25.38	25.32	25.25	26.5
10	QPSK	50	0	25.36	25.27	25.19	
10	16QAM	1	0	25.57	25.49	25.42	
10	16QAM	1	25	25.50	25.48	25.41	
10	16QAM	1	49	25.55	25.49	25.37	
10	16QAM	25	0	24.40	24.27	24.17	25.5
10	16QAM	25	12	24.43	24.32	24.22	
10	16QAM	25	25	24.39	24.35	24.26	
10	16QAM	50	0	24.43	24.31	24.21	
10	64QAM	1	0	24.18	24.27	24.32	
10	64QAM	1	25	24.22	24.14	24.14	25.5
10	64QAM	1	49	24.04	24.13	24.17	
10	64QAM	25	0	23.29	23.15	23.18	
10	64QAM	25	12	23.30	23.20	23.19	
10	64QAM	25	25	23.25	23.13	23.12	
10	64QAM	50	0	23.18	23.07	23.06	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.17	26.11	26.10	27.5
5	QPSK	1	12	26.15	26.16	26.03	
5	QPSK	1	24	26.16	26.17	26.07	
5	QPSK	12	0	25.40	25.28	25.26	
5	QPSK	12	7	25.41	25.34	25.26	
5	QPSK	12	13	25.36	25.36	25.25	26.5
5	QPSK	25	0	25.34	25.28	25.22	
5	16QAM	1	0	25.51	25.44	25.43	
5	16QAM	1	12	25.51	25.50	25.36	
5	16QAM	1	24	25.54	25.50	25.42	
5	16QAM	12	0	24.43	24.31	24.28	25.5
5	16QAM	12	7	24.41	24.44	24.32	
5	16QAM	12	13	24.43	24.40	24.30	
5	16QAM	25	0	24.40	24.32	24.29	
5	64QAM	1	0	24.17	24.18	24.16	
5	64QAM	1	12	24.20	24.26	24.29	25.5
5	64QAM	1	24	24.15	24.24	24.32	
5	64QAM	12	0	23.25	23.23	23.27	
5	64QAM	12	7	23.29	23.32	23.36	
5	64QAM	12	13	23.26	23.27	23.30	
5	64QAM	25	0	23.29	23.28	23.25	



Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2590	2595	2610	
20	QPSK	1	0	24.59	24.55	24.54	25.7
20	QPSK	1	49	24.57	24.56	24.49	
20	QPSK	1	99	24.56	24.54	24.47	
20	QPSK	50	0	23.68	23.71	23.63	24.7
20	QPSK	50	24	23.77	23.67	23.61	
20	QPSK	50	50	23.73	23.72	23.65	
20	QPSK	100	0	23.75	23.67	23.61	24.7
20	16QAM	1	0	23.71	23.71	23.64	
20	16QAM	1	49	23.61	23.62	23.58	
20	16QAM	1	99	23.65	23.64	23.59	23.7
20	16QAM	50	0	22.72	22.71	22.65	
20	16QAM	50	24	22.77	22.69	22.63	
20	16QAM	50	50	22.76	22.75	22.68	23.7
20	16QAM	100	0	22.76	22.69	22.62	
20	64QAM	1	0	22.43	22.40	22.31	
20	64QAM	1	49	22.39	22.37	22.31	23.7
20	64QAM	1	99	22.37	22.39	22.30	
20	64QAM	50	0	21.74	21.73	21.67	
20	64QAM	50	24	21.77	21.73	21.64	22.7
20	64QAM	50	50	21.75	21.75	21.67	
20	64QAM	100	0	21.78	21.69	21.64	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.59	24.57	24.51	25.7
15	QPSK	1	37	24.54	24.54	24.49	
15	QPSK	1	74	24.54	24.53	24.47	
15	QPSK	36	0	23.79	23.69	23.63	24.7
15	QPSK	36	20	23.72	23.65	23.68	
15	QPSK	36	39	23.72	23.70	23.64	
15	QPSK	75	0	23.75	23.67	23.58	24.7
15	16QAM	1	0	23.71	23.70	23.64	
15	16QAM	1	37	23.60	23.59	23.49	
15	16QAM	1	74	23.67	23.66	23.57	23.7
15	16QAM	36	0	22.75	22.67	22.57	
15	16QAM	36	20	22.71	22.61	22.62	
15	16QAM	36	39	22.69	22.66	22.59	23.7
15	16QAM	75	0	22.77	22.69	22.60	
15	64QAM	1	0	22.41	22.38	22.30	
15	64QAM	1	37	22.42	22.39	22.34	23.7
15	64QAM	1	74	22.36	22.40	22.31	
15	64QAM	36	0	21.79	21.71	21.63	
15	64QAM	36	20	21.76	21.63	21.67	22.7
15	64QAM	36	39	21.76	21.73	21.66	
15	64QAM	75	0	21.77	21.70	21.61	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.58	24.57	24.47	25.7
10	QPSK	1	25	24.52	24.52	24.43	
10	QPSK	1	49	24.51	24.48	24.42	
10	QPSK	25	0	23.77	23.59	23.58	24.7
10	QPSK	25	12	23.68	23.62	23.68	
10	QPSK	25	25	23.62	23.70	23.60	
10	QPSK	50	0	23.67	23.58	23.56	24.7
10	16QAM	1	0	23.70	23.67	23.54	
10	16QAM	1	25	23.50	23.53	23.43	
10	16QAM	1	49	23.67	23.66	23.48	23.7
10	16QAM	25	0	22.75	22.67	22.55	
10	16QAM	25	12	22.65	22.54	22.59	
10	16QAM	25	25	22.59	22.61	22.56	23.7
10	16QAM	50	0	22.77	22.65	22.55	
10	64QAM	1	0	22.33	22.29	22.30	
10	64QAM	1	25	22.38	22.30	22.31	23.7
10	64QAM	1	49	22.31	22.39	22.26	
10	64QAM	25	0	21.71	21.62	21.54	
10	64QAM	25	12	21.67	21.58	21.58	22.7
10	64QAM	25	25	21.73	21.66	21.57	
10	64QAM	50	0	21.76	21.63	21.54	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.64	24.59	24.53	25.7
5	QPSK	1	12	24.62	24.63	24.50	
5	QPSK	1	24	24.62	24.57	24.50	
5	QPSK	12	0	23.76	23.69	23.62	24.7
5	QPSK	12	7	23.76	23.77	23.67	
5	QPSK	12	13	23.72	23.73	23.63	
5	QPSK	25	0	23.72	23.67	23.63	24.7
5	16QAM	1	0	23.62	23.72	23.71	
5	16QAM	1	12	23.63	23.65	23.66	
5	16QAM	1	24	23.62	23.78	23.67	23.7
5	16QAM	12	0	22.71	22.67	22.62	
5	16QAM	12	7	22.73	22.73	22.62	
5	16QAM	12	13	22.69	22.72	22.60	23.7
5	16QAM	25	0	22.76	22.66	22.64	
5	64QAM	1	0	22.96	22.47	22.42	
5	64QAM	1	12	22.55	22.51	22.40	23.7
5	64QAM	1	24	22.55	22.54	22.43	
5	64QAM	12	0	21.76	21.68	21.66	
5	64QAM	12	7	21.77	21.77	21.70	22.7
5	64QAM	12	13	21.80	21.75	21.67	
5	64QAM	25	0	21.81	21.74	21.70	



Band 41												
Ant 0												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)			
Channel				39760	40185	40620	41055	41490				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	24.07	24.02	24.07	24.22	23.73	25.7			
20	QPSK	1	49	23.99	24.01	23.97	24.21	24.09				
20	QPSK	1	99	23.99	24.01	24.00	23.76	23.96				
20	QPSK	50	0	23.14	23.10	23.08	23.20	23.07	24.7			
20	QPSK	50	24	23.22	23.20	23.14	23.31	23.18				
20	QPSK	50	50	23.17	23.18	23.12	23.15	23.13				
20	QPSK	100	0	23.21	23.19	23.15	23.22	23.11	24.7			
20	16QAM	1	0	23.21	23.13	23.20	23.12	22.84				
20	16QAM	1	49	23.09	23.12	23.08	23.32	23.18				
20	16QAM	1	99	23.10	23.14	23.13	22.86	23.04	23.7			
20	16QAM	50	0	22.17	22.15	22.13	22.22	22.07				
20	16QAM	50	24	22.23	22.24	22.17	22.35	22.19				
20	16QAM	50	50	22.20	22.20	22.17	22.17	22.17	23.7			
20	16QAM	100	0	22.23	22.20	22.17	22.24	22.12				
20	64QAM	1	0	21.92	21.83	21.83	21.78	21.54				
20	64QAM	1	49	21.83	21.87	21.79	22.11	21.95	23.7			
20	64QAM	1	99	21.85	21.89	21.84	21.56	21.78				
20	64QAM	50	0	21.21	21.16	21.13	21.24	21.11				
20	64QAM	50	24	21.27	21.24	21.20	21.33	21.21	22.7			
20	64QAM	50	50	21.22	21.22	21.17	21.17	21.19				
20	64QAM	100	0	21.25	21.22	21.18	21.27	21.13				
Channel				39725	40173	40620	41068	41515				
Frequency (MHz)				2503.5	2548.3	2593	2637.7	2682.5				
15	QPSK	1	0	24.04	24.03	24.00	24.12	23.88	25.7			
15	QPSK	1	37	24.00	23.95	23.96	24.20	24.04				
15	QPSK	1	74	23.99	24.07	24.05	23.94	24.01				
15	QPSK	36	0	23.20	23.09	23.07	23.20	23.06	24.7			
15	QPSK	36	20	23.20	23.16	23.13	23.22	23.18				
15	QPSK	36	39	23.16	23.16	23.10	23.17	23.15				
15	QPSK	75	0	23.20	23.18	23.13	23.17	23.11	24.7			
15	16QAM	1	0	23.22	23.15	23.14	23.25	22.97				
15	16QAM	1	37	23.06	23.04	23.04	23.30	23.16				
15	16QAM	1	74	23.15	23.22	23.16	23.08	23.17	23.7			
15	16QAM	36	0	22.19	22.07	22.03	22.16	22.04				
15	16QAM	36	20	22.18	22.13	22.08	22.20	22.12				
15	16QAM	36	39	22.13	22.14	22.11	22.14	22.11	23.7			
15	16QAM	75	0	22.24	22.19	22.16	22.19	22.14				
15	64QAM	1	0	21.87	21.83	21.77	21.83	21.70				
15	64QAM	1	37	21.88	21.87	21.79	22.08	21.85	23.7			
15	64QAM	1	74	21.86	21.98	21.90	21.82	21.92				
15	64QAM	36	0	21.23	21.15	21.09	21.22	21.12				
15	64QAM	36	20	21.22	21.18	21.14	21.26	21.21	22.7			
15	64QAM	36	39	21.17	21.19	21.13	21.23	21.17				
15	64QAM	75	0	21.24	21.22	21.15	21.19	21.16				
Channel				39700	40180	40620	41080	41540				
Frequency (MHz)				2501	2547	2593	2639	2685				
10	QPSK	1	0	24.00	23.96	23.98	24.12	23.82	25.7			
10	QPSK	1	25	23.99	23.92	23.90	24.16	24.00				
10	QPSK	1	49	23.89	24.00	24.04	23.85	23.99				
10	QPSK	25	0	23.15	23.09	23.02	23.12	23.06	24.7			
10	QPSK	25	12	23.13	23.15	23.10	23.16	23.18				
10	QPSK	25	25	23.08	23.15	23.04	23.11	23.05				
10	QPSK	50	0	23.16	23.16	23.05	23.09	23.08	24.7			
10	16QAM	1	0	23.16	23.15	23.09	23.17	22.94				
10	16QAM	1	25	23.02	23.01	23.04	23.20	23.11				
10	16QAM	1	49	23.09	23.14	23.10	22.98	23.17	23.7			
10	16QAM	25	0	22.09	22.01	22.03	22.13	21.95				
10	16QAM	25	12	22.17	22.12	22.05	22.18	22.06				
10	16QAM	25	25	22.08	22.04	22.10	22.08	22.05	23.7			
10	16QAM	50	0	22.23	22.19	22.10	22.13	22.13				
10	64QAM	1	0	21.84	21.76	21.70	21.90	21.70				
10	64QAM	1	25	21.81	21.80	21.71	22.04	21.91	23.7			
10	64QAM	1	49	21.86	21.93	21.85	21.74	21.88				
10	64QAM	25	0	21.16	21.15	21.00	21.12	21.11				
10	64QAM	25	12	21.12	21.16	21.10	21.19	21.13	22.7			
10	64QAM	25	25	21.13	21.13	21.13	21.16	21.15				
10	64QAM	50	0	21.23	21.12	21.15	21.09	21.15				
Channel				39875	40148	40620	41083	41665				
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5				
5	QPSK	1	0	24.13	23.95	23.96	24.20	24.06	25.7			
5	QPSK	1	12	24.09	24.01	24.00	24.17	24.06				
5	QPSK	1	24	24.01	24.00	23.95	24.15	24.01				
5	QPSK	12	0	23.20	23.17	23.13	23.33	23.20	24.7			
5	QPSK	12	7	23.24	23.19	23.17	23.34	23.21				
5	QPSK	12	13	23.18	23.17	23.14	23.28	23.18				
5	QPSK	25	0	23.20	23.18	23.14	23.32	23.17	24.7			
5	16QAM	1	0	23.27	23.11	23.09	23.37	23.21				
5	16QAM	1	12	23.26	23.20	23.24	23.42	23.28				
5	16QAM	1	24	23.24	23.17	23.18	23.34	23.19	23.7			
5	16QAM	12	0	22.20	22.15	22.14	22.30	22.17				
5	16QAM	12	7	22.23	22.16	22.14	22.31	22.18				
5	16QAM	12	13	22.21	22.14	22.11	22.27	22.17	23.7			
5	16QAM	25	0	22.24	22.20	22.15	22.35	22.25				
5	64QAM	1	0	22.04	21.85	21.85	22.12	21.92				
5	64QAM	1	12	21.96	21.91	21.89	22.14	21.92	23.7			
5	64QAM	1	24	21.98	21.95	21.92	22.08	21.92				
5	64QAM	12	0	21.27	21.18	21.21	21.35	21.23				
5	64QAM	12	7	21.29	21.22	21.22	21.37	21.25	22.7			
5	64QAM	12	13	21.24	21.19	21.18	21.35	21.22				
5	64QAM	25	0	21.25	21.22	21.22	21.38	21.27				



Band 48										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Mid. Ch. / Freq.	Power High Mid. Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dbm)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3550	3609	3641	3690			
20	QPSK	1	0	21.54	21.64	21.61	21.48	22.6		
20	QPSK	1	49	21.40	21.44	21.41	21.19			
20	QPSK	1	99	21.39	21.42	21.33	21.07			
20	QPSK	50	0	20.63	20.65	20.64	20.47			
20	QPSK	50	24	20.60	20.60	20.56	20.36	21.6		
20	QPSK	50	50	20.52	20.54	20.49	20.26			
20	QPSK	100	0	20.55	20.51	20.54	20.35			
20	16QAM	1	0	20.68	20.76	20.73	20.59	21.6		
20	16QAM	1	49	20.51	20.52	20.51	20.28			
20	16QAM	1	99	20.52	20.50	20.42	20.18			
20	16QAM	50	0	19.65	19.70	19.68	19.49			
20	16QAM	50	24	19.61	19.66	19.62	19.43	20.6		
20	16QAM	50	50	19.57	19.59	19.53	19.29			
20	16QAM	100	0	19.59	19.65	19.58	19.40			
20	64QAM	1	0	19.44	19.48	19.45	19.32	20.6		
20	64QAM	1	49	19.26	19.28	19.23	19.02			
20	64QAM	1	99	19.41	19.24	19.15	18.93			
20	64QAM	50	0	18.64	18.70	18.67	18.51			
20	64QAM	50	24	18.63	18.67	18.64	18.42	19.6		
20	64QAM	50	50	18.57	18.58	18.54	18.31			
20	64QAM	100	0	18.61	18.64	18.60	18.41			
Channel				55315	55820	56160	56660	Tune-up limit (dbm)		
Frequency (MHz)				3597.5	3606	3642	3692.5			
15	QPSK	1	0	21.50	21.56	21.53	21.34	22.6		
15	QPSK	1	37	21.39	21.41	21.40	21.14			
15	QPSK	1	74	21.43	21.39	21.32	21.09			
15	QPSK	36	0	20.61	20.64	20.62	20.43			
15	QPSK	36	20	20.57	20.58	20.57	20.32	21.6		
15	QPSK	36	39	20.55	20.57	20.51	20.27			
15	QPSK	75	0	20.57	20.63	20.54	20.34			
15	16QAM	1	0	20.63	20.68	20.66	20.51	21.6		
15	16QAM	1	37	20.45	20.49	20.39	20.21			
15	16QAM	1	74	20.69	20.59	20.51	20.26			
15	16QAM	36	0	19.58	19.60	19.56	19.39			
15	16QAM	36	20	19.53	19.56	19.51	19.31	20.6		
15	16QAM	36	39	19.51	19.53	19.49	19.22			
15	16QAM	75	0	19.60	19.61	19.58	19.37			
15	64QAM	1	0	19.37	19.44	19.39	19.24	20.6		
15	64QAM	1	37	19.29	19.29	19.25	19.03			
15	64QAM	1	74	19.32	19.34	19.19	18.99			
15	64QAM	36	0	18.62	18.66	18.64	18.44			
15	64QAM	36	20	18.59	18.62	18.56	18.34	19.6		
15	64QAM	36	39	18.55	18.59	18.51	18.26			
15	64QAM	75	0	18.59	18.63	18.60	18.37			
Channel				55200	55615	56165	56690	Tune-up limit (dbm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	21.50	21.56	21.52	21.31	22.6		
10	QPSK	1	25	21.30	21.31	21.31	21.14			
10	QPSK	1	49	21.34	21.37	21.24	21.01			
10	QPSK	25	0	20.57	20.60	20.61	20.43			
10	QPSK	25	12	20.49	20.53	20.57	20.25	21.6		
10	QPSK	25	25	20.53	20.54	20.44	20.26			
10	QPSK	50	0	20.53	20.60	20.53	20.30			
10	16QAM	1	0	20.61	20.64	20.58	20.45	21.6		
10	16QAM	1	25	20.36	20.45	20.36	20.11			
10	16QAM	1	49	20.59	20.59	20.44	20.23			
10	16QAM	25	0	19.55	19.53	19.49	19.34			
10	16QAM	25	12	19.50	19.48	19.44	19.31	20.6		
10	16QAM	25	25	19.42	19.50	19.43	19.14			
10	16QAM	50	0	19.53	19.56	19.57	19.31			
10	64QAM	1	0	19.29	19.40	19.39	19.17	20.6		
10	64QAM	1	25	19.29	19.19	19.22	18.97			
10	64QAM	1	49	19.24	19.32	19.14	18.90			
10	64QAM	25	0	18.56	18.59	18.59	18.41			
10	64QAM	25	12	18.59	18.62	18.51	18.31	19.6		
10	64QAM	25	25	18.54	18.56	18.47	18.26			
10	64QAM	50	0	18.49	18.55	18.53	18.37			
Channel				55265	55810	56170	56715	Tune-up limit (dbm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	21.46	21.52	21.47	21.27	22.6		
5	QPSK	1	12	21.41	21.47	21.41	21.18			
5	QPSK	1	24	21.40	21.40	21.37	21.11			
5	QPSK	12	0	20.54	20.64	20.63	20.38			
5	QPSK	12	7	20.62	20.66	20.60	20.34	21.6		
5	QPSK	12	13	20.54	20.56	20.54	20.28			
5	QPSK	25	0	20.58	20.58	20.57	20.30			
5	16QAM	1	0	20.55	20.62	20.58	20.36	21.6		
5	16QAM	1	12	20.64	20.67	20.64	20.36			
5	16QAM	1	24	20.56	20.63	20.55	20.30			
5	16QAM	12	0	19.55	19.59	19.62	19.31			
5	16QAM	12	7	19.55	19.62	19.58	19.33	20.6		
5	16QAM	12	13	19.55	19.60	19.54	19.31			
5	16QAM	25	0	19.58	19.63	19.60	19.38			
5	64QAM	1	0	19.36	19.41	19.36	19.10	20.6		
5	64QAM	1	12	19.36	19.40	19.33	19.08			
5	64QAM	1	24	19.33	19.37	19.32	19.04			
5	64QAM	12	0	18.62	18.66	18.61	18.40			
5	64QAM	12	7	18.65	18.69	18.64	18.42	19.6		
5	64QAM	12	13	18.64	18.62	18.62	18.31			
5	64QAM	25	0	18.66	18.70	18.63	18.40			



Band 38 HPUE							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2572.5	2595	2617.5	
20	QPSK	1	0	25.30	25.30	25.23	27.2
20	QPSK	1	49	25.32	25.27	25.26	
20	QPSK	1	99	25.33	25.28	25.24	
20	QPSK	50	0	25.32	25.30	25.27	
20	QPSK	50	24	25.40	25.30	25.26	
20	QPSK	50	50	25.39	25.36	25.32	26.2
20	QPSK	100	0	25.40	25.31	25.27	
20	16QAM	1	0	25.47	25.45	25.36	
20	16QAM	1	49	25.79	25.42	25.34	
20	16QAM	1	99	25.45	25.43	25.37	
20	16QAM	50	0	24.45	24.47	24.39	25.2
20	16QAM	50	24	24.53	24.46	24.37	
20	16QAM	50	50	24.52	24.54	24.45	
20	16QAM	100	0	24.57	24.46	24.38	
20	64QAM	1	0	24.42	24.38	24.27	
20	64QAM	1	49	24.45	24.37	24.32	25.2
20	64QAM	1	99	24.43	24.40	24.33	
20	64QAM	50	0	23.47	23.48	23.39	
20	64QAM	50	24	23.54	23.47	23.38	
20	64QAM	50	50	23.52	23.53	23.45	
20	64QAM	100	0	23.51	23.46	23.38	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2577.5	2595	2617.5	
15	QPSK	1	0	25.25	25.24	25.20	27.2
15	QPSK	1	37	25.32	25.27	25.23	
15	QPSK	1	74	25.29	25.23	25.25	
15	QPSK	36	0	25.51	25.41	25.39	
15	QPSK	36	20	25.45	25.38	25.44	
15	QPSK	36	39	25.48	25.43	25.38	26.2
15	QPSK	75	0	25.49	25.37	25.33	
15	16QAM	1	0	25.56	25.59	25.48	
15	16QAM	1	37	25.56	25.54	25.47	
15	16QAM	1	74	25.61	25.54	25.50	
15	16QAM	36	0	24.57	24.53	24.44	25.2
15	16QAM	36	20	24.55	24.49	24.50	
15	16QAM	36	39	24.55	24.55	24.46	
15	16QAM	75	0	24.62	24.52	24.44	
15	64QAM	1	0	24.49	24.43	24.38	
15	64QAM	1	37	24.55	24.52	24.43	25.2
15	64QAM	1	74	24.56	24.50	24.41	
15	64QAM	36	0	23.62	23.57	23.48	
15	64QAM	36	20	23.62	23.53	23.52	
15	64QAM	36	39	23.58	23.61	23.53	
15	64QAM	75	0	23.62	23.54	23.48	24.2
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.43	25.31	25.24	27.2
10	QPSK	1	25	25.37	25.34	25.22	
10	QPSK	1	49	25.41	25.35	25.28	
10	QPSK	25	0	25.50	25.46	25.38	
10	QPSK	25	12	25.58	25.48	25.40	
10	QPSK	25	25	25.50	25.56	25.44	26.2
10	QPSK	50	0	25.45	25.43	25.36	
10	16QAM	1	0	25.70	25.55	25.55	
10	16QAM	1	25	25.70	25.65	25.54	
10	16QAM	1	49	25.69	25.73	25.59	
10	16QAM	25	0	24.72	24.65	24.53	25.2
10	16QAM	25	12	24.63	24.71	24.61	
10	16QAM	25	25	24.70	24.63	24.55	
10	16QAM	50	0	24.67	24.54	24.61	
10	64QAM	1	0	24.63	24.54	24.58	
10	64QAM	1	25	24.64	24.64	24.61	25.2
10	64QAM	1	49	24.65	24.74	24.57	
10	64QAM	25	0	23.74	23.64	23.61	
10	64QAM	25	12	23.75	23.72	23.54	
10	64QAM	25	25	23.69	23.62	23.60	
10	64QAM	50	0	23.76	23.60	23.61	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.45	25.36	25.29	27.2
5	QPSK	1	12	25.39	25.38	25.26	
5	QPSK	1	24	25.43	25.39	25.29	
5	QPSK	12	0	25.59	25.49	25.46	
5	QPSK	12	7	25.64	25.57	25.49	
5	QPSK	12	13	25.58	25.58	25.45	26.2
5	QPSK	25	0	25.55	25.46	25.44	
5	16QAM	1	0	25.74	25.62	25.63	
5	16QAM	1	12	25.71	25.69	25.60	
5	16QAM	1	24	25.76	25.73	25.66	
5	16QAM	12	0	24.74	24.65	24.60	25.2
5	16QAM	12	7	24.72	24.74	24.64	
5	16QAM	12	13	24.71	24.69	24.61	
5	16QAM	25	0	24.71	24.63	24.62	
5	64QAM	1	0	24.73	24.64	24.62	
5	64QAM	1	12	24.72	24.69	24.61	25.2
5	64QAM	1	24	24.74	24.74	24.67	
5	64QAM	12	0	23.74	23.67	23.63	
5	64QAM	12	7	23.76	23.75	23.62	
5	64QAM	12	13	23.74	23.70	23.61	
5	64QAM	25	0	23.77	23.66	23.66	24.2

Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.48	23.45	23.40	25.4
20	QPSK	1	49	23.49	23.46	23.40	
20	QPSK	1	99	23.51	23.46	23.40	
20	QPSK	50	0	23.58	23.54	23.48	24.4
20	QPSK	50	24	23.72	23.55	23.47	
20	QPSK	50	50	23.63	23.61	23.53	
20	QPSK	100	0	23.65	23.55	23.47	24.4
20	16QAM	1	0	23.59	23.58	23.49	
20	16QAM	1	49	23.55	23.53	23.45	
20	16QAM	1	99	23.56	23.55	23.47	23.4
20	16QAM	50	0	22.61	22.58	22.48	
20	16QAM	50	24	22.68	22.58	22.50	
20	16QAM	50	50	22.67	22.64	22.56	23.4
20	16QAM	100	0	22.67	22.56	22.48	
20	64QAM	1	0	22.32	22.25	22.15	
20	64QAM	1	49	22.28	22.28	22.18	22.4
20	64QAM	1	99	22.32	22.26	22.16	
20	64QAM	50	0	21.62	21.59	21.51	
20	64QAM	50	24	21.69	21.59	21.50	22.4
20	64QAM	50	50	21.68	21.64	21.57	
20	64QAM	100	0	21.68	21.57	21.50	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.51	23.45	23.48	25.4
15	QPSK	1	37	23.47	23.45	23.47	
15	QPSK	1	74	23.48	23.46	23.40	
15	QPSK	36	0	23.66	23.57	23.49	24.4
15	QPSK	36	20	23.68	23.55	23.54	
15	QPSK	36	39	23.65	23.61	23.53	
15	QPSK	75	0	23.67	23.55	23.46	24.4
15	16QAM	1	0	23.62	23.61	23.49	
15	16QAM	1	37	23.51	23.49	23.41	
15	16QAM	1	74	23.65	23.60	23.50	23.4
15	16QAM	36	0	22.66	22.56	22.45	
15	16QAM	36	20	22.63	22.51	22.54	
15	16QAM	36	39	22.62	22.60	22.50	22.4
15	16QAM	75	0	22.69	22.58	22.50	
15	64QAM	1	0	22.30	22.27	22.17	
15	64QAM	1	37	22.37	22.30	22.21	22.4
15	64QAM	1	74	22.33	22.31	22.18	
15	64QAM	36	0	21.71	21.59	21.51	
15	64QAM	36	20	21.68	21.58	21.58	22.4
15	64QAM	36	39	21.69	21.66	21.57	
15	64QAM	75	0	21.72	21.57	21.52	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.47	23.48	23.42	25.4
10	QPSK	1	25	23.49	23.49	23.49	
10	QPSK	1	49	23.45	23.42	23.43	
10	QPSK	25	0	23.57	23.53	23.49	24.4
10	QPSK	25	12	23.61	23.69	23.49	
10	QPSK	25	25	23.58	23.58	23.49	
10	QPSK	50	0	23.62	23.58	23.55	24.4
10	16QAM	1	0	23.70	23.53	23.47	
10	16QAM	1	25	23.61	23.63	23.51	
10	16QAM	1	49	23.65	23.62	23.51	23.4
10	16QAM	25	0	22.64	22.50	22.51	
10	16QAM	25	12	22.67	22.63	22.51	
10	16QAM	25	25	22.58	22.54	22.47	23.4
10	16QAM	50	0	22.60	22.55	22.46	
10	64QAM	1	0	22.46	22.29	22.24	
10	64QAM	1	25	22.36	22.40	22.19	22.4
10	64QAM	1	49	22.37	22.38	22.29	
10	64QAM	25	0	21.71	21.56	21.49	
10	64QAM	25	12	21.69	21.64	21.57	22.4
10	64QAM	25	25	21.69	21.62	21.52	
10	64QAM	50	0	21.76	21.60	21.53	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.55	23.51	23.46	25.4
5	QPSK	1	12	23.53	23.50	23.40	
5	QPSK	1	24	23.51	23.48	23.40	
5	QPSK	12	0	23.65	23.60	23.56	24.4
5	QPSK	12	7	23.69	23.69	23.58	
5	QPSK	12	13	23.66	23.68	23.57	
5	QPSK	25	0	23.65	23.60	23.55	24.4
5	16QAM	1	0	23.66	23.59	23.55	
5	16QAM	1	12	23.60	23.66	23.58	
5	16QAM	1	24	23.66	23.66	23.57	23.4
5	16QAM	12	0	22.66	22.59	22.55	
5	16QAM	12	7	22.69	22.68	22.56	
5	16QAM	12	13	22.64	22.60	22.55	23.4
5	16QAM	25	0	22.70	22.62	22.56	
5	64QAM	1	0	22.47	22.35	22.29	
5	64QAM	1	12	22.46	22.42	22.29	22.4
5	64QAM	1	24	22.46	22.42	22.30	
5	64QAM	12	0	21.73	21.66	21.57	
5	64QAM	12	7	21.73	21.71	21.65	22.4
5	64QAM	12	13	21.73	21.69	21.62	
5	64QAM	25	0	21.76	21.64	21.62	



