

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	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	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	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	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	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
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	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00

		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		32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot		32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots		31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots		28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots		28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot		25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots		25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots		24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots		22.06	22.16	21.82	23.00	19.06	19.16	18.82	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		29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot		29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots		28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots		26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots		25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot		25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots		24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots		23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots		22.90	23.10	23.08	24.00	19.90	20.10	20.08	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	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
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	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00

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	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	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	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	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		31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot		31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots		30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots		27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots		27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot		25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots		24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots		23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots		21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
		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		28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot		28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots		28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots		26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots		25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot		25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots		24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots		23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots		22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00

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	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	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	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	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		31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot		31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots		30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots		27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots		27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot		25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots		24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots		23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots		21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
		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		28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot		28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots		28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots		26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots		25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot		25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots		24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots		23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots		22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00

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	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	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	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	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	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
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	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00



		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	24.33	24.49	24.70	25.70	24.56	24.66	24.61	25.70	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	24.35	24.51	24.71	25.70	24.60	24.67	24.66	25.70	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.59	23.76	24.70	23.60	23.73	23.70	24.70	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	23.35	23.59	23.48	24.70	23.62	23.70	23.69	24.70	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.86	23.09	23.27	24.20	23.09	23.18	23.19	24.20	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.88	23.09	23.26	24.20	23.09	23.19	22.81	24.20	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.28	23.58	23.68	24.70	23.58	23.68	23.69	24.70	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.30	23.59	23.43	24.70	23.58	23.68	23.68	24.70	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.86	23.09	23.17	24.20	23.02	23.14	23.10	24.20	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.80	23.05	23.23	24.20	23.05	23.10	22.77	24.20	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	23.38	23.59	23.77	24.70	23.62	23.72	23.72	24.70	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	21.40	21.64	21.79	22.70	21.57	21.69	21.59	22.70	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	22.40	22.64	22.77	23.70	22.60	22.68	22.69	23.70	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	21.39	21.59	21.74	22.70	21.59	21.69	21.70	22.70	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	23.40	23.60	23.80	24.70	23.60	23.70	23.70	24.70	22.80	22.80	22.70	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	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00

Band		Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
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	24.49	24.70	25.70	24.56	24.66	24.61	25.70	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	24.35	24.51	24.71	25.70	24.60	24.67	24.66	25.70	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.59	23.76	24.70	23.60	23.73	23.70	24.70	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	23.35	23.59	23.48	24.70	23.62	23.70	23.69	24.70	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.86	23.09	23.27	24.20	23.09	23.18	23.19	24.20	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.88	23.09	23.26	24.20	23.09	23.19	22.81	24.20	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.28	23.58	23.68	24.70	23.58	23.68	23.69	24.70	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.30	23.59	23.43	24.70	23.58	23.68	23.68	24.70	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.86	23.09	23.17	24.20	23.02	23.14	23.10	24.20	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.80	23.05	23.23	24.20	23.05	23.10	22.77	24.20	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	23.38	23.59	23.77	24.70	23.62	23.72	23.72	24.70	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	21.40	21.64	21.79	22.70	21.57	21.69	21.59	22.70	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	22.40	22.64	22.77	23.70	22.60	22.68	22.69	23.70	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	21.39	21.59	21.74	22.70	21.59	21.69	21.70	22.70	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	23.40	23.60	23.80	24.70	23.60	23.70	23.70	24.70	22.80	22.80	22.70	24.00



		Ant 0			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)
Band	WCDMA II			WCDMA IV			WCDMA V						
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	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	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	23.75	23.99	23.97	25.70	23.54	23.57	23.57	25.20	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	23.83	24.03	24.02	25.70	23.56	23.62	23.59	25.20	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	22.86	23.05	23.21	24.70	22.66	22.56	22.58	24.20	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	22.88	22.80	23.21	24.70	22.58	22.64	22.58	24.20	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.35	22.23	22.71	24.20	22.14	22.06	22.15	23.70	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.37	22.55	22.71	24.20	22.15	22.06	22.07	23.70	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.81	23.00	23.14	24.70	22.64	22.54	22.52	24.20	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.79	22.75	23.17	24.70	22.51	22.54	22.55	24.20	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.32	22.20	22.66	24.20	22.06	22.01	22.06	23.70	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.30	22.47	22.65	24.20	22.06	22.01	22.06	23.70	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	22.90	23.06	23.23	24.70	22.64	22.64	22.56	24.20	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	21.10	21.23	22.70	20.63	20.65	20.57	22.20	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	21.94	22.05	22.22	23.70	21.61	21.63	21.64	23.20	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	21.08	21.24	22.70	20.60	20.63	20.63	22.20	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	23.10	23.20	24.70	22.65	22.60	22.56	24.20	22.80	22.80	22.70	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	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00

Band		Ant 2 WCDMA II			Tune-up Limit (dBm)	Ant 2 WCDMA IV			Tune-up Limit (dBm)	Ant 0 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	23.75	23.99	23.97	24.90	23.54	23.57	23.57	24.40	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	23.83	24.03	24.02	24.90	23.56	23.62	23.59	24.40	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	22.86	23.05	23.21	23.90	22.66	22.56	22.58	23.40	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	22.88	22.80	23.21	23.90	22.58	22.64	22.58	23.40	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.35	22.23	22.71	23.40	22.14	22.06	22.15	22.90	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.37	22.55	22.71	23.40	22.15	22.06	22.07	22.90	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.81	23.00	23.14	23.90	22.64	22.54	22.52	23.40	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.79	22.75	23.17	23.90	22.51	22.54	22.55	23.40	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.32	22.20	22.66	23.40	22.06	22.01	22.06	22.90	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.30	22.47	22.65	23.40	22.06	22.01	22.06	22.90	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	22.90	23.06	23.23	23.90	22.64	22.64	22.56	23.40	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	21.10	21.23	21.90	20.63	20.65	20.57	21.40	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	21.94	22.05	22.22	22.90	21.61	21.63	21.64	22.40	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	21.08	21.24	21.90	20.60	20.63	20.63	21.40	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	23.10	23.20	23.90	22.65	22.60	22.56	23.40	22.80	22.80	22.70	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	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00

Band		Ant 2 WCDMA II			Tune-up Limit (dBm)	Ant 2 WCDMA IV			Tune-up Limit (dBm)	Ant 0 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	23.75	23.99	23.97	24.90	23.54	23.57	23.57	24.60	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	23.83	24.03	24.02	24.90	23.56	23.62	23.59	24.60	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	22.86	23.05	23.21	23.90	22.66	22.56	22.58	23.60	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	22.88	22.80	23.21	23.90	22.58	22.64	22.58	23.60	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.35	22.23	22.71	23.40	22.14	22.06	22.15	23.10	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.37	22.55	22.71	23.40	22.15	22.06	22.07	23.10	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.81	23.00	23.14	23.90	22.64	22.54	22.52	23.60	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.79	22.75	23.17	23.90	22.51	22.54	22.55	23.60	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.32	22.20	22.66	23.40	22.06	22.01	22.06	23.10	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.30	22.47	22.65	23.40	22.06	22.01	22.06	23.10	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	22.90	23.06	23.23	23.90	22.64	22.64	22.56	23.60	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	21.10	21.23	21.90	20.63	20.65	20.57	21.60	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	21.94	22.05	22.22	22.90	21.61	21.63	21.64	22.60	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	21.08	21.24	21.90	20.60	20.63	20.63	21.60	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	23.10	23.20	23.90	22.65	22.60	22.56	23.60	22.80	22.80	22.70	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	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00



Band 2_Ant 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				1865	1890	1900	
Frequency (MHz)				1865	1890	1900	
20	QPSK	1	0	24.19	24.30	24.36	25.7
20	QPSK	1	49	24.16	24.32	24.21	
20	QPSK	1	99	24.17	24.44	24.28	
20	QPSK	50	0	23.23	23.38	23.45	
20	QPSK	50	24	23.33	23.41	23.58	24.7
20	QPSK	50	50	23.30	23.50	23.58	
20	QPSK	100	0	23.34	23.37	23.35	
20	16QAM	1	0	23.56	23.60	23.67	
20	16QAM	1	49	23.52	23.68	23.47	24.7
20	16QAM	1	99	23.50	23.74	23.63	
20	16QAM	50	0	22.25	22.40	22.46	
20	16QAM	50	24	22.33	22.42	22.59	
20	16QAM	50	50	22.31	22.49	22.80	23.7
20	16QAM	100	0	22.31	22.40	22.47	
20	64QAM	1	0	22.40	22.44	22.35	
20	64QAM	1	49	22.40	22.53	21.57	
20	64QAM	1	99	22.11	22.62	21.73	22.7
20	64QAM	50	0	21.27	21.40	20.84	
20	64QAM	50	24	21.35	21.45	20.77	
20	64QAM	50	50	21.15	21.51	20.87	
20	64QAM	100	0	21.30	21.43	20.69	Tune-up limit (dBm)
Channel				1867.5	18900	19125	
Frequency (MHz)				1867.5	1890	1902.5	
15	QPSK	1	0	24.14	24.32	24.42	25.7
15	QPSK	1	37	24.12	24.35	24.33	
15	QPSK	1	74	24.14	24.36	24.35	
15	QPSK	36	0	23.21	23.34	23.45	
15	QPSK	36	20	23.32	23.41	23.57	24.7
15	QPSK	36	39	23.28	23.48	23.59	
15	QPSK	75	0	23.28	23.39	23.47	
15	16QAM	1	0	23.36	23.60	23.73	
15	16QAM	1	57	23.45	23.67	23.96	24.7
15	16QAM	1	74	23.45	23.64	23.75	
15	16QAM	36	0	22.20	22.35	22.46	
15	16QAM	36	20	22.28	22.40	22.59	
15	16QAM	36	39	22.27	22.48	22.58	23.7
15	16QAM	75	0	22.29	22.40	22.50	
15	64QAM	1	0	22.33	22.51	21.76	
15	64QAM	1	37	22.34	22.57	21.67	
15	64QAM	1	74	22.18	22.56	21.79	22.7
15	64QAM	36	0	21.26	21.40	20.71	
15	64QAM	36	20	21.36	21.40	20.89	
15	64QAM	36	39	21.20	21.51	20.91	
15	64QAM	75	0	21.32	21.40	20.77	Tune-up limit (dBm)
Channel				1865.0	1890.0	1915.0	
Frequency (MHz)				1865	1890	1905	
10	QPSK	1	0	24.10	24.24	24.37	25.7
10	QPSK	1	25	24.03	24.31	24.28	
10	QPSK	1	49	24.09	24.35	24.35	
10	QPSK	25	0	23.20	23.25	23.44	
10	QPSK	25	12	23.23	23.35	23.56	24.7
10	QPSK	25	25	23.23	23.45	23.51	
10	QPSK	50	0	23.24	23.32	23.37	
10	16QAM	1	0	23.31	23.58	23.72	
10	16QAM	1	25	23.41	23.57	23.61	24.7
10	16QAM	1	49	23.39	23.57	23.70	
10	16QAM	25	0	22.15	22.33	22.42	
10	16QAM	25	12	22.20	22.34	22.51	
10	16QAM	25	25	22.20	22.41	22.53	23.7
10	16QAM	50	0	22.23	22.31	22.49	
10	64QAM	1	0	22.29	22.45	21.69	
10	64QAM	1	25	22.25	22.52	21.65	
10	64QAM	1	49	22.17	22.55	21.72	22.7
10	64QAM	25	0	21.25	21.39	20.71	
10	64QAM	25	12	21.28	21.31	20.79	
10	64QAM	25	25	21.17	21.43	20.81	
10	64QAM	50	0	21.25	21.37	20.72	Tune-up limit (dBm)
Channel				1862.5	18900	19175	
Frequency (MHz)				1862.5	1890	1907.5	
5	QPSK	1	0	24.13	24.29	24.39	25.7
5	QPSK	1	12	24.05	24.29	24.24	
5	QPSK	1	24	24.08	24.27	24.30	
5	QPSK	12	0	23.18	23.31	23.40	
5	QPSK	12	7	23.27	23.32	23.48	24.7
5	QPSK	12	13	23.25	23.44	23.58	
5	QPSK	25	0	23.24	23.33	23.41	
5	16QAM	1	0	23.32	23.58	23.65	
5	16QAM	1	12	23.38	23.64	23.83	24.7
5	16QAM	1	24	23.37	23.61	23.66	
5	16QAM	12	0	22.12	22.33	22.45	
5	16QAM	12	7	22.27	22.37	22.50	
5	16QAM	12	13	22.23	22.42	22.58	23.7
5	16QAM	25	0	22.20	22.39	22.49	
5	64QAM	1	0	22.25	22.51	21.73	
5	64QAM	1	12	22.26	22.50	21.61	
5	64QAM	1	24	22.17	22.53	21.78	22.7
5	64QAM	12	0	21.16	21.33	20.69	
5	64QAM	12	7	21.26	21.36	20.87	
5	64QAM	12	13	21.18	21.49	20.83	
5	64QAM	25	0	21.23	21.48	20.71	Tune-up limit (dBm)
Channel				1861.5	18900	19165	
Frequency (MHz)				1851.5	1890	1908.5	
3	QPSK	1	0	24.08	24.25	24.36	25.7
3	QPSK	1	8	24.06	24.35	24.23	
3	QPSK	1	14	24.11	24.30	24.29	
3	QPSK	8	0	23.13	23.31	23.40	
3	QPSK	8	4	23.29	23.34	23.54	24.7
3	QPSK	8	7	23.28	23.40	23.53	
3	QPSK	15	0	23.19	23.36	23.37	
3	16QAM	1	0	23.35	23.54	23.64	
3	16QAM	1	8	23.43	23.62	23.59	24.7
3	16QAM	1	14	23.40	23.64	23.69	
3	16QAM	8	0	22.20	22.29	22.44	
3	16QAM	8	4	22.28	22.37	22.50	
3	16QAM	8	7	22.23	22.46	22.54	23.7
3	16QAM	15	0	22.20	22.30	22.45	
3	64QAM	1	0	22.29	22.48	21.78	
3	64QAM	1	8	22.26	22.50	21.59	
3	64QAM	1	14	22.09	22.51	21.72	22.7
3	64QAM	8	0	21.25	21.31	20.67	
3	64QAM	8	4	21.35	21.36	20.87	
3	64QAM	8	7	21.14	21.49	20.86	
3	64QAM	15	0	21.22	21.32	20.69	Tune-up limit (dBm)
Channel				1860.7	18900	19193	
Frequency (MHz)				1850.7	1890	1909.3	
1.4	QPSK	1	0	24.09	24.18	24.33	25.7
1.4	QPSK	1	3	24.14	24.33	24.41	
1.4	QPSK	1	5	24.10	24.28	24.32	
1.4	QPSK	3	0	24.12	24.24	24.38	
1.4	QPSK	3	1	24.16	24.34	24.40	24.7
1.4	QPSK	3	3	24.12	24.30	24.37	
1.4	QPSK	6	0	23.18	23.36	23.49	
1.4	16QAM	1	0	23.41	23.53	23.69	
1.4	16QAM	1	3	23.47	23.65	23.75	24.7
1.4	16QAM	1	5	23.42	23.61	23.69	
1.4	16QAM	3	0	23.20	23.31	23.45	
1.4	16QAM	3	1	23.24	23.43	23.52	
1.4	16QAM	3	3	23.19	23.36	23.44	23.7
1.4	16QAM	6	0	22.24	22.43	22.61	
1.4	64QAM	1	0	22.35	22.47	21.83	
1.4	64QAM	1	3	22.46	22.64	21.87	
1.4	64QAM	1	5	22.32	22.54	21.78	23.7
1.4	64QAM	3	0	22.30	22.43	21.82	
1.4	64QAM	3	1	22.36	22.54	21.86	
1.4	64QAM	3	3	22.30	22.48	21.75	
1.4	64QAM	6	0	21.65	21.38	20.70	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	1724.5	1745	
20	QPSK	1	0	24.49	24.63	24.57	25.7
20	QPSK	1	49	24.35	24.41	24.37	
20	QPSK	1	99	24.45	24.37	24.36	
20	QPSK	50	0	23.56	23.60	23.58	
20	QPSK	50	24	23.59	23.55	23.50	24.7
20	QPSK	50	50	23.50	23.52	23.50	
20	QPSK	100	0	23.53	23.55	23.50	
20	16QAM	1	0	23.84	23.86	23.90	
20	16QAM	1	49	23.70	23.81	23.72	24.7
20	16QAM	1	99	23.79	23.69	23.72	
20	16QAM	50	0	22.55	22.63	22.59	
20	16QAM	50	24	22.58	22.55	22.53	
20	16QAM	50	50	22.51	22.54	22.51	23.7
20	16QAM	100	0	22.54	22.54	22.51	
20	64QAM	1	0	21.93	22.79	22.36	
20	64QAM	1	49	22.58	22.45	22.55	
20	64QAM	1	99	22.69	22.24	22.62	22.7
20	64QAM	50	0	21.34	21.65	21.31	
20	64QAM	50	24	21.60	21.35	21.52	
20	64QAM	50	50	21.52	21.19	21.53	
20	64QAM	100	0	21.51	21.41	21.51	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	24.48	24.62	24.56	25.7
15	QPSK	1	37	24.36	24.45	24.40	
15	QPSK	1	74	24.36	24.38	24.36	
15	QPSK	36	0	23.50	23.61	23.57	
15	QPSK	36	20	23.50	23.53	23.59	24.7
15	QPSK	36	39	23.50	23.56	23.51	
15	QPSK	75	0	23.54	23.55	23.51	
15	16QAM	1	0	23.78	23.93	23.87	
15	16QAM	1	37	23.67	23.75	23.70	24.7
15	16QAM	1	74	23.68	23.67	23.68	
15	16QAM	36	0	22.50	22.60	22.57	
15	16QAM	36	20	22.53	22.53	22.57	
15	16QAM	36	39	22.50	22.54	22.51	23.7
15	16QAM	75	0	22.53	22.51	22.51	
15	64QAM	1	0	21.69	22.76	22.36	
15	64QAM	1	37	22.58	22.26	22.67	
15	64QAM	1	74	22.58	22.15	22.58	22.7
15	64QAM	36	0	21.06	21.60	21.61	
15	64QAM	36	20	21.56	21.25	21.60	
15	64QAM	36	39	21.53	21.12	21.58	
15	64QAM	75	0	21.51	21.35	21.63	
Channel				20000	20115	20355	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.45	24.59	24.51	25.7
10	QPSK	1	25	24.26	24.37	24.30	
10	QPSK	1	49	24.26	24.38	24.28	
10	QPSK	25	0	23.47	23.58	23.54	
10	QPSK	25	12	23.43	23.49	23.50	24.7
10	QPSK	25	25	23.48	23.51	23.41	
10	QPSK	50	0	23.54	23.47	23.45	
10	16QAM	1	0	23.75	23.93	23.87	
10	16QAM	1	25	23.61	23.66	23.64	24.7
10	16QAM	1	49	23.68	23.67	23.63	
10	16QAM	25	0	22.49	22.51	22.47	
10	16QAM	25	12	22.43	22.46	22.47	
10	16QAM	25	25	22.45	22.53	22.44	23.7
10	16QAM	50	0	22.51	22.45	22.48	
10	64QAM	1	0	21.86	22.76	22.31	
10	64QAM	1	25	22.48	22.22	22.67	
10	64QAM	1	49	22.53	22.09	22.50	23.7
10	64QAM	25	0	20.97	21.55	21.56	
10	64QAM	25	12	21.52	21.22	21.52	
10	64QAM	25	25	21.47	21.03	21.56	
10	64QAM	50	0	21.48	21.27	21.45	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.40	24.58	24.52	25.7
5	QPSK	1	12	24.36	24.43	24.37	
5	QPSK	1	24	24.36	24.35	24.32	
5	QPSK	12	0	23.50	23.53	23.53	
5	QPSK	12	7	23.40	23.43	23.54	24.7
5	QPSK	12	13	23.47	23.46	23.43	
5	QPSK	25	0	23.46	23.47	23.42	
5	16QAM	1	0	23.73	23.87	23.83	
5	16QAM	1	12	23.65	23.66	23.63	24.7
5	16QAM	1	24	23.61	23.57	23.68	
5	16QAM	12	0	22.47	22.51	22.49	
5	16QAM	12	7	22.43	22.45	22.57	23.7
5	16QAM	12	13	22.50	22.46	22.44	
5	16QAM	25	0	22.43	22.43	22.45	
5	64QAM	1	0	21.88	22.76	22.32	
5	64QAM	1	12	22.57	22.26	22.62	23.7
5	64QAM	1	24	22.50	22.12	22.55	
5	64QAM	12	0	21.02	21.55	21.52	
5	64QAM	12	7	21.55	21.17	21.52	
5	64QAM	12	13	21.51	21.11	21.48	22.7
5	64QAM	25	0	21.46	21.30	21.49	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.42	24.55	24.54	25.7
3	QPSK	1	8	24.26	24.42	24.36	
3	QPSK	1	14	24.36	24.36	24.37	
3	QPSK	8	0	23.46	23.51	23.56	
3	QPSK	8	4	23.44	23.53	23.53	24.7
3	QPSK	8	7	23.45	23.46	23.41	
3	QPSK	15	0	23.45	23.53	23.45	
3	16QAM	1	0	23.68	23.90	23.85	
3	16QAM	1	8	23.57	23.67	23.69	24.7
3	16QAM	1	14	23.67	23.67	23.68	
3	16QAM	8	0	22.41	22.54	22.47	
3	16QAM	8	4	22.53	22.44	22.55	
3	16QAM	8	7	22.49	22.48	22.44	23.7
3	16QAM	15	0	22.49	22.50	22.41	
3	64QAM	1	0	21.80	22.77	22.29	
3	64QAM	1	8	22.55	22.18	22.61	
3	64QAM	1	14	22.50	22.07	22.50	23.7
3	64QAM	8	0	21.06	21.54	21.60	
3	64QAM	8	4	21.49	21.17	21.59	
3	64QAM	8	7	21.49	21.10	21.54	
3	64QAM	15	0	21.51	21.33	21.50	
Channel				19967	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.32	24.36	24.35	25.7
1.4	QPSK	1	3	24.41	24.52	24.47	
1.4	QPSK	1	5	24.37	24.46	24.42	
1.4	QPSK	3	0	24.34	24.43	24.44	
1.4	QPSK	3	1	24.39	24.50	24.47	24.7
1.4	QPSK	3	3	24.38	24.50	24.42	
1.4	QPSK	6	0	23.41	23.50	23.46	
1.4	16QAM	1	0	23.56	23.75	23.69	
1.4	16QAM	1	3	23.68	23.82	23.76	24.7
1.4	16QAM	1	5	23.67	23.80	23.67	
1.4	16QAM	3	0	23.41	23.49	23.51	
1.4	16QAM	3	1	23.47	23.61	23.56	
1.4	16QAM	3	3	23.45	23.56	23.50	23.7
1.4	16QAM	6	0	22.53	22.56	22.56	
1.4	64QAM	1	0	21.64	22.27	22.64	
1.4	64QAM	1	3	21.73	22.33	22.72	
1.4	64QAM	1	5	21.68	22.22	22.67	23.7
1.4	64QAM	3	0	21.63	22.28	22.59	
1.4	64QAM	3	1	21.74	22.36	22.66	
1.4	64QAM	3	3	21.70	22.28	22.61	
1.4	64QAM	6	0	20.60	21.18	21.49	22.7



Band 5_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				824.5	836.5	844.5	
Frequency (MHz)				824.5	836.5	844.5	
10	QPSK	1	0	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	24.7
10	QPSK	50	0	23.40	23.33	23.31	
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	
10	16QAM	25	0	22.30	22.32	22.32	23.7
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.35	22.30	
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	23.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	22.7
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	24.7
5	QPSK	25	0	23.36	23.25	23.29	
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	
5	16QAM	12	0	22.25	22.30	22.25	23.7
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.26	
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	23.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	22.7
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	24.7
3	QPSK	15	0	23.36	23.28	23.24	
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.61	23.25	
3	16QAM	8	0	22.20	22.29	22.27	23.7
3	16QAM	8	4	22.35	22.30	22.23	
3	16QAM	8	7	22.38	22.29	22.28	
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	23.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	22.7
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	24.7
1.4	QPSK	6	0	23.26	23.28	23.25	
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	
1.4	16QAM	3	0	23.51	23.58	23.71	24.7
1.4	16QAM	3	1	23.62	23.60	23.63	
1.4	16QAM	3	3	23.54	23.59	23.22	
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.26	
1.4	64QAM	1	3	22.33	22.38	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.26	22.7



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	24.59	24.67	24.65	25.7
20	QPSK	1	49	24.64	24.75	24.68	
20	QPSK	1	99	24.69	24.86	24.71	
20	QPSK	50	0	23.69	23.81	23.75	
20	QPSK	50	24	23.82	23.86	23.87	24.7
20	QPSK	50	50	23.63	23.95	23.85	
20	QPSK	100	0	23.77	23.83	23.87	
20	16QAM	1	0	23.95	23.97	24.01	
20	16QAM	1	49	23.99	24.08	24.03	24.7
20	16QAM	1	99	24.07	24.14	24.04	
20	16QAM	50	0	22.70	22.82	22.77	
20	16QAM	50	24	22.83	22.85	22.87	
20	16QAM	50	50	22.83	22.99	22.88	23.7
20	16QAM	100	0	22.79	22.82	22.88	
20	64QAM	1	0	22.83	22.84	22.85	
20	64QAM	1	49	22.90	22.96	22.80	
20	64QAM	1	99	22.99	23.03	22.16	22.7
20	64QAM	50	0	21.74	21.84	21.80	
20	64QAM	50	24	21.87	21.89	21.85	
20	64QAM	50	50	21.85	21.97	21.80	
20	64QAM	100	0	21.85	21.85	21.87	Tune-up limit (dBm)
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.61	24.71	24.69	25.7
15	QPSK	1	37	24.68	24.75	24.68	
15	QPSK	1	74	24.74	24.85	24.73	
15	QPSK	36	0	23.68	23.81	23.76	
15	QPSK	36	20	23.82	23.86	23.80	24.7
15	QPSK	36	39	23.82	23.94	23.86	
15	QPSK	75	0	23.77	23.85	23.79	
15	16QAM	1	0	23.93	24.04	24.01	
15	16QAM	1	37	23.97	24.05	24.02	24.7
15	16QAM	1	74	24.08	24.14	24.04	
15	16QAM	36	0	22.67	22.80	22.76	
15	16QAM	36	20	22.80	22.85	22.79	
15	16QAM	36	39	22.82	22.95	22.87	23.7
15	16QAM	75	0	22.80	22.84	22.77	
15	64QAM	1	0	22.80	22.89	22.85	
15	64QAM	1	37	22.93	23.01	22.75	
15	64QAM	1	74	22.93	23.03	22.78	22.7
15	64QAM	36	0	21.71	21.85	21.80	
15	64QAM	36	20	21.84	21.90	21.80	
15	64QAM	36	39	21.84	21.99	21.84	
15	64QAM	75	0	21.83	21.83	21.79	Tune-up limit (dBm)
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.51	24.67	24.61	25.7
10	QPSK	1	25	24.65	24.70	24.68	
10	QPSK	1	49	24.71	24.85	24.67	
10	QPSK	25	0	23.62	23.72	23.76	
10	QPSK	25	12	23.76	23.76	23.75	24.7
10	QPSK	25	25	23.77	23.92	23.79	
10	QPSK	50	0	23.77	23.82	23.74	
10	16QAM	1	0	23.85	24.03	23.91	
10	16QAM	1	25	23.97	23.95	23.95	24.7
10	16QAM	1	49	24.04	24.09	23.98	
10	16QAM	25	0	22.58	22.71	22.67	
10	16QAM	25	12	22.73	22.85	22.69	
10	16QAM	25	25	22.76	22.88	22.82	23.7
10	16QAM	50	0	22.78	22.77	22.73	
10	64QAM	1	0	22.79	22.88	22.79	
10	64QAM	1	25	22.84	23.01	22.66	
10	64QAM	1	49	22.83	22.98	22.73	22.7
10	64QAM	25	0	21.67	21.77	21.79	
10	64QAM	25	12	21.77	21.84	21.70	
10	64QAM	25	25	21.74	21.95	21.75	
10	64QAM	50	0	21.75	21.81	21.79	Tune-up limit (dBm)
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.60	24.71	24.69	25.7
5	QPSK	1	12	24.63	24.66	24.68	
5	QPSK	1	24	24.72	24.80	24.73	
5	QPSK	12	0	23.60	23.75	23.70	
5	QPSK	12	7	23.77	23.84	23.72	24.7
5	QPSK	12	13	23.75	23.94	23.83	
5	QPSK	25	0	23.67	23.79	23.73	
5	16QAM	1	0	23.88	23.99	24.01	
5	16QAM	1	12	23.93	24.01	23.97	24.7
5	16QAM	1	24	24.02	24.05	24.01	
5	16QAM	12	0	22.65	22.76	22.76	
5	16QAM	12	7	22.79	22.80	22.73	
5	16QAM	12	13	22.80	22.91	22.82	23.7
5	16QAM	25	0	22.75	22.84	22.73	
5	64QAM	1	0	22.79	22.83	22.79	
5	64QAM	1	12	22.92	22.91	22.71	
5	64QAM	1	24	22.86	22.94	22.69	22.7
5	64QAM	12	0	21.69	21.83	21.76	
5	64QAM	12	7	21.74	21.82	21.70	
5	64QAM	12	13	21.80	21.93	21.84	
5	64QAM	25	0	21.71	21.89	21.70	



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)				701.5	707.5	713.5	
10	QPSK	1	0	24.35	24.28	24.30	25.7
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.46	23.46	23.44	24.7
10	QPSK	50	0	23.51	23.43	23.47	
10	16QAM	1	0	23.74	23.65	23.73	
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.66	23.67	
10	16QAM	25	0	22.41	22.42	22.42	23.7
10	16QAM	25	12	22.50	22.44	22.48	
10	16QAM	25	25	22.47	22.49	22.41	
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.26	21.22	
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	25.7
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.46	23.46	23.36	24.7
5	QPSK	25	0	23.49	23.34	23.44	
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.66	
5	16QAM	1	24	23.69	23.59	23.61	
5	16QAM	12	0	22.38	22.42	22.33	23.7
5	16QAM	12	7	22.40	22.34	22.47	
5	16QAM	12	13	22.39	22.49	22.35	
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.25	21.17	
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				23005	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	25.7
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.36	23.44	23.40	24.7
3	QPSK	15	0	23.44	23.33	23.42	
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	
3	16QAM	8	0	22.40	22.39	22.33	23.7
3	16QAM	8	4	22.41	22.42	22.36	
3	16QAM	8	7	22.39	22.41	22.39	
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	25.7
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	24.7
1.4	QPSK	6	0	23.36	23.36	23.33	
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	
1.4	16QAM	3	0	23.67	23.65	23.71	24.7
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	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			Tune-up limit (dbm)
Frequency (MHz)				762			
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.92			
10	QPSK	50	0	22.95			24.2
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			
10	16QAM	1	49	23.12			24.2
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.88			
10	16QAM	25	25	21.89			23.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			23.2
10	64QAM	1	49	22.07			
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.93			22.2
10	64QAM	25	25	20.92			
10	64QAM	50	0	20.97			
Channel				23205	23230	23255	Tune-up limit (dbm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	
5	QPSK	12	0	22.74	22.83	22.79	24.2
5	QPSK	12	7	22.83	22.78	22.77	
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	
5	16QAM	1	24	23.09	23.07	23.11	23.2
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.93	21.86	21.91	
5	64QAM	1	0	21.90	21.89	21.90	
5	64QAM	1	12	21.97	21.96	21.97	23.2
5	64QAM	1	24	22.04	22.04	22.04	
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.88	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	



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			Tune-up limit (dbm)
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	49	23.60			
10	16QAM	25	0	22.30			23.7
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			
10	16QAM	50	0	22.29			23.7
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.55			
10	64QAM	1	49	22.53			22.7
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.33			
10	64QAM	25	25	21.38			22.7
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



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	Tune-up limit (dBm)
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.40	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	22.7
10	64QAM	25	12	21.54	21.45	21.41	
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	22.7
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	Tune-up limit (dBm)
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.68	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.46	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	



Band 25_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1855	1880	1925	
20	QPSK	1	0	24.24	24.24	24.35	25.7
20	QPSK	1	49	24.14	24.25	24.50	
20	QPSK	1	99	24.21	24.31	24.11	
20	QPSK	50	0	23.28	23.37	23.55	
20	QPSK	50	24	23.34	23.46	23.65	24.7
20	QPSK	50	50	23.26	23.45	23.63	
20	QPSK	100	0	23.35	23.42	23.55	
20	16QAM	1	0	23.57	23.61	23.72	
20	16QAM	1	49	23.49	23.63	23.77	24.7
20	16QAM	1	99	23.48	23.65	23.46	
20	16QAM	50	0	22.30	22.40	22.56	
20	16QAM	50	24	22.36	22.48	22.64	
20	16QAM	50	50	22.31	22.42	22.64	23.7
20	16QAM	100	0	22.34	22.43	22.53	
20	64QAM	1	0	22.44	22.47	22.57	
20	64QAM	1	49	22.42	22.49	22.38	
20	64QAM	1	99	22.46	22.57	21.60	23.7
20	64QAM	50	0	21.31	21.41	21.25	
20	64QAM	50	24	21.37	21.50	21.32	
20	64QAM	50	50	21.33	21.45	21.10	
20	64QAM	100	0	21.34	21.48	20.93	22.7
Channel				26115	26340	26615	
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	24.25	24.34	24.46	25.7
15	QPSK	1	37	24.22	24.31	24.49	
15	QPSK	1	74	24.18	24.33	24.17	
15	QPSK	38	0	23.28	23.40	23.56	
15	QPSK	38	20	23.38	23.45	23.64	24.7
15	QPSK	38	39	23.28	23.40	23.63	
15	QPSK	75	0	23.31	23.42	23.55	
15	16QAM	1	0	23.53	23.65	23.75	
15	16QAM	1	37	23.45	23.63	23.79	24.7
15	16QAM	1	74	23.42	23.61	23.56	
15	16QAM	38	0	22.28	22.39	22.57	
15	16QAM	38	20	22.31	22.46	22.65	
15	16QAM	38	39	22.26	22.42	22.62	23.7
15	16QAM	75	0	22.32	22.43	22.56	
15	64QAM	1	0	22.38	22.46	22.17	
15	64QAM	1	37	22.47	22.63	22.46	
15	64QAM	1	74	22.37	22.55	21.67	23.7
15	64QAM	38	0	21.33	21.44	21.33	
15	64QAM	38	20	21.38	21.48	21.35	
15	64QAM	38	39	21.37	21.46	21.00	
15	64QAM	75	0	21.34	21.43	21.03	Tune-up limit (dBm)
Channel				26090	26340	26590	
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	24.16	24.25	24.42	25.7
10	QPSK	1	25	24.22	24.28	24.49	
10	QPSK	1	49	24.10	24.23	24.14	
10	QPSK	25	0	23.21	23.34	23.55	
10	QPSK	25	12	23.30	23.40	23.55	24.7
10	QPSK	25	25	23.18	23.36	23.59	
10	QPSK	50	0	23.27	23.40	23.46	
10	16QAM	1	0	23.50	23.61	23.66	
10	16QAM	1	25	23.41	23.63	23.73	24.7
10	16QAM	1	49	23.36	23.59	23.56	
10	16QAM	25	0	22.25	22.32	22.47	
10	16QAM	25	12	22.31	22.44	22.64	
10	16QAM	25	25	22.20	22.38	22.58	23.7
10	16QAM	50	0	22.30	22.41	22.49	
10	64QAM	1	0	22.33	22.37	22.15	
10	64QAM	1	25	22.41	22.53	22.46	
10	64QAM	1	49	22.32	22.46	21.67	23.7
10	64QAM	25	0	21.24	21.40	21.23	
10	64QAM	25	12	21.28	21.46	21.25	
10	64QAM	25	25	21.38	21.38	20.90	
10	64QAM	50	0	21.27	21.40	21.01	Tune-up limit (dBm)
Channel				26065	26340	26665	
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.20	24.27	24.43	25.7
5	QPSK	1	12	24.12	24.27	24.43	
5	QPSK	1	24	24.12	24.23	24.08	
5	QPSK	12	0	23.27	23.40	23.47	
5	QPSK	12	7	23.28	23.37	23.57	24.7
5	QPSK	12	13	23.24	23.40	23.63	
5	QPSK	25	0	23.29	23.42	23.51	
5	16QAM	1	0	23.47	23.60	23.67	
5	16QAM	1	12	23.45	23.58	23.72	24.7
5	16QAM	1	24	23.40	23.51	23.56	
5	16QAM	12	0	22.20	22.35	22.53	
5	16QAM	12	7	22.30	22.38	22.59	
5	16QAM	12	13	22.18	22.33	22.62	23.7
5	16QAM	25	0	22.32	22.33	22.46	
5	64QAM	1	0	22.35	22.36	22.12	
5	64QAM	1	12	22.38	22.63	22.38	
5	64QAM	1	24	22.27	22.55	21.63	22.7
5	64QAM	12	0	21.31	21.44	21.24	
5	64QAM	12	7	21.30	21.48	21.29	
5	64QAM	12	13	21.31	21.37	20.91	
5	64QAM	25	0	21.30	21.42	21.03	Tune-up limit (dBm)
Channel				26055	26340	26675	
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.23	24.30	24.37	25.7
3	QPSK	1	8	24.14	24.27	24.39	
3	QPSK	1	14	24.15	24.32	24.09	
3	QPSK	8	0	23.23	23.30	23.55	
3	QPSK	8	4	23.33	23.39	23.59	24.7
3	QPSK	8	7	23.25	23.39	23.64	
3	QPSK	15	0	23.31	23.37	23.52	
3	16QAM	1	0	23.48	23.60	23.74	
3	16QAM	1	8	23.40	23.59	23.77	24.7
3	16QAM	1	14	23.41	23.52	23.52	
3	16QAM	8	0	22.28	22.36	22.48	
3	16QAM	8	4	22.30	22.36	22.61	
3	16QAM	8	7	22.26	22.40	22.52	23.7
3	16QAM	15	0	22.32	22.37	22.51	
3	64QAM	1	0	22.38	22.46	22.10	
3	64QAM	1	8	22.44	22.53	22.40	
3	64QAM	1	14	22.32	22.45	21.67	22.7
3	64QAM	8	0	21.28	21.36	21.25	
3	64QAM	8	4	21.38	21.43	21.27	
3	64QAM	8	7	21.37	21.43	20.95	
3	64QAM	15	0	21.24	21.41	21.03	Tune-up limit (dBm)
Channel				26047	26340	26683	
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	24.07	24.17	24.17	25.7
1.4	QPSK	1	3	24.20	24.30	24.14	
1.4	QPSK	1	5	24.15	24.30	24.05	
1.4	QPSK	3	0	24.14	24.29	24.11	
1.4	QPSK	3	1	24.20	24.32	24.14	24.7
1.4	QPSK	3	3	24.20	24.29	24.09	
1.4	QPSK	6	0	23.28	23.37	23.17	
1.4	16QAM	1	0	23.39	23.50	23.42	
1.4	16QAM	1	3	23.50	23.63	23.46	24.7
1.4	16QAM	1	5	23.49	23.65	23.40	
1.4	16QAM	3	0	23.24	23.36	23.24	
1.4	16QAM	3	1	23.30	23.42	23.29	
1.4	16QAM	3	3	23.26	23.39	23.25	23.7
1.4	16QAM	6	0	22.33	22.44	22.36	
1.4	64QAM	1	0	22.39	22.42	21.49	
1.4	64QAM	1	3	22.47	22.60	21.51	
1.4	64QAM	1	5	22.44	22.52	21.37	23.7
1.4	64QAM	3	0	22.34	22.45	21.52	
1.4	64QAM	3	1	22.39	22.48	21.62	
1.4	64QAM	3	3	22.39	22.50	21.51	
1.4	64QAM	6	0	21.30	21.38	20.43	22.7



Band 26_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	831.5	26965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.23	24.12	24.14	25.7
15	QPSK	1	37	24.15	24.13	24.09	
15	QPSK	1	74	24.18	24.13	23.98	
15	QPSK	36	0	23.31	23.25	23.24	
15	QPSK	36	20	23.34	23.29	23.20	24.7
15	QPSK	36	39	23.30	23.30	23.25	
15	QPSK	75	0	23.34	23.29	23.20	
15	16QAM	1	0	23.58	23.46	23.45	
15	16QAM	1	37	23.49	23.44	23.44	24.7
15	16QAM	1	74	23.46	23.43	23.30	
15	16QAM	36	0	22.33	22.26	22.24	
15	16QAM	36	20	22.34	22.31	22.19	
15	16QAM	36	39	22.31	22.25	22.18	23.7
15	16QAM	75	0	22.36	22.31	22.23	
15	64QAM	1	0	22.43	22.31	22.31	
15	64QAM	1	37	22.43	22.39	22.34	
15	64QAM	1	74	22.36	22.34	21.62	23.7
15	64QAM	36	0	21.35	21.31	21.30	
15	64QAM	36	20	21.41	21.33	21.23	
15	64QAM	36	39	21.36	21.30	21.29	
15	64QAM	75	0	21.37	21.31	21.24	22.7
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.18	24.06	24.14	25.7
10	QPSK	1	25	24.15	24.06	23.99	
10	QPSK	1	49	24.13	24.13	23.98	
10	QPSK	25	0	23.24	23.17	23.17	
10	QPSK	25	12	23.31	23.29	23.11	24.7
10	QPSK	25	25	23.20	23.26	23.25	
10	QPSK	50	0	23.26	23.28	23.14	
10	16QAM	1	0	23.52	23.39	23.40	
10	16QAM	1	25	23.49	23.37	23.35	24.7
10	16QAM	1	49	23.46	23.41	23.27	
10	16QAM	25	0	22.28	22.24	22.24	
10	16QAM	25	12	22.27	22.21	22.09	
10	16QAM	25	25	22.30	22.16	22.08	23.7
10	16QAM	50	0	22.26	22.24	22.15	
10	64QAM	1	0	22.37	22.25	22.22	
10	64QAM	1	25	22.33	22.35	22.24	
10	64QAM	1	49	22.34	22.28	21.54	22.7
10	64QAM	25	0	21.31	21.28	21.28	
10	64QAM	25	12	21.37	21.29	21.22	
10	64QAM	25	25	21.28	21.29	21.22	
10	64QAM	50	0	21.27	21.27	21.21	Tune-up limit (dBm)
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.14	24.10	24.05	25.7
5	QPSK	1	12	24.05	24.05	24.08	
5	QPSK	1	24	24.12	24.11	23.91	
5	QPSK	12	0	23.21	23.23	23.15	
5	QPSK	12	7	23.30	23.27	23.19	24.7
5	QPSK	12	13	23.25	23.27	23.21	
5	QPSK	25	0	23.32	23.27	23.17	
5	16QAM	1	0	23.53	23.40	23.43	
5	16QAM	1	12	23.46	23.35	23.44	24.7
5	16QAM	1	24	23.44	23.33	23.27	
5	16QAM	12	0	22.29	22.18	22.16	
5	16QAM	12	7	22.31	22.28	22.17	
5	16QAM	12	13	22.30	22.23	22.16	23.7
5	16QAM	25	0	22.33	22.24	22.19	
5	64QAM	1	0	22.40	22.21	22.25	
5	64QAM	1	12	22.35	22.32	22.30	
5	64QAM	1	24	22.32	22.34	21.52	23.7
5	64QAM	12	0	21.27	21.30	21.26	
5	64QAM	12	7	21.33	21.32	21.14	
5	64QAM	12	13	21.34	21.24	21.25	
5	64QAM	25	0	21.31	21.31	21.24	22.7
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.19	24.10	24.14	25.7
3	QPSK	1	8	24.05	24.08	24.08	
3	QPSK	1	14	24.15	24.03	23.97	
3	QPSK	8	0	23.21	23.23	23.17	
3	QPSK	8	4	23.26	23.19	23.15	24.7
3	QPSK	8	7	23.24	23.23	23.22	
3	QPSK	15	0	23.31	23.22	23.20	
3	16QAM	1	0	23.56	23.45	23.39	
3	16QAM	1	8	23.43	23.39	23.43	24.7
3	16QAM	1	14	23.37	23.36	23.26	
3	16QAM	8	0	22.29	22.16	22.15	
3	16QAM	8	4	22.25	22.22	22.09	
3	16QAM	8	7	22.21	22.22	22.14	23.7
3	16QAM	15	0	22.28	22.29	22.23	
3	64QAM	1	0	22.35	22.21	22.31	
3	64QAM	1	8	22.35	22.37	22.24	
3	64QAM	1	14	22.32	22.31	21.61	23.7
3	64QAM	8	0	21.31	21.31	21.22	
3	64QAM	8	4	21.38	21.25	21.21	
3	64QAM	8	7	21.35	21.24	21.19	
3	64QAM	15	0	21.33	21.21	21.24	22.7
Channel				26897	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.15	24.03	24.06	25.7
1.4	QPSK	1	3	23.98	24.04	23.99	
1.4	QPSK	1	5	24.14	24.02	23.96	
1.4	QPSK	3	0	24.15	24.03	24.12	
1.4	QPSK	3	1	24.05	24.05	24.08	24.7
1.4	QPSK	3	3	24.07	23.93	23.94	
1.4	QPSK	6	0	23.15	23.20	23.12	
1.4	16QAM	1	0	23.17	23.16	23.05	
1.4	16QAM	1	3	23.16	23.17	23.16	24.7
1.4	16QAM	1	5	23.23	23.19	23.10	
1.4	16QAM	3	0	23.46	23.36	23.30	
1.4	16QAM	3	1	23.39	23.30	23.35	
1.4	16QAM	3	3	23.33	23.26	23.26	23.7
1.4	16QAM	6	0	22.20	22.14	22.10	
1.4	64QAM	1	0	22.18	22.22	22.05	
1.4	64QAM	1	3	22.16	22.20	22.04	
1.4	64QAM	1	5	22.25	22.29	22.20	23.7
1.4	64QAM	3	0	22.28	22.11	22.27	
1.4	64QAM	3	1	22.28	22.37	22.24	
1.4	64QAM	3	3	22.31	22.31	21.51	
1.4	64QAM	6	0	21.26	21.25	21.15	22.7



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			Tune-up limit (dBm)
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.31			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.25			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			22.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.30			
10	16QAM	25	25	21.31			21.2
10	16QAM	50	0	21.28			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.49	22.56	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.36	21.47	
5	64QAM	1	12	21.42	21.48	21.47	21.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	



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	1776					
20	QPSK	1	0	24.57	24.62	24.48	25.7				
20	QPSK	1	49	24.49	24.42	24.36					
20	QPSK	1	99	24.42	24.42	24.20					
20	QPSK	50	0	23.57	23.57	23.47					
20	QPSK	50	24	23.64	23.55	23.42	24.7				
20	QPSK	50	50	23.59	23.56	23.43					
20	QPSK	100	0	23.61	23.49	23.44					
20	16QAM	1	0	23.87	23.52	23.86					
20	16QAM	1	49	23.81	23.82	23.69	24.7				
20	16QAM	1	99	23.78	23.72	23.50					
20	16QAM	50	0	22.58	22.58	22.48					
20	16QAM	50	24	22.63	22.54	22.44					
20	16QAM	50	50	22.60	22.54	22.44	23.7				
20	16QAM	100	0	22.60	22.50	22.44					
20	64QAM	1	0	22.62	22.76	22.67					
20	64QAM	1	49	22.70	22.64	22.30					
20	64QAM	1	99	22.68	22.61	22.36	22.7				
20	64QAM	50	0	21.58	21.60	21.49					
20	64QAM	50	24	21.66	21.57	21.30					
20	64QAM	50	50	21.61	21.58	21.44					
20	64QAM	100	0	21.64	21.53	21.40					
Channel				132047	132322	132597	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	24.49	24.47	24.46	25.7				
15	QPSK	1	37	24.47	24.48	24.31					
15	QPSK	1	74	24.44	24.44	24.29					
15	QPSK	36	0	23.60	23.55	23.44					
15	QPSK	36	20	23.61	23.54	23.49	24.7				
15	QPSK	36	39	23.58	23.56	23.42					
15	QPSK	75	0	23.59	23.51	23.46					
15	16QAM	1	0	23.80	23.85	23.76					
15	16QAM	1	37	23.78	23.75	23.71	24.7				
15	16QAM	1	74	23.72	23.74	23.59					
15	16QAM	36	0	22.60	22.53	22.42					
15	16QAM	36	20	22.61	22.55	22.48					
15	16QAM	36	39	22.58	22.56	22.42	23.7				
15	16QAM	75	0	22.59	22.51	22.47					
15	64QAM	1	0	22.64	22.70	22.63					
15	64QAM	1	37	22.67	22.68	22.51					
15	64QAM	1	74	22.65	22.65	22.53	23.7				
15	64QAM	36	0	21.63	21.51	21.34					
15	64QAM	36	20	21.65	21.57	21.46					
15	64QAM	36	39	21.63	21.58	21.44					
15	64QAM	75	0	21.59	21.52	21.47					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	24.47	24.38	24.37	25.7				
10	QPSK	1	25	24.47	24.42	24.21					
10	QPSK	1	49	24.34	24.42	24.24					
10	QPSK	25	0	23.58	23.49	23.38					
10	QPSK	25	12	23.54	23.48	23.39	24.7				
10	QPSK	25	25	23.51	23.52	23.35					
10	QPSK	50	0	23.54	23.49	23.37					
10	16QAM	1	0	23.78	23.83	23.70					
10	16QAM	1	25	23.78	23.65	23.71	24.7				
10	16QAM	1	49	23.71	23.66	23.53					
10	16QAM	25	0	22.51	22.48	22.38					
10	16QAM	25	12	22.53	22.45	22.44					
10	16QAM	25	25	22.52	22.55	22.41	23.7				
10	16QAM	50	0	22.58	22.51	22.43					
10	64QAM	1	0	22.57	22.70	22.58					
10	64QAM	1	25	22.62	22.65	22.42					
10	64QAM	1	49	22.57	22.62	22.53	23.7				
10	64QAM	25	0	21.63	21.51	21.30					
10	64QAM	25	12	21.61	21.51	21.37					
10	64QAM	25	25	21.53	21.57	21.42					
10	64QAM	50	0	21.54	21.49	21.37					
Channel				131997	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	24.46	24.47	24.39	25.7				
5	QPSK	1	12	24.44	24.47	24.31					
5	QPSK	1	24	24.44	24.35	24.25					
5	QPSK	12	0	23.58	23.51	23.44					
5	QPSK	12	7	23.52	23.48	23.43	24.7				
5	QPSK	12	13	23.48	23.51	23.42					
5	QPSK	25	0	23.51	23.48	23.40					
5	16QAM	1	0	23.74	23.84	23.67					
5	16QAM	1	12	23.75	23.65	23.68	24.7				
5	16QAM	1	24	23.69	23.66	23.55					
5	16QAM	12	0	22.51	22.51	22.41					
5	16QAM	12	7	22.53	22.49	22.45					
5	16QAM	12	13	22.58	22.50	22.32	23.7				
5	16QAM	25	0	22.57	22.48	22.38					
5	64QAM	1	0	22.62	22.65	22.61					
5	64QAM	1	12	22.65	22.66	22.48					
5	64QAM	1	24	22.62	22.57	22.45	22.7				
5	64QAM	12	0	21.62	21.50	21.27					
5	64QAM	12	7	21.59	21.53	21.39					
5	64QAM	12	13	21.54	21.51	21.38					
5	64QAM	25	0	21.49	21.51	21.44					
Channel				131967	132322	132667	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1773.5					
3	QPSK	1	0	24.43	24.47	24.41	25.7				
3	QPSK	1	8	24.40	24.40	24.22					
3	QPSK	1	14	24.34	24.37	24.25					
3	QPSK	8	0	23.56	23.50	23.34					
3	QPSK	8	4	23.61	23.46	23.44	24.7				
3	QPSK	8	7	23.48	23.40	23.33					
3	QPSK	15	0	23.57	23.49	23.45					
3	16QAM	1	0	23.77	23.79	23.74					
3	16QAM	1	8	23.68	23.65	23.68	24.7				
3	16QAM	1	14	23.68	23.66	23.50					
3	16QAM	8	0	22.59	22.47	22.32					
3	16QAM	8	4	22.59	22.46	22.41					
3	16QAM	8	7	22.51	22.55	22.34	23.7				
3	16QAM	15	0	22.55	22.43	22.47					
3	64QAM	1	0	22.60	22.62	22.62					
3	64QAM	1	8	22.57	22.61	22.43					
3	64QAM	1	14	22.61	22.63	22.52	23.7				
3	64QAM	8	0	21.58	21.53	21.31					
3	64QAM	8	4	21.63	21.54	21.36					
3	64QAM	8	7	21.58	21.58	21.38					
3	64QAM	15	0	21.57	21.45	21.45					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	24.44	24.42	24.28	25.7				
1.4	QPSK	1	3	24.51	24.50	24.32					
1.4	QPSK	1	5	24.42	24.41	24.31					
1.4	QPSK	3	0	24.45	24.49	24.32					
1.4	QPSK	3	1	24.52	24.47	24.36	24.7				
1.4	QPSK	3	3	24.43	24.43	24.32					
1.4	QPSK	6	0	23.51	23.48	23.37					
1.4	16QAM	1	0	23.78	23.76	23.60					
1.4	16QAM	1	3	23.83	23.73	23.66	24.7				
1.4	16QAM	1	5	23.74	23.75	23.60					
1.4	16QAM	3	0	23.56	23.56	23.42					
1.4	16QAM	3	3	23.60	23.54	23.44					
1.4	16QAM	3	3	22.58	22.54	22.47	23.7				
1.4	16QAM	6	0	22.57	22.52	22.48					
1.4	64QAM	1	3	22.50	22.78	22.60					
1.4	64QAM	1	5	22.46	22.70	22.55					
1.4	64QAM	3	0	22.37	22.66	22.51	23.7				
1.4	64QAM	3	3	22.55	22.71	22.57					
1.4	64QAM	3	5	22.53	22.64	22.49					
1.4	64QAM	3	7	22.51	22.59	22.30					



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)				678	683	688	
20	QPSK	1	0	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	
20	QPSK	50	24	23.40	23.32	23.31	24.7
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	24.7
20	16QAM	1	99	23.60	23.53	23.62	
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.80	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	
20	64QAM	1	99	22.47	22.50	22.44	23.7
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.33	21.34	
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.16	21.34	21.41	22.7
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	Tune-up limit (dBm)
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	
15	QPSK	36	20	23.39	23.35	23.28	24.7
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	24.7
15	16QAM	1	74	23.58	23.60	23.48	
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.56	22.15	22.26	
15	64QAM	1	37	21.81	22.58	22.48	
15	64QAM	1	74	22.45	22.55	22.42	23.7
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	22.7
Channel				133172	133272	133372	
Frequency (MHz)				668	678	693	Tune-up limit (dBm)
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	
10	QPSK	25	12	23.33	23.30	23.26	24.7
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	24.7
10	16QAM	1	49	23.52	23.58	23.47	
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	
10	64QAM	1	49	22.43	22.49	22.32	23.7
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.68	21.32	21.25	
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	22.7
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	Tune-up limit (dBm)
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	
5	QPSK	12	7	23.39	23.28	23.26	24.7
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	24.7
5	16QAM	1	24	23.49	23.51	23.38	
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	
5	64QAM	1	24	22.42	22.49	22.33	23.7
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	22.7
Channel				133122	133222	133322	
Frequency (MHz)				663	673	683	Tune-up limit (dBm)



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				1860	1890	1900	
Frequency (MHz)				1860	1890	1900	
20	QPSK	1	0	23.51	23.52	23.54	25.5
20	QPSK	1	49	23.50	23.54	23.54	
20	QPSK	1	99	23.55	23.64	23.65	
20	QPSK	50	0	22.52	22.61	22.62	
20	QPSK	50	24	22.57	22.64	22.76	24.5
20	QPSK	50	50	22.55	22.71	22.76	
20	QPSK	100	0	22.57	22.60	22.65	
20	16QAM	1	0	22.80	22.85	22.86	
20	16QAM	1	49	22.73	22.85	22.85	24.5
20	16QAM	1	99	22.72	22.87	22.84	
20	16QAM	50	0	21.50	21.61	21.65	
20	16QAM	50	24	21.50	21.65	21.77	
20	16QAM	50	50	21.58	21.71	21.77	23.5
20	16QAM	100	0	21.56	21.59	21.66	
20	64QAM	1	0	21.63	21.65	21.78	
20	64QAM	1	49	21.61	21.77	21.21	
20	64QAM	1	99	21.65	21.79	21.52	22.5
20	64QAM	50	0	20.52	20.65	20.54	
20	64QAM	50	24	20.60	20.66	20.33	
20	64QAM	50	50	20.60	20.73	20.49	
20	64QAM	100	0	20.56	20.64	20.49	
Channel				1867.5	18900	19125	Tune-up limit [dBm]
Frequency (MHz)				1867.5	1890	1902.5	
15	QPSK	1	0	23.51	23.54	23.62	25.5
15	QPSK	1	37	23.50	23.59	23.61	
15	QPSK	1	74	23.53	23.53	23.59	
15	QPSK	36	0	22.54	22.63	22.64	
15	QPSK	36	20	22.59	22.66	22.76	24.5
15	QPSK	36	39	22.57	22.71	22.78	
15	QPSK	75	0	22.55	22.62	22.68	
15	16QAM	1	0	22.72	22.81	22.96	
15	16QAM	1	37	22.76	22.89	22.90	24.5
15	16QAM	1	74	22.73	22.85	22.86	
15	16QAM	36	0	21.47	21.64	21.64	
15	16QAM	36	20	21.57	21.66	21.77	
15	16QAM	36	39	21.54	21.73	21.78	23.5
15	16QAM	75	0	21.56	21.64	21.68	
15	64QAM	1	0	21.63	21.79	21.81	
15	64QAM	1	37	21.71	21.84	21.07	
15	64QAM	1	74	21.64	21.73	21.54	22.5
15	64QAM	36	0	20.51	20.67	20.28	
15	64QAM	36	20	20.63	20.69	20.42	
15	64QAM	36	39	20.64	20.78	20.63	
15	64QAM	75	0	20.58	20.67	20.41	
Channel				1865.0	1890.0	1915.0	Tune-up limit [dBm]
Frequency (MHz)				1865	1890	1905	
10	QPSK	1	0	23.52	23.56	23.59	25.5
10	QPSK	1	25	23.51	23.55	23.56	
10	QPSK	1	49	23.50	23.55	23.59	
10	QPSK	25	0	22.52	22.62	22.67	
10	QPSK	25	12	22.53	22.64	22.70	24.5
10	QPSK	25	25	22.57	22.73	22.80	
10	QPSK	50	0	22.54	22.65	22.69	
10	16QAM	1	0	22.76	22.89	22.97	
10	16QAM	1	25	22.73	22.98	23.00	24.5
10	16QAM	1	49	22.74	22.89	22.97	
10	16QAM	25	0	21.49	21.61	21.65	
10	16QAM	25	12	21.53	21.65	21.72	
10	16QAM	25	25	21.57	21.72	21.77	23.5
10	16QAM	50	0	21.55	21.62	21.68	
10	64QAM	1	0	21.64	21.80	21.37	
10	64QAM	1	25	21.65	21.86	21.60	
10	64QAM	1	49	21.68	21.82	21.80	22.5
10	64QAM	25	0	20.55	20.66	20.34	
10	64QAM	25	12	20.59	20.67	20.60	
10	64QAM	25	25	20.55	20.75	20.71	
10	64QAM	50	0	20.54	20.69	20.43	
Channel				1862.5	18900	19175	Tune-up limit [dBm]
Frequency (MHz)				1862.5	1890	1907.5	
5	QPSK	1	0	23.51	23.55	23.59	25.5
5	QPSK	1	12	23.52	23.60	23.62	
5	QPSK	1	24	23.53	23.62	23.64	
5	QPSK	12	0	22.51	22.60	22.72	
5	QPSK	12	7	22.52	22.73	22.79	24.5
5	QPSK	12	13	22.56	22.72	22.74	
5	QPSK	25	0	22.53	22.63	22.70	
5	16QAM	1	0	22.74	22.82	22.91	
5	16QAM	1	12	22.79	22.91	22.98	24.5
5	16QAM	1	24	22.78	22.93	22.98	
5	16QAM	12	0	21.54	21.68	21.76	
5	16QAM	12	7	21.60	21.73	21.76	
5	16QAM	12	13	21.55	21.75	21.77	23.5
5	16QAM	25	0	21.54	21.63	21.74	
5	64QAM	1	0	21.74	21.79	21.72	
5	64QAM	1	12	21.67	21.87	21.86	
5	64QAM	1	24	21.67	21.87	21.90	22.5
5	64QAM	12	0	20.58	20.69	20.73	
5	64QAM	12	7	20.64	20.75	20.83	
5	64QAM	12	13	20.58	20.76	20.81	
5	64QAM	25	0	20.56	20.65	20.67	
Channel				1861.5	1890.0	19165	Tune-up limit [dBm]
Frequency (MHz)				1861.5	1890	1908.5	
3	QPSK	1	0	23.50	23.54	23.62	25.5
3	QPSK	1	8	23.50	23.61	23.62	
3	QPSK	1	14	23.52	23.63	23.60	
3	QPSK	8	0	22.57	22.64	22.74	
3	QPSK	8	4	22.58	22.73	22.77	24.5
3	QPSK	8	7	22.55	22.71	22.74	
3	QPSK	15	0	22.57	22.64	22.78	
3	16QAM	1	0	22.78	22.85	22.90	
3	16QAM	1	8	22.85	23.01	23.07	24.5
3	16QAM	1	14	22.77	22.98	23.01	
3	16QAM	8	0	21.61	21.73	21.84	
3	16QAM	8	4	21.63	21.79	21.82	
3	16QAM	8	7	21.64	21.80	21.85	23.5
3	16QAM	15	0	21.61	21.70	21.82	
3	64QAM	1	0	21.69	21.79	21.84	
3	64QAM	1	8	21.77	21.96	21.98	
3	64QAM	1	14	21.73	21.89	21.93	22.5
3	64QAM	8	0	20.63	20.72	20.81	
3	64QAM	8	4	20.66	20.81	20.84	
3	64QAM	8	7	20.62	20.78	20.82	
3	64QAM	15	0	20.59	20.69	20.76	
Channel				1860.7	18900	19193	Tune-up limit [dBm]
Frequency (MHz)				1860.7	1890	1909.3	
1.4	QPSK	1	0	23.54	23.52	23.54	25.5
1.4	QPSK	1	3	23.51	23.58	23.61	
1.4	QPSK	1	5	23.52	23.56	23.58	
1.4	QPSK	3	0	23.50	23.53	23.59	
1.4	QPSK	3	1	23.55	23.60	23.64	24.5
1.4	QPSK	3	3	23.56	23.57	23.58	
1.4	QPSK	6	0	22.51	22.54	22.53	
1.4	16QAM	1	0	22.74	22.76	22.89	
1.4	16QAM	1	3	22.78	22.92	22.92	24.5
1.4	16QAM	1	5	22.72	22.87	22.87	
1.4	16QAM	3	0	22.52	22.59	22.66	
1.4	16QAM	3	1	22.55	22.69	22.67	
1.4	16QAM	3	3	22.51	22.65	22.61	23.5
1.4	16QAM	6	0	21.58	21.72	21.76	
1.4	64QAM	1	0	21.65	21.71	21.77	
1.4	64QAM	1	3	21.68	21.85	21.80	
1.4	64QAM	1	5	21.64	21.81	21.74	23.5
1.4	64QAM	3	0	21.60	21.71	21.74	
1.4	64QAM	3	1	21.66	21.81	21.82	
1.4	64QAM	3	3	21.57	21.78	21.75	
1.4	64QAM	6	0	20.52	20.67	20.67	22.5