Band 41											
Ant 2											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dbm)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	23.29	23.45	23.52	23.23	23.01	25.4		
20	QPSK	1	49	23.40	23.51	23.46	23.52	23.38			
20	QPSK	1	99	23.34	23.50	23.50	23.06	23.25			
20	QPSK	50	0	23.39	23.53	23.55	23.46	23.37	24.4		
20	QPSK	50	24	23.50	23.75	23.62	23.59	23.50			
20	QPSK	50	50	23.49	23.63	23.60	23.43	23.46			
20	QPSK	100	0	23.50	23.65	23.62	23.50	23.41	24.4		
20	16QAM	1	0	23.42	23.55	23.65	23.35	23.12			
20	16QAM	1	49	23.39	23.58	23.53	23.63	23.51			
20	16QAM	1	99	23.42	23.63	23.60	23.16	23.34	23.4		
20	16QAM	50	0	22.43	22.59	22.57	22.68	22.59			
20	16QAM	50	24	22.54	22.69	22.63	22.84	22.73			
20	16QAM	50	50	22.54	22.67	22.64	22.69	22.68	23.4		
20	16QAM	100	0	22.53	22.67	22.64	22.72	22.63			
20	64QAM	1	0	22.13	22.17	22.26	22.18	21.99			
20	64QAM	1	49	22.10	22.30	22.25	22.61	22.48	23.4		
20	64QAM	1	99	22.16	22.37	22.28	22.15	22.23			
20	64QAM	50	0	21.45	21.58	21.58	21.70	21.58			
20	64QAM	50	24	21.53	21.68	21.66	21.84	21.74	22.4		
20	64QAM	50	50	21.53	21.68	21.64	21.66	21.69			
20	64QAM	100	0	21.53	21.67	21.65	21.74	21.63			
Channel				39720	40173	4059	41068	41515	Tune-up limit (dbm)		
Frequency (MHz)				2503.5	2548.3	2593	2637.5	2682.5			
15	QPSK	1	0	23.40	23.50	23.49	23.47	23.40	25.4		
15	QPSK	1	37	23.43	23.47	23.47	23.50	23.47			
15	QPSK	1	74	23.48	23.58	23.60	23.49	23.43			
15	QPSK	36	0	23.47	23.55	23.57	23.50	23.39	24.4		
15	QPSK	36	20	23.50	23.66	23.64	23.53	23.50			
15	QPSK	36	39	23.47	23.64	23.62	23.51	23.44			
15	QPSK	75	0	23.51	23.64	23.65	23.46	23.42	24.4		
15	16QAM	1	0	23.43	23.58	23.60	23.51	23.27			
15	16QAM	1	37	23.34	23.54	23.54	23.61	23.50			
15	16QAM	1	74	23.47	23.74	23.70	23.44	23.42	23.4		
15	16QAM	36	0	22.45	22.53	22.55	22.70	22.55			
15	16QAM	36	20	22.47	22.61	22.59	22.69	22.65			
15	16QAM	36	39	22.46	22.63	22.59	22.69	22.62	23.4		
15	16QAM	75	0	22.54	22.68	22.65	22.70	22.66			
15	64QAM	1	0	22.12	22.25	22.25	22.43	22.16			
15	64QAM	1	37	22.14	22.33	22.30	22.61	22.42	23.4		
15	64QAM	1	74	22.13	22.46	22.38	22.40	22.32			
15	64QAM	36	0	21.49	21.59	21.59	21.71	21.59			
15	64QAM	36	20	21.52	21.64	21.66	21.74	21.71	22.4		
15	64QAM	36	39	21.51	21.68	21.65	21.70	21.68			
15	64QAM	75	0	21.55	21.68	21.66	21.70	21.66			
Channel				39700	40160	40520	41080	41540	Tune-up limit (dbm)		
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	23.51	23.49	23.52	23.61	23.43	25.4		
10	QPSK	1	25	23.43	23.62	23.59	23.57	23.41			
10	QPSK	1	49	23.46	23.65	23.51	23.61	23.40			
10	QPSK	25	0	23.60	23.66	23.66	23.66	23.50	24.4		
10	QPSK	25	12	23.56	23.64	23.63	23.66	23.45			
10	QPSK	25	25	23.45	23.66	23.66	23.54	23.43			
10	QPSK	50	0	23.45	23.67	23.61	23.58	23.45	24.4		
10	16QAM	1	0	23.47	23.55	23.57	23.63	23.49			
10	16QAM	1	25	23.47	23.69	23.72	23.70	23.62			
10	16QAM	1	49	23.56	23.66	23.70	23.57	23.41	23.4		
10	16QAM	25	0	22.47	22.63	22.58	22.79	22.64			
10	16QAM	25	12	22.50	22.63	22.63	22.80	22.62			
10	16QAM	25	25	22.41	22.55	22.62	22.76	22.59	23.4		
10	16QAM	50	0	22.52	22.72	22.68	22.87	22.67			
10	64QAM	1	0	22.27	22.35	22.32	22.55	22.35			
10	64QAM	1	25	22.29	22.47	22.35	22.64	22.40	23.4		
10	64QAM	1	49	22.24	22.48	22.34	22.60	22.35			
10	64QAM	25	0	21.46	21.65	21.65	21.89	21.65			
10	64QAM	25	12	21.53	21.69	21.62	21.83	21.73	22.4		
10	64QAM	25	25	21.46	21.64	21.65	21.86	21.60			
10	64QAM	50	0	21.50	21.70	21.70	21.89	21.66			
Channel				39875	40148	40620	41083	41595	Tune-up limit (dbm)		
Frequency (MHz)				2496.5	2545.8	2593	2640.3	2687.5			
5	QPSK	1	0	23.44	23.47	23.47	23.55	23.40	25.4		
5	QPSK	1	12	23.40	23.53	23.58	23.55	23.40			
5	QPSK	1	24	23.40	23.57	23.51	23.51	23.40			
5	QPSK	12	0	23.51	23.67	23.68	23.63	23.49	24.4		
5	QPSK	12	7	23.56	23.71	23.71	23.66	23.53			
5	QPSK	12	13	23.51	23.69	23.68	23.64	23.47			
5	QPSK	25	0	23.50	23.69	23.66	23.65	23.49	24.4		
5	16QAM	1	0	23.52	23.62	23.62	23.67	23.53			
5	16QAM	1	12	23.57	23.71	23.70	23.71	23.63			
5	16QAM	1	24	23.57	23.71	23.72	23.67	23.51	23.4		
5	16QAM	12	0	22.47	22.65	22.66	22.85	22.67			
5	16QAM	12	7	22.54	22.70	22.66	22.85	22.71			
5	16QAM	12	13	22.50	22.64	22.65	22.80	22.67	23.4		
5	16QAM	25	0	22.55	22.72	22.71	22.90	22.72			
5	64QAM	1	0	22.30	22.37	22.37	22.65	22.42			
5	64QAM	1	12	22.29	22.47	22.45	22.67	22.45	23.4		
5	64QAM	1	24	22.31	22.49	22.44	22.63	22.35			
5	64QAM	12	0	21.55	21.74	21.71	21.90	21.73			
5	64QAM	12	7	21.57	21.76	21.71	21.90	21.76	22.4		
5	64QAM	12	13	21.52	21.73	21.74	21.87	21.70			
5	64QAM	25	0	21.59	21.77	21.75	21.90	21.74			



Band 48									
Ant 7									
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)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3599	3641	3690		
20	QPSK	1	0	22.70	22.79	22.84	22.93	24.2	
20	QPSK	1	49	22.55	22.57	22.64	22.71		
20	QPSK	1	99	22.54	22.57	22.59	22.67		
20	QPSK	50	0	22.05	22.11	22.14	22.23		
20	QPSK	50	24	22.02	22.03	22.08	22.19	23.2	
20	QPSK	50	50	21.94	21.99	22.04	22.08		
20	QPSK	100	0	21.97	22.05	22.08	22.16		
20	16QAM	1	0	22.13	22.21	22.26	22.34		
20	16QAM	1	49	21.92	21.97	22.00	22.09	23.2	
20	16QAM	1	99	21.95	21.99	21.97	22.09		
20	16QAM	50	0	21.07	21.12	21.19	21.27		
20	16QAM	50	24	21.03	21.10	21.13	21.20		
20	16QAM	50	50	20.95	21.03	21.05	21.14	22.2	
20	16QAM	100	0	20.99	21.08	21.13	21.19		
20	64QAM	1	0	20.88	20.96	20.96	21.09		
20	64QAM	1	49	20.65	20.71	20.74	20.83		
20	64QAM	1	99	20.72	20.74	20.67	20.82	22.2	
20	64QAM	50	0	20.08	20.12	20.16	20.27		
20	64QAM	50	24	20.04	20.06	20.11	20.19		
20	64QAM	50	50	19.96	20.01	20.07	20.13		
20	64QAM	100	0	20.02	20.06	20.12	20.20	Tune-up limit (dBm)	
Channel				55315	55820	56160	56655		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.60	22.69	22.73	22.84	24.2	
15	QPSK	1	37	22.48	22.56	22.58	22.68		
15	QPSK	1	74	22.52	22.58	22.59	22.69		
15	QPSK	36	0	22.01	22.09	22.13	22.25		
15	QPSK	36	20	21.95	22.02	22.07	22.16	23.2	
15	QPSK	36	39	21.92	22.01	22.04	22.11		
15	QPSK	75	0	21.95	22.07	22.09	22.19		
15	16QAM	1	0	22.06	22.15	22.21	22.28		
15	16QAM	1	37	21.84	21.93	21.95	22.03	23.2	
15	16QAM	1	74	21.98	22.05	22.04	22.16		
15	16QAM	36	0	20.95	21.05	21.09	21.21		
15	16QAM	36	20	20.91	21.00	21.03	21.13		
15	16QAM	36	39	20.90	20.97	21.01	21.10	22.2	
15	16QAM	75	0	20.97	21.07	21.11	21.20		
15	64QAM	1	0	20.79	20.90	20.96	21.00		
15	64QAM	1	37	20.66	20.74	20.75	20.89	22.2	
15	64QAM	1	74	20.73	20.81	20.73	20.92		
15	64QAM	36	0	20.01	20.13	20.14	20.24		
15	64QAM	36	20	19.96	20.06	20.08	20.18		
15	64QAM	36	39	19.95	20.02	20.03	20.13	21.2	
15	64QAM	75	0	20.00	20.07	20.09	20.20		
Channel				55200	55815	56165	56660		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	22.60	22.66	22.69	22.74	24.2	
10	QPSK	1	25	22.38	22.53	22.51	22.64		
10	QPSK	1	49	22.51	22.57	22.58	22.64		
10	QPSK	25	0	21.95	22.09	22.11	22.21		
10	QPSK	25	12	21.88	22.01	22.07	22.11	23.2	
10	QPSK	25	25	21.83	21.97	22.00	22.06		
10	QPSK	50	0	21.85	22.07	22.04	22.11		
10	16QAM	1	0	22.05	22.13	22.12	22.18		
10	16QAM	1	25	21.81	21.84	21.88	21.93	23.2	
10	16QAM	1	49	21.97	22.01	22.02	22.11		
10	16QAM	25	0	20.93	21.05	21.02	21.16		
10	16QAM	25	12	20.87	20.98	20.98	21.06		
10	16QAM	25	25	20.80	20.89	20.96	21.08	22.2	
10	16QAM	50	0	20.87	21.01	21.04	21.20		
10	64QAM	1	0	20.79	20.81	20.93	20.94		
10	64QAM	1	25	20.65	20.86	20.69	20.83		
10	64QAM	1	49	20.69	20.77	20.70	20.83	22.2	
10	64QAM	25	0	19.95	20.13	20.10	20.23		
10	64QAM	25	12	19.94	20.06	20.05	20.11		
10	64QAM	25	25	19.90	19.92	20.00	20.13		
10	64QAM	50	0	19.98	20.05	20.05	20.10	Tune-up limit (dBm)	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.61	22.64	22.74	22.84	24.2	
5	QPSK	1	12	22.57	22.61	22.68	22.77		
5	QPSK	1	24	22.49	22.62	22.61	22.71		
5	QPSK	12	0	21.97	22.10	22.12	22.20		
5	QPSK	12	7	21.99	22.09	22.15	22.22	23.2	
5	QPSK	12	13	21.97	22.02	22.08	22.21		
5	QPSK	25	0	21.98	22.02	22.10	22.21		
5	16QAM	1	0	21.98	22.07	22.15	22.22		
5	16QAM	1	12	22.04	22.15	22.17	22.26	23.2	
5	16QAM	1	24	22.02	22.08	22.12	22.17		
5	16QAM	12	0	20.98	21.07	21.13	21.21		
5	16QAM	12	7	20.95	21.10	21.09	21.21		
5	16QAM	12	13	20.95	21.00	21.07	21.15	22.2	
5	16QAM	25	0	21.00	21.06	21.13	21.21		
5	64QAM	1	0	20.78	20.83	20.88	20.97		
5	64QAM	1	12	20.77	20.83	20.85	20.97		
5	64QAM	1	24	20.75	20.79	20.88	20.96	21.2	
5	64QAM	12	0	20.01	20.07	20.18	20.27		
5	64QAM	12	7	20.01	20.09	20.16	20.27		
5	64QAM	12	13	20.01	20.09	20.10	20.19		
5	64QAM	25	0	20.03	20.11	20.16	20.25		

Band 38 HPUE							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2572.5	2595	2617.5	
20	QPSK	1	0	24.63	24.59	24.56	25.8
20	QPSK	1	49	24.56	24.59	24.51	
20	QPSK	1	99	24.55	24.54	24.47	
20	QPSK	50	0	24.81	24.81	24.77	
20	QPSK	50	24	24.85	24.79	24.73	25.8
20	QPSK	50	50	24.85	24.84	24.77	
20	QPSK	100	0	24.88	24.78	24.73	
20	16QAM	1	0	24.98	24.95	24.96	
20	16QAM	1	49	24.97	24.90	24.87	25.8
20	16QAM	1	99	24.95	24.91	24.83	
20	16QAM	50	0	24.53	24.55	24.51	
20	16QAM	50	24	24.61	24.53	24.47	
20	16QAM	50	50	24.61	24.58	24.52	25.3
20	16QAM	100	0	24.62	24.54	24.46	
20	64QAM	1	0	24.53	24.50	24.43	
20	64QAM	1	49	24.48	24.50	24.43	
20	64QAM	1	99	24.37	24.50	24.43	24.3
20	64QAM	50	0	23.49	23.40	23.45	
20	64QAM	50	24	23.47	23.47	23.46	
20	64QAM	50	50	23.39	23.42	23.43	
20	64QAM	100	0	23.35	23.29	23.25	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.61	24.64	24.59	25.8
15	QPSK	1	37	24.60	24.66	24.60	
15	QPSK	1	74	24.59	24.65	24.56	
15	QPSK	36	0	24.83	24.79	24.69	
15	QPSK	36	20	24.79	24.75	24.75	25.8
15	QPSK	36	39	24.77	24.79	24.72	
15	QPSK	75	0	24.81	24.75	24.69	
15	16QAM	1	0	24.88	24.86	24.83	
15	16QAM	1	37	24.85	24.85	24.78	25.8
15	16QAM	1	74	24.93	24.92	24.80	
15	16QAM	36	0	24.51	24.41	24.37	
15	16QAM	36	20	24.46	24.39	24.38	
15	16QAM	36	39	24.47	24.45	24.39	25.3
15	16QAM	75	0	24.51	24.44	24.39	
15	64QAM	1	0	24.38	24.39	24.35	
15	64QAM	1	37	24.46	24.34	24.36	
15	64QAM	1	74	24.30	24.41	24.33	24.3
15	64QAM	36	0	23.46	23.34	23.31	
15	64QAM	36	20	23.41	23.38	23.40	
15	64QAM	36	39	23.35	23.30	23.28	
15	64QAM	75	0	23.43	23.33	23.35	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.70	24.54	24.49	25.8
10	QPSK	1	25	24.56	24.55	24.47	
10	QPSK	1	49	24.62	24.66	24.49	
10	QPSK	25	0	24.81	24.74	24.66	
10	QPSK	25	12	24.82	24.75	24.67	25.8
10	QPSK	25	25	24.78	24.78	24.73	
10	QPSK	50	0	24.79	24.75	24.65	
10	16QAM	1	0	24.97	24.96	24.89	
10	16QAM	1	25	24.92	24.94	24.87	25.8
10	16QAM	1	49	24.96	24.95	24.88	
10	16QAM	25	0	24.50	24.39	24.33	
10	16QAM	25	12	24.51	24.45	24.39	
10	16QAM	25	25	24.49	24.48	24.39	25.3
10	16QAM	50	0	24.51	24.45	24.36	
10	64QAM	1	0	24.35	24.22	24.17	
10	64QAM	1	25	24.38	24.36	24.29	
10	64QAM	1	49	24.20	24.33	24.30	24.3
10	64QAM	25	0	23.45	23.38	23.39	
10	64QAM	25	12	23.46	23.42	23.39	
10	64QAM	25	25	23.40	23.33	23.31	
10	64QAM	50	0	23.33	23.28	23.26	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.59	24.53	24.51	25.8
5	QPSK	1	12	24.60	24.54	24.46	
5	QPSK	1	24	24.56	24.57	24.48	
5	QPSK	12	0	24.73	24.73	24.66	
5	QPSK	12	7	24.80	24.80	24.70	25.8
5	QPSK	12	13	24.78	24.75	24.70	
5	QPSK	25	0	24.72	24.68	24.67	
5	16QAM	1	0	24.92	24.89	24.83	
5	16QAM	1	12	24.91	24.90	24.82	25.8
5	16QAM	1	24	24.92	24.95	24.82	
5	16QAM	12	0	24.48	24.42	24.40	
5	16QAM	12	7	24.49	24.53	24.42	
5	16QAM	12	13	24.46	24.49	24.36	25.3
5	16QAM	25	0	24.50	24.45	24.39	
5	64QAM	1	0	24.36	24.22	24.22	
5	64QAM	1	12	24.37	24.37	24.34	
5	64QAM	1	24	24.32	24.37	24.38	24.3
5	64QAM	12	0	23.42	23.35	23.33	
5	64QAM	12	7	23.44	23.45	23.40	
5	64QAM	12	13	23.38	23.40	23.38	
5	64QAM	25	0	23.40	23.40	23.35	

Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2590	2595	2599	
20	QPSK	1	0	23.04	23.02	22.97	24
20	QPSK	1	49	23.00	23.01	22.95	
20	QPSK	1	99	23.00	22.99	22.91	
20	QPSK	50	0	23.11	23.10	23.04	24
20	QPSK	50	24	23.18	23.09	23.01	
20	QPSK	50	50	23.14	23.13	23.06	
20	QPSK	100	0	23.17	23.10	23.02	24
20	16QAM	1	0	23.19	23.11	23.08	
20	16QAM	1	49	23.11	23.08	23.02	
20	16QAM	1	99	23.07	23.08	23.00	23.5
20	16QAM	50	0	22.75	22.74	22.69	
20	16QAM	50	24	22.78	22.72	22.64	
20	16QAM	50	50	22.77	22.76	22.69	23.5
20	16QAM	100	0	22.78	22.70	22.64	
20	64QAM	1	0	22.42	22.41	22.35	
20	64QAM	1	49	22.39	22.35	22.33	22.5
20	64QAM	1	99	22.39	22.41	22.30	
20	64QAM	50	0	21.73	21.76	21.68	
20	64QAM	50	24	21.82	21.73	21.66	22.5
20	64QAM	50	50	21.78	21.77	21.71	
20	64QAM	100	0	21.78	21.71	21.65	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.99	22.99	22.92	24
15	QPSK	1	37	22.95	22.94	22.85	
15	QPSK	1	74	22.97	22.96	22.88	
15	QPSK	36	0	23.18	23.08	23.03	24
15	QPSK	36	20	23.18	23.05	23.06	
15	QPSK	36	39	23.13	23.11	23.04	
15	QPSK	75	0	23.15	23.08	22.98	24
15	16QAM	1	0	23.13	23.10	23.06	
15	16QAM	1	37	23.01	23.03	22.91	
15	16QAM	1	74	23.09	23.11	23.02	23.5
15	16QAM	36	0	22.74	22.85	22.55	
15	16QAM	36	20	22.71	22.61	22.62	
15	16QAM	36	39	22.70	22.67	22.61	22.5
15	16QAM	75	0	22.76	22.67	22.58	
15	64QAM	1	0	22.40	22.38	22.28	
15	64QAM	1	37	22.42	22.40	22.32	22.5
15	64QAM	1	74	22.38	22.39	22.28	
15	64QAM	36	0	21.78	21.72	21.63	
15	64QAM	36	20	21.78	21.67	21.68	22.5
15	64QAM	36	39	21.75	21.74	21.66	
15	64QAM	75	0	21.78	21.67	21.63	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.97	22.95	22.88	24
10	QPSK	1	25	22.90	22.94	22.80	
10	QPSK	1	49	22.90	22.96	22.79	
10	QPSK	25	0	23.15	23.08	22.93	24
10	QPSK	25	12	23.09	22.96	23.06	
10	QPSK	25	25	23.10	23.05	22.96	
10	QPSK	50	0	23.10	23.03	22.88	24
10	16QAM	1	0	23.04	23.09	23.00	
10	16QAM	1	25	22.96	22.96	22.87	
10	16QAM	1	49	23.04	23.07	22.99	23.5
10	16QAM	25	0	22.66	22.62	22.55	
10	16QAM	25	12	22.64	22.56	22.62	
10	16QAM	25	25	22.64	22.58	22.59	23.5
10	16QAM	50	0	22.76	22.65	22.55	
10	64QAM	1	0	22.32	22.35	22.20	
10	64QAM	1	25	22.32	22.38	22.27	22.5
10	64QAM	1	49	22.29	22.32	22.18	
10	64QAM	25	0	21.77	21.63	21.55	
10	64QAM	25	12	21.72	21.60	21.67	22.5
10	64QAM	25	25	21.70	21.65	21.64	
10	64QAM	50	0	21.71	21.59	21.61	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.04	22.96	22.92	24
5	QPSK	1	12	22.98	22.98	22.89	
5	QPSK	1	24	22.97	23.00	22.90	
5	QPSK	12	0	23.12	23.06	23.04	24
5	QPSK	12	7	23.17	23.16	23.04	
5	QPSK	12	13	23.15	23.11	23.02	
5	QPSK	25	0	23.15	23.08	23.02	24
5	16QAM	1	0	23.17	23.07	23.06	
5	16QAM	1	12	23.17	23.15	23.06	
5	16QAM	1	24	23.17	23.17	23.04	23.5
5	16QAM	12	0	22.73	22.67	22.60	
5	16QAM	12	7	22.74	22.69	22.64	
5	16QAM	12	13	22.68	22.71	22.62	23.5
5	16QAM	25	0	22.74	22.67	22.64	
5	64QAM	1	0	22.53	22.47	22.39	
5	64QAM	1	12	22.54	22.51	22.39	22.5
5	64QAM	1	24	22.54	22.52	22.39	
5	64QAM	12	0	21.77	21.69	21.69	
5	64QAM	12	7	21.79	21.77	21.68	22.5
5	64QAM	12	13	21.77	21.75	21.66	
5	64QAM	25	0	21.81	21.74	21.65	



Band 41										
Ant B										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				39760	40185	40620	41065	41490		
Frequency (MHz)				2503	2545.5	2593	2635.5	2680		
20	QPSK	1	0	22.48	22.43	22.55	22.21	22.00	24	
20	QPSK	1	49	22.42	22.42	22.40	22.44	22.29		
20	QPSK	1	99	22.40	22.41	22.50	22.05	22.14		
20	QPSK	50	0	22.52	22.50	22.52	22.41	22.22		
20	QPSK	50	24	22.57	22.58	22.60	22.51	22.36	24	
20	QPSK	50	50	22.56	22.57	22.58	22.35	22.34		
20	QPSK	100	0	22.59	22.60	22.61	22.42	22.29		
20	16QAM	1	0	22.63	22.58	22.66	22.32	22.02		
20	16QAM	1	49	22.62	22.54	22.49	22.57	22.36	24	
20	16QAM	1	99	22.49	22.57	22.54	22.06	22.25		
20	16QAM	50	0	22.17	22.15	22.14	22.24	22.06		
20	16QAM	50	24	22.23	22.22	22.19	22.33	22.19		
20	16QAM	50	50	22.19	22.21	22.17	22.19	22.17	23.5	
20	16QAM	100	0	22.23	22.22	22.17	22.24	22.11		
20	64QAM	1	0	21.93	21.82	21.87	21.75	21.50		
20	64QAM	1	49	21.81	21.85	21.85	22.12	21.93		
20	64QAM	1	99	21.86	21.92	21.94	21.57	21.76	23.5	
20	64QAM	50	0	21.20	21.16	21.15	21.23	21.13		
20	64QAM	50	24	21.27	21.23	21.19	21.34	21.20		
20	64QAM	50	50	21.22	21.22	21.18	21.19	21.16		
20	64QAM	100	0	21.25	21.22	21.21	21.25	21.13	22.5	
Channel				39720	40175	40620	41065	41415		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	22.45	22.40	22.42	22.30	22.03	24	
15	QPSK	1	37	22.38	22.35	22.38	22.36	22.20		
15	QPSK	1	74	22.36	22.45	22.49	22.10	22.19		
15	QPSK	36	0	22.58	22.48	22.49	22.41	22.26		
15	QPSK	36	20	22.56	22.55	22.56	22.40	22.36	24	
15	QPSK	36	39	22.52	22.53	22.53	22.38	22.32		
15	QPSK	75	0	22.58	22.56	22.56	22.34	22.30		
15	16QAM	1	0	22.63	22.56	22.50	22.43	22.15		
15	16QAM	1	37	22.41	22.44	22.39	22.43	22.36	24	
15	16QAM	1	74	22.51	22.63	22.62	22.25	22.34		
15	16QAM	36	0	22.17	22.07	22.05	22.17	22.03		
15	16QAM	36	20	22.14	22.12	22.10	22.18	22.13		
15	16QAM	36	39	22.12	22.12	22.09	22.15	22.11	23.5	
15	16QAM	75	0	22.22	22.18	22.15	22.17	22.12		
15	64QAM	1	0	21.87	21.80	21.79	21.88	21.61		
15	64QAM	1	37	21.83	21.84	21.81	22.06	21.91		
15	64QAM	1	74	21.78	21.97	21.88	21.78	21.84	23.5	
15	64QAM	36	0	21.19	21.12	21.09	21.24	21.10		
15	64QAM	36	20	21.22	21.19	21.15	21.23	21.19		
15	64QAM	36	39	21.17	21.19	21.13	21.20	21.18		
15	64QAM	75	0	21.22	21.20	21.16	21.17	21.12	22.5	
Channel				39700	40180	40620	41060	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	22.41	22.40	22.41	22.21	22.00	24	
10	QPSK	1	25	22.34	22.28	22.36	22.34	22.15		
10	QPSK	1	49	22.35	22.36	22.43	22.05	22.17		
10	QPSK	25	0	22.49	22.42	22.41	22.35	22.18		
10	QPSK	25	12	22.54	22.53	22.53	22.38	22.30	24	
10	QPSK	25	25	22.50	22.50	22.50	22.38	22.30		
10	QPSK	50	0	22.65	22.46	22.51	22.33	22.29		
10	16QAM	1	0	22.57	22.51	22.50	22.35	22.14		
10	16QAM	1	25	22.36	22.42	22.34	22.39	22.29	24	
10	16QAM	1	49	22.45	22.63	22.65	22.18	22.28		
10	16QAM	25	0	22.08	21.97	22.04	22.08	21.94		
10	16QAM	25	12	22.10	22.06	22.07	22.18	22.03		
10	16QAM	25	25	22.06	22.05	22.05	22.08	22.10	23.5	
10	16QAM	50	0	22.16	22.17	22.10	22.08	22.08		
10	64QAM	1	0	21.77	21.76	21.70	21.81	21.55		
10	64QAM	1	25	21.76	21.80	21.78	22.05	21.81		
10	64QAM	1	49	21.77	21.87	21.82	21.70	21.82	23.5	
10	64QAM	25	0	21.14	21.10	21.09	21.22	21.08		
10	64QAM	25	12	21.20	21.12	21.13	21.19	21.15		
10	64QAM	25	25	21.11	21.09	21.03	21.15	21.09		
10	64QAM	50	0	21.21	21.20	21.09	21.13	21.07	22.5	
Channel				39875	40148	40620	41083	41665		
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	22.54	22.42	22.43	22.43	22.26	24	
5	QPSK	1	12	22.56	22.49	22.46	22.43	22.26		
5	QPSK	1	24	22.54	22.47	22.42	22.38	22.17		
5	QPSK	12	0	22.64	22.56	22.58	22.53	22.38		
5	QPSK	12	7	22.63	22.59	22.58	22.54	22.43	24	
5	QPSK	12	13	22.64	22.58	22.58	22.53	22.35		
5	QPSK	25	0	22.62	22.58	22.57	22.53	22.40		
5	16QAM	1	0	22.65	22.52	22.53	22.55	22.41		
5	16QAM	1	12	22.64	22.63	22.65	22.63	22.61	24	
5	16QAM	1	24	22.65	22.64	22.61	22.54	22.42		
5	16QAM	12	0	22.22	22.15	22.13	22.33	22.20		
5	16QAM	12	7	22.23	22.20	22.16	22.35	22.20		
5	16QAM	12	13	22.21	22.17	22.15	22.31	22.16	23.5	
5	16QAM	25	0	22.25	22.22	22.21	22.39	22.22		
5	64QAM	1	0	22.02	21.88	21.84	22.13	21.97		
5	64QAM	1	12	21.97	21.94	21.93	22.14	21.88		
5	64QAM	1	24	21.97	21.97	21.95	22.08	21.93	22.5	
5	64QAM	12	0	21.31	21.23	21.21	21.38	21.25		
5	64QAM	12	7	21.28	21.25	21.25	21.40	21.26		
5	64QAM	12	13	21.28	21.23	21.20	21.33	21.19		
5	64QAM	25	0	21.29	21.26	21.20	21.39	21.25	22.5	



Band 48									
Ant 2									
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)	
Channel				3550	3600	3641	3690		
Frequency (MHz)				55340	55830	56150	56640		
20	QPSK	1	0	21.15	21.17	21.13	21.00	22.2	
20	QPSK	1	49	20.83	20.96	20.92	20.72		
20	QPSK	1	99	20.85	20.94	20.87	20.60		
20	QPSK	50	0	20.83	20.86	20.85	20.68		
20	QPSK	50	24	20.82	20.82	20.81	20.60	21.6	
20	QPSK	50	50	20.76	20.77	20.71	20.47		
20	QPSK	100	0	20.80	20.81	20.76	20.58		
20	16QAM	1	0	20.90	20.96	20.95	20.81		
20	16QAM	1	49	20.71	20.74	20.70	20.48	21.6	
20	16QAM	1	99	20.75	20.72	20.64	20.42		
20	16QAM	50	0	19.67	19.91	19.86	19.71		
20	16QAM	50	24	19.84	19.85	19.83	19.62		
20	16QAM	50	50	19.78	19.79	19.76	19.50	20.6	
20	16QAM	100	0	19.80	19.83	19.83	19.61		
20	64QAM	1	0	19.68	19.74	19.69	19.54		
20	64QAM	1	49	19.46	19.48	19.45	19.24		
20	64QAM	1	99	19.52	19.47	19.35	19.16	20.6	
20	64QAM	50	0	18.85	18.92	18.86	18.72		
20	64QAM	50	24	18.84	18.89	18.81	18.65		
20	64QAM	50	50	18.78	18.82	18.74	18.51		
20	64QAM	100	0	18.83	18.85	18.81	18.62	19.6	
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3606	3642	3692.5		
15	QPSK	1	0	20.57	20.86	20.84	20.69	22.2	
15	QPSK	1	37	20.50	20.72	20.69	20.48		
15	QPSK	1	74	20.54	20.75	20.65	20.41		
15	QPSK	36	0	20.62	20.64	20.60	20.45		
15	QPSK	36	20	20.57	20.59	20.55	20.35	21.6	
15	QPSK	36	39	20.54	20.57	20.52	20.25		
15	QPSK	75	0	20.57	20.64	20.57	20.36		
15	16QAM	1	0	20.65	20.69	20.67	20.53		
15	16QAM	1	37	20.44	20.50	20.43	20.21	21.6	
15	16QAM	1	74	20.58	20.59	20.52	20.27		
15	16QAM	36	0	19.57	19.62	19.58	19.40		
15	16QAM	36	20	19.53	19.56	19.52	19.31		
15	16QAM	36	39	19.51	19.54	19.48	19.24	20.6	
15	16QAM	75	0	19.61	19.63	19.60	19.38		
15	64QAM	1	0	19.38	19.44	19.43	19.27		
15	64QAM	1	37	19.26	19.29	19.24	19.03		
15	64QAM	1	74	19.34	19.34	19.22	19.00	20.6	
15	64QAM	36	0	18.63	18.67	18.64	18.45		
15	64QAM	36	20	18.58	18.64	18.57	18.35		
15	64QAM	36	39	18.56	18.56	18.52	18.26		
15	64QAM	75	0	18.61	18.64	18.50	18.37	19.6	
Channel				55930	55915	56165	56660		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	20.59	20.77	20.71	20.57	22.2	
10	QPSK	1	25	20.53	20.73	20.73	20.49		
10	QPSK	1	49	20.50	20.68	20.65	20.38		
10	QPSK	25	0	20.57	20.51	20.55	20.34		
10	QPSK	25	12	20.55	20.62	20.59	20.35	21.6	
10	QPSK	25	25	20.58	20.52	20.52	20.26		
10	QPSK	50	0	20.56	20.52	20.49	20.24		
10	16QAM	1	0	20.56	20.58	20.57	20.28		
10	16QAM	1	25	20.60	20.64	20.63	20.41	21.6	
10	16QAM	1	49	20.53	20.59	20.51	20.26		
10	16QAM	25	0	19.57	19.56	19.54	19.33		
10	16QAM	25	12	19.62	19.57	19.54	19.25		
10	16QAM	25	25	19.53	19.55	19.51	19.27	20.6	
10	16QAM	50	0	19.49	19.57	19.61	19.31		
10	64QAM	1	0	19.25	19.33	19.30	19.03		
10	64QAM	1	25	19.31	19.29	19.27	19.08		
10	64QAM	1	49	19.25	19.28	19.29	18.97	19.6	
10	64QAM	25	0	18.54	18.59	18.64	18.34		
10	64QAM	25	12	18.62	18.58	18.62	18.33		
10	64QAM	25	25	18.61	18.56	18.61	18.31		
10	64QAM	50	0	18.64	18.62	18.54	18.35	19.6	
Channel				55285	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	20.61	20.84	20.80	20.60	22.2	
5	QPSK	1	12	20.56	20.79	20.75	20.51		
5	QPSK	1	24	20.51	20.72	20.73	20.43		
5	QPSK	12	0	20.60	20.61	20.58	20.35		
5	QPSK	12	7	20.63	20.63	20.61	20.36	21.6	
5	QPSK	12	13	20.59	20.62	20.59	20.33		
5	QPSK	25	0	20.59	20.61	20.57	20.32		
5	16QAM	1	0	20.58	20.65	20.63	20.38		
5	16QAM	1	12	20.64	20.70	20.64	20.41	21.6	
5	16QAM	1	24	20.55	20.62	20.56	20.29		
5	16QAM	12	0	19.59	19.63	19.59	19.37		
5	16QAM	12	7	19.62	19.60	19.62	19.34		
5	16QAM	12	13	19.53	19.59	19.57	19.28	20.6	
5	16QAM	25	0	19.59	19.64	19.62	19.37		
5	64QAM	1	0	19.35	19.40	19.37	19.11		
5	64QAM	1	12	19.35	19.39	19.33	19.08		
5	64QAM	1	24	19.33	19.35	19.34	19.07	19.6	
5	64QAM	12	0	18.61	18.69	18.65	18.37		
5	64QAM	12	7	18.64	18.64	18.68	18.37		
5	64QAM	12	13	18.64	18.64	18.61	18.36		
5	64QAM	25	0	18.65	18.67	18.64	18.38		



Band 38 HPUE								
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)	
Channel				37850	38000	38150		
Frequency (MHz)				2572.5	2595	2610		
20	QPSK	1	0	25.30	25.33	25.23	26.4	
20	QPSK	1	49	25.32	25.27	25.26		
20	QPSK	1	99	25.32	25.28	25.24		
20	QPSK	50	0	25.32	25.30	25.27		
20	QPSK	50	24	25.40	25.30	25.26		
20	QPSK	50	50	25.39	25.36	25.32	26.4	
20	QPSK	100	0	25.40	25.31	25.27		
20	16QAM	1	0	25.47	25.45	25.36		
20	16QAM	1	49	25.79	25.42	25.34		
20	16QAM	1	99	25.45	25.43	25.37		
20	16QAM	50	0	24.45	24.47	24.39	25.4	
20	16QAM	50	24	24.53	24.46	24.37		
20	16QAM	50	50	24.52	24.54	24.45		
20	16QAM	100	0	24.57	24.46	24.38		
20	64QAM	1	0	24.42	24.38	24.27		
20	64QAM	1	49	24.45	24.37	24.32	25.4	
20	64QAM	1	99	24.43	24.40	24.33		
20	64QAM	50	0	23.47	23.48	23.39		
20	64QAM	50	24	23.54	23.47	23.38		
20	64QAM	50	50	23.52	23.53	23.45		
20	64QAM	100	0	23.51	23.46	23.38	Tune-up limit (dBm)	
Channel				37850	38000	38150		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	25.25	25.24	25.20	26.4	
15	QPSK	1	37	25.32	25.27	25.23		
15	QPSK	1	74	25.29	25.23	25.25		
15	QPSK	36	0	25.51	25.41	25.39		
15	QPSK	36	20	25.45	25.38	25.44		
15	QPSK	36	39	25.46	25.43	25.38	26.4	
15	QPSK	75	0	25.49	25.37	25.33		
15	16QAM	1	0	25.56	25.59	25.48		
15	16QAM	1	37	25.56	25.54	25.47		
15	16QAM	1	74	25.61	25.54	25.50		
15	16QAM	36	0	24.57	24.53	24.44	25.4	
15	16QAM	36	20	24.55	24.49	24.50		
15	16QAM	36	39	24.55	24.55	24.46		
15	16QAM	75	0	24.62	24.52	24.44		
15	64QAM	1	0	24.49	24.43	24.38		
15	64QAM	1	37	24.55	24.52	24.43	25.4	
15	64QAM	1	74	24.56	24.50	24.41		
15	64QAM	36	0	23.62	23.57	23.48		
15	64QAM	36	20	23.62	23.53	23.52		
15	64QAM	36	39	23.58	23.61	23.53		
15	64QAM	75	0	23.62	23.54	23.48	Tune-up limit (dBm)	
Channel				37800	38000	38200		
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	25.43	25.31	25.24	26.4	
10	QPSK	1	25	25.37	25.34	25.22		
10	QPSK	1	49	25.41	25.35	25.28		
10	QPSK	25	0	25.50	25.46	25.38		
10	QPSK	25	12	25.58	25.48	25.40		
10	QPSK	25	25	25.50	25.56	25.44	26.4	
10	QPSK	50	0	25.45	25.43	25.36		
10	16QAM	1	0	25.70	25.55	25.55		
10	16QAM	1	25	25.70	25.65	25.54		
10	16QAM	1	49	25.69	25.73	25.59		
10	16QAM	25	0	24.72	24.65	24.53	25.4	
10	16QAM	25	12	24.63	24.71	24.61		
10	16QAM	25	25	24.70	24.63	24.55		
10	16QAM	50	0	24.67	24.54	24.61		
10	64QAM	1	0	24.63	24.54	24.58		
10	64QAM	1	25	24.64	24.64	24.61	25.4	
10	64QAM	1	49	24.65	24.74	24.57		
10	64QAM	25	0	23.74	23.64	23.61		
10	64QAM	25	12	23.75	23.72	23.54		
10	64QAM	25	25	23.69	23.62	23.60		
10	64QAM	50	0	23.76	23.60	23.61	Tune-up limit (dBm)	
Channel				37775	38000	38225		
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	25.45	25.36	25.29	26.4	
5	QPSK	1	12	25.39	25.38	25.26		
5	QPSK	1	24	25.43	25.39	25.29		
5	QPSK	12	0	25.59	25.49	25.46		
5	QPSK	12	7	25.64	25.57	25.49		
5	QPSK	12	13	25.58	25.58	25.45	26.4	
5	QPSK	25	0	25.55	25.46	25.44		
5	16QAM	1	0	25.74	25.62	25.63		
5	16QAM	1	12	25.71	25.69	25.60		
5	16QAM	1	24	25.76	25.73	25.66		
5	16QAM	12	0	24.74	24.65	24.60	25.4	
5	16QAM	12	7	24.72	24.74	24.64		
5	16QAM	12	13	24.71	24.69	24.61		
5	16QAM	25	0	24.71	24.63	24.62		
5	64QAM	1	0	24.73	24.64	24.62		
5	64QAM	1	12	24.72	24.69	24.61	25.4	
5	64QAM	1	24	24.74	24.74	24.67		
5	64QAM	12	0	23.74	23.67	23.63		
5	64QAM	12	7	23.76	23.75	23.62		
5	64QAM	12	13	23.74	23.70	23.61		
5	64QAM	25	0	23.77	23.66	23.66	24.4	



Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.48	23.45	23.40	24.6
20	QPSK	1	49	23.49	23.46	23.40	
20	QPSK	1	99	23.51	23.46	23.40	
20	QPSK	50	0	23.58	23.54	23.48	24.6
20	QPSK	50	24	23.72	23.55	23.47	
20	QPSK	50	50	23.63	23.61	23.53	
20	QPSK	100	0	23.65	23.55	23.47	24.6
20	16QAM	1	0	23.59	23.58	23.49	
20	16QAM	1	49	23.55	23.53	23.45	
20	16QAM	1	99	23.56	23.55	23.47	23.6
20	16QAM	50	0	22.61	22.58	22.48	
20	16QAM	50	24	22.68	22.58	22.50	
20	16QAM	50	50	22.67	22.64	22.56	23.6
20	16QAM	100	0	22.67	22.56	22.48	
20	64QAM	1	0	22.32	22.25	22.15	
20	64QAM	1	49	22.28	22.28	22.18	23.6
20	64QAM	1	99	22.32	22.26	22.16	
20	64QAM	50	0	21.62	21.59	21.51	
20	64QAM	50	24	21.69	21.59	21.50	22.8
20	64QAM	50	50	21.68	21.64	21.57	
20	64QAM	100	0	21.68	21.57	21.50	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.51	23.45	23.48	24.6
15	QPSK	1	37	23.47	23.45	23.47	
15	QPSK	1	74	23.48	23.46	23.40	
15	QPSK	36	0	23.66	23.57	23.49	24.6
15	QPSK	36	20	23.68	23.55	23.54	
15	QPSK	36	39	23.65	23.61	23.53	
15	QPSK	75	0	23.67	23.55	23.46	24.6
15	16QAM	1	0	23.62	23.61	23.49	
15	16QAM	1	37	23.51	23.49	23.41	
15	16QAM	1	74	23.65	23.60	23.50	23.6
15	16QAM	36	0	22.66	22.56	22.45	
15	16QAM	36	20	22.63	22.51	22.54	
15	16QAM	36	39	22.62	22.60	22.50	23.6
15	16QAM	75	0	22.69	22.58	22.50	
15	64QAM	1	0	22.30	22.27	22.17	
15	64QAM	1	37	22.37	22.30	22.21	23.6
15	64QAM	1	74	22.33	22.31	22.18	
15	64QAM	36	0	21.71	21.59	21.51	
15	64QAM	36	20	21.68	21.58	21.58	22.8
15	64QAM	36	39	21.69	21.66	21.57	
15	64QAM	75	0	21.72	21.57	21.52	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.47	23.48	23.42	24.6
10	QPSK	1	25	23.49	23.49	23.49	
10	QPSK	1	49	23.45	23.42	23.43	
10	QPSK	25	0	23.57	23.53	23.49	24.6
10	QPSK	25	12	23.61	23.69	23.49	
10	QPSK	25	25	23.58	23.58	23.49	
10	QPSK	50	0	23.62	23.58	23.55	24.6
10	16QAM	1	0	23.70	23.53	23.47	
10	16QAM	1	25	23.61	23.63	23.51	
10	16QAM	1	49	23.65	23.62	23.51	23.6
10	16QAM	25	0	22.64	22.50	22.51	
10	16QAM	25	12	22.67	22.63	22.51	
10	16QAM	25	25	22.58	22.54	22.47	23.6
10	16QAM	50	0	22.60	22.55	22.46	
10	64QAM	1	0	22.46	22.29	22.24	
10	64QAM	1	25	22.36	22.40	22.19	23.6
10	64QAM	1	49	22.37	22.38	22.29	
10	64QAM	25	0	21.71	21.56	21.49	
10	64QAM	25	12	21.69	21.64	21.57	22.8
10	64QAM	25	25	21.69	21.62	21.52	
10	64QAM	50	0	21.76	21.60	21.53	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.55	23.51	23.46	24.6
5	QPSK	1	12	23.53	23.50	23.40	
5	QPSK	1	24	23.51	23.48	23.40	
5	QPSK	12	0	23.65	23.60	23.56	24.6
5	QPSK	12	7	23.69	23.69	23.58	
5	QPSK	12	13	23.66	23.68	23.57	
5	QPSK	25	0	23.65	23.60	23.55	24.6
5	16QAM	1	0	23.66	23.59	23.55	
5	16QAM	1	12	23.60	23.66	23.58	
5	16QAM	1	24	23.66	23.66	23.57	23.6
5	16QAM	12	0	22.66	22.59	22.55	
5	16QAM	12	7	22.69	22.68	22.56	
5	16QAM	12	13	22.64	22.60	22.55	23.6
5	16QAM	25	0	22.70	22.62	22.56	
5	64QAM	1	0	22.47	22.35	22.29	
5	64QAM	1	12	22.46	22.42	22.29	23.6
5	64QAM	1	24	22.46	22.42	22.30	
5	64QAM	12	0	21.73	21.66	21.57	
5	64QAM	12	7	21.73	21.71	21.65	22.8
5	64QAM	12	13	21.73	21.69	21.62	
5	64QAM	25	0	21.76	21.64	21.62	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39760	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.29	23.45	23.52	23.23	23.01	24.6	
20	QPSK	1	49	23.36	23.51	23.46	23.52	23.38		
20	QPSK	1	99	23.34	23.50	23.50	23.06	23.25		
20	QPSK	50	0	23.39	23.53	23.55	23.46	23.37	24.6	
20	QPSK	50	24	23.50	23.75	23.62	23.59	23.50		
20	QPSK	50	50	23.49	23.63	23.60	23.43	23.41		
20	QPSK	0	0	23.50	23.65	23.62	23.50	23.46	24.6	
20	16QAM	1	0	23.42	23.55	23.65	23.35	23.12		
20	16QAM	1	49	23.39	23.58	23.53	23.63	23.51		
20	16QAM	1	99	23.42	23.63	23.60	23.16	23.34	24.6	
20	16QAM	50	0	22.43	22.59	22.57	22.68	22.59		
20	16QAM	50	24	22.54	22.69	22.63	22.84	22.73		
20	16QAM	50	50	22.54	22.67	22.62	22.69	22.58	23.6	
20	16QAM	100	0	22.63	22.67	22.64	22.72	22.63		
20	64QAM	1	0	22.13	22.17	22.26	22.18	21.99		
20	64QAM	1	49	22.10	22.30	22.25	22.61	22.48	23.6	
20	64QAM	1	99	22.16	22.37	22.28	22.15	22.23		
20	64QAM	50	0	21.58	21.68	21.68	21.70	21.58		
20	64QAM	50	24	21.63	21.68	21.66	21.84	21.74	22.6	
20	64QAM	50	50	21.63	21.68	21.64	21.66	21.69		
20	64QAM	100	0	21.63	21.67	21.65	21.74	21.63		
Channel				39720	40173	40620	41058	41515		
Frequency (MHz)				2503.5	2548.3	2593.5	2637.7	2682.5	Tune-up limit (dBm)	
15	QPSK	1	0	23.40	23.50	23.49	23.47	23.40	24.6	
15	QPSK	1	37	23.43	23.47	23.47	23.50	23.47		
15	QPSK	1	74	23.48	23.58	23.60	23.49	23.43		
15	QPSK	36	0	23.47	23.55	23.57	23.50	23.39	24.6	
15	QPSK	36	20	23.50	23.66	23.64	23.53	23.50		
15	QPSK	36	39	23.47	23.64	23.62	23.51	23.44		
15	QPSK	75	0	23.51	23.64	23.65	23.46	23.42	24.6	
15	16QAM	1	0	23.43	23.58	23.60	23.51	23.27		
15	16QAM	1	37	23.34	23.54	23.54	23.61	23.50		
15	16QAM	1	74	23.47	23.74	23.70	23.44	23.42	24.6	
15	16QAM	36	0	22.45	22.53	22.55	22.70	22.55		
15	16QAM	36	20	22.47	22.61	22.59	22.69	22.65		
15	16QAM	36	39	22.46	22.63	22.59	22.69	22.62	23.6	
15	16QAM	75	0	22.54	22.68	22.65	22.70	22.66		
15	64QAM	1	0	22.12	22.25	22.25	22.43	22.16		
15	64QAM	1	37	22.14	22.33	22.30	22.61	22.42	23.6	
15	64QAM	1	74	22.13	22.46	22.38	22.40	22.32		
15	64QAM	36	0	21.49	21.59	21.59	21.71	21.59		
15	64QAM	36	20	21.62	21.64	21.66	21.74	21.71	22.6	
15	64QAM	36	39	21.61	21.68	21.65	21.70	21.68		
15	64QAM	75	0	21.65	21.68	21.66	21.70	21.66		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.51	23.49	23.52	23.61	23.43	24.6	
10	QPSK	1	25	23.43	23.62	23.59	23.57	23.41		
10	QPSK	1	49	23.46	23.65	23.51	23.61	23.40		
10	QPSK	25	0	23.60	23.66	23.66	23.66	23.50	24.6	
10	QPSK	25	12	23.56	23.64	23.63	23.66	23.45		
10	QPSK	25	25	23.45	23.66	23.66	23.54	23.43		
10	QPSK	50	0	23.45	23.67	23.61	23.58	23.45	24.6	
10	16QAM	1	0	23.47	23.55	23.57	23.63	23.49		
10	16QAM	1	25	23.47	23.69	23.72	23.70	23.62		
10	16QAM	1	49	23.56	23.66	23.70	23.57	23.41	23.6	
10	16QAM	25	0	22.47	22.63	22.58	22.79	22.64		
10	16QAM	25	12	22.50	22.63	22.63	22.80	22.62		
10	16QAM	25	25	22.41	22.55	22.62	22.76	22.59	23.6	
10	16QAM	50	0	22.62	22.72	22.68	22.87	22.67		
10	64QAM	1	0	22.27	22.35	22.32	22.55	22.35		
10	64QAM	1	25	22.29	22.47	22.35	22.64	22.40	23.6	
10	64QAM	1	49	22.24	22.48	22.34	22.60	22.35		
10	64QAM	25	0	21.46	21.65	21.65	21.89	21.65		
10	64QAM	25	12	21.63	21.69	21.62	21.83	21.73	22.6	
10	64QAM	25	25	21.46	21.64	21.65	21.86	21.60		
10	64QAM	50	0	21.50	21.70	21.70	21.89	21.68		
Channel				39875	40148	40620	41083	41665	Tune-up limit (dBm)	
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	23.44	23.47	23.47	23.55	23.40	24.6	
5	QPSK	1	12	23.40	23.53	23.58	23.55	23.40		
5	QPSK	1	24	23.40	23.57	23.51	23.51	23.40		
5	QPSK	12	0	23.51	23.67	23.68	23.63	23.49	24.6	
5	QPSK	12	7	23.56	23.71	23.71	23.66	23.53		
5	QPSK	12	13	23.61	23.69	23.68	23.64	23.47		
5	QPSK	25	0	23.50	23.69	23.66	23.65	23.49	24.6	
5	16QAM	1	0	23.62	23.62	23.62	23.67	23.53		
5	16QAM	1	12	23.67	23.71	23.70	23.71	23.63		
5	16QAM	1	24	23.67	23.71	23.72	23.67	23.51	24.6	
5	16QAM	12	0	22.47	22.65	22.66	22.85	22.67		
5	16QAM	12	7	22.54	22.70	22.66	22.85	22.71		
5	16QAM	12	13	22.50	22.64	22.65	22.80	22.67	23.6	
5	16QAM	25	0	22.55	22.72	22.71	22.90	22.72		
5	64QAM	1	0	22.30	22.37	22.38	22.65	22.42		
5	64QAM	1	12	22.29	22.47	22.45	22.67	22.45	23.6	
5	64QAM	1	24	22.31	22.49	22.44	22.63	22.35		
5	64QAM	12	0	21.65	21.74	21.71	21.90	21.73		
5	64QAM	12	7	21.67	21.76	21.71	21.80	21.76	22.6	
5	64QAM	12	13	21.62	21.73	21.74	21.87	21.70		
5	64QAM	25	0	21.59	21.77	21.75	21.90	21.74		



Band 48									
Ant 7									
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)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3550	3609	3641	3690		
20	QPSK	1	0	22.70	22.79	22.84	22.93	23.8	
20	QPSK	1	49	22.55	22.57	22.64	22.71		
20	QPSK	1	99	22.54	22.57	22.59	22.67		
20	QPSK	50	0	22.05	22.11	22.14	22.23		
20	QPSK	50	24	22.02	22.03	22.08	22.19	23.2	
20	QPSK	50	50	21.94	21.99	22.04	22.08		
20	QPSK	100	0	21.97	22.05	22.08	22.16		
20	16QAM	1	0	22.13	22.21	22.26	22.34		
20	16QAM	1	49	21.92	21.97	22.00	22.09	23.2	
20	16QAM	1	99	21.95	21.99	21.97	22.09		
20	16QAM	50	0	21.07	21.12	21.19	21.27		
20	16QAM	50	24	21.03	21.10	21.13	21.20		
20	16QAM	50	50	20.96	21.03	21.05	21.14	22.2	
20	16QAM	100	0	20.99	21.08	21.13	21.19		
20	64QAM	1	0	20.88	20.96	20.96	21.09		
20	64QAM	1	49	20.65	20.71	20.74	20.83		
20	64QAM	1	99	20.72	20.74	20.67	20.82	22.2	
20	64QAM	50	0	20.08	20.12	20.16	20.27		
20	64QAM	50	24	20.04	20.06	20.11	20.19		
20	64QAM	50	50	19.96	20.01	20.07	20.13		
20	64QAM	100	0	20.02	20.06	20.12	20.20	21.2	
Channel				55315	55820	56150	56655		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.60	22.69	22.73	22.84	23.8	
15	QPSK	1	37	22.48	22.56	22.58	22.68		
15	QPSK	1	74	22.52	22.58	22.59	22.69		
15	QPSK	36	0	22.01	22.09	22.13	22.25		
15	QPSK	36	20	21.96	22.02	22.07	22.16	23.2	
15	QPSK	36	39	21.92	22.01	22.04	22.11		
15	QPSK	75	0	21.95	22.07	22.09	22.19		
15	16QAM	1	0	22.06	22.15	22.21	22.28		
15	16QAM	1	37	21.84	21.93	21.95	22.03	23.2	
15	16QAM	1	74	21.98	22.05	22.04	22.16		
15	16QAM	36	0	20.95	21.05	21.09	21.21		
15	16QAM	36	20	20.91	21.00	21.03	21.13		
15	16QAM	36	39	20.90	20.97	21.01	21.10	22.2	
15	16QAM	75	0	20.97	21.07	21.11	21.20		
15	64QAM	1	0	20.79	20.90	20.96	21.00		
15	64QAM	1	37	20.66	20.74	20.75	20.89		
15	64QAM	1	74	20.73	20.81	20.73	20.92	21.2	
15	64QAM	36	0	20.01	20.13	20.14	20.24		
15	64QAM	36	20	19.96	20.06	20.08	20.18		
15	64QAM	36	39	19.95	20.02	20.03	20.13		
15	64QAM	75	0	20.00	20.07	20.09	20.20	Tune-up limit (dbm)	
Channel				55200	55815	56165	56890		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	22.60	22.66	22.69	22.74	23.8	
10	QPSK	1	25	22.38	22.53	22.51	22.64		
10	QPSK	1	49	22.51	22.57	22.58	22.64		
10	QPSK	25	0	21.95	22.09	22.11	22.21		
10	QPSK	25	12	21.88	22.01	22.07	22.11	23.2	
10	QPSK	25	25	21.83	21.97	22.00	22.06		
10	QPSK	50	0	21.85	22.07	22.04	22.11		
10	16QAM	1	0	22.05	22.13	22.12	22.18		
10	16QAM	1	25	21.81	21.84	21.88	21.93	23.2	
10	16QAM	1	49	21.97	22.01	22.02	22.11		
10	16QAM	25	0	20.93	21.05	21.02	21.16		
10	16QAM	25	12	20.87	20.98	20.98	21.06		
10	16QAM	25	25	20.80	20.89	20.96	21.08	22.2	
10	16QAM	50	0	20.87	21.01	21.04	21.20		
10	64QAM	1	0	20.70	20.81	20.93	20.94		
10	64QAM	1	25	20.65	20.86	20.69	20.83		
10	64QAM	1	49	20.69	20.77	20.70	20.83	21.2	
10	64QAM	25	0	19.95	20.13	20.10	20.23		
10	64QAM	25	12	19.94	20.06	20.05	20.11		
10	64QAM	25	25	19.90	19.92	20.00	20.13		
10	64QAM	50	0	19.98	20.05	20.05	20.10	Tune-up limit (dbm)	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.61	22.64	22.74	22.84	23.8	
5	QPSK	1	12	22.57	22.61	22.68	22.77		
5	QPSK	1	24	22.49	22.62	22.61	22.71		
5	QPSK	12	0	21.97	22.10	22.12	22.20		
5	QPSK	12	7	21.99	22.09	22.15	22.22	23.2	
5	QPSK	12	13	21.97	22.02	22.08	22.21		
5	QPSK	25	0	21.96	22.02	22.10	22.21		
5	16QAM	1	0	21.98	22.07	22.15	22.22		
5	16QAM	1	12	22.04	22.15	22.17	22.26	23.2	
5	16QAM	1	24	22.02	22.08	22.12	22.17		
5	16QAM	12	0	20.98	21.07	21.13	21.21		
5	16QAM	12	7	20.95	21.10	21.09	21.21		
5	16QAM	12	13	20.95	21.00	21.07	21.15	22.2	
5	16QAM	25	0	21.00	21.06	21.13	21.21		
5	64QAM	1	0	20.78	20.83	20.88	20.97		
5	64QAM	1	12	20.77	20.83	20.85	20.97		
5	64QAM	1	24	20.75	20.79	20.88	20.96	21.2	
5	64QAM	12	0	20.01	20.07	20.18	20.27		
5	64QAM	12	7	20.01	20.09	20.16	20.27		
5	64QAM	12	13	20.01	20.09	20.10	20.19		
5	64QAM	25	0	20.03	20.11	20.16	20.25		



Band 38 HPUE							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2575.5	2595	2615	
20	QPSK	1	0	23.86	23.83	23.78	25
20	QPSK	1	49	23.78	23.78	23.74	
20	QPSK	1	99	23.82	23.77	23.69	
20	QPSK	50	0	24.04	24.06	23.97	
20	QPSK	50	24	24.13	23.99	23.93	25
20	QPSK	50	50	24.08	24.05	23.99	
20	QPSK	100	0	24.10	24.00	23.95	
20	16QAM	1	0	24.20	24.22	24.18	
20	16QAM	1	49	24.15	24.19	24.11	25
20	16QAM	1	99	24.14	24.15	24.09	
20	16QAM	50	0	24.09	24.10	24.03	
20	16QAM	50	24	24.15	24.05	24.01	
20	16QAM	50	50	24.15	24.10	24.06	25
20	16QAM	100	0	24.15	24.04	23.99	
20	64QAM	1	0	24.02	23.99	23.92	
20	64QAM	1	49	23.96	23.96	23.93	
20	64QAM	1	99	24.00	23.98	23.92	25
20	64QAM	50	0	23.45	23.39	23.45	
20	64QAM	50	24	23.43	23.45	23.47	
20	64QAM	50	50	23.40	23.38	23.45	
20	64QAM	100	0	23.33	23.26	23.24	24.5
Channel				37850	38000	38150	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.78	23.78	23.70	25
15	QPSK	1	37	23.78	23.80	23.73	
15	QPSK	1	74	23.79	23.78	23.67	
15	QPSK	36	0	24.02	23.93	23.85	
15	QPSK	36	20	23.97	23.89	23.88	25
15	QPSK	36	39	23.95	23.93	23.86	
15	QPSK	75	0	23.99	23.88	23.83	
15	16QAM	1	0	24.12	24.07	24.02	
15	16QAM	1	37	24.04	24.05	23.99	25
15	16QAM	1	74	24.09	24.08	23.96	
15	16QAM	36	0	24.02	23.93	23.84	
15	16QAM	36	20	23.96	23.88	23.88	
15	16QAM	36	39	23.96	23.94	23.85	25
15	16QAM	75	0	24.01	23.92	23.85	
15	64QAM	1	0	23.88	23.84	23.77	
15	64QAM	1	37	23.90	23.88	23.80	25
15	64QAM	1	74	23.87	23.89	23.78	
15	64QAM	36	0	23.36	23.28	23.28	
15	64QAM	36	20	23.35	23.28	23.37	
15	64QAM	36	39	23.30	23.25	23.25	24.5
15	64QAM	75	0	23.37	23.29	23.28	
Channel				37800	38000	38200	unit-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.83	23.73	23.64	25
10	QPSK	1	25	23.70	23.70	23.65	
10	QPSK	1	49	23.83	23.81	23.72	
10	QPSK	25	0	23.96	23.87	23.83	
10	QPSK	25	12	23.97	23.89	23.83	25
10	QPSK	25	25	23.94	23.95	23.91	
10	QPSK	50	0	23.94	23.87	23.81	
10	16QAM	1	0	24.17	24.11	24.05	
10	16QAM	1	25	24.11	24.11	24.05	25
10	16QAM	1	49	24.16	24.13	24.02	
10	16QAM	25	0	24.01	23.89	23.85	
10	16QAM	25	12	24.02	23.93	23.84	
10	16QAM	25	25	23.96	23.94	23.85	25
10	16QAM	50	0	23.99	23.92	23.85	
10	64QAM	1	0	24.09	24.03	23.95	
10	64QAM	1	25	24.02	24.10	24.00	
10	64QAM	1	49	24.05	24.05	23.94	24.5
10	64QAM	25	0	23.44	23.34	23.37	
10	64QAM	25	12	23.45	23.38	23.36	
10	64QAM	25	25	23.40	23.29	23.29	
10	64QAM	50	0	23.33	23.24	23.17	24.5
Channel				37775	38000	38225	unit-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.77	23.73	23.68	25
5	QPSK	1	12	23.69	23.72	23.64	
5	QPSK	1	24	23.74	23.77	23.65	
5	QPSK	12	0	23.93	23.86	23.83	
5	QPSK	12	7	23.95	23.94	23.88	25
5	QPSK	12	13	23.91	23.92	23.86	
5	QPSK	25	0	23.93	23.87	23.83	
5	16QAM	1	0	24.15	24.07	24.03	
5	16QAM	1	12	24.10	24.10	24.01	25
5	16QAM	1	24	24.10	24.15	24.04	
5	16QAM	12	0	23.96	23.93	23.90	
5	16QAM	12	7	23.98	23.97	23.94	
5	16QAM	12	13	23.98	23.98	23.88	25
5	16QAM	25	0	23.99	23.92	23.89	
5	64QAM	1	0	23.99	23.95	23.93	
5	64QAM	1	12	23.98	23.98	23.87	
5	64QAM	1	24	24.01	24.04	23.91	24.5
5	64QAM	12	0	23.33	23.31	23.32	
5	64QAM	12	7	23.34	23.31	23.36	
5	64QAM	12	13	23.28	23.27	23.37	
5	64QAM	25	0	23.31	23.27	23.28	



Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2575	2595	2615	
20	QPSK	1	0	22.19	22.22	22.17	23.2
20	QPSK	1	49	22.21	22.21	22.15	
20	QPSK	1	99	22.19	22.17	22.10	
20	QPSK	50	0	22.30	22.33	22.26	23.2
20	QPSK	50	24	22.35	22.29	22.24	
20	QPSK	50	50	22.35	22.34	22.29	
20	QPSK	100	0	22.37	22.29	22.21	23.2
20	16QAM	1	0	22.39	22.43	22.32	
20	16QAM	1	49	22.31	22.30	22.25	
20	16QAM	1	99	22.32	22.33	22.24	23.2
20	16QAM	50	0	22.35	22.33	22.28	
20	16QAM	50	24	22.39	22.33	22.25	
20	16QAM	50	50	22.38	22.38	22.30	23.2
20	16QAM	100	0	22.39	22.29	22.25	
20	64QAM	1	0	22.04	22.06	21.95	
20	64QAM	1	49	21.98	21.99	21.95	23.2
20	64QAM	1	99	21.99	22.01	21.92	
20	64QAM	50	0	21.76	21.75	21.71	
20	64QAM	50	24	21.81	21.72	21.67	22.7
20	64QAM	50	50	21.78	21.77	21.69	
20	64QAM	100	0	21.80	21.71	21.66	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.23	22.19	22.13	23.2
15	QPSK	1	37	22.15	22.14	22.06	
15	QPSK	1	74	22.18	22.16	22.10	
15	QPSK	36	0	22.38	22.29	22.24	23.2
15	QPSK	36	20	22.36	22.25	22.29	
15	QPSK	36	39	22.33	22.31	22.24	
15	QPSK	75	0	22.36	22.28	22.21	23.2
15	16QAM	1	0	22.36	22.35	22.27	
15	16QAM	1	37	22.26	22.27	22.22	
15	16QAM	1	74	22.34	22.34	22.25	23.2
15	16QAM	36	0	22.35	22.25	22.22	
15	16QAM	36	20	22.33	22.24	22.26	
15	16QAM	36	39	22.31	22.28	22.22	23.2
15	16QAM	75	0	22.39	22.29	22.23	
15	64QAM	1	0	22.01	22.00	21.93	
15	64QAM	1	37	22.05	22.02	21.94	23.2
15	64QAM	1	74	22.00	22.02	21.92	
15	64QAM	36	0	21.80	21.74	21.64	
15	64QAM	36	20	21.78	21.70	21.72	22.7
15	64QAM	36	39	21.76	21.75	21.68	
15	64QAM	75	0	21.78	21.69	21.61	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.23	22.10	22.07	23.2
10	QPSK	1	25	22.15	22.05	21.98	
10	QPSK	1	49	22.13	22.09	22.00	
10	QPSK	25	0	22.32	22.21	22.20	23.2
10	QPSK	25	12	22.27	22.22	22.26	
10	QPSK	25	25	22.31	22.30	22.23	
10	QPSK	50	0	22.33	22.23	22.19	23.2
10	16QAM	1	0	22.28	22.35	22.17	
10	16QAM	1	25	22.22	22.16	22.20	
10	16QAM	1	49	22.28	22.32	22.24	23.2
10	16QAM	25	0	22.27	22.25	22.21	
10	16QAM	25	12	22.32	22.19	22.23	
10	16QAM	25	25	22.26	22.24	22.18	23.2
10	16QAM	50	0	22.39	22.24	22.23	
10	64QAM	1	0	21.92	21.95	21.83	
10	64QAM	1	25	21.97	22.01	21.85	23.2
10	64QAM	1	49	21.97	21.96	21.91	
10	64QAM	25	0	21.73	21.70	21.62	
10	64QAM	25	12	21.74	21.69	21.70	22.7
10	64QAM	25	25	21.76	21.65	21.65	
10	64QAM	50	0	21.69	21.69	21.54	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.30	22.20	22.18	23.2
5	QPSK	1	12	22.24	22.17	22.14	
5	QPSK	1	24	22.23	22.21	22.11	
5	QPSK	12	0	22.38	22.31	22.26	23.2
5	QPSK	12	7	22.38	22.36	22.26	
5	QPSK	12	13	22.35	22.32	22.24	
5	QPSK	25	0	22.32	22.30	22.27	23.2
5	16QAM	1	0	22.42	22.32	22.30	
5	16QAM	1	12	22.42	22.37	22.30	
5	16QAM	1	24	22.42	22.39	22.29	23.2
5	16QAM	12	0	22.34	22.28	22.24	
5	16QAM	12	7	22.38	22.33	22.24	
5	16QAM	12	13	22.33	22.29	22.20	23.2
5	16QAM	25	0	22.40	22.32	22.29	
5	64QAM	1	0	22.13	22.05	21.99	
5	64QAM	1	12	22.13	22.09	22.00	23.2
5	64QAM	1	24	22.13	22.10	22.00	
5	64QAM	12	0	21.78	21.73	21.72	
5	64QAM	12	7	21.81	21.81	21.69	22.7
5	64QAM	12	13	21.80	21.77	21.67	
5	64QAM	25	0	21.82	21.76	21.68	