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	1824.5	1845	
20	QPSK	1	0	23.74	23.74	23.77	25.5
20	QPSK	1	49	23.58	23.60	23.58	
20	QPSK	1	99	23.62	23.58	23.53	
20	QPSK	50	0	22.78	22.82	22.80	
20	QPSK	50	24	22.82	22.75	22.71	24.5
20	QPSK	50	50	22.73	22.72	22.71	
20	QPSK	100	0	22.77	22.78	22.69	
20	16QAM	1	0	23.14	23.08	23.11	
20	16QAM	1	49	22.94	22.98	22.95	24.5
20	16QAM	1	99	22.96	22.90	22.88	
20	16QAM	50	0	21.79	21.84	21.81	
20	16QAM	50	24	21.82	21.75	21.73	
20	16QAM	50	50	21.73	21.73	21.71	23.5
20	16QAM	100	0	21.79	21.78	21.74	
20	64QAM	1	0	21.57	21.95	21.98	
20	64QAM	1	49	21.85	21.83	21.80	
20	64QAM	1	99	21.91	21.78	21.76	22.5
20	64QAM	50	0	20.77	20.87	20.83	
20	64QAM	50	24	20.84	20.78	20.76	
20	64QAM	50	50	20.77	20.76	20.75	
20	64QAM	100	0	20.84	20.78	20.74	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	Tune-up limit (dBm)
15	QPSK	1	0	23.73	23.76	23.72	25.5
15	QPSK	1	37	23.62	23.68	23.61	
15	QPSK	1	74	23.62	23.63	23.61	
15	QPSK	36	0	22.78	22.84	22.80	
15	QPSK	36	20	22.81	22.78	22.80	24.5
15	QPSK	36	39	22.77	22.75	22.73	
15	QPSK	75	0	22.81	22.78	22.73	
15	16QAM	1	0	23.10	23.16	23.10	
15	16QAM	1	37	22.88	22.95	22.90	24.5
15	16QAM	1	74	22.92	22.93	22.94	
15	16QAM	36	0	21.79	21.83	21.79	
15	16QAM	36	20	21.80	21.75	21.80	
15	16QAM	36	39	21.76	21.76	21.75	23.5
15	16QAM	75	0	21.81	21.77	21.73	
15	64QAM	1	0	21.54	22.01	21.98	
15	64QAM	1	37	21.83	21.92	21.92	
15	64QAM	1	74	21.82	21.85	21.81	22.5
15	64QAM	36	0	20.53	20.87	20.85	
15	64QAM	36	20	20.84	20.85	20.85	
15	64QAM	36	39	20.81	20.86	20.79	
15	64QAM	75	0	20.82	20.79	20.73	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	Tune-up limit (dBm)
10	QPSK	1	0	23.67	23.75	23.67	25.5
10	QPSK	1	25	23.62	23.68	23.65	
10	QPSK	1	49	23.67	23.69	23.66	
10	QPSK	25	0	22.81	22.77	22.74	
10	QPSK	25	12	22.82	22.80	22.74	24.5
10	QPSK	25	25	22.81	22.84	22.79	
10	QPSK	50	0	22.81	22.79	22.74	
10	16QAM	1	0	23.05	23.08	23.06	
10	16QAM	1	25	23.07	23.09	23.11	24.5
10	16QAM	1	49	23.01	23.10	23.04	
10	16QAM	25	0	21.79	21.79	21.72	
10	16QAM	25	12	21.83	21.82	21.75	
10	16QAM	25	25	21.78	21.98	21.82	23.5
10	16QAM	50	0	21.82	21.77	21.76	
10	64QAM	1	0	21.36	21.92	21.95	
10	64QAM	1	25	21.73	21.97	21.97	
10	64QAM	1	49	21.91	21.99	22.00	22.5
10	64QAM	25	0	20.43	20.79	20.75	
10	64QAM	25	12	20.65	20.82	20.81	
10	64QAM	25	25	20.81	20.90	20.85	
10	64QAM	50	0	20.66	20.83	20.76	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	Tune-up limit (dBm)
5	QPSK	1	0	23.71	23.68	23.69	25.5
5	QPSK	1	12	23.73	23.74	23.74	
5	QPSK	1	24	23.74	23.73	23.70	
5	QPSK	12	0	22.82	22.76	22.78	
5	QPSK	12	7	22.83	22.79	22.83	24.5
5	QPSK	12	13	22.83	22.83	22.81	
5	QPSK	25	0	22.79	22.79	22.76	
5	16QAM	1	0	23.01	23.01	23.06	
5	16QAM	1	12	23.03	23.10	23.05	24.5
5	16QAM	1	24	23.04	23.14	23.09	
5	16QAM	12	0	21.81	21.77	21.82	
5	16QAM	12	7	21.88	21.80	21.84	
5	16QAM	12	13	21.82	21.85	21.84	23.5
5	16QAM	25	0	21.82	21.81	21.81	
5	64QAM	1	0	21.43	21.96	21.96	
5	64QAM	1	12	21.43	21.97	21.96	
5	64QAM	1	24	21.58	22.02	21.94	22.5
5	64QAM	12	0	20.35	20.85	20.88	
5	64QAM	12	7	20.43	20.89	20.86	
5	64QAM	12	13	20.48	20.91	20.85	
5	64QAM	25	0	20.38	20.83	20.82	
Channel				19965	20175	20395	
Frequency (MHz)				1711.5	1732.5	1753.5	Tune-up limit (dBm)
3	QPSK	1	0	23.74	23.70	23.74	25.5
3	QPSK	1	8	23.75	23.70	23.75	
3	QPSK	1	14	23.76	23.71	23.71	
3	QPSK	8	0	22.86	22.82	22.81	
3	QPSK	8	4	22.90	22.89	22.81	24.5
3	QPSK	8	7	22.88	22.83	22.77	
3	QPSK	15	0	22.87	22.77	22.79	
3	16QAM	1	0	23.09	23.04	23.02	
3	16QAM	1	8	23.12	23.22	23.10	24.5
3	16QAM	1	14	23.07	23.12	23.08	
3	16QAM	8	0	21.94	21.85	21.83	
3	16QAM	8	4	21.97	21.88	21.93	
3	16QAM	8	7	21.90	21.94	21.84	23.5
3	16QAM	15	0	21.87	21.81	21.84	
3	64QAM	1	0	21.45	21.96	21.98	
3	64QAM	1	8	21.50	22.10	22.01	
3	64QAM	1	14	21.47	22.05	21.95	22.5
3	64QAM	8	0	20.36	20.84	20.84	
3	64QAM	8	4	20.38	20.91	20.90	
3	64QAM	8	7	20.35	20.92	20.85	
3	64QAM	15	0	20.33	20.87	20.83	
Channel				19967	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.67	23.64	23.67	25.5
1.4	QPSK	1	3	23.71	23.74	23.71	
1.4	QPSK	1	5	23.65	23.72	23.63	
1.4	QPSK	3	0	23.69	23.64	23.69	
1.4	QPSK	3	1	23.74	23.75	23.71	24.5
1.4	QPSK	3	3	23.70	23.74	23.67	
1.4	QPSK	6	0	22.76	22.71	22.73	
1.4	16QAM	1	0	22.99	22.94	22.96	
1.4	16QAM	1	3	23.06	23.09	22.99	24.5
1.4	16QAM	1	5	23.03	23.08	22.98	
1.4	16QAM	3	0	22.78	22.77	22.74	
1.4	16QAM	3	1	22.83	22.85	22.78	
1.4	16QAM	3	3	22.77	22.80	22.74	23.5
1.4	16QAM	6	0	21.83	21.79	21.82	
1.4	64QAM	1	0	21.30	21.94	21.90	
1.4	64QAM	1	3	21.37	22.02	21.96	
1.4	64QAM	1	5	21.31	21.98	21.90	23.5
1.4	64QAM	3	0	21.34	21.86	21.88	
1.4	64QAM	3	1	21.42	21.98	21.91	
1.4	64QAM	3	3	21.32	21.91	21.85	
1.4	64QAM	6	0	20.24	20.74	20.72	22.5



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				824	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	24
10	QPSK	25	12	22.18	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	24
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	23
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	22
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	24
5	QPSK	12	7	22.12	22.12	22.09	
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	24
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	
5	16QAM	1	24	22.40	22.41	22.16	23
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	22
5	64QAM	1	24	21.34	21.35	20.16	
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	22
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	24
3	QPSK	8	4	22.09	22.12	22.03	
3	QPSK	8	7	22.06	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	24
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	
3	16QAM	1	14	22.29	22.35	22.26	23
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.18	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	23
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	22
3	64QAM	1	14	21.24	21.32	20.28	
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	22
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	24
1.4	QPSK	3	1	23.26	23.25	23.23	
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	24
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	
1.4	16QAM	1	5	22.52	22.54	22.47	23
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.68	
1.4	64QAM	1	3	21.53	21.56	20.78	23
1.4	64QAM	1	5	21.45	21.49	20.77	
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	22
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	



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	2534	2558	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	
20	QPSK	50	24	22.99	22.97	22.97	24.5
20	QPSK	50	50	23.02	23.08	22.99	
20	QPSK	100	0	22.96	23.00	22.97	
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	24.5
20	16QAM	1	99	23.19	23.32	23.22	
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.96	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	
20	64QAM	1	99	22.11	22.23	22.12	22.5
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	
15	QPSK	36	20	23.04	23.01	22.92	24.5
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	24.5
15	16QAM	1	74	23.21	23.30	23.26	
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	
15	64QAM	1	74	22.12	22.25	22.13	22.5
15	64QAM	36	0	20.93	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	
10	QPSK	25	12	23.00	23.02	22.95	24.5
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	24.5
10	16QAM	1	49	23.25	23.34	23.19	
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.98	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	23.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	
10	64QAM	1	49	22.13	22.27	22.09	22.5
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	
5	QPSK	12	7	22.95	23.01	22.89	24.5
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	24.5
5	16QAM	1	24	23.19	23.25	23.14	
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	
5	64QAM	1	24	22.14	22.22	22.10	22.5
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.03	20.97	



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	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	
10	QPSK	25	12	23.11	23.04	23.08	24.7
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	24.7
10	16QAM	1	49	23.37	23.36	23.33	
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	23.7
10	16QAM	25	25	22.09	22.15	22.08	
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	23.7
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	22.7
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	
5	QPSK	12	7	23.04	23.05	23.04	24.7
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.28	23.25	24.7
5	16QAM	1	24	23.28	23.35	23.28	
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	23.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	
5	64QAM	1	12	21.70	22.17	22.01	
5	64QAM	1	24	21.72	22.12	21.85	22.7
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.99	20.96	Tune-up limit (dBm)
Channel				23035	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	
3	QPSK	8	4	23.05	23.09	23.05	24.7
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	24.7
3	16QAM	1	14	23.21	23.30	23.22	
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	23.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	
3	64QAM	1	14	21.73	22.21	21.77	23.7
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.15	20.90	
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	Tune-up limit (dBm)
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	
1.4	QPSK	3	1	23.99	23.98	23.96	24.7
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	24.7
1.4	16QAM	1	5	23.44	23.52	23.45	
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.38	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	
1.4	64QAM	1	5	21.70	22.43	21.80	23.7
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	22.7



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			Tune-up limit (dBm)
Frequency (MHz)				762			
10	QPSK	1	0		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		
10	QPSK	25	12		22.02		24
10	QPSK	25	25		22.08		
10	QPSK	50	0		22.15		
10	16QAM	1	0		22.23		
10	16QAM	1	25		22.27		24
10	16QAM	1	49		22.33		
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.06		23
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		
10	64QAM	1	25		21.22		
10	64QAM	1	49		21.29		23
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.06		
10	64QAM	25	25		20.11		
10	64QAM	50	0		20.12		22
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	Tune-up limit (dBm)
5	QPSK	1	0	22.90	22.85	22.60	25
5	QPSK	1	12	22.94	22.95	22.68	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	
5	QPSK	12	7	22.06	22.09	21.82	24
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	24
5	16QAM	1	24	22.25	22.24	21.96	
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.06	21.13	20.86	
5	64QAM	1	12	21.13	21.16	20.90	
5	64QAM	1	24	21.18	21.17	20.98	22
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	
5	64QAM	12	13	20.09	20.13	19.86	



Band 14_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Turn-up limit (dBm)
Channel				23330			Turn-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0	23.07			25
10	QPSK	1	25	23.07			
10	QPSK	1	49	23.08			
10	QPSK	25	0	22.08			
10	QPSK	25	12	22.10			24
10	QPSK	25	25	22.19			
10	QPSK	50	0	22.12			
10	16QAM	1	0	22.44			
10	16QAM	1	25	22.44			24
10	16QAM	1	49	22.42			
10	16QAM	25	0	21.10			
10	16QAM	25	12	21.12			23
10	16QAM	25	25	21.20			
10	16QAM	50	0	21.10			
10	64QAM	1	0	21.31			
10	64QAM	1	49	21.35			23
10	64QAM	1	25	21.39			
10	64QAM	25	0	20.12			
10	64QAM	25	12	20.15			22
10	64QAM	25	25	20.20			
10	64QAM	50	0	20.17			
Channel				23305	23330	23355	Turn-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.02	23.03	23.01	25
5	QPSK	1	12	23.02	23.06	23.05	
5	QPSK	1	24	23.04	23.03	23.01	
5	QPSK	12	0	22.05	22.07	22.08	
5	QPSK	12	7	22.16	22.11	22.13	24
5	QPSK	12	13	22.10	22.12	22.07	
5	QPSK	25	0	22.08	22.06	22.04	
5	16QAM	1	0	22.32	22.32	22.31	
5	16QAM	1	12	22.40	22.43	22.42	24
5	16QAM	1	24	22.38	22.40	22.36	
5	16QAM	12	0	21.12	21.11	21.10	
5	16QAM	12	7	21.21	21.16	21.19	
5	16QAM	12	13	21.14	21.16	21.12	23
5	16QAM	25	0	21.11	21.09	21.06	
5	64QAM	1	0	21.21	21.30	21.29	
5	64QAM	1	12	21.32	21.41	21.34	
5	64QAM	1	24	21.38	21.36	21.33	23
5	64QAM	12	0	20.16	20.18	20.14	
5	64QAM	12	7	20.25	20.18	20.21	
5	64QAM	12	13	20.18	20.23	20.16	
5	64QAM	25	0	20.12	20.12	20.07	22



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	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	24
10	QPSK	25	12	22.25	22.26	22.28	
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.26	22.30	24
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	
10	16QAM	1	49	22.26	22.23	22.26	23
10	16QAM	25	0	20.91	20.87	20.88	
10	16QAM	25	12	21.02	20.96	20.94	
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	
10	64QAM	1	25	21.14	21.18	21.17	22
10	64QAM	1	49	21.16	21.18	21.13	
10	64QAM	25	0	19.92	19.92	19.92	
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.98	19.97	19.97	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	24
5	QPSK	12	7	22.29	22.22	22.23	
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	24
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	
5	16QAM	1	24	22.25	22.25	22.22	23
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.09	21.13	21.09	22
5	64QAM	1	24	21.19	21.16	21.10	
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	



Band 25_Ant 0								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)	
Channel								
Frequency (MHz)								
20	QPSK	1	0	23.58	23.60	23.61	25.5	
20	QPSK	1	49	23.59	23.61	23.79		
20	QPSK	1	99	23.51	23.59	23.71		
20	QPSK	50	0	22.53	22.63	22.68		
20	QPSK	50	24	22.59	22.70	22.78	24.5	
20	QPSK	50	50	22.53	22.64	22.67		
20	QPSK	100	0	22.60	22.66	22.67		
20	16QAM	1	0	22.85	22.84	22.87		
20	16QAM	1	49	22.79	22.85	22.92	24.5	
20	16QAM	1	99	22.70	22.85	22.86		
20	16QAM	50	0	21.54	21.65	21.69		
20	16QAM	50	24	21.62	21.71	21.79		
20	16QAM	50	50	21.57	21.65	21.75	23.5	
20	16QAM	100	0	21.58	21.68	21.70		
20	64QAM	1	0	21.71	21.72	21.77		
20	64QAM	1	49	21.66	21.77	21.73		
20	64QAM	1	99	21.66	21.81	21.34	23.5	
20	64QAM	50	0	20.56	20.67	20.70		
20	64QAM	50	24	20.64	20.74	20.82		
20	64QAM	50	50	20.57	20.66	20.79		
20	64QAM	100	0	20.60	20.70	20.62	Tune-up limit (dBm)	
Channel								
Frequency (MHz)								
15	QPSK	1	0	23.52	23.61	23.64	25.5	
15	QPSK	1	37	23.50	23.58	23.61		
15	QPSK	1	74	23.51	23.51	23.63		
15	QPSK	36	0	22.57	22.65	22.71		
15	QPSK	36	20	22.62	22.71	22.82	24.5	
15	QPSK	36	39	22.56	22.66	22.78		
15	QPSK	75	0	22.61	22.71	22.69		
15	16QAM	1	0	22.81	22.91	22.98		
15	16QAM	1	37	22.78	22.83	22.92	24.5	
15	16QAM	1	74	22.76	22.83	22.91		
15	16QAM	36	0	21.57	21.66	21.73		
15	16QAM	36	20	21.63	21.71	21.80		
15	16QAM	36	39	21.57	21.68	21.77	23.5	
15	16QAM	75	0	21.60	21.71	21.74		
15	64QAM	1	0	21.71	21.78	21.81		
15	64QAM	1	37	21.69	21.84	21.91		
15	64QAM	1	74	21.60	21.73	21.52	22.5	
15	64QAM	36	0	20.60	20.68	20.75		
15	64QAM	36	20	20.65	20.74	20.85		
15	64QAM	36	39	20.64	20.70	20.84		
15	64QAM	75	0	20.62	20.71	20.71	Tune-up limit (dBm)	
Channel								
Frequency (MHz)								
10	QPSK	1	0	23.53	23.51	23.61	25.5	
10	QPSK	1	25	23.50	23.58	23.62		
10	QPSK	1	49	23.51	23.60	23.67		
10	QPSK	25	0	22.56	22.61	22.70		
10	QPSK	25	12	22.59	22.71	22.73	24.5	
10	QPSK	25	25	22.58	22.69	22.82		
10	QPSK	50	0	22.60	22.70	22.72		
10	16QAM	1	0	22.88	22.94	23.01		
10	16QAM	1	25	22.75	22.95	23.04	24.5	
10	16QAM	1	49	22.77	22.91	23.04		
10	16QAM	25	0	21.58	21.59	21.69		
10	16QAM	25	12	21.61	21.72	21.74		
10	16QAM	25	25	21.58	21.68	21.79	23.5	
10	16QAM	50	0	21.57	21.70	21.74		
10	64QAM	1	0	21.71	21.74	21.78		
10	64QAM	1	25	21.67	21.86	22.00		
10	64QAM	1	49	21.70	21.85	21.52	22.5	
10	64QAM	25	0	20.60	20.63	20.73		
10	64QAM	25	12	20.66	20.75	20.79		
10	64QAM	25	25	20.61	20.71	20.77		
10	64QAM	50	0	20.58	20.72	20.78	Tune-up limit (dBm)	
Channel								
Frequency (MHz)								
5	QPSK	1	0	23.53	23.52	23.64	25.5	
5	QPSK	1	12	23.51	23.62	23.74		
5	QPSK	1	24	23.50	23.63	23.70		
5	QPSK	12	0	22.54	22.58	22.74		
5	QPSK	12	7	22.60	22.72	22.81	24.5	
5	QPSK	12	13	22.60	22.72	22.82		
5	QPSK	25	0	22.57	22.67	22.80		
5	16QAM	1	0	22.81	22.89	23.03		
5	16QAM	1	12	22.82	22.95	23.02	24.5	
5	16QAM	1	24	22.80	22.95	23.05		
5	16QAM	12	0	21.57	21.62	21.78		
5	16QAM	12	7	21.60	21.74	21.82		
5	16QAM	12	13	21.64	21.77	21.82	23.5	
5	16QAM	25	0	21.58	21.70	21.81		
5	64QAM	1	0	21.75	21.81	21.97		
5	64QAM	1	12	21.74	21.90	21.85		
5	64QAM	1	24	21.67	21.86	21.55	22.5	
5	64QAM	12	0	20.59	20.67	20.78		
5	64QAM	12	7	20.69	20.77	20.81		
5	64QAM	12	13	20.69	20.81	20.50		
5	64QAM	25	0	20.61	20.71	20.62	Tune-up limit (dBm)	
Channel								
Frequency (MHz)								
3	QPSK	1	0	23.50	23.52	23.63	25.5	
3	QPSK	1	8	23.56	23.73	23.78		
3	QPSK	1	14	23.53	23.69	23.78		
3	QPSK	8	0	22.56	22.64	22.74		
3	QPSK	8	4	22.65	22.73	22.82	24.5	
3	QPSK	8	7	22.64	22.73	22.82		
3	QPSK	15	0	22.58	22.68	22.80		
3	16QAM	1	0	22.75	22.83	22.93		
3	16QAM	1	8	22.91	23.05	23.07	24.5	
3	16QAM	1	14	22.87	22.99	23.07		
3	16QAM	8	0	21.65	21.72	21.82		
3	16QAM	8	4	21.69	21.80	21.89		
3	16QAM	8	7	21.71	21.80	21.91	23.5	
3	16QAM	15	0	21.65	21.75	21.79		
3	64QAM	1	0	21.68	21.77	21.77		
3	64QAM	1	8	21.83	21.94	21.56		
3	64QAM	1	14	21.80	21.93	21.51	22.5	
3	64QAM	8	0	20.64	20.71	20.70		
3	64QAM	8	4	20.72	20.78	20.58		
3	64QAM	8	7	20.69	20.80	20.41		
3	64QAM	15	0	20.64	20.73	20.52	Tune-up limit (dBm)	
Channel								
Frequency (MHz)								
1.4	QPSK	1	0	23.54	23.55	23.57	25.5	
1.4	QPSK	1	3	23.50	23.59	23.66		
1.4	QPSK	1	5	23.56	23.56	23.63		
1.4	QPSK	3	0	23.43	23.58	23.60		
1.4	QPSK	3	1	23.48	23.62	23.65	24.5	
1.4	QPSK	3	3	23.47	23.60	23.68		
1.4	QPSK	6	0	22.53	22.61	22.71		
1.4	16QAM	1	0	22.72	22.79	22.92		
1.4	16QAM	1	3	22.63	22.92	23.00	24.5	
1.4	16QAM	1	5	22.78	22.91	22.99		
1.4	16QAM	3	0	22.51	22.67	22.67		
1.4	16QAM	3	1	22.61	22.72	22.75		
1.4	16QAM	3	3	22.55	22.69	22.70	23.5	
1.4	16QAM	6	0	21.61	21.68	21.78		
1.4	64QAM	1	0	21.65	21.73	21.51		
1.4	64QAM	1	3	21.75	21.89	21.50		
1.4	64QAM	1	5	21.71	21.84	21.53	23.5	
1.4	64QAM	3	0	21.63	21.77	21.21		
1.4	64QAM	3	1	21.67	21.80	21.30		
1.4	64QAM	3	3	21.67	21.80	21.14		
1.4	64QAM	6	0	20.56	20.63	21.52	22.5	



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)				831.5	831.5	841.5	
15	QPSK	1	0	23.14	23.06	23.05	25
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.18	22.17	
15	QPSK	36	20	22.22	22.20	22.18	24
15	QPSK	36	39	22.21	22.18	22.15	
15	QPSK	75	0	22.25	22.23	22.12	
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.38	24
15	16QAM	1	74	22.38	22.39	22.23	
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	23
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	
15	64QAM	1	37	21.28	21.32	21.32	
15	64QAM	1	74	21.29	21.30	21.02	22
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.28	20.27	20.21	
15	64QAM	36	39	20.26	20.27	20.21	
15	64QAM	75	0	20.27	20.25	20.20	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	
10	QPSK	25	12	22.13	22.03	22.05	24
10	QPSK	25	25	22.06	22.06	22.03	
10	QPSK	50	0	22.15	22.08	22.02	
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.39	22.36	22.34	24
10	16QAM	1	49	22.33	22.37	22.21	
10	16QAM	25	0	21.16	21.05	21.04	
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	23
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.29	21.21	
10	64QAM	1	25	21.15	21.27	21.25	
10	64QAM	1	49	21.31	21.32	21.08	22
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.98	20.10	20.08	
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	
Channel				8674.5	86865	87016	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	
5	QPSK	12	7	22.18	22.10	22.02	24
5	QPSK	12	13	22.08	22.03	22.00	
5	QPSK	25	0	22.09	22.08	22.02	
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	24
5	16QAM	1	24	22.33	22.38	22.19	
5	16QAM	12	0	21.20	21.06	21.05	
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	23
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.00	
5	64QAM	1	24	21.02	21.27	21.01	22
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.19	19.45	
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	
3	QPSK	8	4	22.16	22.08	22.00	24
3	QPSK	8	7	22.10	22.02	22.02	
3	QPSK	15	0	22.15	22.03	22.01	
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	24
3	16QAM	1	14	22.29	22.32	22.16	
3	16QAM	8	0	21.23	21.11	21.03	
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	23
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	
3	64QAM	1	14	21.18	21.28	20.45	22
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.09	19.41	
Channel				26957	26965	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	
1.4	QPSK	3	1	23.09	23.07	23.11	24
1.4	QPSK	3	3	23.12	23.06	23.05	
1.4	QPSK	6	0	22.16	22.21	22.13	
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	24
1.4	16QAM	1	5	22.36	22.48	22.32	
1.4	16QAM	3	0	22.24	22.24	22.16	
1.4	16QAM	3	1	22.20	22.30	22.18	
1.4	16QAM	3	3	22.21	22.26	22.14	23
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.94	
1.4	64QAM	1	5	21.31	21.36	20.91	23
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.29	20.25	19.69	22



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			Tune-up limit (dBm)
Frequency (MHz)				2310			
10	QPSK	1	0		24.12		25.7
10	QPSK	1	25		24.04		
10	QPSK	1	49		24.03		
10	QPSK	25	0		23.10		24.7
10	QPSK	25	12		23.16		
10	QPSK	25	25		23.14		
10	QPSK	50	0		23.18		24.7
10	16QAM	1	0		23.44		
10	16QAM	1	25		23.47		
10	16QAM	1	49		23.35		23.7
10	16QAM	25	0		22.11		
10	16QAM	25	12		22.15		
10	16QAM	25	25		22.14		23.7
10	16QAM	50	0		22.11		
10	64QAM	1	0		22.35		
10	64QAM	1	25		21.90		23.7
10	64QAM	1	49		21.70		
10	64QAM	25	0		21.07		
10	64QAM	25	12		20.86		22.7
10	64QAM	25	25		20.84		
10	64QAM	50	0		20.86		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.93	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.75	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	



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)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	
20	QPSK	50	24	22.33	22.25	22.21	24
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	24
20	16QAM	1	99	22.45	22.43	22.40	
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.16	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	
20	64QAM	1	99	21.28	21.28	21.23	23
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	22
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	
15	QPSK	36	20	22.32	22.22	22.14	24
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.32	22.45	24
15	16QAM	1	74	22.39	22.47	22.33	
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.56	21.40	21.08	
15	64QAM	1	37	20.95	21.41	21.35	
15	64QAM	1	74	21.28	21.39	21.23	23
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	19.86	20.11	20.20	
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	22
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	
10	QPSK	25	12	22.15	22.10	22.00	24
10	QPSK	25	25	22.07	22.08	22.01	
10	QPSK	50	0	22.15	22.11	22.02	
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	24
10	16QAM	1	49	22.36	22.30	22.21	
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	23
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	
10	64QAM	1	49	20.69	21.18	21.10	23
10	64QAM	25	0	19.03	20.05	19.96	
10	64QAM	25	12	19.15	20.15	19.95	
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.95	22
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	
5	QPSK	12	7	22.01	22.04	22.03	24
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	24
5	16QAM	1	24	22.24	22.27	22.13	
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	
5	64QAM	1	24	20.13	21.24	20.77	23
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	22



Band 2_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				18700	18800	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.19	24.30	24.36	25.7
20	QPSK	1	49	24.16	24.32	24.21	
20	QPSK	1	99	24.17	24.44	24.28	
20	QPSK	50	0	23.23	23.38	23.45	24.7
20	QPSK	50	24	23.33	23.41	23.58	
20	QPSK	50	50	23.30	23.50	23.58	
20	QPSK	100	0	23.34	23.37	23.35	24.7
20	16QAM	1	0	23.56	23.60	23.67	
20	16QAM	1	49	23.52	23.68	23.47	
20	16QAM	1	99	23.50	23.74	23.63	23.7
20	16QAM	50	0	22.25	22.40	22.45	
20	16QAM	50	24	22.33	22.42	22.59	
20	16QAM	50	50	22.31	22.49	22.60	23.7
20	16QAM	100	0	22.31	22.40	22.47	
20	64QAM	1	0	22.40	22.44	22.35	23.7
20	64QAM	1	49	22.40	22.53	21.57	
20	64QAM	1	99	22.11	22.62	21.73	
20	64QAM	50	0	21.27	21.40	20.84	22.7
20	64QAM	50	24	21.35	21.45	20.77	
20	64QAM	50	50	21.15	21.51	20.87	
20	64QAM	100	0	21.30	21.43	20.69	Tune-up limit [dBm]
Channel				18675	18700	19025	
Frequency (MHz)				1867.5	1880	1902.5	
15	QPSK	1	0	24.14	24.32	24.42	25.7
15	QPSK	1	37	24.12	24.35	24.33	
15	QPSK	1	74	24.14	24.36	24.35	
15	QPSK	36	0	23.21	23.34	23.45	24.7
15	QPSK	36	20	23.32	23.41	23.57	
15	QPSK	36	39	23.28	23.48	23.59	
15	QPSK	75	0	23.28	23.39	23.47	24.7
15	16QAM	1	0	23.36	23.60	23.73	
15	16QAM	1	37	23.45	23.67	23.66	
15	16QAM	1	74	23.45	23.64	23.75	23.7
15	16QAM	36	0	22.20	22.35	22.45	
15	16QAM	36	20	22.28	22.40	22.59	
15	16QAM	36	39	22.27	22.48	22.58	23.7
15	16QAM	75	0	22.29	22.40	22.50	
15	64QAM	1	0	22.33	22.51	21.78	
15	64QAM	1	37	22.34	22.57	21.67	22.7
15	64QAM	1	74	22.18	22.56	21.75	
15	64QAM	36	0	21.26	21.40	20.71	
15	64QAM	36	20	21.36	21.40	20.89	Tune-up limit [dBm]
15	64QAM	36	39	21.20	21.51	20.91	
15	64QAM	75	0	21.32	21.40	20.77	
Channel				18650	18650	19150	
Frequency (MHz)				1865	1880	1905	
10	QPSK	1	0	24.10	24.24	24.37	25.7
10	QPSK	1	25	24.03	24.31	24.28	
10	QPSK	1	49	24.09	24.35	24.35	
10	QPSK	25	0	23.20	23.35	23.44	24.7
10	QPSK	25	12	23.23	23.35	23.58	
10	QPSK	25	25	23.23	23.45	23.51	
10	QPSK	50	0	23.24	23.32	23.37	24.7
10	16QAM	1	0	23.31	23.58	23.72	
10	16QAM	1	25	23.41	23.57	23.61	
10	16QAM	1	49	23.39	23.57	23.70	23.7
10	16QAM	25	0	22.15	22.33	22.42	
10	16QAM	25	12	22.20	22.34	22.51	
10	16QAM	25	25	22.20	22.41	22.53	23.7
10	16QAM	50	0	22.23	22.31	22.49	
10	64QAM	1	0	22.29	22.45	21.69	
10	64QAM	1	25	22.25	22.50	21.65	22.7
10	64QAM	1	49	22.17	22.55	21.72	
10	64QAM	25	0	21.25	21.39	20.71	
10	64QAM	25	12	21.28	21.31	20.79	Tune-up limit [dBm]
10	64QAM	25	25	21.17	21.43	20.81	
10	64QAM	50	0	21.25	21.37	20.72	
Channel				18625	18625	19175	
Frequency (MHz)				1862.5	1880	1907.5	
5	QPSK	1	0	24.13	24.29	24.39	25.7
5	QPSK	1	12	24.05	24.29	24.24	
5	QPSK	1	24	24.08	24.27	24.30	
5	QPSK	12	0	23.18	23.31	23.40	24.7
5	QPSK	12	7	23.27	23.32	23.48	
5	QPSK	12	13	23.25	23.44	23.55	
5	QPSK	25	0	23.24	23.33	23.41	24.7
5	16QAM	1	0	23.32	23.58	23.65	
5	16QAM	1	12	23.38	23.64	23.63	
5	16QAM	1	24	23.37	23.61	23.68	23.7
5	16QAM	12	0	22.12	22.33	22.45	
5	16QAM	12	7	22.27	22.37	22.50	
5	16QAM	12	13	22.23	22.42	22.58	23.7
5	16QAM	25	0	22.20	22.39	22.49	
5	64QAM	1	0	22.25	22.51	21.73	
5	64QAM	1	12	22.26	22.50	21.61	22.7
5	64QAM	1	24	22.17	22.53	21.78	
5	64QAM	12	0	21.16	21.33	20.69	
5	64QAM	12	7	21.26	21.36	20.87	Tune-up limit [dBm]
5	64QAM	12	13	21.18	21.49	20.83	
5	64QAM	25	0	21.28	21.40	20.71	
Channel				18615	18620	19165	
Frequency (MHz)				1861.5	1880	1906.5	
3	QPSK	1	0	24.08	24.25	24.36	25.7
3	QPSK	1	8	24.06	24.35	24.23	
3	QPSK	1	14	24.11	24.30	24.29	
3	QPSK	8	0	23.13	23.31	23.40	24.7
3	QPSK	8	4	23.29	23.34	23.54	
3	QPSK	8	7	23.28	23.40	23.53	
3	QPSK	15	0	23.19	23.36	23.37	24.7
3	16QAM	1	0	23.35	23.54	23.64	
3	16QAM	1	8	23.43	23.62	23.59	
3	16QAM	1	14	23.40	23.64	23.69	23.7
3	16QAM	8	0	22.20	22.29	22.44	
3	16QAM	8	4	22.28	22.37	22.50	
3	16QAM	8	7	22.23	22.46	22.54	23.7
3	16QAM	15	0	22.20	22.30	22.45	
3	64QAM	1	0	22.29	22.48	21.78	
3	64QAM	1	8	22.26	22.50	21.69	22.7
3	64QAM	1	14	22.09	22.51	21.72	
3	64QAM	8	0	21.25	21.31	20.67	
3	64QAM	8	4	21.35	21.36	20.87	Tune-up limit [dBm]
3	64QAM	8	7	21.14	21.49	20.86	
3	64QAM	15	0	21.22	21.32	20.69	
Channel				18597	18600	19093	
Frequency (MHz)				1859.7	1880	1909.3	
1.4	QPSK	1	0	24.09	24.18	24.33	25.7
1.4	QPSK	1	3	24.14	24.33	24.41	
1.4	QPSK	1	5	24.10	24.28	24.32	
1.4	QPSK	3	0	24.12	24.24	24.38	24.7
1.4	QPSK	3	1	24.16	24.34	24.40	
1.4	QPSK	3	3	24.12	24.30	24.37	
1.4	QPSK	6	0	23.18	23.36	23.49	24.7
1.4	16QAM	1	0	23.41	23.53	23.69	
1.4	16QAM	1	3	23.47	23.65	23.75	
1.4	16QAM	1	5	23.42	23.61	23.69	24.7
1.4	16QAM	3	0	23.20	23.31	23.45	
1.4	16QAM	3	1	23.24	23.43	23.52	
1.4	16QAM	3	3	23.19	23.36	23.44	23.7
1.4	16QAM	6	0	22.24	22.43	22.61	
1.4	64QAM	1	0	22.35	22.47	21.83	
1.4	64QAM	1	3	22.46	22.64	21.87	23.7
1.4	64QAM	1	5	22.32	22.54	21.75	
1.4	64QAM	3	0	22.30	22.43	21.82	
1.4	64QAM	3	1	22.36	22.54	21.88	22.7
1.4	64QAM	3	3	22.30	22.48	21.75	
1.4	64QAM	6	0	21.05	21.38	20.70	



Band 5_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 Frequency (MHz)				825	836.5	848	
10	QPSK	1	0	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	24.7
10	QPSK	25	12	23.39	23.36	23.33	
10	QPSK	25	25	23.37	23.40	23.37	
10	QPSK	50	0	23.40	23.33	23.31	24.7
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	23.7
10	16QAM	25	0	22.30	22.32	22.32	
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	22.7
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	22.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	22.7
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	
Channel Frequency (MHz)				825.5	836.5	848.5	Tune-up limit (dBm)
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	24.7
5	QPSK	12	7	23.38	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	
5	QPSK	25	0	23.38	23.25	23.29	24.7
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	23.7
5	16QAM	12	0	22.25	22.30	22.25	
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.26	22.7
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.45	22.52	22.36	22.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.36	21.42	21.29	22.7
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	
Channel Frequency (MHz)				825.5	836.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	24.7
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	
3	QPSK	15	0	23.38	23.28	23.24	24.7
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.61	23.25	23.7
3	16QAM	8	0	22.20	22.29	22.27	
3	16QAM	8	4	22.35	22.30	22.23	
3	16QAM	8	7	22.38	22.29	22.29	22.7
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	22.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.36	21.42	21.34	22.7
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	
Channel Frequency (MHz)				824.7	836.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	24.7
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	
1.4	QPSK	6	0	23.26	23.28	23.25	24.7
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	23.7
1.4	16QAM	3	0	23.51	23.58	23.71	
1.4	16QAM	3	1	23.62	23.60	23.53	
1.4	16QAM	3	3	23.54	23.59	23.22	23.7
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.28	
1.4	64QAM	1	3	22.35	22.36	22.30	22.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	22.7
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.26	



Band 7_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 Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.59	24.67	24.65	25.7
20	QPSK	1	49	24.64	24.75	24.68	
20	QPSK	1	99	24.69	24.86	24.71	
20	QPSK	50	0	23.69	23.81	23.75	24.7
20	QPSK	50	24	23.82	23.96	23.87	
20	QPSK	50	50	23.83	23.95	23.85	
20	QPSK	100	0	23.77	23.83	23.87	24.7
20	16QAM	1	0	23.95	23.97	24.01	
20	16QAM	1	49	23.99	24.08	24.03	
20	16QAM	1	99	24.07	24.14	24.04	23.7
20	16QAM	50	0	22.70	22.82	22.77	
20	16QAM	50	24	22.83	22.85	22.87	
20	16QAM	50	50	22.83	22.98	22.88	22.7
20	16QAM	100	0	22.79	22.82	22.88	
20	64QAM	1	0	22.83	22.84	22.85	
20	64QAM	1	49	22.90	22.96	22.80	22.7
20	64QAM	1	99	22.99	23.03	22.16	
20	64QAM	50	0	21.74	21.84	21.80	
20	64QAM	50	24	21.87	21.89	21.85	22.7
20	64QAM	50	50	21.85	21.97	21.80	
20	64QAM	100	0	21.85	21.86	21.87	
Channel Frequency (MHz)				2597.5	2635	2672.5	Tune-up limit (dBm)
15	QPSK	1	0	24.61	24.71	24.69	25.7
15	QPSK	1	37	24.68	24.75	24.68	
15	QPSK	1	74	24.74	24.85	24.73	
15	QPSK	36	0	23.68	23.81	23.76	24.7
15	QPSK	36	20	23.82	23.96	23.80	
15	QPSK	36	39	23.82	23.94	23.86	
15	QPSK	75	0	23.77	23.85	23.79	24.7
15	16QAM	1	0	23.93	24.04	24.01	
15	16QAM	1	37	23.97	24.05	24.02	
15	16QAM	1	74	24.08	24.14	24.04	23.7
15	16QAM	36	0	22.67	22.80	22.76	
15	16QAM	36	20	22.80	22.85	22.79	
15	16QAM	36	39	22.82	22.95	22.87	22.7
15	16QAM	75	0	22.80	22.84	22.77	
15	64QAM	1	0	22.80	22.89	22.85	
15	64QAM	1	37	22.89	23.01	22.75	22.7
15	64QAM	1	74	22.93	23.03	22.78	
15	64QAM	36	0	21.71	21.85	21.80	
15	64QAM	36	20	21.84	21.90	21.80	22.7
15	64QAM	36	39	21.84	21.99	21.84	
15	64QAM	75	0	21.83	21.98	21.79	
Channel Frequency (MHz)				2690.0	2710.0	2740.0	Tune-up limit (dBm)
10	QPSK	1	0	24.51	24.67	24.61	25.7
10	QPSK	1	25	24.65	24.70	24.68	
10	QPSK	1	49	24.71	24.85	24.67	
10	QPSK	25	0	23.62	23.72	23.76	24.7
10	QPSK	25	12	23.76	23.76	23.75	
10	QPSK	25	25	23.77	23.92	23.79	
10	QPSK	50	0	23.77	23.82	23.74	24.7
10	16QAM	1	0	23.85	24.03	23.91	
10	16QAM	1	25	23.97	23.95	23.95	
10	16QAM	1	49	24.04	24.09	23.98	23.7
10	16QAM	25	0	22.59	22.71	22.67	
10	16QAM	25	12	22.73	22.82	22.69	
10	16QAM	25	25	22.76	22.88	22.82	22.7
10	16QAM	50	0	22.78	22.77	22.73	
10	64QAM	1	0	22.79	22.88	22.79	
10	64QAM	1	25	22.84	23.01	22.96	22.7
10	64QAM	1	49	22.83	22.98	22.73	
10	64QAM	25	0	21.67	21.77	21.79	
10	64QAM	25	12	21.77	21.84	21.70	22.7
10	64QAM	25	25	21.74	21.95	21.75	
10	64QAM	50	0	21.75	21.81	21.79	
Channel Frequency (MHz)				2697.5	2710.0	2727.5	Tune-up limit (dBm)
5	QPSK	1	0	24.60	24.71	24.69	25.7
5	QPSK	1	12	24.63	24.66	24.68	
5	QPSK	1	24	24.72	24.80	24.73	
5	QPSK	12	0	23.60	23.75	23.70	24.7
5	QPSK	12	7	23.77	23.84	23.72	
5	QPSK	12	13	23.75	23.94	23.83	
5	QPSK	25	0	23.67	23.79	23.73	24.7
5	16QAM	1	0	23.88	23.99	24.01	
5	16QAM	1	12	23.93	24.01	23.97	
5	16QAM	1	24	24.02	24.05	24.01	23.7
5	16QAM	12	0	22.65	22.76	22.76	
5	16QAM	12	7	22.79	22.80	22.73	
5	16QAM	12	13	22.80	22.91	22.82	22.7
5	16QAM	25	0	22.75	22.84	22.73	
5	64QAM	1	0	22.79	22.83	22.79	
5	64QAM	1	12	22.82	22.91	22.71	22.7
5	64QAM	1	24	22.96	22.94	22.69	
5	64QAM	12	0	21.69	21.83	21.76	
5	64QAM	12	7	21.74	21.82	21.70	22.7
5	64QAM	12	13	21.80	21.93	21.84	
5	64QAM	25	0	21.71	21.89	21.70	



Band 12_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 Frequency (MHz)				704	707.5	711	25.7
10	QPSK	1	0	24.35	24.28	24.30	
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	24.7
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.48	23.48	23.44	
10	QPSK	50	0	23.51	23.43	23.47	
10	16QAM	1	0	23.74	23.65	23.73	24.7
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.68	23.67	
10	16QAM	25	0	22.41	22.42	22.42	
10	16QAM	25	12	22.50	22.44	22.48	23.7
10	16QAM	25	25	22.47	22.48	22.41	
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	23.7
10	64QAM	1	25	22.60	22.47	22.39	
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.28	21.27	21.14	
10	64QAM	25	12	21.40	21.28	21.22	22.7
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.13	21.19	21.37	
Channel Frequency (MHz)				713.5	717.5	721.5	25.7
5	QPSK	1	0	24.30	24.22	24.29	
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	24.7
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.48	23.48	23.36	
5	QPSK	25	0	23.49	23.34	23.44	
5	16QAM	1	0	23.72	23.55	23.71	24.7
5	16QAM	1	12	23.62	23.62	23.68	
5	16QAM	1	24	23.69	23.59	23.61	
5	16QAM	12	0	22.38	22.42	22.33	
5	16QAM	12	7	22.40	22.34	22.47	23.7
5	16QAM	12	13	22.39	22.48	22.35	
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.59	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.28	21.08	
5	64QAM	12	7	21.35	21.25	21.17	
5	64QAM	12	13	21.35	21.30	21.41	22.7
5	64QAM	25	0	21.13	21.13	21.27	
Channel Frequency (MHz)				716.5	720.5	724.5	25.7
3	QPSK	1	0	24.25	24.20	24.29	
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	24.7
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.38	23.44	23.40	
3	QPSK	15	0	23.44	23.33	23.42	
3	16QAM	1	0	23.73	23.56	23.72	24.7
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	
3	16QAM	8	0	22.40	22.39	22.33	
3	16QAM	8	4	22.41	22.42	22.38	23.7
3	16QAM	8	7	22.39	22.41	22.39	
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	
3	64QAM	8	7	21.37	21.25	21.38	22.7
3	64QAM	15	0	21.11	21.08	21.31	
Channel Frequency (MHz)				719.7	723.5	727.3	25.7
1.4	QPSK	1	0	24.27	24.25	24.21	
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.28	24.23	24.7
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	
1.4	QPSK	6	0	23.38	23.36	23.33	
1.4	16QAM	1	0	23.42	23.39	23.44	24.7
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	
1.4	16QAM	3	0	23.67	23.65	23.71	
1.4	16QAM	3	1	23.60	23.63	23.62	23.7
1.4	16QAM	3	3	23.68	23.57	23.59	
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	
1.4	64QAM	3	3	22.55	22.27	22.21	22.7
1.4	64QAM	6	0	21.18	21.26	21.13	



Band 13_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 Frequency (MHz)				192			25.2
10	QPSK	1	0		23.71		
10	QPSK	1	25		23.71		24.2
10	QPSK	1	49		23.87		
10	QPSK	50	0		22.83		24.2
10	QPSK	25	12		22.85		
10	QPSK	25	25		22.92		24.2
10	QPSK	50	0		22.95		
10	16QAM	1	0		23.07		24.2
10	16QAM	1	25		23.12		
10	16QAM	1	49		23.12		23.2
10	16QAM	25	0		21.86		
10	16QAM	25	12		21.89		23.2
10	16QAM	25	25		21.90		
10	16QAM	50	0		21.94		23.2
10	64QAM	1	0		21.97		
10	64QAM	1	25		21.99		22.2
10	64QAM	1	49		22.07		
10	64QAM	25	0		20.86		22.2
10	64QAM	25	12		20.93		
10	64QAM	25	25		20.92		22.2
10	64QAM	50	0		20.97		
Channel Frequency (MHz)				23205	23212	23255	Tune-up limit (dBm)
				779.5	782	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	24.2
5	QPSK	12	0	22.74	22.83	22.79	
5	QPSK	12	7	22.83	22.78	22.77	24.2
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.08	23.08	24.2
5	16QAM	1	24	23.09	23.07	23.11	
5	16QAM	12	0	21.84	21.83	21.86	23.2
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.93	21.86	21.91	
5	64QAM	1	0	21.90	21.89	21.90	23.2
5	64QAM	1	12	21.97	21.99	21.97	
5	64QAM	1	24	22.04	22.04	22.04	22.2
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.95	20.89	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	



Band 14_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 Frequency (MHz)				2330.5	2333.0	2335.5	
				790.5	793	795.5	
10	QPSK	1	0		24.23		25.7
10	QPSK	1	25		24.27		
10	QPSK	1	49		24.24		
10	QPSK	25	0		23.28		24.7
10	QPSK	25	12		23.32		
10	QPSK	25	25		23.35		
10	QPSK	50	0		23.30		24.7
10	16QAM	1	0		23.61		
10	16QAM	1	25		23.62		
10	16QAM	1	49		23.60		23.7
10	16QAM	25	0		22.30		
10	16QAM	25	12		22.28		
10	16QAM	25	25		22.32		23.7
10	16QAM	50	0		22.29		
10	64QAM	1	0		22.50		
10	64QAM	1	25		22.55		23.7
10	64QAM	1	49		22.53		
10	64QAM	25	0		21.32		
10	64QAM	25	12		21.33		22.7
10	64QAM	25	25		21.38		
10	64QAM	50	0		21.29		
Channel Frequency (MHz)				2330.5	2333.0	2335.5	Tune-up limit (dBm)
				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.26	23.26	23.26	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.35	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



Band 17_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 Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.48	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	22.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	22.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	21.5
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel Frequency (MHz)				709.5	710	713.5	Tune-up limit (dBm)
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.68	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	22.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.46	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	22.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	21.5
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	



Band 25_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				26140	26340	26500					
Frequency (MHz)				1860	1880	1905					
20	QPSK	1	0	24.24	24.24	24.35	25.7				
20	QPSK	1	49	24.14	24.25	24.50					
20	QPSK	1	99	24.21	24.31	24.11					
20	QPSK	50	0	23.28	23.37	23.55	24.7				
20	QPSK	50	24	23.34	23.46	23.65					
20	QPSK	50	50	23.28	23.43	23.63					
20	QPSK	100	0	23.35	23.42	23.55	24.7				
20	16QAM	1	0	23.57	23.61	23.72					
20	16QAM	1	49	23.49	23.63	23.77					
20	16QAM	1	99	23.48	23.65	23.46	23.7				
20	16QAM	50	0	22.30	22.40	22.56					
20	16QAM	50	24	22.36	22.48	22.64					
20	16QAM	50	50	22.31	22.42	22.64	23.7				
20	16QAM	100	0	22.34	22.43	22.53					
20	64QAM	1	0	22.44	22.47	22.57					
20	64QAM	1	49	22.42	22.49	22.38	23.7				
20	64QAM	1	99	22.46	22.57	21.80					
20	64QAM	50	0	21.31	21.41	21.25					
20	64QAM	50	24	21.37	21.50	21.32	22.7				
20	64QAM	50	50	21.33	21.45	21.10					
20	64QAM	100	0	21.34	21.46	20.93					
Channel				26115	26340	26615	Tune-up limit (dBm)				
Frequency (MHz)				1867.5	1880	1907.5					
15	QPSK	1	0	24.25	24.34	24.46	25.7				
15	QPSK	1	37	24.22	24.31	24.49					
15	QPSK	1	74	24.18	24.33	24.17					
15	QPSK	36	0	23.28	23.40	23.56	24.7				
15	QPSK	36	20	23.36	23.45	23.64					
15	QPSK	36	39	23.28	23.40	23.63					
15	QPSK	75	0	23.31	23.42	23.55	24.7				
15	16QAM	1	0	23.53	23.65	23.75					
15	16QAM	1	37	23.45	23.63	23.79					
15	16QAM	1	74	23.42	23.61	23.56	23.7				
15	16QAM	36	0	22.28	22.39	22.57					
15	16QAM	36	20	22.31	22.46	22.65					
15	16QAM	36	39	22.26	22.42	22.62	22.7				
15	16QAM	75	0	22.32	22.43	22.56					
15	64QAM	1	0	22.38	22.46	22.17					
15	64QAM	1	37	22.41	22.63	22.46	23.7				
15	64QAM	1	74	22.37	22.55	21.87					
15	64QAM	36	0	21.33	21.44	21.33					
15	64QAM	36	20	21.38	21.48	21.35	22.7				
15	64QAM	36	39	21.37	21.46	21.00					
15	64QAM	75	0	21.34	21.43	21.03					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1865	1880	1910					
10	QPSK	1	0	24.16	24.25	24.42	25.7				
10	QPSK	1	25	24.22	24.28	24.49					
10	QPSK	1	49	24.10	24.23	24.21					
10	QPSK	25	0	23.21	23.34	23.55	24.7				
10	QPSK	25	12	23.30	23.40	23.55					
10	QPSK	25	25	23.18	23.36	23.59					
10	QPSK	50	0	23.27	23.40	23.46	24.7				
10	16QAM	1	0	23.50	23.61	23.66					
10	16QAM	1	25	23.41	23.63	23.73					
10	16QAM	1	49	23.36	23.59	23.56	23.7				
10	16QAM	25	0	22.25	22.32	22.47					
10	16QAM	25	12	22.31	22.44	22.64					
10	16QAM	25	25	22.20	22.36	22.58	22.7				
10	16QAM	50	0	22.30	22.41	22.49					
10	64QAM	1	0	22.33	22.37	22.15					
10	64QAM	1	25	22.41	22.63	22.46	23.7				
10	64QAM	1	49	22.32	22.48	21.87					
10	64QAM	25	0	21.24	21.40	21.23					
10	64QAM	25	12	21.28	21.46	21.25	22.7				
10	64QAM	25	25	21.36	21.36	20.90					
10	64QAM	50	0	21.27	21.40	21.01					
Channel				26095	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1862.5	1880	1912.5					
5	QPSK	1	0	24.20	24.27	24.43	25.7				
5	QPSK	1	12	24.12	24.27	24.43					
5	QPSK	1	24	24.12	24.23	24.08					
5	QPSK	12	0	23.27	23.40	23.47	24.7				
5	QPSK	12	7	23.26	23.37	23.57					
5	QPSK	12	13	23.24	23.40	23.63					
5	QPSK	25	0	23.29	23.42	23.51	24.7				
5	16QAM	1	0	23.47	23.60	23.67					
5	16QAM	1	12	23.45	23.58	23.72					
5	16QAM	1	24	23.40	23.51	23.56	23.7				
5	16QAM	12	0	22.20	22.35	22.53					
5	16QAM	12	7	22.30	22.38	22.59					
5	16QAM	12	13	22.18	22.33	22.62	22.7				
5	16QAM	25	0	22.32	22.33	22.46					
5	64QAM	1	0	22.35	22.36	22.12					
5	64QAM	1	12	22.38	22.63	22.38	23.7				
5	64QAM	1	24	22.27	22.55	21.83					
5	64QAM	12	0	21.31	21.44	21.24					
5	64QAM	12	7	21.30	21.48	21.29	22.7				
5	64QAM	12	13	21.31	21.37	20.91					
5	64QAM	25	0	21.30	21.42	21.03					
Channel				26095	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1861.5	1880	1913.5					
3	QPSK	1	0	24.23	24.30	24.37	25.7				
3	QPSK	1	8	24.14	24.27	24.38					
3	QPSK	1	14	24.15	24.32	24.09					
3	QPSK	8	0	23.23	23.30	23.55	24.7				
3	QPSK	8	4	23.33	23.39	23.59					
3	QPSK	8	7	23.25	23.39	23.54					
3	QPSK	15	0	23.31	23.37	23.52	24.7				
3	16QAM	1	0	23.48	23.60	23.74					
3	16QAM	1	8	23.40	23.59	23.77					
3	16QAM	1	14	23.41	23.52	23.52	23.7				
3	16QAM	8	0	22.28	22.36	22.48					
3	16QAM	8	4	22.30	22.36	22.81					
3	16QAM	8	7	22.26	22.40	22.52	22.7				
3	16QAM	15	0	22.32	22.37	22.51					
3	64QAM	1	0	22.38	22.46	22.10					
3	64QAM	1	8	22.44	22.63	22.40	23.7				
3	64QAM	1	14	22.32	22.45	21.87					
3	64QAM	8	0	21.28	21.36	21.25					
3	64QAM	8	4	21.38	21.43	21.27	22.7				
3	64QAM	8	7	21.37	21.43	20.95					
3	64QAM	15	0	21.24	21.41	21.03					
Channel				26097	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1860.7	1880	1914.3					
1.4	QPSK	1	0	24.07	24.17	24.17	25.7				
1.4	QPSK	1	3	24.20	24.30	24.14					
1.4	QPSK	1	5	24.15	24.30	24.05					
1.4	QPSK	3	0	24.14	24.29	24.11	24.7				
1.4	QPSK	3	1	24.20	24.32	24.14					
1.4	QPSK	3	3	24.20	24.29	24.09					
1.4	QPSK	6	0	23.28	23.37	23.17	24.7				



Band 26_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				26765	26865	26965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.23	24.12	24.14	25.7
15	QPSK	1	37	24.15	24.13	24.09	
15	QPSK	1	74	24.18	24.13	23.98	
15	QPSK	36	0	23.31	23.25	23.24	24.7
15	QPSK	36	20	23.34	23.29	23.20	
15	QPSK	36	39	23.30	23.30	23.25	
15	QPSK	75	0	23.34	23.29	23.20	24.7
15	16QAM	1	0	23.58	23.46	23.45	
15	16QAM	1	37	23.49	23.44	23.44	
15	16QAM	1	74	23.46	23.43	23.30	23.7
15	16QAM	36	0	22.53	22.26	22.24	
15	16QAM	36	20	22.34	22.31	22.19	
15	16QAM	36	39	22.31	22.25	22.18	23.7
15	16QAM	75	0	22.36	22.31	22.23	
15	64QAM	1	0	22.43	22.31	22.31	23.7
15	64QAM	1	37	22.43	22.36	22.34	
15	64QAM	1	74	22.36	22.34	21.82	
15	64QAM	36	0	21.35	21.31	21.30	22.7
15	64QAM	36	20	21.41	21.33	21.23	
15	64QAM	36	39	21.36	21.30	21.29	
15	64QAM	75	0	21.37	21.31	21.24	
Channel				26740	26840	26940	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.18	24.06	24.14	25.7
10	QPSK	1	25	24.15	24.06	23.99	
10	QPSK	1	49	24.13	24.13	23.98	
10	QPSK	25	0	23.24	23.17	23.17	24.7
10	QPSK	25	12	23.31	23.29	23.11	
10	QPSK	25	25	23.20	23.26	23.25	
10	QPSK	50	0	23.26	23.28	23.14	24.7
10	16QAM	1	0	23.52	23.39	23.40	
10	16QAM	1	25	23.49	23.37	23.35	
10	16QAM	1	49	23.46	23.41	23.27	23.7
10	16QAM	25	0	22.28	22.24	22.24	
10	16QAM	25	12	22.27	22.21	22.09	
10	16QAM	25	25	22.30	22.16	22.08	23.7
10	16QAM	50	0	22.26	22.24	22.15	
10	64QAM	1	0	22.37	22.23	22.22	
10	64QAM	1	25	22.33	22.35	22.24	23.7
10	64QAM	1	49	22.34	22.26	21.54	
10	64QAM	25	0	21.31	21.26	21.28	
10	64QAM	25	12	21.37	21.29	21.22	22.7
10	64QAM	25	25	21.28	21.29	21.22	
10	64QAM	50	0	21.27	21.27	21.21	
Channel				811.5	831.5	851.5	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.14	24.10	24.05	25.7
5	QPSK	1	12	24.05	24.05	24.08	
5	QPSK	1	24	24.12	24.11	23.91	
5	QPSK	12	0	23.21	23.23	23.15	24.7
5	QPSK	12	7	23.30	23.27	23.19	
5	QPSK	12	13	23.25	23.27	23.21	
5	QPSK	25	0	23.32	23.27	23.17	24.7
5	16QAM	1	0	23.53	23.40	23.43	
5	16QAM	1	12	23.46	23.35	23.44	
5	16QAM	1	24	23.44	23.33	23.27	23.7
5	16QAM	12	0	22.29	22.18	22.16	
5	16QAM	12	7	22.31	22.28	22.17	
5	16QAM	12	13	22.30	22.23	22.16	23.7
5	16QAM	25	0	22.33	22.24	22.19	
5	64QAM	1	0	22.40	22.21	22.25	
5	64QAM	1	12	22.35	22.32	22.36	23.7
5	64QAM	1	24	22.32	22.34	21.52	
5	64QAM	12	0	21.27	21.30	21.28	
5	64QAM	12	7	21.33	21.32	21.14	22.7
5	64QAM	12	13	21.34	21.24	21.25	
5	64QAM	25	0	21.31	21.31	21.24	
Channel				811.5	831.5	851.5	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.19	24.10	24.14	25.7
3	QPSK	1	8	24.05	24.08	24.08	
3	QPSK	1	14	24.15	24.03	23.97	
3	QPSK	8	0	23.21	23.23	23.17	24.7
3	QPSK	8	4	23.26	23.19	23.15	
3	QPSK	8	7	23.24	23.23	23.22	
3	QPSK	15	0	23.31	23.22	23.20	24.7
3	16QAM	1	0	23.56	23.45	23.39	
3	16QAM	1	8	23.43	23.39	23.43	
3	16QAM	1	14	23.37	23.36	23.26	23.7
3	16QAM	8	0	22.29	22.16	22.15	
3	16QAM	8	4	22.25	22.22	22.09	
3	16QAM	8	7	22.21	22.22	22.14	23.7
3	16QAM	15	0	22.28	22.29	22.23	
3	64QAM	1	0	22.35	22.21	22.31	
3	64QAM	1	8	22.35	22.37	22.24	23.7
3	64QAM	1	14	22.32	22.31	21.61	
3	64QAM	8	0	21.31	21.31	21.22	
3	64QAM	8	4	21.38	21.25	21.21	22.7
3	64QAM	8	7	21.35	21.24	21.19	
3	64QAM	15	0	21.33	21.21	21.24	
Channel				806.7	831.5	856.3	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.15	24.03	24.05	25.7
1.4	QPSK	1	3	23.98	24.04	23.99	
1.4	QPSK	1	5	24.14	24.02	23.95	
1.4	QPSK	3	0	24.15	24.03	24.12	24.7
1.4	QPSK	3	1	24.05	24.05	24.06	
1.4	QPSK	3	3	24.07	23.93	23.94	
1.4	QPSK	6	0	23.15	23.20	23.12	24.7
1.4	16QAM	1	0	23.17	23.16	23.05	
1.4	16QAM	1	3	23.16	23.17	23.16	
1.4	16QAM	1	5	23.23	23.19	23.10	24.7
1.4	16QAM	3	0	23.46	23.36	23.30	
1.4	16QAM	3	1	23.39	23.30	23.35	
1.4	16QAM	3	3	23.33	23.26	23.26	23.7
1.4	16QAM	6	0	22.20	22.14	22.10	
1.4	64QAM	1	0	22.18	22.22	22.05	
1.4	64QAM	1	3	22.16	22.20	22.04	23.7
1.4	64QAM	1	5	22.25	22.29	22.20	
1.4	64QAM	3	0	22.28	22.11	22.27	
1.4	64QAM	3	1	22.28	22.37	22.24	22.7
1.4	64QAM	3	3	22.31	22.31	21.51	
1.4	64QAM	6	0	21.26	21.25	21.15	



Band 30_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 Frequency (MHz)				2310			24.2
10	QPSK	1	0		23.10		
10	QPSK	1	25		23.33		
10	QPSK	1	49		23.20		
10	QPSK	25	0		22.24		23.2
10	QPSK	25	12		22.31		
10	QPSK	25	25		22.32		
10	QPSK	50	0		22.26		
10	16QAM	1	0		22.46		23.2
10	16QAM	1	25		22.61		
10	16QAM	1	49		22.57		
10	16QAM	25	0		21.22		
10	16QAM	25	12		21.30		22.2
10	16QAM	25	25		21.31		
10	16QAM	50	0		21.26		
10	64QAM	1	0		21.34		
10	64QAM	1	25		21.52		22.2
10	64QAM	1	49		21.41		
10	64QAM	25	0		20.28		
10	64QAM	25	12		20.37		
10	64QAM	25	25		20.36		21.2
10	64QAM	50	0		20.32		
Channel Frequency (MHz)				27685	27710	27735	Tune-up limit (dBm)
				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.24	23.20	24.2
5	QPSK	12	0	22.15	22.31	22.30	
5	QPSK	12	7	22.31	22.36	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.49	22.56	22.52	
5	16QAM	1	24	22.62	22.57	22.54	
5	16QAM	12	0	21.15	21.31	21.32	23.2
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.38	21.47	22.2
5	64QAM	1	12	21.42	21.48	21.47	
5	64QAM	1	24	21.56	21.48	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	



Band 66_Ant 2									
BIW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)		
Channel				130072	130322	130572			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	24.57	24.62	24.48	25.7		
20	QPSK	1	49	24.49	24.42	24.36			
20	QPSK	1	99	24.42	24.42	24.20			
20	QPSK	50	0	23.57	23.57	23.47	24.7		
20	QPSK	50	24	23.64	23.55	23.42			
20	QPSK	50	50	23.59	23.56	23.43			
20	QPSK	100	0	23.61	23.49	23.44	24.7		
20	16QAM	1	0	23.87	23.92	23.86			
20	16QAM	1	49	23.81	23.82	23.69			
20	16QAM	50	0	22.58	22.58	22.48	23.7		
20	16QAM	50	24	22.63	22.54	22.44			
20	16QAM	50	50	22.60	22.54	22.44			
20	64QAM	1	0	22.62	22.76	22.67	23.7		
20	64QAM	1	49	22.70	22.64	22.30			
20	64QAM	1	99	22.68	22.61	22.36			
20	64QAM	50	0	21.58	21.60	21.49	22.7		
20	64QAM	50	24	21.66	21.57	21.30			
20	64QAM	50	50	21.61	21.58	21.44			
20	64QAM	100	0	21.64	21.53	21.40			
Channel				130067	130422	130697	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.49	24.47	24.46	25.7		
15	QPSK	1	37	24.47	24.48	24.31			
15	QPSK	1	74	24.44	24.44	24.29			
15	QPSK	36	0	23.60	23.55	23.44	24.7		
15	QPSK	36	20	23.61	23.54	23.49			
15	QPSK	36	39	23.58	23.56	23.42			
15	QPSK	75	0	23.59	23.51	23.46	24.7		
15	16QAM	1	0	23.80	23.85	23.76			
15	16QAM	1	37	23.78	23.75	23.71			
15	16QAM	1	74	23.72	23.74	23.59	23.7		
15	16QAM	36	0	22.60	22.53	22.42			
15	16QAM	36	20	22.61	22.55	22.48			
15	16QAM	36	39	22.58	22.56	22.42	23.7		
15	16QAM	75	0	22.59	22.51	22.47			
15	64QAM	1	0	22.64	22.70	22.63	23.7		
15	64QAM	1	37	22.67	22.68	22.61			
15	64QAM	1	74	22.65	22.65	22.53			
15	64QAM	36	0	21.63	21.58	21.34	22.7		
15	64QAM	36	20	21.65	21.57	21.46			
15	64QAM	36	39	21.63	21.58	21.44			
15	64QAM	75	0	21.55	21.52	21.47			
Channel				130022	130322	130602	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
10	QPSK	1	0	24.47	24.38	24.37	25.7		
10	QPSK	1	25	24.47	24.42	24.21			
10	QPSK	1	49	24.34	24.42	24.24			
10	QPSK	25	0	23.58	23.49	23.38	24.7		
10	QPSK	25	12	23.54	23.48	23.39			
10	QPSK	25	25	23.51	23.52	23.35			
10	QPSK	50	0	23.54	23.49	23.37	24.7		
10	16QAM	1	0	23.78	23.83	23.70			
10	16QAM	1	25	23.78	23.65	23.71			
10	16QAM	1	49	23.71	23.66	23.53	23.7		
10	16QAM	25	0	22.51	22.48	22.38			
10	16QAM	25	12	22.53	22.45	22.44			
10	16QAM	25	25	22.52	22.55	22.41	23.7		
10	16QAM	50	0	22.58	22.51	22.43			
10	64QAM	1	0	22.57	22.70	22.58	23.7		
10	64QAM	1	25	22.62	22.65	22.48			
10	64QAM	1	49	22.57	22.62	22.53			
10	64QAM	25	0	21.63	21.51	21.30	22.7		
10	64QAM	25	12	21.61	21.51	21.37			
10	64QAM	25	25	21.53	21.57	21.42			
10	64QAM	50	0	21.54	21.46	21.37			
Channel				131987	130322	130647	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.46	24.47	24.39	25.7		
5	QPSK	1	12	24.44	24.47	24.31			
5	QPSK	1	24	24.44	24.35	24.25			
5	QPSK	12	0	23.58	23.51	23.44	24.7		
5	QPSK	12	7	23.52	23.48	23.43			
5	QPSK	12	13	23.46	23.51	23.42			
5	QPSK	25	0	23.51	23.48	23.40	24.7		
5	16QAM	1	0	23.74	23.84	23.67			
5	16QAM	1	12	23.75	23.65	23.68			
5	16QAM	1	24	23.69	23.66	23.55	23.7		
5	16QAM	12	0	22.51	22.51	22.41			
5	16QAM	12	7	22.53	22.49	22.45			
5	16QAM	12	13	22.58	22.50	22.32	23.7		
5	16QAM	25	0	22.57	22.48	22.38			
5	64QAM	1	0	22.62	22.65	22.61	23.7		
5	64QAM	1	12	22.65	22.66	22.48			
5	64QAM	1	24	22.62	22.57	22.45			
5	64QAM	12	0	21.62	21.50	21.27	22.7		
5	64QAM	12	7	21.59	21.53	21.39			
5	64QAM	12	13	21.54	21.51	21.38			
5	64QAM	25	0	21.49	21.51	21.44			
Channel				131987	130322	130605	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1778.5			
3	QPSK	1	0	24.43	24.47	24.41	25.7		
3	QPSK	1	8	24.40	24.40	24.22			
3	QPSK	1	14	24.34	24.37	24.25			
3	QPSK	8	0	23.56	23.50	23.34	24.7		
3	QPSK	8	4	23.61	23.46	23.44			
3	QPSK	8	7	23.45	23.49	23.33			
3	QPSK	15	0	23.57	23.49	23.45	24.7		
3	16QAM	1	0	23.77	23.79	23.74			
3	16QAM	1	8	23.68	23.65	23.68			
3	16QAM	1	14	23.68	23.66	23.50	23.7		
3	16QAM	8	0	22.59	22.47	22.32			
3	16QAM	8	4	22.59	22.46	22.41			
3	16QAM	8	7	22.51	22.55	22.34	23.7		
3	16QAM	15	0	22.55	22.43	22.47			
3	64QAM	1	0	22.60	22.62	22.62	23.7		
3	64QAM	1	8	22.57	22.61	22.43			
3	64QAM	1	14	22.61	22.63	22.52			
3	64QAM	8	0	21.58	21.53	21.31	22.7		
3	64QAM	8	4	21.63	21.54	21.36			
3	64QAM	8	7	21.58	21.58	21.36			
3	64QAM	15	0	21.57	21.45	21.45			
Channel				131979	130322	130605	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.44	24.42	24.28	25.7		
1.4	QPSK	1	3	24.51	24.50	24.32			
1.4	QPSK	1	5	24.42	24.41	24.31			
1.4	QPSK	3	0	24.45	24.49	24.32	24.7		
1.4	QPSK	3	1	24.52	24.47	24.36			
1.4	QPSK	3	2	24.43	24.43	24.32			
1.4	QPSK	6	0	23.51	23.48	23.37	24.7		
1.4	16QAM	1	0	23.78	23.76	23.60			
1.4	16QAM	1	3	23.80	23.81	23.66	24.7		
1.4	16QAM	1	5	23.82	23.79	23.68			
1.4	16QAM	3	0	23.96	23.96	23.82			
1.4	16QAM	3	1	23.60	23.59	23.44	23.7		
1.4	16QAM	3	3	23.53	23.54	23.37			
1.4	16QAM	6	0	22.58	22.54	22.47			
1.4	64QAM	1	0	22.62	22.73	22.62	23.7		
1.4	64QAM	1	3	22.50	22.76	22.60			
1.4	64QAM	1	5	22.48	22.70	22.55			
1.4	64QAM	3	0	22.37	22.66	22.51	23.7		
1.4	64QAM	3	1	22.55	22.71	22.57			
1.4	64QAM	3	2	22.53	22.64	22.49			
1.4	64QAM	3	3	22.52	22.68	22.53			



Band 71_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 Frequency (MHz)				679	683	686	25.7
20	QPSK	1	0	24.38	24.29	24.30	
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	24.7
20	QPSK	50	0	23.40	23.38	23.34	
20	QPSK	50	24	23.40	23.32	23.31	
20	QPSK	50	50	23.42	23.35	23.34	24.7
20	QPSK	100	0	23.40	23.32	23.37	
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	23.7
20	16QAM	1	99	23.60	23.53	23.52	
20	16QAM	50	0	22.41	22.38	22.36	
20	16QAM	50	24	22.45	22.35	22.34	23.7
20	16QAM	50	50	22.42	22.34	22.33	
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.90	22.31	22.45	23.7
20	64QAM	1	49	22.07	22.46	22.46	
20	64QAM	1	99	22.47	22.50	22.44	
20	64QAM	50	0	20.76	21.40	21.19	22.7
20	64QAM	50	24	21.02	21.33	21.34	
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.15	21.34	21.41	Tune-up limit (dBm)
Channel Frequency (MHz)				133197	133227	133257	
15	QPSK	1	0	24.37	24.31	24.25	
15	QPSK	1	37	24.23	24.29	24.23	25.7
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	
15	QPSK	36	20	23.39	23.35	23.28	24.7
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	
15	16QAM	1	0	23.66	23.63	23.61	24.7
15	16QAM	1	37	23.60	23.60	23.59	
15	16QAM	1	74	23.58	23.60	23.48	
15	16QAM	36	0	22.40	22.38	22.34	23.7
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	
15	16QAM	75	0	22.41	22.34	22.26	23.7
15	64QAM	1	0	21.56	22.15	22.26	
15	64QAM	1	37	21.61	22.58	22.49	
15	64QAM	1	74	22.45	22.55	22.42	22.7
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	
15	64QAM	36	39	21.15	21.21	21.38	Tune-up limit (dBm)
15	64QAM	75	0	21.04	21.35	21.30	
Channel Frequency (MHz)				669	679	693	
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	24.7
10	QPSK	25	12	23.33	23.30	23.26	
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	24.7
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	
10	16QAM	1	49	23.52	23.58	23.47	23.7
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	22.7
10	64QAM	1	49	22.43	22.49	22.32	
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.66	21.32	21.29	Tune-up limit (dBm)
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	
Channel Frequency (MHz)				133147	133217	133247	25.7
5	QPSK	1	0	24.33	24.27	24.24	
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	24.7
5	QPSK	12	0	23.29	23.36	23.28	
5	QPSK	12	7	23.39	23.28	23.26	
5	QPSK	12	13	23.22	23.28	23.22	24.7
5	QPSK	25	0	23.38	23.28	23.23	
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	23.7
5	16QAM	1	24	23.49	23.51	23.38	
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	23.7
5	16QAM	12	13	22.24	22.27	22.30	
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	23.7
5	64QAM	1	12	21.80	22.58	22.46	
5	64QAM	1	24	22.42	22.49	22.33	
5	64QAM	12	0	20.66	21.33	21.13	22.7
5	64QAM	12	7	20.73	21.41	21.33	
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	



Band 2_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				18700	18800	18900	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.51	23.52	23.54	25.5
20	QPSK	1	49	23.50	23.54	23.54	
20	QPSK	1	99	23.55	23.64	23.65	
20	QPSK	50	0	22.52	22.61	22.62	24.5
20	QPSK	50	24	22.57	22.84	22.78	
20	QPSK	50	50	22.55	22.71	22.76	
20	QPSK	100	0	22.57	22.60	22.65	24.5
20	16QAM	1	0	22.80	22.85	22.86	
20	16QAM	1	49	22.73	22.85	22.85	
20	16QAM	1	99	22.72	22.87	22.84	23.5
20	16QAM	50	0	21.50	21.61	21.65	
20	16QAM	50	24	21.60	21.65	21.77	
20	16QAM	50	50	21.58	21.71	21.77	23.5
20	16QAM	100	0	21.56	21.59	21.66	
20	64QAM	1	0	21.63	21.65	21.78	
20	64QAM	1	49	21.61	21.77	21.77	23.5
20	64QAM	1	99	21.65	21.79	21.52	
20	64QAM	50	0	20.52	20.65	20.54	22.5
20	64QAM	50	24	20.60	20.66	20.33	
20	64QAM	50	50	20.60	20.73	20.49	
20	64QAM	100	0	20.56	20.64	20.49	Tune-up limit [dBm]
Channel				18600	18700	18800	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.51	23.54	23.62	25.5
15	QPSK	1	37	23.50	23.59	23.61	
15	QPSK	1	74	23.53	23.53	23.59	
15	QPSK	36	0	22.54	22.63	22.64	24.5
15	QPSK	36	20	22.59	22.86	22.78	
15	QPSK	36	39	22.57	22.71	22.78	
15	QPSK	75	0	22.55	22.62	22.68	24.5
15	16QAM	1	0	22.72	22.81	22.96	
15	16QAM	1	37	22.76	22.90	22.90	
15	16QAM	1	74	22.73	22.85	22.86	23.5
15	16QAM	36	0	21.47	21.64	21.64	
15	16QAM	36	20	21.57	21.66	21.77	
15	16QAM	36	39	21.54	21.73	21.78	23.5
15	16QAM	75	0	21.56	21.64	21.68	
15	64QAM	1	0	21.63	21.79	21.61	
15	64QAM	1	37	21.71	21.94	21.67	22.5
15	64QAM	1	74	21.64	21.73	21.54	
15	64QAM	36	0	20.51	20.67	20.28	
15	64QAM	36	20	20.63	20.69	20.42	22.5
15	64QAM	36	39	20.64	20.78	20.63	
15	64QAM	75	0	20.58	20.67	20.41	
Channel				18650	18700	18750	Tune-up limit [dBm]
Frequency (MHz)				1865	1880	1905	
10	QPSK	1	0	23.52	23.56	23.59	
10	QPSK	1	25	23.51	23.55	23.56	25.5
10	QPSK	1	49	23.50	23.55	23.59	
10	QPSK	25	0	22.52	22.62	22.67	24.5
10	QPSK	25	12	22.53	22.84	22.78	
10	QPSK	25	25	22.57	22.73	22.80	
10	QPSK	50	0	22.54	22.65	22.69	24.5
10	16QAM	1	0	22.76	22.89	22.97	
10	16QAM	1	25	22.73	22.98	23.00	
10	16QAM	1	49	22.74	22.89	22.97	23.5
10	16QAM	25	0	21.49	21.61	21.65	
10	16QAM	25	12	21.53	21.65	21.72	
10	16QAM	25	25	21.57	21.72	21.77	23.5
10	16QAM	50	0	21.55	21.62	21.68	
10	64QAM	1	0	21.64	21.80	21.37	
10	64QAM	1	25	21.65	21.86	21.60	22.5
10	64QAM	1	49	21.68	21.82	21.80	
10	64QAM	25	0	20.55	20.66	20.34	
10	64QAM	25	12	20.59	20.67	20.60	22.5
10	64QAM	25	25	20.55	20.75	20.71	
10	64QAM	50	0	20.54	20.69	20.43	
Channel				18650	18700	18750	Tune-up limit [dBm]
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.51	23.55	23.59	
5	QPSK	1	12	23.52	23.60	23.62	25.5
5	QPSK	1	24	23.53	23.62	23.64	
5	QPSK	12	0	22.51	22.60	22.72	24.5
5	QPSK	12	7	22.52	22.73	22.79	
5	QPSK	12	13	22.56	22.72	22.74	
5	QPSK	25	0	22.53	22.63	22.70	24.5
5	16QAM	1	0	22.74	22.82	22.91	
5	16QAM	1	12	22.79	22.91	22.98	
5	16QAM	1	24	22.78	22.93	22.98	23.5
5	16QAM	12	0	21.54	21.68	21.76	
5	16QAM	12	7	21.60	21.73	21.76	
5	16QAM	12	13	21.55	21.75	21.77	23.5
5	16QAM	25	0	21.54	21.63	21.74	
5	64QAM	1	0	21.74	21.79	21.72	
5	64QAM	1	12	21.67	21.87	21.66	22.5
5	64QAM	1	24	21.67	21.87	21.90	
5	64QAM	12	0	20.58	20.69	20.73	
5	64QAM	12	7	20.64	20.75	20.83	22.5
5	64QAM	12	13	20.58	20.76	20.81	
5	64QAM	25	0	20.56	20.65	20.67	
Channel				18610	18700	18790	Tune-up limit [dBm]
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.50	23.54	23.62	
3	QPSK	1	8	23.50	23.61	23.62	25.5
3	QPSK	1	14	23.52	23.63	23.60	
3	QPSK	8	0	22.57	22.64	22.74	24.5
3	QPSK	8	4	22.58	22.73	22.77	
3	QPSK	8	7	22.55	22.71	22.74	
3	QPSK	15	0	22.57	22.64	22.78	24.5
3	16QAM	1	0	22.78	22.85	22.90	
3	16QAM	1	8	22.85	23.01	23.07	
3	16QAM	1	14	22.77	22.98	23.01	23.5
3	16QAM	8	0	21.61	21.73	21.84	
3	16QAM	8	4	21.63	21.79	21.82	
3	16QAM	8	7	21.64	21.80	21.85	23.5
3	16QAM	15	0	21.61	21.70	21.82	
3	64QAM	1	0	21.69	21.79	21.84	
3	64QAM	1	8	21.77	21.96	21.96	22.5
3	64QAM	1	14	21.73	21.99	21.93	
3	64QAM	8	0	20.63	20.72	20.81	
3	64QAM	8	4	20.66	20.81	20.84	22.5
3	64QAM	8	7	20.62	20.78	20.82	
3	64QAM	15	0	20.59	20.69	20.76	
Channel				18600	18700	18800	Tune-up limit [dBm]
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.54	23.52	23.54	
1.4	QPSK	1	3	23.51	23.58	23.61	25.5
1.4	QPSK	1	5	23.52	23.56	23.58	
1.4	QPSK	3	0	23.50	23.53	23.59	24.5
1.4	QPSK	3	1	23.55	23.60	23.64	
1.4	QPSK	3	3	23.56	23.57	23.59	
1.4	QPSK	6	0	22.51	22.54	22.53	24.5
1.4	16QAM	1	0	22.74	22.78	22.89	
1.4	16QAM	1	3	22.78	22.92	22.92	
1.4	16QAM	1	5	22.72	22.87	22.87	24.5
1.4	16QAM	3	0	22.52	22.56	22.66	
1.4	16QAM	3	1	22.55	22.69	22.67	
1.4	16QAM	3	3	22.51	22.65	22.61	23.5
1.4	16QAM	6	0	21.58	21.72	21.76	
1.4	64QAM	1	0	21.65	21.71	21.77	
1.4	64QAM	1	3	21.68	21.85	21.80	23.5
1.4	64QAM	1	5	21.64	21.81	21.74	
1.4	64QAM	3	0	21.60	21.71	21.74	
1.4	64QAM	3	1	21.66	21.81	21.82	22.5
1.4	64QAM	3	3	21.57	21.78	21.75	
1.4	64QAM	6	0	20.52	20.67	20.67	



Band 4_Ant 0											
BIW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)				
Channel Frequency (MHz)				20050	17020	17050					
20	QPSK	1	0	23.74	23.74	23.77	25.5				
20	QPSK	1	49	23.58	23.60	23.56					
20	QPSK	1	99	23.62	23.58	23.53					
20	QPSK	50	0	22.78	22.82	22.80	24.5				
20	QPSK	50	24	22.82	22.75	22.71					
20	QPSK	50	50	22.73	22.72	22.71					
20	QPSK	100	0	22.77	22.78	22.69	24.5				
20	16QAM	1	0	23.14	23.08	23.11					
20	16QAM	1	49	22.94	22.98	22.95					
20	16QAM	1	99	22.96	22.90	22.88	23.5				
20	16QAM	50	0	21.79	21.84	21.81					
20	16QAM	50	24	21.82	21.75	21.73					
20	16QAM	50	50	21.73	21.73	21.71	23.5				
20	16QAM	100	0	21.79	21.78	21.74					
20	64QAM	1	0	21.57	21.95	21.99	23.5				
20	64QAM	1	49	21.85	21.83	21.80					
20	64QAM	1	99	21.91	21.78	21.76					
20	64QAM	50	0	20.77	20.87	20.83	22.5				
20	64QAM	50	24	20.84	20.78	20.74					
20	64QAM	50	50	20.77	20.76	20.75					
20	64QAM	100	0	20.84	20.78	20.74					
Channel Frequency (MHz)				20025	17015	17035	Tune-up limit (dBm)				
Channel Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	23.73	23.76	23.72	25.5				
15	QPSK	1	49	23.57	23.60	23.57					
15	QPSK	1	74	23.62	23.63	23.61					
15	QPSK	36	0	22.78	22.84	22.80	24.5				
15	QPSK	36	20	22.81	22.78	22.80					
15	QPSK	36	39	22.77	22.75	22.73					
15	QPSK	75	0	22.81	22.78	22.73	24.5				
15	16QAM	1	0	23.10	23.16	23.10					
15	16QAM	1	37	22.89	22.95	22.90					
15	16QAM	1	74	22.92	22.93	22.94	23.5				
15	16QAM	36	0	21.79	21.83	21.79					
15	16QAM	36	20	21.80	21.75	21.80					
15	16QAM	36	39	21.76	21.76	21.75	23.5				
15	16QAM	75	0	21.81	21.77	21.73					
15	64QAM	1	0	21.54	22.01	21.98	23.5				
15	64QAM	1	37	21.83	21.92	21.82					
15	64QAM	1	74	21.82	21.85	21.81					
15	64QAM	36	0	20.53	20.87	20.85	22.5				
15	64QAM	36	20	20.84	20.85	20.85					
15	64QAM	36	39	20.81	20.86	20.79					
15	64QAM	75	0	20.82	20.79	20.73					
Channel Frequency (MHz)				20010	17005	17050	Tune-up limit (dBm)				
Channel Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	23.67	23.75	23.67	25.5				
10	QPSK	1	25	23.62	23.68	23.65					
10	QPSK	1	49	23.67	23.69	23.66					
10	QPSK	25	0	22.81	22.77	22.74	24.5				
10	QPSK	25	12	22.82	22.80	22.74					
10	QPSK	25	25	22.81	22.84	22.79					
10	QPSK	50	0	22.81	22.79	22.74	24.5				
10	16QAM	1	0	23.05	23.08	23.06					
10	16QAM	1	25	23.07	23.09	23.11					
10	16QAM	1	49	23.01	23.10	23.04	23.5				
10	16QAM	25	0	21.79	21.79	21.72					
10	16QAM	25	12	21.83	21.82	21.75					
10	16QAM	25	25	21.78	21.86	21.82	23.5				
10	16QAM	50	0	21.82	21.77	21.78					
10	64QAM	1	0	21.36	21.92	21.95	23.5				
10	64QAM	1	25	21.73	21.97	21.87					
10	64QAM	1	49	21.91	21.90	22.00					
10	64QAM	25	0	20.43	20.79	20.75	22.5				
10	64QAM	25	12	20.65	20.82	20.81					
10	64QAM	25	25	20.81	20.90	20.85					
10	64QAM	50	0	20.66	20.83	20.76					
Channel Frequency (MHz)				19975	17015	17075	Tune-up limit (dBm)				
Channel Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	23.71	23.88	23.89	25.5				
5	QPSK	1	12	23.73	23.74	23.74					
5	QPSK	1	24	23.74	23.73	23.70					
5	QPSK	12	0	22.82	22.76	22.78	24.5				
5	QPSK	12	7	22.83	22.79	22.83					
5	QPSK	12	13	22.83	22.83	22.81					
5	QPSK	25	0	22.79	22.79	22.76	24.5				
5	16QAM	1	0	23.01	23.01	23.06					
5	16QAM	1	12	23.03	23.10	23.05					
5	16QAM	1	24	23.04	23.14	23.09	23.5				
5	16QAM	12	0	21.81	21.77	21.82					
5	16QAM	12	7	21.88	21.80	21.84					
5	16QAM	12	13	21.82	21.85	21.84	23.5				
5	16QAM	25	0	21.82	21.81	21.81					
5	64QAM	1	0	21.43	21.96	21.96	23.5				
5	64QAM	1	12	21.43	21.97	21.96					
5	64QAM	1	24	21.58	22.02	21.94					
5	64QAM	12	0	20.35	20.85	20.88	22.5				
5	64QAM	12	7	20.43	20.89	20.86					
5	64QAM	12	13	20.48	20.91	20.85					
5	64QAM	25	0	20.38	20.83	20.82					
Channel Frequency (MHz)				19965	17015	17085	Tune-up limit (dBm)				
Channel Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	23.74	23.70	23.74	25.5				
3	QPSK	1	8	23.75	23.70	23.75					
3	QPSK	1	14	23.76	23.71	23.71					
3	QPSK	8	0	22.86	22.82	22.81	24.5				
3	QPSK	8	4	22.90	22.80	22.81					
3	QPSK	8	7	22.85	22.83	22.77					
3	QPSK	15	0	22.87	22.77	22.79	24.5				
3	16QAM	1	0	23.09	23.04	23.02					
3	16QAM	1	8	23.12	23.22	23.10					
3	16QAM	1	14	23.07	23.12	23.08	23.5				
3	16QAM	8	0	21.94	21.85	21.83					
3	16QAM	8	4	21.97	21.88	21.93					
3	16QAM	8	7	21.90	21.94	21.84	23.5				
3	16QAM	15	0	21.87	21.81	21.84					
3	64QAM	1	0	21.45	21.96	21.98	23.5				
3	64QAM	1	8	21.50	22.10	22.01					
3	64QAM	1	14	21.47	22.05	21.95					
3	64QAM	8	0	20.38	20.84	20.84	22.5				
3	64QAM	8	4	20.38	20.91	20.90					
3	64QAM	8	7	20.35	20.92	20.85					
3	64QAM	15	0	20.33	20.87	20.83					
Channel Frequency (MHz)				19957	17015	17083	Tune-up limit (dBm)				
Channel Frequency (MHz)				1711.5	1732.5	1754.3					
1.4	QPSK	1	0	23.67	23.84	23.87	25.5				
1.4	QPSK	1	3	23.71	23.74	23.71					
1.4	QPSK	1	5	23.65	23.72	23.63					
1.4	QPSK	3	0	23.69	23.64	23.69	24.5				
1.4	QPSK	3	1	23.74	23.75	23.71					
1.4	QPSK	3	3	23.70	23.74	23.67					
1.4	QPSK	6	0	22.76	22.71	22.73	24.5				
1.4	16QAM	1	0	22.99	22.94	22.96					
1.4	16QAM	1	3	23.06	23.08	22.99					
1.4	16QAM	1	5	23.03	23.08	22.96	24.5				
1.4	16QAM	3	0	22.76	22.77	22.74					
1.4	16QAM	3	1	22.83	22.85	22.78					
1.4	16QAM	3	3	22.77	22.80	22.74	23.5				
1.4	16QAM	6	0	21.83	21.79	21.82					
1.4	16QAM	6	1	21.84	21.84	21.80					
1.4	64QAM	1	3	21.37	22.02	21.96	23.5				
1.4	64QAM	1	5	21.31	21.98	21.90					
1.4	64QAM	3	0	21.34	21.88	21.88					
1.4	64QAM	3	1	21.42	21.98	21.91	23.5				
1.4	64QAM	3	3	21.32	21.91	21.85					
1.4	64QAM	3	5	21.34	21.93	21.87					



Band 5_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 Frequency (MHz)				825	836.5	848	25
10	QPSK	1	0	23.24	23.25	23.22	
10	QPSK	1	25	23.22	23.27	23.26	24
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	
10	QPSK	25	12	22.16	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	24
10	QPSK	50	0	22.14	22.18	22.11	
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	
10	16QAM	50	0	21.18	21.16	21.08	22
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel Frequency (MHz)				825.5	836.5	848.5	Tune-up limit (dBm)
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	
5	QPSK	12	7	22.12	22.12	22.09	24
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.39	22.47	22.22	24
5	16QAM	1	24	22.40	22.41	22.16	
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.38	21.13	
5	64QAM	1	12	21.36	21.37	20.34	
5	64QAM	1	24	21.34	21.35	20.16	22
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.51	
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	22
Channel Frequency (MHz)				824.6	835.2	846.3	Tune-up limit (dBm)
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	
3	QPSK	8	4	22.09	22.12	22.03	24
3	QPSK	8	7	22.06	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	24
3	16QAM	1	14	22.29	22.35	22.26	
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.19	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	23
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	
3	64QAM	1	14	21.24	21.32	20.28	22
3	64QAM	8	0	20.13	20.19	19.16	
3	64QAM	8	4	20.16	20.20	19.14	
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	22
Channel Frequency (MHz)				824.7	836.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	
1.4	QPSK	3	1	23.26	23.25	23.23	24
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	24
1.4	16QAM	1	5	22.52	22.54	22.47	
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.28	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.68	
1.4	64QAM	1	3	21.53	21.56	20.76	
1.4	64QAM	1	5	21.45	21.49	20.77	23
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	22



Band 7_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 Frequency (MHz)				2510	2535	2560	25.5
20	QPSK	1	0	23.74	23.85	23.82	
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	24.5
20	QPSK	50	0	22.90	22.95	22.88	
20	QPSK	50	24	22.96	22.97	22.87	
20	QPSK	50	50	23.02	23.08	22.99	24.5
20	QPSK	100	0	22.96	23.00	22.97	
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	24.5
20	16QAM	1	99	23.19	23.32	23.22	
20	16QAM	50	0	21.87	21.97	21.87	
20	16QAM	50	24	21.98	21.99	22.01	23.5
20	16QAM	50	50	22.01	22.09	21.99	
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.96	22.08	21.99	23.5
20	64QAM	1	49	22.06	22.15	22.04	
20	64QAM	1	99	22.11	22.23	22.12	
20	64QAM	50	0	20.91	20.98	20.90	22.5
20	64QAM	50	24	21.04	21.02	21.02	
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	Tune-up limit (dBm)
Channel Frequency (MHz)				2592.5	21100	21312	
15	QPSK	1	0	23.81	23.93	23.84	
15	QPSK	1	37	23.84	23.90	23.84	25.5
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	
15	QPSK	36	20	23.04	23.01	22.92	24.5
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	
15	16QAM	1	0	23.15	23.28	23.19	24.5
15	16QAM	1	37	23.17	23.32	23.19	
15	16QAM	1	74	23.21	23.30	23.26	
15	16QAM	36	0	21.91	21.98	21.89	23.5
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	
15	16QAM	75	0	22.01	21.99	21.91	23.5
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.06	22.21	22.12	
15	64QAM	1	74	22.12	22.25	22.13	22.5
15	64QAM	36	0	20.93	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	
15	64QAM	36	39	21.07	21.14	21.05	Tune-up limit (dBm)
15	64QAM	75	0	21.00	21.01	20.94	
Channel Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	24.5
10	QPSK	25	12	23.00	23.02	22.96	
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	24.5
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	
10	16QAM	1	49	23.25	23.34	23.19	23.5
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.98	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	23.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.06	23.5
10	64QAM	1	49	22.13	22.27	22.09	
10	64QAM	25	0	20.96	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	22.5
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel Frequency (MHz)				2597.5	21102	21302	Tune-up limit (dBm)
5	QPSK	1	0	23.84	23.87	23.78	
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	25.5
5	QPSK	12	0	22.95	22.97	22.93	
5	QPSK	12	7	22.95	23.01	22.89	
5	QPSK	12	13	22.97	23.02	22.92	24.5
5	QPSK	25	0	22.96	22.98	22.91	
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	24.5
5	16QAM	1	24	23.19	23.25	23.14	
5	16QAM	12	0	21.96	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	23.5
5	16QAM	12	13	21.99	22.05	21.91	
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	23.5
5	64QAM	1	12	22.08	22.16	22.01	
5	64QAM	1	24	22.14	22.22	22.10	
5	64QAM	12	0	21.05	21.08	20.98	22.5
5	64QAM	12	7	21.04	21.02	20.96	
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.03	20.97	



Band 12_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 Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	24.7
10	QPSK	25	12	23.11	23.04	23.08	
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	24.7
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	
10	16QAM	1	49	23.37	23.36	23.33	23.7
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.06	23.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	23.7
10	64QAM	1	25	21.92	22.16	22.31	
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	22.7
10	64QAM	25	12	20.71	21.01	21.14	
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	Tune-up limit (dBm)
Channel Frequency (MHz)				707.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	24.7
5	QPSK	12	7	23.04	23.05	23.04	
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	24.7
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.28	23.25	
5	16QAM	1	24	23.28	23.35	23.26	23.7
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	22.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.73	22.16	
5	64QAM	1	12	21.70	22.17	22.31	Tune-up limit (dBm)
5	64QAM	1	24	21.72	22.12	21.85	
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	25.7
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.98	20.96	
Channel Frequency (MHz)				707.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	24.7
3	QPSK	8	4	23.05	23.09	23.05	
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	24.7
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	
3	16QAM	1	14	23.21	23.30	23.22	23.7
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	22.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	Tune-up limit (dBm)
3	64QAM	1	14	21.73	22.21	21.77	
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.16	20.90	25.7
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	
Channel Frequency (MHz)				809.7	809.7	815.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	24.7
1.4	QPSK	3	1	23.99	23.96	23.96	
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	24.7
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	
1.4	16QAM	1	5	23.44	23.52	23.45	23.7
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	22.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.38	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	25.7
1.4	64QAM	1	5	21.70	22.43	21.90	
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	22.7
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	



Band 13_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 Frequency (MHz)				192			
10	QPSK	1	0		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		24
10	QPSK	25	12		22.02		
10	QPSK	25	25		22.08		
10	QPSK	50	0		22.15		24
10	16QAM	1	0		22.28		
10	16QAM	1	25		22.27		
10	16QAM	1	49		22.33		23
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.08		23
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		
10	64QAM	1	25		21.22		23
10	64QAM	1	49		21.29		
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.08		22
10	64QAM	25	25		20.11		
10	64QAM	50	0		20.12		
Channel Frequency (MHz)				23205	23252	23255	Tune-up limit (dBm)
				779.5	782	784.5	
5	QPSK	1	0	22.90	22.85	22.60	25
5	QPSK	1	12	22.94	22.95	22.68	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.08	22.09	21.80	
5	QPSK	25	0	22.08	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.98	23
5	16QAM	12	0	21.09	21.08	20.90	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.06	21.13	20.86	
5	64QAM	1	12	21.10	21.18	20.90	23
5	64QAM	1	24	21.18	21.17	20.98	
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	22
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



Band 14_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				23330			Tune-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0		23.07		25
10	QPSK	1	25		23.07		
10	QPSK	1	49		23.07		
10	QPSK	25	0		22.08		24
10	QPSK	25	12		22.10		
10	QPSK	25	25		22.19		
10	QPSK	50	0		22.12		24
10	16QAM	1	0		22.44		
10	16QAM	1	25		22.44		
10	16QAM	1	49		22.42		23
10	16QAM	25	0		21.10		
10	16QAM	25	12		21.12		
10	16QAM	25	25		21.20		23
10	16QAM	50	0		21.10		
10	64QAM	1	0		21.31		23
10	64QAM	1	25		21.39		
10	64QAM	1	49		21.35		
10	64QAM	25	0		20.12		22
10	64QAM	25	12		20.15		
10	64QAM	25	25		20.20		
10	64QAM	50	0		20.17		Tune-up limit (dBm)
Channel				23305	23330	23355	
Frequency (MHz)				790.5	793	795.5	Tune-up limit (dBm)
5	QPSK	1	0	23.02	23.01	23.01	
5	QPSK	1	12	23.02	23.06	23.05	
5	QPSK	1	24	23.04	23.03	23.01	
5	QPSK	12	0	22.05	22.07	22.08	24
5	QPSK	12	7	22.16	22.11	22.13	
5	QPSK	12	13	22.10	22.12	22.07	
5	QPSK	25	0	22.08	22.06	22.04	24
5	16QAM	1	0	22.32	22.32	22.31	
5	16QAM	1	12	22.40	22.43	22.42	
5	16QAM	1	24	22.38	22.40	22.36	23
5	16QAM	12	0	21.12	21.11	21.10	
5	16QAM	12	7	21.21	21.16	21.19	
5	16QAM	12	13	21.14	21.16	21.12	23
5	16QAM	25	0	21.11	21.09	21.06	
5	64QAM	1	0	21.21	21.30	21.29	
5	64QAM	1	12	21.32	21.41	21.34	23
5	64QAM	1	24	21.38	21.35	21.33	
5	64QAM	12	0	20.16	20.18	20.14	22
5	64QAM	12	7	20.25	20.18	20.21	
5	64QAM	12	13	20.18	20.23	20.16	
5	64QAM	25	0	20.12	20.12	20.07	



Band 17_Ant 1							
SW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel Frequency (MHz)				769	770	711	
10	QPSK	1	0	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	24
10	QPSK	25	12	22.25	22.26	22.26	
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.26	22.30	24
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	
10	16QAM	1	49	22.26	22.23	22.26	23
10	16QAM	25	0	20.91	20.97	20.96	
10	16QAM	25	12	21.02	20.96	20.94	
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	23
10	64QAM	1	25	21.14	21.16	21.17	
10	64QAM	1	49	21.16	21.18	21.13	
10	64QAM	25	0	19.92	19.92	19.92	22
10	64QAM	25	12	20.08	19.96	19.96	
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.93	19.97	19.97	Tune-up limit (dBm)
Channel				737.5	737.5	737.5	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	24
5	QPSK	12	7	22.29	22.22	22.23	
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	24
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	
5	16QAM	1	24	22.25	22.25	22.22	23
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.08	21.13	21.09	22
5	64QAM	1	24	21.19	21.16	21.10	
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	



Band 25_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 Frequency (MHz)				18640	18640	18690					
20	QPSK	1	0	23.58	23.60	23.61	25.5				
20	QPSK	1	49	23.59	23.61	23.79					
20	QPSK	1	99	23.51	23.59	23.71					
20	QPSK	50	0	22.53	22.63	22.68	24.5				
20	QPSK	50	24	22.59	22.70	22.78					
20	QPSK	50	50	22.53	22.84	22.77					
20	QPSK	100	0	22.60	22.66	22.67	24.5				
20	16QAM	1	0	22.85	22.84	22.87					
20	16QAM	1	49	22.79	22.85	22.92					
20	16QAM	1	99	22.70	22.85	22.86	23.5				
20	16QAM	50	0	21.54	21.65	21.69					
20	16QAM	50	24	21.62	21.71	21.79					
20	16QAM	50	50	21.57	21.65	21.75	22.5				
20	16QAM	100	0	21.58	21.68	21.70					
20	64QAM	1	0	21.71	21.72	21.77					
20	64QAM	1	49	21.68	21.77	21.73	22.5				
20	64QAM	1	99	21.66	21.81	21.34					
20	64QAM	50	0	20.56	20.67	20.70					
20	64QAM	50	24	20.64	20.74	20.82	22.5				
20	64QAM	50	50	20.57	20.66	20.79					
20	64QAM	100	0	20.60	20.70	20.82					
Channel				18615	18640	18665	Tune-up limit (dBm)				
Frequency (MHz)				18615	18640	1907.5					
15	QPSK	1	0	23.52	23.61	23.64	25.5				
15	QPSK	1	37	23.50	23.58	23.61					
15	QPSK	1	74	23.51	23.51	23.63					
15	QPSK	36	0	22.57	22.65	22.71	24.5				
15	QPSK	36	20	22.59	22.71	22.82					
15	QPSK	36	39	22.56	22.66	22.78					
15	QPSK	75	0	22.61	22.71	22.69	24.5				
15	16QAM	1	0	22.81	22.91	22.98					
15	16QAM	1	37	22.76	22.83	22.92					
15	16QAM	1	74	22.76	22.83	22.91	23.5				
15	16QAM	36	0	21.57	21.66	21.73					
15	16QAM	36	20	21.63	21.71	21.80					
15	16QAM	36	39	21.57	21.68	21.77	22.5				
15	16QAM	75	0	21.60	21.71	21.74					
15	64QAM	1	0	21.71	21.78	21.81					
15	64QAM	1	37	21.69	21.84	21.81	22.5				
15	64QAM	1	74	21.60	21.73	21.52					
15	64QAM	36	0	20.60	20.68	20.75					
15	64QAM	36	20	20.65	20.74	20.85	22.5				
15	64QAM	36	39	20.64	20.70	20.84					
15	64QAM	75	0	20.62	20.71	20.71					
Channel				18690	18640	18690	Tune-up limit (dBm)				
Frequency (MHz)				18690	18650	18690					
10	QPSK	1	0	23.53	23.51	23.61	25.5				
10	QPSK	1	12	23.51	23.62	23.74					
10	QPSK	1	24	23.51	23.63	23.67					
10	QPSK	25	0	22.56	22.61	22.70	24.5				
10	QPSK	25	12	22.59	22.71	22.73					
10	QPSK	25	25	22.58	22.69	22.82					
10	QPSK	50	0	22.60	22.70	22.72	24.5				
10	16QAM	1	0	22.88	22.94	23.01					
10	16QAM	1	25	22.75	22.95	23.04					
10	16QAM	1	49	22.77	22.91	23.04	23.5				
10	16QAM	25	0	21.59	21.59	21.69					
10	16QAM	25	12	21.61	21.72	21.74					
10	16QAM	25	25	21.58	21.68	21.79	22.5				
10	16QAM	50	0	21.57	21.70	21.74					
10	64QAM	1	0	21.71	21.74	21.78					
10	64QAM	1	25	21.67	21.86	22.00	22.5				
10	64QAM	1	49	21.70	21.85	21.52					
10	64QAM	25	0	20.60	20.63	20.73					
10	64QAM	25	12	20.66	20.75	20.79	22.5				
10	64QAM	25	25	20.61	20.71	20.77					
10	64QAM	50	0	20.58	20.72	20.78					
Channel				18695	18640	18695	Tune-up limit (dBm)				
Frequency (MHz)				18695	18650	18695					
5	QPSK	1	0	23.53	23.52	23.64	25.5				
5	QPSK	1	12	23.51	23.62	23.74					
5	QPSK	1	24	23.50	23.63	23.70					
5	QPSK	12	0	22.54	22.58	22.74	24.5				
5	QPSK	12	7	22.60	22.72	22.81					
5	QPSK	12	13	22.60	22.72	22.82					
5	QPSK	25	0	22.57	22.67	22.80	24.5				
5	16QAM	1	0	22.81	22.89	23.03					
5	16QAM	1	12	22.82	22.95	23.02					
5	16QAM	1	24	22.80	22.95	23.05	23.5				
5	16QAM	12	0	21.57	21.62	21.78					
5	16QAM	12	7	21.60	21.74	21.82					
5	16QAM	12	13	21.64	21.77	21.82	22.5				
5	16QAM	25	0	21.58	21.70	21.81					
5	64QAM	1	0	21.75	21.81	21.97					
5	64QAM	1	12	21.74	21.90	21.85	22.5				
5	64QAM	1	24	21.67	21.86	21.55					
5	64QAM	12	0	20.59	20.67	20.78					
5	64QAM	12	7	20.69	20.77	20.81	22.5				
5	64QAM	12	13	20.69	20.81	20.50					
5	64QAM	25	0	20.61	20.71	20.62					
Channel				18695	18640	18695	Tune-up limit (dBm)				
Frequency (MHz)				18695	18650	18695					
3	QPSK	1	0	23.50	23.52	23.63	25.5				
3	QPSK	1	8	23.56	23.73	23.78					
3	QPSK	1	14	23.53	23.69	23.78					
3	QPSK	8	0	22.56	22.64	22.74	24.5				
3	QPSK	8	4	22.65	22.73	22.82					
3	QPSK	8	7	22.64	22.73	22.82					
3	QPSK	15	0	22.58	22.68	22.80	24.5				
3	16QAM	1	0	22.75	22.83	22.93					
3	16QAM	1	8	22.91	23.05	23.07					
3	16QAM	1	14	22.87	22.99	23.07	23.5				
3	16QAM	8	0	21.65	21.72	21.82					
3	16QAM	8	4	21.69	21.80	21.89					
3	16QAM	8	7	21.71	21.80	21.91	22.5				
3	16QAM	15	0	21.65	21.75	21.79					
3	64QAM	1	0	21.68	21.77	21.77					
3	64QAM	1	8	21.83	21.94	21.56	22.5				
3	64QAM	1	14	21.80	21.93	21.51					
3	64QAM	8	0	20.64	20.71	20.70					
3	64QAM	8	4	20.72	20.78	20.58	22.5				
3	64QAM	8	7	20.69	20.80	20.41					
3	64QAM	15	0	20.64	20.73	20.52					
Channel				18697	18640	18693	Tune-up limit (dBm)				
Frequency (MHz)				18697	18650	18693					
1.4	QPSK	1	0	23.54	23.55	23.57	25.5				
1.4	QPSK	1	3	23.50	23.59	23.66					
1.4	QPSK	1	5	23.56	23.56	23.63					
1.4	QPSK	3	0	23.43	23.58	23.60	24.5				
1.4	QPSK	3	1	23.48	23.62	23.65					
1.4	QPSK	3	3	23.47	23.60	23.68					
1.4	QPSK	6	0	22.53	22.61	22.71	24.5				
1.4	16QAM	1	0	22.72	22.79	22.92					
1.4	16QAM	1	3	22.83	22.92	23.00					
1.4	16QAM	1	5	22.78	22.91	22.99	24.5				
1.4	16QAM	3	0	22.51	22.67	22.87					
1.4	16QAM	3	1	22.61	22.72	22.75					
1.4	16QAM	3	3	22.55	22.69	22.70	23.5				
1.4	16QAM	6	0	21.61	21.68	21.78					
1.4	16QAM	6	1	21.73	21.75	21.81					
1.4	16QAM	3	3	21.75	21.89	21.50	23.5				
1.4	64QAM	1	5	21.71	21.84	21.53					
1.4	64QAM	3	0	21.63	21.77	21.21					
1.4	64QAM	3	1	21.67	21.80	21.30	22.5				
1.4	64QAM	3	3	21.65	21.81	21.41					
1.4	64QAM	6	0	20.59	20.63	20.52					



Band 26_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 Frequency (MHz)				807.5	831.5	844.5	25
15	QPSK	1	0	23.14	23.06	23.05	
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.16	22.17	
15	QPSK	36	20	22.22	22.20	22.18	24
15	QPSK	36	39	22.21	22.18	22.15	
15	QPSK	75	0	22.25	22.23	22.12	
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.39	
15	16QAM	1	74	22.36	22.39	22.23	23
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	22
15	64QAM	1	37	21.29	21.32	21.32	
15	64QAM	1	74	21.29	21.30	21.02	
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.26	20.27	20.21	
15	64QAM	36	39	20.26	20.27	20.21	21
15	64QAM	75	0	20.27	20.25	20.20	
Channel Frequency (MHz)				807.5	831.5	844.5	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	
10	QPSK	25	12	22.13	22.03	22.05	
10	QPSK	25	25	22.08	22.06	22.03	24
10	QPSK	50	0	22.15	22.08	22.02	
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.39	22.36	22.34	
10	16QAM	1	49	22.33	22.37	22.21	
10	16QAM	25	0	21.15	21.05	21.04	23
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.20	21.21	
10	64QAM	1	25	21.15	21.27	21.25	22
10	64QAM	1	49	21.31	21.32	21.06	
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.96	20.10	20.08	
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	21
Channel Frequency (MHz)				807.5	831.5	844.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	
5	QPSK	12	7	22.18	22.10	22.02	
5	QPSK	12	13	22.08	22.03	22.00	24
5	QPSK	25	0	22.09	22.08	22.02	
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	
5	16QAM	1	24	22.33	22.38	22.19	
5	16QAM	12	0	21.20	21.08	21.05	23
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.20	22
5	64QAM	1	24	21.02	21.27	21.01	
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.19	19.46	
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	21
Channel Frequency (MHz)				807.5	831.5	844.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	
3	QPSK	8	4	22.16	22.08	22.00	
3	QPSK	8	7	22.10	22.02	22.02	24
3	QPSK	15	0	22.15	22.03	22.01	
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	
3	16QAM	1	14	22.29	22.32	22.16	
3	16QAM	8	0	21.23	21.11	21.03	23
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	22
3	64QAM	1	14	21.18	21.28	20.45	
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.09	19.41	21
Channel Frequency (MHz)				807.5	831.5	844.5	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	
1.4	QPSK	3	1	23.09	23.07	23.11	
1.4	QPSK	3	3	23.12	23.08	23.05	24
1.4	QPSK	6	0	22.16	22.21	22.13	
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	
1.4	16QAM	1	5	22.36	22.48	22.32	
1.4	16QAM	3	0	22.24	22.24	22.16	23
1.4	16QAM	3	1	22.20	22.30	22.18	
1.4	16QAM	3	3	22.21	22.26	22.14	
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.84	22
1.4	64QAM	1	5	21.31	21.36	20.91	
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.28	20.25	19.69	



Band 30_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 Frequency (MHz)				2310			25.7
10	QPSK	1	0	24.12			
10	QPSK	1	25	24.04			
10	QPSK	1	49	24.03			24.7
10	QPSK	25	0	23.10			
10	QPSK	25	12	23.16			
10	QPSK	25	25	23.18			24.7
10	QPSK	50	0	23.14			
10	16QAM	1	0	23.44			
10	16QAM	1	25	23.47			23.7
10	16QAM	1	49	23.35			
10	16QAM	25	0	22.11			
10	16QAM	25	12	22.15			23.7
10	16QAM	25	25	22.11			
10	16QAM	50	0	22.14			
10	64QAM	1	0	22.35			23.7
10	64QAM	1	25	21.90			
10	64QAM	1	49	21.70			
10	64QAM	25	0	21.07			22.7
10	64QAM	25	12	20.86			
10	64QAM	25	25	20.84			
10	64QAM	50	0	20.86			Tune-up limit (dBm)
Channel Frequency (MHz)				27685	27710	27735	
				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.15	21.93	21.72	22.7
5	64QAM	1	24	22.03	21.84	21.92	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.75	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	



Band 66_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				130072	130322	130572			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	23.85	23.81	23.70	25.5		
20	QPSK	1	49	23.73	23.68	23.60			
20	QPSK	1	99	23.66	23.62	23.52			
20	QPSK	50	0	22.89	22.78	22.67	24.5		
20	QPSK	50	24	22.93	22.83	22.72			
20	QPSK	50	50	22.87	22.79	22.67			
20	16QAM	1	0	23.22	23.16	23.09	24.5		
20	16QAM	1	49	23.09	23.01	22.95			
20	16QAM	1	99	23.03	22.92	22.73			
20	16QAM	50	0	21.86	21.81	21.75	23.5		
20	16QAM	50	24	21.93	21.79	21.73			
20	16QAM	50	50	21.88	21.80	21.71			
20	16QAM	100	0	21.90	21.75	21.69	23.5		
20	64QAM	1	0	22.02	21.98	21.88			
20	64QAM	1	49	21.95	21.89	21.83			
20	64QAM	1	99	21.91	21.84	21.74	22.5		
20	64QAM	50	0	20.91	20.87	20.76			
20	64QAM	50	24	20.95	20.83	20.72			
20	64QAM	50	50	20.90	20.83	20.74	22.5		
20	64QAM	100	0	20.94	20.78	20.69			
Channel				130047	130322	130597			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	23.80	23.73	23.70	25.5		
15	QPSK	1	37	23.76	23.71	23.59			
15	QPSK	1	74	23.72	23.65	23.57			
15	QPSK	36	0	22.94	22.80	22.70	24.5		
15	QPSK	36	20	22.95	22.79	22.76			
15	QPSK	36	39	22.88	22.82	22.69			
15	QPSK	75	0	22.92	22.77	22.75	24.5		
15	16QAM	1	0	23.11	23.08	23.00			
15	16QAM	1	37	23.03	22.99	22.95			
15	16QAM	1	74	23.07	22.93	22.77	23.5		
15	16QAM	36	0	21.93	21.77	21.69			
15	16QAM	36	20	21.94	21.82	21.73			
15	16QAM	36	39	21.87	21.83	21.69	23.5		
15	16QAM	75	0	21.91	21.79	21.74			
15	64QAM	1	0	21.92	21.94	21.88			
15	64QAM	1	37	22.01	22.01	21.84	23.5		
15	64QAM	1	74	21.97	21.84	21.80			
15	64QAM	36	0	20.97	20.84	20.77			
15	64QAM	36	20	20.96	20.85	20.82	22.5		
15	64QAM	36	39	20.89	20.86	20.73			
15	64QAM	75	0	20.91	20.79	20.75			
Channel				130022	130322	130622	Tune-up limit (dBm)		
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	23.84	23.75	23.62	25.5		
10	QPSK	1	25	23.72	23.65	23.52			
10	QPSK	1	49	23.67	23.62	23.52			
10	QPSK	25	0	22.91	22.77	22.65	24.5		
10	QPSK	25	12	22.95	22.75	22.84			
10	QPSK	25	25	22.85	22.81	22.65			
10	QPSK	50	0	22.88	22.75	22.61	24.5		
10	16QAM	1	0	23.22	23.14	22.98			
10	16QAM	1	25	23.13	23.07	22.93			
10	16QAM	1	49	23.06	23.07	22.91	23.5		
10	16QAM	25	0	21.92	21.75	21.62			
10	16QAM	25	12	21.90	21.78	21.63			
10	16QAM	25	25	21.82	21.78	21.67	23.5		
10	16QAM	50	0	21.90	21.76	21.62			
10	64QAM	1	0	22.10	21.97	21.83			
10	64QAM	1	25	22.05	22.01	21.85	23.5		
10	64QAM	1	49	21.99	21.90	21.78			
10	64QAM	25	0	20.93	20.79	20.66			
10	64QAM	25	12	20.93	20.82	20.66	22.5		
10	64QAM	25	25	20.90	20.83	20.70			
10	64QAM	50	0	20.91	20.77	20.64			
Channel				131967	130322	130647	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	23.82	23.89	23.59	25.5		
5	QPSK	1	12	23.84	23.78	23.62			
5	QPSK	1	24	23.76	23.71	23.53			
5	QPSK	12	0	22.96	22.76	22.70	24.5		
5	QPSK	12	7	22.93	22.78	22.74			
5	QPSK	12	13	22.87	22.82	22.70			
5	QPSK	25	0	22.88	22.79	22.67	24.5		
5	16QAM	1	0	23.17	23.03	22.93			
5	16QAM	1	12	23.19	23.07	22.94			
5	16QAM	1	24	23.09	23.05	22.89	23.5		
5	16QAM	12	0	21.96	21.85	21.72			
5	16QAM	12	7	21.95	21.86	21.75			
5	16QAM	12	13	21.93	21.83	21.69	23.5		
5	16QAM	25	0	21.90	21.78	21.69			
5	64QAM	1	0	22.09	21.99	21.93			
5	64QAM	1	12	22.08	21.99	21.86	23.5		
5	64QAM	1	24	22.07	21.95	21.79			
5	64QAM	12	0	20.97	20.83	20.80			
5	64QAM	12	7	21.01	20.85	20.80	22.5		
5	64QAM	12	13	20.96	20.87	20.78			
5	64QAM	25	0	20.95	20.79	20.71			
Channel				131967	130322	130647	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	23.81	23.88	23.60	25.5		
3	QPSK	1	8	23.84	23.81	23.66			
3	QPSK	1	14	23.79	23.73	23.56			
3	QPSK	8	0	22.91	22.78	22.70	24.5		
3	QPSK	8	4	22.94	22.89	22.74			
3	QPSK	8	7	22.92	22.82	22.69			
3	QPSK	15	0	22.92	22.79	22.71	24.5		
3	16QAM	1	0	23.18	23.05	22.94			
3	16QAM	1	8	23.23	23.14	22.98			
3	16QAM	1	14	23.13	23.08	22.94	23.5		
3	16QAM	8	0	21.96	21.88	21.78			
3	16QAM	8	4	22.01	21.96	21.77			
3	16QAM	8	7	21.99	21.90	21.77	23.5		
3	16QAM	15	0	21.96	21.83	21.76			
3	64QAM	1	0	22.13	21.95	21.87			
3	64QAM	1	8	22.16	22.11	21.93	23.5		
3	64QAM	1	14	22.10	22.02	21.86			
3	64QAM	8	0	20.99	20.83	20.77			
3	64QAM	8	4	21.02	20.95	20.78	22.5		
3	64QAM	8	7	20.99	20.90	20.76			
3	64QAM	15	0	20.99	20.81	20.74			
Channel				131976	130322	130656	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	23.73	23.68	23.51	25.5		
1.4	QPSK	1	3	23.79	23.70	23.59			
1.4	QPSK	1	5	23.71	23.65	23.52			
1.4	QPSK	3	0	23.78	23.69	23.57	24.5		
1.4	QPSK	3	1	23.82	23.76	23.58			
1.4	QPSK	3	2	23.79	23.72	23.52			
1.4	QPSK	6	0	22.85	22.79	22.59	24.5		
1.4	16QAM	1	0	23.08	23.01	22.82			
1.4	16QAM	1	3	23.16	23.08	22.95			
1.4	16QAM	1	5	23.06	23.01	22.89	24.5		
1.4	16QAM	3	0	22.87	22.78	22.66			
1.4	16QAM	3	1	22.94	22.85	22.71			
1.4	16QAM	3	2	22.83	22.79	22.61	23.5		
1.4	16QAM	6	0	21.95	21.83	21.71			
1.4	16QAM	6	1	22.01	21.96	21.78			
1.4	16QAM	1	3	22.09	21.97	21.85	23.5		
1.4	16QAM	1	5	21.98	21.91	21.78			
1.4	16QAM	3	0	22.00	21.88	21.76			
1.4	16QAM	3	1	22.04	21.96	21.80	23.5		
1.4	16QAM	3	2	21.92	21.82	21.73			
1.4	16QAM	6	0	20.98	20.77	20.65			



Band 71_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				679	683	686	25
Frequency (MHz)				13322	13332	13332	
20	QPSK	1	0	23.27	23.17	23.14	
20	QPSK	1	49	23.12	23.14	23.11	24
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	
20	QPSK	50	24	22.33	22.25	22.21	24
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	
20	16QAM	1	0	22.57	22.46	22.49	24
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	
20	16QAM	50	0	21.32	21.25	21.22	23
20	16QAM	50	24	21.34	21.20	21.14	
20	16QAM	50	50	21.31	21.22	21.17	
20	16QAM	100	0	21.29	21.16	21.22	23
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	
20	64QAM	1	99	21.28	21.28	21.23	22
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	
20	64QAM	50	50	20.32	20.20	20.20	22
20	64QAM	100	0	20.04	20.20	20.24	
Channel				133197	133257	133307	25
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	
15	QPSK	1	37	23.09	23.13	23.09	24
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	
15	QPSK	36	20	22.32	22.22	22.14	24
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	
15	16QAM	1	0	22.57	22.52	22.46	24
15	16QAM	1	37	22.44	22.52	22.45	
15	16QAM	1	74	22.39	22.47	22.33	
15	16QAM	36	0	21.31	21.28	21.19	23
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	
15	16QAM	75	0	21.31	21.21	21.13	23
15	64QAM	1	0	20.56	21.40	21.09	
15	64QAM	1	37	20.95	21.41	21.35	
15	64QAM	1	74	21.28	21.35	21.23	22
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	19.86	20.11	20.20	
15	64QAM	36	39	20.23	20.03	20.23	22
15	64QAM	75	0	20.05	20.22	20.14	
Channel				133172	133272	133422	25
Frequency (MHz)				669	679	693	
10	QPSK	1	0	23.13	23.04	23.05	
10	QPSK	1	25	23.04	23.03	23.04	24
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	
10	QPSK	25	12	22.15	22.10	22.00	24
10	QPSK	25	25	22.07	22.08	22.01	
10	QPSK	50	0	22.15	22.11	22.02	
10	16QAM	1	0	22.50	22.31	22.27	24
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	
10	16QAM	25	0	21.09	21.01	21.03	23
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	
10	16QAM	50	0	21.15	21.10	21.00	23
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	
10	64QAM	1	49	20.69	21.18	21.10	22
10	64QAM	25	0	19.03	20.05	19.96	
10	64QAM	25	12	19.15	20.15	19.96	
10	64QAM	25	25	19.47	19.86	19.90	22
10	64QAM	50	0	19.35	19.91	19.96	
Channel				133147	133247	133422	25
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	
5	QPSK	1	12	23.03	23.06	23.04	24
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	
5	QPSK	12	7	22.01	22.04	22.03	24
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	
5	16QAM	1	0	22.24	22.33	22.28	24
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	
5	16QAM	12	0	21.04	21.05	21.01	23
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	
5	16QAM	25	0	21.02	21.06	21.00	23
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	
5	64QAM	1	24	20.13	21.24	20.77	22
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	
5	64QAM	12	13	19.15	20.06	19.77	22
5	64QAM	25	0	19.09	20.08	19.72	



Band 2_Ant 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				1865	1890	1900	24.8
Frequency (MHz)				1865	1890	1900	
20	QPSK	1	0	23.40	23.43	23.51	24.7
20	QPSK	1	49	23.30	23.47	23.54	
20	QPSK	1	99	23.35	23.49	23.57	
20	QPSK	50	0	23.32	23.45	23.49	
20	QPSK	50	24	23.40	23.48	23.43	
20	QPSK	50	50	23.39	23.55	23.49	24.7
20	QPSK	100	0	23.42	23.45	23.11	
20	16QAM	1	0	23.59	23.70	23.70	
20	16QAM	1	49	23.57	23.74	23.31	
20	16QAM	1	99	23.51	23.78	23.49	
20	16QAM	50	0	22.33	22.45	22.54	23.7
20	16QAM	50	24	22.43	22.50	22.57	
20	16QAM	50	50	22.41	22.59	22.63	
20	16QAM	100	0	22.40	22.47	22.53	
20	64QAM	1	0	22.47	22.47	22.34	
20	64QAM	1	49	22.40	22.57	21.44	22.7
20	64QAM	1	99	22.04	22.56	21.57	
20	64QAM	50	0	21.34	21.45	20.72	
20	64QAM	50	24	21.41	21.53	20.61	
20	64QAM	50	50	21.14	21.54	20.70	
20	64QAM	100	0	21.29	21.30	20.65	Tune-up limit (dBm)
Channel				1867.5	18900	19125	
Frequency (MHz)				1867.5	1890	1902.5	24.8
15	QPSK	1	0	23.30	23.35	23.51	
15	QPSK	1	37	23.23	23.43	23.53	24.7
15	QPSK	1	74	23.33	23.46	23.52	
15	QPSK	36	0	23.31	23.45	23.39	
15	QPSK	36	20	23.38	23.40	23.43	
15	QPSK	36	39	23.32	23.50	23.48	
15	QPSK	75	0	23.36	23.39	23.09	24.7
15	16QAM	1	0	23.56	23.65	23.68	
15	16QAM	1	57	23.57	23.67	23.21	
15	16QAM	1	74	23.44	23.77	23.48	
15	16QAM	36	0	22.25	22.36	22.45	
15	16QAM	36	20	22.43	22.41	22.53	23.7
15	16QAM	36	39	22.31	22.59	22.53	
15	16QAM	75	0	22.37	22.41	22.51	
15	64QAM	1	0	22.43	22.37	22.31	
15	64QAM	1	37	22.40	22.52	21.41	
15	64QAM	1	74	22.01	22.47	21.55	22.7
15	64QAM	36	0	21.27	21.38	20.82	
15	64QAM	36	20	21.41	21.44	20.53	
15	64QAM	36	39	21.13	21.53	20.63	
15	64QAM	75	0	21.16	21.27	20.62	
Channel				1869.5	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1869.5	1890	1905	
10	QPSK	1	0	23.32	23.33	23.45	24.8
10	QPSK	1	25	23.25	23.38	23.45	
10	QPSK	1	49	23.30	23.48	23.51	
10	QPSK	25	0	23.24	23.40	23.40	
10	QPSK	25	12	23.30	23.46	23.41	
10	QPSK	25	25	23.32	23.54	23.48	24.7
10	QPSK	50	0	23.39	23.41	23.10	
10	16QAM	1	0	23.51	23.69	23.64	
10	16QAM	1	25	23.51	23.73	23.25	
10	16QAM	1	49	23.46	23.75	23.45	
10	16QAM	25	0	22.26	22.36	22.44	23.7
10	16QAM	25	12	22.36	22.50	22.53	
10	16QAM	25	25	22.41	22.54	22.59	
10	16QAM	50	0	22.34	22.45	22.47	
10	64QAM	1	0	22.43	22.45	22.27	
10	64QAM	1	25	22.30	22.47	21.39	22.7
10	64QAM	1	49	22.03	22.49	21.51	
10	64QAM	25	0	21.33	21.35	20.62	
10	64QAM	25	12	21.33	21.52	20.61	
10	64QAM	25	25	21.09	21.47	20.65	
10	64QAM	50	0	21.20	21.22	20.83	Tune-up limit (dBm)
Channel				1862.5	18900	19175	
Frequency (MHz)				1862.5	1890	1907.5	24.8
5	QPSK	1	0	23.34	23.36	23.43	
5	QPSK	1	12	23.28	23.43	23.53	24.7
5	QPSK	1	24	23.28	23.39	23.57	
5	QPSK	12	0	23.28	23.43	23.47	
5	QPSK	12	7	23.33	23.45	23.39	
5	QPSK	12	13	23.35	23.45	23.45	
5	QPSK	25	0	23.32	23.38	23.03	24.7
5	16QAM	1	0	23.54	23.68	23.62	
5	16QAM	1	12	23.49	23.72	23.28	
5	16QAM	1	24	23.47	23.70	23.39	
5	16QAM	12	0	22.25	22.37	22.44	
5	16QAM	12	7	22.40	22.45	22.47	23.7
5	16QAM	12	13	22.32	22.58	22.55	
5	16QAM	25	0	22.39	22.42	22.43	
5	64QAM	1	0	22.38	22.46	22.34	
5	64QAM	1	12	22.39	22.54	21.40	
5	64QAM	1	24	21.99	22.55	21.49	22.7
5	64QAM	12	0	21.25	21.35	20.70	
5	64QAM	12	7	21.37	21.46	20.51	
5	64QAM	12	13	21.07	21.44	20.70	
5	64QAM	25	0	21.27	21.28	20.46	
Channel				1861.5	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1861.5	1890	1908.5	
3	QPSK	1	0	23.33	23.33	23.47	24.8
3	QPSK	1	8	23.25	23.40	23.44	
3	QPSK	1	14	23.34	23.42	23.53	
3	QPSK	8	0	23.22	23.35	23.42	
3	QPSK	8	4	23.38	23.41	23.39	
3	QPSK	8	7	23.30	23.47	23.46	24.7
3	QPSK	15	0	23.39	23.35	23.08	
3	16QAM	1	0	23.50	23.60	23.64	
3	16QAM	1	8	23.54	23.72	23.26	
3	16QAM	1	14	23.51	23.71	23.46	
3	16QAM	8	0	22.28	22.44	22.54	23.7
3	16QAM	8	4	22.36	22.41	22.47	
3	16QAM	8	7	22.41	22.56	22.60	
3	16QAM	15	0	22.30	22.40	22.53	
3	64QAM	1	0	22.40	22.43	22.31	
3	64QAM	1	8	22.33	22.56	21.42	22.7
3	64QAM	1	14	22.00	22.55	21.54	
3	64QAM	8	0	21.32	21.36	20.63	
3	64QAM	8	4	21.32	21.45	20.52	
3	64QAM	8	7	21.07	21.54	20.66	
3	64QAM	15	0	21.25	21.30	20.61	Tune-up limit (dBm)
Channel				1860.7	18900	19193	
Frequency (MHz)				1860.7	1890	1909.3	24.8
1.4	QPSK	1	0	23.24	23.35	23.52	
1.4	QPSK	1	3	23.34	23.46	23.61	24.7
1.4	QPSK	1	5	23.26	23.45	23.58	
1.4	QPSK	3	0	23.29	23.38	23.57	
1.4	QPSK	3	1	23.38	23.51	23.63	
1.4	QPSK	3	3	23.31	23.46	23.61	
1.4	QPSK	6	0	23.26	23.44	23.47	24.7
1.4	16QAM	1	0	23.52	23.60	23.70	
1.4	16QAM	1	3	23.58	23.73	23.73	
1.4	16QAM	1	5	23.54	23.67	23.65	
1.4	16QAM	3	0	23.27	23.37	23.51	
1.4	16QAM	3	1	23.35	23.51	23.54	23.7
1.4	16QAM	3	3	23.26	23.43	23.48	
1.4	16QAM	6	0	22.32	22.50	22.62	
1.4	64QAM	1	0	22.46	22.54	21.74	
1.4	64QAM	1	3	22.51	22.66	21.77	
1.4	64QAM	1	5	22.42	22.63	21.69	23.7
1.4	64QAM	3	0	22.41	22.51	21.73	
1.4	64QAM	3	1	22.46	22.63	21.83	
1.4	64QAM	3	3	22.43	22.56	21.71	
1.4	64QAM	6	0	21.29	21.46	20.63	