Band 41										
Ant B										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.69	21.80	21.66	21.44	21.20	23.2	
20	QPSK	1	49	21.66	21.71	21.63	21.79	21.52		
20	QPSK	1	99	21.62	21.65	21.65	21.22	21.35		
20	QPSK	50	0	21.75	21.72	21.73	21.61	21.45	23.2	
20	QPSK	50	24	21.80	21.90	21.78	21.89	21.57		
20	QPSK	50	50	21.76	21.78	21.75	21.55	21.55		
20	QPSK	100	0	21.81	21.83	21.78	21.65	21.49	23.2	
20	16QAM	1	0	21.87	21.76	21.92	21.47	21.20		
20	16QAM	1	49	21.70	21.76	21.67	21.73	21.58		
20	16QAM	1	99	21.71	21.79	21.73	21.24	21.43	23.2	
20	16QAM	50	0	21.76	21.79	21.76	21.63	21.48		
20	16QAM	50	24	21.85	21.88	21.82	21.75	21.60		
20	16QAM	50	50	21.79	21.86	21.80	21.56	21.57	23.2	
20	16QAM	100	0	21.79	21.84	21.79	21.66	21.51		
20	64QAM	1	0	21.55	21.44	21.45	21.22	21.21		
20	64QAM	1	49	21.43	21.48	21.47	21.55	21.35	23.2	
20	64QAM	1	99	21.46	21.53	21.44	21.20	21.22		
20	64QAM	50	0	21.20	21.16	21.15	21.25	21.09		
20	64QAM	50	24	21.28	21.27	21.21	21.36	21.20	22.7	
20	64QAM	50	50	21.22	21.24	21.19	21.21	21.18		
20	64QAM	100	0	21.27	21.25	21.19	21.27	21.12		
Channel				39725	40170	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.7	2682.5	Tune-up limit (dBm)	
15	QPSK	1	0	21.75	21.73	21.72	21.63	21.34	23.2	
15	QPSK	1	37	21.74	21.70	21.68	21.69	21.53		
15	QPSK	1	74	21.70	21.79	21.80	21.45	21.49		
15	QPSK	36	0	21.80	21.80	21.78	21.73	21.56	23.2	
15	QPSK	36	20	21.89	21.88	21.84	21.72	21.68		
15	QPSK	36	39	21.84	21.86	21.82	21.70	21.65		
15	QPSK	75	0	21.80	21.81	21.84	21.66	21.61	23.2	
15	16QAM	1	0	21.82	21.85	21.88	21.71	21.45		
15	16QAM	1	37	21.74	21.80	21.76	21.75	21.63		
15	16QAM	1	74	21.76	21.87	21.85	21.53	21.65	23.2	
15	16QAM	36	0	21.85	21.80	21.80	21.68	21.55		
15	16QAM	36	20	21.84	21.87	21.82	21.66	21.64		
15	16QAM	36	39	21.81	21.87	21.80	21.67	21.60	23.2	
15	16QAM	75	0	21.80	21.83	21.90	21.69	21.63		
15	64QAM	1	0	21.58	21.51	21.48	21.47	21.20		
15	64QAM	1	37	21.55	21.57	21.53	21.59	21.44	23.2	
15	64QAM	1	74	21.53	21.67	21.62	21.28	21.42		
15	64QAM	36	0	21.35	21.25	21.20	21.33	21.23		
15	64QAM	36	20	21.34	21.31	21.25	21.37	21.31	22.7	
15	64QAM	36	39	21.28	21.29	21.25	21.32	21.26		
15	64QAM	75	0	21.35	21.32	21.27	21.31	21.25		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.65	21.63	21.62	21.53	21.25	23.2	
10	QPSK	1	25	21.68	21.70	21.65	21.63	21.46		
10	QPSK	1	49	21.61	21.77	21.70	21.38	21.40		
10	QPSK	25	0	21.83	21.72	21.75	21.69	21.55	23.2	
10	QPSK	25	12	21.85	21.78	21.75	21.62	21.67		
10	QPSK	25	25	21.76	21.76	21.72	21.65	21.60		
10	QPSK	50	0	21.84	21.85	21.79	21.64	21.53	23.2	
10	16QAM	1	0	21.82	21.84	21.83	21.70	21.36		
10	16QAM	1	25	21.68	21.70	21.67	21.70	21.57		
10	16QAM	1	49	21.72	21.86	21.86	21.51	21.60	23.2	
10	16QAM	25	0	21.78	21.73	21.71	21.66	21.50		
10	16QAM	25	12	21.82	21.79	21.81	21.66	21.61		
10	16QAM	25	25	21.77	21.85	21.76	21.59	21.50	23.2	
10	16QAM	50	0	21.85	21.83	21.68	21.66	21.58		
10	64QAM	1	0	21.48	21.44	21.44	21.46	21.22		
10	64QAM	1	25	21.53	21.51	21.53	21.52	21.42	23.2	
10	64QAM	1	49	21.51	21.63	21.60	21.28	21.35		
10	64QAM	25	0	21.25	21.18	21.20	21.31	21.13		
10	64QAM	25	12	21.26	21.24	21.22	21.34	21.21	22.7	
10	64QAM	25	25	21.18	21.26	21.21	21.32	21.26		
10	64QAM	50	0	21.29	21.25	21.24	21.21	21.20		
Channel				39875	40148	40620	41083	41665	Tune-up limit (dBm)	
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	21.77	21.60	21.55	21.60	21.45	23.2	
5	QPSK	1	12	21.71	21.63	21.67	21.58	21.48		
5	QPSK	1	24	21.71	21.63	21.59	21.55	21.36		
5	QPSK	12	0	21.84	21.77	21.76	21.74	21.58	23.2	
5	QPSK	12	7	21.87	21.82	21.79	21.76	21.57		
5	QPSK	12	13	21.82	21.76	21.77	21.68	21.55		
5	QPSK	25	0	21.82	21.77	21.76	21.71	21.55	23.2	
5	16QAM	1	0	21.86	21.80	21.73	21.82	21.69		
5	16QAM	1	12	21.89	21.82	21.84	21.79	21.69		
5	16QAM	1	24	21.86	21.89	21.86	21.76	21.56	23.2	
5	16QAM	12	0	21.83	21.77	21.78	21.72	21.58		
5	16QAM	12	7	21.85	21.79	21.78	21.73	21.60		
5	16QAM	12	13	21.81	21.75	21.74	21.66	21.51	23.2	
5	16QAM	25	0	21.85	21.83	21.83	21.75	21.61		
5	64QAM	1	0	21.66	21.46	21.42	21.50	21.35		
5	64QAM	1	12	21.81	21.54	21.53	21.52	21.34	23.2	
5	64QAM	1	24	21.63	21.56	21.52	21.48	21.32		
5	64QAM	12	0	21.27	21.22	21.20	21.38	21.22		
5	64QAM	12	7	21.31	21.25	21.23	21.40	21.23	22.7	
5	64QAM	12	13	21.26	21.24	21.22	21.32	21.22		
5	64QAM	25	0	21.28	21.24	21.22	21.39	21.25		



Band 48										
Ant 2										
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)		
Channel				55540	55830	56150	56640			
Frequency (MHz)				3550	3609	3641	3690			
20	QPSK	1	0	21.16	21.17	21.13	21.00	21.4		
20	QPSK	1	49	20.83	20.96	20.92	20.72			
20	QPSK	1	99	20.85	20.84	20.87	20.60			
20	QPSK	50	0	20.83	20.86	20.85	20.68			
20	QPSK	50	24	20.82	20.82	20.81	20.60	21.4		
20	QPSK	50	50	20.76	20.77	20.71	20.47			
20	QPSK	100	0	20.80	20.81	20.76	20.58			
20	16QAM	1	0	20.90	20.96	20.95	20.81	21.4		
20	16QAM	1	49	20.71	20.74	20.70	20.48			
20	16QAM	1	99	20.75	20.72	20.64	20.42			
20	16QAM	50	0	19.87	19.91	19.88	19.71			
20	16QAM	50	24	19.84	19.85	19.83	19.62	20.6		
20	16QAM	50	50	19.78	19.79	19.76	19.50			
20	16QAM	100	0	19.80	19.83	19.83	19.61			
20	64QAM	1	0	19.68	19.74	19.69	19.54	20.6		
20	64QAM	1	49	19.46	19.48	19.45	19.24			
20	64QAM	1	99	19.52	19.47	19.35	19.16			
20	64QAM	50	0	18.85	18.92	18.86	18.72			
20	64QAM	50	24	18.84	18.89	18.81	18.65	19.6		
20	64QAM	50	50	18.78	18.82	18.74	18.51			
20	64QAM	100	0	18.83	18.85	18.81	18.62			
Channel				55515	55820	56160	56650	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3606	3642	3692.5			
15	QPSK	1	0	20.57	20.86	20.84	20.69	21.4		
15	QPSK	1	37	20.50	20.72	20.69	20.48			
15	QPSK	1	74	20.54	20.75	20.65	20.41			
15	QPSK	36	0	20.62	20.64	20.60	20.45			
15	QPSK	36	20	20.57	20.59	20.55	20.35	21.4		
15	QPSK	36	39	20.54	20.57	20.52	20.25			
15	QPSK	75	0	20.57	20.64	20.57	20.36			
15	16QAM	1	0	20.65	20.69	20.67	20.53	21.4		
15	16QAM	1	37	20.44	20.50	20.43	20.21			
15	16QAM	1	74	20.58	20.58	20.52	20.27			
15	16QAM	36	0	19.57	19.62	19.58	19.40			
15	16QAM	36	20	19.53	19.56	19.52	19.31	20.6		
15	16QAM	36	39	19.51	19.54	19.48	19.24			
15	16QAM	75	0	19.61	19.63	19.60	19.38			
15	64QAM	1	0	19.38	19.44	19.43	19.27	20.6		
15	64QAM	1	37	19.26	19.29	19.24	19.03			
15	64QAM	1	74	19.34	19.34	19.22	19.00			
15	64QAM	36	0	18.63	18.67	18.64	18.45			
15	64QAM	36	20	18.58	18.64	18.57	18.35	19.6		
15	64QAM	36	39	18.56	18.56	18.52	18.26			
15	64QAM	75	0	18.61	18.64	18.60	18.37			
Channel				55200	55615	56165	56660	Tune-up limit (dBm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	20.59	20.77	20.71	20.57	21.4		
10	QPSK	1	25	20.53	20.73	20.73	20.49			
10	QPSK	1	49	20.50	20.68	20.65	20.38			
10	QPSK	25	0	20.57	20.61	20.55	20.34			
10	QPSK	25	12	20.55	20.62	20.59	20.35	21.4		
10	QPSK	25	25	20.58	20.52	20.52	20.26			
10	QPSK	50	0	20.56	20.52	20.49	20.24			
10	16QAM	1	0	20.56	20.58	20.57	20.28	21.4		
10	16QAM	1	25	20.60	20.64	20.63	20.41			
10	16QAM	1	49	20.53	20.59	20.51	20.26			
10	16QAM	25	0	19.57	19.56	19.54	19.33			
10	16QAM	25	12	19.62	19.57	19.54	19.25	20.6		
10	16QAM	25	25	19.53	19.55	19.51	19.27			
10	16QAM	50	0	19.49	19.57	19.61	19.31			
10	64QAM	1	0	19.25	19.33	19.30	19.03	20.6		
10	64QAM	1	25	19.31	19.29	19.27	19.08			
10	64QAM	1	49	19.25	19.28	19.29	18.97			
10	64QAM	25	0	18.54	18.59	18.64	18.34			
10	64QAM	25	12	18.62	18.58	18.62	18.33	19.6		
10	64QAM	25	25	18.61	18.56	18.61	18.31			
10	64QAM	50	0	18.64	18.62	18.54	18.35			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	20.61	20.84	20.80	20.60	21.4		
5	QPSK	1	12	20.56	20.79	20.75	20.51			
5	QPSK	1	24	20.51	20.72	20.73	20.43			
5	QPSK	12	0	20.60	20.61	20.58	20.35			
5	QPSK	12	7	20.63	20.63	20.61	20.36	21.4		
5	QPSK	12	13	20.59	20.62	20.59	20.33			
5	QPSK	25	0	20.59	20.61	20.57	20.32			
5	16QAM	1	0	20.58	20.65	20.63	20.38	21.4		
5	16QAM	1	12	20.64	20.70	20.64	20.41			
5	16QAM	1	24	20.55	20.62	20.56	20.29			
5	16QAM	12	0	19.59	19.63	19.59	19.37			
5	16QAM	12	7	19.62	19.60	19.62	19.34	20.6		
5	16QAM	12	13	19.53	19.59	19.57	19.28			
5	16QAM	25	0	19.59	19.64	19.62	19.37			
5	64QAM	1	0	19.35	19.40	19.37	19.11	20.6		
5	64QAM	1	12	19.35	19.39	19.33	19.08			
5	64QAM	1	24	19.33	19.35	19.34	19.07			
5	64QAM	12	0	18.61	18.69	18.65	18.37			
5	64QAM	12	7	18.64	18.64	18.68	18.37	19.6		
5	64QAM	12	13	18.64	18.64	18.61	18.36			
5	64QAM	25	0	18.65	18.67	18.64	18.38			



Band 38 HPUE							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2575.5	2595	2610	
20	QPSK	1	0	26.05	26.04	26.01	27.5
20	QPSK	1	49	26.04	26.09	26.03	
20	QPSK	1	99	26.16	26.12	26.04	
20	QPSK	50	0	25.27	25.32	25.27	
20	QPSK	50	24	25.34	25.33	25.28	26.5
20	QPSK	50	50	25.34	25.40	25.34	
20	QPSK	100	0	25.36	25.34	25.28	
20	16QAM	1	0	25.37	25.38	25.32	
20	16QAM	1	49	25.43	25.47	25.35	26.5
20	16QAM	1	99	25.43	25.49	25.38	
20	16QAM	50	0	24.28	24.34	24.31	
20	16QAM	50	24	24.36	24.35	24.32	
20	16QAM	50	50	24.37	24.42	24.37	25.5
20	16QAM	100	0	24.37	24.35	24.28	
20	64QAM	1	0	24.20	24.22	24.17	
20	64QAM	1	49	24.27	24.28	24.24	
20	64QAM	1	99	24.28	24.31	24.26	25.5
20	64QAM	50	0	23.28	23.33	23.29	
20	64QAM	50	24	23.37	23.36	23.31	
20	64QAM	50	50	23.38	23.42	23.37	
20	64QAM	100	0	23.34	23.34	23.29	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.06	26.10	26.10	27.5
15	QPSK	1	37	26.04	26.09	26.08	
15	QPSK	1	74	26.11	26.13	26.11	
15	QPSK	36	0	25.31	25.26	25.28	
15	QPSK	36	20	25.30	25.25	25.37	26.5
15	QPSK	36	39	25.31	25.32	25.33	
15	QPSK	75	0	25.29	25.24	25.27	
15	16QAM	1	0	25.38	25.37	25.38	
15	16QAM	1	37	25.38	25.42	25.35	26.5
15	16QAM	1	74	25.41	25.44	25.38	
15	16QAM	36	0	24.29	24.22	24.23	
15	16QAM	36	20	24.29	24.22	24.32	
15	16QAM	36	39	24.30	24.32	24.31	25.5
15	16QAM	75	0	24.33	24.27	24.25	
15	64QAM	1	0	24.18	24.18	24.14	
15	64QAM	1	37	24.27	24.30	24.26	
15	64QAM	1	74	24.31	24.34	24.26	25.5
15	64QAM	36	0	23.33	23.28	23.29	
15	64QAM	36	20	23.33	23.26	23.36	
15	64QAM	36	39	23.34	23.36	23.36	
15	64QAM	75	0	23.33	23.27	23.28	24.5
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.14	26.06	26.02	27.5
10	QPSK	1	25	26.07	26.12	26.06	
10	QPSK	1	49	26.15	26.14	26.09	
10	QPSK	25	0	25.32	25.29	25.23	
10	QPSK	25	12	25.33	25.30	25.24	26.5
10	QPSK	25	25	25.35	25.35	25.32	
10	QPSK	50	0	25.36	25.29	25.25	
10	16QAM	1	0	25.51	25.46	25.48	
10	16QAM	1	25	25.46	25.50	25.45	26.5
10	16QAM	1	49	25.53	25.49	25.49	
10	16QAM	25	0	24.35	24.25	24.23	
10	16QAM	25	12	24.37	24.34	24.27	
10	16QAM	25	25	24.34	24.35	24.29	25.5
10	16QAM	50	0	24.36	24.31	24.26	
10	64QAM	1	0	24.46	24.35	24.35	
10	64QAM	1	25	24.42	24.49	24.43	
10	64QAM	1	49	24.38	24.45	24.40	24.5
10	64QAM	25	0	23.42	23.38	23.35	
10	64QAM	25	12	23.43	23.36	23.34	
10	64QAM	25	25	23.44	23.43	23.40	
10	64QAM	50	0	23.38	23.34	23.30	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.13	26.09	26.11	27.5
5	QPSK	1	12	26.08	26.09	26.06	
5	QPSK	1	24	26.11	26.15	26.10	
5	QPSK	12	0	25.31	25.25	25.27	
5	QPSK	12	7	25.29	25.36	25.30	26.5
5	QPSK	12	13	25.28	25.32	25.28	
5	QPSK	25	0	25.30	25.25	25.25	
5	16QAM	1	0	25.40	25.42	25.42	
5	16QAM	1	12	25.43	25.46	25.41	26.5
5	16QAM	1	24	25.45	25.47	25.46	
5	16QAM	12	0	24.34	24.30	24.32	
5	16QAM	12	7	24.37	24.38	24.38	
5	16QAM	12	13	24.33	24.34	24.32	25.5
5	16QAM	25	0	24.33	24.32	24.34	
5	64QAM	1	0	24.36	24.30	24.33	
5	64QAM	1	12	24.33	24.37	24.30	
5	64QAM	1	24	24.37	24.40	24.38	24.5
5	64QAM	12	0	23.38	23.33	23.30	
5	64QAM	12	7	23.39	23.39	23.38	
5	64QAM	12	13	23.33	23.36	23.32	
5	64QAM	25	0	23.36	23.33	23.33	

Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2590	2595	2610	
20	QPSK	1	0	24.27	24.23	24.31	25.7
20	QPSK	1	49	24.32	24.24	24.23	
20	QPSK	1	99	24.25	24.27	24.22	
20	QPSK	50	0	23.46	23.35	23.38	24.7
20	QPSK	50	24	23.42	23.38	23.44	
20	QPSK	50	50	23.38	23.39	23.40	
20	QPSK	100	0	23.50	23.46	23.34	24.7
20	16QAM	1	0	23.43	23.43	23.40	
20	16QAM	1	49	23.31	23.34	23.31	
20	16QAM	1	99	23.37	23.30	23.33	23.7
20	16QAM	50	0	22.49	22.44	22.42	
20	16QAM	50	24	22.48	22.45	22.51	
20	16QAM	50	50	22.48	22.39	22.43	23.7
20	16QAM	100	0	22.47	22.40	22.32	
20	64QAM	1	0	22.17	22.09	22.03	
20	64QAM	1	49	22.05	22.01	22.03	22.7
20	64QAM	1	99	22.05	22.05	22.03	
20	64QAM	50	0	21.46	21.38	21.41	
20	64QAM	50	24	21.52	21.45	21.46	22.7
20	64QAM	50	50	21.49	21.48	21.40	
20	64QAM	100	0	21.47	21.50	21.43	
Channel				37825	38000	38175	100% up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.29	24.28	24.21	25.7
15	QPSK	1	37	24.25	24.20	24.25	
15	QPSK	1	74	24.19	24.29	24.25	
15	QPSK	36	0	23.48	23.31	23.40	24.7
15	QPSK	36	20	23.39	23.47	23.42	
15	QPSK	36	39	23.42	23.43	23.34	
15	QPSK	75	0	23.41	23.44	23.37	24.7
15	16QAM	1	0	23.36	23.34	23.31	
15	16QAM	1	37	23.25	23.20	23.28	
15	16QAM	1	74	23.36	23.36	23.30	23.7
15	16QAM	36	0	22.42	22.34	22.34	
15	16QAM	36	20	22.36	22.35	22.35	
15	16QAM	36	39	22.39	22.40	22.31	22.7
15	16QAM	75	0	22.41	22.41	22.31	
15	64QAM	1	0	22.13	22.05	22.04	
15	64QAM	1	37	22.17	22.13	22.06	22.7
15	64QAM	1	74	22.08	22.04	22.03	
15	64QAM	36	0	21.49	21.34	21.34	
15	64QAM	36	20	21.42	21.44	21.45	22.7
15	64QAM	36	39	21.43	21.39	21.47	
15	64QAM	75	0	21.42	21.43	21.33	
Channel				37800	38000	38200	100% up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.16	24.19	24.22	25.7
10	QPSK	1	25	24.19	24.18	24.21	
10	QPSK	1	49	24.08	24.18	24.20	
10	QPSK	25	0	23.38	23.36	23.35	24.7
10	QPSK	25	12	23.33	23.45	23.39	
10	QPSK	25	25	23.35	23.38	23.29	
10	QPSK	50	0	23.39	23.42	23.28	24.7
10	16QAM	1	0	23.38	23.37	23.31	
10	16QAM	1	25	23.24	23.15	23.22	
10	16QAM	1	49	23.25	23.31	23.30	23.7
10	16QAM	25	0	22.37	22.19	22.32	
10	16QAM	25	12	22.38	22.31	22.36	
10	16QAM	25	25	22.32	22.27	22.36	23.7
10	64QAM	1	0	22.04	22.01	22.02	
10	64QAM	1	25	22.12	22.02	22.04	
10	64QAM	1	49	22.06	22.04	22.02	22.7
10	64QAM	25	0	21.48	21.32	21.35	
10	64QAM	25	12	21.40	21.41	21.39	
10	64QAM	25	25	21.47	21.26	21.37	22.7
10	64QAM	50	0	21.42	21.43	21.31	
Channel				37775	38000	38225	100% up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.30	24.19	24.17	25.7
5	QPSK	1	12	24.16	24.21	24.20	
5	QPSK	1	24	24.16	24.12	24.25	
5	QPSK	12	0	23.35	23.30	23.41	24.7
5	QPSK	12	7	23.39	23.43	23.40	
5	QPSK	12	13	23.43	23.32	23.29	
5	QPSK	25	0	23.41	23.39	23.33	24.7
5	16QAM	1	0	23.45	23.28	23.42	
5	16QAM	1	12	23.34	23.37	23.31	
5	16QAM	1	24	23.39	23.44	23.35	23.7
5	16QAM	12	0	22.38	22.24	22.39	
5	16QAM	12	7	22.34	22.38	22.35	
5	16QAM	12	13	22.38	22.30	22.29	23.7
5	16QAM	25	0	22.43	22.39	22.39	
5	64QAM	1	0	22.14	22.09	22.09	
5	64QAM	1	12	22.20	22.09	22.09	22.7
5	64QAM	1	24	22.13	22.17	22.05	
5	64QAM	12	0	21.43	21.35	21.38	
5	64QAM	12	7	21.44	21.37	21.36	22.7
5	64QAM	12	13	21.44	21.42	21.37	
5	64QAM	25	0	21.46	21.42	21.36	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.11	24.14	24.18	24.13	23.98	25.7	
20	QPSK	1	49	24.05	24.13	24.05	24.37	24.31		
20	QPSK	1	99	24.09	24.13	24.10	23.93	24.17		
20	QPSK	50	0	23.19	23.23	23.17	23.31	23.32	24.7	
20	QPSK	50	24	23.28	23.32	23.22	23.44	23.41		
20	QPSK	50	50	23.25	23.27	23.20	23.28	23.39		
20	QPSK	100	0	23.27	23.30	23.24	23.34	23.34	24.7	
20	16QAM	1	0	23.26	23.27	23.31	23.22	23.08		
20	16QAM	1	49	23.16	23.22	23.13	23.46	23.43		
20	16QAM	1	99	23.15	23.27	23.21	23.03	23.26	23.7	
20	16QAM	50	0	22.23	22.25	22.19	22.32	22.32		
20	16QAM	50	24	22.31	22.34	22.25	22.45	22.45		
20	16QAM	50	50	22.29	22.31	22.22	22.29	22.41	23.7	
20	16QAM	100	0	22.30	22.34	22.25	22.35	22.35		
20	64QAM	1	0	21.95	21.91	21.92	21.85	21.76		
20	64QAM	1	49	21.88	21.99	21.85	22.25	22.16	23.7	
20	64QAM	1	99	21.87	22.07	21.80	21.80	21.83		
20	64QAM	50	0	21.25	21.27	21.19	21.34	21.29		
20	64QAM	50	24	21.33	21.36	21.29	21.44	21.44	22.7	
20	64QAM	50	50	21.29	21.31	21.22	21.30	21.43		
20	64QAM	100	0	21.31	21.35	21.24	21.36	21.36		
Channel				39720	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.11	24.07	24.14	24.04	23.89	25.7	
15	QPSK	1	37	23.95	24.11	23.99	24.27	24.25		
15	QPSK	1	74	24.02	24.09	24.10	23.91	24.16		
15	QPSK	36	0	23.17	23.21	23.13	23.30	23.26	24.7	
15	QPSK	36	20	23.25	23.30	23.22	23.38	23.31		
15	QPSK	36	39	23.15	23.27	23.19	23.23	23.31		
15	QPSK	75	0	23.21	23.29	23.21	23.33	23.30	24.7	
15	16QAM	1	0	23.21	23.27	23.27	23.13	23.00		
15	16QAM	1	37	23.16	23.20	23.08	23.44	23.37		
15	16QAM	1	74	23.12	23.27	23.21	23.00	23.21	23.7	
15	16QAM	36	0	22.20	22.19	22.15	22.30	22.23		
15	16QAM	36	20	22.25	22.26	22.19	22.41	22.45		
15	16QAM	36	39	22.20	22.27	22.15	22.28	22.37	22.7	
15	16QAM	75	0	22.21	22.30	22.20	22.29	22.35		
15	64QAM	1	0	21.81	21.89	21.89	21.82	21.75		
15	64QAM	1	37	21.87	21.99	21.79	22.22	22.15	23.7	
15	64QAM	1	74	21.85	22.03	21.79	21.76	21.87		
15	64QAM	36	0	21.21	21.20	21.12	21.33	21.23		
15	64QAM	36	20	21.24	21.27	21.26	21.38	21.37	22.7	
15	64QAM	36	39	21.23	21.26	21.12	21.22	21.43		
15	64QAM	75	0	21.27	21.27	21.21	21.34	21.27		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.10	24.12	24.15	24.12	23.93	25.7	
10	QPSK	1	25	24.02	24.04	23.97	24.37	24.31		
10	QPSK	1	49	24.00	24.05	24.04	23.83	24.12		
10	QPSK	25	0	23.18	23.20	23.08	23.23	23.23	24.7	
10	QPSK	25	12	23.28	23.30	23.17	23.40	23.35		
10	QPSK	25	25	23.15	23.19	23.18	23.18	23.36		
10	QPSK	50	0	23.25	23.30	23.22	23.34	23.27	24.7	
10	16QAM	1	0	23.26	23.25	23.26	23.20	23.00		
10	16QAM	1	25	23.07	23.20	23.07	23.45	23.43		
10	16QAM	1	49	23.14	23.18	23.11	23.01	23.17	23.7	
10	16QAM	25	0	22.14	22.24	22.14	22.31	22.30		
10	16QAM	25	12	22.22	22.26	22.16	22.45	22.40		
10	16QAM	25	25	22.24	22.30	22.12	22.22	22.40	23.7	
10	16QAM	50	0	22.24	22.27	22.16	22.28	22.28		
10	64QAM	1	0	21.89	21.99	21.83	21.85	21.75		
10	64QAM	1	25	21.80	21.95	21.78	22.15	22.07	23.7	
10	64QAM	1	49	21.81	22.07	21.80	21.78	21.90		
10	64QAM	25	0	21.24	21.21	21.19	21.30	21.21		
10	64QAM	25	12	21.32	21.26	21.26	21.36	21.44	22.7	
10	64QAM	25	25	21.23	21.27	21.16	21.28	21.35		
10	64QAM	50	0	21.29	21.30	21.22	21.34	21.34		
Channel				39875	40148	40620	41083	41665		
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.02	24.10	24.14	24.11	23.91	25.7	
5	QPSK	1	12	23.99	24.06	23.99	24.28	24.25		
5	QPSK	1	24	24.07	24.06	24.10	23.87	24.11		
5	QPSK	12	0	23.11	23.17	23.08	23.22	23.28	24.7	
5	QPSK	12	7	23.18	23.30	23.14	23.37	23.40		
5	QPSK	12	13	23.21	23.17	23.12	23.22	23.33		
5	QPSK	25	0	23.23	23.28	23.20	23.33	23.24	24.7	
5	16QAM	1	0	23.22	23.26	23.31	23.17	23.02		
5	16QAM	1	12	23.16	23.15	23.08	23.40	23.35		
5	16QAM	1	24	23.05	23.24	23.19	23.02	23.20	23.7	
5	16QAM	12	0	22.21	22.16	22.13	22.26	22.29		
5	16QAM	12	7	22.29	22.34	22.16	22.37	22.40		
5	16QAM	12	13	22.20	22.21	22.17	22.21	22.35	23.7	
5	16QAM	25	0	22.20	22.25	22.23	22.31	22.29		
5	64QAM	1	0	21.90	21.90	21.85	21.76	21.70		
5	64QAM	1	12	21.86	21.93	21.81	22.17	22.07	23.7	
5	64QAM	1	24	21.82	22.01	21.72	21.74	21.83		
5	64QAM	12	0	21.18	21.18	21.14	21.25	21.25		
5	64QAM	12	7	21.24	21.31	21.26	21.35	21.35	22.7	
5	64QAM	12	13	21.26	21.22	21.19	21.29	21.33		
5	64QAM	25	0	21.30	21.32	21.19	21.28	21.33		