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	1824.5	1845	
20	QPSK	1	0	23.05	23.03	23.09	24.8
20	QPSK	1	49	22.93	22.93	22.88	
20	QPSK	1	99	22.97	22.90	22.89	
20	QPSK	50	0	23.10	23.18	23.12	
20	QPSK	50	24	23.14	23.10	23.05	24.7
20	QPSK	50	50	23.07	23.07	23.02	
20	QPSK	100	0	23.12	23.10	23.03	
20	16QAM	1	0	23.39	23.40	23.45	
20	16QAM	1	49	23.29	23.31	23.26	24.7
20	16QAM	1	99	23.32	23.24	23.23	
20	16QAM	50	0	22.61	22.69	22.64	
20	16QAM	50	24	22.65	22.60	22.56	
20	16QAM	50	50	22.57	22.55	22.56	23.7
20	16QAM	100	0	22.61	22.61	22.51	
20	64QAM	1	0	21.81	22.78	22.30	
20	64QAM	1	49	22.66	22.46	22.58	
20	64QAM	1	99	22.62	22.29	22.62	23.7
20	64QAM	50	0	21.30	21.67	21.35	
20	64QAM	50	24	21.65	21.39	21.56	
20	64QAM	50	50	21.59	21.16	21.57	
20	64QAM	100	0	21.50	21.44	21.51	22.7
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.98	23.01	22.99	24.8
15	QPSK	1	37	22.88	22.85	22.86	
15	QPSK	1	74	22.93	22.87	22.83	
15	QPSK	36	0	23.01	23.08	23.10	
15	QPSK	36	20	23.09	23.08	23.05	24.7
15	QPSK	36	39	22.99	22.99	22.97	
15	QPSK	75	0	23.06	23.10	22.97	
15	16QAM	1	0	23.35	23.30	23.37	
15	16QAM	1	37	23.25	23.27	23.20	24.7
15	16QAM	1	74	23.28	23.24	23.16	
15	16QAM	36	0	22.52	22.63	22.55	
15	16QAM	36	20	22.59	22.55	22.51	
15	16QAM	36	39	22.54	22.56	22.49	23.7
15	16QAM	75	0	22.56	22.57	22.51	
15	64QAM	1	0	21.69	22.76	22.22	
15	64QAM	1	37	22.60	22.35	22.51	
15	64QAM	1	74	22.59	22.29	22.52	23.7
15	64QAM	36	0	21.30	21.61	21.30	
15	64QAM	36	20	21.63	21.36	21.47	
15	64QAM	36	39	21.53	21.13	21.48	
15	64QAM	75	0	21.50	21.41	21.46	22.7
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.97	23.01	23.07	24.8
10	QPSK	1	25	22.92	22.84	22.83	
10	QPSK	1	49	22.94	22.88	22.84	
10	QPSK	25	0	23.05	23.18	23.12	
10	QPSK	25	12	23.06	23.07	23.02	24.7
10	QPSK	25	25	23.07	23.07	22.94	
10	QPSK	50	0	23.07	23.04	22.95	
10	16QAM	1	0	23.29	23.33	23.37	
10	16QAM	1	25	23.29	23.24	23.22	24.7
10	16QAM	1	49	23.26	23.23	23.19	
10	16QAM	25	0	22.60	22.68	22.54	
10	16QAM	25	12	22.61	22.54	22.47	
10	16QAM	25	25	22.51	22.55	22.55	23.7
10	16QAM	50	0	22.54	22.58	22.42	
10	64QAM	1	0	21.91	22.75	22.27	
10	64QAM	1	25	22.60	22.43	22.48	
10	64QAM	1	49	22.59	22.29	22.61	23.7
10	64QAM	25	0	21.26	21.67	21.31	
10	64QAM	25	12	21.57	21.29	21.56	
10	64QAM	25	25	21.56	21.13	21.54	
10	64QAM	50	0	21.40	21.43	21.48	22.7
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.05	22.96	23.00	24.8
5	QPSK	1	12	22.90	22.84	22.83	
5	QPSK	1	24	22.93	22.85	22.86	
5	QPSK	12	0	23.04	23.13	23.04	
5	QPSK	12	7	23.09	23.08	23.03	24.7
5	QPSK	12	13	22.98	23.05	22.93	
5	QPSK	25	0	23.04	23.10	22.98	
5	16QAM	1	0	23.33	23.40	23.39	
5	16QAM	1	12	23.27	23.25	23.25	24.7
5	16QAM	1	24	23.32	23.18	23.13	
5	16QAM	12	0	22.54	22.63	22.63	
5	16QAM	12	7	22.60	22.50	22.47	
5	16QAM	12	13	22.56	22.54	22.53	23.7
5	16QAM	25	0	22.55	22.52	22.43	
5	64QAM	1	0	21.83	22.73	22.29	
5	64QAM	1	12	22.63	22.40	22.51	
5	64QAM	1	24	22.58	22.26	22.62	23.7
5	64QAM	12	0	21.30	21.58	21.25	
5	64QAM	12	7	21.64	21.32	21.51	
5	64QAM	12	13	21.52	21.06	21.49	
5	64QAM	25	0	21.45	21.35	21.45	22.7
Channel				19965	20175	20365	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.98	23.03	23.01	24.8
3	QPSK	1	8	22.88	22.84	22.80	
3	QPSK	1	14	22.96	22.87	22.87	
3	QPSK	8	0	23.09	23.09	23.04	
3	QPSK	8	4	23.10	23.08	22.95	24.7
3	QPSK	8	7	23.04	22.96	23.02	
3	QPSK	15	0	23.02	23.00	23.00	
3	16QAM	1	0	23.36	23.34	23.41	
3	16QAM	1	8	23.23	23.23	23.26	24.7
3	16QAM	1	14	23.24	23.15	23.19	
3	16QAM	8	0	22.58	22.62	22.60	
3	16QAM	8	4	22.58	22.54	22.52	
3	16QAM	8	7	22.57	22.49	22.55	23.7
3	16QAM	15	0	22.52	22.52	22.44	
3	64QAM	1	0	21.90	22.75	22.23	
3	64QAM	1	8	22.57	22.43	22.53	
3	64QAM	1	14	22.57	22.27	22.61	23.7
3	64QAM	8	0	21.21	21.67	21.29	
3	64QAM	8	4	21.58	21.30	21.50	
3	64QAM	8	7	21.54	21.16	21.54	
3	64QAM	15	0	21.47	21.34	21.43	22.7
Channel				19967	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.88	22.89	22.87	24.8
1.4	QPSK	1	3	22.95	23.02	22.96	
1.4	QPSK	1	5	22.91	22.94	22.89	
1.4	QPSK	3	0	22.96	22.92	22.94	
1.4	QPSK	3	1	22.99	23.03	22.98	24.7
1.4	QPSK	3	3	22.95	22.97	22.95	
1.4	QPSK	6	0	23.02	22.98	23.00	
1.4	16QAM	1	0	23.23	23.24	23.29	
1.4	16QAM	1	3	23.29	23.35	23.28	24.7
1.4	16QAM	1	5	23.23	23.28	23.23	
1.4	16QAM	3	0	22.98	23.05	23.00	
1.4	16QAM	3	1	23.04	23.11	23.06	
1.4	16QAM	3	3	23.00	23.11	23.00	23.7
1.4	64QAM	6	0	22.61	22.60	22.59	
1.4	64QAM	1	0	21.65	22.25	22.68	
1.4	64QAM	1	3	21.77	22.33	22.77	
1.4	64QAM	1	5	21.73	22.25	22.71	23.7
1.4	64QAM	3	0	21.69	22.31	22.64	
1.4	64QAM	3	1	21.78	22.37	22.70	
1.4	64QAM	3	3	21.75	22.26	22.64	
1.4	64QAM	6	0	20.64	21.21	21.53	22.7



Band 5_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				820	836.5	844	25.7
Frequency (MHz)				2420	2424	2427	
10	QPSK	1	0	24.20	24.24	24.27	24.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	24.7
10	QPSK	50	0	23.40	23.33	23.31	
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	
10	16QAM	25	0	22.30	22.32	22.32	23.7
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	23.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	22.7
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	25.7
5	QPSK	1	0	24.14	24.14	24.18	
5	QPSK	1	12	24.17	24.13	24.19	24.7
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	
5	QPSK	25	0	23.36	23.25	23.29	24.7
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	
5	16QAM	12	0	22.25	22.30	22.25	
5	16QAM	12	7	22.29	22.24	22.24	23.7
5	16QAM	12	13	22.35	22.35	22.26	
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	
5	64QAM	1	24	22.50	22.29	21.04	22.7
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	
Channel				8241.5	8255.5	8269.5	25.7
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	6	0	23.22	23.33	23.31	
3	QPSK	6	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	24.7
3	QPSK	15	0	23.36	23.26	23.24	
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.61	23.25	
3	16QAM	6	0	22.20	22.29	22.27	23.7
3	16QAM	8	4	22.35	22.30	22.23	
3	16QAM	8	7	22.38	22.29	22.28	
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	23.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	6	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	22.7
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	25.7
1.4	QPSK	1	0	24.16	24.22	24.26	
1.4	QPSK	1	3	24.14	24.18	24.23	25.7
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	
1.4	QPSK	6	0	23.26	23.26	23.25	24.7
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	
1.4	16QAM	3	0	23.51	23.58	23.71	
1.4	16QAM	3	1	23.62	23.60	23.63	23.7
1.4	16QAM	3	3	23.54	23.59	23.22	
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.26	
1.4	64QAM	1	3	22.33	22.38	22.30	
1.4	64QAM	1	5	22.35	22.29	22.23	23.7
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.26	



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	2534	2558	
20	QPSK	1	0	22.14	22.26	22.28	24.1
20	QPSK	1	49	22.25	22.35	22.32	
20	QPSK	1	99	22.32	22.48	22.41	
20	QPSK	50	0	22.27	22.39	22.39	
20	QPSK	50	24	22.43	22.46	22.51	24.1
20	QPSK	50	50	22.45	22.36	22.52	
20	QPSK	100	0	22.41	22.47	22.46	
20	16QAM	1	0	22.50	22.52	22.64	
20	16QAM	1	49	22.61	22.69	22.67	24.1
20	16QAM	1	99	22.64	22.78	22.68	
20	16QAM	50	0	22.28	22.41	22.39	
20	16QAM	50	24	22.43	22.48	22.48	
20	16QAM	50	50	22.46	22.56	22.50	23.7
20	16QAM	100	0	22.38	22.42	22.48	
20	64QAM	1	0	22.39	22.49	22.48	
20	64QAM	1	49	22.47	22.59	22.58	
20	64QAM	1	99	22.57	22.70	22.24	23.7
20	64QAM	50	0	22.28	21.85	21.81	
20	64QAM	50	24	22.41	21.90	21.94	
20	64QAM	50	50	22.42	21.99	21.94	
20	64QAM	100	0	22.38	21.91	21.92	22.7
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.05	22.27	22.27	24.1
15	QPSK	1	37	22.18	22.35	22.22	
15	QPSK	1	74	22.28	22.43	22.33	
15	QPSK	36	0	22.23	22.37	22.39	
15	QPSK	36	20	22.35	22.43	22.49	24.1
15	QPSK	36	39	22.35	22.51	22.42	
15	QPSK	75	0	22.37	22.34	22.46	
15	16QAM	1	0	22.48	22.53	22.62	
15	16QAM	1	37	22.58	22.61	22.65	24.1
15	16QAM	1	74	22.64	22.69	22.64	
15	16QAM	36	0	22.28	22.37	22.38	
15	16QAM	36	20	22.41	22.39	22.41	
15	16QAM	36	39	22.36	22.49	22.40	23.7
15	16QAM	75	0	22.34	22.37	22.38	
15	64QAM	1	0	22.31	22.42	22.46	
15	64QAM	1	37	22.43	22.52	22.55	
15	64QAM	1	74	22.53	22.66	22.14	23.7
15	64QAM	36	0	22.16	21.79	21.74	
15	64QAM	36	20	22.32	21.87	21.84	
15	64QAM	36	39	22.42	21.93	21.85	
15	64QAM	75	0	22.31	21.84	21.90	22.7
Channel				20800	21100	21400	
Frequency (MHz)				2506	2535	2565	
10	QPSK	1	0	22.08	22.23	22.20	24.1
10	QPSK	1	25	22.23	22.30	22.25	
10	QPSK	1	49	22.24	22.40	22.34	
10	QPSK	25	0	22.20	22.30	22.32	
10	QPSK	25	12	22.42	22.37	22.51	24.1
10	QPSK	25	25	22.37	22.47	22.43	
10	QPSK	50	0	22.41	22.35	22.44	
10	16QAM	1	0	22.46	22.60	22.57	
10	16QAM	1	25	22.51	22.61	22.64	24.1
10	16QAM	1	49	22.58	22.73	22.58	
10	16QAM	25	0	22.28	22.34	22.35	
10	16QAM	25	12	22.43	22.40	22.39	
10	16QAM	25	25	22.43	22.52	22.48	23.7
10	16QAM	50	0	22.31	22.37	22.43	
10	64QAM	1	0	22.30	22.41	22.38	
10	64QAM	1	25	22.39	22.57	22.48	
10	64QAM	1	49	22.54	22.68	22.21	23.7
10	64QAM	25	0	22.28	21.94	21.79	
10	64QAM	25	12	22.32	21.85	21.84	
10	64QAM	25	25	22.42	21.99	21.88	
10	64QAM	50	0	22.31	21.89	21.89	22.7
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.05	22.27	22.20	24.1
5	QPSK	1	12	22.16	22.31	22.28	
5	QPSK	1	24	22.22	22.46	22.38	
5	QPSK	12	0	22.17	22.39	22.39	
5	QPSK	12	7	22.40	22.38	22.44	24.1
5	QPSK	12	13	22.44	22.56	22.50	
5	QPSK	25	0	22.39	22.35	22.47	
5	16QAM	1	0	22.40	22.61	22.60	
5	16QAM	1	12	22.58	22.69	22.67	24.1
5	16QAM	1	24	22.60	22.71	22.58	
5	16QAM	12	0	22.23	22.31	22.37	
5	16QAM	12	7	22.42	22.44	22.45	
5	16QAM	12	13	22.40	22.54	22.49	23.7
5	16QAM	25	0	22.31	22.32	22.43	
5	64QAM	1	0	22.35	22.47	22.41	
5	64QAM	1	12	22.38	22.52	22.52	
5	64QAM	1	24	22.57	22.67	22.17	23.7
5	64QAM	12	0	22.20	21.80	21.71	
5	64QAM	12	7	22.37	21.80	21.78	
5	64QAM	12	13	22.35	21.94	21.89	
5	64QAM	25	0	22.37	21.84	21.91	22.7



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)				701.5	707.5	713.5	
10	QPSK	1	0	24.35	24.28	24.30	25.7
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.46	23.46	23.44	24.7
10	QPSK	50	0	23.51	23.43	23.47	
10	16QAM	1	0	23.74	23.65	23.73	
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.66	23.67	
10	16QAM	25	0	22.41	22.42	22.42	23.7
10	16QAM	25	12	22.50	22.44	22.48	
10	16QAM	25	25	22.47	22.49	22.41	
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.26	21.22	
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	25.7
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.46	23.46	23.36	24.7
5	QPSK	25	0	23.49	23.34	23.44	
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.66	
5	16QAM	1	24	23.69	23.59	23.61	
5	16QAM	12	0	22.38	22.42	22.33	23.7
5	16QAM	12	7	22.40	22.34	22.47	
5	16QAM	12	13	22.39	22.49	22.35	
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.25	21.17	
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				23005	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	25.7
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.36	23.44	23.40	24.7
3	QPSK	15	0	23.44	23.33	23.42	
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	
3	16QAM	8	0	22.40	22.39	22.33	23.7
3	16QAM	8	4	22.41	22.42	22.36	
3	16QAM	8	7	22.39	22.41	22.39	
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	25.7
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	24.7
1.4	QPSK	6	0	23.36	23.36	23.33	
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	
1.4	16QAM	3	0	23.67	23.65	23.71	23.7
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	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			Tune-up limit (dBm)
Frequency (MHz)				762			
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			
10	QPSK	25	12	22.85			24.2
10	QPSK	25	25	22.92			
10	QPSK	50	0	22.95			
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			24.2
10	16QAM	1	49	23.12			
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.89			
10	16QAM	25	25	21.90			23.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			
10	64QAM	1	49	22.07			23.2
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.93			
10	64QAM	25	25	20.92			
10	64QAM	50	0	20.97			22.2
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.90	23.86	
5	QPSK	12	0	22.74	22.83	22.79	
5	QPSK	12	7	22.83	22.78	22.77	24.2
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	24.2
5	16QAM	1	24	23.09	23.07	23.11	
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.93	21.86	21.91	
5	64QAM	1	0	21.90	21.89	21.90	
5	64QAM	1	12	21.97	21.99	21.97	
5	64QAM	1	24	22.04	22.04	22.04	23.2
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.89	20.92	
5	64QAM	12	13	20.91	20.88	20.86	
5	64QAM	25	0	20.88	20.87	20.96	22.2
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	



Band 14_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Turn-up limit (dBm)
Channel				23330			Turn-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			
10	QPSK	25	12	23.32			24.7
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			24.7
10	16QAM	1	49	23.60			
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			23.7
10	16QAM	25	25	22.32			
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.55			23.7
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.33			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	Turn-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	
5	QPSK	12	7	23.27	23.32	23.31	24.7
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	24.7
5	16QAM	1	24	23.59	23.57	23.51	
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	
5	64QAM	1	24	22.44	22.52	22.51	23.7
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	22.7



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	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.40	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.68	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.46	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	



Band 25_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1850	1880	1925	
20	QPSK	1	0	23.40	23.45	23.55	24.8
20	QPSK	1	49	23.38	23.44	23.61	
20	QPSK	1	99	23.42	23.50	23.62	
20	QPSK	50	0	23.37	23.45	23.60	
20	QPSK	50	24	23.45	23.52	23.70	24.7
20	QPSK	50	50	23.39	23.49	23.68	
20	QPSK	100	0	23.47	23.51	23.52	
20	16QAM	1	0	23.69	23.68	23.76	
20	16QAM	1	49	23.66	23.75	23.84	24.7
20	16QAM	1	99	23.59	23.74	23.13	
20	16QAM	50	0	22.40	22.47	22.61	
20	16QAM	50	24	22.45	22.55	22.71	
20	16QAM	50	50	22.41	22.52	22.68	23.7
20	16QAM	100	0	22.42	22.51	22.61	
20	64QAM	1	0	22.54	22.51	22.35	
20	64QAM	1	49	22.46	22.62	22.08	
20	64QAM	1	99	22.48	22.68	21.46	23.7
20	64QAM	50	0	21.41	21.49	21.08	
20	64QAM	50	24	21.51	21.58	21.17	
20	64QAM	50	50	21.39	21.52	20.94	
20	64QAM	100	0	21.44	21.54	20.76	22.7
Channel				26115	26340	26615	
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	23.37	23.42	23.54	24.8
15	QPSK	1	37	23.28	23.40	23.57	
15	QPSK	1	74	23.42	23.50	23.58	
15	QPSK	38	0	23.31	23.44	23.55	
15	QPSK	38	20	23.44	23.48	23.67	24.7
15	QPSK	38	39	23.35	23.43	23.58	
15	QPSK	75	0	23.47	23.49	23.51	
15	16QAM	1	0	23.66	23.60	23.69	
15	16QAM	1	37	23.58	23.74	23.62	24.7
15	16QAM	1	74	23.59	23.64	23.04	
15	16QAM	38	0	22.30	22.45	22.56	
15	16QAM	38	20	22.44	22.53	22.69	
15	16QAM	38	39	22.38	22.47	22.58	23.7
15	16QAM	75	0	22.35	22.47	22.55	
15	64QAM	1	0	22.53	22.49	22.33	
15	64QAM	1	37	22.41	22.53	22.07	
15	64QAM	1	74	22.38	22.65	21.45	23.7
15	64QAM	38	0	21.38	21.45	20.99	
15	64QAM	38	20	21.41	21.54	21.16	
15	64QAM	38	39	21.32	21.47	20.90	
15	64QAM	75	0	21.37	21.45	20.68	22.7
Channel				26090	26340	26640	
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	23.37	23.36	23.51	24.8
10	QPSK	1	25	23.33	23.38	23.52	
10	QPSK	1	49	23.35	23.44	23.57	
10	QPSK	25	0	23.27	23.35	23.57	
10	QPSK	25	12	23.45	23.43	23.66	24.7
10	QPSK	25	26	23.33	23.46	23.59	
10	QPSK	50	0	23.41	23.47	23.46	
10	16QAM	1	0	23.68	23.67	23.70	
10	16QAM	1	25	23.62	23.70	23.80	24.7
10	16QAM	1	49	23.51	23.65	23.13	
10	16QAM	25	0	22.38	22.43	22.52	
10	16QAM	25	12	22.35	22.55	22.64	
10	16QAM	25	26	22.38	22.51	22.65	23.7
10	16QAM	50	0	22.35	22.50	22.54	
10	64QAM	1	0	22.46	22.44	22.27	
10	64QAM	1	25	22.40	22.59	21.99	
10	64QAM	1	49	22.42	22.60	21.37	23.7
10	64QAM	25	0	21.36	21.46	21.06	
10	64QAM	25	12	21.48	21.51	21.10	
10	64QAM	25	25	21.36	21.47	20.94	
10	64QAM	50	0	21.41	21.51	20.66	22.7
Channel				26055	26340	26655	
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	23.38	23.35	23.53	24.8
5	QPSK	1	12	23.28	23.36	23.51	
5	QPSK	1	24	23.34	23.43	23.53	
5	QPSK	12	0	23.36	23.42	23.54	
5	QPSK	12	7	23.39	23.48	23.63	24.7
5	QPSK	12	13	23.37	23.41	23.68	
5	QPSK	25	0	23.42	23.50	23.44	
5	16QAM	1	0	23.64	23.64	23.73	
5	16QAM	1	12	23.65	23.75	23.77	24.7
5	16QAM	1	24	23.49	23.68	23.10	
5	16QAM	12	0	22.30	22.37	22.59	
5	16QAM	12	7	22.38	22.54	22.70	
5	16QAM	12	13	22.34	22.46	22.65	23.7
5	16QAM	25	0	22.39	22.43	22.58	
5	64QAM	1	0	22.50	22.42	22.36	
5	64QAM	1	12	22.43	22.59	22.07	
5	64QAM	1	24	22.41	22.59	21.40	23.7
5	64QAM	12	0	21.36	21.44	20.98	
5	64QAM	12	7	21.49	21.57	21.08	
5	64QAM	12	13	21.32	21.44	20.93	
5	64QAM	25	0	21.38	21.40	20.67	22.7
Channel				26055	26340	26675	
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	23.37	23.41	23.55	24.8
3	QPSK	1	8	23.37	23.40	23.58	
3	QPSK	1	14	23.33	23.49	23.54	
3	QPSK	8	0	23.36	23.37	23.58	
3	QPSK	8	4	23.39	23.52	23.64	24.7
3	QPSK	8	7	23.37	23.45	23.60	
3	QPSK	15	0	23.39	23.48	23.46	
3	16QAM	1	0	23.61	23.61	23.76	
3	16QAM	1	8	23.57	23.65	23.77	24.7
3	16QAM	1	14	23.55	23.72	23.11	
3	16QAM	8	0	22.39	22.45	22.53	
3	16QAM	8	4	22.44	22.46	22.64	
3	16QAM	8	7	22.32	22.48	22.60	23.7
3	16QAM	15	0	22.35	22.51	22.58	
3	64QAM	1	0	22.44	22.41	22.29	
3	64QAM	1	8	22.46	22.60	22.05	
3	64QAM	1	14	22.38	22.65	21.43	23.7
3	64QAM	8	0	21.36	21.42	20.98	
3	64QAM	8	4	21.50	21.49	21.13	
3	64QAM	8	7	21.29	21.47	20.94	
3	64QAM	15	0	21.42	21.48	20.70	22.7
Channel				26047	26340	26683	
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	23.34	23.38	23.52	24.8
1.4	QPSK	1	3	23.43	23.46	23.61	
1.4	QPSK	1	5	23.40	23.46	23.59	
1.4	QPSK	3	0	23.38	23.46	23.56	
1.4	QPSK	3	1	23.44	23.52	23.63	24.7
1.4	QPSK	3	3	23.42	23.49	23.61	
1.4	QPSK	6	0	23.37	23.42	23.05	
1.4	16QAM	1	0	23.53	23.59	23.23	
1.4	16QAM	1	3	23.64	23.72	23.31	24.7
1.4	16QAM	1	5	23.59	23.70	23.20	
1.4	16QAM	3	0	23.34	23.43	23.11	
1.4	16QAM	3	1	23.40	23.50	23.13	
1.4	16QAM	3	3	23.36	23.47	23.05	23.7
1.4	16QAM	6	0	22.45	22.50	22.21	
1.4	64QAM	1	0	22.47	22.47	21.35	
1.4	64QAM	1	3	22.58	22.67	21.40	
1.4	64QAM	1	5	22.53	22.62	21.33	23.7
1.4	64QAM	3	0	22.43	22.53	21.36	
1.4	64QAM	3	1	22.49	22.59	21.46	
1.4	64QAM	3	3	22.51	22.57	21.33	
1.4	64QAM	6	0	21.41	21.47	20.27	22.7



Band 26_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				26705	26865	26965			
Frequency (MHz)				831.5	831.5	841.5			
15	QPSK	1	0	24.23	24.12	24.14	25.7		
15	QPSK	1	37	24.15	24.13	24.09			
15	QPSK	1	74	24.18	24.13	23.98			
15	QPSK	36	0	23.31	23.25	23.24			
15	QPSK	36	20	23.34	23.29	23.20	24.7		
15	QPSK	36	39	23.30	23.30	23.25			
15	QPSK	75	0	23.34	23.29	23.20			
15	16QAM	1	0	23.58	23.46	23.45			
15	16QAM	1	37	23.49	23.44	23.44	24.7		
15	16QAM	1	74	23.46	23.43	23.30			
15	16QAM	36	0	22.33	22.26	22.24			
15	16QAM	36	20	22.34	22.31	22.19			
15	16QAM	36	39	22.31	22.25	22.18	23.7		
15	16QAM	75	0	22.36	22.31	22.23			
15	64QAM	1	0	22.43	22.31	22.31			
15	64QAM	1	37	22.43	22.39	22.34			
15	64QAM	1	74	22.36	22.34	21.62	23.7		
15	64QAM	36	0	21.35	21.31	21.30			
15	64QAM	36	20	21.41	21.33	21.23			
15	64QAM	36	39	21.36	21.30	21.29			
15	64QAM	75	0	21.37	21.31	21.24	22.7		
Channel				26740	26865	26990			
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	24.18	24.06	24.14	25.7		
10	QPSK	1	25	24.15	24.06	23.99			
10	QPSK	1	49	24.13	24.13	23.98			
10	QPSK	25	0	23.24	23.17	23.17			
10	QPSK	25	12	23.31	23.29	23.11	24.7		
10	QPSK	25	25	23.20	23.26	23.25			
10	QPSK	50	0	23.26	23.28	23.14			
10	16QAM	1	0	23.52	23.39	23.40			
10	16QAM	1	25	23.49	23.37	23.35	24.7		
10	16QAM	1	49	23.46	23.41	23.27			
10	16QAM	25	0	22.28	22.24	22.24			
10	16QAM	25	12	22.27	22.21	22.09			
10	16QAM	25	25	22.30	22.16	22.08	23.7		
10	16QAM	50	0	22.26	22.24	22.15			
10	64QAM	1	0	22.37	22.25	22.22			
10	64QAM	1	25	22.33	22.35	22.24			
10	64QAM	1	49	22.34	22.28	21.54	23.7		
10	64QAM	25	0	21.31	21.28	21.28			
10	64QAM	25	12	21.37	21.29	21.22			
10	64QAM	25	25	21.28	21.29	21.22			
10	64QAM	50	0	21.27	21.27	21.21	22.7		
Channel				26715	26865	27015			
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	0	24.14	24.10	24.05	25.7		
5	QPSK	1	12	24.05	24.05	24.08			
5	QPSK	1	24	24.12	24.11	23.91			
5	QPSK	12	0	23.21	23.23	23.15			
5	QPSK	12	7	23.30	23.27	23.19	24.7		
5	QPSK	12	13	23.25	23.27	23.21			
5	QPSK	25	0	23.32	23.27	23.17			
5	16QAM	1	0	23.53	23.40	23.43			
5	16QAM	1	12	23.46	23.35	23.44	24.7		
5	16QAM	1	24	23.44	23.33	23.27			
5	16QAM	12	0	22.29	22.18	22.16			
5	16QAM	12	7	22.31	22.28	22.17			
5	16QAM	12	13	22.30	22.23	22.16	23.7		
5	16QAM	25	0	22.33	22.24	22.19			
5	64QAM	1	0	22.40	22.21	22.25			
5	64QAM	1	12	22.35	22.32	22.30			
5	64QAM	1	24	22.32	22.34	21.52	23.7		
5	64QAM	12	0	21.27	21.30	21.26			
5	64QAM	12	7	21.33	21.32	21.14			
5	64QAM	12	13	21.34	21.24	21.25			
5	64QAM	25	0	21.31	21.31	21.24	22.7		
Channel				26705	26865	27025			
Frequency (MHz)				815.5	831.5	847.5			
3	QPSK	1	0	24.19	24.10	24.14	25.7		
3	QPSK	1	8	24.05	24.08	24.08			
3	QPSK	1	14	24.15	24.03	23.97			
3	QPSK	8	0	23.21	23.23	23.17			
3	QPSK	8	4	23.26	23.19	23.15	24.7		
3	QPSK	8	7	23.24	23.23	23.22			
3	QPSK	15	0	23.31	23.22	23.20			
3	16QAM	1	0	23.56	23.45	23.39			
3	16QAM	1	8	23.43	23.39	23.43	24.7		
3	16QAM	1	14	23.37	23.36	23.26			
3	16QAM	8	0	22.29	22.16	22.15			
3	16QAM	8	4	22.25	22.22	22.09			
3	16QAM	8	7	22.21	22.22	22.14	23.7		
3	16QAM	15	0	22.28	22.29	22.23			
3	64QAM	1	0	22.35	22.21	22.31			
3	64QAM	1	8	22.35	22.37	22.24			
3	64QAM	1	14	22.32	22.31	21.61	23.7		
3	64QAM	8	0	21.31	21.31	21.22			
3	64QAM	8	4	21.38	21.25	21.21			
3	64QAM	8	7	21.35	21.24	21.19			
3	64QAM	15	0	21.33	21.21	21.24	22.7		
Channel				26897	26865	27033			
Frequency (MHz)				814.7	831.5	848.3			
1.4	QPSK	1	0	24.15	24.03	24.06	25.7		
1.4	QPSK	1	3	23.98	24.04	23.99			
1.4	QPSK	1	5	24.14	24.02	23.96			
1.4	QPSK	3	0	24.15	24.03	24.12			
1.4	QPSK	3	1	24.05	24.05	24.08	24.7		
1.4	QPSK	3	3	24.07	23.93	23.94			
1.4	QPSK	6	0	23.15	23.20	23.12			
1.4	16QAM	1	0	23.17	23.16	23.05			
1.4	16QAM	1	3	23.16	23.17	23.16	24.7		
1.4	16QAM	1	5	23.23	23.19	23.10			
1.4	16QAM	3	0	23.46	23.36	23.30			
1.4	16QAM	3	1	23.39	23.30	23.35			
1.4	16QAM	3	3	23.33	23.26	23.26	23.7		
1.4	16QAM	6	0	22.20	22.14	22.10			
1.4	64QAM	1	0	22.18	22.22	22.05			
1.4	64QAM	1	3	22.16	22.20	22.04			
1.4	64QAM	1	5	22.25	22.29	22.20	23.7		
1.4	64QAM	3	0	22.28	22.11	22.27			
1.4	64QAM	3	1	22.28	22.37	22.24			
1.4	64QAM	3	3	22.31	22.31	21.51			
1.4	64QAM	6	0	21.26	21.25	21.15	22.7		



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			Tune-up limit (dbm)
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.31			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.25			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			23.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.39			
10	16QAM	25	25	21.31			22.2
10	16QAM	50	0	21.28			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit (dbm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.49	22.56	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.38	21.47	
5	64QAM	1	12	21.42	21.46	21.47	22.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	



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	1744	1770	
20	QPSK	1	0	23.13	23.11	23.02	24.8
20	QPSK	1	49	23.06	23.00	22.90	
20	QPSK	1	99	22.96	22.91	22.82	
20	QPSK	50	0	23.19	23.12	23.00	
20	QPSK	50	24	23.18	23.08	22.97	24.7
20	QPSK	50	50	23.16	23.10	22.96	
20	QPSK	100	0	23.18	23.05	22.97	
20	16QAM	1	0	23.47	23.45	23.37	
20	16QAM	1	49	23.42	23.35	23.23	24.7
20	16QAM	1	99	23.32	23.26	23.09	
20	16QAM	50	0	22.63	22.61	22.52	
20	16QAM	50	24	22.73	22.60	22.50	23.7
20	16QAM	50	50	22.65	22.58	22.50	
20	16QAM	100	0	22.67	22.54	22.46	
20	64QAM	1	0	22.64	22.83	22.73	
20	64QAM	1	49	22.81	22.75	22.35	23.7
20	64QAM	1	99	22.77	22.69	22.41	
20	64QAM	50	0	21.55	21.65	21.32	
20	64QAM	50	24	21.73	21.61	21.36	22.7
20	64QAM	50	50	21.66	21.62	21.49	
20	64QAM	100	0	21.72	21.56	21.47	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.05	23.04	22.95	24.8
15	QPSK	1	37	23.02	22.91	22.82	
15	QPSK	1	74	22.86	22.85	22.81	
15	QPSK	36	0	23.12	23.11	22.95	
15	QPSK	36	20	23.12	23.00	22.91	24.7
15	QPSK	36	39	23.11	23.10	22.92	
15	QPSK	75	0	23.13	23.03	22.95	
15	16QAM	1	0	23.41	23.35	23.28	
15	16QAM	1	37	23.41	23.29	23.13	24.7
15	16QAM	1	74	23.28	23.17	23.05	
15	16QAM	36	0	22.62	22.54	22.48	
15	16QAM	36	20	22.69	22.59	22.40	23.7
15	16QAM	36	39	22.64	22.56	22.40	
15	16QAM	75	0	22.60	22.44	22.37	
15	64QAM	1	0	22.63	22.75	22.66	23.7
15	64QAM	1	37	22.76	22.71	22.34	
15	64QAM	1	74	22.68	22.64	22.34	
15	64QAM	36	0	21.57	21.57	21.44	
15	64QAM	36	20	21.68	21.54	21.38	22.7
15	64QAM	36	39	21.59	21.58	21.46	
15	64QAM	75	0	21.65	21.45	21.38	
Channel				132022	132322	132522	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.03	23.03	23.02	24.8
10	QPSK	1	25	23.04	22.93	22.87	
10	QPSK	1	49	22.94	22.85	22.80	
10	QPSK	25	0	23.09	23.06	22.92	
10	QPSK	25	12	23.18	23.03	22.97	24.7
10	QPSK	25	25	23.10	23.06	22.94	
10	QPSK	50	0	23.16	23.01	22.88	
10	16QAM	1	0	23.41	23.39	23.32	
10	16QAM	1	25	23.39	23.34	23.18	24.7
10	16QAM	1	49	23.31	23.22	23.04	
10	16QAM	25	0	22.63	22.56	22.45	
10	16QAM	25	12	22.73	22.58	22.42	23.7
10	16QAM	25	25	22.65	22.51	22.41	
10	16QAM	50	0	22.66	22.53	22.39	
10	64QAM	1	0	22.62	22.79	22.64	23.7
10	64QAM	1	25	22.76	22.70	22.34	
10	64QAM	1	49	22.76	22.67	22.41	
10	64QAM	25	0	21.58	21.56	21.46	
10	64QAM	25	12	21.68	21.54	21.32	22.7
10	64QAM	25	25	21.56	21.58	21.39	
10	64QAM	50	0	21.66	21.55	21.41	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.13	23.11	22.92	24.8
5	QPSK	1	12	22.99	22.96	22.82	
5	QPSK	1	24	22.83	22.90	22.79	
5	QPSK	12	0	23.12	23.04	22.94	
5	QPSK	12	7	23.13	23.01	22.87	24.7
5	QPSK	12	13	23.09	23.03	22.97	
5	QPSK	25	0	23.12	23.02	22.94	
5	16QAM	1	0	23.47	23.45	23.35	
5	16QAM	1	12	23.36	23.30	23.16	24.7
5	16QAM	1	24	23.30	23.18	22.99	
5	16QAM	12	0	22.57	22.55	22.45	
5	16QAM	12	7	22.64	22.50	22.40	23.7
5	16QAM	12	13	22.65	22.53	22.42	
5	16QAM	25	0	22.63	22.48	22.39	
5	64QAM	1	0	22.62	22.74	22.72	23.7
5	64QAM	1	12	22.76	22.73	22.32	
5	64QAM	1	24	22.77	22.62	22.31	
5	64QAM	12	0	21.65	21.60	21.42	
5	64QAM	12	7	21.63	21.51	21.33	22.7
5	64QAM	12	13	21.59	21.54	21.39	
5	64QAM	25	0	21.72	21.56	21.47	
Channel				131967	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1773.5	
3	QPSK	1	0	23.05	23.11	22.96	24.8
3	QPSK	1	8	23.04	22.94	22.83	
3	QPSK	1	14	22.95	22.87	22.76	
3	QPSK	8	0	23.17	23.10	22.97	
3	QPSK	8	4	23.15	23.07	22.82	24.7
3	QPSK	8	7	23.16	23.07	22.90	
3	QPSK	15	0	23.16	23.04	22.96	
3	16QAM	1	0	23.39	23.39	23.32	
3	16QAM	1	8	23.40	23.29	23.17	24.7
3	16QAM	1	14	23.23	23.20	23.05	
3	16QAM	8	0	22.63	22.59	22.42	
3	16QAM	8	4	22.68	22.56	22.43	23.7
3	16QAM	8	7	22.61	22.48	22.41	
3	16QAM	15	0	22.59	22.46	22.37	
3	64QAM	1	0	22.64	22.73	22.71	23.7
3	64QAM	1	8	22.73	22.72	22.28	
3	64QAM	1	14	22.68	22.59	22.40	
3	64QAM	8	0	21.60	21.61	21.51	
3	64QAM	8	4	21.72	21.59	21.39	22.7
3	64QAM	8	7	21.64	21.54	21.45	
3	64QAM	15	0	21.71	21.56	21.41	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.98	22.96	22.83	24.8
1.4	QPSK	1	3	23.05	23.01	22.86	
1.4	QPSK	1	5	22.98	22.92	22.79	
1.4	QPSK	3	0	23.02	22.99	22.87	
1.4	QPSK	3	1	23.08	23.04	22.91	24.7
1.4	QPSK	3	3	23.02	22.98	22.86	
1.4	QPSK	6	0	23.11	23.04	22.93	
1.4	16QAM	1	0	23.33	23.28	23.12	
1.4	16QAM	1	3	23.37	23.32	23.23	24.7
1.4	16QAM	1	5	23.30	23.27	23.14	
1.4	16QAM	3	0	23.10	23.07	22.97	
1.4	16QAM	3	1	23.16	23.13	23.01	
1.4	16QAM	3	3	23.10	23.04	22.93	23.7
1.4	16QAM	6	0	22.63	22.58	22.47	
1.4	64QAM	1	0	22.62	22.73	22.62	
1.4	64QAM	1	3	22.57	22.60	22.66	
1.4	64QAM	1	5	22.54	22.72	22.59	23.7
1.4	64QAM	3	0	22.51	22.69	22.56	
1.4	64QAM	3	1	22.60	22.75	22.60	
1.4	64QAM	3	3	22.56	22.69	22.57	
1.4	64QAM	6	0	21.42	21.54	21.43	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	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	
20	QPSK	50	24	23.40	23.32	23.31	24.7
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	24.7
20	16QAM	1	99	23.60	23.53	23.62	
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.80	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	
20	64QAM	1	99	22.47	22.50	22.44	23.7
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.33	21.34	
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.16	21.34	21.41	22.7
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	Tune-up limit (dBm)
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	
15	QPSK	36	20	23.39	23.35	23.28	24.7
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	24.7
15	16QAM	1	74	23.58	23.60	23.48	
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.56	22.15	22.26	
15	64QAM	1	37	21.81	22.58	22.48	
15	64QAM	1	74	22.45	22.55	22.42	23.7
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	22.7
Channel				133172	133272	133372	
Frequency (MHz)				668	678	693	Tune-up limit (dBm)
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	
10	QPSK	25	12	23.33	23.30	23.26	24.7
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	24.7
10	16QAM	1	49	23.52	23.58	23.47	
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	
10	64QAM	1	49	22.43	22.49	22.32	23.7
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.68	21.32	21.25	
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	22.7
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	Tune-up limit (dBm)
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	
5	QPSK	12	7	23.39	23.28	23.26	24.7
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	24.7
5	16QAM	1	24	23.49	23.51	23.38	
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	
5	64QAM	1	24	22.42	22.49	22.33	23.7
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	22.7
Channel				133122	133222	133322	
Frequency (MHz)				663	673	683	Tune-up limit (dBm)



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				1860	1890	1900	
Frequency (MHz)				1860	1890	1900	
20	QPSK	1	0	23.51	23.52	23.54	25.5
20	QPSK	1	49	23.50	23.54	23.54	
20	QPSK	1	99	23.55	23.64	23.65	
20	QPSK	50	0	22.52	22.61	22.62	
20	QPSK	50	24	22.57	22.64	22.76	24.5
20	QPSK	50	50	22.55	22.71	22.76	
20	QPSK	100	0	22.57	22.60	22.65	
20	16QAM	1	0	22.80	22.85	22.86	
20	16QAM	1	49	22.73	22.85	22.85	24.5
20	16QAM	1	99	22.72	22.87	22.84	
20	16QAM	50	0	21.50	21.61	21.65	
20	16QAM	50	24	21.50	21.65	21.77	
20	16QAM	50	50	21.58	21.71	21.77	23.5
20	16QAM	100	0	21.56	21.59	21.66	
20	64QAM	1	0	21.63	21.65	21.78	
20	64QAM	1	49	21.61	21.77	21.21	
20	64QAM	1	99	21.65	21.79	21.52	22.5
20	64QAM	50	0	20.52	20.65	20.54	
20	64QAM	50	24	20.60	20.66	20.33	
20	64QAM	50	50	20.60	20.73	20.49	
20	64QAM	100	0	20.56	20.64	20.49	
Channel				1867.5	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1867.5	1890	1902.5	
15	QPSK	1	0	23.51	23.54	23.62	25.5
15	QPSK	1	37	23.50	23.59	23.61	
15	QPSK	1	74	23.53	23.53	23.59	
15	QPSK	36	0	22.54	22.63	22.64	
15	QPSK	36	20	22.59	22.66	22.76	24.5
15	QPSK	36	39	22.57	22.71	22.78	
15	QPSK	75	0	22.55	22.62	22.68	
15	16QAM	1	0	22.72	22.81	22.96	
15	16QAM	1	37	22.76	22.89	22.90	24.5
15	16QAM	1	74	22.73	22.85	22.86	
15	16QAM	36	0	21.47	21.64	21.64	
15	16QAM	36	20	21.57	21.66	21.77	
15	16QAM	36	39	21.54	21.73	21.78	23.5
15	16QAM	75	0	21.56	21.64	21.68	
15	64QAM	1	0	21.63	21.79	21.81	
15	64QAM	1	37	21.71	21.84	21.07	
15	64QAM	1	74	21.64	21.73	21.54	22.5
15	64QAM	36	0	20.51	20.67	20.28	
15	64QAM	36	20	20.63	20.69	20.42	
15	64QAM	36	39	20.64	20.78	20.63	
15	64QAM	75	0	20.58	20.67	20.41	
Channel				1865.0	1890.0	1915.0	Tune-up limit (dBm)
Frequency (MHz)				1865	1890	1905	
10	QPSK	1	0	23.52	23.56	23.59	25.5
10	QPSK	1	25	23.51	23.55	23.56	
10	QPSK	1	49	23.50	23.55	23.59	
10	QPSK	25	0	22.52	22.62	22.67	
10	QPSK	25	12	22.53	22.64	22.70	24.5
10	QPSK	25	25	22.57	22.73	22.80	
10	QPSK	50	0	22.54	22.65	22.69	
10	16QAM	1	0	22.76	22.89	22.97	
10	16QAM	1	25	22.73	22.98	23.00	24.5
10	16QAM	1	49	22.74	22.89	22.97	
10	16QAM	25	0	21.49	21.61	21.65	
10	16QAM	25	12	21.53	21.65	21.72	
10	16QAM	25	25	21.57	21.72	21.77	23.5
10	16QAM	50	0	21.55	21.62	21.68	
10	64QAM	1	0	21.64	21.80	21.37	
10	64QAM	1	25	21.65	21.86	21.60	
10	64QAM	1	49	21.68	21.82	21.80	22.5
10	64QAM	25	0	20.55	20.66	20.34	
10	64QAM	25	12	20.59	20.67	20.60	
10	64QAM	25	25	20.55	20.75	20.71	
10	64QAM	50	0	20.54	20.69	20.43	
Channel				1862.5	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1890	1907.5	
5	QPSK	1	0	23.51	23.55	23.59	25.5
5	QPSK	1	12	23.52	23.60	23.62	
5	QPSK	1	24	23.53	23.62	23.64	
5	QPSK	12	0	22.51	22.60	22.72	
5	QPSK	12	7	22.52	22.73	22.79	24.5
5	QPSK	12	13	22.56	22.72	22.74	
5	QPSK	25	0	22.53	22.63	22.70	
5	16QAM	1	0	22.74	22.82	22.91	
5	16QAM	1	12	22.79	22.91	22.98	24.5
5	16QAM	1	24	22.78	22.93	22.98	
5	16QAM	12	0	21.54	21.68	21.76	
5	16QAM	12	7	21.60	21.73	21.76	
5	16QAM	12	13	21.55	21.75	21.77	23.5
5	16QAM	25	0	21.54	21.63	21.74	
5	64QAM	1	0	21.74	21.79	21.72	
5	64QAM	1	12	21.67	21.87	21.86	
5	64QAM	1	24	21.67	21.87	21.90	22.5
5	64QAM	12	0	20.58	20.69	20.73	
5	64QAM	12	7	20.64	20.75	20.83	
5	64QAM	12	13	20.58	20.76	20.81	
5	64QAM	25	0	20.56	20.65	20.67	
Channel				1861.5	1890.0	19165	Tune-up limit (dBm)
Frequency (MHz)				1861.5	1890	1908.5	
3	QPSK	1	0	23.50	23.54	23.62	25.5
3	QPSK	1	8	23.50	23.61	23.62	
3	QPSK	1	14	23.52	23.63	23.60	
3	QPSK	8	0	22.57	22.64	22.74	
3	QPSK	8	4	22.58	22.73	22.77	24.5
3	QPSK	8	7	22.55	22.71	22.74	
3	QPSK	15	0	22.57	22.64	22.78	
3	16QAM	1	0	22.78	22.85	22.90	
3	16QAM	1	8	22.85	23.01	23.07	24.5
3	16QAM	1	14	22.77	22.98	23.01	
3	16QAM	8	0	21.61	21.73	21.84	
3	16QAM	8	4	21.63	21.79	21.82	
3	16QAM	8	7	21.64	21.80	21.85	23.5
3	16QAM	15	0	21.61	21.70	21.82	
3	64QAM	1	0	21.69	21.79	21.84	
3	64QAM	1	8	21.77	21.96	21.98	
3	64QAM	1	14	21.73	21.89	21.93	22.5
3	64QAM	8	0	20.63	20.72	20.81	
3	64QAM	8	4	20.66	20.81	20.84	
3	64QAM	8	7	20.62	20.78	20.82	
3	64QAM	15	0	20.59	20.69	20.76	
Channel				1860.7	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1860.7	1890	1909.3	
1.4	QPSK	1	0	23.54	23.52	23.54	25.5
1.4	QPSK	1	3	23.51	23.58	23.61	
1.4	QPSK	1	5	23.52	23.56	23.58	
1.4	QPSK	3	0	23.50	23.53	23.59	
1.4	QPSK	3	1	23.55	23.60	23.64	24.5
1.4	QPSK	3	3	23.56	23.57	23.58	
1.4	QPSK	6	0	22.51	22.54	22.53	
1.4	16QAM	1	0	22.74	22.76	22.89	
1.4	16QAM	1	3	22.78	22.92	22.92	24.5
1.4	16QAM	1	5	22.72	22.87	22.87	
1.4	16QAM	3	0	22.52	22.59	22.66	
1.4	16QAM	3	1	22.55	22.69	22.67	
1.4	16QAM	3	3	22.51	22.65	22.61	23.5
1.4	16QAM	6	0	21.58	21.72	21.76	
1.4	64QAM	1	0	21.65	21.71	21.77	
1.4	64QAM	1	3	21.68	21.85	21.80	
1.4	64QAM	1	5	21.64	21.81	21.74	23.5
1.4	64QAM	3	0	21.60	21.71	21.74	
1.4	64QAM	3	1	21.66	21.81	21.82	
1.4	64QAM	3	3	21.57	21.78	21.75	
1.4	64QAM	6	0	20.52	20.67	20.67	22.5



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	1824.5	1845	
20	QPSK	1	0	23.74	23.74	23.77	25.5
20	QPSK	1	49	23.58	23.60	23.58	
20	QPSK	1	99	23.62	23.58	23.53	
20	QPSK	50	0	22.78	22.82	22.80	
20	QPSK	50	24	22.82	22.75	22.71	24.5
20	QPSK	50	50	22.73	22.72	22.71	
20	QPSK	100	0	22.77	22.78	22.69	
20	16QAM	1	0	23.14	23.08	23.11	
20	16QAM	1	49	22.94	22.98	22.95	24.5
20	16QAM	1	99	22.96	22.90	22.88	
20	16QAM	50	0	21.79	21.84	21.81	
20	16QAM	50	24	21.82	21.75	21.73	
20	16QAM	50	50	21.73	21.73	21.71	23.5
20	16QAM	100	0	21.79	21.78	21.74	
20	64QAM	1	0	21.57	21.95	21.98	
20	64QAM	1	49	21.85	21.83	21.80	
20	64QAM	1	99	21.91	21.78	21.76	22.5
20	64QAM	50	0	20.77	20.87	20.83	
20	64QAM	50	24	20.84	20.78	20.76	
20	64QAM	50	50	20.77	20.76	20.75	
20	64QAM	100	0	20.84	20.78	20.74	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.73	23.76	23.72	25.5
15	QPSK	1	37	23.62	23.66	23.61	
15	QPSK	1	74	23.62	23.63	23.61	
15	QPSK	36	0	22.78	22.84	22.80	
15	QPSK	36	20	22.81	22.78	22.80	24.5
15	QPSK	36	39	22.77	22.75	22.73	
15	QPSK	75	0	22.81	22.78	22.73	
15	16QAM	1	0	23.10	23.16	23.10	
15	16QAM	1	37	22.89	22.95	22.90	24.5
15	16QAM	1	74	22.92	22.93	22.94	
15	16QAM	36	0	21.79	21.83	21.79	
15	16QAM	36	20	21.80	21.75	21.80	
15	16QAM	36	39	21.76	21.76	21.75	23.5
15	16QAM	75	0	21.81	21.77	21.73	
15	64QAM	1	0	21.54	22.01	21.98	
15	64QAM	1	37	21.83	21.92	21.92	
15	64QAM	1	74	21.82	21.85	21.81	22.5
15	64QAM	36	0	20.53	20.87	20.85	
15	64QAM	36	20	20.84	20.85	20.85	
15	64QAM	36	39	20.81	20.86	20.79	
15	64QAM	75	0	20.82	20.79	20.73	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.67	23.75	23.67	25.5
10	QPSK	1	25	23.62	23.68	23.65	
10	QPSK	1	49	23.67	23.69	23.66	
10	QPSK	25	0	22.81	22.77	22.74	
10	QPSK	25	12	22.82	22.80	22.74	24.5
10	QPSK	25	25	22.81	22.84	22.79	
10	QPSK	50	0	22.81	22.79	22.74	
10	16QAM	1	0	23.05	23.08	23.06	
10	16QAM	1	25	23.07	23.09	23.11	24.5
10	16QAM	1	49	23.01	23.10	23.04	
10	16QAM	25	0	21.79	21.79	21.72	
10	16QAM	25	12	21.83	21.82	21.75	
10	16QAM	25	25	21.78	21.98	21.82	23.5
10	16QAM	50	0	21.82	21.77	21.76	
10	64QAM	1	0	21.36	21.92	21.95	
10	64QAM	1	25	21.73	21.97	21.97	
10	64QAM	1	49	21.91	21.99	22.00	22.5
10	64QAM	25	0	20.43	20.79	20.75	
10	64QAM	25	12	20.65	20.82	20.81	
10	64QAM	25	25	20.81	20.90	20.85	
10	64QAM	50	0	20.66	20.83	20.76	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.71	23.68	23.69	25.5
5	QPSK	1	12	23.73	23.74	23.74	
5	QPSK	1	24	23.74	23.73	23.70	
5	QPSK	12	0	22.82	22.76	22.78	
5	QPSK	12	7	22.83	22.79	22.83	24.5
5	QPSK	12	13	22.83	22.83	22.81	
5	QPSK	25	0	22.79	22.79	22.76	
5	16QAM	1	0	23.01	23.01	23.06	
5	16QAM	1	12	23.03	23.10	23.05	24.5
5	16QAM	1	24	23.04	23.14	23.09	
5	16QAM	12	0	21.81	21.77	21.82	
5	16QAM	12	7	21.88	21.80	21.84	
5	16QAM	12	13	21.82	21.85	21.84	23.5
5	16QAM	25	0	21.82	21.81	21.81	
5	64QAM	1	0	21.43	21.96	21.96	
5	64QAM	1	12	21.43	21.97	21.96	
5	64QAM	1	24	21.58	22.02	21.94	22.5
5	64QAM	12	0	20.35	20.85	20.88	
5	64QAM	12	7	20.43	20.89	20.86	
5	64QAM	12	13	20.48	20.91	20.85	
5	64QAM	25	0	20.38	20.83	20.82	
Channel				19965	20175	20395	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.74	23.70	23.74	25.5
3	QPSK	1	8	23.75	23.70	23.75	
3	QPSK	1	14	23.76	23.71	23.71	
3	QPSK	8	0	22.86	22.82	22.81	
3	QPSK	8	4	22.90	22.89	22.81	24.5
3	QPSK	8	7	22.88	22.83	22.77	
3	QPSK	15	0	22.87	22.77	22.79	
3	16QAM	1	0	23.09	23.04	23.02	
3	16QAM	1	8	23.12	23.22	23.10	24.5
3	16QAM	1	14	23.07	23.12	23.08	
3	16QAM	8	0	21.94	21.85	21.83	
3	16QAM	8	4	21.97	21.88	21.93	
3	16QAM	8	7	21.90	21.94	21.84	23.5
3	16QAM	15	0	21.87	21.81	21.84	
3	64QAM	1	0	21.45	21.96	21.98	
3	64QAM	1	8	21.50	22.10	22.01	
3	64QAM	1	14	21.47	22.05	21.95	22.5
3	64QAM	8	0	20.36	20.84	20.84	
3	64QAM	8	4	20.38	20.91	20.90	
3	64QAM	8	7	20.35	20.92	20.85	
3	64QAM	15	0	20.33	20.87	20.83	
Channel				19967	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.67	23.64	23.67	25.5
1.4	QPSK	1	3	23.71	23.74	23.71	
1.4	QPSK	1	5	23.65	23.72	23.63	
1.4	QPSK	3	0	23.69	23.64	23.69	
1.4	QPSK	3	1	23.74	23.75	23.71	24.5
1.4	QPSK	3	3	23.70	23.74	23.67	
1.4	QPSK	6	0	22.76	22.71	22.73	
1.4	16QAM	1	0	22.99	22.94	22.96	
1.4	16QAM	1	3	23.06	23.09	22.99	24.5
1.4	16QAM	1	5	23.03	23.08	22.98	
1.4	16QAM	3	0	22.78	22.77	22.74	
1.4	16QAM	3	1	22.83	22.85	22.78	
1.4	16QAM	3	3	22.77	22.80	22.74	23.5
1.4	16QAM	6	0	21.83	21.79	21.82	
1.4	64QAM	1	0	21.30	21.94	21.90	
1.4	64QAM	1	3	21.37	22.02	21.96	
1.4	64QAM	1	5	21.31	21.98	21.90	23.5
1.4	64QAM	3	0	21.34	21.86	21.88	
1.4	64QAM	3	1	21.42	21.98	21.91	
1.4	64QAM	3	3	21.32	21.91	21.85	
1.4	64QAM	6	0	20.24	20.74	20.72	22.5



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				824	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	24
10	QPSK	25	12	22.18	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	24
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	23
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	22
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	24
5	QPSK	12	7	22.12	22.12	22.09	
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	24
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	
5	16QAM	1	24	22.40	22.41	22.16	23
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	22
5	64QAM	1	24	21.34	21.35	20.16	
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	22
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	24
3	QPSK	8	4	22.09	22.12	22.03	
3	QPSK	8	7	22.06	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	24
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	
3	16QAM	1	14	22.29	22.35	22.26	23
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.18	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	23
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	22
3	64QAM	1	14	21.24	21.32	20.28	
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	22
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	24
1.4	QPSK	3	1	23.26	23.25	23.23	
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	24
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	
1.4	16QAM	1	5	22.52	22.54	22.47	23
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.68	
1.4	64QAM	1	3	21.53	21.56	20.78	23
1.4	64QAM	1	5	21.45	21.49	20.77	
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	22
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	



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	2534	2558	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	
20	QPSK	50	24	22.99	22.97	22.97	24.5
20	QPSK	50	50	23.02	23.08	22.99	
20	QPSK	100	0	22.96	23.00	22.97	
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	24.5
20	16QAM	1	99	23.19	23.32	23.22	
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.96	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	
20	64QAM	1	99	22.11	22.23	22.12	22.5
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	
15	QPSK	36	20	23.04	23.01	22.92	24.5
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	24.5
15	16QAM	1	74	23.21	23.30	23.26	
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	
15	64QAM	1	74	22.12	22.25	22.13	22.5
15	64QAM	36	0	20.93	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	
10	QPSK	25	12	23.00	23.02	22.95	24.5
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	24.5
10	16QAM	1	49	23.25	23.34	23.19	
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.98	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	23.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	
10	64QAM	1	49	22.13	22.27	22.09	22.5
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	
5	QPSK	12	7	22.95	23.01	22.89	24.5
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	24.5
5	16QAM	1	24	23.19	23.25	23.14	
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	
5	64QAM	1	24	22.14	22.22	22.10	22.5
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.03	20.97	



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	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	
10	QPSK	25	12	23.11	23.04	23.08	24.7
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	24.7
10	16QAM	1	49	23.37	23.36	23.33	
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.08	23.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	
10	64QAM	1	49	22.09	22.03	21.83	22.7
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	Tune-up limit (dBm)
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	
5	QPSK	12	7	23.04	23.05	23.04	24.7
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.28	23.25	24.7
5	16QAM	1	24	23.28	23.35	23.28	
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	23.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	
5	64QAM	1	12	21.70	22.17	22.01	
5	64QAM	1	24	21.72	22.12	21.85	22.7
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.99	20.96	Tune-up limit (dBm)
Channel				23035	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	
3	QPSK	8	4	23.05	23.09	23.05	24.7
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	24.7
3	16QAM	1	14	23.21	23.30	23.22	
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	23.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	
3	64QAM	1	14	21.73	22.21	21.77	23.7
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.15	20.90	
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	Tune-up limit (dBm)
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	
1.4	QPSK	3	1	23.99	23.98	23.96	24.7
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	24.7
1.4	16QAM	1	5	23.44	23.52	23.45	
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.38	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	
1.4	64QAM	1	5	21.70	22.43	21.80	23.7
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	22.7



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		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		
10	QPSK	25	12		22.02		24
10	QPSK	25	25		22.05		
10	QPSK	50	0		22.18		
10	16QAM	1	0		22.28		
10	16QAM	1	25		22.27		24
10	16QAM	1	49		22.33		
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.06		23
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		
10	64QAM	1	25		21.22		
10	64QAM	1	49		21.29		23
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.06		
10	64QAM	25	25		20.11		
10	64QAM	50	0		20.12		22
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	22.90	22.85	22.60	25
5	QPSK	1	12	22.94	22.95	22.68	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	
5	QPSK	12	7	22.06	22.09	21.82	24
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	24
5	16QAM	1	24	22.25	22.24	21.96	
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.06	21.13	20.86	
5	64QAM	1	12	21.13	21.16	20.90	
5	64QAM	1	24	21.18	21.17	20.98	23
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



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			Tune-up limit (dbm)
Frequency (MHz)				793			
10	QPSK	1	0	23.07			25
10	QPSK	1	25	23.07			
10	QPSK	1	49	23.08			
10	QPSK	25	0	22.08			24
10	QPSK	25	12	22.10			
10	QPSK	25	25	22.19			
10	QPSK	50	0	22.12			24
10	16QAM	1	0	22.44			
10	16QAM	1	25	22.44			
10	16QAM	1	49	22.42			23
10	16QAM	25	0	21.10			
10	16QAM	25	12	21.12			
10	16QAM	25	25	21.20			23
10	16QAM	50	0	21.10			
10	64QAM	1	0	21.31			
10	64QAM	1	25	21.39			22
10	64QAM	1	49	21.35			
10	64QAM	25	0	20.12			
10	64QAM	25	12	20.15			22
10	64QAM	25	25	20.20			
10	64QAM	50	0	20.17			
Channel				23305	23330	23355	Tune-up limit (dbm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.02	23.01	23.01	25
5	QPSK	1	12	23.02	23.06	23.05	
5	QPSK	1	24	23.04	23.04	23.01	
5	QPSK	12	0	22.05	22.07	22.08	24
5	QPSK	12	7	22.16	22.11	22.13	
5	QPSK	12	13	22.10	22.12	22.07	
5	QPSK	25	0	22.08	22.06	22.04	24
5	16QAM	1	0	22.32	22.32	22.31	
5	16QAM	1	12	22.40	22.43	22.42	
5	16QAM	1	24	22.38	22.40	22.36	23
5	16QAM	12	0	21.12	21.11	21.10	
5	16QAM	12	7	21.21	21.16	21.19	
5	16QAM	12	13	21.14	21.16	21.12	23
5	16QAM	25	0	21.11	21.09	21.06	
5	64QAM	1	0	21.21	21.30	21.29	
5	64QAM	1	12	21.32	21.41	21.34	23
5	64QAM	1	24	21.38	21.36	21.33	
5	64QAM	12	0	20.16	20.18	20.14	
5	64QAM	12	7	20.25	20.18	20.21	22
5	64QAM	12	13	20.18	20.23	20.16	
5	64QAM	25	0	20.12	20.12	20.07	



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	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	24
10	QPSK	25	12	22.25	22.26	22.28	
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.26	22.30	24
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	
10	16QAM	1	49	22.26	22.23	22.26	23
10	16QAM	25	0	20.91	20.87	20.88	
10	16QAM	25	12	21.02	20.96	20.94	
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	
10	64QAM	1	25	21.14	21.18	21.17	22
10	64QAM	1	49	21.16	21.18	21.13	
10	64QAM	25	0	19.92	19.92	19.92	
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.98	19.97	19.97	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	24
5	QPSK	12	7	22.29	22.22	22.23	
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	24
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	
5	16QAM	1	24	22.25	22.25	22.22	23
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.09	21.13	21.09	22
5	64QAM	1	24	21.19	21.16	21.10	
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	



Band 25_Ant 0												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. (dBm)	Power Middle Ch. (dBm)	Power High Ch. (dBm)	Tune-up limit (dBm)					
Channel												
Frequency (MHz)												
20	QPSK	1	0	23.58	23.60	23.61	25.5					
20	QPSK	1	49	23.59	23.61	23.79						
20	QPSK	1	99	23.51	23.59	23.71						
20	QPSK	50	0	22.53	22.63	22.68						
20	QPSK	50	24	22.59	22.70	22.78	24.5					
20	QPSK	50	50	22.53	22.64	22.77						
20	QPSK	100	0	22.60	22.66	22.67						
20	16QAM	1	0	22.85	22.84	22.87						
20	16QAM	1	49	22.79	22.85	22.92	24.5					
20	16QAM	1	99	22.70	22.85	22.86						
20	16QAM	50	0	21.54	21.65	21.69						
20	16QAM	50	24	21.62	21.71	21.79						
20	16QAM	50	50	21.57	21.65	21.75	23.5					
20	16QAM	100	0	21.58	21.68	21.70						
20	64QAM	1	0	21.71	21.72	21.77						
20	64QAM	1	49	21.66	21.77	21.73						
20	64QAM	1	99	21.66	21.81	21.34	23.5					
20	64QAM	50	0	20.56	20.67	20.70						
20	64QAM	50	24	20.64	20.74	20.82						
20	64QAM	50	50	20.57	20.66	20.79						
20	64QAM	100	0	20.60	20.70	20.62	Tune-up limit (dBm)					
Channel												
Frequency (MHz)												
15	QPSK	1	0	23.52	23.61	23.64	25.5					
15	QPSK	1	37	23.50	23.58	23.61						
15	QPSK	1	74	23.51	23.51	23.63						
15	QPSK	36	0	22.57	22.65	22.71						
15	QPSK	36	20	22.62	22.71	22.82	24.5					
15	QPSK	36	39	22.56	22.66	22.78						
15	QPSK	75	0	22.61	22.71	22.69						
15	16QAM	1	0	22.81	22.91	22.98						
15	16QAM	1	37	22.78	22.83	22.92	24.5					
15	16QAM	1	74	22.76	22.83	22.91						
15	16QAM	36	0	21.57	21.66	21.73						
15	16QAM	36	20	21.63	21.71	21.80						
15	16QAM	36	39	21.57	21.68	21.77	23.5					
15	16QAM	75	0	21.60	21.71	21.74						
15	64QAM	1	0	21.71	21.76	21.81						
15	64QAM	1	37	21.69	21.84	21.91						
15	64QAM	1	74	21.60	21.73	21.52	23.5					
15	64QAM	36	0	20.60	20.68	20.75						
15	64QAM	36	20	20.65	20.74	20.85						
15	64QAM	36	39	20.64	20.70	20.84						
15	64QAM	75	0	20.62	20.71	20.71	Tune-up limit (dBm)					
Channel												
Frequency (MHz)												
10	QPSK	1	0	23.53	23.51	23.61	25.5					
10	QPSK	1	25	23.50	23.58	23.62						
10	QPSK	1	49	23.51	23.60	23.67						
10	QPSK	25	0	22.56	22.61	22.70						
10	QPSK	25	12	22.59	22.71	22.73	24.5					
10	QPSK	25	25	22.58	22.69	22.82						
10	QPSK	50	0	22.60	22.70	22.72						
10	16QAM	1	0	22.88	22.94	23.01						
10	16QAM	1	25	22.75	22.95	23.04	24.5					
10	16QAM	1	49	22.77	22.91	23.04						
10	16QAM	25	0	21.58	21.59	21.69						
10	16QAM	25	12	21.61	21.72	21.74						
10	16QAM	25	25	21.58	21.68	21.79	23.5					
10	16QAM	50	0	21.57	21.70	21.74						
10	64QAM	1	0	21.71	21.74	21.78						
10	64QAM	1	25	21.67	21.86	22.00						
10	64QAM	1	49	21.70	21.85	21.52	23.5					
10	64QAM	25	0	20.60	20.63	20.73						
10	64QAM	25	12	20.66	20.75	20.79						
10	64QAM	25	25	20.61	20.71	20.77						
10	64QAM	50	0	20.58	20.72	20.78	Tune-up limit (dBm)					
Channel												
Frequency (MHz)												
5	QPSK	1	0	23.53	23.52	23.64	25.5					
5	QPSK	1	12	23.51	23.62	23.74						
5	QPSK	1	24	23.50	23.63	23.70						
5	QPSK	12	0	22.54	22.58	22.74						
5	QPSK	12	7	22.60	22.72	22.81	24.5					
5	QPSK	12	13	22.60	22.72	22.82						
5	QPSK	25	0	22.57	22.67	22.80						
5	16QAM	1	0	22.81	22.89	23.03						
5	16QAM	1	12	22.82	22.95	23.02	24.5					
5	16QAM	1	24	22.80	22.95	23.05						
5	16QAM	12	0	21.57	21.62	21.78						
5	16QAM	12	7	21.60	21.74	21.82						
5	16QAM	12	13	21.64	21.77	21.82	23.5					
5	16QAM	25	0	21.58	21.70	21.81						
5	64QAM	1	0	21.75	21.81	21.97						
5	64QAM	1	12	21.74	21.90	21.85						
5	64QAM	1	24	21.67	21.86	21.55	23.5					
5	64QAM	12	0	20.59	20.67	20.78						
5	64QAM	12	7	20.69	20.77	20.81						
5	64QAM	12	13	20.69	20.81	20.50						
5	64QAM	25	0	20.61	20.71	20.62	Tune-up limit (dBm)					
Channel												
Frequency (MHz)												
3	QPSK	1	0	23.50	23.52	23.63	25.5					
3	QPSK	1	8	23.56	23.73	23.78						
3	QPSK	1	14	23.53	23.69	23.78						
3	QPSK	8	0	22.56	22.64	22.74						
3	QPSK	8	4	22.65	22.73	22.82	24.5					
3	QPSK	8	7	22.64	22.73	22.82						
3	QPSK	15	0	22.58	22.68	22.80						
3	16QAM	1	0	22.75	22.83	22.93						
3	16QAM	1	8	22.91	23.05	23.07	24.5					
3	16QAM	1	14	22.87	22.99	23.07						
3	16QAM	8	0	21.65	21.72	21.82						
3	16QAM	8	4	21.69	21.80	21.89						
3	16QAM	8	7	21.71	21.80	21.91	23.5					
3	16QAM	15	0	21.65	21.75	21.79						
3	64QAM	1	0	21.68	21.77	21.77						
3	64QAM	1	8	21.83	21.94	21.56						
3	64QAM	1	14	21.80	21.93	21.51	23.5					
3	64QAM	8	0	20.64	20.71	20.70						
3	64QAM	8	4	20.72	20.78	20.58						
3	64QAM	8	7	20.69	20.80	20.41						
3	64QAM	15	0	20.64	20.73	20.52	Tune-up limit (dBm)					
Channel												
Frequency (MHz)												
1.4	QPSK	1	0	23.54	23.55	23.57	25.5					
1.4	QPSK	1	3	23.50	23.59	23.66						
1.4	QPSK	1	5	23.56	23.56	23.63						
1.4	QPSK	3	0	23.43	23.58	23.60						
1.4	QPSK	3	1	23.48	23.62	23.65	24.5					
1.4	QPSK	3	3	23.47	23.60	23.68						
1.4	QPSK	6	0	22.53	22.61	22.71						
1.4	16QAM	1	0	22.72	22.79	22.92						
1.4	16QAM	1	3	22.63	22.92	23.00	24.5					
1.4	16QAM	1	5	22.78	22.91	22.99						
1.4	16QAM	3	0	22.51	22.67	22.67						
1.4	16QAM	3	1	22.61	22.72	22.75						
1.4												



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)				831.5	831.5	841.5	
15	QPSK	1	0	23.14	23.06	23.05	25
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.18	22.17	
15	QPSK	36	20	22.22	22.20	22.18	24
15	QPSK	36	39	22.21	22.18	22.15	
15	QPSK	75	0	22.25	22.23	22.12	
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.38	24
15	16QAM	1	74	22.38	22.39	22.23	
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	23
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	
15	64QAM	1	37	21.28	21.32	21.32	
15	64QAM	1	74	21.29	21.30	21.02	22
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.28	20.27	20.21	
15	64QAM	36	39	20.26	20.27	20.21	
15	64QAM	75	0	20.27	20.25	20.20	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	
10	QPSK	25	12	22.13	22.03	22.05	24
10	QPSK	25	25	22.06	22.06	22.03	
10	QPSK	50	0	22.15	22.08	22.02	
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.39	22.36	22.34	24
10	16QAM	1	49	22.33	22.37	22.21	
10	16QAM	25	0	21.16	21.05	21.04	
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	23
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.26	21.21	
10	64QAM	1	25	21.15	21.27	21.25	
10	64QAM	1	49	21.31	21.32	21.08	22
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.98	20.10	20.08	
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	
Channel				847.5	859.5	870.5	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	
5	QPSK	12	7	22.18	22.10	22.02	24
5	QPSK	12	13	22.08	22.03	22.00	
5	QPSK	25	0	22.09	22.08	22.02	
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	24
5	16QAM	1	24	22.33	22.38	22.19	
5	16QAM	12	0	21.20	21.06	21.05	
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	23
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.00	
5	64QAM	1	24	21.02	21.27	21.01	22
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.19	19.45	
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	
3	QPSK	8	4	22.16	22.08	22.00	24
3	QPSK	8	7	22.10	22.02	22.02	
3	QPSK	15	0	22.15	22.03	22.01	
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	24
3	16QAM	1	14	22.29	22.32	22.16	
3	16QAM	8	0	21.23	21.11	21.03	
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	23
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	
3	64QAM	1	14	21.18	21.28	20.45	22
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.09	19.41	
Channel				26957	26965	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	
1.4	QPSK	3	1	23.09	23.07	23.11	24
1.4	QPSK	3	3	23.12	23.06	23.05	
1.4	QPSK	6	0	22.16	22.21	22.13	
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	24
1.4	16QAM	1	5	22.36	22.48	22.32	
1.4	16QAM	3	0	22.24	22.24	22.16	
1.4	16QAM	3	1	22.20	22.30	22.18	
1.4	16QAM	3	3	22.21	22.26	22.14	23
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.94	
1.4	64QAM	1	5	21.31	21.36	20.91	23
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.29	20.25	19.69	22



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			Tune-up limit (dBm)
Frequency (MHz)				2310			
10	QPSK	1	0		24.12		25.7
10	QPSK	1	25		24.04		
10	QPSK	1	49		24.03		
10	QPSK	25	0		23.10		24.7
10	QPSK	25	12		23.16		
10	QPSK	25	25		23.16		
10	QPSK	50	0		23.14		24.7
10	16QAM	1	0		23.44		
10	16QAM	1	25		23.47		
10	16QAM	1	49		23.35		23.7
10	16QAM	25	0		22.11		
10	16QAM	25	12		22.15		
10	16QAM	25	25		22.11		23.7
10	16QAM	50	0		22.14		
10	64QAM	1	0		22.35		
10	64QAM	1	25		21.90		23.7
10	64QAM	1	49		21.70		
10	64QAM	25	0		21.07		
10	64QAM	25	12		20.86		22.7
10	64QAM	25	25		20.84		
10	64QAM	50	0		20.86		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.93	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.75	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	



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)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	24
20	QPSK	50	24	22.33	22.25	22.21	
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	24
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	23
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.16	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	22
20	64QAM	1	99	21.28	21.28	21.23	
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	22
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	24
15	QPSK	36	20	22.32	22.22	22.14	
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	24
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.32	22.45	
15	16QAM	1	74	22.39	22.47	22.33	23
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.56	21.40	21.08	
15	64QAM	1	37	20.95	21.41	21.35	22
15	64QAM	1	74	21.28	21.39	21.23	
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	19.86	20.11	20.20	22
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	24
10	QPSK	25	12	22.15	22.10	22.00	
10	QPSK	25	25	22.07	22.08	22.01	
10	QPSK	50	0	22.15	22.11	22.02	24
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	23
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	22
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	22
10	64QAM	1	49	20.69	21.18	21.10	
10	64QAM	25	0	19.03	20.05	19.96	
10	64QAM	25	12	19.15	20.15	19.95	22
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.95	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	24
5	QPSK	12	7	22.01	22.04	22.03	
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	24
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	23
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	22
5	64QAM	1	24	20.13	21.24	20.77	
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	22
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	



Band 2_Ant 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				1860	1890	1900	24
Frequency (MHz)				1860	1890	1900	
20	QPSK	1	0	22.61	22.66	22.74	24
20	QPSK	1	49	22.53	22.72	22.77	
20	QPSK	1	99	22.55	22.71	22.80	
20	QPSK	50	0	22.64	22.75	22.82	
20	QPSK	50	24	22.71	22.80	22.92	
20	QPSK	50	50	22.70	22.86	22.94	24
20	QPSK	100	0	22.72	22.77	22.87	
20	16QAM	1	0	22.91	22.97	23.02	
20	16QAM	1	49	22.89	23.04	23.08	
20	16QAM	1	99	22.86	23.07	23.06	
20	16QAM	50	0	22.34	22.46	22.55	23.7
20	16QAM	50	24	22.44	22.49	22.85	
20	16QAM	50	50	22.40	22.56	22.86	
20	16QAM	100	0	22.40	22.49	22.55	
20	64QAM	1	0	22.53	22.46	22.38	
20	64QAM	1	49	22.53	22.60	21.52	23.7
20	64QAM	1	99	22.20	22.61	21.60	
20	64QAM	50	0	21.36	21.49	20.78	
20	64QAM	50	24	21.44	21.51	20.65	
20	64QAM	50	50	21.17	21.60	20.77	
20	64QAM	100	0	21.32	21.39	20.72	22.7
Channel				1867.5	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	QPSK	1	0	22.59	22.57	22.66	24
15	QPSK	1	37	22.47	22.64	22.75	
15	QPSK	1	74	22.50	22.68	22.74	
15	QPSK	36	0	22.60	22.67	22.79	
15	QPSK	36	20	22.63	22.70	22.86	
15	QPSK	36	39	22.61	22.84	22.94	24
15	QPSK	75	0	22.70	22.70	22.81	
15	16QAM	1	0	22.82	22.95	22.93	
15	16QAM	1	37	22.80	22.96	23.07	
15	16QAM	1	74	22.85	23.00	23.06	
15	16QAM	36	0	22.24	22.45	22.55	23.7
15	16QAM	36	20	22.34	22.42	22.59	
15	16QAM	36	39	22.38	22.53	22.65	
15	16QAM	75	0	22.34	22.42	22.52	
15	64QAM	1	0	22.46	22.40	22.31	
15	64QAM	1	37	22.52	22.54	21.47	23.7
15	64QAM	1	74	22.13	22.60	21.55	
15	64QAM	36	0	21.30	21.39	20.88	
15	64QAM	36	20	21.43	21.51	20.61	
15	64QAM	36	39	21.12	21.53	20.67	
15	64QAM	75	0	21.27	21.34	20.72	22.7
Channel				1865.0	18900	19150	
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	QPSK	1	0	22.56	22.62	22.74	24
10	QPSK	1	25	22.44	22.71	22.75	
10	QPSK	1	49	22.54	22.69	22.79	
10	QPSK	25	0	22.61	22.65	22.81	
10	QPSK	25	12	22.66	22.74	22.91	
10	QPSK	25	25	22.68	22.84	22.91	24
10	QPSK	50	0	22.64	22.67	22.80	
10	16QAM	1	0	22.85	22.92	22.94	
10	16QAM	1	25	22.81	23.00	23.06	
10	16QAM	1	49	22.77	23.06	22.96	
10	16QAM	25	0	22.30	22.41	22.45	23.7
10	16QAM	25	12	22.39	22.42	22.65	
10	16QAM	25	25	22.38	22.56	22.84	
10	16QAM	50	0	22.36	22.44	22.52	
10	64QAM	1	0	22.45	22.36	22.33	
10	64QAM	1	25	22.50	22.57	21.49	23.7
10	64QAM	1	49	22.16	22.54	21.57	
10	64QAM	25	0	21.30	21.45	20.76	
10	64QAM	25	12	21.43	21.42	20.82	
10	64QAM	25	25	21.12	21.54	20.72	
10	64QAM	50	0	21.27	21.35	20.85	22.7
Channel				1862.5	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	QPSK	1	0	22.61	22.58	22.67	24
5	QPSK	1	12	22.49	22.63	22.70	
5	QPSK	1	24	22.55	22.66	22.76	
5	QPSK	12	0	22.57	22.72	22.75	
5	QPSK	12	7	22.65	22.70	22.82	
5	QPSK	12	13	22.68	22.81	22.86	24
5	QPSK	25	0	22.63	22.74	22.86	
5	16QAM	1	0	22.88	22.89	22.96	
5	16QAM	1	12	22.86	22.95	23.04	
5	16QAM	1	24	22.80	23.04	22.99	
5	16QAM	12	0	22.25	22.45	22.55	23.7
5	16QAM	12	7	22.37	22.47	22.56	
5	16QAM	12	13	22.34	22.53	22.57	
5	16QAM	25	0	22.31	22.42	22.48	
5	64QAM	1	0	22.51	22.42	22.32	
5	64QAM	1	12	22.51	22.50	21.51	23.7
5	64QAM	1	24	22.11	22.61	21.59	
5	64QAM	12	0	21.36	21.41	20.69	
5	64QAM	12	7	21.34	21.43	20.55	
5	64QAM	12	13	21.12	21.50	20.77	
5	64QAM	25	0	21.22	21.35	20.68	22.7
Channel				1861.5	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	Tune-up limit (dBm)
3	QPSK	1	0	22.55	22.61	22.70	24
3	QPSK	1	8	22.45	22.69	22.71	
3	QPSK	1	14	22.48	22.69	22.73	
3	QPSK	8	0	22.56	22.66	22.77	
3	QPSK	8	4	22.64	22.79	22.92	
3	QPSK	8	7	22.64	22.86	22.91	24
3	QPSK	15	0	22.65	22.69	22.86	
3	16QAM	1	0	22.90	22.95	22.96	
3	16QAM	1	8	22.85	23.01	23.06	
3	16QAM	1	14	22.76	22.97	23.03	
3	16QAM	8	0	22.29	22.40	22.52	23.7
3	16QAM	8	4	22.40	22.46	22.80	
3	16QAM	8	7	22.35	22.48	22.62	
3	16QAM	15	0	22.37	22.47	22.54	
3	64QAM	1	0	22.49	22.37	22.29	
3	64QAM	1	8	22.53	22.50	21.42	23.7
3	64QAM	1	14	22.16	22.51	21.56	
3	64QAM	8	0	21.31	21.39	20.71	
3	64QAM	8	4	21.43	21.43	20.56	
3	64QAM	8	7	21.13	21.60	20.68	
3	64QAM	15	0	21.22	21.34	20.63	22.7
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	Tune-up limit (dBm)
1.4	QPSK	1	0	22.43	22.58	22.70	24
1.4	QPSK	1	3	22.51	22.67	22.77	
1.4	QPSK	1	5	22.47	22.63	22.73	
1.4	QPSK	3	0	22.48	22.60	22.72	
1.4	QPSK	3	1	22.56	22.72	22.82	
1.4	QPSK	3	3	22.50	22.66	22.77	24
1.4	QPSK	6	0	22.56	22.75	22.84	
1.4	16QAM	1	0	22.76	22.90	23.04	
1.4	16QAM	1	3	22.84	23.03	23.07	
1.4	16QAM	1	5	22.78	22.98	23.06	
1.4	16QAM	3	0	22.57	22.72	22.84	24
1.4	16QAM	3	1	22.62	22.83	22.91	
1.4	16QAM	3	3	22.56	22.77	22.83	
1.4	16QAM	6	0	22.30	22.53	22.63	
1.4	64QAM	1	0	22.42	22.53	21.76	
1.4	64QAM	1	3	22.47	22.68	21.82	23.7
1.4	64QAM	1	5	22.42	22.60	21.72	
1.4	64QAM	3	0	22.39	22.51	21.75	
1.4	64QAM	3	1	22.45	22.59	21.84	
1.4	64QAM	3	3	22.40	22.58	21.75	
1.4	64QAM	6	0	21.27	21.44	20.66	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	1824.5	1845	
20	QPSK	1	0	23.05	23.03	23.09	24
20	QPSK	1	49	22.93	22.93	22.88	
20	QPSK	1	99	22.97	22.90	22.89	
20	QPSK	50	0	23.10	23.18	23.12	
20	QPSK	50	24	23.14	23.10	23.05	24
20	QPSK	50	50	23.07	23.07	23.02	
20	QPSK	100	0	23.12	23.10	23.03	
20	16QAM	1	0	23.39	23.40	23.45	
20	16QAM	1	49	23.29	23.31	23.26	24
20	16QAM	1	99	23.32	23.24	23.23	
20	16QAM	50	0	22.61	22.69	22.64	
20	16QAM	50	24	22.65	22.60	22.56	
20	16QAM	50	50	22.57	22.55	22.56	23.7
20	16QAM	100	0	22.61	22.61	22.51	
20	64QAM	1	0	21.81	22.78	22.30	
20	64QAM	1	49	22.66	22.46	22.58	
20	64QAM	1	99	22.62	22.29	22.62	22.7
20	64QAM	50	0	21.30	21.67	21.35	
20	64QAM	50	24	21.65	21.39	21.56	
20	64QAM	50	50	21.59	21.16	21.57	
20	64QAM	100	0	21.50	21.44	21.51	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.98	23.01	22.99	24
15	QPSK	1	37	22.88	22.85	22.86	
15	QPSK	1	74	22.93	22.87	22.83	
15	QPSK	36	0	23.01	23.08	23.10	
15	QPSK	36	20	23.09	23.08	23.05	24
15	QPSK	36	39	22.99	22.99	22.97	
15	QPSK	75	0	23.06	23.10	22.97	
15	16QAM	1	0	23.35	23.30	23.37	
15	16QAM	1	37	23.25	23.27	23.20	24
15	16QAM	1	74	23.28	23.24	23.16	
15	16QAM	36	0	22.52	22.63	22.55	
15	16QAM	36	20	22.59	22.55	22.51	
15	16QAM	36	39	22.54	22.56	22.49	23.7
15	16QAM	75	0	22.55	22.57	22.51	
15	64QAM	1	0	21.69	22.76	22.22	
15	64QAM	1	37	22.60	22.35	22.51	
15	64QAM	1	74	22.59	22.29	22.52	22.7
15	64QAM	36	0	21.30	21.61	21.30	
15	64QAM	36	20	21.63	21.36	21.47	
15	64QAM	36	39	21.53	21.13	21.48	
15	64QAM	75	0	21.50	21.41	21.46	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.97	23.01	23.07	24
10	QPSK	1	25	22.92	22.84	22.83	
10	QPSK	1	49	22.94	22.88	22.84	
10	QPSK	25	0	23.05	23.18	23.12	
10	QPSK	25	12	23.06	23.07	23.02	24
10	QPSK	25	25	23.07	23.07	22.94	
10	QPSK	50	0	23.07	23.04	22.95	
10	16QAM	1	0	23.29	23.33	23.37	
10	16QAM	1	25	23.29	23.24	23.22	24
10	16QAM	1	49	23.26	23.23	23.19	
10	16QAM	25	0	22.60	22.68	22.54	
10	16QAM	25	12	22.61	22.54	22.47	
10	16QAM	25	25	22.51	22.55	22.55	23.7
10	16QAM	50	0	22.54	22.58	22.42	
10	64QAM	1	0	21.91	22.75	22.27	
10	64QAM	1	25	22.60	22.43	22.48	
10	64QAM	1	49	22.59	22.29	22.61	22.7
10	64QAM	25	0	21.26	21.67	21.31	
10	64QAM	25	12	21.57	21.29	21.56	
10	64QAM	25	25	21.56	21.13	21.54	
10	64QAM	50	0	21.40	21.43	21.48	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.05	22.96	23.00	24
5	QPSK	1	12	22.90	22.84	22.83	
5	QPSK	1	24	22.93	22.85	22.86	
5	QPSK	12	0	23.04	23.13	23.04	
5	QPSK	12	7	23.09	23.08	23.03	24
5	QPSK	12	13	22.98	23.05	22.93	
5	QPSK	25	0	23.04	23.10	22.98	
5	16QAM	1	0	23.33	23.40	23.39	
5	16QAM	1	12	23.27	23.25	23.25	24
5	16QAM	1	24	23.32	23.18	23.13	
5	16QAM	12	0	22.54	22.63	22.63	
5	16QAM	12	7	22.60	22.50	22.47	23.7
5	16QAM	12	13	22.56	22.54	22.53	
5	16QAM	25	0	22.55	22.52	22.43	
5	64QAM	1	0	21.83	22.73	22.29	
5	64QAM	1	12	22.63	22.40	22.51	23.7
5	64QAM	1	24	22.58	22.26	22.62	
5	64QAM	12	0	21.30	21.58	21.25	
5	64QAM	12	7	21.64	21.32	21.51	
5	64QAM	12	13	21.52	21.06	21.49	22.7
5	64QAM	25	0	21.45	21.35	21.45	
Channel				19965	20175	20365	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.98	23.03	23.01	24
3	QPSK	1	8	22.88	22.84	22.80	
3	QPSK	1	14	22.96	22.87	22.87	
3	QPSK	8	0	23.09	23.09	23.04	
3	QPSK	8	4	23.10	23.08	22.95	24
3	QPSK	8	7	23.04	22.96	23.02	
3	QPSK	15	0	23.02	23.00	23.00	
3	16QAM	1	0	23.36	23.34	23.41	
3	16QAM	1	8	23.23	23.23	23.26	24
3	16QAM	1	14	23.24	23.15	23.19	
3	16QAM	8	0	22.58	22.62	22.60	
3	16QAM	8	4	22.58	22.54	22.52	
3	16QAM	8	7	22.57	22.49	22.55	23.7
3	16QAM	15	0	22.52	22.52	22.44	
3	64QAM	1	0	21.90	22.75	22.23	
3	64QAM	1	8	22.57	22.43	22.53	
3	64QAM	1	14	22.57	22.27	22.61	22.7
3	64QAM	8	0	21.21	21.67	21.29	
3	64QAM	8	4	21.58	21.30	21.50	
3	64QAM	8	7	21.54	21.16	21.54	
3	64QAM	15	0	21.47	21.34	21.43	
Channel				19967	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.88	22.89	22.87	24
1.4	QPSK	1	3	22.95	23.02	22.96	
1.4	QPSK	1	5	22.91	22.94	22.89	
1.4	QPSK	3	0	22.96	22.92	22.94	
1.4	QPSK	3	1	22.99	23.03	22.98	24
1.4	QPSK	3	3	22.95	22.97	22.95	
1.4	QPSK	6	0	23.02	22.98	23.00	
1.4	16QAM	1	0	23.23	23.24	23.29	
1.4	16QAM	1	3	23.29	23.35	23.28	24
1.4	16QAM	1	5	23.23	23.28	23.23	
1.4	16QAM	3	0	22.98	23.05	23.00	
1.4	16QAM	3	1	23.04	23.11	23.06	
1.4	16QAM	3	3	23.00	23.11	23.00	23.7
1.4	64QAM	6	0	22.61	22.60	22.59	
1.4	64QAM	1	0	21.65	22.25	22.68	
1.4	64QAM	1	3	21.77	22.33	22.77	
1.4	64QAM	1	5	21.73	22.25	22.71	23.7
1.4	64QAM	3	0	21.69	22.31	22.64	
1.4	64QAM	3	1	21.78	22.37	22.70	
1.4	64QAM	3	3	21.75	22.26	22.64	
1.4	64QAM	6	0	20.64	21.21	21.53	22.7



Band 5_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				824.5	836.5	844.5	
Frequency (MHz)				824.5	836.5	844.5	
10	QPSK	1	0	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	24.7
10	QPSK	50	0	23.40	23.33	23.31	
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	
10	16QAM	25	0	22.30	22.32	22.32	23.7
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.35	22.30	
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	23.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	22.7
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	24.7
5	QPSK	25	0	23.36	23.25	23.29	
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	
5	16QAM	12	0	22.25	22.30	22.25	23.7
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.26	
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	23.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	22.7
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	24.7
3	QPSK	15	0	23.36	23.28	23.24	
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.61	23.25	
3	16QAM	8	0	22.20	22.29	22.27	23.7
3	16QAM	8	4	22.35	22.30	22.23	
3	16QAM	8	7	22.38	22.29	22.28	
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	23.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	22.7
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	24.7
1.4	QPSK	6	0	23.26	23.28	23.25	
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	
1.4	16QAM	3	0	23.51	23.58	23.71	24.7
1.4	16QAM	3	1	23.62	23.60	23.63	
1.4	16QAM	3	3	23.54	23.59	23.22	
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.28	
1.4	64QAM	1	3	22.33	22.38	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.28	22.7



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	2534	2558	
20	QPSK	1	0	22.14	22.26	22.28	23.3
20	QPSK	1	49	22.25	22.35	22.32	
20	QPSK	1	99	22.32	22.48	22.41	
20	QPSK	50	0	22.27	22.39	22.39	
20	QPSK	50	24	22.43	22.46	22.51	23.3
20	QPSK	50	50	22.45	22.36	22.52	
20	QPSK	100	0	22.41	22.47	22.46	
20	16QAM	1	0	22.50	22.52	22.64	
20	16QAM	1	49	22.61	22.69	22.67	23.3
20	16QAM	1	99	22.64	22.78	22.68	
20	16QAM	50	0	22.28	22.41	22.39	
20	16QAM	50	24	22.43	22.48	22.48	
20	16QAM	50	50	22.46	22.56	22.50	23.3
20	16QAM	100	0	22.38	22.42	22.48	
20	64QAM	1	0	22.39	22.49	22.48	
20	64QAM	1	49	22.47	22.59	22.58	
20	64QAM	1	99	22.57	22.70	22.24	22.7
20	64QAM	50	0	22.28	21.85	21.81	
20	64QAM	50	24	22.41	21.90	21.94	
20	64QAM	50	50	22.42	21.99	21.94	
20	64QAM	100	0	22.38	21.91	21.92	Tune-up limit (dBm)
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.05	22.27	22.27	23.3
15	QPSK	1	37	22.18	22.35	22.22	
15	QPSK	1	74	22.28	22.43	22.33	
15	QPSK	36	0	22.23	22.37	22.39	
15	QPSK	36	20	22.35	22.43	22.49	23.3
15	QPSK	36	39	22.35	22.51	22.42	
15	QPSK	75	0	22.37	22.34	22.46	
15	16QAM	1	0	22.48	22.53	22.62	
15	16QAM	1	37	22.58	22.61	22.65	23.3
15	16QAM	1	74	22.64	22.69	22.64	
15	16QAM	36	0	22.28	22.37	22.38	
15	16QAM	36	20	22.41	22.39	22.41	
15	16QAM	36	39	22.36	22.49	22.40	23.3
15	16QAM	75	0	22.34	22.37	22.38	
15	64QAM	1	0	22.31	22.42	22.46	
15	64QAM	1	37	22.43	22.52	22.55	
15	64QAM	1	74	22.53	22.66	22.14	22.7
15	64QAM	36	0	22.16	21.79	21.74	
15	64QAM	36	20	22.32	21.87	21.84	
15	64QAM	36	39	22.42	21.93	21.85	
15	64QAM	75	0	22.31	21.84	21.90	Tune-up limit (dBm)
Channel				20800	21100	21400	
Frequency (MHz)				2506	2535	2565	
10	QPSK	1	0	22.08	22.23	22.20	23.3
10	QPSK	1	25	22.23	22.30	22.25	
10	QPSK	1	49	22.24	22.40	22.34	
10	QPSK	25	0	22.20	22.30	22.32	
10	QPSK	25	12	22.42	22.37	22.51	23.3
10	QPSK	25	25	22.37	22.47	22.43	
10	QPSK	50	0	22.41	22.35	22.44	
10	16QAM	1	0	22.46	22.60	22.57	
10	16QAM	1	25	22.51	22.61	22.64	23.3
10	16QAM	1	49	22.58	22.73	22.58	
10	16QAM	25	0	22.28	22.34	22.35	
10	16QAM	25	12	22.43	22.40	22.39	
10	16QAM	25	25	22.43	22.52	22.48	23.3
10	16QAM	50	0	22.31	22.37	22.43	
10	64QAM	1	0	22.30	22.41	22.38	
10	64QAM	1	25	22.39	22.57	22.48	
10	64QAM	1	49	22.54	22.68	22.21	22.7
10	64QAM	25	0	22.28	21.94	21.79	
10	64QAM	25	12	22.32	21.85	21.84	
10	64QAM	25	25	22.42	21.99	21.88	
10	64QAM	50	0	22.31	21.89	21.89	Tune-up limit (dBm)
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.05	22.27	22.20	23.3
5	QPSK	1	12	22.16	22.31	22.28	
5	QPSK	1	24	22.22	22.46	22.38	
5	QPSK	12	0	22.17	22.39	22.39	
5	QPSK	12	7	22.40	22.38	22.44	23.3
5	QPSK	12	13	22.44	22.56	22.50	
5	QPSK	25	0	22.39	22.35	22.47	
5	16QAM	1	0	22.40	22.61	22.60	
5	16QAM	1	12	22.58	22.69	22.67	23.3
5	16QAM	1	24	22.60	22.71	22.58	
5	16QAM	12	0	22.23	22.31	22.37	
5	16QAM	12	7	22.42	22.44	22.45	
5	16QAM	12	13	22.40	22.54	22.49	23.3
5	16QAM	25	0	22.31	22.32	22.43	
5	64QAM	1	0	22.35	22.47	22.41	
5	64QAM	1	12	22.38	22.52	22.52	
5	64QAM	1	24	22.57	22.67	22.17	22.7
5	64QAM	12	0	22.20	21.80	21.71	
5	64QAM	12	7	22.37	21.80	21.78	
5	64QAM	12	13	22.35	21.94	21.89	
5	64QAM	25	0	22.37	21.84	21.91	



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)				701.5	707.5	713.5	
10	QPSK	1	0	24.35	24.28	24.30	25.7
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.46	23.46	23.44	24.7
10	QPSK	50	0	23.51	23.43	23.47	
10	16QAM	1	0	23.74	23.65	23.73	
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.66	23.67	
10	16QAM	25	0	22.41	22.42	22.42	23.7
10	16QAM	25	12	22.50	22.44	22.48	
10	16QAM	25	25	22.47	22.49	22.41	
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.26	21.22	
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	22.7
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	25.7
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.46	23.46	23.36	24.7
5	QPSK	25	0	23.49	23.34	23.44	
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.66	
5	16QAM	1	24	23.69	23.59	23.61	
5	16QAM	12	0	22.38	22.42	22.33	23.7
5	16QAM	12	7	22.40	22.34	22.47	
5	16QAM	12	13	22.39	22.49	22.35	
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.25	21.17	
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	22.7
Channel				23005	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	25.7
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.36	23.44	23.40	24.7
3	QPSK	15	0	23.44	23.33	23.42	
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	
3	16QAM	8	0	22.40	22.39	22.33	23.7
3	16QAM	8	4	22.41	22.42	22.36	
3	16QAM	8	7	22.39	22.41	22.39	
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	22.7
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	25.7
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	24.7
1.4	QPSK	6	0	23.36	23.36	23.33	
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	
1.4	16QAM	3	0	23.67	23.65	23.71	23.7
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	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			Tune-up limit (dBm)
Frequency (MHz)				762			
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			
10	QPSK	25	12	22.85			24.2
10	QPSK	25	25	22.92			
10	QPSK	50	0	22.95			
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			24.2
10	16QAM	1	49	23.12			
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.89			
10	16QAM	25	25	21.90			23.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			
10	64QAM	1	49	22.07			23.2
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.93			
10	64QAM	25	25	20.92			
10	64QAM	50	0	20.97			22.2
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.90	23.86	
5	QPSK	12	0	22.74	22.83	22.79	
5	QPSK	12	7	22.83	22.78	22.77	24.2
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	24.2
5	16QAM	1	24	23.09	23.07	23.11	
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.93	21.86	21.91	
5	64QAM	1	0	21.90	21.89	21.90	
5	64QAM	1	12	21.97	21.99	21.97	
5	64QAM	1	24	22.04	22.04	22.04	23.2
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.89	20.92	
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	22.2
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	



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			Tune-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			
10	16QAM	1	49	23.60			23.7
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			23.7
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.55			23.7
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.33			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



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	Tune-up limit (dBm)
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.40	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.68	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.46	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	



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			Tune-up limit (dbm)
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.28			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.25			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			23.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.39			
10	16QAM	25	25	21.31			22.2
10	16QAM	50	0	21.28			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit (dbm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.49	22.56	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.38	21.47	
5	64QAM	1	12	21.42	21.46	21.47	22.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	



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	1744	1770	
20	QPSK	1	0	23.13	23.11	23.02	24
20	QPSK	1	49	23.06	23.00	22.90	
20	QPSK	1	99	22.96	22.91	22.82	
20	QPSK	50	0	23.19	23.12	23.00	
20	QPSK	50	24	23.18	23.08	22.97	24
20	QPSK	50	50	23.16	23.10	22.96	
20	QPSK	100	0	23.18	23.05	22.97	
20	16QAM	1	0	23.47	23.45	23.37	
20	16QAM	1	49	23.42	23.35	23.23	24
20	16QAM	1	99	23.32	23.26	23.09	
20	16QAM	50	0	22.63	22.61	22.52	
20	16QAM	50	24	22.73	22.60	22.50	23.7
20	16QAM	50	50	22.65	22.55	22.50	
20	16QAM	100	0	22.67	22.54	22.46	
20	64QAM	1	0	22.64	22.83	22.73	
20	64QAM	1	49	22.81	22.75	22.35	23.7
20	64QAM	1	99	22.77	22.69	22.41	
20	64QAM	50	0	21.55	21.65	21.32	
20	64QAM	50	24	21.73	21.61	21.39	22.7
20	64QAM	50	50	21.66	21.62	21.49	
20	64QAM	100	0	21.72	21.56	21.47	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.05	23.04	22.95	24
15	QPSK	1	37	23.02	22.91	22.82	
15	QPSK	1	74	22.86	22.85	22.81	
15	QPSK	36	0	23.12	23.11	22.95	
15	QPSK	36	20	23.12	23.00	22.91	24
15	QPSK	36	39	23.11	23.10	22.92	
15	QPSK	75	0	23.13	23.03	22.95	
15	16QAM	1	0	23.41	23.35	23.28	
15	16QAM	1	37	23.41	23.29	23.13	24
15	16QAM	1	74	23.28	23.17	23.05	
15	16QAM	36	0	22.62	22.54	22.48	
15	16QAM	36	20	22.69	22.59	22.40	23.7
15	16QAM	36	39	22.64	22.56	22.40	
15	16QAM	75	0	22.60	22.44	22.37	
15	64QAM	1	0	22.63	22.75	22.66	23.7
15	64QAM	1	37	22.76	22.71	22.34	
15	64QAM	1	74	22.68	22.64	22.34	
15	64QAM	36	0	21.57	21.57	21.44	
15	64QAM	36	20	21.68	21.54	21.38	22.7
15	64QAM	36	39	21.59	21.58	21.46	
15	64QAM	75	0	21.65	21.45	21.38	
Channel				132022	132322	132522	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.03	23.03	23.02	24
10	QPSK	1	25	23.04	22.93	22.87	
10	QPSK	1	49	22.94	22.85	22.80	
10	QPSK	25	0	23.09	23.06	22.92	
10	QPSK	25	12	23.18	23.03	22.97	24
10	QPSK	25	25	23.10	23.06	22.94	
10	QPSK	50	0	23.16	23.01	22.88	
10	16QAM	1	0	23.41	23.39	23.32	
10	16QAM	1	25	23.39	23.34	23.18	24
10	16QAM	1	49	23.31	23.22	23.04	
10	16QAM	25	0	22.63	22.56	22.45	
10	16QAM	25	12	22.73	22.56	22.42	23.7
10	16QAM	25	25	22.65	22.51	22.41	
10	16QAM	50	0	22.66	22.53	22.39	
10	64QAM	1	0	22.62	22.79	22.64	23.7
10	64QAM	1	25	22.76	22.70	22.34	
10	64QAM	1	49	22.76	22.67	22.41	
10	64QAM	25	0	21.58	21.56	21.46	
10	64QAM	25	12	21.68	21.54	21.32	22.7
10	64QAM	25	25	21.56	21.58	21.39	
10	64QAM	50	0	21.66	21.55	21.41	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.13	23.11	22.92	24
5	QPSK	1	12	22.99	22.96	22.82	
5	QPSK	1	24	22.83	22.90	22.79	
5	QPSK	12	0	23.12	23.04	22.94	
5	QPSK	12	7	23.13	23.01	22.87	24
5	QPSK	12	13	23.09	23.03	22.97	
5	QPSK	25	0	23.12	23.02	22.94	
5	16QAM	1	0	23.47	23.45	23.35	
5	16QAM	1	12	23.36	23.30	23.16	24
5	16QAM	1	24	23.30	23.18	22.99	
5	16QAM	12	0	22.57	22.55	22.45	
5	16QAM	12	7	22.64	22.50	22.40	23.7
5	16QAM	12	13	22.65	22.53	22.42	
5	16QAM	25	0	22.63	22.48	22.39	
5	64QAM	1	0	22.62	22.74	22.72	23.7
5	64QAM	1	12	22.76	22.73	22.32	
5	64QAM	1	24	22.77	22.62	22.31	
5	64QAM	12	0	21.65	21.60	21.42	
5	64QAM	12	7	21.63	21.51	21.33	22.7
5	64QAM	12	13	21.59	21.54	21.39	
5	64QAM	25	0	21.72	21.56	21.47	
Channel				131967	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1773.5	
3	QPSK	1	0	23.05	23.11	22.96	24
3	QPSK	1	8	23.04	22.94	22.83	
3	QPSK	1	14	22.95	22.87	22.76	
3	QPSK	8	0	23.17	23.10	22.97	
3	QPSK	8	4	23.15	23.07	22.82	24
3	QPSK	8	7	23.16	23.07	22.90	
3	QPSK	15	0	23.16	23.04	22.96	
3	16QAM	1	0	23.39	23.39	23.32	
3	16QAM	1	8	23.40	23.29	23.17	24
3	16QAM	1	14	23.23	23.20	23.05	
3	16QAM	8	0	22.63	22.59	22.42	
3	16QAM	8	4	22.68	22.56	22.43	23.7
3	16QAM	8	7	22.61	22.48	22.41	
3	16QAM	15	0	22.59	22.46	22.37	
3	64QAM	1	0	22.64	22.73	22.71	23.7
3	64QAM	1	8	22.73	22.72	22.28	
3	64QAM	1	14	22.68	22.59	22.40	
3	64QAM	8	0	21.60	21.61	21.51	
3	64QAM	8	4	21.72	21.59	21.39	22.7
3	64QAM	8	7	21.64	21.54	21.45	
3	64QAM	15	0	21.71	21.56	21.41	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.98	22.96	22.83	24
1.4	QPSK	1	3	23.05	23.01	22.86	
1.4	QPSK	1	5	22.98	22.92	22.79	
1.4	QPSK	3	0	23.02	22.99	22.87	
1.4	QPSK	3	1	23.08	23.04	22.91	24
1.4	QPSK	3	3	23.02	22.98	22.86	
1.4	QPSK	6	0	23.11	23.04	22.93	
1.4	16QAM	1	0	23.33	23.28	23.12	
1.4	16QAM	1	3	23.37	23.32	23.23	24
1.4	16QAM	1	5	23.30	23.27	23.14	
1.4	16QAM	3	0	23.10	23.07	22.97	
1.4	16QAM	3	1	23.16	23.13	23.01	23.7
1.4	16QAM	3	3	23.10	23.04	22.93	
1.4	16QAM	6	0	22.63	22.58	22.47	
1.4	64QAM	1	0	22.62	22.73	22.62	23.7
1.4	64QAM	1	3	22.57	22.60	22.66	
1.4	64QAM	1	5	22.54	22.72	22.59	
1.4	64QAM	3	0	22.51	22.69	22.56	
1.4	64QAM	3	1	22.60	22.75	22.60	23.7
1.4	64QAM	3	3	22.56	22.69	22.57	
1.4	64QAM	6	0	21.42	21.54	21.43	22.7



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				1860	1890	1900	
Frequency (MHz)				1860	1890	1900	
20	QPSK	1	0	23.14	23.17	23.21	25.1
20	QPSK	1	49	23.10	23.21	23.23	
20	QPSK	1	99	23.11	23.19	23.22	
20	QPSK	50	0	22.50	22.58	22.58	
20	QPSK	50	24	22.56	22.59	22.70	24.5
20	QPSK	50	50	22.53	22.66	22.71	
20	QPSK	100	0	22.57	22.58	22.50	
20	16QAM	1	0	22.76	22.78	22.81	
20	16QAM	1	49	22.72	22.80	22.89	24.5
20	16QAM	1	99	22.71	22.81	22.85	
20	16QAM	50	0	21.46	21.59	21.60	
20	16QAM	50	24	21.56	21.61	21.71	
20	16QAM	50	50	21.52	21.67	21.72	23.5
20	16QAM	100	0	21.54	21.59	21.63	
20	64QAM	1	0	21.63	21.67	21.77	
20	64QAM	1	49	21.59	21.73	20.91	
20	64QAM	1	99	21.60	21.74	21.23	22.5
20	64QAM	50	0	20.49	20.61	20.35	
20	64QAM	50	24	20.59	20.63	20.15	
20	64QAM	50	50	20.59	20.67	20.29	
20	64QAM	100	0	20.54	20.60	20.25	
Channel				1867.5	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1867.5	1890	1902.5	
15	QPSK	1	0	23.14	23.08	23.19	25.1
15	QPSK	1	37	23.10	23.15	23.14	
15	QPSK	1	74	23.06	23.18	23.15	
15	QPSK	36	0	22.41	22.52	22.52	
15	QPSK	36	20	22.50	22.52	22.68	24.5
15	QPSK	36	39	22.48	22.66	22.64	
15	QPSK	75	0	22.52	22.50	22.40	
15	16QAM	1	0	22.76	22.68	22.72	
15	16QAM	1	37	22.67	22.77	22.89	24.5
15	16QAM	1	74	22.61	22.80	22.77	
15	16QAM	36	0	21.40	21.52	21.54	
15	16QAM	36	20	21.48	21.54	21.70	
15	16QAM	36	39	21.51	21.66	21.67	23.5
15	16QAM	75	0	21.54	21.53	21.53	
15	64QAM	1	0	21.53	21.66	21.73	
15	64QAM	1	37	21.57	21.70	20.92	
15	64QAM	1	74	21.54	21.70	21.23	22.5
15	64QAM	36	0	20.39	20.55	20.33	
15	64QAM	36	20	20.52	20.63	20.06	
15	64QAM	36	39	20.51	20.64	20.27	
15	64QAM	75	0	20.47	20.54	20.19	
Channel				1865.0	1890.0	1915.0	Tune-up limit (dBm)
Frequency (MHz)				1865	1890	1905	
10	QPSK	1	0	23.08	23.12	23.14	25.1
10	QPSK	1	25	23.00	23.20	23.22	
10	QPSK	1	49	23.05	23.09	23.21	
10	QPSK	25	0	22.48	22.49	22.56	
10	QPSK	25	12	22.53	22.56	22.70	24.5
10	QPSK	25	25	22.43	22.56	22.64	
10	QPSK	50	0	22.50	22.56	22.49	
10	16QAM	1	0	22.66	22.74	22.74	
10	16QAM	1	25	22.67	22.70	22.64	24.5
10	16QAM	1	49	22.65	22.75	22.80	
10	16QAM	25	0	21.41	21.57	21.50	
10	16QAM	25	12	21.50	21.54	21.64	
10	16QAM	25	25	21.49	21.58	21.65	23.5
10	16QAM	50	0	21.47	21.56	21.58	
10	64QAM	1	0	21.55	21.57	21.77	
10	64QAM	1	25	21.52	21.66	20.82	
10	64QAM	1	49	21.54	21.68	21.17	22.5
10	64QAM	25	0	20.48	20.58	20.26	
10	64QAM	25	12	20.54	20.63	20.06	
10	64QAM	25	25	20.58	20.58	20.20	
10	64QAM	50	0	20.48	20.59	20.17	
Channel				1862.5	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1890	1907.5	
5	QPSK	1	0	23.04	23.15	23.15	25.1
5	QPSK	1	12	23.00	23.21	23.15	
5	QPSK	1	24	23.02	23.14	23.20	
5	QPSK	12	0	22.50	22.56	22.53	
5	QPSK	12	7	22.52	22.59	22.66	24.5
5	QPSK	12	13	22.46	22.66	22.66	
5	QPSK	25	0	22.53	22.52	22.48	
5	16QAM	1	0	22.73	22.77	22.71	
5	16QAM	1	12	22.71	22.80	22.84	24.5
5	16QAM	1	24	22.68	22.81	22.77	
5	16QAM	12	0	21.41	21.54	21.53	
5	16QAM	12	7	21.54	21.57	21.70	
5	16QAM	12	13	21.47	21.67	21.67	23.5
5	16QAM	25	0	21.53	21.51	21.63	
5	64QAM	1	0	21.63	21.60	21.74	
5	64QAM	1	12	21.50	21.68	20.86	
5	64QAM	1	24	21.59	21.73	21.14	22.5
5	64QAM	12	0	20.39	20.52	20.29	
5	64QAM	12	7	20.51	20.57	20.05	
5	64QAM	12	13	20.56	20.60	20.25	
5	64QAM	25	0	20.48	20.55	20.21	
Channel				1861.5	1890.0	19185	Tune-up limit (dBm)
Frequency (MHz)				1861.5	1890	1908.5	
3	QPSK	1	0	23.11	23.07	23.12	25.1
3	QPSK	1	8	23.02	23.12	23.17	
3	QPSK	1	14	23.06	23.11	23.17	
3	QPSK	8	0	22.50	22.48	22.54	
3	QPSK	8	4	22.48	22.59	22.67	24.5
3	QPSK	8	7	22.44	22.61	22.65	
3	QPSK	15	0	22.55	22.58	22.42	
3	16QAM	1	0	22.72	22.68	22.71	
3	16QAM	1	8	22.64	22.72	22.64	24.5
3	16QAM	1	14	22.64	22.78	22.85	
3	16QAM	8	0	21.44	21.58	21.51	
3	16QAM	8	4	21.47	21.60	21.61	
3	16QAM	8	7	21.44	21.63	21.68	23.5
3	16QAM	15	0	21.46	21.56	21.56	
3	64QAM	1	0	21.55	21.60	21.72	
3	64QAM	1	8	21.54	21.66	20.88	
3	64QAM	1	14	21.60	21.64	21.16	22.5
3	64QAM	8	0	20.46	20.61	20.33	
3	64QAM	8	4	20.51	20.56	20.12	
3	64QAM	8	7	20.58	20.60	20.29	
3	64QAM	15	0	20.44	20.54	20.16	
Channel				1860.7	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1860.7	1890	1909.3	
1.4	QPSK	1	0	22.89	23.01	23.07	25.1
1.4	QPSK	1	3	22.96	23.09	23.11	
1.4	QPSK	1	5	22.92	23.05	23.10	
1.4	QPSK	3	0	22.96	23.03	23.11	
1.4	QPSK	3	1	23.01	23.13	23.15	24.5
1.4	QPSK	3	3	22.94	23.09	23.12	
1.4	QPSK	6	0	22.39	22.55	22.60	
1.4	16QAM	1	0	22.61	22.75	22.80	
1.4	16QAM	1	3	22.67	22.83	22.86	24.5
1.4	16QAM	1	5	22.64	22.80	22.81	
1.4	16QAM	3	0	22.43	22.51	22.59	
1.4	16QAM	3	1	22.50	22.60	22.64	
1.4	16QAM	3	3	22.41	22.54	22.57	23.5
1.4	16QAM	6	0	21.49	21.64	21.66	
1.4	64QAM	1	0	21.56	21.63	21.61	
1.4	64QAM	1	3	21.65	21.77	21.65	
1.4	64QAM	1	5	21.57	21.73	21.56	23.5
1.4	64QAM	3	0	21.52	21.62	21.58	
1.4	64QAM	3	1	21.58	21.72	21.66	
1.4	64QAM	3	3	21.53	21.68	21.55	
1.4	64QAM	6	0	20.43	20.58	20.47	22.5



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	1724.5	1745	
20	QPSK	1	0	23.46	23.47	23.52	25.1
20	QPSK	1	49	23.46	23.56	23.51	
20	QPSK	1	99	23.43	23.49	23.47	
20	QPSK	50	0	23.55	23.56	23.57	
20	QPSK	50	24	23.51	23.56	23.52	24.5
20	QPSK	50	50	23.50	23.55	23.52	
20	QPSK	100	0	22.92	22.97	22.96	
20	16QAM	1	0	23.19	23.21	23.26	
20	16QAM	1	49	23.20	23.32	23.30	24.5
20	16QAM	1	99	23.20	23.23	23.21	
20	16QAM	50	0	23.06	23.08	23.08	
20	16QAM	50	24	23.01	23.06	23.03	
20	16QAM	50	50	22.98	23.04	23.00	23.5
20	16QAM	100	0	21.94	22.01	21.97	
20	64QAM	1	0	21.45	22.14	22.11	
20	64QAM	1	49	21.67	22.12	22.07	
20	64QAM	1	99	21.85	22.10	22.06	23.5
20	64QAM	50	0	21.43	22.08	22.06	
20	64QAM	50	24	21.54	22.05	21.94	
20	64QAM	50	50	21.70	22.04	21.95	
20	64QAM	100	0	20.58	20.99	20.94	22.5
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.54	23.54	23.43	25.1
15	QPSK	1	37	23.50	23.46	23.43	
15	QPSK	1	74	23.41	23.40	23.40	
15	QPSK	36	0	23.57	23.55	23.50	
15	QPSK	36	20	23.52	23.51	23.39	24.5
15	QPSK	36	39	23.47	23.46	23.36	
15	QPSK	75	0	22.95	22.97	22.85	
15	16QAM	1	0	23.29	23.27	23.15	
15	16QAM	1	37	23.24	23.19	23.16	24.5
15	16QAM	1	74	23.17	23.13	23.16	
15	16QAM	36	0	23.07	23.03	22.95	
15	16QAM	36	20	22.97	22.96	22.88	
15	16QAM	36	39	22.92	22.92	22.81	23.5
15	16QAM	75	0	21.97	21.96	21.86	
15	64QAM	1	0	22.12	22.15	22.04	
15	64QAM	1	37	22.10	22.08	22.00	
15	64QAM	1	74	21.98	21.98	22.00	23.5
15	64QAM	36	0	22.05	22.05	21.95	
15	64QAM	36	20	22.00	21.97	21.85	
15	64QAM	36	39	21.95	21.91	21.84	
15	64QAM	75	0	20.98	20.95	20.85	22.5
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.48	23.43	23.48	25.1
10	QPSK	1	25	23.38	23.50	23.46	
10	QPSK	1	49	23.38	23.45	23.42	
10	QPSK	25	0	23.54	23.56	23.53	
10	QPSK	25	12	23.44	23.52	23.45	24.5
10	QPSK	25	25	23.40	23.47	23.49	
10	QPSK	50	0	22.89	22.95	22.88	
10	16QAM	1	0	23.09	23.15	23.21	
10	16QAM	1	25	23.19	23.32	23.30	24.5
10	16QAM	1	49	23.17	23.22	23.18	
10	16QAM	25	0	23.00	23.08	22.98	
10	16QAM	25	12	22.96	23.02	22.97	
10	16QAM	25	25	22.96	23.03	23.00	23.5
10	16QAM	50	0	21.92	21.95	21.87	
10	64QAM	1	0	21.43	22.07	22.04	
10	64QAM	1	25	21.65	22.03	22.07	
10	64QAM	1	49	21.81	22.02	22.03	23.5
10	64QAM	25	0	21.42	22.07	21.96	
10	64QAM	25	12	21.44	22.01	21.94	
10	64QAM	25	25	21.64	22.03	21.88	
10	64QAM	50	0	20.50	20.94	20.90	22.5
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.38	23.47	23.43	25.1
5	QPSK	1	12	23.46	23.49	23.44	
5	QPSK	1	24	23.36	23.46	23.40	
5	QPSK	12	0	23.45	23.56	23.50	
5	QPSK	12	7	23.41	23.52	23.45	24.5
5	QPSK	12	13	23.48	23.53	23.42	
5	QPSK	25	0	22.85	22.90	22.96	
5	16QAM	1	0	23.19	23.21	23.20	
5	16QAM	1	12	23.11	23.26	23.27	24.5
5	16QAM	1	24	23.15	23.14	23.14	
5	16QAM	12	0	23.03	23.05	23.01	
5	16QAM	12	7	22.96	22.96	23.02	
5	16QAM	12	13	22.97	22.96	22.93	23.5
5	16QAM	25	0	21.87	21.99	21.93	
5	64QAM	1	0	21.45	22.05	22.06	
5	64QAM	1	12	21.66	22.07	22.05	
5	64QAM	1	24	21.83	22.10	22.05	22.5
5	64QAM	12	0	21.43	22.05	22.00	
5	64QAM	12	7	21.49	22.01	21.87	
5	64QAM	12	13	21.70	22.01	21.89	
5	64QAM	25	0	20.56	20.93	20.91	22.5
Channel				19950	20175	20395	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.44	23.38	23.45	25.1
3	QPSK	1	8	23.39	23.45	23.43	
3	QPSK	1	14	23.34	23.42	23.42	
3	QPSK	8	0	23.54	23.56	23.52	
3	QPSK	8	4	23.46	23.55	23.49	24.5
3	QPSK	8	7	23.49	23.50	23.44	
3	QPSK	15	0	22.90	22.91	22.88	
3	16QAM	1	0	23.11	23.11	23.25	
3	16QAM	1	8	23.15	23.32	23.21	24.5
3	16QAM	1	14	23.14	23.18	23.14	
3	16QAM	8	0	23.06	23.06	23.06	
3	16QAM	8	4	22.93	23.05	22.94	
3	16QAM	8	7	22.93	22.97	22.92	23.5
3	16QAM	15	0	21.91	21.93	21.89	
3	64QAM	1	0	21.40	22.05	22.01	
3	64QAM	1	8	21.62	22.09	21.97	
3	64QAM	1	14	21.85	22.00	21.97	22.5
3	64QAM	8	0	21.41	22.06	22.00	
3	64QAM	8	4	21.45	21.96	21.85	
3	64QAM	8	7	21.68	21.97	21.90	
3	64QAM	15	0	20.57	20.93	20.90	22.5
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.30	23.32	23.27	25.1
1.4	QPSK	1	3	23.39	23.45	23.36	
1.4	QPSK	1	5	23.34	23.35	23.30	
1.4	QPSK	3	0	23.33	23.35	23.38	
1.4	QPSK	3	1	23.40	23.44	23.38	24.5
1.4	QPSK	3	3	23.34	23.38	23.35	
1.4	QPSK	6	0	22.84	22.79	22.77	
1.4	16QAM	1	0	23.05	23.05	23.08	
1.4	16QAM	1	3	23.11	23.20	23.13	24.5
1.4	16QAM	1	5	23.07	23.08	23.06	
1.4	16QAM	3	0	22.81	22.83	22.86	
1.4	16QAM	3	1	22.89	22.93	22.91	
1.4	16QAM	3	3	22.81	22.87	22.81	23.5
1.4	16QAM	6	0	21.89	21.89	21.87	
1.4	64QAM	1	0	21.25	21.97	22.01	
1.4	64QAM	1	3	21.32	22.11	22.04	
1.4	64QAM	1	5	21.24	21.99	21.98	23.5
1.4	64QAM	3	0	21.26	21.95	21.93	
1.4	64QAM	3	1	21.34	22.05	21.98	
1.4	64QAM	3	3	21.27	22.00	21.95	
1.4	64QAM	6	0	20.18	20.84	20.81	22.5



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				824	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	
10	QPSK	25	12	22.18	22.14	22.17	24
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	24
10	16QAM	1	49	22.47	22.39	22.31	
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	23
10	16QAM	25	25	21.16	21.16	21.17	
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	23
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	
5	QPSK	12	7	22.12	22.12	22.09	24
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	24
5	16QAM	1	24	22.40	22.41	22.16	
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	
5	64QAM	1	24	21.34	21.35	20.16	23
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	22
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	
3	QPSK	8	4	22.09	22.12	22.03	24
3	QPSK	8	7	22.06	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	24
3	16QAM	1	14	22.29	22.35	22.26	
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.16	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	23
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	
3	64QAM	1	14	21.24	21.32	20.28	23
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	22
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	
1.4	QPSK	3	1	23.26	23.25	23.23	24
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	24
1.4	16QAM	1	5	22.52	22.54	22.47	
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.66	
1.4	64QAM	1	3	21.53	21.56	20.78	
1.4	64QAM	1	5	21.45	21.49	20.77	23
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	22