Band 48										
Ant. 7										
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)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	23.07	23.00	23.01	23.11	24.2		
20	QPSK	1	49	22.81	22.81	22.78	22.89			
20	QPSK	1	99	22.82	22.79	22.76	22.89			
20	QPSK	50	0	22.09	22.06	22.03	22.09			
20	QPSK	50	24	22.05	21.92	22.01	22.07	23.2		
20	QPSK	50	50	21.85	21.86	21.96	22.07			
20	QPSK	100	0	22.06	21.93	22.03	22.07			
20	16QAM	1	0	22.11	22.21	22.15	22.29	23.2		
20	16QAM	1	49	21.96	21.88	21.96	21.93			
20	16QAM	1	99	21.98	21.86	21.95	21.95			
20	16QAM	50	0	21.07	21.11	21.09	21.16			
20	16QAM	50	24	21.01	20.93	21.02	21.06	22.2		
20	16QAM	50	50	20.93	20.94	20.92	21.01			
20	16QAM	100	0	21.04	20.89	21.01	21.08			
20	64QAM	1	0	20.88	20.89	20.84	20.93	22.2		
20	64QAM	1	49	20.69	20.72	20.71	20.71			
20	64QAM	1	99	20.65	20.58	20.67	20.78			
20	64QAM	50	0	20.15	20.04	20.10	20.14			
20	64QAM	50	24	20.11	20.00	20.01	20.15	21.2		
20	64QAM	50	50	19.92	19.91	19.94	20.01			
20	64QAM	100	0	20.05	19.98	20.03	20.14			
Channel				55315	55820	56160	56655	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3606	3642	3692.5			
15	QPSK	1	0	22.93	22.89	22.97	23.00	24.2		
15	QPSK	1	37	22.83	22.78	22.81	22.91			
15	QPSK	1	74	22.82	22.78	22.83	22.92			
15	QPSK	36	0	22.01	22.07	21.98	22.11			
15	QPSK	36	20	21.90	21.90	22.03	22.06	23.2		
15	QPSK	36	39	21.89	21.89	21.92	22.00			
15	QPSK	75	0	21.99	21.88	21.98	22.08			
15	16QAM	1	0	22.06	22.06	22.14	22.20	23.2		
15	16QAM	1	37	21.87	21.85	21.87	21.96			
15	16QAM	1	74	22.04	21.93	21.98	22.08			
15	16QAM	36	0	20.96	20.95	20.99	21.02			
15	16QAM	36	20	20.88	20.82	21.00	21.03	22.2		
15	16QAM	36	39	20.80	20.85	20.93	21.01			
15	16QAM	75	0	21.00	20.89	21.03	21.12			
15	64QAM	1	0	20.82	20.89	20.85	20.86	22.2		
15	64QAM	1	37	20.76	20.64	20.72	20.75			
15	64QAM	1	74	20.67	20.70	20.69	20.83			
15	64QAM	36	0	20.08	20.08	20.02	20.18			
15	64QAM	36	20	19.91	19.94	19.95	20.08	21.2		
15	64QAM	36	39	19.82	19.95	19.94	20.03			
15	64QAM	75	0	19.99	20.00	20.03	20.02			
Channel				55200	55815	56165	56660	Tune-up limit (dBm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	23.05	22.99	22.95	23.04	24.2		
10	QPSK	1	25	22.79	22.81	22.71	22.85			
10	QPSK	1	49	22.72	22.78	22.72	22.81			
10	QPSK	25	0	21.98	22.07	22.01	22.03			
10	QPSK	25	12	21.95	21.90	21.99	21.97	23.2		
10	QPSK	25	25	21.79	21.78	21.84	21.96			
10	QPSK	50	0	21.95	21.83	22.00	22.01			
10	16QAM	1	0	22.01	22.04	22.06	22.24	23.2		
10	16QAM	1	25	21.95	21.92	21.87	21.96			
10	16QAM	1	49	21.89	21.89	21.91	21.88			
10	16QAM	25	0	21.09	20.98	20.99	21.16			
10	16QAM	25	12	20.91	20.86	20.93	21.02	22.2		
10	16QAM	25	25	20.89	20.81	20.91	21.05			
10	16QAM	50	0	20.96	20.90	21.05	21.06			
10	64QAM	1	0	20.74	20.88	20.87	20.87	22.2		
10	64QAM	1	25	20.59	20.64	20.66	20.65			
10	64QAM	1	49	20.69	20.64	20.64	20.71			
10	64QAM	25	0	20.14	20.05	20.10	20.10			
10	64QAM	25	12	20.01	19.93	19.99	20.03	21.2		
10	64QAM	25	25	19.94	19.82	19.87	19.97			
10	64QAM	50	0	19.94	19.92	19.88	20.05			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	22.89	22.98	22.97	23.04	24.2		
5	QPSK	1	12	22.88	22.90	22.90	22.95			
5	QPSK	1	24	22.88	22.78	22.85	22.97			
5	QPSK	12	0	22.06	22.03	22.02	22.15			
5	QPSK	12	7	22.02	22.03	22.05	22.14	23.2		
5	QPSK	12	13	22.00	21.95	22.00	22.09			
5	QPSK	25	0	21.99	22.02	22.01	22.10			
5	16QAM	1	0	22.05	21.99	22.09	22.14	23.2		
5	16QAM	1	12	22.15	22.08	22.12	22.18			
5	16QAM	1	24	22.11	22.02	22.08	22.07			
5	16QAM	12	0	21.03	20.93	21.02	21.11	22.2		
5	16QAM	12	7	21.10	20.98	20.98	21.06			
5	16QAM	12	13	21.07	20.95	21.04	21.01			
5	16QAM	25	0	21.12	21.08	21.02	21.12			
5	64QAM	1	0	20.81	20.83	20.84	20.93	22.2		
5	64QAM	1	12	20.89	20.74	20.76	20.83			
5	64QAM	1	24	20.85	20.75	20.79	20.82			
5	64QAM	12	0	20.17	20.07	20.07	20.15			
5	64QAM	12	7	20.09	20.03	20.12	20.22	21.2		
5	64QAM	12	13	20.06	20.08	20.05	20.10			
5	64QAM	25	0	20.09	20.05	20.09	20.11			



Band 38 HPUE								
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)	
Channel				37850	38000	38150		
Frequency (MHz)				2575.5	2595	2615		
20	QPSK	1	0	26.10	26.07	26.00	27.5	
20	QPSK	1	49	26.20	26.08	25.99		
20	QPSK	1	99	26.14	26.09	26.00		
20	QPSK	50	0	25.35	25.32	25.23		
20	QPSK	50	24	25.45	25.33	25.24	26.5	
20	QPSK	50	50	25.43	25.38	25.27		
20	QPSK	100	0	25.44	25.34	25.25		
20	16QAM	1	0	25.46	25.44	25.34		
20	16QAM	1	49	25.49	25.45	25.34	26.5	
20	16QAM	1	99	25.47	25.43	25.34		
20	16QAM	50	0	24.37	24.35	24.25		
20	16QAM	50	24	24.45	24.33	24.26		
20	16QAM	50	50	24.45	24.42	24.32	25.5	
20	16QAM	100	0	24.46	24.35	24.23		
20	64QAM	1	0	24.29	24.27	24.18		
20	64QAM	1	49	24.31	24.27	24.23		
20	64QAM	1	99	24.20	24.32	24.21	25.5	
20	64QAM	50	0	23.22	23.14	23.17		
20	64QAM	50	24	23.19	23.17	23.17		
20	64QAM	50	50	23.17	23.20	23.13		
20	64QAM	100	0	23.11	23.00	22.93	24.5	
Channel				37850	38000	38150		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	26.12	26.12	26.03	27.5	
15	QPSK	1	37	26.19	26.11	26.05		
15	QPSK	1	74	26.15	26.10	26.04		
15	QPSK	36	0	25.38	25.30	25.19		
15	QPSK	36	20	25.38	25.27	25.25	26.5	
15	QPSK	36	39	25.37	25.34	25.23		
15	QPSK	75	0	25.38	25.28	25.18		
15	16QAM	1	0	25.46	25.43	25.29		
15	16QAM	1	37	25.43	25.41	25.31	26.5	
15	16QAM	1	74	25.44	25.42	25.33		
15	16QAM	36	0	24.38	24.27	24.18		
15	16QAM	36	20	24.37	24.24	24.22		
15	16QAM	36	39	24.35	24.31	24.21	25.5	
15	16QAM	75	0	24.38	24.30	24.19		
15	64QAM	1	0	24.13	24.15	24.11		
15	64QAM	1	37	24.22	24.15	24.22		
15	64QAM	1	74	24.01	24.21	24.13	25.5	
15	64QAM	36	0	23.17	23.13	23.13		
15	64QAM	36	20	23.19	23.14	23.24		
15	64QAM	36	39	23.12	23.12	23.12		
15	64QAM	75	0	23.20	23.14	23.12	24.5	
Channel				37800	38000	38200		
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	26.17	26.11	26.00	27.5	
10	QPSK	1	25	26.10	26.08	26.01		
10	QPSK	1	49	26.19	26.15	26.00		
10	QPSK	25	0	25.36	25.24	25.17		
10	QPSK	25	12	25.37	25.27	25.19	26.5	
10	QPSK	25	25	25.38	25.32	25.25		
10	QPSK	50	0	25.36	25.27	25.19		
10	16QAM	1	0	25.57	25.49	25.42		
10	16QAM	1	25	25.50	25.48	25.41	26.5	
10	16QAM	1	49	25.55	25.49	25.37		
10	16QAM	25	0	24.40	24.27	24.17		
10	16QAM	25	12	24.43	24.32	24.22		
10	16QAM	25	25	24.39	24.35	24.26	25.5	
10	16QAM	50	0	24.43	24.31	24.21		
10	64QAM	1	0	24.15	24.27	24.32		
10	64QAM	1	25	24.22	24.14	24.14		
10	64QAM	1	49	24.04	24.13	24.17	25.5	
10	64QAM	25	0	23.29	23.15	23.18		
10	64QAM	25	12	23.30	23.20	23.19		
10	64QAM	25	25	23.25	23.13	23.12		
10	64QAM	50	0	23.18	23.07	23.06	24.5	
Channel				37775	38000	38225		
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	26.17	26.11	26.10	27.5	
5	QPSK	1	12	26.15	26.16	26.03		
5	QPSK	1	24	26.15	26.17	26.07		
5	QPSK	12	0	25.40	25.28	25.26		
5	QPSK	12	7	25.41	25.34	25.26	26.5	
5	QPSK	12	13	25.36	25.36	25.25		
5	QPSK	25	0	25.34	25.28	25.22		
5	16QAM	1	0	25.51	25.44	25.43		
5	16QAM	1	12	25.51	25.50	25.36	26.5	
5	16QAM	1	24	25.54	25.50	25.42		
5	16QAM	12	0	24.43	24.31	24.28		
5	16QAM	12	7	24.41	24.44	24.32		
5	16QAM	12	13	24.43	24.40	24.30	25.5	
5	16QAM	25	0	24.40	24.32	24.29		
5	64QAM	1	0	24.17	24.18	24.16		
5	64QAM	1	12	24.20	24.26	24.29		
5	64QAM	1	24	24.15	24.24	24.32	25.5	
5	64QAM	12	0	23.25	23.23	23.27		
5	64QAM	12	7	23.29	23.32	23.36		
5	64QAM	12	13	23.26	23.27	23.30		
5	64QAM	25	0	23.29	23.28	23.25	24.5	

Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.59	24.55	24.54	25.7
20	QPSK	1	49	24.57	24.56	24.49	
20	QPSK	1	99	24.56	24.54	24.47	
20	QPSK	50	0	23.68	23.71	23.63	24.7
20	QPSK	50	24	23.77	23.67	23.61	
20	QPSK	50	50	23.73	23.72	23.65	
20	QPSK	100	0	23.75	23.67	23.61	24.7
20	16QAM	1	0	23.71	23.71	23.64	
20	16QAM	1	49	23.61	23.62	23.58	
20	16QAM	1	99	23.65	23.64	23.59	23.7
20	16QAM	50	0	22.72	22.71	22.65	
20	16QAM	50	24	22.77	22.69	22.63	
20	16QAM	50	50	22.76	22.75	22.68	23.7
20	16QAM	100	0	22.76	22.69	22.62	
20	64QAM	1	0	22.43	22.40	22.31	23.7
20	64QAM	1	49	22.39	22.37	22.31	
20	64QAM	1	99	22.37	22.39	22.30	
20	64QAM	50	0	21.74	21.73	21.67	22.7
20	64QAM	50	24	21.77	21.73	21.64	
20	64QAM	50	50	21.75	21.75	21.67	
20	64QAM	100	0	21.78	21.69	21.64	
Channel				37850	38000	38150	
Frequency (MHz)				2577.5	2595	2612.5	1000000 limit (dBm)
15	QPSK	1	0	24.59	24.57	24.51	25.7
15	QPSK	1	37	24.54	24.54	24.49	
15	QPSK	1	74	24.54	24.53	24.47	
15	QPSK	36	0	23.79	23.69	23.63	24.7
15	QPSK	36	20	23.72	23.66	23.68	
15	QPSK	36	39	23.72	23.70	23.64	
15	QPSK	75	0	23.75	23.67	23.58	24.7
15	16QAM	1	0	23.71	23.70	23.64	
15	16QAM	1	37	23.60	23.59	23.49	
15	16QAM	1	74	23.67	23.66	23.57	23.7
15	16QAM	36	0	22.75	22.67	22.57	
15	16QAM	36	20	22.71	22.61	22.62	
15	16QAM	36	39	22.69	22.66	22.59	23.7
15	16QAM	75	0	22.77	22.69	22.60	
15	64QAM	1	0	22.41	22.38	22.30	23.7
15	64QAM	1	37	22.42	22.39	22.34	
15	64QAM	1	74	22.39	22.40	22.31	
15	64QAM	36	0	21.79	21.71	21.63	22.7
15	64QAM	36	20	21.76	21.63	21.67	
15	64QAM	36	39	21.76	21.73	21.66	
15	64QAM	75	0	21.77	21.70	21.61	
Channel				37900	38000	38200	
Frequency (MHz)				2575	2595	2615	1000000 limit (dBm)
10	QPSK	1	0	24.58	24.57	24.47	25.7
10	QPSK	1	25	24.52	24.52	24.43	
10	QPSK	1	49	24.51	24.48	24.42	
10	QPSK	25	0	23.77	23.59	23.58	24.7
10	QPSK	25	12	23.68	23.62	23.68	
10	QPSK	25	25	23.62	23.70	23.60	
10	QPSK	50	0	23.67	23.58	23.56	24.7
10	16QAM	1	0	23.70	23.67	23.54	
10	16QAM	1	25	23.50	23.53	23.43	
10	16QAM	1	49	23.67	23.66	23.48	23.7
10	16QAM	25	0	22.75	22.67	22.55	
10	16QAM	25	12	22.65	22.54	22.59	
10	16QAM	25	25	22.59	22.61	22.56	23.7
10	16QAM	50	0	22.77	22.65	22.55	
10	64QAM	1	0	22.33	22.28	22.30	
10	64QAM	1	25	22.38	22.30	22.31	23.7
10	64QAM	1	49	22.31	22.39	22.26	
10	64QAM	25	0	21.71	21.62	21.54	
10	64QAM	25	12	21.67	21.58	21.58	22.7
10	64QAM	25	25	21.73	21.66	21.57	
10	64QAM	50	0	21.76	21.63	21.54	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	1000000 limit (dBm)
5	QPSK	1	0	24.64	24.59	24.53	25.7
5	QPSK	1	12	24.62	24.63	24.50	
5	QPSK	1	24	24.62	24.57	24.50	
5	QPSK	12	0	23.76	23.69	23.62	24.7
5	QPSK	12	7	23.76	23.77	23.67	
5	QPSK	12	13	23.72	23.73	23.63	
5	QPSK	25	0	23.72	23.67	23.63	24.7
5	16QAM	1	0	23.62	23.72	23.71	
5	16QAM	1	12	23.83	23.80	23.68	
5	16QAM	1	24	23.82	23.78	23.67	23.7
5	16QAM	12	0	22.71	22.67	22.62	
5	16QAM	12	7	22.73	22.73	22.62	
5	16QAM	12	13	22.69	22.72	22.60	23.7
5	16QAM	25	0	22.76	22.66	22.64	
5	64QAM	1	0	22.96	22.47	22.42	
5	64QAM	1	12	22.55	22.51	22.40	23.7
5	64QAM	1	24	22.55	22.54	22.43	
5	64QAM	12	0	21.76	21.68	21.66	
5	64QAM	12	7	21.77	21.77	21.70	22.7
5	64QAM	12	13	21.80	21.75	21.67	
5	64QAM	25	0	21.81	21.74	21.70	



Band 41										
Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Channel	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
				Frequency (MHz)	39750	40185	40620	41055	41490	
				Frequency (MHz)	2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	24.07	24.02	24.07	24.22	23.73		25.7
20	QPSK	1	49	23.99	24.01	23.97	24.21	24.08		
20	QPSK	1	99	23.99	24.01	24.00	23.76	23.96		
20	QPSK	50	0	23.14	23.10	23.08	23.20	23.07		24.7
20	QPSK	50	24	23.22	23.20	23.14	23.31	23.18		
20	QPSK	50	50	23.17	23.18	23.12	23.15	23.13		
20	QPSK	100	0	23.21	23.19	23.15	23.22	23.11		24.7
20	16QAM	1	0	23.21	23.13	23.20	23.12	22.84		
20	16QAM	1	49	23.09	23.12	23.08	23.32	23.18		
20	16QAM	1	99	23.10	23.14	23.13	22.86	23.04		24.7
20	16QAM	50	0	22.17	22.15	22.13	22.22	22.07		
20	16QAM	50	24	22.23	22.24	22.17	22.35	22.19		
20	16QAM	50	50	22.20	22.20	22.17	22.17	22.17		23.7
20	16QAM	100	0	22.23	22.20	22.17	22.24	22.12		
20	64QAM	1	0	21.92	21.83	21.83	21.78	21.54		
20	64QAM	1	49	21.83	21.87	21.79	22.11	21.95		23.7
20	64QAM	1	99	21.85	21.89	21.84	21.56	21.78		
20	64QAM	50	0	21.21	21.16	21.13	21.24	21.11		
20	64QAM	50	24	21.27	21.24	21.20	21.33	21.21		22.7
20	64QAM	50	50	21.22	21.22	21.17	21.17	21.19		
20	64QAM	100	0	21.25	21.22	21.18	21.27	21.13		
Channel				39723	40173	40620	41060	41515		Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.04	24.03	24.00	24.12	23.88		25.7
15	QPSK	1	37	24.00	23.95	23.96	24.20	24.04		
15	QPSK	1	74	23.99	24.07	24.05	23.94	24.01		
15	QPSK	36	0	23.20	23.09	23.07	23.20	23.06		24.7
15	QPSK	36	20	23.20	23.16	23.13	23.22	23.18		
15	QPSK	36	39	23.16	23.16	23.10	23.17	23.15		
15	QPSK	75	0	23.20	23.18	23.13	23.17	23.11		24.7
15	16QAM	1	0	23.22	23.15	23.14	23.25	22.97		
15	16QAM	1	37	23.06	23.04	23.04	23.30	23.16		
15	16QAM	1	74	23.15	23.22	23.16	23.08	23.17		23.7
15	16QAM	36	0	22.19	22.07	22.03	22.16	22.04		
15	16QAM	36	20	22.18	22.13	22.08	22.20	22.12		
15	16QAM	36	39	22.13	22.14	22.11	22.14	22.11		23.7
15	16QAM	75	0	22.24	22.19	22.16	22.19	22.14		
15	64QAM	1	0	21.83	21.83	21.77	21.83	21.70		
15	64QAM	1	37	21.88	21.87	21.79	22.08	21.95		23.7
15	64QAM	1	74	21.86	21.98	21.90	21.82	21.92		
15	64QAM	36	0	21.23	21.15	21.09	21.22	21.12		
15	64QAM	36	20	21.22	21.18	21.14	21.26	21.21		22.7
15	64QAM	36	39	21.17	21.19	21.13	21.23	21.17		
15	64QAM	75	0	21.24	21.22	21.15	21.19	21.16		
Channel				39700	40160	40620	41060	41540		Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.00	23.96	23.98	24.12	23.82		25.7
10	QPSK	1	25	23.99	23.92	23.90	24.16	24.00		
10	QPSK	1	49	23.99	24.00	24.04	23.85	23.99		
10	QPSK	25	0	23.15	23.09	23.02	23.12	23.06		24.7
10	QPSK	25	12	23.13	23.15	23.10	23.16	23.18		
10	QPSK	25	25	23.08	23.15	23.04	23.11	23.05		
10	QPSK	50	0	23.16	23.16	23.05	23.09	23.08		24.7
10	16QAM	1	0	23.16	23.15	23.09	23.17	22.94		
10	16QAM	1	25	23.02	23.01	23.04	23.20	23.11		
10	16QAM	1	49	23.09	23.14	23.10	22.98	23.17		23.7
10	16QAM	25	0	22.09	22.01	22.03	22.13	21.95		
10	16QAM	25	12	22.17	22.12	22.05	22.18	22.06		
10	16QAM	25	25	22.08	22.04	22.10	22.08	22.05		23.7
10	16QAM	50	0	22.23	22.19	22.10	22.13	22.13		
10	64QAM	1	0	21.84	21.76	21.76	21.50	21.70		
10	64QAM	1	25	21.81	21.80	21.71	22.04	21.91		23.7
10	64QAM	1	49	21.86	21.93	21.85	21.74	21.88		
10	64QAM	25	0	21.16	21.15	21.06	21.12	21.11		
10	64QAM	25	12	21.12	21.16	21.10	21.19	21.13		22.7
10	64QAM	25	25	21.13	21.13	21.13	21.16	21.15		
10	64QAM	50	0	21.23	21.12	21.15	21.09	21.15		
Channel				39875	40148	40620	41083	41665		Tune-up limit (dBm)
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.13	23.95	23.96	24.20	24.06		25.7
5	QPSK	1	12	24.09	24.01	24.00	24.17	24.06		
5	QPSK	1	24	24.01	24.00	23.95	24.15	24.01		
5	QPSK	12	0	23.20	23.17	23.13	23.33	23.20		24.7
5	QPSK	12	7	23.24	23.19	23.17	23.34	23.21		
5	QPSK	12	13	23.18	23.17	23.14	23.28	23.18		
5	QPSK	25	0	23.20	23.18	23.14	23.32	23.17		24.7
5	16QAM	1	0	23.27	23.11	23.09	23.37	23.21		
5	16QAM	1	12	23.26	23.20	23.24	23.42	23.28		
5	16QAM	1	24	23.24	23.17	23.18	23.34	23.19		23.7
5	16QAM	12	0	22.20	22.15	22.14	22.30	22.17		
5	16QAM	12	7	22.23	22.16	22.14	22.31	22.18		
5	16QAM	12	13	22.21	22.14	22.11	22.27	22.17		23.7
5	16QAM	25	0	22.24	22.20	22.15	22.35	22.25		
5	64QAM	1	0	22.04	21.85	21.85	22.12	21.92		
5	64QAM	1	12	21.96	21.91	21.89	22.14	21.92		23.7
5	64QAM	1	24	21.98	21.95	21.92	22.08	21.92		
5	64QAM	12	0	21.27	21.18	21.21	21.35	21.23		
5	64QAM	12	7	21.29	21.22	21.22	21.37	21.25		22.7
5	64QAM	12	13	21.24	21.19	21.18	21.35	21.22		
5	64QAM	25	0	21.25	21.22	21.22	21.38	21.27		



Band 48									
Ant 2									
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)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	21.54	21.64	21.61	21.48	22.6	
20	QPSK	1	49	21.40	21.42	21.44	21.41		
20	QPSK	1	99	21.39	21.42	21.33	21.07		
20	QPSK	50	0	20.63	20.65	20.64	20.47		
20	QPSK	50	24	20.60	20.60	20.56	20.36	21.6	
20	QPSK	50	50	20.52	20.54	20.49	20.26		
20	QPSK	100	0	20.55	20.61	20.54	20.35		
20	16QAM	1	0	20.68	20.76	20.73	20.59	21.6	
20	16QAM	1	49	20.51	20.52	20.51	20.28		
20	16QAM	1	99	20.52	20.50	20.42	20.18		
20	16QAM	50	0	19.65	19.70	19.68	19.49		
20	16QAM	50	24	19.61	19.68	19.62	19.43	20.6	
20	16QAM	50	50	19.57	19.59	19.53	19.29		
20	16QAM	100	0	19.59	19.65	19.58	19.40		
20	64QAM	1	0	19.44	19.48	19.45	19.32	20.6	
20	64QAM	1	49	19.26	19.28	19.23	19.02		
20	64QAM	1	99	19.31	19.24	19.15	18.93		
20	64QAM	50	0	18.64	18.70	18.67	18.51		
20	64QAM	50	24	18.63	18.67	18.64	18.42	19.6	
20	64QAM	50	50	18.57	18.58	18.54	18.31		
20	64QAM	100	0	18.61	18.64	18.60	18.41		
Channel				55315	55830	56160	56645		
Frequency (MHz)				3557.5	3608	3642	3692.5	Tune-up limit (dBm)	
15	QPSK	1	0	21.50	21.56	21.53	21.34	22.6	
15	QPSK	1	37	21.39	21.41	21.40	21.14		
15	QPSK	1	74	21.43	21.39	21.32	21.09		
15	QPSK	36	0	20.61	20.64	20.62	20.43		
15	QPSK	36	20	20.57	20.58	20.57	20.32	21.6	
15	QPSK	36	39	20.55	20.57	20.51	20.27		
15	QPSK	75	0	20.57	20.63	20.54	20.34		
15	16QAM	1	0	20.63	20.68	20.66	20.51	21.6	
15	16QAM	1	37	20.45	20.49	20.39	20.21		
15	16QAM	1	74	20.59	20.59	20.51	20.26		
15	16QAM	36	0	19.58	19.60	19.56	19.39		
15	16QAM	36	20	19.53	19.56	19.51	19.31	20.6	
15	16QAM	36	39	19.51	19.53	19.49	19.22		
15	16QAM	75	0	19.60	19.61	19.58	19.37		
15	64QAM	1	0	19.37	19.44	19.39	19.24	20.6	
15	64QAM	1	37	19.29	19.29	19.25	19.03		
15	64QAM	1	74	19.32	19.34	19.19	18.99		
15	64QAM	36	0	18.62	18.66	18.64	18.44		
15	64QAM	36	20	18.59	18.62	18.56	18.34	19.6	
15	64QAM	36	39	18.55	18.59	18.51	18.26		
15	64QAM	75	0	18.59	18.63	18.60	18.37		
Channel				55290	55815	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	21.50	21.56	21.52	21.31	22.6	
10	QPSK	1	25	21.30	21.31	21.31	21.14		
10	QPSK	1	49	21.34	21.37	21.24	21.01		
10	QPSK	25	0	20.57	20.60	20.61	20.43		
10	QPSK	25	12	20.49	20.53	20.57	20.25	21.6	
10	QPSK	25	25	20.53	20.54	20.44	20.26		
10	QPSK	50	0	20.53	20.60	20.53	20.30		
10	16QAM	1	0	20.61	20.64	20.58	20.45	21.6	
10	16QAM	1	25	20.38	20.45	20.38	20.11		
10	16QAM	1	49	20.59	20.59	20.44	20.23		
10	16QAM	25	0	19.55	19.53	19.49	19.34		
10	16QAM	25	12	19.50	19.48	19.44	19.31	20.6	
10	16QAM	25	25	19.42	19.50	19.43	19.14		
10	16QAM	50	0	19.53	19.56	19.57	19.31		
10	64QAM	1	0	19.29	19.40	19.39	19.17	20.6	
10	64QAM	1	25	19.29	19.19	19.22	18.97		
10	64QAM	1	49	19.24	19.32	19.14	18.90		
10	64QAM	25	0	18.56	18.59	18.59	18.41		
10	64QAM	25	12	18.59	18.62	18.51	18.31	19.6	
10	64QAM	25	25	18.54	18.50	18.47	18.26		
10	64QAM	50	0	18.49	18.55	18.53	18.37		
Channel				55285	55810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	21.46	21.52	21.47	21.27	22.6	
5	QPSK	1	12	21.41	21.47	21.41	21.18		
5	QPSK	1	24	21.40	21.40	21.37	21.11		
5	QPSK	12	0	20.54	20.64	20.63	20.38		
5	QPSK	12	7	20.62	20.66	20.60	20.34	21.6	
5	QPSK	12	13	20.54	20.66	20.54	20.28		
5	QPSK	25	0	20.58	20.58	20.57	20.30		
5	16QAM	1	0	20.55	20.62	20.58	20.36	21.6	
5	16QAM	1	12	20.64	20.67	20.64	20.36		
5	16QAM	1	24	20.56	20.63	20.55	20.30		
5	16QAM	12	0	19.55	19.59	19.62	19.31		
5	16QAM	12	7	19.55	19.62	19.58	19.33	20.6	
5	16QAM	12	13	19.55	19.60	19.54	19.31		
5	16QAM	25	0	19.59	19.63	19.60	19.38		
5	64QAM	1	0	19.36	19.41	19.36	19.10	20.6	
5	64QAM	1	12	19.36	19.40	19.33	19.08		
5	64QAM	1	24	19.33	19.37	19.32	19.04		
5	64QAM	12	0	18.62	18.66	18.61	18.40		
5	64QAM	12	7	18.65	18.69	18.64	18.42	19.6	
5	64QAM	12	13	18.64	18.62	18.62	18.31		
5	64QAM	25	0	18.66	18.70	18.63	18.40		



Band 38 HPUE								
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)	
Channel				37850	38000	38150		
Frequency (MHz)				25850	25950	26100		
20	QPSK	1	0	25.30	25.30	25.23	26.4	
20	QPSK	1	49	25.32	25.27	25.26		
20	QPSK	1	99	25.33	25.28	25.24		
20	QPSK	50	0	25.32	25.30	25.27		
20	QPSK	50	24	25.40	25.30	25.26	26.4	
20	QPSK	50	50	25.39	25.36	25.32		
20	QPSK	100	0	25.40	25.31	25.27		
20	16QAM	1	0	25.47	25.45	25.36		
20	16QAM	1	49	25.79	25.42	25.34	26.4	
20	16QAM	1	99	25.45	25.43	25.37		
20	16QAM	50	0	24.45	24.47	24.39		
20	16QAM	50	24	24.53	24.48	24.37		
20	16QAM	50	50	24.52	24.54	24.45	25.4	
20	16QAM	100	0	24.57	24.46	24.38		
20	64QAM	1	0	24.42	24.38	24.27		
20	64QAM	1	49	24.45	24.37	24.32		
20	64QAM	1	99	24.43	24.40	24.33	25.4	
20	64QAM	50	0	23.47	23.48	23.39		
20	64QAM	50	24	23.54	23.47	23.38		
20	64QAM	50	50	23.52	23.53	23.45		
20	64QAM	100	0	23.51	23.46	23.38	Tune-up limit (dBm)	
Channel				37855	38000	38175		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	25.25	25.24	25.20	26.4	
15	QPSK	1	37	25.32	25.27	25.23		
15	QPSK	1	74	25.29	25.23	25.25		
15	QPSK	36	0	25.51	25.41	25.39		
15	QPSK	36	20	25.46	25.38	25.44	26.4	
15	QPSK	36	39	25.46	25.43	25.38		
15	QPSK	75	0	25.49	25.37	25.33		
15	16QAM	1	0	25.56	25.59	25.48		
15	16QAM	1	37	25.56	25.54	25.47	26.4	
15	16QAM	1	74	25.61	25.54	25.50		
15	16QAM	36	0	24.57	24.53	24.44		
15	16QAM	36	20	24.55	24.49	24.50		
15	16QAM	36	39	24.55	24.55	24.46	25.4	
15	16QAM	75	0	24.62	24.52	24.44		
15	64QAM	1	0	24.49	24.43	24.38		
15	64QAM	1	37	24.55	24.52	24.43		
15	64QAM	1	74	24.56	24.50	24.41	25.4	
15	64QAM	36	0	23.62	23.57	23.48		
15	64QAM	36	20	23.62	23.53	23.52		
15	64QAM	36	39	23.58	23.61	23.53		
15	64QAM	75	0	23.62	23.54	23.48	Tune-up limit (dBm)	
Channel				37800	38000	38200		
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	25.43	25.31	25.24	26.4	
10	QPSK	1	25	25.37	25.34	25.22		
10	QPSK	1	49	25.41	25.35	25.28		
10	QPSK	25	0	25.50	25.46	25.38		
10	QPSK	25	12	25.58	25.48	25.40	26.4	
10	QPSK	25	25	25.50	25.56	25.44		
10	QPSK	50	0	25.45	25.43	25.36		
10	16QAM	1	0	25.70	25.55	25.55		
10	16QAM	1	25	25.70	25.65	25.54	26.4	
10	16QAM	1	49	25.69	25.73	25.59		
10	16QAM	25	0	24.72	24.65	24.53		
10	16QAM	25	12	24.63	24.71	24.61		
10	16QAM	25	25	24.70	24.63	24.55	25.4	
10	16QAM	50	0	24.67	24.54	24.61		
10	64QAM	1	0	24.63	24.54	24.58		
10	64QAM	1	25	24.64	24.64	24.61		
10	64QAM	1	49	24.65	24.74	24.57	25.4	
10	64QAM	25	0	23.74	23.64	23.61		
10	64QAM	25	12	23.75	23.72	23.54		
10	64QAM	25	25	23.69	23.62	23.60		
10	64QAM	50	0	23.76	23.60	23.61	Tune-up limit (dBm)	
Channel				37775	38000	38225		
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	25.45	25.36	25.29	26.4	
5	QPSK	1	12	25.39	25.38	25.26		
5	QPSK	1	24	25.43	25.39	25.29		
5	QPSK	12	0	25.59	25.49	25.46		
5	QPSK	12	7	25.64	25.57	25.49	26.4	
5	QPSK	12	13	25.58	25.58	25.45		
5	QPSK	25	0	25.55	25.46	25.44		
5	16QAM	1	0	25.74	25.62	25.63		
5	16QAM	1	12	25.71	25.69	25.60	26.4	
5	16QAM	1	24	25.76	25.73	25.66		
5	16QAM	12	0	24.74	24.65	24.60		
5	16QAM	12	7	24.72	24.74	24.64		
5	16QAM	12	13	24.71	24.69	24.61	25.4	
5	16QAM	25	0	24.71	24.63	24.62		
5	64QAM	1	0	24.73	24.64	24.62		
5	64QAM	1	12	24.72	24.69	24.61		
5	64QAM	1	24	24.74	24.74	24.67	25.4	
5	64QAM	12	0	23.74	23.67	23.63		
5	64QAM	12	7	23.76	23.75	23.62		
5	64QAM	12	13	23.74	23.70	23.61		
5	64QAM	25	0	23.77	23.66	23.66	24.4	



Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.48	23.45	23.40	24.6
20	QPSK	1	49	23.49	23.46	23.40	
20	QPSK	1	99	23.51	23.46	23.40	
20	QPSK	50	0	23.58	23.54	23.48	24.6
20	QPSK	50	24	23.72	23.56	23.47	
20	QPSK	50	50	23.63	23.61	23.53	
20	QPSK	100	0	23.65	23.55	23.47	24.6
20	16QAM	1	0	23.59	23.58	23.49	
20	16QAM	1	49	23.55	23.53	23.45	
20	16QAM	1	99	23.56	23.55	23.47	23.6
20	16QAM	50	0	22.61	22.56	22.48	
20	16QAM	50	24	22.68	22.58	22.50	
20	16QAM	50	50	22.67	22.64	22.56	23.6
20	16QAM	100	0	22.67	22.56	22.48	
20	64QAM	1	0	22.32	22.25	22.15	
20	64QAM	1	49	22.28	22.28	22.18	23.6
20	64QAM	1	99	22.32	22.26	22.16	
20	64QAM	50	0	21.62	21.59	21.51	
20	64QAM	50	24	21.69	21.59	21.50	22.8
20	64QAM	50	50	21.68	21.64	21.57	
20	64QAM	100	0	21.68	21.57	21.50	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.51	23.45	23.48	24.6
15	QPSK	1	37	23.47	23.45	23.47	
15	QPSK	1	74	23.48	23.46	23.40	
15	QPSK	36	0	23.66	23.57	23.49	24.6
15	QPSK	36	20	23.68	23.55	23.54	
15	QPSK	36	39	23.65	23.61	23.53	
15	QPSK	75	0	23.67	23.55	23.46	24.6
15	16QAM	1	0	23.62	23.61	23.49	
15	16QAM	1	37	23.51	23.49	23.41	
15	16QAM	1	74	23.65	23.60	23.50	23.6
15	16QAM	36	0	22.66	22.56	22.45	
15	16QAM	36	20	22.63	22.51	22.54	
15	16QAM	36	39	22.62	22.60	22.50	23.6
15	16QAM	75	0	22.69	22.58	22.50	
15	64QAM	1	0	22.30	22.27	22.17	
15	64QAM	1	37	22.37	22.30	22.21	23.6
15	64QAM	1	74	22.33	22.31	22.18	
15	64QAM	36	0	21.71	21.59	21.51	
15	64QAM	36	20	21.68	21.58	21.58	22.8
15	64QAM	36	39	21.69	21.66	21.57	
15	64QAM	75	0	21.72	21.57	21.52	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.47	23.48	23.42	24.6
10	QPSK	1	25	23.49	23.49	23.49	
10	QPSK	1	49	23.45	23.42	23.43	
10	QPSK	25	0	23.57	23.53	23.49	24.6
10	QPSK	25	12	23.61	23.69	23.49	
10	QPSK	25	25	23.58	23.58	23.49	
10	QPSK	50	0	23.62	23.58	23.55	24.6
10	16QAM	1	0	23.70	23.53	23.47	
10	16QAM	1	25	23.61	23.63	23.51	
10	16QAM	1	49	23.65	23.62	23.51	23.6
10	16QAM	25	0	22.64	22.50	22.51	
10	16QAM	25	12	22.67	22.63	22.51	
10	16QAM	25	25	22.58	22.54	22.47	23.6
10	16QAM	50	0	22.60	22.55	22.46	
10	64QAM	1	0	22.46	22.29	22.24	
10	64QAM	1	25	22.36	22.40	22.19	23.6
10	64QAM	1	49	22.37	22.38	22.29	
10	64QAM	25	0	21.71	21.56	21.49	
10	64QAM	25	12	21.69	21.64	21.57	22.8
10	64QAM	25	25	21.69	21.62	21.52	
10	64QAM	50	0	21.76	21.60	21.53	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.55	23.51	23.46	24.6
5	QPSK	1	12	23.53	23.50	23.40	
5	QPSK	1	24	23.51	23.48	23.40	
5	QPSK	12	0	23.65	23.60	23.56	24.6
5	QPSK	12	7	23.69	23.69	23.58	
5	QPSK	12	13	23.66	23.68	23.57	
5	QPSK	25	0	23.65	23.60	23.55	24.6
5	16QAM	1	0	23.66	23.59	23.55	
5	16QAM	1	12	23.60	23.66	23.58	
5	16QAM	1	24	23.66	23.66	23.57	23.6
5	16QAM	12	0	22.66	22.59	22.55	
5	16QAM	12	7	22.69	22.68	22.56	
5	16QAM	12	13	22.64	22.60	22.55	23.6
5	16QAM	25	0	22.70	22.62	22.56	
5	64QAM	1	0	22.47	22.35	22.29	
5	64QAM	1	12	22.46	22.42	22.29	23.6
5	64QAM	1	24	22.46	22.42	22.30	
5	64QAM	12	0	21.73	21.66	21.57	
5	64QAM	12	7	21.73	21.71	21.65	22.8
5	64QAM	12	13	21.73	21.69	21.62	
5	64QAM	25	0	21.76	21.64	21.62	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39760	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.29	23.45	23.52	23.23	23.01	24.6	
20	QPSK	1	49	23.36	23.51	23.46	23.52	23.38		
20	QPSK	1	99	23.34	23.50	23.50	23.06	23.25		
20	QPSK	50	0	23.39	23.53	23.55	23.46	23.37	24.6	
20	QPSK	50	24	23.50	23.75	23.62	23.59	23.50		
20	QPSK	50	50	23.49	23.63	23.60	23.43	23.41		
20	QPSK	100	0	23.50	23.65	23.62	23.50	23.46	24.6	
20	16QAM	1	0	23.42	23.55	23.65	23.35	23.12		
20	16QAM	1	49	23.39	23.58	23.53	23.63	23.51		
20	16QAM	1	99	23.42	23.63	23.60	23.16	23.34	23.6	
20	16QAM	50	0	22.43	22.59	22.57	22.68	22.59		
20	16QAM	50	24	22.54	22.69	22.63	22.84	22.73		
20	16QAM	50	50	22.54	22.67	22.62	22.69	22.58	23.6	
20	16QAM	100	0	22.63	22.67	22.64	22.72	22.63		
20	64QAM	1	0	22.13	22.17	22.26	22.18	21.99		
20	64QAM	1	49	22.10	22.30	22.25	22.61	22.48	23.6	
20	64QAM	1	99	22.16	22.37	22.28	22.15	22.23		
20	64QAM	50	0	21.55	21.58	21.58	21.70	21.58		
20	64QAM	50	24	21.63	21.68	21.66	21.84	21.74	22.6	
20	64QAM	50	50	21.63	21.68	21.64	21.66	21.69		
20	64QAM	100	0	21.63	21.67	21.65	21.74	21.63		
Channel				39720	40173	40620	41058	41515		
Frequency (MHz)				2503.5	2548.3	2593.5	2637.7	2682.5	Tune-up limit (dBm)	
15	QPSK	1	0	23.40	23.50	23.49	23.47	23.40	24.6	
15	QPSK	1	37	23.43	23.47	23.47	23.50	23.47		
15	QPSK	1	74	23.48	23.58	23.60	23.49	23.43		
15	QPSK	36	0	23.47	23.55	23.57	23.50	23.39	24.6	
15	QPSK	36	20	23.50	23.66	23.64	23.53	23.50		
15	QPSK	36	39	23.47	23.64	23.62	23.51	23.44		
15	QPSK	75	0	23.51	23.64	23.65	23.46	23.42	24.6	
15	16QAM	1	0	23.43	23.58	23.60	23.51	23.27		
15	16QAM	1	37	23.34	23.54	23.54	23.61	23.50		
15	16QAM	1	74	23.47	23.74	23.70	23.44	23.42	24.6	
15	16QAM	36	0	22.45	22.53	22.55	22.70	22.55		
15	16QAM	36	20	22.47	22.61	22.59	22.69	22.65		
15	16QAM	36	39	22.46	22.63	22.59	22.69	22.62	23.6	
15	16QAM	75	0	22.54	22.68	22.65	22.70	22.66		
15	64QAM	1	0	22.12	22.25	22.25	22.43	22.16		
15	64QAM	1	37	22.14	22.33	22.30	22.61	22.42	23.6	
15	64QAM	1	74	22.13	22.46	22.38	22.40	22.32		
15	64QAM	36	0	21.49	21.59	21.59	21.71	21.59		
15	64QAM	36	20	21.62	21.64	21.66	21.74	21.71	22.6	
15	64QAM	36	39	21.61	21.68	21.65	21.70	21.68		
15	64QAM	75	0	21.65	21.68	21.66	21.70	21.66		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.51	23.49	23.52	23.61	23.43	24.6	
10	QPSK	1	25	23.43	23.62	23.59	23.57	23.41		
10	QPSK	1	49	23.46	23.65	23.51	23.61	23.40		
10	QPSK	25	0	23.60	23.66	23.66	23.66	23.50	24.6	
10	QPSK	25	12	23.56	23.64	23.63	23.66	23.45		
10	QPSK	25	25	23.45	23.66	23.66	23.54	23.43		
10	QPSK	50	0	23.45	23.67	23.61	23.58	23.45	24.6	
10	16QAM	1	0	23.47	23.55	23.57	23.63	23.49		
10	16QAM	1	25	23.47	23.69	23.72	23.70	23.62		
10	16QAM	1	49	23.56	23.66	23.70	23.57	23.41	23.6	
10	16QAM	25	0	22.47	22.63	22.58	22.79	22.64		
10	16QAM	25	12	22.50	22.63	22.63	22.80	22.62		
10	16QAM	25	25	22.41	22.55	22.62	22.76	22.59	23.6	
10	16QAM	50	0	22.62	22.72	22.68	22.87	22.67		
10	64QAM	1	0	22.27	22.35	22.32	22.55	22.35		
10	64QAM	1	25	22.29	22.47	22.35	22.64	22.40	23.6	
10	64QAM	1	49	22.24	22.48	22.34	22.60	22.35		
10	64QAM	25	0	21.46	21.65	21.65	21.89	21.65		
10	64QAM	25	12	21.63	21.69	21.62	21.83	21.73	22.6	
10	64QAM	25	25	21.46	21.64	21.65	21.86	21.60		
10	64QAM	50	0	21.50	21.70	21.70	21.89	21.68		
Channel				39875	40148	40620	41083	41665	Tune-up limit (dBm)	
Frequency (MHz)				2496.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	23.44	23.47	23.47	23.55	23.40	24.6	
5	QPSK	1	12	23.40	23.53	23.58	23.55	23.40		
5	QPSK	1	24	23.40	23.57	23.51	23.51	23.40		
5	QPSK	12	0	23.51	23.67	23.68	23.63	23.49	24.6	
5	QPSK	12	7	23.56	23.71	23.71	23.66	23.53		
5	QPSK	12	13	23.61	23.69	23.68	23.64	23.47		
5	QPSK	25	0	23.50	23.69	23.66	23.65	23.49	24.6	
5	16QAM	1	0	23.62	23.62	23.62	23.67	23.53		
5	16QAM	1	12	23.67	23.71	23.70	23.71	23.63		
5	16QAM	1	24	23.67	23.71	23.72	23.67	23.51	24.6	
5	16QAM	12	0	22.47	22.65	22.66	22.85	22.67		
5	16QAM	12	7	22.54	22.70	22.66	22.85	22.71		
5	16QAM	12	13	22.50	22.64	22.65	22.80	22.67	23.6	
5	16QAM	25	0	22.55	22.72	22.71	22.90	22.72		
5	64QAM	1	0	22.30	22.37	22.38	22.65	22.42		
5	64QAM	1	12	22.29	22.47	22.45	22.67	22.45	23.6	
5	64QAM	1	24	22.31	22.49	22.44	22.63	22.35		
5	64QAM	12	0	21.65	21.74	21.71	21.90	21.73		
5	64QAM	12	7	21.67	21.76	21.71	21.80	21.76	22.6	
5	64QAM	12	13	21.62	21.73	21.74	21.87	21.70		
5	64QAM	25	0	21.59	21.77	21.75	21.90	21.74		



Band 48									
Ant 7									
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)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3599	3641	3690		
20	QPSK	1	0	22.70	22.79	22.84	22.93	23.8	
20	QPSK	1	49	22.55	22.57	22.64	22.71		
20	QPSK	1	99	22.54	22.57	22.59	22.67		
20	QPSK	50	0	22.05	22.11	22.14	22.23		
20	QPSK	50	24	22.02	22.03	22.08	22.19	23.2	
20	QPSK	50	50	21.94	21.99	22.04	22.08		
20	QPSK	100	0	21.97	22.05	22.08	22.16		
20	16QAM	1	0	22.13	22.21	22.26	22.34		
20	16QAM	1	49	21.92	21.97	22.00	22.09	23.2	
20	16QAM	1	99	21.95	21.99	21.97	22.09		
20	16QAM	50	0	21.07	21.12	21.19	21.27		
20	16QAM	50	24	21.03	21.10	21.13	21.20		
20	16QAM	50	50	20.95	21.03	21.05	21.14	22.2	
20	16QAM	100	0	20.99	21.08	21.13	21.19		
20	64QAM	1	0	20.88	20.96	20.96	21.09		
20	64QAM	1	49	20.65	20.71	20.74	20.83		
20	64QAM	1	99	20.72	20.74	20.67	20.82	22.2	
20	64QAM	50	0	20.08	20.12	20.16	20.27		
20	64QAM	50	24	20.04	20.06	20.11	20.19		
20	64QAM	50	50	19.96	20.01	20.07	20.13		
20	64QAM	100	0	20.02	20.06	20.12	20.20	21.2	
Channel				55315	55820	56160	56655		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.60	22.69	22.73	22.84	23.8	
15	QPSK	1	37	22.48	22.56	22.58	22.68		
15	QPSK	1	74	22.52	22.58	22.59	22.69		
15	QPSK	36	0	22.01	22.09	22.13	22.25		
15	QPSK	36	20	21.95	22.02	22.07	22.16	23.2	
15	QPSK	36	39	21.92	22.01	22.04	22.11		
15	QPSK	75	0	21.95	22.07	22.09	22.19		
15	16QAM	1	0	22.06	22.15	22.21	22.28		
15	16QAM	1	37	21.84	21.93	21.95	22.03	23.2	
15	16QAM	1	74	21.98	22.05	22.04	22.16		
15	16QAM	36	0	20.95	21.05	21.09	21.21		
15	16QAM	36	20	20.91	21.00	21.03	21.13		
15	16QAM	36	39	20.90	20.97	21.01	21.10	22.2	
15	16QAM	75	0	20.97	21.07	21.11	21.20		
15	64QAM	1	0	20.79	20.90	20.96	21.00		
15	64QAM	1	37	20.66	20.74	20.75	20.89		
15	64QAM	1	74	20.73	20.81	20.73	20.92	21.2	
15	64QAM	36	0	20.01	20.13	20.14	20.24		
15	64QAM	36	20	19.96	20.06	20.08	20.18		
15	64QAM	36	39	19.95	20.02	20.03	20.13		
15	64QAM	75	0	20.00	20.07	20.09	20.20	Tune-up limit (dBm)	
Channel				55200	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	22.60	22.66	22.69	22.74	23.8	
10	QPSK	1	25	22.38	22.53	22.51	22.64		
10	QPSK	1	49	22.51	22.57	22.58	22.64		
10	QPSK	25	0	21.95	22.09	22.11	22.21		
10	QPSK	25	12	21.88	22.01	22.07	22.11	23.2	
10	QPSK	25	25	21.83	21.97	22.00	22.06		
10	QPSK	50	0	21.85	22.07	22.04	22.11		
10	16QAM	1	0	22.05	22.13	22.12	22.18		
10	16QAM	1	25	21.81	21.84	21.88	21.93	23.2	
10	16QAM	1	49	21.97	22.01	22.02	22.11		
10	16QAM	25	0	20.93	21.05	21.02	21.16		
10	16QAM	25	12	20.87	20.98	20.98	21.06		
10	16QAM	25	25	20.80	20.89	20.96	21.08	22.2	
10	16QAM	50	0	20.87	21.01	21.04	21.20		
10	64QAM	1	0	20.79	20.81	20.93	20.94		
10	64QAM	1	25	20.65	20.86	20.69	20.83		
10	64QAM	1	49	20.69	20.77	20.70	20.83	21.2	
10	64QAM	25	0	19.95	20.13	20.10	20.23		
10	64QAM	25	12	19.94	20.06	20.05	20.11		
10	64QAM	25	25	19.90	19.92	20.00	20.13		
10	64QAM	50	0	19.98	20.05	20.05	20.10	Tune-up limit (dBm)	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.61	22.64	22.74	22.84	23.8	
5	QPSK	1	12	22.57	22.61	22.68	22.77		
5	QPSK	1	24	22.49	22.62	22.61	22.71		
5	QPSK	12	0	21.97	22.10	22.12	22.20		
5	QPSK	12	7	21.99	22.09	22.15	22.22	23.2	
5	QPSK	12	13	21.97	22.02	22.08	22.21		
5	QPSK	25	0	21.96	22.02	22.10	22.21		
5	16QAM	1	0	21.98	22.07	22.15	22.22		
5	16QAM	1	12	22.04	22.15	22.17	22.26	23.2	
5	16QAM	1	24	22.02	22.08	22.12	22.17		
5	16QAM	12	0	20.98	21.07	21.13	21.21		
5	16QAM	12	7	20.95	21.10	21.09	21.21		
5	16QAM	12	13	20.95	21.00	21.07	21.15	22.2	
5	16QAM	25	0	21.00	21.06	21.13	21.21		
5	64QAM	1	0	20.78	20.83	20.88	20.97		
5	64QAM	1	12	20.77	20.83	20.85	20.97		
5	64QAM	1	24	20.75	20.79	20.88	20.96	21.2	
5	64QAM	12	0	20.01	20.07	20.18	20.27		
5	64QAM	12	7	20.01	20.09	20.16	20.27		
5	64QAM	12	13	20.01	20.09	20.10	20.19		
5	64QAM	25	0	20.03	20.11	20.16	20.25		



Band 38 HPUE							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2575.5	2595	2615	
20	QPSK	1	0	23.86	23.53	23.78	25
20	QPSK	1	49	23.78	23.78	23.74	
20	QPSK	1	99	23.82	23.77	23.69	
20	QPSK	50	0	24.04	24.06	23.97	
20	QPSK	50	24	24.13	23.99	23.93	25
20	QPSK	50	50	24.08	24.05	23.99	
20	QPSK	100	0	24.10	24.00	23.95	
20	16QAM	1	0	24.20	24.22	24.18	
20	16QAM	1	49	24.15	24.19	24.11	25
20	16QAM	1	99	24.14	24.15	24.09	
20	16QAM	50	0	24.09	24.10	24.03	
20	16QAM	50	24	24.15	24.05	24.01	
20	16QAM	50	50	24.15	24.10	24.06	25
20	16QAM	100	0	24.15	24.04	23.99	
20	64QAM	1	0	24.02	23.99	23.92	
20	64QAM	1	49	23.96	23.96	23.93	
20	64QAM	1	99	24.00	23.98	23.92	24.5
20	64QAM	50	0	23.45	23.39	23.45	
20	64QAM	50	24	23.43	23.45	23.47	
20	64QAM	50	50	23.40	23.38	23.45	
20	64QAM	100	0	23.33	23.26	23.24	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.78	23.78	23.70	25
15	QPSK	1	37	23.78	23.80	23.73	
15	QPSK	1	74	23.79	23.78	23.67	
15	QPSK	36	0	24.02	23.93	23.85	
15	QPSK	36	20	23.97	23.89	23.88	25
15	QPSK	36	39	23.95	23.93	23.86	
15	QPSK	75	0	23.99	23.88	23.83	
15	16QAM	1	0	24.12	24.07	24.02	
15	16QAM	1	37	24.04	24.05	23.99	25
15	16QAM	1	74	24.09	24.08	23.96	
15	16QAM	36	0	24.02	23.93	23.84	
15	16QAM	36	20	23.96	23.88	23.88	
15	16QAM	36	39	23.96	23.94	23.85	25
15	16QAM	75	0	24.01	23.92	23.85	
15	64QAM	1	0	23.88	23.84	23.77	
15	64QAM	1	37	23.90	23.88	23.80	24.5
15	64QAM	1	74	23.87	23.89	23.78	
15	64QAM	36	0	23.36	23.28	23.28	
15	64QAM	36	20	23.35	23.28	23.37	
15	64QAM	36	39	23.30	23.25	23.25	Tune-up limit (dBm)
15	64QAM	75	0	23.37	23.29	23.28	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.83	23.73	23.64	25
10	QPSK	1	25	23.70	23.70	23.65	
10	QPSK	1	49	23.83	23.81	23.72	
10	QPSK	25	0	23.96	23.87	23.83	
10	QPSK	25	12	23.97	23.89	23.83	25
10	QPSK	25	25	23.94	23.95	23.91	
10	QPSK	50	0	23.94	23.87	23.81	
10	16QAM	1	0	24.17	24.11	24.05	
10	16QAM	1	25	24.11	24.11	24.05	25
10	16QAM	1	49	24.16	24.13	24.02	
10	16QAM	25	0	24.01	23.89	23.85	
10	16QAM	25	12	24.02	23.93	23.84	
10	16QAM	25	25	23.96	23.94	23.85	25
10	16QAM	50	0	23.99	23.92	23.85	
10	64QAM	1	0	24.00	24.03	23.95	
10	64QAM	1	25	24.02	24.10	24.00	
10	64QAM	1	49	24.05	24.05	23.94	24.5
10	64QAM	25	0	23.44	23.34	23.37	
10	64QAM	25	12	23.45	23.38	23.36	
10	64QAM	25	25	23.40	23.29	23.29	
10	64QAM	50	0	23.33	23.24	23.17	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.77	23.73	23.68	25
5	QPSK	1	12	23.69	23.72	23.64	
5	QPSK	1	24	23.74	23.77	23.65	
5	QPSK	12	0	23.93	23.86	23.83	
5	QPSK	12	7	23.95	23.94	23.88	25
5	QPSK	12	13	23.91	23.92	23.86	
5	QPSK	25	0	23.93	23.87	23.83	
5	16QAM	1	0	24.15	24.07	24.03	
5	16QAM	1	12	24.10	24.10	24.01	25
5	16QAM	1	24	24.10	24.15	24.04	
5	16QAM	12	0	23.96	23.93	23.90	
5	16QAM	12	7	23.98	23.97	23.94	
5	16QAM	12	13	23.98	23.98	23.88	25
5	16QAM	25	0	23.99	23.92	23.89	
5	64QAM	1	0	23.99	23.95	23.93	
5	64QAM	1	12	23.98	23.98	23.87	
5	64QAM	1	24	24.01	24.04	23.91	24.5
5	64QAM	12	0	23.33	23.31	23.32	
5	64QAM	12	7	23.34	23.31	23.36	
5	64QAM	12	13	23.28	23.27	23.37	
5	64QAM	25	0	23.31	23.27	23.28	



Band 38							
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)
Channel				37850	38000	38150	
Frequency (MHz)				2575	2595	2615	
20	QPSK	1	0	22.19	22.22	22.17	23.2
20	QPSK	1	49	22.21	22.21	22.15	
20	QPSK	1	99	22.19	22.17	22.10	
20	QPSK	50	0	22.30	22.33	22.26	23.2
20	QPSK	50	24	22.35	22.29	22.24	
20	QPSK	50	50	22.35	22.34	22.29	
20	QPSK	100	0	22.37	22.29	22.21	23.2
20	16QAM	1	0	22.39	22.43	22.32	
20	16QAM	1	49	22.31	22.30	22.25	
20	16QAM	1	99	22.32	22.33	22.24	23.2
20	16QAM	50	0	22.35	22.33	22.28	
20	16QAM	50	24	22.39	22.33	22.25	
20	16QAM	50	50	22.38	22.38	22.30	23.2
20	16QAM	100	0	22.39	22.29	22.25	
20	64QAM	1	0	22.04	22.06	21.95	
20	64QAM	1	49	21.98	21.99	21.95	23.2
20	64QAM	1	99	21.99	22.01	21.92	
20	64QAM	50	0	21.76	21.75	21.71	
20	64QAM	50	24	21.81	21.72	21.67	22.7
20	64QAM	50	50	21.78	21.77	21.69	
20	64QAM	100	0	21.80	21.71	21.66	
Channel				37850	38000	38150	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.23	22.19	22.13	23.2
15	QPSK	1	37	22.15	22.14	22.06	
15	QPSK	1	74	22.18	22.16	22.10	
15	QPSK	36	0	22.38	22.29	22.24	23.2
15	QPSK	36	20	22.38	22.25	22.29	
15	QPSK	36	39	22.33	22.31	22.24	
15	QPSK	75	0	22.36	22.28	22.21	23.2
15	16QAM	1	0	22.36	22.35	22.27	
15	16QAM	1	37	22.26	22.27	22.22	
15	16QAM	1	74	22.34	22.34	22.25	23.2
15	16QAM	36	0	22.35	22.25	22.22	
15	16QAM	36	20	22.33	22.24	22.26	
15	16QAM	36	39	22.31	22.28	22.22	23.2
15	16QAM	75	0	22.39	22.29	22.23	
15	64QAM	1	0	22.01	22.00	21.93	23.2
15	64QAM	1	37	22.05	22.02	21.94	
15	64QAM	1	74	22.00	22.02	21.92	
15	64QAM	36	0	21.80	21.74	21.64	22.7
15	64QAM	36	20	21.78	21.70	21.72	
15	64QAM	36	39	21.76	21.75	21.68	
15	64QAM	75	0	21.78	21.69	21.61	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.23	22.10	22.07	23.2
10	QPSK	1	25	22.15	22.05	21.98	
10	QPSK	1	49	22.13	22.09	22.00	
10	QPSK	25	0	22.32	22.21	22.20	23.2
10	QPSK	25	12	22.27	22.22	22.26	
10	QPSK	25	25	22.31	22.30	22.23	
10	QPSK	50	0	22.33	22.23	22.19	23.2
10	16QAM	1	0	22.28	22.35	22.17	
10	16QAM	1	25	22.22	22.16	22.20	
10	16QAM	1	49	22.28	22.32	22.24	23.2
10	16QAM	25	0	22.27	22.25	22.21	
10	16QAM	25	12	22.32	22.19	22.23	
10	16QAM	25	25	22.26	22.24	22.18	23.2
10	16QAM	50	0	22.39	22.24	22.23	
10	64QAM	1	0	21.92	21.95	21.83	
10	64QAM	1	25	21.97	22.01	21.85	23.2
10	64QAM	1	49	21.97	21.96	21.91	
10	64QAM	25	0	21.73	21.70	21.62	
10	64QAM	25	12	21.74	21.69	21.70	22.7
10	64QAM	25	25	21.76	21.65	21.65	
10	64QAM	50	0	21.69	21.69	21.54	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.30	22.20	22.18	23.2
5	QPSK	1	12	22.24	22.17	22.14	
5	QPSK	1	24	22.23	22.21	22.11	
5	QPSK	12	0	22.38	22.31	22.26	23.2
5	QPSK	12	7	22.38	22.36	22.26	
5	QPSK	12	13	22.35	22.32	22.24	
5	QPSK	25	0	22.32	22.30	22.27	23.2
5	16QAM	1	0	22.42	22.32	22.30	
5	16QAM	1	12	22.42	22.37	22.30	
5	16QAM	1	24	22.42	22.39	22.29	23.2
5	16QAM	12	0	22.34	22.28	22.24	
5	16QAM	12	7	22.38	22.33	22.24	
5	16QAM	12	13	22.33	22.29	22.20	23.2
5	16QAM	25	0	22.40	22.32	22.29	
5	64QAM	1	0	22.13	22.05	21.99	
5	64QAM	1	12	22.13	22.09	22.00	23.2
5	64QAM	1	24	22.13	22.10	22.00	
5	64QAM	12	0	21.78	21.73	21.72	
5	64QAM	12	7	21.81	21.81	21.69	22.7
5	64QAM	12	13	21.80	21.77	21.67	
5	64QAM	25	0	21.82	21.76	21.68	



Band 41										
Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.69	21.80	21.66	21.44	21.20	23.2	
20	QPSK	1	49	21.66	21.71	21.63	21.79	21.52		
20	QPSK	1	99	21.62	21.65	21.65	21.22	21.35		
20	QPSK	50	0	21.75	21.72	21.73	21.61	21.45	23.2	
20	QPSK	50	24	21.80	21.90	21.78	21.89	21.57		
20	QPSK	50	50	21.76	21.78	21.75	21.55	21.55		
20	QPSK	100	0	21.81	21.83	21.78	21.65	21.49	23.2	
20	16QAM	1	0	21.87	21.76	21.92	21.47	21.20		
20	16QAM	1	49	21.70	21.76	21.67	21.73	21.58		
20	16QAM	1	99	21.71	21.79	21.73	21.24	21.43	23.2	
20	16QAM	50	0	21.76	21.79	21.76	21.63	21.48		
20	16QAM	50	24	21.85	21.88	21.82	21.75	21.60		
20	16QAM	50	50	21.79	21.86	21.80	21.56	21.57	23.2	
20	16QAM	100	0	21.79	21.84	21.79	21.66	21.51		
20	64QAM	1	0	21.55	21.44	21.45	21.22	21.21		
20	64QAM	1	49	21.43	21.48	21.47	21.55	21.35	23.2	
20	64QAM	1	99	21.46	21.53	21.44	21.20	21.22		
20	64QAM	50	0	21.20	21.16	21.15	21.25	21.09		
20	64QAM	50	24	21.28	21.27	21.21	21.36	21.20	22.7	
20	64QAM	50	50	21.22	21.24	21.19	21.21	21.18		
20	64QAM	100	0	21.27	21.25	21.19	21.27	21.12		
Channel				39725	40170	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	Tune-up limit (dBm)	
15	QPSK	1	0	21.75	21.73	21.72	21.63	21.34	23.2	
15	QPSK	1	37	21.74	21.70	21.68	21.69	21.53		
15	QPSK	1	74	21.70	21.79	21.80	21.45	21.49		
15	QPSK	36	0	21.80	21.80	21.78	21.73	21.56	23.2	
15	QPSK	36	20	21.89	21.88	21.84	21.72	21.68		
15	QPSK	36	39	21.84	21.86	21.82	21.70	21.65		
15	QPSK	75	0	21.80	21.81	21.84	21.66	21.61	23.2	
15	16QAM	1	0	21.82	21.85	21.88	21.71	21.45		
15	16QAM	1	37	21.74	21.80	21.76	21.75	21.63		
15	16QAM	1	74	21.76	21.87	21.85	21.53	21.65	23.2	
15	16QAM	36	0	21.85	21.80	21.80	21.68	21.55		
15	16QAM	36	20	21.84	21.87	21.82	21.66	21.64		
15	16QAM	36	39	21.81	21.87	21.80	21.67	21.60	23.2	
15	16QAM	75	0	21.80	21.83	21.90	21.69	21.63		
15	64QAM	1	0	21.58	21.51	21.48	21.47	21.20		
15	64QAM	1	37	21.55	21.57	21.53	21.59	21.44	23.2	
15	64QAM	1	74	21.53	21.67	21.62	21.28	21.42		
15	64QAM	36	0	21.35	21.25	21.20	21.33	21.23		
15	64QAM	36	20	21.34	21.31	21.25	21.37	21.31	22.7	
15	64QAM	36	39	21.28	21.29	21.25	21.32	21.26		
15	64QAM	75	0	21.35	21.32	21.27	21.31	21.25		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.65	21.63	21.62	21.53	21.25	23.2	
10	QPSK	1	25	21.68	21.70	21.65	21.63	21.46		
10	QPSK	1	49	21.61	21.77	21.70	21.38	21.40		
10	QPSK	25	0	21.83	21.72	21.75	21.69	21.55	23.2	
10	QPSK	25	12	21.85	21.78	21.75	21.62	21.67		
10	QPSK	25	25	21.76	21.76	21.72	21.65	21.60		
10	QPSK	50	0	21.84	21.85	21.79	21.64	21.53	23.2	
10	16QAM	1	0	21.82	21.84	21.83	21.70	21.36		
10	16QAM	1	25	21.68	21.70	21.67	21.70	21.57		
10	16QAM	1	49	21.72	21.86	21.86	21.51	21.60	23.2	
10	16QAM	25	0	21.78	21.73	21.71	21.66	21.50		
10	16QAM	25	12	21.82	21.79	21.81	21.66	21.61		
10	16QAM	25	25	21.77	21.85	21.76	21.59	21.50	23.2	
10	16QAM	50	0	21.85	21.83	21.68	21.66	21.58		
10	64QAM	1	0	21.48	21.44	21.44	21.46	21.22		
10	64QAM	1	25	21.53	21.51	21.53	21.52	21.42	23.2	
10	64QAM	1	49	21.51	21.63	21.60	21.28	21.35		
10	64QAM	25	0	21.25	21.18	21.20	21.31	21.13		
10	64QAM	25	12	21.26	21.24	21.22	21.34	21.21	22.7	
10	64QAM	25	25	21.18	21.26	21.21	21.32	21.26		
10	64QAM	50	0	21.29	21.25	21.24	21.21	21.20		
Channel				39875	40148	40620	41083	41665	Tune-up limit (dBm)	
Frequency (MHz)				2496.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	21.77	21.60	21.55	21.60	21.45	23.2	
5	QPSK	1	12	21.71	21.63	21.67	21.58	21.48		
5	QPSK	1	24	21.71	21.63	21.59	21.55	21.36		
5	QPSK	12	0	21.84	21.77	21.76	21.74	21.58	23.2	
5	QPSK	12	7	21.87	21.82	21.79	21.76	21.57		
5	QPSK	12	13	21.82	21.76	21.77	21.68	21.55		
5	QPSK	25	0	21.82	21.77	21.76	21.71	21.55	23.2	
5	16QAM	1	0	21.86	21.80	21.73	21.82	21.69		
5	16QAM	1	12	21.89	21.82	21.84	21.79	21.69		
5	16QAM	1	24	21.86	21.89	21.86	21.76	21.56	23.2	
5	16QAM	12	0	21.83	21.77	21.78	21.72	21.58		
5	16QAM	12	7	21.85	21.79	21.78	21.73	21.60		
5	16QAM	12	13	21.81	21.75	21.74	21.66	21.51	23.2	
5	16QAM	25	0	21.85	21.83	21.83	21.75	21.61		
5	64QAM	1	0	21.66	21.46	21.42	21.50	21.35		
5	64QAM	1	12	21.81	21.54	21.53	21.52	21.34	23.2	
5	64QAM	1	24	21.63	21.56	21.52	21.48	21.32		
5	64QAM	12	0	21.27	21.22	21.20	21.38	21.22		
5	64QAM	12	7	21.31	21.25	21.23	21.40	21.23	22.7	
5	64QAM	12	13	21.26	21.24	21.22	21.32	21.22		
5	64QAM	25	0	21.28	21.24	21.22	21.39	21.25		