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	2534	2558	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	
20	QPSK	50	24	22.99	22.97	22.97	24.5
20	QPSK	50	50	23.02	23.08	22.99	
20	QPSK	100	0	22.96	23.00	22.97	
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	24.5
20	16QAM	1	99	23.19	23.32	23.22	
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.96	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	
20	64QAM	1	99	22.11	22.23	22.12	22.5
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	
15	QPSK	36	20	23.04	23.01	22.92	24.5
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	24.5
15	16QAM	1	74	23.21	23.30	23.26	
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	
15	64QAM	1	74	22.12	22.25	22.13	22.5
15	64QAM	36	0	20.93	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	
10	QPSK	25	12	23.00	23.02	22.95	24.5
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	24.5
10	16QAM	1	49	23.25	23.34	23.19	
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.88	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	23.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	
10	64QAM	1	49	22.13	22.27	22.09	22.5
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	
5	QPSK	12	7	22.95	23.01	22.89	24.5
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	24.5
5	16QAM	1	24	23.19	23.25	23.14	
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	
5	64QAM	1	24	22.14	22.22	22.10	22.5
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.03	20.97	



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	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	
10	QPSK	25	12	23.11	23.04	23.08	24.7
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	24.7
10	16QAM	1	49	23.37	23.36	23.33	
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.08	23.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	
10	64QAM	1	49	22.09	22.03	21.83	22.7
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	
5	QPSK	12	7	23.04	23.05	23.04	24.7
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.28	23.25	24.7
5	16QAM	1	24	23.28	23.35	23.28	
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	23.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	
5	64QAM	1	12	21.70	22.17	22.01	
5	64QAM	1	24	21.72	22.12	21.85	22.7
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.99	20.96	
Channel				23035	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	
3	QPSK	8	4	23.05	23.09	23.05	24.7
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	24.7
3	16QAM	1	14	23.21	23.30	23.22	
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	23.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	
3	64QAM	1	14	21.73	22.21	21.77	23.7
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.15	20.90	
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	
1.4	QPSK	3	1	23.99	23.98	23.96	24.7
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	24.7
1.4	16QAM	1	5	23.44	23.52	23.45	
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.36	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	
1.4	64QAM	1	5	21.70	22.43	21.80	23.7
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	22.7



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		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		24
10	QPSK	25	12		22.02		
10	QPSK	25	25		22.05		
10	QPSK	50	0		22.15		24
10	16QAM	1	0		22.27		
10	16QAM	1	25		22.27		
10	16QAM	1	49		22.33		23
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.06		
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		23
10	64QAM	1	25		21.22		
10	64QAM	1	49		21.29		
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.06		
10	64QAM	25	25		20.11		22
10	64QAM	50	0		20.12		
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	22.90	22.85	22.60	25
5	QPSK	1	12	22.94	22.95	22.68	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.96	
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	23
5	16QAM	12	13	21.09	21.09	20.84	
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.06	21.13	20.86	
5	64QAM	1	12	21.13	21.16	20.90	
5	64QAM	1	24	21.18	21.17	20.98	22
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



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			Tune-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0	23.07			25
10	QPSK	1	25	23.07			
10	QPSK	1	49	23.08			
10	QPSK	25	0	22.08			
10	QPSK	25	12	22.10			24
10	QPSK	25	25	22.19			
10	QPSK	50	0	22.12			
10	16QAM	1	0	22.44			
10	16QAM	1	25	22.44			24
10	16QAM	1	49	22.42			
10	16QAM	25	0	21.10			
10	16QAM	25	12	21.12			23
10	16QAM	25	25	21.20			
10	16QAM	50	0	21.10			
10	64QAM	1	0	21.31			
10	64QAM	1	25	21.39			23
10	64QAM	1	49	21.35			
10	64QAM	25	0	20.12			
10	64QAM	25	12	20.15			22
10	64QAM	25	25	20.20			
10	64QAM	50	0	20.17			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.02	23.01	23.01	25
5	QPSK	1	12	23.02	23.06	23.05	
5	QPSK	1	24	23.04	23.04	23.01	
5	QPSK	12	0	22.05	22.07	22.08	
5	QPSK	12	7	22.16	22.11	22.13	24
5	QPSK	12	13	22.10	22.12	22.07	
5	QPSK	25	0	22.08	22.06	22.04	
5	16QAM	1	0	22.32	22.32	22.31	
5	16QAM	1	12	22.40	22.43	22.42	24
5	16QAM	1	24	22.38	22.40	22.36	
5	16QAM	12	0	21.12	21.11	21.10	
5	16QAM	12	7	21.21	21.16	21.19	
5	16QAM	12	13	21.14	21.16	21.12	23
5	16QAM	25	0	21.11	21.09	21.06	
5	64QAM	1	0	21.21	21.30	21.29	
5	64QAM	1	12	21.32	21.41	21.34	
5	64QAM	1	24	21.38	21.36	21.33	23
5	64QAM	12	0	20.16	20.18	20.14	
5	64QAM	12	7	20.25	20.18	20.21	
5	64QAM	12	13	20.18	20.23	20.16	
5	64QAM	25	0	20.12	20.12	20.07	22



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	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	
10	QPSK	25	12	22.25	22.26	22.28	24
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.26	22.30	
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	24
10	16QAM	1	49	22.26	22.23	22.26	
10	16QAM	25	0	20.91	20.87	20.88	
10	16QAM	25	12	21.02	20.96	20.94	
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	
10	64QAM	1	25	21.14	21.18	21.17	
10	64QAM	1	49	21.16	21.18	21.13	23
10	64QAM	25	0	19.92	19.92	19.92	
10	64QAM	25	12	20.08	19.96	19.96	
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.98	19.97	19.97	22
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	
5	QPSK	12	7	22.29	22.22	22.23	24
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	24
5	16QAM	1	24	22.25	22.25	22.22	
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.09	21.13	21.09	
5	64QAM	1	24	21.19	21.16	21.10	23
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	22



Band 25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. (dBm)	Power Middle Ch. (dBm)	Power High Ch. (dBm)	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	23.19	23.13	23.13	25.1		
20	QPSK	1	49	23.11	23.12	23.12			
20	QPSK	1	99	23.11	23.10	23.11			
20	QPSK	50	0	22.54	22.59	22.63	24.5		
20	QPSK	50	24	22.58	22.67	22.74			
20	QPSK	50	50	22.55	22.61	22.71			
20	QPSK	100	0	22.60	22.63	22.66	24.5		
20	16QAM	1	0	22.77	22.82	22.81			
20	16QAM	1	49	22.77	22.85	22.86			
20	16QAM	1	99	22.73	22.84	22.83	23.5		
20	16QAM	50	0	21.55	21.60	21.65			
20	16QAM	50	24	21.61	21.67	21.73			
20	16QAM	50	50	21.55	21.63	21.71	23.5		
20	16QAM	100	0	21.57	21.64	21.65			
20	64QAM	1	0	21.67	21.67	21.74			
20	64QAM	1	49	21.64	21.69	21.53	22.5		
20	64QAM	1	99	21.66	21.71	21.08			
20	64QAM	50	0	20.55	20.64	20.58			
20	64QAM	50	24	20.61	20.70	20.74	22.5		
20	64QAM	50	50	20.59	20.63	20.69			
20	64QAM	100	0	20.58	20.67	20.34			
Channel				26115	26340	26615	Tune-up limit (dBm)		
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	23.09	23.11	23.03	25.1		
15	QPSK	1	37	23.03	23.05	23.10			
15	QPSK	1	74	23.04	23.08	23.08			
15	QPSK	36	0	22.52	22.56	22.54	24.5		
15	QPSK	36	20	22.50	22.67	22.73			
15	QPSK	36	39	22.51	22.61	22.63			
15	QPSK	75	0	22.57	22.63	22.62	24.5		
15	16QAM	1	0	22.73	22.79	22.73			
15	16QAM	1	37	22.75	22.77	22.76			
15	16QAM	1	74	22.71	22.79	22.77	23.5		
15	16QAM	36	0	21.54	21.53	21.63			
15	16QAM	36	20	21.56	21.57	21.66			
15	16QAM	36	39	21.55	21.55	21.71	23.5		
15	16QAM	75	0	21.52	21.59	21.55			
15	64QAM	1	0	21.59	21.62	21.69			
15	64QAM	1	37	21.60	21.62	21.45	22.5		
15	64QAM	1	74	21.59	21.64	21.04			
15	64QAM	36	0	20.49	20.54	20.50			
15	64QAM	36	20	20.60	20.65	20.69	22.5		
15	64QAM	36	39	20.54	20.57	20.61			
15	64QAM	75	0	20.50	20.62	20.34			
Channel				26090	26340	26640	Tune-up limit (dBm)		
Frequency (MHz)				1853	1880	1910			
10	QPSK	1	0	23.13	23.10	23.13	25.1		
10	QPSK	1	25	23.10	23.11	23.14			
10	QPSK	1	49	23.15	23.10	23.12			
10	QPSK	25	0	22.50	22.57	22.62	24.5		
10	QPSK	25	12	22.51	22.58	22.65			
10	QPSK	25	25	22.50	22.55	22.69			
10	QPSK	50	0	22.59	22.56	22.63	24.5		
10	16QAM	1	0	22.67	22.81	22.79			
10	16QAM	1	25	22.71	22.80	22.85			
10	16QAM	1	49	22.66	22.75	22.76	23.5		
10	16QAM	25	0	21.46	21.58	21.56			
10	16QAM	25	12	21.59	21.57	21.70			
10	16QAM	25	25	21.50	21.63	21.65	23.5		
10	16QAM	50	0	21.47	21.63	21.59			
10	64QAM	1	0	21.61	21.61	21.65			
10	64QAM	1	25	21.62	21.68	21.45	22.5		
10	64QAM	1	49	21.66	21.62	21.08			
10	64QAM	25	0	20.51	20.57	20.56			
10	64QAM	25	12	20.58	20.60	20.64	22.5		
10	64QAM	25	25	20.57	20.60	20.65			
10	64QAM	50	0	20.57	20.67	20.26			
Channel				26065	26340	26665	Tune-up limit (dBm)		
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	23.12	23.09	23.05	25.1		
5	QPSK	1	12	23.07	23.10	23.09			
5	QPSK	1	24	23.09	23.09	23.09			
5	QPSK	12	0	22.52	22.53	22.55	24.5		
5	QPSK	12	7	22.48	22.65	22.67			
5	QPSK	12	13	22.53	22.54	22.69			
5	QPSK	25	0	22.53	22.55	22.64	24.5		
5	16QAM	1	0	22.75	22.76	22.80			
5	16QAM	1	12	22.74	22.75	22.81			
5	16QAM	1	24	22.71	22.82	22.79	23.5		
5	16QAM	12	0	21.45	21.50	21.61			
5	16QAM	12	7	21.60	21.63	21.67			
5	16QAM	12	13	21.54	21.63	21.61	23.5		
5	16QAM	25	0	21.51	21.56	21.55			
5	64QAM	1	0	21.61	21.58	21.68	23.5		
5	64QAM	1	12	21.64	21.67	21.48			
5	64QAM	1	24	21.64	21.62	21.01			
5	64QAM	12	0	20.48	20.57	20.52	22.5		
5	64QAM	12	7	20.57	20.64	20.67			
5	64QAM	12	13	20.53	20.59	20.65			
5	64QAM	25	0	20.51	20.59	20.26	20.34		
Channel				26055	26340	26683		Tune-up limit (dBm)	
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	23.16	23.04	23.06	25.1		
3	QPSK	1	8	23.02	23.07	23.06			
3	QPSK	1	14	23.01	23.05	23.06			
3	QPSK	8	0	22.45	22.56	22.53	24.5		
3	QPSK	8	4	22.52	22.58	22.70			
3	QPSK	8	7	22.54	22.51	22.63			
3	QPSK	15	0	22.52	22.55	22.65	24.5		
3	16QAM	1	0	22.69	22.81	22.79			
3	16QAM	1	8	22.75	22.75	22.81			
3	16QAM	1	14	22.67	22.84	22.76	23.5		
3	16QAM	8	0	21.55	21.60	21.58			
3	16QAM	8	4	21.51	21.64	21.68			
3	16QAM	8	7	21.55	21.56	21.70	23.5		
3	16QAM	15	0	21.55	21.61	21.55			
3	64QAM	1	0	21.66	21.58	21.71			
3	64QAM	1	8	21.54	21.66	21.44	23.5		
3	64QAM	1	14	21.66	21.69	20.98			
3	64QAM	8	0	20.50	20.57	20.54			
3	64QAM	8	4	20.54	20.62	20.65	22.5		
3	64QAM	8	7	20.59	20.55	20.60			
3	64QAM	15	0	20.49	20.66	20.29			
Channel				26047	26340	26683	Tune-up limit (dBm)		
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	22.92	22.94	23.11	25.1		
1.4	QPSK	1	3	23.02	23.09	23.16			
1.4	QPSK	1	5	22.97	23.09	23.17			
1.4	QPSK	3	0	22.99	23.04	23.17	24.5		
1.4	QPSK	3	1	23.04	23.10	23.17			
1.4	QPSK	3	3	23.01	23.08	23.18			
1.4	QPSK	6	0	22.50	22.52	22.63	24.5		
1.4	QPSK	6	1	22.58	22.59	22.83			
1.4	QPSK	6	3	22.56	22.53	22.83			
1.4	16QAM	1	0	22.76	22.85	22.82	24.5		
1.4	16QAM	1	5	22.72	22.82	22.84			
1.4	16QAM	1	3	22.48	22.56	22.62			
1.4	16QAM	3	1	22.55	22.65	22.67	23.5		
1.4	16QAM	3	3	22.50	22.61	22.62			
1.4	16QAM	3	5	21.61	21.68	21.68			
1.4	64QAM	1	0	21.61	21.64	21.04	23.5		
1.4	64QAM	1	3	21.69	21.80	21.00			
1.4	64QAM	1	5	21.64	21.76	20.95			
1.4	64QAM	3	0	21.57	21.68	21.02	23.5		
1.4	64QAM	3	1	21.62	21.73	21.01			
1.4	64QAM	3	3	21.73	21.79	21.06			
1.4	64QAM	6	0	20.49	20.56	19.93	22.5		



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)				831.5	831.5	841.5	
15	QPSK	1	0	23.14	23.06	23.05	25
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.18	22.17	
15	QPSK	36	20	22.22	22.20	22.18	24
15	QPSK	36	39	22.21	22.18	22.15	
15	QPSK	75	0	22.25	22.23	22.12	
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.38	24
15	16QAM	1	74	22.38	22.39	22.23	
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	23
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	
15	64QAM	1	37	21.28	21.32	21.32	
15	64QAM	1	74	21.29	21.30	21.02	22
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.28	20.27	20.21	
15	64QAM	36	39	20.26	20.27	20.21	
15	64QAM	75	0	20.27	20.25	20.20	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	
10	QPSK	25	12	22.13	22.03	22.05	24
10	QPSK	25	25	22.06	22.06	22.03	
10	QPSK	50	0	22.15	22.08	22.02	
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.39	22.36	22.34	24
10	16QAM	1	49	22.33	22.37	22.21	
10	16QAM	25	0	21.16	21.05	21.04	
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	23
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.29	21.21	
10	64QAM	1	25	21.15	21.27	21.25	
10	64QAM	1	49	21.31	21.32	21.08	22
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.98	20.10	20.08	
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	
Channel				847.5	846.5	846.5	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	
5	QPSK	12	7	22.18	22.10	22.02	24
5	QPSK	12	13	22.08	22.03	22.00	
5	QPSK	25	0	22.09	22.08	22.02	
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	24
5	16QAM	1	24	22.33	22.38	22.19	
5	16QAM	12	0	21.20	21.06	21.05	
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	23
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.00	
5	64QAM	1	24	21.02	21.27	21.01	22
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.19	19.45	
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	
3	QPSK	8	4	22.16	22.08	22.00	24
3	QPSK	8	7	22.10	22.02	22.02	
3	QPSK	15	0	22.15	22.03	22.01	
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	24
3	16QAM	1	14	22.29	22.32	22.16	
3	16QAM	8	0	21.23	21.11	21.03	
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	23
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	
3	64QAM	1	14	21.18	21.28	20.45	22
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.09	19.41	
Channel				26957	26965	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	846.3	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	
1.4	QPSK	3	1	23.09	23.07	23.11	24
1.4	QPSK	3	3	23.12	23.06	23.05	
1.4	QPSK	6	0	22.16	22.21	22.13	
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	24
1.4	16QAM	1	5	22.36	22.48	22.32	
1.4	16QAM	3	0	22.24	22.24	22.16	
1.4	16QAM	3	1	22.20	22.30	22.18	
1.4	16QAM	3	3	22.21	22.26	22.14	23
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.94	
1.4	64QAM	1	5	21.31	21.36	20.91	23
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.29	20.25	19.69	22



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		24.12		25.7
10	QPSK	1	25		24.04		
10	QPSK	1	49		24.03		
10	QPSK	25	0		23.10		24.7
10	QPSK	25	12		23.16		
10	QPSK	25	25		23.14		
10	QPSK	50	0		23.18		24.7
10	16QAM	1	0		23.44		
10	16QAM	1	25		23.47		
10	16QAM	1	49		23.35		23.7
10	16QAM	25	0		22.11		
10	16QAM	25	12		22.15		
10	16QAM	25	25		22.14		23.7
10	16QAM	50	0		22.11		
10	64QAM	1	0		22.35		
10	64QAM	1	25		21.90		23.7
10	64QAM	1	49		21.70		
10	64QAM	25	0		21.07		
10	64QAM	25	12		20.86		22.7
10	64QAM	25	25		20.84		
10	64QAM	50	0		20.86		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.93	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.75	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	



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	1744	1772	
20	QPSK	1	0	23.54	23.54	23.43	25.1
20	QPSK	1	49	23.50	23.46	23.43	
20	QPSK	1	99	23.41	23.40	23.40	
20	QPSK	50	0	23.57	23.60	23.50	24.5
20	QPSK	50	24	23.52	23.51	23.39	
20	QPSK	50	50	23.47	23.46	23.36	
20	QPSK	100	0	22.95	22.97	22.85	24.5
20	16QAM	1	0	23.29	23.27	23.15	
20	16QAM	1	49	23.24	23.19	23.18	
20	16QAM	1	99	23.17	23.13	23.16	23.5
20	16QAM	50	0	23.07	23.03	22.95	
20	16QAM	50	24	22.97	22.96	22.88	
20	16QAM	50	50	22.92	22.92	22.81	23.5
20	16QAM	100	0	21.97	21.96	21.86	
20	64QAM	1	0	22.12	22.15	22.04	
20	64QAM	1	49	22.10	22.08	22.00	22.5
20	64QAM	1	99	21.98	21.98	22.00	
20	64QAM	50	0	22.05	22.05	21.95	
20	64QAM	50	24	22.00	21.97	21.85	22.5
20	64QAM	50	50	21.95	21.91	21.84	
20	64QAM	100	0	20.98	20.98	20.85	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.47	23.46	23.33	25.1
15	QPSK	1	37	23.50	23.39	23.42	
15	QPSK	1	74	23.33	23.31	23.32	
15	QPSK	36	0	23.48	23.52	23.44	24.5
15	QPSK	36	20	23.52	23.42	23.30	
15	QPSK	36	39	23.37	23.37	23.35	
15	QPSK	75	0	22.90	22.89	22.84	24.5
15	16QAM	1	0	23.23	23.25	23.06	
15	16QAM	1	37	23.19	23.18	23.15	
15	16QAM	1	74	23.09	23.05	23.08	23.5
15	16QAM	36	0	22.97	23.03	22.85	
15	16QAM	36	20	22.96	22.96	22.82	
15	16QAM	36	39	22.89	22.88	22.79	23.5
15	16QAM	75	0	21.91	21.87	21.81	
15	64QAM	1	0	22.02	22.14	21.96	
15	64QAM	1	37	22.08	21.99	21.94	22.5
15	64QAM	1	74	21.89	21.95	21.91	
15	64QAM	36	0	22.01	22.02	21.88	
15	64QAM	36	20	21.95	21.88	21.80	22.5
15	64QAM	36	39	21.87	21.81	21.75	
15	64QAM	75	0	20.92	20.85	20.75	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.45	23.48	23.40	25.1
10	QPSK	1	25	23.48	23.38	23.39	
10	QPSK	1	49	23.31	23.32	23.33	
10	QPSK	25	0	23.51	23.52	23.46	24.5
10	QPSK	25	12	23.43	23.42	23.32	
10	QPSK	25	25	23.46	23.40	23.33	
10	QPSK	50	0	22.86	22.88	22.82	24.5
10	16QAM	1	0	23.26	23.18	23.15	
10	16QAM	1	25	23.23	23.10	23.10	
10	16QAM	1	49	23.13	23.12	23.15	23.5
10	16QAM	25	0	22.97	22.94	22.95	
10	16QAM	25	12	22.89	22.91	22.84	
10	16QAM	25	25	22.85	22.87	22.71	23.5
10	16QAM	50	0	21.93	21.89	21.82	
10	64QAM	1	0	22.02	22.09	21.96	
10	64QAM	1	25	22.04	22.05	21.99	22.5
10	64QAM	1	49	21.98	21.96	21.95	
10	64QAM	25	0	21.97	22.05	21.91	
10	64QAM	25	12	21.92	21.95	21.75	22.5
10	64QAM	25	25	21.85	21.89	21.83	
10	64QAM	50	0	20.89	20.94	20.81	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.45	23.47	23.37	25.1
5	QPSK	1	12	23.47	23.45	23.40	
5	QPSK	1	24	23.39	23.31	23.38	
5	QPSK	12	0	23.57	23.57	23.42	24.5
5	QPSK	12	7	23.50	23.47	23.34	
5	QPSK	12	13	23.38	23.43	23.27	
5	QPSK	25	0	22.88	22.90	22.83	24.5
5	16QAM	1	0	23.19	23.17	23.14	
5	16QAM	1	12	23.18	23.16	23.09	
5	16QAM	1	24	23.14	23.11	23.14	23.5
5	16QAM	12	0	23.05	22.99	22.88	
5	16QAM	12	7	22.88	22.91	22.84	
5	16QAM	12	13	22.88	22.85	22.78	23.5
5	16QAM	25	0	21.94	21.93	21.85	
5	64QAM	1	0	22.05	22.05	21.96	
5	64QAM	1	12	22.07	22.02	21.91	22.5
5	64QAM	1	24	21.93	21.91	22.00	
5	64QAM	12	0	22.04	22.02	21.91	
5	64QAM	12	7	21.91	21.91	21.82	22.5
5	64QAM	12	13	21.94	21.91	21.75	
5	64QAM	25	0	20.89	20.92	20.83	
Channel				131967	132322	132667	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1773.5	
3	QPSK	1	0	23.49	23.50	23.38	25.1
3	QPSK	1	8	23.40	23.45	23.37	
3	QPSK	1	14	23.35	23.39	23.37	
3	QPSK	8	0	23.55	23.52	23.41	24.5
3	QPSK	8	4	23.49	23.44	23.31	
3	QPSK	8	7	23.38	23.40	23.27	
3	QPSK	15	0	22.85	22.93	22.75	24.5
3	16QAM	1	0	23.21	23.23	23.07	
3	16QAM	1	8	23.15	23.16	23.09	
3	16QAM	1	14	23.08	23.04	23.09	23.5
3	16QAM	8	0	23.02	22.98	22.88	
3	16QAM	8	4	22.90	22.96	22.80	
3	16QAM	8	7	22.89	22.92	22.73	23.5
3	16QAM	15	0	21.92	21.89	21.79	
3	64QAM	1	0	22.10	22.05	22.04	
3	64QAM	1	8	22.07	21.99	22.00	22.5
3	64QAM	1	14	21.97	21.92	22.00	
3	64QAM	8	0	22.05	22.01	21.91	
3	64QAM	8	4	21.97	21.92	21.83	22.5
3	64QAM	8	7	21.94	21.88	21.77	
3	64QAM	15	0	20.91	20.89	20.84	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.42	23.35	23.17	25.1
1.4	QPSK	1	3	23.47	23.39	23.24	
1.4	QPSK	1	5	23.39	23.32	23.17	
1.4	QPSK	3	0	23.44	23.40	23.20	24.5
1.4	QPSK	3	1	23.48	23.45	23.25	
1.4	QPSK	3	3	23.41	23.36	23.18	
1.4	QPSK	6	0	22.90	22.85	22.66	24.5
1.4	16QAM	1	0	23.17	23.07	22.83	
1.4	16QAM	1	3	23.21	23.15	22.97	
1.4	16QAM	1	5	23.12	23.08	22.91	24.5
1.4	16QAM	3	0	22.93	22.90	22.72	
1.4	16QAM	3	1	22.99	22.94	22.76	
1.4	16QAM	3	3	22.92	22.85	22.67	23.5
1.4	16QAM	6	0	21.97	21.91	21.73	
1.4	64QAM	1	0	22.04	22.04	21.83	
1.4	64QAM	1	3	22.08	22.10	21.91	23.5
1.4	64QAM	1	5	22.06	22.00	21.83	
1.4	64QAM	3	0	22.01	21.99	21.79	
1.4	64QAM	3	1	22.07	22.03	21.84	22.5
1.4	64QAM	3	3	22.04	21.98	21.79	
1.4	64QAM	6	0	20.94	20.84	20.71	



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)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	24
20	QPSK	50	24	22.33	22.25	22.21	
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	24
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	23
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.16	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	22
20	64QAM	1	99	21.28	21.28	21.23	
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	22
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	24
15	QPSK	36	20	22.32	22.22	22.14	
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	24
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.32	22.45	
15	16QAM	1	74	22.39	22.47	22.33	23
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.56	21.40	21.08	
15	64QAM	1	37	20.95	21.41	21.35	22
15	64QAM	1	74	21.28	21.39	21.23	
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	19.86	20.11	20.20	22
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	24
10	QPSK	25	12	22.15	22.10	22.00	
10	QPSK	25	25	22.07	22.08	22.01	
10	QPSK	50	0	22.15	22.11	22.02	24
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	23
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	23
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	22
10	64QAM	1	49	20.69	21.18	21.10	
10	64QAM	25	0	19.03	20.05	19.96	
10	64QAM	25	12	19.15	20.15	19.95	22
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.95	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	24
5	QPSK	12	7	22.01	22.04	22.03	
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	24
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	23
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	22
5	64QAM	1	24	20.13	21.24	20.77	
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	22
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	



Band 2_Ant 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				1860	1890	1900	
Frequency (MHz)				1860	1890	1900	
20	QPSK	1	0	22.61	22.66	22.74	24.4
20	QPSK	1	49	22.53	22.72	22.77	
20	QPSK	1	99	22.55	22.71	22.80	
20	QPSK	50	0	22.64	22.75	22.82	
20	QPSK	50	24	22.71	22.80	22.92	24.4
20	QPSK	50	50	22.70	22.86	22.94	
20	QPSK	100	0	22.72	22.77	22.87	
20	16QAM	1	0	22.91	22.97	23.02	
20	16QAM	1	49	22.89	23.04	23.08	24.4
20	16QAM	1	99	22.86	23.07	23.06	
20	16QAM	50	0	22.34	22.46	22.55	
20	16QAM	50	24	22.44	22.49	22.85	
20	16QAM	50	50	22.40	22.56	22.86	23.7
20	16QAM	100	0	22.40	22.49	22.55	
20	64QAM	1	0	22.53	22.46	22.38	
20	64QAM	1	49	22.53	22.60	21.52	
20	64QAM	1	99	22.20	22.61	21.60	22.7
20	64QAM	50	0	21.36	21.49	20.78	
20	64QAM	50	24	21.44	21.51	20.65	
20	64QAM	50	50	21.17	21.60	20.77	
20	64QAM	100	0	21.32	21.39	20.72	
Channel				1867.5	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1867.5	1890	1902.5	
15	QPSK	1	0	22.59	22.57	22.66	24.4
15	QPSK	1	37	22.47	22.64	22.75	
15	QPSK	1	74	22.50	22.68	22.74	
15	QPSK	36	0	22.60	22.67	22.79	
15	QPSK	36	20	22.63	22.70	22.86	24.4
15	QPSK	36	39	22.61	22.84	22.94	
15	QPSK	75	0	22.70	22.70	22.81	
15	16QAM	1	0	22.82	22.95	22.93	
15	16QAM	1	37	22.80	22.96	23.07	24.4
15	16QAM	1	74	22.85	23.00	23.06	
15	16QAM	36	0	22.24	22.45	22.55	
15	16QAM	36	20	22.34	22.42	22.59	
15	16QAM	36	39	22.38	22.53	22.65	23.7
15	16QAM	75	0	22.34	22.42	22.52	
15	64QAM	1	0	22.46	22.40	22.31	
15	64QAM	1	37	22.52	22.54	21.47	
15	64QAM	1	74	22.13	22.60	21.55	22.7
15	64QAM	36	0	21.30	21.39	20.88	
15	64QAM	36	20	21.43	21.51	20.61	
15	64QAM	36	39	21.12	21.53	20.67	
15	64QAM	75	0	21.27	21.34	20.72	
Channel				1865.0	1890.0	1915.0	Tune-up limit (dBm)
Frequency (MHz)				1865	1890	1905	
10	QPSK	1	0	22.56	22.62	22.74	24.4
10	QPSK	1	25	22.44	22.71	22.75	
10	QPSK	1	49	22.54	22.69	22.79	
10	QPSK	25	0	22.61	22.65	22.81	
10	QPSK	25	12	22.66	22.74	22.91	24.4
10	QPSK	25	25	22.68	22.84	22.91	
10	QPSK	50	0	22.64	22.67	22.80	
10	16QAM	1	0	22.85	22.92	22.94	
10	16QAM	1	25	22.81	23.00	23.06	24.4
10	16QAM	1	49	22.77	23.06	22.96	
10	16QAM	25	0	22.30	22.41	22.45	
10	16QAM	25	12	22.39	22.42	22.65	
10	16QAM	25	25	22.38	22.56	22.84	23.7
10	16QAM	50	0	22.36	22.44	22.52	
10	64QAM	1	0	22.45	22.36	22.33	
10	64QAM	1	25	22.50	22.57	21.49	
10	64QAM	1	49	22.16	22.54	21.57	22.7
10	64QAM	25	0	21.30	21.45	20.76	
10	64QAM	25	12	21.43	21.42	20.62	
10	64QAM	25	25	21.12	21.54	20.72	
10	64QAM	50	0	21.27	21.35	20.85	
Channel				1862.5	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1890	1907.5	
5	QPSK	1	0	22.61	22.58	22.67	24.4
5	QPSK	1	12	22.49	22.63	22.70	
5	QPSK	1	24	22.55	22.66	22.76	
5	QPSK	12	0	22.57	22.72	22.75	
5	QPSK	12	7	22.65	22.70	22.82	24.4
5	QPSK	12	13	22.68	22.81	22.86	
5	QPSK	25	0	22.63	22.74	22.86	
5	16QAM	1	0	22.88	22.89	22.96	
5	16QAM	1	12	22.86	22.95	23.04	24.4
5	16QAM	1	24	22.80	23.04	22.99	
5	16QAM	12	0	22.25	22.45	22.55	
5	16QAM	12	7	22.37	22.47	22.56	
5	16QAM	12	13	22.34	22.53	22.57	23.7
5	16QAM	25	0	22.31	22.42	22.48	
5	64QAM	1	0	22.51	22.42	22.32	
5	64QAM	1	12	22.51	22.50	21.51	
5	64QAM	1	24	22.11	22.61	21.59	22.7
5	64QAM	12	0	21.36	21.41	20.69	
5	64QAM	12	7	21.34	21.43	20.55	
5	64QAM	12	13	21.12	21.50	20.77	
5	64QAM	25	0	21.22	21.35	20.68	
Channel				1861.5	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1861.5	1890	1908.5	
3	QPSK	1	0	22.55	22.61	22.70	24.4
3	QPSK	1	8	22.45	22.69	22.71	
3	QPSK	1	14	22.48	22.69	22.73	
3	QPSK	8	0	22.56	22.66	22.77	
3	QPSK	8	4	22.64	22.79	22.92	24.4
3	QPSK	8	7	22.64	22.86	22.91	
3	QPSK	15	0	22.65	22.69	22.86	
3	16QAM	1	0	22.90	22.95	22.96	
3	16QAM	1	8	22.85	23.01	23.06	24.4
3	16QAM	1	14	22.76	22.97	23.03	
3	16QAM	8	0	22.29	22.40	22.52	
3	16QAM	8	4	22.40	22.46	22.80	
3	16QAM	8	7	22.35	22.48	22.62	23.7
3	16QAM	15	0	22.37	22.47	22.54	
3	64QAM	1	0	22.49	22.37	22.29	
3	64QAM	1	8	22.53	22.50	21.42	
3	64QAM	1	14	22.16	22.51	21.56	22.7
3	64QAM	8	0	21.31	21.39	20.71	
3	64QAM	8	4	21.43	21.43	20.56	
3	64QAM	8	7	21.13	21.60	20.68	
3	64QAM	15	0	21.22	21.34	20.63	
Channel				1860.7	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1860.7	1890	1909.3	
1.4	QPSK	1	0	22.43	22.58	22.70	24.4
1.4	QPSK	1	3	22.51	22.67	22.77	
1.4	QPSK	1	5	22.47	22.63	22.73	
1.4	QPSK	3	0	22.48	22.60	22.72	
1.4	QPSK	3	1	22.56	22.72	22.82	24.4
1.4	QPSK	3	3	22.50	22.66	22.77	
1.4	QPSK	6	0	22.56	22.75	22.84	
1.4	16QAM	1	0	22.76	22.90	23.04	
1.4	16QAM	1	3	22.84	23.03	23.07	24.4
1.4	16QAM	1	5	22.78	22.98	23.06	
1.4	16QAM	3	0	22.57	22.72	22.84	
1.4	16QAM	3	1	22.62	22.83	22.91	
1.4	16QAM	3	3	22.56	22.77	22.83	23.7
1.4	16QAM	6	0	22.30	22.53	22.63	
1.4	64QAM	1	0	22.42	22.53	21.76	
1.4	64QAM	1	3	22.47	22.68	21.82	
1.4	64QAM	1	5	22.42	22.60	21.72	23.7
1.4	64QAM	3	0	22.39	22.51	21.75	
1.4	64QAM	3	1	22.45	22.59	21.84	
1.4	64QAM	3	3	22.40	22.58	21.75	
1.4	64QAM	6	0	21.27	21.44	20.66	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	1824.5	1845	
20	QPSK	1	0	23.05	23.03	23.09	24
20	QPSK	1	49	22.93	22.93	22.88	
20	QPSK	1	99	22.97	22.90	22.89	
20	QPSK	50	0	23.10	23.18	23.12	
20	QPSK	50	24	23.14	23.10	23.05	24
20	QPSK	50	50	23.07	23.07	23.02	
20	QPSK	100	0	23.12	23.10	23.03	
20	16QAM	1	0	23.39	23.40	23.45	
20	16QAM	1	49	23.29	23.31	23.26	24
20	16QAM	1	99	23.32	23.24	23.23	
20	16QAM	50	0	22.61	22.69	22.64	
20	16QAM	50	24	22.65	22.60	22.56	
20	16QAM	50	50	22.57	22.55	22.56	23.7
20	16QAM	100	0	22.61	22.61	22.51	
20	64QAM	1	0	21.81	22.78	22.30	
20	64QAM	1	49	22.66	22.46	22.58	
20	64QAM	1	99	22.62	22.29	22.62	23.7
20	64QAM	50	0	21.30	21.67	21.35	
20	64QAM	50	24	21.65	21.39	21.56	
20	64QAM	50	50	21.59	21.16	21.57	
20	64QAM	100	0	21.50	21.44	21.51	22.7
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.98	23.01	22.99	24
15	QPSK	1	37	22.88	22.85	22.86	
15	QPSK	1	74	22.93	22.87	22.83	
15	QPSK	36	0	23.01	23.08	23.10	
15	QPSK	36	20	23.09	23.08	23.05	24
15	QPSK	36	39	22.99	22.99	22.97	
15	QPSK	75	0	23.06	23.10	22.97	
15	16QAM	1	0	23.35	23.30	23.37	
15	16QAM	1	37	23.25	23.27	23.20	24
15	16QAM	1	74	23.28	23.24	23.16	
15	16QAM	36	0	22.52	22.63	22.55	
15	16QAM	36	20	22.59	22.55	22.51	
15	16QAM	36	39	22.54	22.56	22.49	23.7
15	16QAM	75	0	22.55	22.57	22.51	
15	64QAM	1	0	21.69	22.76	22.22	
15	64QAM	1	37	22.60	22.35	22.51	
15	64QAM	1	74	22.59	22.29	22.52	23.7
15	64QAM	36	0	21.30	21.61	21.30	
15	64QAM	36	20	21.63	21.36	21.47	
15	64QAM	36	39	21.53	21.13	21.48	
15	64QAM	75	0	21.50	21.41	21.46	22.7
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.97	23.01	23.07	24
10	QPSK	1	25	22.92	22.84	22.83	
10	QPSK	1	49	22.94	22.88	22.84	
10	QPSK	25	0	23.05	23.18	23.12	
10	QPSK	25	12	23.06	23.07	23.02	24
10	QPSK	25	25	23.07	23.07	22.94	
10	QPSK	50	0	23.07	23.04	22.95	
10	16QAM	1	0	23.29	23.33	23.37	
10	16QAM	1	25	23.29	23.24	23.22	24
10	16QAM	1	49	23.26	23.23	23.19	
10	16QAM	25	0	22.60	22.68	22.54	
10	16QAM	25	12	22.61	22.54	22.47	
10	16QAM	25	25	22.51	22.55	22.55	23.7
10	16QAM	50	0	22.54	22.58	22.42	
10	64QAM	1	0	21.91	22.75	22.27	
10	64QAM	1	25	22.60	22.43	22.48	
10	64QAM	1	49	22.59	22.29	22.61	23.7
10	64QAM	25	0	21.26	21.67	21.31	
10	64QAM	25	12	21.57	21.29	21.56	
10	64QAM	25	25	21.56	21.13	21.54	
10	64QAM	50	0	21.40	21.43	21.48	22.7
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.05	22.96	23.00	24
5	QPSK	1	12	22.50	22.54	22.83	
5	QPSK	1	24	22.93	22.85	22.86	
5	QPSK	12	0	23.04	23.13	23.04	
5	QPSK	12	7	23.09	23.08	23.03	24
5	QPSK	12	13	22.98	23.05	22.93	
5	QPSK	25	0	23.04	23.10	22.98	
5	16QAM	1	0	23.33	23.40	23.39	
5	16QAM	1	12	23.27	23.25	23.25	24
5	16QAM	1	24	23.32	23.18	23.13	
5	16QAM	12	0	22.54	22.63	22.63	
5	16QAM	12	7	22.60	22.50	22.47	
5	16QAM	12	13	22.56	22.54	22.53	23.7
5	16QAM	25	0	22.55	22.52	22.43	
5	64QAM	1	0	21.83	22.73	22.29	
5	64QAM	1	12	22.63	22.40	22.51	
5	64QAM	1	24	22.58	22.26	22.62	23.7
5	64QAM	12	0	21.30	21.58	21.25	
5	64QAM	12	7	21.64	21.32	21.51	
5	64QAM	12	13	21.52	21.06	21.49	
5	64QAM	25	0	21.45	21.35	21.45	22.7
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.98	23.03	23.01	24
3	QPSK	1	8	22.88	22.84	22.80	
3	QPSK	1	14	22.96	22.87	22.87	
3	QPSK	8	0	23.09	23.09	23.04	
3	QPSK	8	4	23.10	23.08	22.95	24
3	QPSK	8	7	23.04	22.96	23.02	
3	QPSK	15	0	23.02	23.00	23.00	
3	16QAM	1	0	23.36	23.34	23.41	
3	16QAM	1	8	23.23	23.23	23.26	24
3	16QAM	1	14	23.24	23.15	23.19	
3	16QAM	8	0	22.58	22.62	22.60	
3	16QAM	8	4	22.58	22.54	22.52	
3	16QAM	8	7	22.57	22.49	22.55	23.7
3	16QAM	15	0	22.52	22.52	22.44	
3	64QAM	1	0	21.90	22.75	22.23	
3	64QAM	1	8	22.57	22.43	22.53	
3	64QAM	1	14	22.57	22.27	22.61	23.7
3	64QAM	8	0	21.21	21.67	21.29	
3	64QAM	8	4	21.58	21.30	21.50	
3	64QAM	8	7	21.54	21.16	21.54	
3	64QAM	15	0	21.47	21.34	21.43	22.7
Channel				19967	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.88	22.89	22.87	24
1.4	QPSK	1	3	22.95	23.02	22.96	
1.4	QPSK	1	5	22.91	22.94	22.89	
1.4	QPSK	3	0	22.96	22.92	22.94	
1.4	QPSK	3	1	22.99	23.03	22.98	24
1.4	QPSK	3	3	22.95	22.97	22.95	
1.4	QPSK	6	0	23.02	22.98	23.00	
1.4	16QAM	1	0	23.23	23.24	23.29	
1.4	16QAM	1	3	23.29	23.35	23.28	24
1.4	16QAM	1	5	23.23	23.28	23.23	
1.4	16QAM	3	0	22.98	23.05	23.00	
1.4	16QAM	3	1	23.04	23.11	23.06	
1.4	16QAM	3	3	23.00	23.11	23.00	23.7
1.4	64QAM	6	0	22.61	22.60	22.59	
1.4	64QAM	1	0	21.65	22.25	22.68	
1.4	64QAM	1	3	21.77	22.33	22.77	
1.4	64QAM	1	5	21.73	22.25	22.71	23.7
1.4	64QAM	3	0	21.69	22.31	22.64	
1.4	64QAM	3	1	21.78	22.37	22.70	
1.4	64QAM	3	3	21.75	22.26	22.64	
1.4	64QAM	6	0	20.64	21.21	21.53	22.7



Band 5_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				824.5	836.5	846.5	
Frequency (MHz)				824.5	836.5	846.5	
10	QPSK	1	0	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	24.7
10	QPSK	50	0	23.40	23.33	23.31	
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	
10	16QAM	25	0	22.30	22.32	22.32	23.7
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	23.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	22.7
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	24.7
5	QPSK	25	0	23.36	23.25	23.29	
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	
5	16QAM	12	0	22.25	22.30	22.25	23.7
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.26	
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	23.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	22.7
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	6	0	23.22	23.33	23.31	
3	QPSK	6	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	24.7
3	QPSK	15	0	23.36	23.28	23.24	
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.61	23.25	
3	16QAM	6	0	22.20	22.29	22.27	23.7
3	16QAM	8	4	22.35	22.30	22.23	
3	16QAM	8	7	22.38	22.29	22.28	
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	23.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	6	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	22.7
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	846.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	24.7
1.4	QPSK	6	0	23.26	23.28	23.25	
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	
1.4	16QAM	3	0	23.51	23.58	23.71	24.7
1.4	16QAM	3	1	23.62	23.60	23.63	
1.4	16QAM	3	3	23.54	23.59	23.22	
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.26	
1.4	64QAM	1	3	22.33	22.38	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.26	22.7



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	2534	2558	
20	QPSK	1	0	22.14	22.26	22.28	23.3
20	QPSK	1	49	22.25	22.35	22.32	
20	QPSK	1	99	22.32	22.48	22.41	
20	QPSK	50	0	22.27	22.39	22.39	
20	QPSK	50	24	22.43	22.46	22.51	23.3
20	QPSK	50	50	22.45	22.36	22.52	
20	QPSK	100	0	22.41	22.47	22.46	
20	16QAM	1	0	22.50	22.62	22.64	
20	16QAM	1	49	22.61	22.69	22.67	23.3
20	16QAM	1	99	22.64	22.78	22.68	
20	16QAM	50	0	22.28	22.41	22.39	
20	16QAM	50	24	22.43	22.46	22.48	
20	16QAM	50	50	22.46	22.56	22.50	23.3
20	16QAM	100	0	22.38	22.42	22.48	
20	64QAM	1	0	22.39	22.49	22.48	
20	64QAM	1	49	22.47	22.59	22.58	
20	64QAM	1	99	22.57	22.70	22.24	22.7
20	64QAM	50	0	22.28	21.85	21.81	
20	64QAM	50	24	22.41	21.90	21.94	
20	64QAM	50	50	22.42	21.99	21.94	
20	64QAM	100	0	22.38	21.91	21.92	Tune-up limit (dBm)
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.05	22.27	22.27	23.3
15	QPSK	1	37	22.18	22.35	22.22	
15	QPSK	1	74	22.26	22.43	22.33	
15	QPSK	36	0	22.23	22.37	22.39	
15	QPSK	36	20	22.35	22.43	22.49	23.3
15	QPSK	36	39	22.35	22.51	22.42	
15	QPSK	75	0	22.37	22.34	22.46	
15	16QAM	1	0	22.48	22.53	22.62	
15	16QAM	1	37	22.58	22.61	22.65	23.3
15	16QAM	1	74	22.64	22.69	22.64	
15	16QAM	36	0	22.26	22.37	22.38	
15	16QAM	36	20	22.41	22.39	22.41	
15	16QAM	36	39	22.36	22.49	22.40	23.3
15	16QAM	75	0	22.34	22.37	22.38	
15	64QAM	1	0	22.31	22.42	22.46	
15	64QAM	1	37	22.43	22.52	22.55	
15	64QAM	1	74	22.53	22.66	22.14	22.7
15	64QAM	36	0	22.16	21.79	21.74	
15	64QAM	36	20	22.32	21.87	21.84	
15	64QAM	36	39	22.42	21.93	21.85	
15	64QAM	75	0	22.31	21.84	21.90	Tune-up limit (dBm)
Channel				20800	21100	21400	
Frequency (MHz)				2506	2535	2565	
10	QPSK	1	0	22.08	22.23	22.20	23.3
10	QPSK	1	25	22.23	22.30	22.25	
10	QPSK	1	49	22.24	22.40	22.34	
10	QPSK	25	0	22.20	22.30	22.32	
10	QPSK	25	12	22.42	22.37	22.51	23.3
10	QPSK	25	25	22.37	22.47	22.43	
10	QPSK	50	0	22.41	22.35	22.44	
10	16QAM	1	0	22.46	22.60	22.57	
10	16QAM	1	25	22.51	22.61	22.64	23.3
10	16QAM	1	49	22.58	22.73	22.58	
10	16QAM	25	0	22.28	22.34	22.35	
10	16QAM	25	12	22.43	22.40	22.39	
10	16QAM	25	25	22.43	22.52	22.48	23.3
10	16QAM	50	0	22.31	22.37	22.43	
10	64QAM	1	0	22.30	22.41	22.38	
10	64QAM	1	25	22.39	22.57	22.48	
10	64QAM	1	49	22.54	22.68	22.21	22.7
10	64QAM	25	0	22.26	21.94	21.79	
10	64QAM	25	12	22.32	21.85	21.84	
10	64QAM	25	25	22.42	21.99	21.88	
10	64QAM	50	0	22.31	21.89	21.89	Tune-up limit (dBm)
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.05	22.27	22.20	23.3
5	QPSK	1	12	22.16	22.31	22.28	
5	QPSK	1	24	22.22	22.46	22.38	
5	QPSK	12	0	22.17	22.39	22.39	
5	QPSK	12	7	22.40	22.38	22.44	23.3
5	QPSK	12	13	22.44	22.56	22.50	
5	QPSK	25	0	22.39	22.35	22.47	
5	16QAM	1	0	22.40	22.61	22.60	
5	16QAM	1	12	22.58	22.69	22.67	23.3
5	16QAM	1	24	22.60	22.71	22.58	
5	16QAM	12	0	22.23	22.31	22.37	
5	16QAM	12	7	22.42	22.44	22.45	
5	16QAM	12	13	22.40	22.54	22.49	23.3
5	16QAM	25	0	22.31	22.32	22.43	
5	64QAM	1	0	22.35	22.47	22.41	
5	64QAM	1	12	22.38	22.52	22.52	
5	64QAM	1	24	22.57	22.67	22.17	22.7
5	64QAM	12	0	22.20	21.80	21.71	
5	64QAM	12	7	22.37	21.80	21.78	
5	64QAM	12	13	22.35	21.94	21.89	
5	64QAM	25	0	22.37	21.84	21.91	



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)				701.5	707.5	713.5	
10	QPSK	1	0	24.35	24.28	24.30	25.7
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.46	23.46	23.44	24.7
10	QPSK	50	0	23.51	23.43	23.47	
10	16QAM	1	0	23.74	23.65	23.73	
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.66	23.67	
10	16QAM	25	0	22.41	22.42	22.42	23.7
10	16QAM	25	12	22.50	22.44	22.48	
10	16QAM	25	25	22.47	22.49	22.41	
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.26	21.22	
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	25.7
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.46	23.46	23.36	24.7
5	QPSK	25	0	23.49	23.34	23.44	
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.66	
5	16QAM	1	24	23.69	23.59	23.61	
5	16QAM	12	0	22.38	22.42	22.33	23.7
5	16QAM	12	7	22.40	22.34	22.47	
5	16QAM	12	13	22.39	22.49	22.35	
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.25	21.17	
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				23005	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	25.7
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.36	23.44	23.40	24.7
3	QPSK	15	0	23.44	23.33	23.42	
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	
3	16QAM	8	0	22.40	22.39	22.33	23.7
3	16QAM	8	4	22.41	22.42	22.36	
3	16QAM	8	7	22.39	22.41	22.39	
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	25.7
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	24.7
1.4	QPSK	6	0	23.36	23.36	23.33	
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	
1.4	16QAM	3	0	23.67	23.65	23.71	23.7
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	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			Tune-up limit (dbm)
Frequency (MHz)				762			
10	QPSK	1	0		23.71		25.2
10	QPSK	1	25		23.71		
10	QPSK	1	49		23.87		
10	QPSK	50	0		22.83		24.2
10	QPSK	25	12		22.85		
10	QPSK	25	25		22.92		
10	QPSK	50	0		22.95		24.2
10	16QAM	1	0		23.07		
10	16QAM	1	25		23.12		
10	16QAM	1	49		23.12		24.2
10	16QAM	25	0		21.86		
10	16QAM	25	12		21.86		
10	16QAM	25	25		21.90		23.2
10	16QAM	50	0		21.94		
10	64QAM	1	0		21.97		
10	64QAM	1	25		21.99		23.2
10	64QAM	1	49		22.07		
10	64QAM	25	0		20.86		
10	64QAM	25	12		20.83		22.2
10	64QAM	25	25		20.92		
10	64QAM	50	0		20.97		
Channel				23205	23230	23255	Tune-up limit (dbm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	
5	QPSK	12	0	22.74	22.83	22.79	24.2
5	QPSK	12	7	22.83	22.78	22.77	
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	
5	16QAM	1	24	23.09	23.07	23.11	23.2
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.93	21.86	21.91	
5	64QAM	1	0	21.90	21.89	21.90	
5	64QAM	1	12	21.97	21.96	21.97	23.2
5	64QAM	1	24	22.04	22.04	22.04	
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.88	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	



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			Tune-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			
10	16QAM	1	49	23.60			23.7
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			23.7
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.55			23.7
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.33			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



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	Tune-up limit (dBm)
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.40	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.68	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.46	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	



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	22.62	22.64	22.75	24.4				
20	QPSK	1	49	22.56	22.67	22.77					
20	QPSK	1	99	22.63	22.71	22.78					
20	QPSK	50	0	22.69	22.77	22.86					
20	QPSK	50	24	22.77	22.85	22.98	24.4				
20	QPSK	50	50	22.71	22.81	22.94					
20	QPSK	100	0	22.75	22.83	22.88					
20	16QAM	1	0	22.96	23.02	23.12					
20	16QAM	1	49	22.92	23.04	23.17	24.4				
20	16QAM	1	99	22.87	23.08	23.11					
20	16QAM	50	0	22.42	22.45	22.62					
20	16QAM	50	24	22.45	22.55	22.71					
20	16QAM	50	50	22.42	22.51	22.69	23.7				
20	16QAM	100	0	22.42	22.51	22.60					
20	64QAM	1	0	22.55	22.48	22.43					
20	64QAM	1	49	22.51	22.65	22.14					
20	64QAM	1	99	22.47	22.62	21.41	23.7				
20	64QAM	50	0	21.40	21.49	21.11					
20	64QAM	50	24	21.49	21.55	21.22					
20	64QAM	50	50	21.43	21.53	20.99					
20	64QAM	100	0	21.44	21.55	20.79	Tune-up limit (dBm)				
Channel				1857.5	1880	1907.5					
Frequency (MHz)				1857.5	1880	1907.5					
15	QPSK	1	0	22.59	22.80	22.71	24.4				
15	QPSK	1	37	22.51	22.64	22.77					
15	QPSK	1	74	22.59	22.64	22.73					
15	QPSK	36	0	22.60	22.67	22.80					
15	QPSK	36	20	22.67	22.85	22.89	24.4				
15	QPSK	36	39	22.69	22.76	22.84					
15	QPSK	75	0	22.66	22.80	22.80					
15	16QAM	1	0	22.90	23.02	23.03					
15	16QAM	1	37	22.69	22.99	23.16	24.4				
15	16QAM	1	74	22.81	23.04	23.01					
15	16QAM	36	0	22.42	22.38	22.52					
15	16QAM	36	20	22.38	22.54	22.65					
15	16QAM	36	39	22.36	22.46	22.69	23.7				
15	16QAM	75	0	22.39	22.49	22.55					
15	64QAM	1	0	22.45	22.44	22.40					
15	64QAM	1	37	22.43	22.58	22.08					
15	64QAM	1	74	22.39	22.52	21.31	23.7				
15	64QAM	36	0	21.30	21.47	21.01					
15	64QAM	36	20	21.44	21.48	21.18					
15	64QAM	36	39	21.33	21.43	20.98					
15	64QAM	75	0	21.34	21.53	20.71	Tune-up limit (dBm)				
Channel				26090	26340	26640					
Frequency (MHz)				1855	1880	1910					
10	QPSK	1	0	22.55	22.57	22.73	24.4				
10	QPSK	1	25	22.51	22.58	22.71					
10	QPSK	1	49	22.59	22.63	22.78					
10	QPSK	25	0	22.62	22.75	22.79					
10	QPSK	25	12	22.71	22.82	22.97	24.4				
10	QPSK	25	25	22.61	22.77	22.86					
10	QPSK	50	0	22.66	22.76	22.81					
10	16QAM	1	0	22.87	23.00	23.10					
10	16QAM	1	25	22.84	22.96	23.07	24.4				
10	16QAM	1	49	22.83	23.03	23.07					
10	16QAM	25	0	22.40	22.36	22.62					
10	16QAM	25	12	22.39	22.34	22.62					
10	16QAM	25	25	22.37	22.51	22.63	23.7				
10	16QAM	50	0	22.37	22.42	22.50					
10	64QAM	1	0	22.52	22.44	22.41					
10	64QAM	1	25	22.45	22.64	22.14					
10	64QAM	1	49	22.38	22.53	21.36	23.7				
10	64QAM	25	0	21.30	21.39	21.08					
10	64QAM	25	12	21.46	21.54	21.12					
10	64QAM	25	25	21.43	21.48	20.95					
10	64QAM	50	0	21.39	21.51	20.76	Tune-up limit (dBm)				
Channel				26085	26340	26665					
Frequency (MHz)				1852.5	1880	1912.5					
5	QPSK	1	0	22.61	22.55	22.74	24.4				
5	QPSK	1	12	22.51	22.58	22.73					
5	QPSK	1	24	22.62	22.64	22.70					
5	QPSK	12	0	22.64	22.69	22.80					
5	QPSK	12	7	22.68	22.84	22.94	24.4				
5	QPSK	12	13	22.65	22.74	22.87					
5	QPSK	25	0	22.73	22.75	22.87					
5	16QAM	1	0	22.62	22.95	23.12					
5	16QAM	1	12	22.62	22.97	23.10	24.4				
5	16QAM	1	24	22.77	23.08	23.03					
5	16QAM	12	0	22.38	22.36	22.62					
5	16QAM	12	7	22.39	22.48	22.69					
5	16QAM	12	13	22.39	22.51	22.67	23.7				
5	16QAM	25	0	22.37	22.49	22.56					
5	64QAM	1	0	22.47	22.42	22.35					
5	64QAM	1	12	22.47	22.58	22.13					
5	64QAM	1	24	22.43	22.57	21.37	23.7				
5	64QAM	12	0	21.36	21.47	21.10					
5	64QAM	12	7	21.41	21.54	21.19					
5	64QAM	12	13	21.41	21.47	20.98					
5	64QAM	25	0	21.34	21.54	20.77	Tune-up limit (dBm)				
Channel				26055	26340	26555					
Frequency (MHz)				1851.5	1880	1913.5					
3	QPSK	1	0	22.60	22.59	22.66	24.4				
3	QPSK	1	8	22.46	22.63	22.77					
3	QPSK	1	14	22.58	22.62	22.75					
3	QPSK	8	0	22.66	22.74	22.78					
3	QPSK	8	4	22.69	22.78	22.96	24.4				
3	QPSK	8	7	22.71	22.76	22.85					
3	QPSK	15	0	22.71	22.82	22.81					
3	16QAM	1	0	22.87	22.97	23.08					
3	16QAM	1	8	22.85	22.97	23.14	24.4				
3	16QAM	1	14	22.85	23.05	23.07					
3	16QAM	8	0	22.32	22.42	22.62					
3	16QAM	8	4	22.39	22.46	22.69					
3	16QAM	8	7	22.40	22.51	22.59	23.7				
3	16QAM	15	0	22.39	22.51	22.53					
3	64QAM	1	0	22.55	22.40	22.42					
3	64QAM	1	8	22.48	22.63	22.04					
3	64QAM	1	14	22.43	22.60	21.41	23.7				
3	64QAM	8	0	21.38	21.39	21.01					
3	64QAM	8	4	21.49	21.51	21.21					
3	64QAM	8	7	21.42	21.50	20.93					
3	64QAM	15	0	21.38	21.45	20.78	Tune-up limit (dBm)				
Channel				26047	26340	26683					
Frequency (MHz)				1850.7	1880	1914.3					
1.4	QPSK	1	0	22.48	22.54	22.70	24.4				
1.4	QPSK	1	3	22.57	22.66	22.80					
1.4	QPSK	1	5	22.53	22.64	22.79					
1.4	QPSK	3	0	22.51	22.65	22.75					
1.4	QPSK	3	1	22.60	22.69	22.82	24.4				
1.4	QPSK	3	3	22.59	22.65	22.78					
1.4	QPSK	6	0	22.63	22.70	22.83					
1.4	16QAM	1	0	22.82	22.86	23.05					
1.4	16QAM	1	3	22.83	23.04	23.13	24.4				
1.4	16QAM	1	5	22.89	22.98	23.09					
1.4	16QAM	3	0	22.66	22.74	22.82					
1.4	16QAM	3	1	22.72	22.81	22.85					
1.4	16QAM	3	3	22.66	22.74	22.81	23.7				
1.4	16QAM	6	0	22.63	22.72	22.85					
1.4	16QAM	3	1	22.47	22.58	21.48					
1.4	16QAM	3	3	22.47	22.58	21.48					
1.4	64QAM	1	3	22.55	22.66	23.19	23.7				
1.4	64QAM	1	5	22.50	22.62	21.33					
1.4	64QAM	3	0	22.42	22.53	21.39					
1.4	64QAM	3	1	22.47	22.58	21.48					
1.4	64QAM	3	3	22.47	22.58	21.48	23.7				
1.4	64QAM	6	0	22.47	22.58	21.48					
1.4	64QAM	8	0	21.37	21.45	20.30					



Band 26_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)		
Channel				26705	831.5	26965			
Frequency (MHz)				831.5	831.5	841.5			
15	QPSK	1	0	24.23	24.12	24.14	25.7		
15	QPSK	1	37	24.15	24.13	24.09			
15	QPSK	1	74	24.18	24.13	23.98			
15	QPSK	36	0	23.31	23.25	23.24			
15	QPSK	36	20	23.34	23.29	23.20	24.7		
15	QPSK	36	39	23.30	23.30	23.25			
15	QPSK	75	0	23.34	23.29	23.20			
15	16QAM	1	0	23.58	23.46	23.45			
15	16QAM	1	37	23.49	23.44	23.44	24.7		
15	16QAM	1	74	23.46	23.43	23.30			
15	16QAM	36	0	22.33	22.26	22.24			
15	16QAM	36	20	22.34	22.31	22.19			
15	16QAM	36	39	22.31	22.25	22.18	23.7		
15	16QAM	75	0	22.36	22.31	22.23			
15	64QAM	1	0	22.43	22.31	22.31			
15	64QAM	1	37	22.43	22.39	22.34			
15	64QAM	1	74	22.36	22.34	21.62	23.7		
15	64QAM	36	0	21.35	21.31	21.30			
15	64QAM	36	20	21.41	21.33	21.23			
15	64QAM	36	39	21.36	21.30	21.29			
15	64QAM	75	0	21.37	21.31	21.24	22.7		
Channel				26740	26865	26990			
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	24.18	24.06	24.14	25.7		
10	QPSK	1	25	24.15	24.06	23.99			
10	QPSK	1	49	24.13	24.13	23.98			
10	QPSK	25	0	23.24	23.17	23.17			
10	QPSK	25	12	23.31	23.29	23.11	24.7		
10	QPSK	25	25	23.20	23.26	23.25			
10	QPSK	50	0	23.26	23.28	23.14			
10	16QAM	1	0	23.52	23.39	23.40			
10	16QAM	1	25	23.49	23.37	23.35	24.7		
10	16QAM	1	49	23.46	23.41	23.27			
10	16QAM	25	0	22.28	22.24	22.24			
10	16QAM	25	12	22.27	22.21	22.09			
10	16QAM	25	25	22.30	22.16	22.08	23.7		
10	16QAM	50	0	22.26	22.24	22.15			
10	64QAM	1	0	22.37	22.25	22.22			
10	64QAM	1	25	22.33	22.35	22.24			
10	64QAM	1	49	22.34	22.28	21.54	23.7		
10	64QAM	25	0	21.31	21.28	21.28			
10	64QAM	25	12	21.37	21.29	21.22			
10	64QAM	25	25	21.28	21.29	21.22			
10	64QAM	50	0	21.27	21.27	21.21	22.7		
Channel				26715	26865	27015			
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	0	24.14	24.10	24.05	25.7		
5	QPSK	1	12	24.05	24.05	24.08			
5	QPSK	1	24	24.12	24.11	23.91			
5	QPSK	12	0	23.21	23.23	23.15			
5	QPSK	12	7	23.30	23.27	23.19	24.7		
5	QPSK	12	13	23.25	23.27	23.21			
5	QPSK	25	0	23.32	23.27	23.17			
5	16QAM	1	0	23.53	23.40	23.43			
5	16QAM	1	12	23.46	23.35	23.44	24.7		
5	16QAM	1	24	23.44	23.33	23.27			
5	16QAM	12	0	22.29	22.18	22.16			
5	16QAM	12	7	22.31	22.28	22.17			
5	16QAM	12	13	22.30	22.23	22.16	23.7		
5	16QAM	25	0	22.33	22.24	22.19			
5	64QAM	1	0	22.40	22.21	22.25			
5	64QAM	1	12	22.35	22.32	22.30			
5	64QAM	1	24	22.32	22.34	21.52	23.7		
5	64QAM	12	0	21.27	21.30	21.26			
5	64QAM	12	7	21.33	21.32	21.14			
5	64QAM	12	13	21.34	21.24	21.25			
5	64QAM	25	0	21.31	21.31	21.24	22.7		
Channel				26705	26865	27025			
Frequency (MHz)				815.5	831.5	847.5			
3	QPSK	1	0	24.19	24.10	24.14	25.7		
3	QPSK	1	8	24.05	24.08	24.08			
3	QPSK	1	14	24.15	24.03	23.97			
3	QPSK	8	0	23.21	23.23	23.17			
3	QPSK	8	4	23.26	23.19	23.15	24.7		
3	QPSK	8	7	23.24	23.23	23.22			
3	QPSK	15	0	23.31	23.22	23.20			
3	16QAM	1	0	23.56	23.45	23.39			
3	16QAM	1	8	23.43	23.39	23.43	24.7		
3	16QAM	1	14	23.37	23.36	23.26			
3	16QAM	8	0	22.29	22.16	22.15			
3	16QAM	8	4	22.25	22.22	22.09			
3	16QAM	8	7	22.21	22.22	22.14	23.7		
3	16QAM	15	0	22.28	22.29	22.23			
3	64QAM	1	0	22.35	22.21	22.31			
3	64QAM	1	8	22.35	22.37	22.24			
3	64QAM	1	14	22.32	22.31	21.61	23.7		
3	64QAM	8	0	21.31	21.31	21.22			
3	64QAM	8	4	21.38	21.25	21.21			
3	64QAM	8	7	21.35	21.24	21.19			
3	64QAM	15	0	21.33	21.21	21.24	22.7		
Channel				26897	26965	27033			
Frequency (MHz)				814.7	831.5	848.3			
1.4	QPSK	1	0	24.15	24.03	24.06	25.7		
1.4	QPSK	1	3	23.98	24.04	23.99			
1.4	QPSK	1	5	24.14	24.02	23.96			
1.4	QPSK	3	0	24.15	24.03	24.12			
1.4	QPSK	3	1	24.05	24.05	24.08	24.7		
1.4	QPSK	3	3	24.07	23.93	23.94			
1.4	QPSK	6	0	23.15	23.20	23.12			
1.4	16QAM	1	0	23.17	23.16	23.05			
1.4	16QAM	1	3	23.16	23.17	23.16	24.7		
1.4	16QAM	1	5	23.23	23.19	23.10			
1.4	16QAM	3	0	23.46	23.36	23.30			
1.4	16QAM	3	1	23.39	23.30	23.35			
1.4	16QAM	3	3	23.33	23.26	23.26	23.7		
1.4	16QAM	6	0	22.20	22.14	22.10			
1.4	64QAM	1	0	22.18	22.22	22.05			
1.4	64QAM	1	3	22.16	22.20	22.04			
1.4	64QAM	1	5	22.25	22.29	22.20	23.7		
1.4	64QAM	3	0	22.28	22.11	22.27			
1.4	64QAM	3	1	22.28	22.37	22.24			
1.4	64QAM	3	3	22.31	22.31	21.51			
1.4	64QAM	6	0	21.26	21.25	21.15	22.7		