Band 48									
Ant 2									
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)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3550	3609	3641	3690		
20	QPSK	1	0	21.16	21.17	21.13	21.00	21.4	
20	QPSK	1	49	20.83	20.96	20.92	20.72		
20	QPSK	1	99	20.85	20.84	20.87	20.60		
20	QPSK	50	0	20.83	20.86	20.85	20.68		
20	QPSK	50	24	20.82	20.82	20.81	20.60	21.4	
20	QPSK	50	50	20.76	20.77	20.71	20.47		
20	QPSK	100	0	20.80	20.81	20.76	20.58		
20	16QAM	1	0	20.90	20.96	20.95	20.81		
20	16QAM	1	49	20.71	20.74	20.70	20.48	21.4	
20	16QAM	1	99	20.75	20.72	20.64	20.42		
20	16QAM	50	0	19.87	19.91	19.88	19.71		
20	16QAM	50	24	19.84	19.85	19.83	19.62		
20	16QAM	50	50	19.78	19.79	19.76	19.50	20.6	
20	16QAM	100	0	19.80	19.83	19.83	19.61		
20	64QAM	1	0	19.68	19.74	19.69	19.54		
20	64QAM	1	49	19.46	19.48	19.45	19.24		
20	64QAM	1	99	19.52	19.47	19.35	19.16	20.6	
20	64QAM	50	0	18.85	18.92	18.86	18.72		
20	64QAM	50	24	18.84	18.89	18.81	18.65		
20	64QAM	50	50	18.78	18.82	18.74	18.51		
20	64QAM	100	0	18.83	18.85	18.81	18.62	19.6	
Channel				55315	55820	56160	56655		
Frequency (MHz)				3557.5	3606	3642	3692.5		
15	QPSK	1	0	20.57	20.66	20.64	20.69	21.4	
15	QPSK	1	37	20.50	20.72	20.69	20.48		
15	QPSK	1	74	20.54	20.75	20.65	20.41		
15	QPSK	36	0	20.62	20.64	20.60	20.45		
15	QPSK	36	20	20.57	20.59	20.55	20.35	21.4	
15	QPSK	36	39	20.54	20.57	20.52	20.25		
15	QPSK	75	0	20.57	20.64	20.57	20.36		
15	16QAM	1	0	20.65	20.69	20.67	20.53		
15	16QAM	1	37	20.44	20.50	20.43	20.21	21.4	
15	16QAM	1	74	20.58	20.56	20.52	20.27		
15	16QAM	36	0	19.57	19.62	19.58	19.40		
15	16QAM	36	20	19.53	19.56	19.52	19.31		
15	16QAM	36	39	19.51	19.54	19.46	19.24	20.6	
15	16QAM	75	0	19.61	19.63	19.60	19.38		
15	64QAM	1	0	19.38	19.44	19.43	19.27		
15	64QAM	1	37	19.26	19.29	19.24	19.00		
15	64QAM	1	74	19.34	19.34	19.22	19.00	19.6	
15	64QAM	36	0	18.63	18.67	18.64	18.45		
15	64QAM	36	20	18.58	18.64	18.57	18.35		
15	64QAM	36	39	18.56	18.56	18.52	18.26		
15	64QAM	75	0	18.61	18.64	18.60	18.37	Tune-up limit (dBm)	
Channel				55200	55615	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	20.59	20.77	20.71	20.57	21.4	
10	QPSK	1	25	20.53	20.73	20.73	20.49		
10	QPSK	1	49	20.50	20.68	20.65	20.36		
10	QPSK	25	0	20.57	20.61	20.55	20.34		
10	QPSK	25	12	20.55	20.62	20.59	20.35	21.4	
10	QPSK	25	25	20.58	20.52	20.52	20.26		
10	QPSK	50	0	20.56	20.52	20.49	20.24		
10	16QAM	1	0	20.56	20.58	20.57	20.28		
10	16QAM	1	25	20.60	20.64	20.63	20.41	21.4	
10	16QAM	1	49	20.53	20.59	20.51	20.26		
10	16QAM	25	0	19.57	19.56	19.54	19.33		
10	16QAM	25	12	19.62	19.57	19.54	19.25		
10	16QAM	25	25	19.53	19.55	19.51	19.27	20.6	
10	16QAM	50	0	19.49	19.57	19.61	19.31		
10	64QAM	1	0	19.25	19.33	19.30	19.03		
10	64QAM	1	25	19.31	19.29	19.27	19.08		
10	64QAM	1	49	19.25	19.28	19.29	18.97	19.6	
10	64QAM	25	0	18.54	18.59	18.64	18.34		
10	64QAM	25	12	18.62	18.58	18.62	18.33		
10	64QAM	25	25	18.61	18.56	18.61	18.31		
10	64QAM	50	0	18.64	18.62	18.54	18.35	Tune-up limit (dBm)	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	20.61	20.84	20.80	20.60	21.4	
5	QPSK	1	12	20.56	20.79	20.75	20.51		
5	QPSK	1	24	20.51	20.72	20.73	20.43		
5	QPSK	12	0	20.60	20.61	20.58	20.35		
5	QPSK	12	7	20.63	20.63	20.61	20.36	21.4	
5	QPSK	12	13	20.59	20.62	20.59	20.33		
5	QPSK	25	0	20.59	20.61	20.57	20.32		
5	16QAM	1	0	20.58	20.65	20.63	20.36		
5	16QAM	1	12	20.64	20.70	20.64	20.41	21.4	
5	16QAM	1	24	20.55	20.62	20.56	20.29		
5	16QAM	12	0	19.59	19.63	19.59	19.37		
5	16QAM	12	7	19.62	19.60	19.62	19.34		
5	16QAM	12	13	19.53	19.59	19.57	19.28	20.6	
5	16QAM	25	0	19.59	19.64	19.62	19.37		
5	64QAM	1	0	19.35	19.40	19.37	19.11		
5	64QAM	1	12	19.35	19.39	19.33	19.08		
5	64QAM	1	24	19.33	19.35	19.34	19.07	19.6	
5	64QAM	12	0	18.61	18.69	18.65	18.37		
5	64QAM	12	7	18.64	18.64	18.68	18.37		
5	64QAM	12	13	18.64	18.64	18.61	18.36		
5	64QAM	25	0	18.65	18.67	18.64	18.38		



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)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	23.55	23.56	23.48	25.0
20	PI/2 BPSK	1	53	23.48	23.42	23.49	
20	PI/2 BPSK	1	104	23.37	23.35	23.05	
20	PI/2 BPSK	50	0	22.95	22.90	22.98	25.0
20	PI/2 BPSK	50	28	23.54	23.55	23.54	
20	PI/2 BPSK	50	56	22.93	22.90	22.95	
20	PI/2 BPSK	100	0	23.04	22.98	23.12	24.5
20	QPSK	1	1	23.46	23.37	23.41	25.0
20	QPSK	1	53	23.39	23.44	23.51	
20	QPSK	1	104	23.35	23.22	23.00	
20	QPSK	50	0	22.24	22.20	22.32	25.0
20	QPSK	50	28	23.44	23.39	23.41	
20	QPSK	50	56	22.30	22.28	22.22	
20	QPSK	100	0	22.21	22.34	22.39	24.0
20	16QAM	1	1	22.55	22.49	22.52	24.0
20	16QAM	1	53	22.51	22.56	22.60	
20	16QAM	1	104	22.48	22.41	22.18	
20	16QAM	50	0	21.37	21.36	21.45	24.0
20	16QAM	50	28	22.35	22.32	22.31	
20	16QAM	50	56	21.48	21.45	21.39	
20	16QAM	100	0	21.42	21.43	21.58	23.0
20	64QAM	1	1	20.96	20.84	20.87	22.5
20	64QAM	1	53	20.98	20.95	21.00	
20	64QAM	1	104	20.85	20.84	20.78	
20	64QAM	50	0	20.82	20.76	20.80	22.5
20	64QAM	50	28	20.82	20.74	22.34	
20	64QAM	50	56	20.82	20.79	20.75	
20	64QAM	100	0	20.79	20.78	20.95	22.5
20	256QAM	1	1	18.92	18.84	18.83	20.5
20	256QAM	1	53	18.83	18.89	18.93	
20	256QAM	1	104	18.96	18.92	18.92	
20	256QAM	50	0	19.00	19.04	19.08	20.5
20	256QAM	50	28	19.06	19.07	19.04	
20	256QAM	50	56	19.08	19.11	19.09	
20	256QAM	100	0	19.03	19.12	19.10	20.5
Channel				168300	167300	168300	
Frequency (MHz)				831.5	835.5	841.5	
15	PI/2 BPSK	1	1	23.40	23.46	23.48	25.0
Channel				165800	167300	166800	
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	23.33	23.36	23.38	25.0
Channel				163300	167300	163300	
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.36	23.41	23.40	25.0



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)	
Channel				166800	167300	167800		
Frequency (MHz)				834	836.5	839		
20	PI/2 BPSK	1	1	23.35	23.41	23.32	25.0	
20	PI/2 BPSK	1	53	23.31	23.41	23.35		
20	PI/2 BPSK	1	104	23.02	23.09	23.00		
20	PI/2 BPSK	50	0	22.79	22.81	22.73		
20	PI/2 BPSK	50	28	23.39	23.46	23.41	25.0	
20	PI/2 BPSK	50	56	22.80	22.88	22.79		
20	PI/2 BPSK	100	0	22.88	22.97	22.90		24.5
20	QPSK	1	1	23.30	23.38	23.38	25.0	
20	QPSK	1	53	23.28	23.36	23.32		
20	QPSK	1	104	22.95	23.02	22.97		
20	QPSK	50	0	22.08	22.13	22.09		
20	QPSK	50	28	23.29	23.33	23.31	25.0	
20	QPSK	50	56	22.17	22.18	22.16		
20	QPSK	100	0	22.17	22.23	22.20		24.0
20	16QAM	1	1	22.46	22.47	22.42	24.0	
20	16QAM	1	53	22.23	22.33	22.25		
20	16QAM	1	104	22.15	22.17	22.09		
20	16QAM	50	0	21.22	21.30	21.28		
20	16QAM	50	28	22.07	22.12	22.08	24.0	
20	16QAM	50	56	21.27	21.30	21.25		
20	16QAM	100	0	21.40	21.41	21.35		23.0
20	64QAM	1	1	20.98	21.05	20.99	22.5	
20	64QAM	1	53	20.92	20.97	20.92		
20	64QAM	1	104	20.85	20.88	20.81		
20	64QAM	50	0	20.66	20.72	20.67		
20	64QAM	50	28	20.62	20.70	20.67	22.5	
20	64QAM	50	56	20.76	20.79	20.77		
20	64QAM	100	0	20.74	20.76	20.73		22.5
20	256QAM	1	1	18.99	19.04	19.01	20.5	
20	256QAM	1	53	18.98	19.08	19.06		
20	256QAM	1	104	18.94	19.01	19.01		
20	256QAM	50	0	18.94	19.00	18.90		
20	256QAM	50	28	18.97	19.01	18.96	20.5	
20	256QAM	50	56	19.12	19.18	19.11		
20	256QAM	100	0	19.04	19.05	19.02		20.5
Channel				166300	167300	168300	Tune-up limit (dBm)	
Frequency (MHz)				831.5	835.5	841.5		
15	PI/2 BPSK	1	1	23.33	23.34	23.34	25.0	
Channel				165800	167300	168800	Tune-up limit (dBm)	
Frequency (MHz)				829	835.5	844		
10	PI/2 BPSK	1	1	23.32	23.31	23.37	25.0	
Channel				163300	167300	169300	Tune-up limit (dBm)	
Frequency (MHz)				826.5	835.5	846.5		
5	PI/2 BPSK	1	1	23.30	23.35	23.31	25.0	



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)	
Channel				165800	167300	167900		
Frequency (MHz)				834	836.5	839		
20	PI/2 BPSK	1	1	23.34	23.24	23.21	24.9	
20	PI/2 BPSK	1	53	23.28	23.29	23.20		
20	PI/2 BPSK	1	104	23.16	23.18	23.03		
20	PI/2 BPSK	50	0	23.16	23.12	23.15	24.9	
20	PI/2 BPSK	50	28	23.29	23.31	23.30		
20	PI/2 BPSK	50	56	23.15	23.12	23.05		
20	PI/2 BPSK	100	0	23.16	23.30	23.21	24.9	
20	QPSK	1	1	23.21	23.22	23.08		
20	QPSK	1	53	23.21	23.26	23.26		24.9
20	QPSK	1	104	23.14	23.05	23.04	24.9	
20	QPSK	50	0	22.50	22.40	22.42		
20	QPSK	50	28	23.19	23.18	23.20		
20	QPSK	50	56	22.47	22.44	22.38	23.9	
20	QPSK	100	0	22.50	22.46	22.63		
20	16QAM	1	1	22.55	22.50	22.42		
20	16QAM	1	53	22.44	22.49	22.41	23.9	
20	16QAM	1	104	22.37	22.33	22.27		
20	16QAM	50	0	21.57	21.49	21.53	23.9	
20	16QAM	50	28	22.40	22.34	22.45		
20	16QAM	50	56	21.59	21.53	21.54		
20	16QAM	100	0	21.68	21.63	21.70	22.9	
20	64QAM	1	1	21.09	21.08	20.99		
20	64QAM	1	53	21.09	21.16	21.07		
20	64QAM	1	104	20.96	20.93	20.92	22.4	
20	64QAM	50	0	21.01	20.97	20.98		
20	64QAM	50	28	21.00	20.97	21.04		
20	64QAM	50	56	21.03	20.97	20.95	22.4	
20	64QAM	100	0	21.10	21.07	21.20		
20	256QAM	1	1	19.30	19.29	19.24	20.4	
20	256QAM	1	53	19.31	19.22	19.28		
20	256QAM	1	104	19.30	19.19	19.18		
20	256QAM	50	0	19.31	19.21	19.27	20.4	
20	256QAM	50	28	19.22	19.24	19.27		
20	256QAM	50	56	19.27	19.36	19.33		
20	256QAM	100	0	19.27	19.35	19.38	20.4	
Channel				166300	167300	168300		
Frequency (MHz)				831.5	835.5	841.5		
15	PI/2 BPSK	1	1	23.38	23.30	23.29	24.9	
Channel				165800	167300	168800		
Frequency (MHz)				829	836.5	844		
10	PI/2 BPSK	1	1	23.18	23.15	23.16	24.9	
Channel				165300	167300	168300		
Frequency (MHz)				826.5	836.5	846.5		
5	PI/2 BPSK	1	1	23.25	23.18	23.26	24.9	



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)	
Channel				165800	167300	167900		
Frequency (MHz)				834	836.5	839		
20	PI/2 BPSK	1	1	23.34	23.24	23.21	24.1	
20	PI/2 BPSK	1	53	23.28	23.29	23.20		
20	PI/2 BPSK	1	104	23.16	23.18	23.03		
20	PI/2 BPSK	50	0	23.16	23.12	23.15		
20	PI/2 BPSK	50	28	23.29	23.31	23.30	24.1	
20	PI/2 BPSK	50	56	23.15	23.12	23.05		
20	PI/2 BPSK	100	0	23.16	23.30	23.21		
20	QPSK	1	1	23.21	23.22	23.08		
20	QPSK	1	53	23.21	23.26	23.26	24.1	
20	QPSK	1	104	23.14	23.05	23.04		
20	QPSK	50	0	22.50	22.40	22.42		
20	QPSK	50	28	23.19	23.18	23.20		
20	QPSK	50	56	22.47	22.44	22.38	23.1	
20	QPSK	100	0	22.50	22.46	22.63		
20	16QAM	1	1	22.55	22.50	22.42		
20	16QAM	1	53	22.44	22.49	22.41		
20	16QAM	1	104	22.37	22.33	22.27	23.1	
20	16QAM	50	0	21.57	21.49	21.53		
20	16QAM	50	28	22.40	22.34	22.45		
20	16QAM	50	56	21.58	21.53	21.54		
20	16QAM	100	0	21.68	21.63	21.70	22.1	
20	64QAM	1	1	21.09	21.08	20.99		
20	64QAM	1	53	21.09	21.16	21.07		
20	64QAM	1	104	20.96	20.93	20.92		
20	64QAM	50	0	21.01	20.97	20.98	21.6	
20	64QAM	50	28	21.00	20.97	21.04		
20	64QAM	50	56	21.03	20.97	20.95		
20	64QAM	100	0	21.10	21.07	21.20		
20	256QAM	1	1	19.30	19.29	19.24	19.6	
20	256QAM	1	53	19.31	19.22	19.28		
20	256QAM	1	104	19.30	19.19	19.18		
20	256QAM	50	0	19.31	19.21	19.27		
20	256QAM	50	28	19.22	19.24	19.27	19.6	
20	256QAM	50	56	19.27	19.36	19.33		
20	256QAM	100	0	19.27	19.35	19.38		
Channel				165300	167300	168300		
Frequency (MHz)				831.5	835.5	841.5		
15	PI/2 BPSK	1	1	23.38	23.30	23.29	24.1	
Channel				165800	167300	168800		
Frequency (MHz)				829	836.5	844		
10	PI/2 BPSK	1	1	23.18	23.15	23.16		
Channel				165300	167300	168300		
Frequency (MHz)				826.5	836.5	846.5		
5	PI/2 BPSK	1	1	23.25	23.18	23.26	24.1	



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.30	19.50	98.72	19.10	19.50	98.92	19.40	19.50	19.10	19.50	22.26	22.5	98.92
		6	2437	19.30	19.50		19.40	19.50		19.40	19.50	19.40	19.50	22.41	22.5	
		11	2462	19.10	19.50		19.40	19.50		19.20	19.50	19.40	19.50	22.31	22.5	
	802.11g 6Mbps	1	2412	17.10	17.50	97.87	17.10	17.50	98.35	17.20	17.50	17.10	17.50	20.16	20.5	98.35
		6	2437	19.20	19.50		19.20	19.50		19.30	19.50	19.20	19.50	22.26	22.5	
		11	2462	17.80	18.00		17.90	18.00		17.90	18.00	17.90	18.00	20.91	21.0	
	802.11n-HT20 MCS0	1	2412	16.40	16.50	97.97	16.40	16.50	97.72	16.50	16.50	16.40	16.50	19.46	19.5	97.72
		6	2437	19.30	19.50		19.40	19.50		19.40	19.50	19.40	19.50	22.41	22.5	
		11	2462	16.40	16.50		16.50	16.50		16.40	16.50	16.50	16.50	19.46	19.5	
	802.11ac-VHT20 MCS0	1	2412	16.30	16.50	97.48	16.30	16.50	97.73	16.40	16.50	16.30	16.50	19.36	19.5	97.73
		6	2437	19.20	19.50		19.30	19.50		19.30	19.50	19.30	19.50	22.31	22.5	
		11	2462	16.30	16.50		16.40	16.50		16.30	16.50	16.40	16.50	19.36	19.5	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.30	17.50	97.87	16.90	17.50	97.87	17.30	17.50	17.00	17.50	20.16	20.5	97.87
		40	5200	17.20	17.50		17.00	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
		44	5220	17.20	17.50		17.00	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
		48	5240	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
	802.11n-HT20 MCS0	36	5180	17.40	17.50	97.47	17.20	17.50	97.47	17.40	17.50	17.30	17.50	20.36	20.5	97.72
		40	5200	17.40	17.50		17.20	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		44	5220	17.40	17.50		17.30	17.50		17.40	17.50	17.40	17.50	20.41	20.5	
		48	5240	17.40	17.50		16.90	17.50		17.40	17.50	17.00	17.50	20.21	20.5	
	802.11n-HT40 MCS0	38	5190	13.50	13.50	95.96	13.00	13.50	95.96	13.50	13.50	13.10	13.50	16.31	16.5	95.93
		46	5230	17.40	17.50		17.00	17.50		17.40	17.50	17.10	17.50	20.26	20.5	
	802.11ac-VHT20 MCS0	36	5180	17.30	17.50	97.98	17.10	17.50	97.98	17.30	17.50	17.20	17.50	20.26	20.5	97.49
		40	5200	17.30	17.50		17.10	17.50		17.30	17.50	17.20	17.50	20.26	20.5	
		44	5220	17.30	17.50		17.20	17.50		17.30	17.50	17.30	17.50	20.31	20.5	
		48	5240	17.30	17.50		16.80	17.50		17.30	17.50	16.90	17.50	20.11	20.5	
	802.11ac-VHT40 MCS0	38	5190	13.40	13.50	96.00	12.90	13.50	96.00	13.40	13.50	13.00	13.50	16.21	16.5	95.74
		46	5230	17.30	17.50		16.90	17.50		17.30	17.50	17.00	17.50	20.16	20.5	
	802.11ac-VHT80 MCS0	42	5210	12.80	13.00	92.00	12.80	13.00	92.00	12.80	13.00	12.90	13.00	15.86	16.0	92.00

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.40	17.50	97.87	16.50	17.50	97.87	17.40	17.50	16.60	17.50	20.03	20.5	97.87
		56	5280	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.03	20.5	
		60	5300	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		64	5320	17.40	17.50		16.80	17.50		17.40	17.50	16.90	17.50	20.17	20.5	
	802.11n-HT20 MCS0	52	5260	17.40	17.50	97.47	16.70	17.50	97.47	17.40	17.50	16.80	17.50	20.12	20.5	97.72
		56	5280	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		60	5300	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		64	5320	17.40	17.50		16.80	17.50		17.40	17.50	16.90	17.50	20.17	20.5	
	802.11n-HT40 MCS0	54	5270	17.40	17.50	95.96	16.90	17.50	95.96	17.40	17.50	17.00	17.50	20.21	20.5	95.93
		62	5310	13.80	14.00		13.50	14.00		13.80	14.00	13.60	14.00	16.71	17.0	
	802.11ac-VHT20 MCS0	52	5260	17.30	17.50	97.98	16.60	17.50	97.98	17.30	17.50	16.70	17.50	20.02	20.5	97.49
		56	5280	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
		60	5300	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
		64	5320	17.30	17.50		16.70	17.50		17.30	17.50	16.80	17.50	20.07	20.5	
	802.11ac-VHT40 MCS0	54	5270	17.30	17.50	96.00	16.80	17.50	96.00	17.30	17.50	16.90	17.50	20.11	20.5	95.74
		62	5310	13.70	14.00		13.40	14.00		13.70	14.00	13.50	14.00	16.61	17.0	
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	92.00	11.70	12.00	92.00	12.00	12.00	11.80	12.00	14.91	15.0	92.00



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.40	17.50	97.87	16.90	17.50	97.87	17.40	17.50	17.00	17.50	20.21	20.5	97.87
		116	5580	17.40	17.50		17.30	17.50		17.40	17.50	17.40	17.50	20.41	20.5	
		124	5620	17.30	17.50		17.20	17.50		17.30	17.50	17.30	17.50	20.31	20.5	
		132	5660	17.30	17.50		16.40	17.50		17.30	17.50	16.70	17.50	20.03	20.5	
		140	5700	17.40	17.50		16.50	17.50		17.40	17.50	16.60	17.50	20.03	20.5	
	802.11n-HT20 MCS0	144	5720	17.40	17.50	97.47	16.70	17.50	97.47	17.40	17.50	16.80	17.50	20.12	20.5	97.72
		100	5500	17.30	17.50		17.00	17.50		17.30	17.50	17.10	17.50	20.21	20.5	
		116	5580	17.40	17.50		17.30	17.50		17.40	17.50	17.40	17.50	20.41	20.5	
		124	5620	17.30	17.50		17.30	17.50		17.30	17.50	17.30	17.50	20.31	20.5	
		132	5660	17.90	18.00		16.90	18.00		17.90	18.00	17.00	18.00	20.48	21.0	
	802.11n-HT40 MCS0	140	5700	17.90	18.00	95.96	16.90	18.00	95.96	17.90	18.00	17.10	18.00	20.53	21.0	95.93
		144	5720	17.40	17.50		16.80	17.50		17.40	17.50	16.90	17.50	20.17	20.5	
		102	5510	15.70	16.00		15.40	16.00		15.70	16.00	15.50	16.00	18.61	19.0	
		110	5550	17.40	17.50		16.90	17.50		17.40	17.50	17.00	17.50	20.21	20.5	
		126	5630	17.30	17.50		16.70	17.50		17.30	17.50	16.90	17.50	20.11	20.5	
	802.11ac-VHT20 MCS0	134	5670	17.40	17.50	97.98	16.70	17.50	97.98	17.40	17.50	16.80	17.50	20.12	20.5	97.49
		142	5710	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		100	5500	17.20	17.50		16.90	17.50		17.20	17.50	17.00	17.50	20.11	20.5	
		116	5580	17.30	17.50		17.20	17.50		17.30	17.50	17.30	17.50	20.31	20.5	
		124	5620	17.20	17.50		17.20	17.50		17.20	17.50	17.20	17.50	20.21	20.5	
	802.11ac-VHT40 MCS0	132	5660	17.80	18.00	96.00	16.80	18.00	96.00	17.80	18.00	16.90	18.00	20.38	21.0	95.74
		140	5700	17.80	18.00		16.80	18.00		17.80	18.00	16.90	18.00	20.38	21.0	
		144	5720	17.30	17.50		16.70	17.50		17.30	17.50	16.80	17.50	20.07	20.5	
		102	5510	15.60	16.00		15.30	16.00		15.60	16.00	15.40	16.00	18.51	19.0	
		110	5550	17.30	17.50		16.80	17.50		17.30	17.50	16.90	17.50	20.11	20.5	
	802.11ac-VHT80 MCS0	126	5630	17.20	17.50	92.00	16.60	17.50	92.00	17.20	17.50	16.80	17.50	20.01	20.5	92.00
		134	5670	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
		142	5710	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
		106	5530	12.00	12.50		12.10	12.50		12.00	12.50	12.20	12.50	15.11	15.5	
		122	5610	16.90	17.00		16.60	17.00		16.90	17.00	16.70	17.00	19.81	20.0	
	802.11ac-VHT80 MCS0	138	5690	16.90	17.00		16.00	17.00		16.90	17.00	16.10	17.00	19.53	20.0	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.30	18.50	97.87	17.60	18.50	97.87	18.30	18.50	17.70	18.50	21.02	21.5	97.87
		157	5785	18.40	18.50		17.80	18.50		18.40	18.50	17.90	18.50	21.17	21.5	
		165	5825	18.40	18.50		17.50	18.50		18.40	18.50	17.60	18.50	21.03	21.5	
	802.11n-HT20 MCS0	149	5745	18.30	18.50	97.47	17.80	18.50	97.47	18.30	18.50	17.90	18.50	21.11	21.5	97.72
		157	5785	18.40	18.50		17.70	18.50		18.40	18.50	17.80	18.50	21.12	21.5	
		165	5825	18.40	18.50		17.70	18.50		18.40	18.50	17.80	18.50	21.12	21.5	
	802.11n-HT40 MCS0	151	5755	17.40	17.50	95.96	17.00	17.50	95.96	17.40	17.50	17.10	17.50	20.26	20.5	95.93
		159	5795	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		149	5745	18.20	18.50		17.70	18.50		18.20	18.50	17.80	18.50	21.01	21.5	
	802.11ac-VHT20 MCS0	157	5785	18.30	18.50	97.98	17.60	18.50	97.98	18.30	18.50	17.70	18.50	21.02	21.5	97.49
		165	5825	18.30	18.50		17.60	18.50		18.30	18.50	17.70	18.50	21.02	21.5	
		151	5755	17.30	17.50		16.90	17.50		17.30	17.50	17.00	17.50	20.16	20.5	
	802.11ac-VHT40 MCS0	159	5795	17.30	17.50	96.00	16.60	17.50	96.00	17.30	17.50	16.70	17.50	20.02	20.5	95.74
		155	5775	16.90	17.00		16.10	17.00		16.90	17.00	16.20	17.00	19.57	20.0	
		155	5775	16.90	17.00		16.10	17.00		16.90	17.00	16.20	17.00	19.57	20.0	



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.30	19.50	98.72	19.10	19.50	98.92	19.40	19.50	19.10	19.50	22.26	22.5	98.92
		6	2437	19.30	19.50		19.40	19.50		19.40	19.50	19.40	19.50	22.41	22.5	
		11	2462	19.10	19.50		19.40	19.50		19.20	19.50	19.40	19.50	22.31	22.5	
	802.11g 6Mbps	1	2412	17.10	17.50	97.87	17.10	17.50	98.35	17.20	17.50	17.10	17.50	20.16	20.5	98.35
		6	2437	19.20	19.50		19.20	19.50		19.30	19.50	19.20	19.50	22.26	22.5	
		11	2462	17.80	18.00		17.90	18.00		17.90	18.00	17.90	18.00	20.91	21.0	
	802.11n-HT20 MCS0	1	2412	16.40	16.50	97.97	16.40	16.50	97.72	16.50	16.50	16.40	16.50	19.46	19.5	97.72
		6	2437	19.30	19.50		19.40	19.50		19.40	19.50	19.40	19.50	22.41	22.5	
		11	2462	16.40	16.50		16.50	16.50		16.40	16.50	16.50	16.50	19.46	19.5	
	802.11ac-VHT20 MCS0	1	2412	16.30	16.50	97.48	16.30	16.50	97.73	16.40	16.50	16.30	16.50	19.36	19.5	97.73
		6	2437	19.20	19.50		19.30	19.50		19.30	19.50	19.30	19.50	22.31	22.5	
		11	2462	16.30	16.50		16.40	16.50		16.30	16.50	16.40	16.50	19.36	19.5	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.30	17.50	97.87	16.90	17.50	97.87	17.30	17.50	17.00	17.50	20.16	20.5	97.87
		40	5200	17.20	17.50		17.00	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
		44	5220	17.20	17.50		17.00	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
		48	5240	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
	802.11n-HT20 MCS0	36	5180	17.40	17.50	97.72	17.20	17.50	97.47	17.40	17.50	17.30	17.50	20.36	20.5	97.72
		40	5200	17.40	17.50		17.20	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		44	5220	17.40	17.50		17.30	17.50		17.40	17.50	17.40	17.50	20.41	20.5	
		48	5240	17.40	17.50		16.90	17.50		17.40	17.50	17.00	17.50	20.21	20.5	
	802.11n-HT40 MCS0	38	5190	13.50	13.50	95.93	13.00	13.50	95.96	13.50	13.50	13.10	13.50	16.31	16.5	95.93
		46	5230	17.40	17.50		17.00	17.50		17.40	17.50	17.10	17.50	20.26	20.5	
	802.11ac-VHT20 MCS0	36	5180	17.30	17.50	97.49	17.10	17.50	97.98	17.30	17.50	17.20	17.50	20.26	20.5	97.49
		40	5200	17.30	17.50		17.10	17.50		17.30	17.50	17.20	17.50	20.26	20.5	
		44	5220	17.30	17.50		17.20	17.50		17.30	17.50	17.30	17.50	20.31	20.5	
		48	5240	17.30	17.50		16.80	17.50		17.30	17.50	16.90	17.50	20.11	20.5	
	802.11ac-VHT40 MCS0	38	5190	13.40	13.50	95.74	12.90	13.50	96.00	13.40	13.50	13.00	13.50	16.21	16.5	95.74
		46	5230	17.30	17.50		16.90	17.50		17.30	17.50	17.00	17.50	20.16	20.5	
	802.11ac-VHT80 MCS0	42	5210	12.80	13.00	92.00	12.80	13.00	92.00	12.80	13.00	12.90	13.00	15.86	16.0	92.00

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.40	17.50	97.87	16.50	17.50	97.87	17.40	17.50	16.60	17.50	20.03	20.5	97.87
		56	5280	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.03	20.5	
		60	5300	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		64	5320	17.40	17.50		16.80	17.50		17.40	17.50	16.90	17.50	20.17	20.5	
	802.11n-HT20 MCS0	52	5260	17.40	17.50	97.72	16.70	17.50	97.47	17.40	17.50	16.80	17.50	20.12	20.5	97.72
		56	5280	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		60	5300	17.40	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		64	5320	17.40	17.50		16.80	17.50		17.40	17.50	16.90	17.50	20.17	20.5	
	802.11n-HT40 MCS0	54	5270	17.40	17.50	95.93	16.90	17.50	95.96	17.40	17.50	17.00	17.50	20.21	20.5	95.93
		62	5310	13.80	14.00		13.50	14.00		13.80	14.00	13.60	14.00	16.71	17.0	
	802.11ac-VHT20 MCS0	52	5260	17.30	17.50	97.49	16.60	17.50	97.98	17.30	17.50	16.70	17.50	20.02	20.5	97.49
		56	5280	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
		60	5300	17.30	17.50		16.60	17.50		17.30	17.50	16.70	17.50	20.02	20.5	
		64	5320	17.30	17.50		16.70	17.50		17.30	17.50	16.80	17.50	20.07	20.5	
	802.11ac-VHT40 MCS0	54	5270	17.30	17.50	95.74	16.80	17.50	96.00	17.30	17.50	16.90	17.50	20.11	20.5	95.74
		62	5310	13.70	14.00		13.40	14.00		13.70	14.00	13.50	14.00	16.61	17.0	
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	92.00	11.70	12.00	92.00	12.00	12.00	11.80	12.00	14.91	15.0	92.00



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.10	17.50	97.83	13.40	13.50	97.87	17.10	17.50	15.00	16.00	19.19	19.8	97.83
		116	5580	17.40	17.50		13.30	13.50		17.40	17.50	15.40	16.00	19.52	19.8	
		124	5620	17.30	17.50		13.30	13.50		17.30	17.50	15.30	16.00	19.42	19.8	
		132	5660	16.90	17.50		13.40	13.50		16.90	17.50	15.10	16.00	19.10	19.8	
		140	5700	16.90	17.50		13.40	13.50		16.90	17.50	15.40	16.00	19.22	19.8	
		144	5720	17.10	17.50		13.40	13.50		17.10	17.50	15.40	16.00	19.34	19.8	
	802.11n-HT20 MCS0	100	5500	17.40	17.50	97.69	13.30	13.50	97.47	17.40	17.50	15.30	16.00	19.49	19.8	97.69
		116	5580	17.20	17.50		13.40	13.50		17.20	17.50	15.30	16.00	19.36	19.8	
		124	5620	17.10	17.50		13.40	13.50		17.10	17.50	15.10	16.00	19.22	19.8	
		132	5660	17.30	18.00		13.30	13.50		17.30	18.00	15.40	16.00	19.46	20.1	
		140	5700	17.20	18.00		13.40	13.50		17.20	18.00	15.20	16.00	19.32	20.1	
		144	5720	17.10	17.50		13.40	13.50		17.10	17.50	15.40	16.00	19.34	19.8	
	802.11n-HT40 MCS0	102	5510	15.30	16.00	95.34	13.30	13.50	95.96	15.30	16.00	15.20	16.00	18.26	19.0	95.34
		110	5550	17.20	17.50		13.30	13.50		17.20	17.50	15.30	16.00	19.36	19.8	
		126	5630	17.10	17.50		13.30	13.50		17.10	17.50	15.10	16.00	19.22	19.8	
		134	5670	17.10	17.50		13.40	13.50		17.10	17.50	15.20	16.00	19.26	19.8	
		142	5710	17.40	17.50		13.40	13.50		17.40	17.50	15.20	16.00	19.45	19.8	
		144	5720	17.10	17.50		13.30	13.50		17.10	17.50	15.20	16.00	19.39	19.8	
	802.11ac-VHT20 MCS0	100	5500	17.30	17.50	97.69	13.20	13.50	97.98	17.30	17.50	15.20	16.00	19.39	19.8	97.69
		116	5580	17.10	17.50		13.30	13.50		17.10	17.50	15.20	16.00	19.26	19.8	
		124	5620	17.00	17.50		13.30	13.50		17.00	17.50	15.00	16.00	19.12	19.8	
		132	5660	17.00	18.00		13.20	13.50		17.00	18.00	15.30	16.00	19.24	20.1	
		140	5700	17.00	18.00		13.30	13.50		17.00	18.00	15.10	16.00	19.16	20.1	
		144	5720	17.00	17.50		13.30	13.50		17.00	17.50	15.30	16.00	19.24	19.8	
	802.11ac-VHT40 MCS0	102	5510	15.20	16.00	95.41	13.20	13.50	96.00	15.20	16.00	15.10	16.00	18.16	19.0	95.41
		110	5550	17.10	17.50		13.20	13.50		17.10	17.50	15.20	16.00	19.26	19.8	
		126	5630	17.00	17.50		13.20	13.50		17.00	17.50	15.00	16.00	19.12	19.8	
		134	5670	17.00	17.50		13.30	13.50		17.00	17.50	15.10	16.00	19.16	19.8	
		142	5710	17.30	17.50		13.30	13.50		17.30	17.50	15.10	16.00	19.35	19.8	
		144	5720	17.00	17.50		13.30	13.50		17.00	17.50	15.30	16.00	19.24	19.8	
	802.11ac-VHT80 MCS0	106	5530	12.00	12.50	91.87	12.40	12.50	92.00	12.00	12.50	12.20	12.50	15.11	15.5	91.87
		122	5610	16.80	17.00		13.10	13.50		16.80	17.00	15.20	16.00	19.08	19.5	
		138	5690	16.90	17.00		13.10	13.50		16.90	17.00	15.10	16.00	19.10	19.5	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.30	18.50	97.83	13.40	13.50	97.87	18.30	18.50	15.60	16.00	20.17	20.4	97.83
		157	5785	18.40	18.50		13.40	13.50		18.40	18.50	15.80	16.00	20.30	20.4	
		165	5825	18.20	18.50		13.20	13.50		18.20	18.50	15.80	16.00	20.17	20.4	
	802.11n-HT20 MCS0	149	5745	18.10	18.50	97.69	13.40	13.50	97.47	18.10	18.50	15.90	16.00	20.15	20.4	97.69
		157	5785	18.20	18.50		13.30	13.50		18.20	18.50	15.60	16.00	20.10	20.4	
		165	5825	18.10	18.50		13.40	13.50		18.10	18.50	15.60	16.00	20.04	20.4	
	802.11n-HT40 MCS0	151	5755	17.40	17.50	95.34	13.30	13.50	95.96	17.40	17.50	15.90	16.00	19.72	19.8	95.34
		159	5795	17.10	17.50		13.40	13.50		17.10	17.50	15.70	16.00	19.47	19.8	
		149	5745	18.00	18.50		13.30	13.50		18.00	18.50	15.80	16.00	20.05	20.4	
	802.11ac-VHT20 MCS0	157	5785	18.10	18.50	97.69	13.20	13.50	97.98	18.10	18.50	15.50	16.00	20.00	20.4	97.69
		165	5825	18.00	18.50		13.30	13.50		18.00	18.50	15.50	16.00	19.94	20.4	
		151	5755	17.30	17.50		13.20	13.50		17.30	17.50	15.80	16.00	19.62	19.8	
	802.11ac-VHT40 MCS0	159	5795	17.00	17.50	95.41	13.30	13.50	96.00	17.00	17.50	15.60	16.00	19.37	19.8	95.41
		155	5775	16.90	17.00		13.30	13.50		16.90	17.00	15.80	16.00	19.40	19.5	



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	11.90	12.00	98.72	14.90	15.00	98.92	13.70	14.00	14.90	15.00	17.35	17.5	98.92
		6	2437	11.90	12.00		14.70	15.00		13.60	14.00	14.70	15.00	17.20	17.5	
		11	2462	11.80	12.00		14.70	15.00		13.80	14.00	14.70	15.00	17.28	17.5	
	802.11g 6Mbps	1	2412	11.80	12.00	97.87	14.90	15.00	98.35	13.70	14.00	14.90	15.00	17.35	17.5	98.35
		6	2437	11.70	12.00		14.90	15.00		13.80	14.00	14.90	15.00	17.40	17.5	
		11	2462	11.70	12.00		14.90	15.00		13.60	14.00	14.90	15.00	17.31	17.5	
	802.11n-HT20 MCS0	1	2412	11.80	12.00	97.97	14.70	15.00	97.72	13.60	14.00	14.70	15.00	17.20	17.5	97.72
		6	2437	11.90	12.00		14.90	15.00		13.70	14.00	14.90	15.00	17.35	17.5	
		11	2462	11.90	12.00		14.70	15.00		13.90	14.00	14.70	15.00	17.33	17.5	
	802.11ac-VHT20 MCS0	1	2412	11.70	12.00	97.48	14.60	15.00	97.73	13.50	14.00	14.60	15.00	17.10	17.5	97.73
		6	2437	11.80	12.00		14.80	15.00		13.60	14.00	14.80	15.00	17.25	17.5	
		11	2462	11.80	12.00		14.60	15.00		13.80	14.00	14.60	15.00	17.23	17.5	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	10.80	11.00	97.87	15.30	15.50	97.87	10.80	11.00	15.30	15.50	16.62	16.8	97.87
		40	5200	10.80	11.00		15.40	15.50		10.80	11.00	15.30	15.50	16.62	16.8	
		44	5220	10.90	11.00		15.40	15.50		10.90	11.00	15.40	15.50	16.72	16.8	
		48	5240	10.90	11.00		15.30	15.50		10.90	11.00	15.40	15.50	16.72	16.8	
	802.11n-HT20 MCS0	36	5180	10.80	11.00	97.72	15.40	15.50	97.47	10.80	11.00	15.20	15.50	16.55	16.8	97.72
		40	5200	10.80	11.00		15.30	15.50		10.80	11.00	15.20	15.50	16.55	16.8	
		44	5220	10.90	11.00		15.40	15.50		10.90	11.00	15.30	15.50	16.65	16.8	
		48	5240	10.80	11.00		15.30	15.50		10.80	11.00	15.30	15.50	16.62	16.8	
	802.11n-HT40 MCS0	38	5190	10.90	11.00	95.93	13.00	13.50	95.96	10.90	11.00	13.40	13.50	15.34	15.4	95.93
		46	5230	10.90	11.00		15.30	15.50		10.90	11.00	15.40	15.50	16.72	16.8	
	802.11ac-VHT20 MCS0	36	5180	10.70	11.00	97.49	15.30	15.50	97.98	10.70	11.00	15.10	15.50	16.45	16.8	97.49
		40	5200	10.70	11.00		15.20	15.50		10.70	11.00	15.10	15.50	16.45	16.8	
		44	5220	10.80	11.00		15.30	15.50		10.80	11.00	15.20	15.50	16.55	16.8	
		48	5240	10.70	11.00		15.20	15.50		10.70	11.00	15.20	15.50	16.52	16.8	
	802.11ac-VHT40 MCS0	38	5190	10.80	11.00	95.74	12.90	13.50	96.00	10.80	11.00	13.50	13.50	15.37	15.4	95.74
		46	5230	10.80	11.00		15.20	15.50		10.80	11.00	15.30	15.50	16.62	16.8	
	802.11ac-VHT80 MCS0	42	5210	10.80	11.00	92.00	12.80	13.00	92.00	10.80	11.00	12.30	13.00	14.62	15.1	92.00

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	10.80	11.00	97.87	15.40	15.50	97.87	10.80	11.00	15.40	15.50	16.69	16.8	97.87
		56	5280	10.70	11.00		15.30	15.50		10.70	11.00	15.30	15.50	16.55	16.8	
		60	5300	10.80	11.00		15.30	15.50		10.80	11.00	15.20	15.50	16.55	16.8	
		64	5320	10.80	11.00		15.40	15.50		10.80	11.00	15.20	15.50	16.55	16.8	
	802.11n-HT20 MCS0	52	5260	10.70	11.00	97.72	15.40	15.50	97.47	10.70	11.00	15.40	15.50	16.67	16.8	97.72
		56	5280	10.60	11.00		15.30	15.50		10.60	11.00	15.30	15.50	16.57	16.8	
		60	5300	10.70	11.00		15.30	15.50		10.70	11.00	15.40	15.50	16.67	16.8	
		64	5320	10.70	11.00		15.40	15.50		10.70	11.00	15.30	15.50	16.59	16.8	
	802.11n-HT40 MCS0	54	5270	10.80	11.00	95.93	15.40	15.50	95.96	10.80	11.00	15.30	15.50	16.62	16.8	95.93
		62	5310	10.90	11.00		13.50	14.00		10.90	11.00	13.80	14.00	15.60	15.8	
	802.11ac-VHT20 MCS0	52	5260	10.60	11.00	97.49	15.30	15.50	97.98	10.60	11.00	15.30	15.50	16.57	16.8	97.49
		56	5280	10.50	11.00		15.20	15.50		10.50	11.00	15.20	15.50	16.47	16.8	
		60	5300	10.60	11.00		15.20	15.50		10.60	11.00	15.30	15.50	16.57	16.8	
		64	5320	10.60	11.00		15.30	15.50		10.60	11.00	15.20	15.50	16.49	16.8	
	802.11ac-VHT40 MCS0	54	5270	10.70	11.00	95.74	15.30	15.50	96.00	10.70	11.00	15.20	15.50	16.52	16.8	95.74
		62	5310	10.80	11.00		13.40	14.00		10.80	11.00	13.80	14.00	15.56	15.8	
	802.11ac-VHT80 MCS0	58	5290	10.90	11.00	92.00	11.70	12.00	92.00	10.90	11.00	11.90	12.00	14.44	14.5	92.00



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.5GHz WLAN	802.11a 6Mbps	100	5500	12.90	13.00	97.87	11.90	12.00	97.87	12.90	13.00	11.90	12.00	15.44	15.5	97.87
		116	5580	12.80	13.00		11.80	12.00		12.80	13.00	11.90	12.00	15.38	15.5	
		124	5620	12.70	13.00		11.80	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
		132	5660	12.70	13.00		11.70	12.00		12.70	13.00	11.90	12.00	15.33	15.5	
		140	5700	12.70	13.00		11.70	12.00		12.70	13.00	11.90	12.00	15.33	15.5	
		144	5720	12.90	13.00		11.80	12.00		12.90	13.00	11.90	12.00	15.44	15.5	
	802.11n-HT20 MCS0	100	5500	12.70	13.00	97.72	11.80	12.00	97.47	12.70	13.00	11.90	12.00	15.33	15.5	97.72
		116	5580	12.80	13.00		11.80	12.00		12.80	13.00	11.90	12.00	15.38	15.5	
		124	5620	12.80	13.00		11.70	12.00		12.80	13.00	11.90	12.00	15.38	15.5	
		132	5660	12.70	13.00		11.80	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
		140	5700	12.80	13.00		11.90	12.00		12.80	13.00	11.90	12.00	15.38	15.5	
		144	5720	12.90	13.00		11.90	12.00		12.90	13.00	11.90	12.00	15.44	15.5	
	802.11n-HT40 MCS0	102	5510	12.80	13.00	95.93	11.80	12.00	95.96	12.80	13.00	11.90	12.00	15.38	15.5	95.93
		110	5550	12.80	13.00		11.80	12.00		12.80	13.00	11.90	12.00	15.38	15.5	
		126	5630	12.80	13.00		11.80	12.00		12.80	13.00	11.70	12.00	15.28	15.5	
		134	5670	12.70	13.00		11.80	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
		142	5710	12.90	13.00		11.80	12.00		12.90	13.00	11.80	12.00	15.40	15.5	
		144	5720	12.80	13.00		11.70	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
	802.11ac-VHT20 MCS0	100	5500	12.60	13.00	97.49	11.70	12.00	97.98	12.60	13.00	11.80	12.00	15.23	15.5	97.49
		116	5580	12.70	13.00		11.70	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
		124	5620	12.70	13.00		11.60	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
		132	5660	12.60	13.00		11.70	12.00		12.60	13.00	11.70	12.00	15.18	15.5	
		140	5700	12.70	13.00		11.80	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
		144	5720	12.80	13.00		11.80	12.00		12.80	13.00	11.80	12.00	15.34	15.5	
	802.11ac-VHT40 MCS0	102	5510	12.70	13.00	95.74	11.70	12.00	96.00	12.70	13.00	11.80	12.00	15.28	15.5	95.74
		110	5550	12.70	13.00		11.70	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
		126	5630	12.70	13.00		11.70	12.00		12.70	13.00	11.60	12.00	15.18	15.5	
		134	5670	12.60	13.00		11.70	12.00		12.60	13.00	11.70	12.00	15.18	15.5	
		142	5710	12.80	13.00		11.70	12.00		12.80	13.00	11.70	12.00	15.30	15.5	
		144	5720	12.80	13.00		11.70	12.00		12.70	13.00	11.80	12.00	15.28	15.5	
	802.11ac-VHT80 MCS0	106	5530	12.40	12.50	92.00	11.60	12.00	92.00	12.40	12.50	11.90	12.00	15.17	15.3	92.00
		122	5610	12.80	13.00		11.80	12.00		12.80	13.00	11.80	12.00	15.34	15.5	
		138	5690	12.90	13.00		11.80	12.00		12.90	13.00	11.90	12.00	15.44	15.5	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	14.30	14.50	97.87	12.30	12.50	97.87	14.30	14.50	12.40	12.50	16.46	16.6	97.87
		157	5785	14.30	14.50		12.40	12.50		14.30	14.50	12.40	12.50	16.46	16.6	
		165	5825	14.20	14.50		12.30	12.50		14.20	14.50	12.30	12.50	16.36	16.6	
	802.11n-HT20 MCS0	149	5745	14.20	14.50	97.72	12.40	12.50	97.47	14.20	14.50	12.40	12.50	16.40	16.6	97.72
		157	5785	14.20	14.50		12.40	12.50		14.20	14.50	12.40	12.50	16.40	16.6	
		165	5825	14.30	14.50		12.40	12.50		14.30	14.50	12.30	12.50	16.42	16.6	
	802.11n-HT40 MCS0	151	5755	14.40	14.50	95.93	12.40	12.50	95.96	14.40	14.50	12.30	12.50	16.49	16.6	95.93
		159	5795	14.30	14.50		12.40	12.50		14.30	14.50	12.30	12.50	16.42	16.6	
		167	5835	14.40	14.50		12.30	12.50		14.40	14.50	12.30	12.50	16.42	16.6	
	802.11ac-VHT20 MCS0	149	5745	14.10	14.50	97.49	12.30	12.50	97.98	14.10	14.50	12.30	12.50	16.30	16.6	97.49
		157	5785	14.10	14.50		12.30	12.50		14.10	14.50	12.30	12.50	16.30	16.6	
		165	5825	14.20	14.50		12.30	12.50		14.20	14.50	12.20	12.50	16.32	16.6	
	802.11ac-VHT40 MCS0	151	5755	14.30	14.50	95.74	12.30	12.50	96.00	14.30	14.50	12.20	12.50	16.39	16.6	95.74
		159	5795	14.20	14.50		12.30	12.50		14.20	14.50	12.20	12.50	16.32	16.6	
		167	5835	14.40	14.50		12.40	12.50		14.40	14.50	12.30	12.50	16.49	16.6	
802.11ac-VHT80 MCS0	155	5775	14.40	14.50	92.00	12.40	12.50	92.00	14.40	14.50	12.30	12.50	16.49	16.6	92.00	



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	14.40	14.50	98.72	18.70	19.00	98.92	16.70	17.00	18.70	19.00	20.82	21.1	98.92
		6	2437	14.40	14.50		18.80	19.00		16.70	17.00	18.80	19.00	20.89	21.1	
		11	2462	14.30	14.50		18.70	19.00		16.80	17.00	18.70	19.00	20.86	21.1	
	802.11g 6Mbps	1	2412	14.30	14.50	97.87	17.20	17.50	98.35	16.90	17.00	17.20	17.50	20.06	20.3	98.35
		6	2437	14.20	14.50		18.80	19.00		16.70	17.00	18.80	19.00	20.89	21.1	
		11	2462	14.40	14.50		18.70	19.00		16.80	17.00	18.70	19.00	20.86	21.1	
	802.11n-HT20 MCS0	1	2412	14.40	14.50	97.97	16.40	16.50	97.72	16.50	16.50	16.40	16.50	19.46	19.5	97.72
		6	2437	14.40	14.50		18.90	19.00		16.70	17.00	18.90	19.00	20.95	21.1	
		11	2462	14.40	14.50		16.50	16.50		16.40	16.50	16.50	16.50	19.46	19.5	
	802.11ac-VHT20 MCS0	1	2412	14.30	14.50	97.48	16.30	16.50	97.73	16.50	16.50	16.30	16.50	19.41	19.5	97.73
		6	2437	14.30	14.50		18.80	19.00		16.60	17.00	18.80	19.00	20.85	21.1	
		11	2462	14.30	14.50		16.40	16.50		16.30	16.50	16.40	16.50	19.36	19.5	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.40	16.50	97.83	13.90	14.00	97.87	15.40	16.50	13.60	14.50	17.60	18.6	97.83
		40	5200	15.40	16.50		13.80	14.00		15.40	16.50	13.60	14.50	17.60	18.6	
		44	5220	15.40	16.50		13.80	14.00		15.40	16.50	13.90	14.50	17.72	18.6	
		48	5240	15.40	16.50		13.90	14.00		15.40	16.50	13.70	14.50	17.64	18.6	
	802.11n-HT20 MCS0	36	5180	15.30	16.50	97.69	13.90	14.00	97.47	15.30	16.50	13.60	14.50	17.54	18.6	97.69
		40	5200	15.30	16.50		13.80	14.00		15.30	16.50	13.80	14.50	17.62	18.6	
		44	5220	15.30	16.50		13.90	14.00		15.30	16.50	13.80	14.50	17.62	18.6	
		48	5240	15.40	16.50		13.80	14.00		15.40	16.50	13.90	14.50	17.72	18.6	
	802.11n-HT40 MCS0	38	5190	13.50	13.50	95.34	13.00	13.50	95.96	13.50	13.50	13.10	13.50	16.31	16.5	95.34
		46	5230	15.20	16.50		13.90	14.00		15.20	16.50	13.60	14.50	17.48	18.6	
	802.11ac-VHT20 MCS0	36	5180	15.20	16.50	97.69	13.80	14.00	97.98	15.20	16.50	13.50	14.50	17.44	18.6	97.69
		40	5200	15.20	16.50		13.70	14.00		15.20	16.50	13.70	14.50	17.52	18.6	
		44	5220	15.20	16.50		13.80	14.00		15.20	16.50	13.70	14.50	17.52	18.6	
		48	5240	15.30	16.50		13.70	14.00		15.30	16.50	13.80	14.50	17.62	18.6	
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	95.41	12.90	13.50	96.00	13.50	13.50	13.00	13.50	16.27	16.5	95.41
		46	5230	15.10	16.50		13.80	14.00		15.10	16.50	13.50	14.50	17.38	18.6	
	802.11ac-VHT80 MCS0	42	5210	12.80	13.00	91.87	12.80	13.00	92.00	12.80	13.00	12.90	13.00	15.86	16.0	91.87

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.10	17.50	97.83	13.80	14.00	97.87	17.10	17.50	14.70	15.00	19.07	19.4	97.83
		56	5280	17.10	17.50		13.80	14.00		17.10	17.50	14.70	15.00	19.07	19.4	
		60	5300	17.40	17.50		13.80	14.00		17.40	17.50	14.60	15.00	19.23	19.4	
		64	5320	17.40	17.50		13.90	14.00		17.40	17.50	14.60	15.00	19.23	19.4	
	802.11n-HT20 MCS0	52	5260	17.30	17.50	97.69	13.90	14.00	97.47	17.30	17.50	14.80	15.00	19.24	19.4	97.69
		56	5280	17.30	17.50		13.80	14.00		17.30	17.50	14.80	15.00	19.24	19.4	
		60	5300	17.40	17.50		13.90	14.00		17.40	17.50	14.90	15.00	19.34	19.4	
		64	5320	17.40	17.50		13.80	14.00		17.40	17.50	14.90	15.00	19.34	19.4	
	802.11n-HT40 MCS0	54	5270	17.20	17.50	95.34	13.90	14.00	95.96	17.20	17.50	14.70	15.00	19.14	19.4	95.34
		62	5310	13.60	14.00		13.50	14.00		13.60	14.00	13.90	14.00	16.76	17.0	
	802.11ac-VHT20 MCS0	52	5260	17.20	17.50	97.69	13.80	14.00	97.98	17.20	17.50	14.70	15.00	19.14	19.4	97.69
		56	5280	17.20	17.50		13.70	14.00		17.20	17.50	14.70	15.00	19.14	19.4	
		60	5300	17.30	17.50		13.80	14.00		17.30	17.50	14.80	15.00	19.24	19.4	
		64	5320	17.30	17.50		13.70	14.00		17.30	17.50	14.80	15.00	19.24	19.4	
	802.11ac-VHT40 MCS0	54	5270	17.10	17.50	95.41	13.80	14.00	96.00	17.10	17.50	14.60	15.00	19.04	19.4	95.41
		62	5310	13.50	14.00		13.40	14.00		13.50	14.00	13.80	14.00	16.66	17.0	
	802.11ac-VHT80 MCS0	58	5290	11.60	12.00	91.87	11.70	12.00	92.00	11.60	12.00	11.80	12.00	14.71	15.0	91.87



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.10	17.50	97.83	9.40	10.50	97.87	17.10	17.50	11.30	11.50	18.11	18.47	97.83
		116	5580	17.40	17.50		9.30	10.50		17.40	17.50	11.20	11.50	18.33	18.47	
		124	5620	17.30	17.50		9.30	10.50		17.30	17.50	11.10	11.50	18.23	18.47	
		132	5660	17.00	17.50		9.30	10.50		17.00	17.50	11.40	11.50	18.06	18.47	
		140	5700	17.00	17.50		9.30	10.50		17.00	17.50	11.10	11.50	17.99	18.47	
		144	5720	17.10	17.50		9.30	10.50		17.10	17.50	11.20	11.50	18.09	18.47	
	802.11n-HT20 MCS0	100	5500	17.40	17.50	97.69	9.30	10.50	97.47	17.40	17.50	11.20	11.50	18.33	18.47	97.69
		116	5580	17.20	17.50		9.30	10.50		17.20	17.50	11.10	11.50	18.15	18.47	
		124	5620	17.10	17.50		9.20	10.50		17.10	17.50	11.10	11.50	18.07	18.47	
		132	5660	17.30	18.00		9.30	10.50		17.30	18.00	11.30	11.50	18.27	18.88	
		140	5700	17.20	18.00		9.40	10.50		17.20	18.00	11.40	11.50	18.21	18.88	
		144	5720	17.10	17.50		9.30	10.50		17.10	17.50	11.50	11.50	18.16	18.47	
	802.11n-HT40 MCS0	102	5510	16.00	16.00	95.34	9.40	10.50	95.96	16.00	16.00	11.10	11.50	17.22	17.32	95.34
		110	5550	17.20	17.50		9.30	10.50		17.20	17.50	11.10	11.50	18.15	18.47	
		126	5630	17.10	17.50		9.30	10.50		17.10	17.50	11.40	11.50	18.14	18.47	
		134	5670	17.10	17.50		9.40	10.50		17.10	17.50	11.10	11.50	18.07	18.47	
		142	5710	17.40	17.50		9.40	10.50		17.40	17.50	11.10	11.50	18.31	18.47	
		144	5710	17.40	17.50		9.40	10.50		17.40	17.50	11.10	11.50	18.31	18.47	
	802.11ac-VHT20 MCS0	100	5500	17.30	17.50	97.69	9.20	10.50	97.98	17.30	17.50	11.10	11.50	18.23	18.47	97.69
		116	5580	17.10	17.50		9.20	10.50		17.10	17.50	11.50	11.50	18.16	18.47	
		124	5620	17.00	17.50		9.10	10.50		17.00	17.50	11.50	11.50	18.08	18.47	
		132	5660	17.20	18.00		9.20	10.50		17.20	18.00	11.20	11.50	18.17	18.88	
		140	5700	17.10	18.00		9.30	10.50		17.10	18.00	11.20	11.50	18.09	18.88	
		144	5720	17.00	17.50		9.20	10.50		17.00	17.50	11.30	11.50	18.04	18.47	
	802.11ac-VHT40 MCS0	102	5510	16.00	16.00	95.41	9.30	10.50	96.00	16.00	16.00	11.50	11.50	17.32	17.32	95.41
		110	5550	17.10	17.50		9.20	10.50		17.10	17.50	11.50	11.50	18.16	18.47	
		126	5630	17.00	17.50		9.20	10.50		17.00	17.50	11.30	11.50	18.04	18.47	
		134	5670	17.00	17.50		9.30	10.50		17.00	17.50	11.50	11.50	18.08	18.47	
		142	5710	17.30	17.50		9.30	10.50		17.30	17.50	11.50	11.50	18.31	18.47	
		144	5710	17.30	17.50		9.30	10.50		17.30	17.50	11.50	11.50	18.31	18.47	
	802.11ac-VHT80 MCS0	106	5530	12.00	12.50	91.87	9.30	10.50	92.00	12.00	12.50	11.50	11.50	14.77	15.04	91.87
		122	5610	16.80	17.00		9.30	10.50		16.80	17.00	11.40	11.50	17.90	18.08	
		138	5690	16.90	17.00		9.40	10.50		16.90	17.00	11.40	11.50	17.98	18.08	

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.30	18.50	97.83	9.30	10.00	97.87	18.30	18.50	9.90	10.50	18.89	19.1	97.83
		157	5785	18.40	18.50		9.40	10.00		18.40	18.50	9.70	10.50	18.95	19.1	
		165	5825	18.20	18.50		9.40	10.00		18.20	18.50	9.70	10.50	18.77	19.1	
	802.11n-HT20 MCS0	149	5745	18.10	18.50	97.69	9.40	10.00	97.47	18.10	18.50	9.70	10.50	18.69	19.1	97.69
		157	5785	18.20	18.50		9.40	10.00		18.20	18.50	9.90	10.50	18.80	19.1	
		165	5825	18.10	18.50		9.40	10.00		18.10	18.50	9.90	10.50	18.71	19.1	
	802.11n-HT40 MCS0	151	5755	17.40	17.50	95.34	9.30	10.00	95.96	17.40	17.50	9.80	10.50	18.10	18.3	95.34
		159	5795	17.10	17.50		9.30	10.00		17.10	17.50	9.60	10.50	17.81	18.3	
		149	5745	18.00	18.50		9.30	10.00		18.00	18.50	9.60	10.50	18.59	19.1	
	802.11ac-VHT20 MCS0	157	5785	18.10	18.50	97.69	9.30	10.00	97.98	18.10	18.50	9.80	10.50	18.70	19.1	97.69
		165	5825	18.00	18.50		9.30	10.00		18.00	18.50	9.80	10.50	18.61	19.1	
		151	5755	17.30	17.50		9.20	10.00		17.30	17.50	9.70	10.50	18.00	18.3	
	802.11ac-VHT40 MCS0	159	5795	17.00	17.50	95.41	9.20	10.00	96.00	17.00	17.50	9.50	10.50	17.71	18.3	95.41
		155	5775	16.90	17.00		9.30	10.00		16.90	17.00	9.90	10.50	17.69	17.9	

Bluetooth Default Power Table

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	17.92	17.96	17.99
	CH 39	2441	17.87	17.95	17.97
	CH 78	2480	17.29	17.30	17.33
Tune-up Limit			18	18	18

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	12.00	12.00
	CH 19	2440	12.40	12.40
	CH 39	2480	11.60	11.60
Tune-up Limit			12.5	12.5

Bluetooth Power Table 1

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	17.92	17.96	17.99
	CH 39	2441	17.87	17.95	17.97
	CH 78	2480	17.29	17.30	17.33
Tune-up Limit			18	18	18

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	12.00	12.00
	CH 19	2440	12.40	12.40
	CH 39	2480	11.60	11.60
Tune-up Limit			12.5	12.5

Bluetooth Power Table 2

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	11.38	11.82	11.80
	CH 39	2441	11.97	10.97	10.97
	CH 78	2480	11.77	11.95	11.88
Tune-up Limit			12	12	12

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	11.40	11.40
	CH 19	2440	11.90	11.90
	CH 39	2480	11.90	11.90
Tune-up Limit			12	12

Bluetooth Power Table 3

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	14.05	14.08	14.11
	CH 39	2441	14.50	14.42	14.39
	CH 78	2480	14.50	14.42	14.33
Tune-up Limit			14.5	14.5	14.5

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	12.00	12.00
	CH 19	2440	12.40	12.40
	CH 39	2480	11.60	11.60
Tune-up Limit			12.5	12.5