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			Tune-up limit (dBm)
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.31			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.26			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			23.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.30			
10	16QAM	25	25	21.31			22.2
10	16QAM	50	0	21.28			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.49	22.56	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.36	21.47	
5	64QAM	1	12	21.42	21.46	21.47	22.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	



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	1744	1770	
20	QPSK	1	0	23.13	23.11	23.02	24
20	QPSK	1	49	23.06	23.00	22.90	
20	QPSK	1	99	22.96	22.91	22.82	
20	QPSK	50	0	23.19	23.12	23.00	
20	QPSK	50	24	23.18	23.08	22.97	24
20	QPSK	50	50	23.16	23.10	22.96	
20	QPSK	100	0	23.18	23.05	22.97	
20	16QAM	1	0	23.47	23.45	23.37	
20	16QAM	1	49	23.42	23.35	23.23	24
20	16QAM	1	99	23.32	23.26	23.09	
20	16QAM	50	0	22.63	22.61	22.52	
20	16QAM	50	24	22.73	22.69	22.50	23.7
20	16QAM	50	50	22.65	22.58	22.50	
20	16QAM	100	0	22.67	22.54	22.46	
20	64QAM	1	0	22.64	22.83	22.73	
20	64QAM	1	49	22.81	22.75	22.35	23.7
20	64QAM	1	99	22.77	22.69	22.41	
20	64QAM	50	0	21.55	21.65	21.52	
20	64QAM	50	24	21.73	21.61	21.39	22.7
20	64QAM	50	50	21.66	21.62	21.49	
20	64QAM	100	0	21.72	21.56	21.47	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.05	23.04	22.95	24
15	QPSK	1	37	23.02	22.91	22.82	
15	QPSK	1	74	22.86	22.85	22.81	
15	QPSK	36	0	23.12	23.11	22.95	
15	QPSK	36	20	23.12	23.00	22.91	24
15	QPSK	36	39	23.11	23.10	22.92	
15	QPSK	75	0	23.13	23.03	22.95	
15	16QAM	1	0	23.41	23.35	23.28	
15	16QAM	1	37	23.41	23.29	23.13	24
15	16QAM	1	74	23.28	23.17	23.05	
15	16QAM	36	0	22.62	22.54	22.48	
15	16QAM	36	20	22.69	22.59	22.40	23.7
15	16QAM	36	39	22.64	22.56	22.40	
15	16QAM	75	0	22.60	22.44	22.37	
15	64QAM	1	0	22.63	22.75	22.66	23.7
15	64QAM	1	37	22.76	22.71	22.34	
15	64QAM	1	74	22.68	22.64	22.34	
15	64QAM	36	0	21.57	21.57	21.44	
15	64QAM	36	20	21.68	21.54	21.38	22.7
15	64QAM	36	39	21.59	21.58	21.46	
15	64QAM	75	0	21.65	21.45	21.38	
Channel				132022	132322	132522	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.03	23.03	23.02	24
10	QPSK	1	25	23.04	22.93	22.87	
10	QPSK	1	49	22.94	22.85	22.80	
10	QPSK	25	0	23.09	23.06	22.92	
10	QPSK	25	12	23.18	23.03	22.97	24
10	QPSK	25	25	23.10	23.06	22.94	
10	QPSK	50	0	23.16	23.01	22.88	
10	16QAM	1	0	23.41	23.39	23.32	
10	16QAM	1	25	23.39	23.34	23.18	24
10	16QAM	1	49	23.31	23.22	23.04	
10	16QAM	25	0	22.63	22.56	22.45	
10	16QAM	25	12	22.73	22.58	22.42	23.7
10	16QAM	25	25	22.65	22.51	22.41	
10	16QAM	50	0	22.66	22.53	22.39	
10	64QAM	1	0	22.62	22.79	22.64	23.7
10	64QAM	1	25	22.76	22.70	22.34	
10	64QAM	1	49	22.76	22.67	22.41	
10	64QAM	25	0	21.58	21.56	21.46	
10	64QAM	25	12	21.68	21.54	21.32	22.7
10	64QAM	25	25	21.56	21.58	21.39	
10	64QAM	50	0	21.66	21.55	21.41	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.13	23.11	22.92	24
5	QPSK	1	12	22.99	22.96	22.82	
5	QPSK	1	24	22.83	22.90	22.79	
5	QPSK	12	0	23.12	23.04	22.94	
5	QPSK	12	7	23.13	23.01	22.87	24
5	QPSK	12	13	23.09	23.03	22.97	
5	QPSK	25	0	23.12	23.02	22.94	
5	16QAM	1	0	23.47	23.45	23.35	
5	16QAM	1	12	23.36	23.30	23.16	24
5	16QAM	1	24	23.30	23.18	22.99	
5	16QAM	12	0	22.57	22.55	22.45	
5	16QAM	12	7	22.64	22.50	22.40	23.7
5	16QAM	12	13	22.65	22.53	22.42	
5	16QAM	25	0	22.63	22.48	22.39	
5	64QAM	1	0	22.62	22.74	22.72	23.7
5	64QAM	1	12	22.76	22.73	22.32	
5	64QAM	1	24	22.77	22.62	22.31	
5	64QAM	12	0	21.65	21.60	21.42	
5	64QAM	12	7	21.63	21.51	21.33	22.7
5	64QAM	12	13	21.59	21.54	21.39	
5	64QAM	25	0	21.72	21.56	21.47	
Channel				131967	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1773.5	
3	QPSK	1	0	23.05	23.11	22.96	24
3	QPSK	1	8	23.04	22.94	22.83	
3	QPSK	1	14	22.95	22.87	22.76	
3	QPSK	8	0	23.17	23.10	22.97	
3	QPSK	8	4	23.15	23.07	22.82	24
3	QPSK	8	7	23.16	23.07	22.90	
3	QPSK	15	0	23.16	23.04	22.96	
3	16QAM	1	0	23.39	23.39	23.32	
3	16QAM	1	8	23.40	23.29	23.17	24
3	16QAM	1	14	23.23	23.20	23.05	
3	16QAM	8	0	22.63	22.59	22.42	
3	16QAM	8	4	22.68	22.56	22.43	23.7
3	16QAM	8	7	22.61	22.48	22.41	
3	16QAM	15	0	22.59	22.46	22.37	
3	64QAM	1	0	22.64	22.73	22.71	23.7
3	64QAM	1	8	22.73	22.72	22.28	
3	64QAM	1	14	22.68	22.59	22.40	
3	64QAM	8	0	21.60	21.61	21.51	
3	64QAM	8	4	21.72	21.59	21.39	22.7
3	64QAM	8	7	21.64	21.54	21.45	
3	64QAM	15	0	21.71	21.56	21.41	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.98	22.96	22.83	24
1.4	QPSK	1	3	23.05	23.01	22.86	
1.4	QPSK	1	5	22.98	22.92	22.79	
1.4	QPSK	3	0	23.02	22.99	22.87	
1.4	QPSK	3	1	23.08	23.04	22.91	24
1.4	QPSK	3	3	23.02	22.98	22.86	
1.4	QPSK	6	0	23.11	23.04	22.93	
1.4	16QAM	1	0	23.33	23.28	23.12	
1.4	16QAM	1	3	23.37	23.33	23.23	24
1.4	16QAM	1	5	23.30	23.27	23.14	
1.4	16QAM	3	0	23.10	23.07	22.97	
1.4	16QAM	3	1	23.16	23.13	23.01	
1.4	16QAM	3	3	23.10	23.04	22.93	23.7
1.4	16QAM	6	0	22.63	22.58	22.47	
1.4	64QAM	1	0	22.62	22.73	22.62	
1.4	64QAM	1	3	22.57	22.60	22.66	
1.4	64QAM	1	5	22.54	22.72	22.59	23.7
1.4	64QAM	3	0	22.51	22.69	22.56	
1.4	64QAM	3	1	22.60	22.75	22.60	
1.4	64QAM	3	3	22.56	22.69	22.57	
1.4	64QAM	6	0	21.42	21.54	21.43	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)				678	683	688	
20	QPSK	1	0	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	
20	QPSK	50	24	23.40	23.32	23.31	24.7
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	24.7
20	16QAM	1	99	23.60	23.53	23.62	
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.80	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	
20	64QAM	1	99	22.47	22.50	22.44	23.7
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.33	21.34	
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.16	21.34	21.41	22.7
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	
15	QPSK	36	20	23.39	23.35	23.28	24.7
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	24.7
15	16QAM	1	74	23.58	23.60	23.48	
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.56	22.15	22.26	
15	64QAM	1	37	21.81	22.58	22.48	
15	64QAM	1	74	22.45	22.55	22.42	22.7
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	Tune-up limit (dBm)
Channel				133172	133272	133372	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	
10	QPSK	25	12	23.33	23.30	23.26	24.7
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	24.7
10	16QAM	1	49	23.52	23.58	23.47	
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	
10	64QAM	1	49	22.43	22.49	22.32	23.7
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.68	21.32	21.25	
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	22.7
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	
5	QPSK	12	7	23.39	23.28	23.26	24.7
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	24.7
5	16QAM	1	24	23.49	23.51	23.38	
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	
5	64QAM	1	24	22.42	22.49	22.33	23.7
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	22.7
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	



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	23.51	23.52	23.54	25.5
20	QPSK	1	49	23.50	23.54	23.54	
20	QPSK	1	99	23.55	23.64	23.65	
20	QPSK	50	0	22.52	22.61	22.62	
20	QPSK	50	24	22.57	22.64	22.76	24.5
20	QPSK	50	50	22.55	22.71	22.76	
20	QPSK	100	0	22.57	22.60	22.65	
20	16QAM	1	0	22.80	22.85	22.86	
20	16QAM	1	49	22.73	22.85	22.85	24.5
20	16QAM	1	99	22.72	22.87	22.84	
20	16QAM	50	0	21.50	21.61	21.65	
20	16QAM	50	24	21.50	21.65	21.77	
20	16QAM	50	50	21.58	21.71	21.77	23.5
20	16QAM	100	0	21.56	21.59	21.66	
20	64QAM	1	0	21.63	21.65	21.78	
20	64QAM	1	49	21.61	21.77	21.21	
20	64QAM	1	99	21.65	21.79	21.52	22.5
20	64QAM	50	0	20.52	20.65	20.54	
20	64QAM	50	24	20.60	20.66	20.33	
20	64QAM	50	50	20.60	20.73	20.49	
20	64QAM	100	0	20.56	20.64	20.49	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.51	23.54	23.62	25.5
15	QPSK	1	37	23.50	23.59	23.61	
15	QPSK	1	74	23.53	23.53	23.59	
15	QPSK	36	0	22.54	22.63	22.64	
15	QPSK	36	20	22.59	22.66	22.76	24.5
15	QPSK	36	39	22.57	22.71	22.78	
15	QPSK	75	0	22.55	22.62	22.68	
15	16QAM	1	0	22.72	22.81	22.96	
15	16QAM	1	37	22.76	22.86	22.90	24.5
15	16QAM	1	74	22.73	22.85	22.86	
15	16QAM	36	0	21.47	21.64	21.64	
15	16QAM	36	20	21.57	21.66	21.77	
15	16QAM	36	39	21.54	21.73	21.78	23.5
15	16QAM	75	0	21.56	21.64	21.88	
15	64QAM	1	0	21.63	21.79	21.81	
15	64QAM	1	37	21.71	21.84	21.07	
15	64QAM	1	74	21.64	21.73	21.54	22.5
15	64QAM	36	0	20.51	20.67	20.28	
15	64QAM	36	20	20.63	20.69	20.42	
15	64QAM	36	39	20.64	20.78	20.63	
15	64QAM	75	0	20.58	20.67	20.41	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.52	23.56	23.59	25.5
10	QPSK	1	25	23.51	23.55	23.56	
10	QPSK	1	49	23.50	23.55	23.59	
10	QPSK	25	0	22.52	22.62	22.67	
10	QPSK	25	12	22.53	22.64	22.70	24.5
10	QPSK	25	25	22.57	22.73	22.80	
10	QPSK	50	0	22.54	22.65	22.69	
10	16QAM	1	0	22.76	22.89	22.97	
10	16QAM	1	25	22.73	22.98	23.00	24.5
10	16QAM	1	49	22.74	22.89	22.97	
10	16QAM	25	0	21.49	21.61	21.65	
10	16QAM	25	12	21.53	21.65	21.72	
10	16QAM	25	25	21.57	21.72	21.77	23.5
10	16QAM	50	0	21.55	21.62	21.68	
10	64QAM	1	0	21.64	21.80	21.37	
10	64QAM	1	25	21.65	21.86	21.60	
10	64QAM	1	49	21.68	21.82	21.80	22.5
10	64QAM	25	0	20.55	20.66	20.34	
10	64QAM	25	12	20.59	20.67	20.60	
10	64QAM	25	25	20.55	20.75	20.71	
10	64QAM	50	0	20.54	20.69	20.43	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.51	23.55	23.59	25.5
5	QPSK	1	12	23.52	23.60	23.62	
5	QPSK	1	24	23.53	23.62	23.64	
5	QPSK	12	0	22.51	22.60	22.72	
5	QPSK	12	7	22.52	22.73	22.79	24.5
5	QPSK	12	13	22.56	22.72	22.74	
5	QPSK	25	0	22.53	22.63	22.70	
5	16QAM	1	0	22.74	22.82	22.91	
5	16QAM	1	12	22.79	22.91	22.98	24.5
5	16QAM	1	24	22.78	22.93	22.98	
5	16QAM	12	0	21.54	21.68	21.76	
5	16QAM	12	7	21.60	21.73	21.76	
5	16QAM	12	13	21.55	21.75	21.77	23.5
5	16QAM	25	0	21.54	21.63	21.74	
5	64QAM	1	0	21.74	21.79	21.72	
5	64QAM	1	12	21.67	21.87	21.86	
5	64QAM	1	24	21.67	21.87	21.90	22.5
5	64QAM	12	0	20.58	20.69	20.73	
5	64QAM	12	7	20.64	20.75	20.83	
5	64QAM	12	13	20.58	20.76	20.81	
5	64QAM	25	0	20.56	20.65	20.67	
Channel				18615	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.50	23.54	23.62	25.5
3	QPSK	1	8	23.50	23.61	23.62	
3	QPSK	1	14	23.52	23.63	23.60	
3	QPSK	8	0	22.57	22.64	22.74	
3	QPSK	8	4	22.58	22.73	22.77	24.5
3	QPSK	8	7	22.55	22.71	22.74	
3	QPSK	15	0	22.57	22.64	22.78	
3	16QAM	1	0	22.78	22.85	22.90	
3	16QAM	1	8	22.85	23.01	23.07	24.5
3	16QAM	1	14	22.77	22.98	23.01	
3	16QAM	8	0	21.61	21.73	21.84	
3	16QAM	8	4	21.63	21.79	21.82	
3	16QAM	8	7	21.64	21.80	21.85	23.5
3	16QAM	15	0	21.61	21.70	21.82	
3	64QAM	1	0	21.69	21.79	21.84	
3	64QAM	1	8	21.77	21.96	21.98	
3	64QAM	1	14	21.73	21.89	21.93	22.5
3	64QAM	8	0	20.63	20.72	20.81	
3	64QAM	8	4	20.66	20.81	20.84	
3	64QAM	8	7	20.62	20.78	20.82	
3	64QAM	15	0	20.59	20.69	20.76	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.54	23.52	23.54	25.5
1.4	QPSK	1	3	23.51	23.58	23.61	
1.4	QPSK	1	5	23.52	23.56	23.58	
1.4	QPSK	3	0	23.50	23.53	23.59	
1.4	QPSK	3	1	23.55	23.60	23.64	24.5
1.4	QPSK	3	3	23.56	23.57	23.58	
1.4	QPSK	6	0	22.51	22.54	22.53	
1.4	16QAM	1	0	22.74	22.76	22.89	
1.4	16QAM	1	3	22.78	22.92	22.92	24.5
1.4	16QAM	1	5	22.72	22.87	22.87	
1.4	16QAM	3	0	22.52	22.59	22.66	
1.4	16QAM	3	1	22.55	22.69	22.67	
1.4	16QAM	3	3	22.51	22.65	22.61	23.5
1.4	16QAM	6	0	21.58	21.72	21.76	
1.4	64QAM	1	0	21.65	21.71	21.77	
1.4	64QAM	1	3	21.68	21.85	21.80	
1.4	64QAM	1	5	21.64	21.81	21.74	23.5
1.4	64QAM	3	0	21.60	21.71	21.74	
1.4	64QAM	3	1	21.66	21.81	21.82	
1.4	64QAM	3	3	21.57	21.78	21.75	
1.4	64QAM	6	0	20.52	20.67	20.67	22.5



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	1724.5	1745	
20	QPSK	1	0	23.46	23.47	23.52	25.1
20	QPSK	1	49	23.46	23.56	23.51	
20	QPSK	1	99	23.43	23.49	23.47	
20	QPSK	50	0	23.55	23.56	23.57	
20	QPSK	50	24	23.51	23.56	23.52	24.5
20	QPSK	50	50	23.50	23.55	23.52	
20	QPSK	100	0	22.92	22.97	22.96	
20	16QAM	1	0	23.19	23.21	23.26	
20	16QAM	1	49	23.20	23.32	23.30	24.5
20	16QAM	1	99	23.20	23.23	23.21	
20	16QAM	50	0	23.06	23.08	23.08	
20	16QAM	50	24	23.01	23.06	23.03	
20	16QAM	50	50	22.98	23.04	23.00	23.5
20	16QAM	100	0	21.94	22.01	21.97	
20	64QAM	1	0	21.45	22.14	22.11	
20	64QAM	1	49	21.67	22.12	22.07	
20	64QAM	1	99	21.85	22.10	22.06	23.5
20	64QAM	50	0	21.43	22.08	22.06	
20	64QAM	50	24	21.54	22.05	21.94	
20	64QAM	50	50	21.70	22.04	21.95	
20	64QAM	100	0	20.58	20.99	20.94	22.5
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.54	23.54	23.43	25.1
15	QPSK	1	37	23.50	23.46	23.43	
15	QPSK	1	74	23.41	23.40	23.40	
15	QPSK	36	0	23.57	23.55	23.50	
15	QPSK	36	20	23.52	23.51	23.39	24.5
15	QPSK	36	39	23.47	23.46	23.36	
15	QPSK	75	0	22.95	22.97	22.85	
15	16QAM	1	0	23.29	23.27	23.15	
15	16QAM	1	37	23.24	23.19	23.16	24.5
15	16QAM	1	74	23.17	23.13	23.16	
15	16QAM	36	0	23.07	23.03	22.95	
15	16QAM	36	20	22.97	22.96	22.88	
15	16QAM	36	39	22.92	22.92	22.81	23.5
15	16QAM	75	0	21.97	21.96	21.86	
15	64QAM	1	0	22.12	22.15	22.04	
15	64QAM	1	37	22.10	22.08	22.00	
15	64QAM	1	74	21.98	21.98	22.00	23.5
15	64QAM	36	0	22.05	22.05	21.95	
15	64QAM	36	20	22.00	21.97	21.85	
15	64QAM	36	39	21.95	21.91	21.84	
15	64QAM	75	0	20.98	20.95	20.85	22.5
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.48	23.43	23.48	25.1
10	QPSK	1	25	23.38	23.50	23.46	
10	QPSK	1	49	23.38	23.45	23.42	
10	QPSK	25	0	23.54	23.56	23.53	
10	QPSK	25	12	23.44	23.52	23.45	24.5
10	QPSK	25	25	23.40	23.47	23.49	
10	QPSK	50	0	22.89	22.95	22.88	
10	16QAM	1	0	23.09	23.15	23.21	
10	16QAM	1	25	23.19	23.32	23.30	24.5
10	16QAM	1	49	23.17	23.22	23.18	
10	16QAM	25	0	23.00	23.08	22.98	
10	16QAM	25	12	22.96	23.02	22.97	
10	16QAM	25	25	22.96	23.03	23.00	23.5
10	16QAM	50	0	21.92	21.95	21.87	
10	64QAM	1	0	21.43	22.07	22.04	
10	64QAM	1	25	21.65	22.03	22.07	
10	64QAM	1	49	21.81	22.02	22.03	23.5
10	64QAM	25	0	21.42	22.07	21.96	
10	64QAM	25	12	21.44	22.01	21.94	
10	64QAM	25	25	21.64	22.03	21.88	
10	64QAM	50	0	20.50	20.94	20.90	22.5
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.38	23.47	23.43	25.1
5	QPSK	1	12	23.46	23.49	23.44	
5	QPSK	1	24	23.36	23.46	23.40	
5	QPSK	12	0	23.45	23.56	23.50	
5	QPSK	12	7	23.41	23.52	23.45	24.5
5	QPSK	12	13	23.48	23.53	23.42	
5	QPSK	25	0	22.85	22.90	22.96	
5	16QAM	1	0	23.19	23.21	23.20	
5	16QAM	1	12	23.11	23.26	23.27	24.5
5	16QAM	1	24	23.15	23.14	23.14	
5	16QAM	12	0	23.03	23.05	23.01	
5	16QAM	12	7	22.96	22.96	23.02	
5	16QAM	12	13	22.97	22.96	22.93	23.5
5	16QAM	25	0	21.87	21.99	21.93	
5	64QAM	1	0	21.45	22.05	22.06	
5	64QAM	1	12	21.66	22.07	22.05	
5	64QAM	1	24	21.83	22.10	22.05	22.5
5	64QAM	12	0	21.43	22.05	22.00	
5	64QAM	12	7	21.49	22.01	21.87	
5	64QAM	12	13	21.70	22.01	21.89	
5	64QAM	25	0	20.56	20.93	20.91	22.5
Channel				19950	20175	20395	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.44	23.38	23.45	25.1
3	QPSK	1	8	23.39	23.45	23.43	
3	QPSK	1	14	23.34	23.42	23.42	
3	QPSK	8	0	23.54	23.56	23.52	
3	QPSK	8	4	23.46	23.55	23.49	24.5
3	QPSK	8	7	23.49	23.50	23.44	
3	QPSK	15	0	22.90	22.91	22.88	
3	16QAM	1	0	23.11	23.11	23.25	
3	16QAM	1	8	23.15	23.32	23.21	24.5
3	16QAM	1	14	23.14	23.18	23.14	
3	16QAM	8	0	23.06	23.06	23.06	
3	16QAM	8	4	22.93	23.05	22.94	
3	16QAM	8	7	22.93	22.97	22.92	23.5
3	16QAM	15	0	21.91	21.93	21.89	
3	64QAM	1	0	21.40	22.05	22.01	
3	64QAM	1	8	21.62	22.09	21.97	
3	64QAM	1	14	21.85	22.00	21.97	22.5
3	64QAM	8	0	21.41	22.06	22.00	
3	64QAM	8	4	21.45	21.96	21.85	
3	64QAM	8	7	21.68	21.97	21.90	
3	64QAM	15	0	20.57	20.93	20.90	22.5
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.30	23.32	23.27	25.1
1.4	QPSK	1	3	23.39	23.45	23.36	
1.4	QPSK	1	5	23.34	23.35	23.30	
1.4	QPSK	3	0	23.33	23.35	23.38	
1.4	QPSK	3	1	23.40	23.44	23.38	24.5
1.4	QPSK	3	3	23.34	23.38	23.35	
1.4	QPSK	6	0	22.84	22.79	22.77	
1.4	16QAM	1	0	23.05	23.05	23.08	
1.4	16QAM	1	3	23.11	23.20	23.13	24.5
1.4	16QAM	1	5	23.07	23.08	23.06	
1.4	16QAM	3	0	22.81	22.83	22.86	
1.4	16QAM	3	1	22.89	22.93	22.91	
1.4	16QAM	3	3	22.81	22.87	22.81	23.5
1.4	16QAM	6	0	21.89	21.89	21.87	
1.4	64QAM	1	0	21.25	21.97	22.01	
1.4	64QAM	1	3	21.32	22.11	22.04	
1.4	64QAM	1	5	21.24	21.99	21.98	23.5
1.4	64QAM	3	0	21.26	21.95	21.93	
1.4	64QAM	3	1	21.34	22.05	21.98	
1.4	64QAM	3	3	21.27	22.00	21.95	
1.4	64QAM	6	0	20.18	20.84	20.81	22.5



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 20460	Power Middle Ch. / 20525	Power High Ch. / 20600	Tune-up limit (dBm)
Channel				824	836.5	844	
Frequency (MHz)				824	836.5	844	
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	
10	QPSK	25	12	22.18	22.14	22.17	24
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	24
10	16QAM	1	49	22.47	22.39	22.31	
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	23
10	16QAM	25	25	21.16	21.16	21.17	
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	23
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	
5	QPSK	12	7	22.12	22.12	22.09	24
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	24
5	16QAM	1	24	22.40	22.41	22.16	
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	
5	64QAM	1	24	21.34	21.35	20.16	23
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	22
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	
3	QPSK	8	4	22.09	22.12	22.03	24
3	QPSK	8	7	22.06	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	24
3	16QAM	1	14	22.29	22.35	22.26	
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.18	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	23
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	
3	64QAM	1	14	21.24	21.32	20.28	23
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	22
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	
1.4	QPSK	3	1	23.26	23.25	23.23	24
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	24
1.4	16QAM	1	5	22.52	22.54	22.47	
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.66	
1.4	64QAM	1	3	21.53	21.56	20.78	
1.4	64QAM	1	5	21.45	21.49	20.77	23
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	22



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	2534	2558	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	
20	QPSK	50	24	22.99	22.97	22.97	24.5
20	QPSK	50	50	23.02	23.08	22.99	
20	QPSK	100	0	22.96	23.00	22.97	
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	24.5
20	16QAM	1	99	23.19	23.32	23.22	
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.96	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	
20	64QAM	1	99	22.11	22.23	22.12	22.5
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	
15	QPSK	36	20	23.04	23.01	22.92	24.5
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	24.5
15	16QAM	1	74	23.21	23.30	23.26	
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	
15	64QAM	1	74	22.12	22.25	22.13	22.5
15	64QAM	36	0	20.93	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	
10	QPSK	25	12	23.00	23.02	22.95	24.5
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	24.5
10	16QAM	1	49	23.25	23.34	23.19	
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.98	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	23.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	
10	64QAM	1	49	22.13	22.27	22.09	22.5
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	
5	QPSK	12	7	22.95	23.01	22.89	24.5
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	24.5
5	16QAM	1	24	23.19	23.25	23.14	
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	
5	64QAM	1	24	22.14	22.22	22.10	22.5
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.03	20.97	



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	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	
10	QPSK	25	12	23.11	23.04	23.08	24.7
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	24.7
10	16QAM	1	49	23.37	23.36	23.33	
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	23.7
10	16QAM	25	25	22.09	22.15	22.08	
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	23.7
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	22.7
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	
5	QPSK	12	7	23.04	23.05	23.04	24.7
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.28	23.25	24.7
5	16QAM	1	24	23.28	23.35	23.28	
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	23.7
5	16QAM	12	13	22.07	22.14	22.06	
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	23.7
5	64QAM	1	12	21.70	22.17	22.01	
5	64QAM	1	24	21.72	22.12	21.85	
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	22.7
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.99	20.96	
Channel				23035	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	
3	QPSK	8	4	23.05	23.09	23.05	24.7
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	24.7
3	16QAM	1	14	23.21	23.30	23.22	
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	23.7
3	16QAM	8	7	21.98	22.09	21.92	
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	23.7
3	64QAM	1	14	21.73	22.21	21.77	
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.15	20.90	
3	64QAM	8	7	20.70	21.09	20.80	22.7
3	64QAM	15	0	20.73	21.07	20.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	
1.4	QPSK	3	1	23.99	23.98	23.96	24.7
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	24.7
1.4	16QAM	1	5	23.44	23.52	23.45	
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.38	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	
1.4	64QAM	1	5	21.70	22.43	21.80	23.7
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	22.7



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			Tune-up limit (dBm)
Frequency (MHz)				762			
10	QPSK	1	0		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		24
10	QPSK	25	12		22.02		
10	QPSK	25	25		22.05		
10	QPSK	50	0		22.18		24
10	16QAM	1	0		22.28		
10	16QAM	1	25		22.27		
10	16QAM	1	49		22.33		23
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.06		23
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		
10	64QAM	1	25		21.22		23
10	64QAM	1	49		21.29		
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.06		22
10	64QAM	25	25		20.11		
10	64QAM	50	0		20.12		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	22.90	22.85	22.60	25
5	QPSK	1	12	22.94	22.95	22.68	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.96	23
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.06	21.13	20.86	
5	64QAM	1	12	21.13	21.16	20.90	23
5	64QAM	1	24	21.18	21.17	20.98	
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	22
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



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	23.07			25
10	QPSK	1	25	23.07			
10	QPSK	1	49	23.08			
10	QPSK	25	0	22.08			
10	QPSK	25	12	22.10			24
10	QPSK	25	25	22.19			
10	QPSK	50	0	22.12			
10	16QAM	1	0	22.44			
10	16QAM	1	25	22.44			24
10	16QAM	1	49	22.42			
10	16QAM	25	0	21.10			
10	16QAM	25	12	21.12			23
10	16QAM	25	25	21.20			
10	16QAM	50	0	21.10			
10	64QAM	1	0	21.31			
10	64QAM	1	25	21.39			23
10	64QAM	1	49	21.35			
10	64QAM	25	0	20.12			
10	64QAM	25	12	20.15			22
10	64QAM	25	25	20.20			
10	64QAM	50	0	20.17			
Channel				23305	23330	23355	Tune-up limit (dbm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.02	23.01	23.01	25
5	QPSK	1	12	23.02	23.06	23.05	
5	QPSK	1	24	23.04	23.03	23.01	
5	QPSK	12	0	22.05	22.07	22.08	
5	QPSK	12	7	22.16	22.11	22.13	24
5	QPSK	12	13	22.10	22.12	22.07	
5	QPSK	25	0	22.08	22.06	22.04	
5	16QAM	1	0	22.32	22.32	22.31	
5	16QAM	1	12	22.40	22.43	22.42	24
5	16QAM	1	24	22.38	22.40	22.36	
5	16QAM	12	0	21.12	21.11	21.10	
5	16QAM	12	7	21.21	21.16	21.19	
5	16QAM	12	13	21.14	21.16	21.12	23
5	16QAM	25	0	21.11	21.09	21.06	
5	64QAM	1	0	21.21	21.30	21.29	
5	64QAM	1	12	21.32	21.41	21.34	
5	64QAM	1	24	21.38	21.36	21.33	23
5	64QAM	12	0	20.16	20.18	20.14	
5	64QAM	12	7	20.25	20.18	20.21	
5	64QAM	12	13	20.18	20.23	20.16	
5	64QAM	25	0	20.12	20.12	20.07	22



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	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	24
10	QPSK	25	12	22.25	22.26	22.28	
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.26	22.30	24
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	
10	16QAM	1	49	22.26	22.23	22.26	23
10	16QAM	25	0	20.91	20.87	20.88	
10	16QAM	25	12	21.02	20.96	20.94	
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	
10	64QAM	1	25	21.14	21.18	21.17	22
10	64QAM	1	49	21.16	21.18	21.13	
10	64QAM	25	0	19.92	19.92	19.92	
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.98	19.97	19.97	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	24
5	QPSK	12	7	22.29	22.22	22.23	
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	24
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	
5	16QAM	1	24	22.25	22.25	22.22	23
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.09	21.13	21.09	22
5	64QAM	1	24	21.19	21.16	21.10	
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	



Band 25_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. (dBm)	Power Middle Ch. (dBm)	Power High Ch. (dBm)	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	23.58	23.60	23.61	25.5		
20	QPSK	1	49	23.59	23.61	23.79			
20	QPSK	1	99	23.51	23.59	23.71			
20	QPSK	50	0	22.53	22.63	22.68	24.5		
20	QPSK	50	24	22.59	22.70	22.78			
20	QPSK	50	50	22.53	22.84	22.77			
20	QPSK	100	0	22.60	22.66	22.67	24.5		
20	16QAM	1	0	22.85	22.84	22.87			
20	16QAM	1	49	22.79	22.85	22.92			
20	16QAM	1	99	22.70	22.85	22.86	24.5		
20	16QAM	50	0	21.54	21.65	21.69			
20	16QAM	50	24	21.62	21.71	21.79			
20	16QAM	50	50	21.57	21.65	21.75	23.5		
20	16QAM	100	0	21.58	21.68	21.70			
20	64QAM	1	0	21.71	21.72	21.77			
20	64QAM	1	49	21.66	21.77	21.73	23.5		
20	64QAM	1	99	21.66	21.81	21.34			
20	64QAM	50	0	20.56	20.67	20.70			
20	64QAM	50	24	20.64	20.74	20.82	22.5		
20	64QAM	50	50	20.57	20.66	20.79			
20	64QAM	100	0	20.60	20.70	20.62			
Channel				26115	26340	26615	Tune-up limit (dBm)		
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	23.52	23.61	23.64	25.5		
15	QPSK	1	37	23.50	23.58	23.61			
15	QPSK	1	74	23.51	23.51	23.63			
15	QPSK	36	0	22.57	22.65	22.71	24.5		
15	QPSK	36	20	22.62	22.71	22.82			
15	QPSK	36	39	22.56	22.66	22.78			
15	QPSK	75	0	22.61	22.71	22.69	24.5		
15	16QAM	1	0	22.81	22.91	22.98			
15	16QAM	1	37	22.78	22.83	22.92			
15	16QAM	1	74	22.76	22.83	22.91	23.5		
15	16QAM	36	0	21.57	21.66	21.73			
15	16QAM	36	20	21.63	21.71	21.80			
15	16QAM	36	39	21.57	21.68	21.77	22.5		
15	16QAM	75	0	21.60	21.71	21.74			
15	64QAM	1	0	21.71	21.76	21.81			
15	64QAM	1	37	21.69	21.84	21.91	22.5		
15	64QAM	1	74	21.60	21.73	21.52			
15	64QAM	36	0	20.60	20.68	20.75			
15	64QAM	36	20	20.65	20.74	20.85	22.5		
15	64QAM	36	39	20.64	20.70	20.84			
15	64QAM	75	0	20.62	20.71	20.71			
Channel				26090	26340	26640	Tune-up limit (dBm)		
Frequency (MHz)				1853	1880	1910			
10	QPSK	1	0	23.53	23.51	23.61	25.5		
10	QPSK	1	25	23.50	23.58	23.62			
10	QPSK	1	49	23.51	23.60	23.67			
10	QPSK	25	0	22.56	22.61	22.70	24.5		
10	QPSK	25	12	22.59	22.71	22.73			
10	QPSK	25	25	22.58	22.69	22.82			
10	QPSK	50	0	22.60	22.70	22.72	24.5		
10	16QAM	1	0	22.88	22.94	23.01			
10	16QAM	1	25	22.75	22.95	23.04			
10	16QAM	1	49	22.77	22.91	23.04	23.5		
10	16QAM	25	0	21.58	21.59	21.69			
10	16QAM	25	12	21.61	21.72	21.74			
10	16QAM	25	25	21.58	21.68	21.79	22.5		
10	16QAM	50	0	21.57	21.70	21.74			
10	64QAM	1	0	21.71	21.74	21.78			
10	64QAM	1	25	21.67	21.86	22.00	23.5		
10	64QAM	1	49	21.70	21.85	21.52			
10	64QAM	25	0	20.60	20.63	20.73			
10	64QAM	25	12	20.66	20.75	20.79	22.5		
10	64QAM	25	25	20.61	20.71	20.77			
10	64QAM	50	0	20.58	20.72	20.78			
Channel				26065	26340	26665	Tune-up limit (dBm)		
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	23.53	23.52	23.64	25.5		
5	QPSK	1	12	23.51	23.62	23.74			
5	QPSK	1	24	23.50	23.63	23.70			
5	QPSK	12	0	22.54	22.58	22.74	24.5		
5	QPSK	12	7	22.60	22.72	22.81			
5	QPSK	12	13	22.60	22.72	22.82			
5	QPSK	25	0	22.57	22.67	22.80	24.5		
5	16QAM	1	0	22.81	22.89	23.03			
5	16QAM	1	12	22.82	22.95	23.02			
5	16QAM	1	24	22.80	22.95	23.05	23.5		
5	16QAM	12	0	21.57	21.62	21.78			
5	16QAM	12	7	21.60	21.74	21.82			
5	16QAM	12	13	21.64	21.77	21.82	22.5		
5	16QAM	25	0	21.58	21.70	21.81			
5	64QAM	1	0	21.75	21.81	21.97			
5	64QAM	1	12	21.74	21.90	21.85	22.5		
5	64QAM	1	24	21.67	21.86	21.55			
5	64QAM	12	0	20.59	20.67	20.78			
5	64QAM	12	7	20.69	20.77	20.81	22.5		
5	64QAM	12	13	20.69	20.81	20.50			
5	64QAM	25	0	20.61	20.71	20.62			
Channel				26055	26340	26735	Tune-up limit (dBm)		
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	23.50	23.52	23.63	25.5		
3	QPSK	1	8	23.56	23.73	23.78			
3	QPSK	1	14	23.53	23.69	23.78			
3	QPSK	8	0	22.56	22.64	22.74	24.5		
3	QPSK	8	4	22.65	22.73	22.82			
3	QPSK	15	0	22.58	22.68	22.80			
3	16QAM	1	0	22.75	22.83	22.93	24.5		
3	16QAM	1	8	22.91	23.05	23.07			
3	16QAM	1	14	22.87	22.99	23.07			
3	16QAM	8	0	21.65	21.72	21.82	23.5		
3	16QAM	8	4	21.69	21.80	21.89			
3	16QAM	8	7	21.71	21.80	21.91			
3	16QAM	15	0	21.65	21.75	21.79	23.5		
3	64QAM	1	0	21.68	21.77	21.77			
3	64QAM	1	8	21.83	21.94	21.56			
3	64QAM	1	14	21.80	21.93	21.51	22.5		
3	64QAM	8	0	20.64	20.71	20.70			
3	64QAM	8	4	20.72	20.78	20.58			
3	64QAM	8	7	20.69	20.80	20.41	22.5		
3	64QAM	15	0	20.64	20.73	20.52			
Channel				26047	26340	26683		Tune-up limit (dBm)	
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	23.54	23.55	23.57	25.5		
1.4	QPSK	1	3	23.50	23.59	23.66			
1.4	QPSK	1	5	23.56	23.56	23.63			
1.4	QPSK	3	0	23.43	23.58	23.60	24.5		
1.4	QPSK	3	1	23.48	23.62	23.65			
1.4	QPSK	3	3	23.47	23.60	23.68			
1.4	QPSK	6	0	22.53	22.61	22.71	24.5		
1.4	16QAM	1	0	22.72	22.79	22.92			
1.4	16QAM	1	3	22.83	22.92	23.00			
1.4	16QAM	1	5	22.78	22.91	22.99	24.5		
1.4	16QAM	3	0	22.51	22.67	22.67			
1.4	16QAM	3	1	22.61	22.72	22.75			
1.4	16QAM	3	3	22.55	22.69	22.70	23.5		
1.4	16QAM	6	0	21.68	21.74	21.78			
1.4	16QAM	6	1	21.65	21.73	21.51			
1.4	64QAM	1	3	21.75	21.89	21.50	23.5		
1.4	64QAM	1	5	21.71	21.84	21.53			
1.4	64QAM	3	0	21.63	21.77	21.21			
1.4	64QAM	3	1	21.67	21.80	21.30	22.5		
1.4	64QAM	3	3	21.68	21.81	21.14			
1.4	64QAM	6	0	20.56	20.63	21.52			



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)				831.5	831.5	841.5	
15	QPSK	1	0	23.14	23.06	23.05	25
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.18	22.17	
15	QPSK	36	20	22.22	22.20	22.18	24
15	QPSK	36	39	22.21	22.18	22.15	
15	QPSK	75	0	22.25	22.23	22.12	
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.38	24
15	16QAM	1	74	22.38	22.39	22.23	
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	23
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	
15	64QAM	1	37	21.28	21.32	21.32	
15	64QAM	1	74	21.29	21.30	21.02	22
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.28	20.27	20.21	
15	64QAM	36	39	20.26	20.27	20.21	
15	64QAM	75	0	20.27	20.25	20.20	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	
10	QPSK	25	12	22.13	22.03	22.05	24
10	QPSK	25	25	22.06	22.06	22.03	
10	QPSK	50	0	22.15	22.08	22.02	
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.39	22.36	22.34	24
10	16QAM	1	49	22.33	22.37	22.21	
10	16QAM	25	0	21.16	21.05	21.04	
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	23
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.29	21.21	
10	64QAM	1	25	21.15	21.27	21.25	
10	64QAM	1	49	21.31	21.32	21.08	22
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.98	20.10	20.08	
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	
Channel				8474.5	8486.5	8498.5	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	
5	QPSK	12	7	22.18	22.10	22.02	24
5	QPSK	12	13	22.08	22.03	22.00	
5	QPSK	25	0	22.09	22.08	22.02	
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	24
5	16QAM	1	24	22.33	22.38	22.19	
5	16QAM	12	0	21.20	21.06	21.05	
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	23
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.00	
5	64QAM	1	24	21.02	21.27	21.01	22
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.19	19.45	
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	
3	QPSK	8	4	22.16	22.08	22.00	24
3	QPSK	8	7	22.10	22.02	22.02	
3	QPSK	15	0	22.15	22.03	22.01	
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	24
3	16QAM	1	14	22.29	22.32	22.16	
3	16QAM	8	0	21.23	21.11	21.03	
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	23
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	
3	64QAM	1	14	21.18	21.28	20.45	22
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.09	19.41	
Channel				26957	26965	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	
1.4	QPSK	3	1	23.09	23.07	23.11	24
1.4	QPSK	3	3	23.12	23.06	23.05	
1.4	QPSK	6	0	22.16	22.21	22.13	
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	24
1.4	16QAM	1	5	22.36	22.48	22.32	
1.4	16QAM	3	0	22.24	22.24	22.16	
1.4	16QAM	3	1	22.20	22.30	22.18	
1.4	16QAM	3	3	22.21	22.26	22.14	23
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.94	
1.4	64QAM	1	5	21.31	21.36	20.91	23
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.29	20.25	19.69	22



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		24.12		25.7
10	QPSK	1	25		24.04		
10	QPSK	1	49		24.03		
10	QPSK	25	0		23.10		24.7
10	QPSK	25	12		23.16		
10	QPSK	25	25		23.16		
10	QPSK	50	0		23.14		24.7
10	16QAM	1	0		23.44		
10	16QAM	1	25		23.47		
10	16QAM	1	49		23.35		23.7
10	16QAM	25	0		22.11		
10	16QAM	25	12		22.15		
10	16QAM	25	25		22.11		23.7
10	16QAM	50	0		22.14		
10	64QAM	1	0		22.35		
10	64QAM	1	25		21.90		23.7
10	64QAM	1	49		21.70		
10	64QAM	25	0		21.07		
10	64QAM	25	12		20.86		22.7
10	64QAM	25	25		20.84		
10	64QAM	50	0		20.86		
Channel				27685	27710	27735	Tune-up limit (dbm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.93	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.75	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	



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	1744	1772	
20	QPSK	1	0	23.54	23.54	23.43	25.1
20	QPSK	1	49	23.50	23.46	23.43	
20	QPSK	1	99	23.41	23.40	23.40	
20	QPSK	50	0	23.57	23.60	23.50	24.5
20	QPSK	50	24	23.52	23.51	23.39	
20	QPSK	50	50	23.47	23.46	23.36	
20	QPSK	100	0	22.95	22.97	22.85	24.5
20	16QAM	1	0	23.29	23.27	23.15	
20	16QAM	1	49	23.24	23.19	23.18	
20	16QAM	1	99	23.17	23.13	23.16	23.5
20	16QAM	50	0	23.07	23.03	22.95	
20	16QAM	50	24	22.97	22.96	22.88	
20	16QAM	50	50	22.92	22.92	22.81	23.5
20	16QAM	100	0	21.97	21.96	21.86	
20	64QAM	1	0	22.12	22.15	22.04	
20	64QAM	1	49	22.10	22.08	22.00	22.5
20	64QAM	1	99	21.98	21.98	22.00	
20	64QAM	50	0	22.05	22.05	21.95	
20	64QAM	50	24	22.00	21.97	21.85	22.5
20	64QAM	50	50	21.95	21.91	21.84	
20	64QAM	100	0	20.98	20.98	20.85	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.47	23.46	23.33	25.1
15	QPSK	1	37	23.50	23.39	23.42	
15	QPSK	1	74	23.33	23.31	23.32	
15	QPSK	36	0	23.48	23.52	23.44	24.5
15	QPSK	36	20	23.52	23.42	23.30	
15	QPSK	36	39	23.37	23.37	23.35	
15	QPSK	75	0	22.90	22.89	22.84	24.5
15	16QAM	1	0	23.23	23.25	23.06	
15	16QAM	1	37	23.19	23.18	23.15	
15	16QAM	1	74	23.09	23.05	23.08	23.5
15	16QAM	36	0	22.97	23.03	22.85	
15	16QAM	36	20	22.96	22.96	22.82	
15	16QAM	36	39	22.89	22.88	22.79	23.5
15	16QAM	75	0	21.91	21.87	21.81	
15	64QAM	1	0	22.02	22.14	21.96	
15	64QAM	1	37	22.08	21.99	21.94	22.5
15	64QAM	1	74	21.89	21.95	21.91	
15	64QAM	36	0	22.01	22.02	21.88	
15	64QAM	36	20	21.95	21.88	21.80	22.5
15	64QAM	36	39	21.87	21.81	21.75	
15	64QAM	75	0	20.92	20.85	20.75	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.45	23.48	23.40	25.1
10	QPSK	1	25	23.48	23.38	23.39	
10	QPSK	1	49	23.31	23.32	23.33	
10	QPSK	25	0	23.51	23.52	23.46	24.5
10	QPSK	25	12	23.43	23.42	23.32	
10	QPSK	25	25	23.46	23.40	23.33	
10	QPSK	50	0	22.86	22.88	22.82	24.5
10	16QAM	1	0	23.26	23.18	23.15	
10	16QAM	1	25	23.23	23.10	23.10	
10	16QAM	1	49	23.13	23.12	23.15	23.5
10	16QAM	25	0	22.97	22.94	22.95	
10	16QAM	25	12	22.89	22.91	22.84	
10	16QAM	25	25	22.85	22.87	22.71	23.5
10	16QAM	50	0	21.93	21.89	21.82	
10	64QAM	1	0	22.02	22.09	21.96	
10	64QAM	1	25	22.04	22.05	21.99	22.5
10	64QAM	1	49	21.98	21.96	21.95	
10	64QAM	25	0	21.97	22.05	21.91	
10	64QAM	25	12	21.92	21.95	21.76	22.5
10	64QAM	25	25	21.85	21.89	21.83	
10	64QAM	50	0	20.89	20.94	20.81	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.45	23.47	23.37	25.1
5	QPSK	1	12	23.47	23.45	23.40	
5	QPSK	1	24	23.39	23.31	23.38	
5	QPSK	12	0	23.57	23.57	23.42	24.5
5	QPSK	12	7	23.50	23.47	23.34	
5	QPSK	12	13	23.38	23.43	23.27	
5	QPSK	25	0	22.88	22.90	22.83	24.5
5	16QAM	1	0	23.19	23.17	23.14	
5	16QAM	1	12	23.18	23.16	23.09	
5	16QAM	1	24	23.14	23.11	23.14	23.5
5	16QAM	12	0	23.05	22.99	22.88	
5	16QAM	12	7	22.88	22.91	22.84	
5	16QAM	12	13	22.88	22.85	22.78	23.5
5	16QAM	25	0	21.94	21.93	21.85	
5	64QAM	1	0	22.05	22.05	21.96	
5	64QAM	1	12	22.07	22.02	21.91	22.5
5	64QAM	1	24	21.93	21.91	22.00	
5	64QAM	12	0	22.04	22.02	21.91	
5	64QAM	12	7	21.91	21.91	21.82	22.5
5	64QAM	12	13	21.94	21.91	21.75	
5	64QAM	25	0	20.89	20.92	20.83	
Channel				131967	132322	132667	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1773.5	
3	QPSK	1	0	23.49	23.50	23.36	25.1
3	QPSK	1	8	23.40	23.45	23.37	
3	QPSK	1	14	23.35	23.39	23.37	
3	QPSK	8	0	23.55	23.52	23.41	24.5
3	QPSK	8	4	23.49	23.44	23.31	
3	QPSK	8	7	23.38	23.40	23.27	
3	QPSK	15	0	22.85	22.93	22.76	24.5
3	16QAM	1	0	23.21	23.23	23.07	
3	16QAM	1	8	23.15	23.16	23.09	
3	16QAM	1	14	23.08	23.04	23.09	23.5
3	16QAM	8	0	23.02	22.98	22.88	
3	16QAM	8	4	22.90	22.96	22.80	
3	16QAM	8	7	22.89	22.92	22.73	23.5
3	16QAM	15	0	21.92	21.89	21.79	
3	64QAM	1	0	22.10	22.05	22.04	
3	64QAM	1	8	22.07	21.99	22.00	22.5
3	64QAM	1	14	21.97	21.92	22.00	
3	64QAM	8	0	22.05	22.01	21.91	
3	64QAM	8	4	21.97	21.92	21.83	22.5
3	64QAM	8	7	21.94	21.88	21.77	
3	64QAM	15	0	20.91	20.89	20.84	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.42	23.35	23.17	25.1
1.4	QPSK	1	3	23.47	23.39	23.24	
1.4	QPSK	1	5	23.39	23.32	23.17	
1.4	QPSK	3	0	23.44	23.40	23.20	24.5
1.4	QPSK	3	1	23.48	23.45	23.25	
1.4	QPSK	3	3	23.41	23.36	23.18	
1.4	QPSK	6	0	22.90	22.85	22.66	24.5
1.4	16QAM	1	0	23.17	23.07	22.83	
1.4	16QAM	1	3	23.21	23.15	22.97	
1.4	16QAM	1	5	23.12	23.08	22.91	24.5
1.4	16QAM	3	0	22.93	22.90	22.72	
1.4	16QAM	3	1	22.99	22.94	22.76	
1.4	16QAM	3	3	22.92	22.85	22.67	23.5
1.4	16QAM	6	0	21.97	21.91	21.73	
1.4	64QAM	1	0	22.04	22.04	21.83	
1.4	64QAM	1	3	22.08	22.10	21.91	23.5
1.4	64QAM	1	5	22.06	22.00	21.83	
1.4	64QAM	3	0	22.01	21.99	21.79	
1.4	64QAM	3	1	22.07	22.03	21.84	22.5
1.4	64QAM	3	3	22.04	21.98	21.79	
1.4	64QAM	6	0	20.94	20.84	20.71	



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)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	
20	QPSK	50	24	22.33	22.25	22.21	24
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	24
20	16QAM	1	99	22.45	22.43	22.40	
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.16	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	
20	64QAM	1	99	21.28	21.28	21.23	23
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	22
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	
15	QPSK	36	20	22.32	22.22	22.14	24
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.32	22.45	24
15	16QAM	1	74	22.39	22.47	22.33	
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.56	21.40	21.08	
15	64QAM	1	37	20.95	21.41	21.35	
15	64QAM	1	74	21.28	21.39	21.23	23
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	19.86	20.11	20.20	
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	22
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	
10	QPSK	25	12	22.15	22.10	22.00	24
10	QPSK	25	25	22.07	22.06	22.01	
10	QPSK	50	0	22.15	22.11	22.02	
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	24
10	16QAM	1	49	22.36	22.30	22.21	
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	23
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	
10	64QAM	1	49	20.69	21.18	21.10	23
10	64QAM	25	0	19.03	20.05	19.96	
10	64QAM	25	12	19.15	20.15	19.95	
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.95	22
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	
5	QPSK	12	7	22.01	22.04	22.03	24
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	24
5	16QAM	1	24	22.24	22.27	22.13	
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	
5	64QAM	1	24	20.13	21.24	20.77	23
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	22



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				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	25.7
20	QPSK	1	49	24.62	24.55	24.47	
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	
20	16QAM	50	50	22.76	22.71	22.62	23.7
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	
20	64QAM	1	99	22.43	22.40	22.31	22.7
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	25.7
15	QPSK	1	37	24.55	24.51	24.43	
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	
15	16QAM	36	39	22.66	22.65	22.54	23.7
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	
15	64QAM	1	74	22.46	22.39	22.31	22.7
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	25.7
10	QPSK	1	25	24.59	24.60	24.46	
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	
10	16QAM	1	25	23.73	23.69	23.59	24.7
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	23.7
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	
10	64QAM	1	49	22.51	22.42	22.32	22.7
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.68	
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2372.5	2595	2817.5	
5	QPSK	1	0	24.59	24.51	24.46	25.7
5	QPSK	1	12	24.57	24.55	24.39	
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	
5	16QAM	1	12	23.78	23.76	23.58	24.7
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	
5	16QAM	12	7	22.73	22.70	22.56	
5	16QAM	12	13	22.68	22.67	22.55	23.7
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	
5	64QAM	1	24	22.56	22.51	22.37	22.7
5	64QAM	12	0	21.77	21.65	21.59	
5	64QAM	12	7	21.76	21.74	21.63	
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



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)				2580	2595	2610	
20	QPSK	1	0	26.15	26.16	26.14	27.5
20	QPSK	1	49	26.13	26.16	26.09	
20	QPSK	1	99	26.28	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	26.5
20	QPSK	50	24	25.37	25.43	25.44	
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	26.5
20	16QAM	1	0	25.46	25.56	25.54	
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	25.5
20	16QAM	50	0	24.37	24.45	24.45	
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	25.5
20	16QAM	100	0	24.39	24.44	24.46	
20	64QAM	1	0	24.27	24.30	24.37	
20	64QAM	1	49	24.44	24.44	24.34	24.5
20	64QAM	1	99	24.42	24.44	24.33	
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	24.5
20	64QAM	50	50	23.53	23.54	23.42	
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	27.5
15	QPSK	1	37	26.27	26.11	26.17	
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.50	25.43	25.41	26.5
15	QPSK	36	20	25.50	25.42	25.39	
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	26.5
15	16QAM	1	0	25.63	25.57	25.50	
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	25.5
15	16QAM	36	0	24.52	24.41	24.37	
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	25.5
15	16QAM	75	0	24.53	24.41	24.41	
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	24.5
15	64QAM	1	74	24.48	24.43	24.32	
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	24.5
15	64QAM	36	39	23.53	23.49	23.39	
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	27.5
10	QPSK	1	25	26.20	26.08	26.08	
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	26.5
10	QPSK	25	12	25.43	25.40	25.37	
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.36	26.5
10	16QAM	1	0	25.54	25.51	25.49	
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	25.5
10	16QAM	25	0	24.42	24.40	24.28	
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	25.5
10	16QAM	50	0	24.43	24.40	24.37	
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	24.5
10	64QAM	1	49	24.48	24.38	24.27	
10	64QAM	25	0	23.56	23.36	23.41	
10	64QAM	25	12	23.49	23.35	23.31	24.5
10	64QAM	25	25	23.43	23.39	23.29	
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.22	26.22	26.07	27.5
5	QPSK	1	12	26.22	26.02	26.17	
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	26.5
5	QPSK	12	7	25.44	25.33	25.29	
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	26.5
5	16QAM	1	0	25.59	25.47	25.48	
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	25.5
5	16QAM	12	0	24.50	24.34	24.36	
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	25.5
5	16QAM	25	0	24.50	24.32	24.34	
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	24.5
5	64QAM	1	24	24.36	24.41	24.23	
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	24.5
5	64QAM	12	13	23.49	23.41	23.36	
5	64QAM	25	0	23.52	23.32	23.34	



Band 41_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.	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	24.38	24.49	24.54	24.41	24.26	25.7	
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64		
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78	24.7	
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37		
20	16QAM	1	49	23.48	23.59	23.57	23.82	23.71	24.7	
20	16QAM	1	99	23.54	23.69	23.63	23.38	23.60		
20	16QAM	50	0	22.59	22.66	22.67	22.70	22.65		
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79		
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76	23.7	
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.19	22.32	22.30	22.27	22.09		
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.48		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29	23.7	
20	64QAM	50	0	21.69	21.67	21.68	21.71	21.64		
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79		
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70	22.7	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40	25.7	
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66		
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78	24.7	
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71		
15	16QAM	1	0	23.48	23.65	23.64	23.69	23.51		
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.89	24.7	
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60		
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72		
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70	23.7	
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69		
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22		
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45		
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40	23.7	
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68		
15	64QAM	36	20	21.57	21.70	21.67	21.82	21.79		
15	64QAM	36	39	21.59	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71	22.7	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44	25.7	
10	QPSK	1	24	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72		
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77	24.7	
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70		
10	16QAM	1	0	23.60	23.69	23.70	23.64	23.55		
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78	24.7	
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51		
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81		
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.85	23.7	
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26		
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47		
10	64QAM	1	49	22.33	22.49	22.39	22.57	22.16	22.7	
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.76		
10	64QAM	25	12	21.66	21.79	21.75	21.90	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75	21.7	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	25452	2593	26395	26865		
5	QPSK	1	0	24.48	24.53	24.55	24.69	24.56	25.7	
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77		
5	QPSK	12	7	23.58	23.74	23.70	23.88	23.79	24.7	
5	QPSK	12	15	23.60	23.70	23.68	23.86	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74		
5	16QAM	1	0	23.60	23.65	23.68	23.80	23.76		
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88	24.7	
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75		
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.76		
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77		
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74	23.7	
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79		
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		
5	64QAM	1	12	22.55	22.48	22.48	22.66	22.52		
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45	22.7	
5	64QAM	12	0	21.59	21.72	21.71	21.81	21.80		
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83		
5	64QAM	12	13	21.59	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80		



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				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	24.09	24.44	24.59	24.46	25.7	
20	QPSK	1	49	24.03	24.29	24.38	24.23		
20	QPSK	1	99	24.03	24.26	24.31	24.17		
20	QPSK	50	0	23.08	23.44	23.61	23.48		
20	QPSK	50	24	23.16	23.46	23.55	23.42	24.7	
20	QPSK	50	50	23.12	23.42	23.47	23.33		
20	QPSK	100	0	23.15	23.47	23.54	23.42		
20	16QAM	1	0	23.20	23.59	23.71	23.59		
20	16QAM	1	49	23.06	23.35	23.45	23.31	24.7	
20	16QAM	1	99	23.11	23.38	23.42	23.23		
20	16QAM	50	0	22.11	22.47	22.64	22.50		
20	16QAM	50	24	22.17	22.49	22.59	22.45		
20	16QAM	50	50	22.14	22.46	22.50	22.37	23.7	
20	16QAM	100	0	22.16	22.46	22.57	22.41		
20	64QAM	1	0	21.86	22.23	22.44	22.33		
20	64QAM	1	49	21.78	22.09	22.20	22.03		
20	64QAM	1	99	21.89	22.12	22.13	21.94	22.7	
20	64QAM	50	0	21.13	21.47	21.63	21.53		
20	64QAM	50	24	21.18	21.49	21.61	21.44		
20	64QAM	50	50	21.16	21.45	21.51	21.36		
20	64QAM	100	0	21.19	21.47	21.58	21.42		
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	24.03	24.36	24.54	24.36	25.7	
15	QPSK	1	37	23.95	24.28	24.36	24.24		
15	QPSK	1	74	24.02	24.33	24.36	24.20		
15	QPSK	36	0	23.19	23.42	23.63	23.46		
15	QPSK	36	20	23.14	23.46	23.55	23.41	24.7	
15	QPSK	36	39	23.09	23.43	23.52	23.34		
15	QPSK	75	0	23.17	23.47	23.57	23.43		
15	16QAM	1	0	23.16	23.52	23.67	23.51		
15	16QAM	1	37	22.98	23.34	23.43	23.23	24.7	
15	16QAM	1	74	23.16	23.47	23.51	23.35		
15	16QAM	36	0	22.12	22.41	22.60	22.44		
15	16QAM	36	20	22.10	22.42	22.53	22.37		
15	16QAM	36	39	22.08	22.39	22.46	22.32	23.7	
15	16QAM	75	0	22.17	22.48	22.58	22.44		
15	64QAM	1	0	21.84	22.18	22.38	22.25		
15	64QAM	1	37	21.78	22.12	22.24	22.06		
15	64QAM	1	74	21.88	22.20	22.19	22.03	23.7	
15	64QAM	36	0	21.17	21.44	21.62	21.51		
15	64QAM	36	20	21.14	21.47	21.57	21.40		
15	64QAM	36	39	21.12	21.42	21.52	21.37		
15	64QAM	75	0	21.17	21.50	21.59	21.43		
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	24.04	24.35	24.47	24.33	25.7	
10	QPSK	1	25	23.93	24.28	24.37	24.22		
10	QPSK	1	49	23.96	24.29	24.35	24.22		
10	QPSK	25	0	23.12	23.46	23.55	23.41		
10	QPSK	25	12	23.12	23.44	23.55	23.40	24.7	
10	QPSK	25	25	23.08	23.42	23.52	23.34		
10	QPSK	50	0	23.10	23.43	23.52	23.39		
10	16QAM	1	0	23.13	23.48	23.65	23.48		
10	16QAM	1	25	23.04	23.41	23.49	23.33	24.7	
10	16QAM	1	49	23.03	23.39	23.47	23.30		
10	16QAM	25	0	22.10	22.43	22.56	22.41		
10	16QAM	25	12	22.12	22.45	22.58	22.41		
10	16QAM	25	25	22.07	22.41	22.50	22.33	23.7	
10	16QAM	50	0	22.11	22.49	22.55	22.42		
10	64QAM	1	0	21.85	22.14	22.35	22.22		
10	64QAM	1	25	21.77	22.14	22.22	22.09		
10	64QAM	1	49	21.83	22.15	22.16	22.05	22.7	
10	64QAM	25	0	21.16	21.52	21.60	21.46		
10	64QAM	25	12	21.19	21.54	21.62	21.48		
10	64QAM	25	25	21.14	21.47	21.57	21.41		
10	64QAM	50	0	21.11	21.46	21.56	21.43		
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	23.99	24.26	24.49	24.34	25.7	
5	QPSK	1	12	23.90	24.25	24.33	24.20		
5	QPSK	1	24	23.95	24.29	24.33	24.25		
5	QPSK	12	0	23.08	23.43	23.53	23.41		
5	QPSK	12	7	23.08	23.43	23.53	23.37	24.7	
5	QPSK	12	13	23.09	23.42	23.54	23.39		
5	QPSK	25	0	23.06	23.41	23.53	23.37		
5	16QAM	1	0	23.11	23.43	23.62	23.45		
5	16QAM	1	12	23.10	23.45	23.53	23.39	24.7	
5	16QAM	1	24	23.11	23.47	23.49	23.43		
5	16QAM	12	0	22.05	22.43	22.55	22.35		
5	16QAM	12	7	22.07	22.39	22.51	22.36		
5	16QAM	12	13	22.07	22.39	22.47	22.35	23.7	
5	16QAM	25	0	22.11	22.46	22.55	22.39		
5	64QAM	1	0	21.87	22.17	22.33	22.20		
5	64QAM	1	12	21.79	22.16	22.26	22.10		
5	64QAM	1	24	21.86	22.25	22.26	22.16	22.7	
5	64QAM	12	0	21.13	21.44	21.56	21.44		
5	64QAM	12	7	21.08	21.43	21.56	21.38		
5	64QAM	12	13	21.08	21.42	21.55	21.35		
5	64QAM	25	0	21.11	21.46	21.57	21.44		



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	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.05	22.91	22.83	
20	QPSK	50	24	23.06	22.88	22.82	24.2
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	24.2
20	16QAM	1	99	22.97	22.90	22.76	
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.66	21.51	
20	64QAM	1	99	21.75	21.68	21.54	22.2
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	
15	QPSK	36	20	23.05	22.87	22.82	24.2
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	24.2
15	16QAM	1	74	23.01	22.92	22.79	
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	
15	64QAM	1	74	21.81	21.67	21.49	22.2
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.97	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	
10	QPSK	25	12	22.98	22.83	22.73	24.2
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.05	22.83	22.79	
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	24.2
10	16QAM	1	49	22.97	22.87	22.73	
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	
10	64QAM	1	49	21.74	21.63	21.47	22.2
10	64QAM	25	0	21.03	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2595	2817.5	
5	QPSK	1	0	23.75	23.76	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	
5	QPSK	12	7	22.97	22.81	22.82	24.2
5	QPSK	12	13	22.96	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	24.2
5	16QAM	1	24	22.96	22.83	22.74	
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	
5	16QAM	12	13	22.04	21.95	21.76	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	
5	64QAM	1	24	21.66	21.59	21.49	22.2
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



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)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	
20	QPSK	1	49	25.53	25.47	25.33	26.7
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	
20	QPSK	50	24	24.87	24.72	24.65	25.7
20	QPSK	50	50	24.84	24.78	24.63	
20	QPSK	100	0	24.86	24.71	24.67	
20	16QAM	1	0	24.96	24.85	24.77	25.7
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	
20	16QAM	50	0	23.91	23.77	23.71	24.7
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	
20	16QAM	100	0	23.92	23.73	23.70	24.7
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	
20	64QAM	1	99	23.77	23.70	23.56	23.7
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.91	22.77	22.69	
20	64QAM	50	50	22.90	22.81	22.69	Tune-up limit (dBm)
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	
15	QPSK	1	37	25.43	25.41	25.33	26.7
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.68	24.63	
15	QPSK	36	20	24.84	24.70	24.59	25.7
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	
15	16QAM	1	0	24.89	24.75	24.77	25.7
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	
15	16QAM	36	0	23.84	23.72	23.65	24.7
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	
15	16QAM	75	0	23.85	23.64	23.70	24.7
15	64QAM	1	0	23.73	23.68	23.62	
15	64QAM	1	37	23.72	23.68	23.47	
15	64QAM	1	74	23.76	23.67	23.47	23.7
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.68	
15	64QAM	36	39	22.86	22.81	22.63	Tune-up limit (dBm)
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	
10	QPSK	1	25	25.44	25.37	25.29	26.7
10	QPSK	1	49	25.48	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.78	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	23.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.70	22.63	Tune-up limit (dBm)
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	23.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.88	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	



Band 41_Ant 0										
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.	Power High 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	24.19	24.06	23.93	23.84		25.5
20	QPSK	1	49	24.14	24.25	24.07	24.21	24.26		
20	QPSK	1	99	24.10	24.19	24.04	23.83	24.20		
20	QPSK	50	0	23.28	23.30	23.18	23.18	23.26		
20	QPSK	50	24	23.27	23.36	23.13	23.21	23.40		
20	QPSK	50	50	23.30	23.38	23.21	23.26	23.41		24.5
20	QPSK	100	0	23.28	23.33	23.16	23.17	23.38		
20	16QAM	1	0	23.23	23.30	23.22	23.06	22.96		24.5
20	16QAM	1	49	23.21	23.30	23.13	23.32	23.36		
20	16QAM	1	99	23.26	23.38	23.16	22.90	23.31		
20	16QAM	50	0	22.31	22.30	22.23	22.23	22.29		
20	16QAM	50	24	22.32	22.42	22.23	22.29	22.43		23.5
20	16QAM	50	50	22.29	22.43	22.17	22.25	22.44		
20	16QAM	100	0	22.31	22.40	22.18	22.19	22.35		
20	64QAM	1	0	21.94	21.99	21.91	21.79	21.65		23.5
20	64QAM	1	49	21.96	21.99	21.86	22.08	22.16		
20	64QAM	1	99	21.99	22.16	21.89	21.60	22.07		
20	64QAM	50	0	21.31	21.34	21.25	21.22	21.30		22.5
20	64QAM	50	24	21.33	21.40	21.22	21.30	21.46		
20	64QAM	50	50	21.30	21.41	21.21	21.25	21.44		
20	64QAM	100	0	21.31	21.40	21.22	21.18	21.35		
Channel				39725	40173	40620	41068	41515		Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.11	24.17	24.06	24.01	23.97		25.5
15	QPSK	1	37	24.08	24.17	23.97	24.17	24.23		
15	QPSK	1	74	24.12	24.25	24.05	23.99	24.23		
15	QPSK	36	0	23.29	23.34	23.18	23.19	23.30		
15	QPSK	36	20	23.27	23.36	23.16	23.31	23.37		24.5
15	QPSK	36	39	23.26	23.35	23.13	23.23	23.40		
15	QPSK	75	0	23.28	23.34	23.14	23.25	23.33		
15	16QAM	1	0	23.23	23.32	23.20	23.19	23.09		24.5
15	16QAM	1	37	23.11	23.21	23.02	23.27	23.34		
15	16QAM	1	74	23.26	23.48	23.21	23.08	23.38		
15	16QAM	36	0	22.24	22.32	22.13	22.18	22.25		23.5
15	16QAM	36	20	22.24	22.31	22.13	22.29	22.36		
15	16QAM	36	39	22.23	22.33	22.11	22.22	22.37		
15	16QAM	75	0	22.30	22.38	22.19	22.31	22.36		
15	64QAM	1	0	21.94	22.00	21.89	21.91	21.79		23.5
15	64QAM	1	37	22.01	22.05	21.87	22.06	22.10		
15	64QAM	1	74	22.02	22.19	21.94	21.80	22.15		
15	64QAM	36	0	21.29	21.33	21.20	21.21	21.29		22.5
15	64QAM	36	20	21.32	21.33	21.17	21.36	21.42		
15	64QAM	36	39	21.28	21.38	21.15	21.26	21.41		
15	64QAM	75	0	21.30	21.39	21.17	21.30	21.36		
Channel				39700	40160	40620	41080	41540		Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.21	24.23	24.10	23.93	24.08		25.5
10	QPSK	1	24	24.20	24.17	24.08	24.23	24.18		
10	QPSK	1	49	24.24	24.20	24.08	24.01	24.08		
10	QPSK	25	0	23.30	23.37	23.21	23.20	23.39		24.5
10	QPSK	25	12	23.33	23.43	23.23	23.31	23.42		
10	QPSK	25	25	23.31	23.40	23.18	23.28	23.34		
10	QPSK	50	0	23.31	23.39	23.20	23.21	23.37		24.5
10	16QAM	1	0	23.37	23.38	23.23	23.12	23.18		
10	16QAM	1	25	23.32	23.41	23.21	23.38	23.43		24.5
10	16QAM	1	49	23.30	23.37	23.17	23.12	23.18		
10	16QAM	25	0	22.34	22.40	22.15	22.25	22.40		23.5
10	16QAM	25	12	22.36	22.44	22.24	22.30	22.52		
10	16QAM	25	25	22.34	22.40	22.18	22.32	22.36		
10	16QAM	50	0	22.37	22.42	22.25	22.27	22.41		
10	64QAM	1	0	22.11	22.06	21.96	21.83	21.87		23.5
10	64QAM	1	25	22.10	22.13	21.98	22.14	22.18		
10	64QAM	1	49	22.13	22.20	21.93	21.83	21.91		
10	64QAM	25	0	21.38	21.45	21.26	21.27	21.43		22.5
10	64QAM	25	12	21.44	21.48	21.30	21.40	21.51		
10	64QAM	25	25	21.39	21.48	21.26	21.37	21.41		
10	64QAM	50	0	21.35	21.42	21.23	21.25	21.41		
Channel				39675	40148	40620	41093	41565		Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.2	2593	2639.50	2687.3		
5	QPSK	1	0	24.22	24.22	24.10	24.19	24.21		25.5
5	QPSK	1	12	24.19	24.17	24.08	24.22	24.22		
5	QPSK	1	24	24.17	24.25	24.02	24.22	24.23		
5	QPSK	12	0	23.30	23.36	23.19	23.28	23.43		24.5
5	QPSK	12	7	23.35	23.43	23.23	23.40	23.47		
5	QPSK	12	15	23.31	23.40	23.16	23.35	23.39		
5	QPSK	25	0	23.30	23.39	23.18	23.32	23.43		
5	16QAM	1	0	23.37	23.33	23.25	23.27	23.42		24.5
5	16QAM	1	12	23.37	23.45	23.26	23.47	23.54		
5	16QAM	1	24	23.40	23.44	23.26	23.38	23.44		
5	16QAM	12	0	22.30	22.37	22.19	22.24	22.41		23.5
5	16QAM	12	7	22.34	22.39	22.23	22.37	22.41		
5	16QAM	12	13	22.32	22.38	22.17	22.33	22.41		
5	16QAM	25	0	22.34	22.45	22.21	22.38	22.46		
5	64QAM	1	0	22.12	22.11	21.97	22.05	22.14		23.5
5	64QAM	1	12	22.12	22.18	21.99	22.14	22.15		
5	64QAM	1	24	22.17	22.19	22.01	22.15	22.19		
5	64QAM	12	0	21.36	21.44	21.27	21.33	21.48		22.5
5	64QAM	12	7	21.36	21.47	21.30	21.43	21.49		
5	64QAM	12	13	21.38	21.43	21.25	21.39	21.44		
5	64QAM	25	0	21.35	21.43	21.26	21.44	21.49		



Band 48_Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Ch. / Freq.	Power High 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	24.05	24.36	24.53	24.56	25.7		
20	QPSK	1	49	23.90	24.19	24.30	24.36			
20	QPSK	1	99	23.91	24.17	24.30	24.29			
20	QPSK	50	0	23.10	23.40	23.50	23.51			
20	QPSK	50	24	23.04	23.34	23.47	23.41	24.7		
20	QPSK	50	50	23.05	23.31	23.42	23.43			
20	QPSK	100	0	23.05	23.36	23.49	23.50			
20	16QAM	1	0	23.15	23.47	23.64	23.68			
20	16QAM	1	49	22.98	23.26	23.40	23.40	24.7		
20	16QAM	1	99	23.02	23.28	23.41	23.40			
20	16QAM	50	0	22.05	22.34	22.58	22.50			
20	16QAM	50	24	22.11	22.38	22.53	22.46			
20	16QAM	50	50	22.07	22.33	22.46	22.44	23.7		
20	16QAM	100	0	22.10	22.37	22.52	22.43			
20	64QAM	1	0	21.85	22.13	22.37	22.34			
20	64QAM	1	49	21.73	22.01	22.16	22.14		23.7	
20	64QAM	1	99	21.78	22.03	22.12	22.14			
20	64QAM	50	0	21.06	21.35	21.56	21.52			
20	64QAM	50	24	21.14	21.38	21.53	21.46			
20	64QAM	50	50	21.06	21.33	21.46	21.45	22.7		
20	64QAM	100	0	21.10	21.39	21.49	21.43			
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	23.92	24.24	24.44	24.44	25.7		
15	QPSK	1	37	23.86	24.17	24.34	24.34			
15	QPSK	1	74	23.86	24.16	24.30	24.29			
15	QPSK	36	0	23.08	23.29	23.52	23.46			
15	QPSK	36	20	23.01	23.32	23.48	23.48	24.7		
15	QPSK	36	39	22.97	23.28	23.43	23.40			
15	QPSK	75	0	23.04	23.33	23.48	23.41			
15	16QAM	1	0	23.04	23.36	23.59	23.57			
15	16QAM	1	37	22.89	23.14	23.31	23.31	24.7		
15	16QAM	1	74	23.03	23.36	23.48	23.45			
15	16QAM	36	0	22.03	22.24	22.50	22.46			
15	16QAM	36	20	21.98	22.28	22.45	22.45			
15	16QAM	36	39	21.95	22.24	22.38	22.39	23.7		
15	16QAM	75	0	22.04	22.33	22.48	22.41			
15	64QAM	1	0	21.75	22.01	22.30	22.22			
15	64QAM	1	37	21.70	22.00	22.16	22.18		23.7	
15	64QAM	1	74	21.79	22.08	22.22	22.22			
15	64QAM	36	0	21.09	21.32	21.55	21.47			
15	64QAM	36	20	21.04	21.33	21.49	21.49			
15	64QAM	36	39	21.01	21.29	21.42	21.44	22.7		
15	64QAM	75	0	21.05	21.36	21.52	21.44			
Channel				55290	55615	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	23.94	24.23	24.39	24.44	25.7		
10	QPSK	1	25	23.85	24.18	24.34	24.35			
10	QPSK	1	49	23.89	24.22	24.35	24.36			
10	QPSK	25	0	23.02	23.33	23.43	23.52			
10	QPSK	25	12	23.02	23.34	23.42	23.52		24.7	
10	QPSK	25	25	22.99	23.29	23.46	23.46			
10	QPSK	50	0	23.00	23.29	23.41	23.51			
10	16QAM	1	0	23.10	23.37	23.56	23.62			
10	16QAM	1	25	22.97	23.27	23.45	23.46		24.7	
10	16QAM	1	49	23.00	23.27	23.43	23.45			
10	16QAM	25	0	22.04	22.34	22.43	22.55			
10	16QAM	25	12	22.05	22.34	22.43	22.54			
10	16QAM	25	25	21.99	22.30	22.47	22.48	23.7		
10	16QAM	50	0	22.07	22.35	22.43	22.51			
10	64QAM	1	0	21.82	22.02	22.26	22.36			
10	64QAM	1	25	21.70	22.00	22.20	22.19		23.7	
10	64QAM	1	49	21.70	22.02	22.17	22.17			
10	64QAM	25	0	21.08	21.41	21.51	21.60			
10	64QAM	25	12	21.10	21.41	21.52	21.59			
10	64QAM	25	25	21.07	21.37	21.53	21.53	22.7		
10	64QAM	50	0	21.06	21.34	21.43	21.53			
Channel				55265	55610	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	23.93	24.20	24.37	24.41	25.7		
5	QPSK	1	12	23.86	24.17	24.33	24.31			
5	QPSK	1	24	23.90	24.23	24.38	24.34			
5	QPSK	12	0	22.98	23.34	23.42	23.54		24.7	
5	QPSK	12	7	23.01	23.34	23.45	23.51			
5	QPSK	12	13	23.01	23.33	23.46	23.51			
5	QPSK	25	0	23.00	23.33	23.44	23.50			
5	16QAM	1	0	23.08	23.33	23.52	23.59		24.7	
5	16QAM	1	12	23.01	23.35	23.54	23.54			
5	16QAM	1	24	23.06	23.36	23.57	23.58			
5	16QAM	12	0	21.97	22.31	22.43	22.53			
5	16QAM	12	7	21.99	22.31	22.41	22.47	23.7		
5	16QAM	12	13	21.98	22.31	22.48	22.45			
5	16QAM	25	0	22.01	22.36	22.45	22.51			
5	64QAM	1	0	21.81	22.07	22.26	22.30			
5	64QAM	1	12	21.73	22.04	22.22	22.19	23.7		
5	64QAM	1	24	21.81	22.10	22.25	22.29			
5	64QAM	12	0	21.05	21.39	21.48	21.52			
5	64QAM	12	7	21.06	21.36	21.48	21.54		22.7	
5	64QAM	12	13	21.06	21.34	21.49	21.53			
5	64QAM	25	0	21.08	21.39	21.49	21.56			



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	24.55	24.52	24.46	25.7
20	QPSK	1	49	24.62	24.55	24.47	
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	
20	16QAM	50	50	22.76	22.71	22.62	23.7
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	
20	64QAM	1	99	22.43	22.40	22.31	22.7
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	25.7
15	QPSK	1	37	24.55	24.51	24.43	
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	
15	16QAM	36	39	22.66	22.65	22.54	23.7
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	
15	64QAM	1	74	22.46	22.39	22.31	22.7
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	25.7
10	QPSK	1	25	24.59	24.60	24.46	
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	
10	16QAM	1	25	23.73	23.69	23.59	24.7
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	23.7
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	
10	64QAM	1	49	22.51	22.42	22.32	22.7
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.68	
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2372.5	2595	2817.5	
5	QPSK	1	0	24.59	24.51	24.46	25.7
5	QPSK	1	12	24.57	24.55	24.39	
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	
5	16QAM	1	12	23.78	23.76	23.58	24.7
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	
5	16QAM	12	7	22.73	22.70	22.56	
5	16QAM	12	13	22.68	22.67	22.55	23.7
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	
5	64QAM	1	24	22.56	22.51	22.37	22.7
5	64QAM	12	0	21.77	21.65	21.59	
5	64QAM	12	7	21.76	21.74	21.63	
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



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)				2580	2595	2610	
20	QPSK	1	0	26.15	26.16	26.14	
20	QPSK	1	49	26.13	26.16	26.09	27.5
20	QPSK	1	99	26.28	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	
20	QPSK	50	24	25.37	25.43	25.44	26.5
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	
20	16QAM	1	0	25.46	25.56	25.54	26.5
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	
20	16QAM	50	0	24.37	24.45	24.45	25.5
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	
20	16QAM	100	0	24.39	24.44	24.46	25.5
20	64QAM	1	0	24.27	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	
20	64QAM	1	99	24.42	24.44	24.33	24.5
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	
20	64QAM	50	50	23.53	23.54	23.42	24.5
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	
15	QPSK	1	37	26.27	26.11	26.17	27.5
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.50	25.43	25.41	
15	QPSK	36	20	25.50	25.42	25.39	26.5
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	
15	16QAM	1	0	25.63	25.57	25.50	26.5
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	
15	16QAM	36	0	24.52	24.41	24.37	25.5
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	
15	16QAM	75	0	24.53	24.41	24.41	25.5
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	
15	64QAM	1	74	24.48	24.43	24.32	24.5
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	
15	64QAM	36	39	23.53	23.49	23.39	24.5
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	
10	QPSK	1	25	26.20	26.08	26.08	27.5
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	
10	QPSK	25	12	25.43	25.40	25.37	26.5
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.36	
10	16QAM	1	0	25.54	25.51	25.49	26.5
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	
10	16QAM	25	0	24.42	24.40	24.28	25.5
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	
10	16QAM	50	0	24.43	24.40	24.37	25.5
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	
10	64QAM	1	49	24.48	24.38	24.27	24.5
10	64QAM	25	0	23.56	23.36	23.41	
10	64QAM	25	12	23.49	23.35	23.31	
10	64QAM	25	25	23.43	23.39	23.29	24.5
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.22	26.22	26.07	
5	QPSK	1	12	26.22	26.02	26.17	27.5
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	
5	QPSK	12	7	25.44	25.33	25.29	26.5
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	
5	16QAM	1	0	25.59	25.47	25.48	26.5
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	
5	16QAM	12	0	24.50	24.34	24.36	25.5
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	
5	16QAM	25	0	24.50	24.32	24.34	25.5
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	
5	64QAM	1	24	24.36	24.41	24.23	24.5
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	
5	64QAM	12	13	23.49	23.41	23.36	24.5
5	64QAM	25	0	23.52	23.32	23.34	



Band 41_Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Low High Ch. / Freq.	Power High Middle Ch. / Freq.	Power High 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	24.38	24.49	24.54	24.41	24.26	25.7	
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64		
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78	24.7	
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37		
20	16QAM	1	49	23.48	23.59	23.57	23.82	23.71	24.7	
20	16QAM	1	99	23.54	23.69	23.63	23.38	23.60		
20	16QAM	50	0	22.59	22.66	22.67	22.70	22.65		
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79		
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76	23.7	
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.19	22.32	22.30	22.27	22.09		
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.48		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29	23.7	
20	64QAM	50	0	21.69	21.67	21.68	21.71	21.64		
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79		
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70	22.7	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40	25.7	
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66		
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78	24.7	
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71		
15	16QAM	1	0	23.48	23.65	23.64	23.69	23.51		
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.69	24.7	
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60		
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72		
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70	23.7	
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69		
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22		
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45		
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40	23.7	
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68		
15	64QAM	36	20	21.57	21.70	21.67	21.82	21.79		
15	64QAM	36	39	21.59	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71	22.7	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44	25.7	
10	QPSK	1	24	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72		
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77	24.7	
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70		
10	16QAM	1	0	23.60	23.69	23.70	23.64	23.55		
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78	24.7	
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51		
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81		
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.85	23.7	
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26		
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47		
10	64QAM	1	49	22.33	22.49	22.39	22.57	22.16	22.7	
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.76		
10	64QAM	25	12	21.66	21.79	21.75	21.90	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75	21.7	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.2	2593	2639.50	2686.2		
5	QPSK	1	0	24.48	24.53	24.55	24.69	24.56	25.7	
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77		
5	QPSK	12	7	23.58	23.74	23.70	23.88	23.79	24.7	
5	QPSK	12	15	23.60	23.70	23.68	23.86	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74		
5	16QAM	1	0	23.60	23.65	23.68	23.80	23.76		
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88	24.7	
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75		
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.76		
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77		
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74	23.7	
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79		
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		
5	64QAM	1	12	22.55	22.48	22.48	22.66	22.52		
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45	22.7	
5	64QAM	12	0	21.59	21.72	21.71	21.81	21.80		
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83		
5	64QAM	12	13	21.59	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80		



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	24.09	24.44	24.59	24.46	25.7	
20	QPSK	1	49	23.95	24.29	24.38	24.23		
20	QPSK	1	99	24.03	24.26	24.31	24.17		
20	QPSK	50	0	23.08	23.44	23.61	23.48		
20	QPSK	50	24	23.16	23.46	23.55	23.42	24.7	
20	QPSK	50	50	23.12	23.42	23.47	23.33		
20	QPSK	100	0	23.15	23.47	23.54	23.42		
20	16QAM	1	0	23.20	23.59	23.71	23.59		
20	16QAM	1	49	23.06	23.35	23.45	23.31	24.7	
20	16QAM	1	99	23.11	23.38	23.42	23.23		
20	16QAM	50	0	22.11	22.47	22.64	22.50		
20	16QAM	50	24	22.17	22.49	22.59	22.45		
20	16QAM	50	50	22.14	22.46	22.50	22.37	23.7	
20	16QAM	100	0	22.16	22.46	22.57	22.41		
20	64QAM	1	0	21.86	22.23	22.44	22.33		
20	64QAM	1	49	21.78	22.09	22.20	22.03		23.7
20	64QAM	1	99	21.89	22.12	22.13	21.94		
20	64QAM	50	24	21.13	21.47	21.63	21.53		
20	64QAM	50	50	21.18	21.49	21.61	21.44	22.7	
20	64QAM	50	50	21.16	21.45	21.51	21.36		
20	64QAM	100	0	21.19	21.47	21.58	21.42		
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	24.03	24.36	24.54	24.36	25.7	
15	QPSK	1	37	23.95	24.28	24.36	24.24		
15	QPSK	1	74	24.02	24.33	24.36	24.20		
15	QPSK	36	0	23.19	23.42	23.63	23.46		
15	QPSK	36	20	23.14	23.46	23.55	23.41	24.7	
15	QPSK	36	39	23.09	23.43	23.52	23.34		
15	QPSK	75	0	23.17	23.47	23.57	23.43		
15	16QAM	1	0	23.16	23.52	23.67	23.51		
15	16QAM	1	37	22.98	23.34	23.43	23.23	24.7	
15	16QAM	1	74	23.16	23.47	23.51	23.35		
15	16QAM	36	0	22.12	22.41	22.60	22.44		
15	16QAM	36	20	22.10	22.42	22.53	22.37		23.7
15	16QAM	36	39	22.08	22.39	22.46	22.32		
15	16QAM	75	0	22.17	22.48	22.58	22.44		
15	64QAM	1	0	21.84	22.18	22.38	22.25		
15	64QAM	1	37	21.78	22.12	22.24	22.06	23.7	
15	64QAM	1	74	21.88	22.20	22.19	22.03		
15	64QAM	36	0	21.17	21.44	21.62	21.51		
15	64QAM	36	20	21.14	21.47	21.57	21.40		22.7
15	64QAM	36	39	21.12	21.42	21.52	21.37		
15	64QAM	75	0	21.17	21.50	21.59	21.43		
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	24.04	24.35	24.47	24.33	25.7	
10	QPSK	1	25	23.93	24.28	24.37	24.22		
10	QPSK	1	49	23.96	24.29	24.35	24.22		
10	QPSK	25	0	23.12	23.46	23.55	23.41		
10	QPSK	25	12	23.12	23.44	23.55	23.40	24.7	
10	QPSK	25	25	23.08	23.42	23.52	23.34		
10	QPSK	50	0	23.10	23.43	23.52	23.39		
10	16QAM	1	0	23.13	23.48	23.65	23.48		
10	16QAM	1	25	23.04	23.41	23.49	23.33	24.7	
10	16QAM	1	49	23.03	23.39	23.47	23.30		
10	16QAM	25	0	22.10	22.43	22.56	22.41		
10	16QAM	25	12	22.12	22.45	22.58	22.41		
10	16QAM	25	25	22.07	22.41	22.50	22.33	23.7	
10	16QAM	50	0	22.11	22.49	22.55	22.42		
10	64QAM	1	0	21.85	22.14	22.35	22.22		
10	64QAM	1	25	21.77	22.14	22.22	22.09		23.7
10	64QAM	1	49	21.83	22.15	22.16	22.05		
10	64QAM	25	0	21.16	21.52	21.60	21.46		
10	64QAM	25	12	21.19	21.54	21.62	21.48	22.7	
10	64QAM	25	25	21.14	21.47	21.57	21.41		
10	64QAM	50	0	21.11	21.46	21.56	21.43		
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	23.99	24.26	24.49	24.34	25.7	
5	QPSK	1	12	23.90	24.25	24.33	24.20		
5	QPSK	1	24	23.95	24.29	24.33	24.25		
5	QPSK	12	0	23.08	23.43	23.53	23.41		
5	QPSK	12	7	23.08	23.43	23.53	23.37	24.7	
5	QPSK	12	13	23.09	23.42	23.54	23.39		
5	QPSK	25	0	23.06	23.41	23.53	23.37		
5	16QAM	1	0	23.11	23.43	23.62	23.45		
5	16QAM	1	12	23.10	23.45	23.53	23.39	24.7	
5	16QAM	1	24	23.11	23.47	23.49	23.43		
5	16QAM	12	0	22.05	22.43	22.55	22.35		
5	16QAM	12	7	22.07	22.39	22.51	22.36		23.7
5	16QAM	12	13	22.07	22.39	22.47	22.35		
5	16QAM	25	0	22.11	22.46	22.55	22.39		
5	64QAM	1	0	21.87	22.17	22.33	22.20	23.7	
5	64QAM	1	12	21.79	22.16	22.26	22.10		
5	64QAM	1	24	21.86	22.25	22.26	22.16		
5	64QAM	12	0	21.13	21.44	21.56	21.44		
5	64QAM	12	7	21.08	21.43	21.56	21.36	22.7	
5	64QAM	12	13	21.08	21.42	21.55	21.35		
5	64QAM	25	0	21.11	21.46	21.57	21.44		
5	64QAM	25	12	21.13	21.46	21.57	21.45		



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	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.05	22.91	22.83	
20	QPSK	50	24	23.06	22.88	22.82	24.2
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	24.2
20	16QAM	1	99	22.97	22.90	22.76	
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.66	21.51	
20	64QAM	1	99	21.75	21.68	21.54	22.2
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	
15	QPSK	36	20	23.05	22.87	22.82	24.2
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	24.2
15	16QAM	1	74	23.01	22.92	22.79	
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	
15	64QAM	1	74	21.81	21.67	21.49	22.2
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.97	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	
10	QPSK	25	12	22.98	22.83	22.73	24.2
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.05	22.83	22.79	
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	24.2
10	16QAM	1	49	22.97	22.87	22.73	
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	
10	64QAM	1	49	21.74	21.63	21.47	22.2
10	64QAM	25	0	21.03	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2595	2817.5	
5	QPSK	1	0	23.75	23.76	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	
5	QPSK	12	7	22.97	22.81	22.82	24.2
5	QPSK	12	13	22.96	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	24.2
5	16QAM	1	24	22.96	22.83	22.74	
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	
5	16QAM	12	13	22.04	21.95	21.76	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	
5	64QAM	1	24	21.66	21.59	21.49	22.2
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



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)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	
20	QPSK	1	49	25.53	25.47	25.33	26.7
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	
20	QPSK	50	24	24.87	24.72	24.65	25.7
20	QPSK	50	50	24.84	24.78	24.63	
20	QPSK	100	0	24.86	24.71	24.67	
20	16QAM	1	0	24.96	24.85	24.77	25.7
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	
20	16QAM	50	0	23.91	23.77	23.71	24.7
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	
20	16QAM	100	0	23.92	23.73	23.70	24.7
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	
20	64QAM	1	99	23.77	23.70	23.56	23.7
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.91	22.77	22.69	
20	64QAM	50	50	22.90	22.81	22.69	Tune-up limit (dBm)
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	26.7
15	QPSK	1	37	25.43	25.41	25.33	
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.68	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.68	23.62	
15	64QAM	1	37	23.72	23.68	23.47	23.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.68	Tune-up limit (dBm)
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	26.7
10	QPSK	1	25	25.44	25.37	25.29	
10	QPSK	1	49	25.48	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.78	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	23.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.70	22.63	Tune-up limit (dBm)
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	23.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.88	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	Tune-up limit (dBm)
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	



Band 41_Ant 0											
BW [MHz]	Modulation	RB Size	RB Offset	Low IC Power Ch. / Freq.	Power Low Middle 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	39750	40185	40620	41055	41490		
Frequency (MHz)				2510	2508	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.11	24.11	24.19	24.06	23.93	23.84	25.5	
20	QPSK	1	49	24.14	24.14	24.25	24.07	24.21	24.26		
20	QPSK	1	99	24.12	24.10	24.19	24.04	23.83	24.20		
20	QPSK	50	0	23.28	23.28	23.30	23.18	23.18	23.26		
20	QPSK	50	24	23.27	23.27	23.36	23.13	23.21	23.40	24.5	
20	QPSK	50	50	23.29	23.30	23.38	23.21	23.26	23.41		
20	QPSK	100	0	23.29	23.28	23.33	23.16	23.17	23.38		
20	16QAM	1	0	23.23	23.23	23.30	23.22	23.06	22.96		
20	16QAM	1	49	23.19	23.21	23.30	23.13	23.32	23.36	24.5	
20	16QAM	1	99	23.24	23.26	23.36	23.16	22.90	23.31		
20	16QAM	50	0	22.29	22.31	22.30	22.23	22.23	22.29		
20	16QAM	50	24	22.34	22.32	22.42	22.23	22.29	22.43		
20	16QAM	50	50	22.31	22.29	22.43	22.17	22.25	22.44	23.5	
20	16QAM	100	0	22.29	22.31	22.40	22.18	22.19	22.35		
20	64QAM	1	0	21.91	21.94	21.99	21.91	21.79	21.65		
20	64QAM	1	49	21.97	21.96	21.99	21.86	22.08	22.16		
20	64QAM	1	99	21.95	21.99	22.16	21.89	21.60	22.07	23.5	
20	64QAM	50	0	21.31	21.31	21.34	21.25	21.22	21.30		
20	64QAM	50	24	21.32	21.33	21.40	21.22	21.30	21.46		
20	64QAM	50	50	21.30	21.30	21.41	21.21	21.25	21.44		
20	64QAM	100	0	21.30	21.31	21.40	21.22	21.18	21.35	22.5	
Channel				39765	39725	40173	40620	41068	41515		limit (dBm)
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.09	24.11	24.17	24.06	24.01	23.97	25.5	
15	QPSK	1	37	24.11	24.08	24.17	23.97	24.17	24.23		
15	QPSK	1	74	24.11	24.12	24.25	24.05	23.99	24.23		
15	QPSK	36	0	23.21	23.29	23.34	23.18	23.19	23.30		
15	QPSK	36	20	23.25	23.27	23.36	23.16	23.31	23.37	24.5	
15	QPSK	36	39	23.25	23.26	23.35	23.13	23.23	23.40		
15	QPSK	75	0	23.26	23.28	23.34	23.14	23.25	23.33		
15	16QAM	1	0	23.25	23.25	23.32	23.20	23.19	23.09		
15	16QAM	1	37	23.14	23.11	23.21	23.02	23.27	23.34	24.5	
15	16QAM	1	74	23.26	23.26	23.48	23.21	23.08	23.38		
15	16QAM	36	0	22.18	22.24	22.32	22.13	22.18	22.25		
15	16QAM	36	20	22.23	22.24	22.31	22.13	22.29	22.36		
15	16QAM	36	39	22.25	22.23	22.33	22.11	22.22	22.37	23.5	
15	16QAM	75	0	22.31	22.30	22.38	22.19	22.31	22.36		
15	64QAM	1	0	21.90	21.94	22.00	21.88	21.91	21.79		
15	64QAM	1	37	21.99	22.01	22.05	21.87	22.06	22.10		
15	64QAM	1	74	21.98	22.02	22.19	21.94	21.80	22.15	23.5	
15	64QAM	36	0	21.21	21.29	21.33	21.20	21.21	21.29		
15	64QAM	36	20	21.30	21.32	21.33	21.17	21.36	21.42		
15	64QAM	36	39	21.30	21.28	21.38	21.15	21.26	21.41		
15	64QAM	75	0	21.30	21.30	21.39	21.17	21.30	21.36	22.5	
Channel				39740	39700	40160	40620	41080	41540		limit (dBm)
Frequency (MHz)				2505	2501	2547	2593	2639	2685		
10	QPSK	1	0	24.18	24.21	24.23	24.10	23.93	24.08	25.5	
10	QPSK	1	25	24.18	24.20	24.17	24.09	24.22	24.18		
10	QPSK	1	49	24.22	24.24	24.20	24.08	24.01	24.08		
10	QPSK	25	0	23.30	23.30	23.37	23.21	23.20	23.39		
10	QPSK	25	12	23.34	23.33	23.43	23.23	23.31	23.42	24.5	
10	QPSK	25	25	23.29	23.31	23.40	23.18	23.28	23.34		
10	QPSK	50	0	23.30	23.31	23.39	23.20	23.21	23.37		
10	16QAM	1	0	23.32	23.37	23.38	23.23	23.12	23.18		
10	16QAM	1	25	23.35	23.32	23.41	23.21	23.38	23.43	24.5	
10	16QAM	1	49	23.34	23.30	23.37	23.17	23.12	23.18		
10	16QAM	25	0	22.32	22.34	22.40	22.15	22.25	22.40		
10	16QAM	25	12	22.37	22.36	22.44	22.24	22.30	22.52		
10	16QAM	25	25	22.33	22.34	22.40	22.18	22.32	22.36	23.5	
10	16QAM	50	0	22.36	22.37	22.42	22.25	22.27	22.41		
10	64QAM	1	0	22.04	22.11	22.06	21.96	21.83	21.87		
10	64QAM	1	25	22.09	22.10	22.13	21.98	22.14	22.18		
10	64QAM	1	49	22.06	22.13	22.20	21.93	21.83	21.91	22.5	
10	64QAM	25	0	21.36	21.39	21.45	21.28	21.27	21.43		
10	64QAM	25	12	21.41	21.44	21.45	21.30	21.40	21.51		
10	64QAM	25	25	21.40	21.39	21.48	21.26	21.37	21.41		
10	64QAM	50	0	21.32	21.35	21.42	21.23	21.25	21.41	22.5	
Channel				39715	39675	40145	40620	41093	41585		limit (dBm)
Frequency (MHz)				2502.5	2498.5	2545.3	2593	2640.0	2687.5		
5	QPSK	1	0	24.20	24.22	24.22	24.10	24.19	24.21	25.5	
5	QPSK	1	12	24.19	24.19	24.17	24.08	24.22	24.22		
5	QPSK	1	24	24.17	24.17	24.25	24.02	24.22	24.23		
5	QPSK	12	0	23.31	23.30	23.36	23.19	23.28	23.43		
5	QPSK	12	7	23.32	23.35	23.43	23.23	23.40	23.47	24.5	
5	QPSK	12	13	23.28	23.31	23.40	23.18	23.35	23.39		
5	QPSK	25	0	23.31	23.30	23.39	23.18	23.32	23.43		
5	16QAM	1	0	23.31	23.37	23.33	23.25	23.27	23.42		
5	16QAM	1	12	23.34	23.37	23.45	23.26	23.47	23.54	24.5	
5	16QAM	1	24	23.34	23.40	23.44	23.26	23.38	23.44		
5	16QAM	12	0	22.26	22.30	22.37	22.19	22.24	22.41		
5	16QAM	12	7	22.31	22.34	22.39	22.23	22.37	22.41		
5	16QAM	12	13	22.29	22.32	22.38	22.17	22.33	22.41	23.5	
5	16QAM	25	0	22.32	22.34	22.45	22.21	22.38	22.48		
5	64QAM	1	0	22.09	22.12	22.11	21.97	22.05	22.14		
5	64QAM	1	12	22.09	22.12	22.18	21.99	22.14	22.15		
5	64QAM	1	24	22.16	22.17	22.19	22.01	22.15	22.19	22.5	
5	64QAM	12	0	21.33	21.36	21.44	21.27	21.33	21.48		
5	64QAM	12	7	21.37	21.38	21.47	21.30	21.43	21.49		
5	64QAM	12	13	21.33	21.38	21.43	21.25	21.39	21.44		
5	64QAM	25	0	21.40	21.35	21.43	21.26	21.44	21.49		



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	24.05	24.36	24.53	24.56	25.7		
20	QPSK	1	49	23.90	24.19	24.30	24.36			
20	QPSK	1	99	23.91	24.17	24.30	24.29			
20	QPSK	50	0	23.10	23.40	23.50	23.51			
20	QPSK	50	24	23.04	23.34	23.47	23.41	24.7		
20	QPSK	50	50	23.05	23.31	23.42	23.43			
20	QPSK	100	0	23.05	23.36	23.49	23.50			
20	16QAM	1	0	23.15	23.47	23.64	23.68			
20	16QAM	1	49	22.98	23.26	23.40	23.40	24.7		
20	16QAM	1	99	23.02	23.28	23.41	23.40			
20	16QAM	50	0	22.05	22.34	22.58	22.50			
20	16QAM	50	24	22.11	22.38	22.53	22.46			
20	16QAM	50	50	22.07	22.33	22.46	22.44	23.7		
20	16QAM	100	0	22.10	22.37	22.52	22.43			
20	64QAM	1	0	21.85	22.13	22.37	22.34			
20	64QAM	1	49	21.73	22.01	22.16	22.14		23.7	
20	64QAM	1	99	21.78	22.03	22.12	22.14			
20	64QAM	50	0	21.06	21.35	21.56	21.52			
20	64QAM	50	24	21.14	21.38	21.53	21.46			
20	64QAM	50	50	21.06	21.33	21.46	21.45	22.7		
20	64QAM	100	0	21.10	21.39	21.49	21.43			
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	23.92	24.24	24.44	24.44	25.7		
15	QPSK	1	37	23.86	24.17	24.34	24.34			
15	QPSK	1	74	23.86	24.16	24.30	24.29			
15	QPSK	36	0	23.08	23.29	23.52	23.46			
15	QPSK	36	20	23.01	23.32	23.48	23.48	24.7		
15	QPSK	36	39	22.97	23.28	23.43	23.40			
15	QPSK	75	0	23.04	23.33	23.48	23.41			
15	16QAM	1	0	23.04	23.36	23.59	23.57			
15	16QAM	1	37	22.89	23.14	23.31	23.31	24.7		
15	16QAM	1	74	23.03	23.36	23.48	23.45			
15	16QAM	36	0	22.03	22.24	22.50	22.46			
15	16QAM	36	20	21.98	22.28	22.45	22.45			
15	16QAM	36	39	21.95	22.24	22.38	22.39	23.7		
15	16QAM	75	0	22.04	22.33	22.48	22.41			
15	64QAM	1	0	21.75	22.01	22.30	22.22			
15	64QAM	1	37	21.70	22.00	22.16	22.18		23.7	
15	64QAM	1	74	21.79	22.08	22.22	22.22			
15	64QAM	36	0	21.09	21.32	21.55	21.47			
15	64QAM	36	20	21.04	21.33	21.49	21.49			
15	64QAM	36	39	21.01	21.29	21.42	21.44	22.7		
15	64QAM	75	0	21.05	21.36	21.52	21.44			
Channel				55290	55615	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	23.94	24.23	24.39	24.44	25.7		
10	QPSK	1	25	23.85	24.18	24.34	24.35			
10	QPSK	1	49	23.89	24.22	24.35	24.36			
10	QPSK	25	0	23.02	23.33	23.43	23.52			
10	QPSK	25	12	23.02	23.34	23.42	23.52	24.7		
10	QPSK	25	25	22.99	23.29	23.46	23.46			
10	QPSK	50	0	23.00	23.29	23.41	23.51			
10	16QAM	1	0	23.10	23.37	23.56	23.62			
10	16QAM	1	25	22.97	23.27	23.46	23.46	24.7		
10	16QAM	1	49	23.00	23.27	23.43	23.45			
10	16QAM	25	0	22.04	22.34	22.43	22.55			
10	16QAM	25	12	22.05	22.34	22.43	22.54			
10	16QAM	25	25	21.99	22.30	22.47	22.48	23.7		
10	16QAM	50	0	22.07	22.35	22.43	22.51			
10	64QAM	1	0	21.82	22.02	22.26	22.36			
10	64QAM	1	25	21.70	22.00	22.20	22.17			
10	64QAM	1	49	21.70	22.02	22.17	22.17	22.7		
10	64QAM	25	0	21.08	21.41	21.51	21.60			
10	64QAM	25	12	21.10	21.41	21.52	21.59			
10	64QAM	25	25	21.07	21.37	21.53	21.53			
Channel				55265	55610	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	23.93	24.20	24.37	24.41	25.7		
5	QPSK	1	12	23.86	24.17	24.33	24.31			
5	QPSK	1	24	23.90	24.23	24.38	24.34			
5	QPSK	12	0	22.98	23.34	23.42	23.54			
5	QPSK	12	7	23.01	23.34	23.45	23.51	24.7		
5	QPSK	12	13	23.01	23.33	23.46	23.51			
5	QPSK	25	0	23.00	23.33	23.44	23.50			
5	16QAM	1	0	23.08	23.33	23.52	23.59			
5	16QAM	1	12	23.01	23.35	23.54	23.54	24.7		
5	16QAM	1	24	23.06	23.36	23.57	23.58			
5	16QAM	12	0	21.97	22.31	22.43	22.53			
5	16QAM	12	7	21.99	22.31	22.41	22.47			
5	16QAM	12	13	21.98	22.31	22.48	22.45	23.7		
5	16QAM	25	0	22.01	22.36	22.45	22.51			
5	64QAM	1	0	21.81	22.07	22.26	22.30			
5	64QAM	1	12	21.73	22.04	22.22	22.19			
5	64QAM	1	24	21.81	22.10	22.25	22.29	22.7		
5	64QAM	12	0	21.05	21.39	21.48	21.52			
5	64QAM	12	7	21.06	21.36	21.47	21.54			
5	64QAM	12	13	21.06	21.34	21.49	21.53			
5	64QAM	25	0	21.08	21.39	21.49	21.56			



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				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	25.7
20	QPSK	1	49	24.62	24.55	24.47	
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	
20	16QAM	50	50	22.76	22.71	22.62	23.7
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	
20	64QAM	1	99	22.43	22.40	22.31	22.7
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	25.7
15	QPSK	1	37	24.55	24.51	24.43	
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	
15	16QAM	36	39	22.66	22.65	22.54	23.7
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	
15	64QAM	1	74	22.46	22.39	22.31	22.7
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	25.7
10	QPSK	1	25	24.59	24.60	24.46	
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	
10	16QAM	1	25	23.73	23.69	23.59	24.7
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	23.7
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	
10	64QAM	1	49	22.51	22.42	22.32	22.7
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.68	
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2372.5	2595	2617.5	
5	QPSK	1	0	24.59	24.51	24.46	25.7
5	QPSK	1	12	24.57	24.55	24.39	
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	
5	16QAM	1	12	23.78	23.76	23.58	24.7
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	
5	16QAM	12	7	22.73	22.70	22.56	
5	16QAM	12	13	22.68	22.67	22.55	23.7
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	
5	64QAM	1	24	22.56	22.51	22.37	22.7
5	64QAM	12	0	21.77	21.65	21.59	
5	64QAM	12	7	21.76	21.74	21.63	
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



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)				2580	2595	2610	
20	QPSK	1	0	26.15	26.16	26.14	
20	QPSK	1	49	26.13	26.16	26.09	27.5
20	QPSK	1	99	26.28	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	
20	QPSK	50	24	25.37	25.43	25.44	26.5
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	
20	16QAM	1	0	25.46	25.56	25.54	26.5
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	
20	16QAM	50	0	24.37	24.45	24.45	25.5
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	
20	16QAM	100	0	24.39	24.44	24.46	25.5
20	64QAM	1	0	24.27	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	
20	64QAM	1	99	24.42	24.44	24.33	24.5
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	
20	64QAM	50	50	23.53	23.54	23.42	24.5
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	
15	QPSK	1	37	26.27	26.11	26.17	27.5
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.50	25.43	25.41	
15	QPSK	36	20	25.50	25.42	25.39	26.5
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	
15	16QAM	1	0	25.63	25.57	25.50	26.5
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	
15	16QAM	36	0	24.52	24.41	24.37	25.5
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	
15	16QAM	75	0	24.53	24.41	24.41	25.5
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	
15	64QAM	1	74	24.48	24.43	24.32	24.5
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	
15	64QAM	36	39	23.53	23.49	23.39	24.5
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	
10	QPSK	1	25	26.20	26.08	26.08	27.5
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	
10	QPSK	25	12	25.43	25.40	25.37	26.5
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.36	
10	16QAM	1	0	25.54	25.51	25.49	26.5
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	
10	16QAM	25	0	24.42	24.40	24.28	25.5
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	
10	16QAM	50	0	24.43	24.40	24.37	25.5
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	
10	64QAM	1	49	24.48	24.38	24.27	24.5
10	64QAM	25	0	23.56	23.36	23.41	
10	64QAM	25	12	23.49	23.35	23.33	
10	64QAM	25	25	23.43	23.39	23.29	24.5
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.22	26.22	26.07	
5	QPSK	1	12	26.22	26.02	26.17	27.5
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	
5	QPSK	12	7	25.44	25.33	25.29	26.5
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	
5	16QAM	1	0	25.59	25.47	25.48	26.5
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	
5	16QAM	12	0	24.50	24.34	24.36	25.5
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	
5	16QAM	25	0	24.50	24.32	24.34	25.5
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	
5	64QAM	1	24	24.36	24.41	24.23	24.5
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	
5	64QAM	12	13	23.49	23.41	23.36	24.5
5	64QAM	25	0	23.52	23.32	23.34	



Band 41_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.	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	24.38	24.49	24.54	24.41	24.26	25.7	
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64		
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78	24.7	
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37		
20	16QAM	1	49	23.48	23.59	23.57	23.82	23.71	24.7	
20	16QAM	1	99	23.54	23.69	23.63	23.38	23.60		
20	16QAM	50	0	22.59	22.66	22.67	22.70	22.65		
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79		
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76	23.7	
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.19	22.32	22.30	22.27	22.09		
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.48		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29	23.7	
20	64QAM	50	0	21.69	21.67	21.68	21.71	21.64		
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79		
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70	22.7	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40	25.7	
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66		
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78	24.7	
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71		
15	16QAM	1	0	23.48	23.65	23.64	23.69	23.51		
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.89	24.7	
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60		
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72		
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70	23.7	
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69		
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22		
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45		
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40	23.7	
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68		
15	64QAM	36	20	21.57	21.70	21.67	21.82	21.79		
15	64QAM	36	39	21.59	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71	22.7	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44	25.7	
10	QPSK	1	24	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72		
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77	24.7	
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70		
10	16QAM	1	0	23.60	23.69	23.70	23.64	23.55		
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78	24.7	
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51		
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81		
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.85	23.7	
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26		
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47		
10	64QAM	1	49	22.33	22.49	22.39	22.57	22.16	22.7	
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.76		
10	64QAM	25	12	21.66	21.79	21.75	21.90	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75	21.7	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	25452	2593	26395	26865		
5	QPSK	1	0	24.48	24.53	24.55	24.69	24.56	25.7	
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77		
5	QPSK	12	7	23.58	23.74	23.70	23.88	23.79	24.7	
5	QPSK	12	15	23.60	23.70	23.68	23.86	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74		
5	16QAM	1	0	23.60	23.65	23.68	23.80	23.76		
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88	24.7	
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75		
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.76		
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77		
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74	23.7	
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79		
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		
5	64QAM	1	12	22.55	22.48	22.48	22.66	22.52		
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45	22.7	
5	64QAM	12	0	21.59	21.72	21.71	21.81	21.80		
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83		
5	64QAM	12	13	21.59	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80		



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	22.45	22.87	23.04	22.87	24.1	
20	QPSK	1	49	22.36	22.74	22.85	22.63		
20	QPSK	1	99	22.39	22.73	22.75	22.59		
20	QPSK	50	0	22.52	22.92	23.06	22.88		
20	QPSK	50	24	22.50	22.91	22.99	22.83	24.1	
20	QPSK	50	50	22.49	22.85	22.93	22.71		
20	QPSK	100	0	22.52	22.89	22.99	22.78		
20	16QAM	1	0	22.62	22.96	23.13	23.02	24.1	
20	16QAM	1	49	22.47	22.79	22.88	22.74		
20	16QAM	1	99	22.54	22.90	22.86	22.68		
20	16QAM	50	0	22.03	22.37	22.56	22.43		
20	16QAM	50	24	22.10	22.43	22.51	22.36	23.7	
20	16QAM	50	50	22.06	22.36	22.43	22.28		
20	16QAM	100	0	22.07	22.41	22.49	22.35		
20	64QAM	1	0	21.76	22.13	22.38	22.23	23.7	
20	64QAM	1	49	21.69	22.02	22.13	21.97		
20	64QAM	1	99	21.79	22.04	22.04	21.84		
20	64QAM	50	0	21.03	21.38	21.57	21.43		
20	64QAM	50	24	21.10	21.41	21.51	21.37	22.7	
20	64QAM	50	50	21.06	21.38	21.47	21.28		
20	64QAM	100	0	21.09	21.40	21.50	21.35		
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.41	22.79	23.00	22.79	24.1	
15	QPSK	1	37	22.35	22.68	22.77	22.63		
15	QPSK	1	74	22.37	22.71	22.69	22.49		
15	QPSK	36	0	22.41	22.84	22.96	22.83		
15	QPSK	36	20	22.48	22.89	22.91	22.74	24.1	
15	QPSK	36	39	22.45	22.76	22.83	22.65		
15	QPSK	75	0	22.45	22.88	22.91	22.69		
15	16QAM	1	0	22.61	22.91	23.12	23.01	24.1	
15	16QAM	1	37	22.38	22.76	22.87	22.66		
15	16QAM	1	74	22.48	22.76	22.82	22.63		
15	16QAM	36	0	22.00	22.34	22.52	22.33		
15	16QAM	36	20	22.07	22.39	22.44	22.31	23.7	
15	16QAM	36	39	22.05	22.31	22.41	22.28		
15	16QAM	75	0	22.01	22.34	22.44	22.25		
15	64QAM	1	0	21.68	22.05	22.38	22.22	23.7	
15	64QAM	1	37	21.59	22.02	22.11	21.89		
15	64QAM	1	74	21.70	22.03	21.97	21.83		
15	64QAM	36	0	21.02	21.29	21.49	21.41		
15	64QAM	36	20	21.00	21.31	21.51	21.36	22.7	
15	64QAM	36	39	21.00	21.28	21.41	21.20		
15	64QAM	75	0	20.99	21.39	21.46	21.25		
Channel				55290	55615	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	22.41	22.78	23.01	22.82	24.1	
10	QPSK	1	25	22.29	22.72	22.83	22.54		
10	QPSK	1	49	22.33	22.65	22.66	22.52		
10	QPSK	25	0	22.37	22.78	23.04	22.83		
10	QPSK	25	12	22.51	22.88	22.92	22.83	24.1	
10	QPSK	25	25	22.39	22.75	22.93	22.70		
10	QPSK	50	0	22.51	22.85	22.99	22.69		
10	16QAM	1	0	22.53	22.89	23.06	22.95		
10	16QAM	1	25	22.38	22.79	22.85	22.65	24.1	
10	16QAM	1	49	22.48	22.72	22.81	22.58		
10	16QAM	25	0	21.96	22.35	22.55	22.42		
10	16QAM	25	12	22.03	22.33	22.45	22.34		
10	16QAM	25	25	21.98	22.35	22.35	22.26	23.7	
10	16QAM	50	0	22.01	22.36	22.48	22.32		
10	64QAM	1	0	21.68	22.07	22.34	22.19		
10	64QAM	1	25	21.60	22.00	22.06	21.93	23.7	
10	64QAM	1	49	21.69	22.04	21.97	21.79		
10	64QAM	25	0	20.95	21.30	21.52	21.37		
10	64QAM	25	12	21.04	21.39	21.46	21.29		
10	64QAM	25	25	21.06	21.33	21.44	21.22	22.7	
10	64QAM	50	0	21.09	21.35	21.50	21.27		
Channel				55265	55610	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.33	22.84	22.98	22.78	24.1	
5	QPSK	1	12	22.36	22.69	22.75	22.61		
5	QPSK	1	24	22.39	22.66	22.66	22.52		
5	QPSK	12	0	22.46	22.78	23.00	22.88		
5	QPSK	12	7	22.44	22.88	22.98	22.83	24.1	
5	QPSK	12	13	22.45	22.81	22.83	22.71		
5	QPSK	25	0	22.43	22.82	22.97	22.68		
5	16QAM	1	0	22.54	22.93	23.10	22.95		
5	16QAM	1	12	22.40	22.78	22.80	22.65	24.1	
5	16QAM	1	24	22.50	22.72	22.83	22.67		
5	16QAM	12	0	22.01	22.29	22.55	22.37		
5	16QAM	12	7	22.06	22.38	22.49	22.27		
5	16QAM	12	13	22.03	22.28	22.38	22.23	23.7	
5	16QAM	25	0	21.99	22.39	22.49	22.30		
5	64QAM	1	0	21.76	22.03	22.32	22.17		
5	64QAM	1	12	21.68	21.92	22.05	21.96	23.7	
5	64QAM	1	24	21.78	22.04	22.01	21.79		
5	64QAM	12	0	20.99	21.36	21.56	21.33		
5	64QAM	12	7	21.08	21.33	21.42	21.36		
5	64QAM	12	13	21.04	21.38	21.45	21.20	22.7	
5	64QAM	25	0	20.99	21.37	21.46	21.32		



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	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.05	22.91	22.83	
20	QPSK	50	24	23.06	22.88	22.82	
20	QPSK	50	50	23.03	22.92	22.81	24.2
20	QPSK	100	0	23.05	22.86	22.82	
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	24.2
20	16QAM	1	99	22.97	22.90	22.76	
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	23.2
20	16QAM	50	50	22.06	21.96	21.83	
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	23.2
20	64QAM	1	49	21.74	21.66	21.51	
20	64QAM	1	99	21.75	21.68	21.54	
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	
20	64QAM	50	50	21.09	20.95	20.86	22.2
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	
15	QPSK	36	20	23.05	22.87	22.82	
15	QPSK	36	39	23.03	22.95	22.80	24.2
15	QPSK	75	0	23.08	22.88	22.81	
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	24.2
15	16QAM	1	74	23.01	22.92	22.79	
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	23.2
15	16QAM	36	39	22.01	21.90	21.77	
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	23.2
15	64QAM	1	37	21.78	21.67	21.52	
15	64QAM	1	74	21.81	21.67	21.49	
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	
15	64QAM	36	39	21.10	20.97	20.83	22.2
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.97	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	
10	QPSK	25	12	22.98	22.83	22.73	
10	QPSK	25	25	23.03	22.89	22.81	24.2
10	QPSK	50	0	23.05	22.83	22.79	
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	24.2
10	16QAM	1	49	22.97	22.87	22.73	
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	23.2
10	16QAM	25	25	21.95	21.93	21.83	
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	23.2
10	64QAM	1	25	21.67	21.57	21.44	
10	64QAM	1	49	21.74	21.63	21.47	
10	64QAM	25	0	21.03	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	
10	64QAM	25	25	21.05	20.86	20.82	22.2
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2595	2817.5	
5	QPSK	1	0	23.75	23.76	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	
5	QPSK	12	7	22.97	22.81	22.82	
5	QPSK	12	13	22.96	22.90	22.76	24.2
5	QPSK	25	0	23.03	22.83	22.74	
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	24.2
5	16QAM	1	24	22.96	22.83	22.74	
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.69	21.86	23.2
5	16QAM	12	13	22.04	21.95	21.76	
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	23.2
5	64QAM	1	12	21.69	21.61	21.42	
5	64QAM	1	24	21.66	21.59	21.49	
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	
5	64QAM	12	13	21.02	20.95	20.80	22.2
5	64QAM	25	0	21.06	20.89	20.77	



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)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	
20	QPSK	1	49	25.53	25.47	25.33	26.7
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	
20	QPSK	50	24	24.87	24.72	24.65	25.7
20	QPSK	50	50	24.84	24.78	24.63	
20	QPSK	100	0	24.86	24.71	24.67	
20	16QAM	1	0	24.96	24.85	24.77	25.7
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	
20	16QAM	50	0	23.91	23.77	23.71	24.7
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	
20	16QAM	100	0	23.92	23.73	23.70	24.7
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	
20	64QAM	1	99	23.77	23.70	23.56	23.7
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.91	22.77	22.69	
20	64QAM	50	50	22.90	22.81	22.69	Tune-up limit (dBm)
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	
15	QPSK	1	37	25.43	25.41	25.33	26.7
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.68	24.63	
15	QPSK	36	20	24.84	24.70	24.59	25.7
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	
15	16QAM	1	0	24.89	24.75	24.77	25.7
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	
15	16QAM	36	0	23.84	23.72	23.65	24.7
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	
15	16QAM	75	0	23.85	23.64	23.70	24.7
15	64QAM	1	0	23.73	23.68	23.62	
15	64QAM	1	37	23.72	23.68	23.47	
15	64QAM	1	74	23.76	23.67	23.47	23.7
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.68	
15	64QAM	36	39	22.86	22.81	22.63	Tune-up limit (dBm)
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	
10	QPSK	1	25	25.44	25.37	25.29	26.7
10	QPSK	1	49	25.48	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.78	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	23.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.70	22.63	Tune-up limit (dBm)
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	23.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.88	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	



Band 41_Ant 0										
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.	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	24.19	24.06	23.93	23.84	25.5	
20	QPSK	1	49	24.14	24.25	24.07	24.21	24.26		
20	QPSK	1	99	24.10	24.19	24.04	23.83	24.20		
20	QPSK	50	0	23.28	23.30	23.18	23.18	23.26		
20	QPSK	50	24	23.27	23.36	23.13	23.21	23.40	24.5	
20	QPSK	50	50	23.30	23.38	23.21	23.26	23.41		
20	QPSK	100	0	23.28	23.33	23.16	23.17	23.38		
20	16QAM	1	0	23.23	23.30	23.22	23.06	22.96		
20	16QAM	1	49	23.21	23.30	23.13	23.32	23.36	24.5	
20	16QAM	1	99	23.26	23.38	23.16	22.90	23.31		
20	16QAM	50	0	22.31	22.30	22.23	22.23	22.29		
20	16QAM	50	24	22.32	22.42	22.23	22.29	22.43		
20	16QAM	50	50	22.29	22.43	22.17	22.25	22.44	23.5	
20	16QAM	100	0	22.31	22.40	22.18	22.19	22.35		
20	64QAM	1	0	21.94	21.99	21.91	21.79	21.65		
20	64QAM	1	49	21.96	21.99	21.86	22.08	22.16		
20	64QAM	1	99	21.99	22.16	21.89	21.60	22.07	22.5	
20	64QAM	50	0	21.31	21.34	21.25	21.22	21.30		
20	64QAM	50	24	21.33	21.40	21.22	21.30	21.46		
20	64QAM	50	50	21.30	21.41	21.21	21.25	21.44		
20	64QAM	100	0	21.31	21.40	21.22	21.18	21.35		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.11	24.17	24.06	24.01	23.97	25.5	
15	QPSK	1	37	24.08	24.17	23.97	24.17	24.23		
15	QPSK	1	74	24.12	24.25	24.05	23.99	24.23		
15	QPSK	36	0	23.29	23.34	23.18	23.19	23.30		
15	QPSK	36	20	23.27	23.36	23.16	23.31	23.37	24.5	
15	QPSK	36	39	23.26	23.35	23.13	23.23	23.40		
15	QPSK	75	0	23.28	23.34	23.14	23.25	23.33		
15	16QAM	1	0	23.23	23.32	23.20	23.19	23.09		
15	16QAM	1	37	23.11	23.21	23.02	23.27	23.34	24.5	
15	16QAM	1	74	23.26	23.48	23.21	23.08	23.38		
15	16QAM	36	0	22.24	22.32	22.13	22.18	22.25		
15	16QAM	36	20	22.24	22.31	22.13	22.29	22.36		
15	16QAM	36	39	22.23	22.33	22.11	22.22	22.37	23.5	
15	16QAM	75	0	22.30	22.38	22.19	22.31	22.36		
15	64QAM	1	0	21.94	22.00	21.89	21.91	21.79		
15	64QAM	1	37	22.01	22.05	21.87	22.06	22.10		
15	64QAM	1	74	22.02	22.19	21.94	21.80	22.15	22.5	
15	64QAM	36	0	21.29	21.33	21.20	21.21	21.29		
15	64QAM	36	20	21.32	21.33	21.17	21.36	21.42		
15	64QAM	36	39	21.28	21.38	21.15	21.26	21.41		
15	64QAM	75	0	21.30	21.39	21.17	21.30	21.36		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.21	24.23	24.10	23.93	24.08	25.5	
10	QPSK	1	24	24.20	24.17	24.08	24.23	24.18		
10	QPSK	1	49	24.24	24.20	24.08	24.01	24.08		
10	QPSK	25	0	23.30	23.37	23.21	23.20	23.39		
10	QPSK	25	12	23.33	23.43	23.23	23.31	23.42	24.5	
10	QPSK	25	25	23.31	23.40	23.18	23.28	23.34		
10	QPSK	50	0	23.31	23.39	23.20	23.21	23.37		
10	16QAM	1	0	23.37	23.38	23.23	23.12	23.18		
10	16QAM	1	25	23.32	23.41	23.21	23.38	23.43	24.5	
10	16QAM	1	49	23.30	23.37	23.17	23.12	23.18		
10	16QAM	25	0	22.34	22.40	22.15	22.25	22.40		
10	16QAM	25	12	22.36	22.44	22.24	22.30	22.52		
10	16QAM	25	25	22.34	22.40	22.18	22.32	22.36	23.5	
10	16QAM	50	0	22.37	22.42	22.25	22.27	22.41		
10	64QAM	1	0	22.11	22.06	21.96	21.83	21.87		
10	64QAM	1	25	22.10	22.13	21.98	22.14	22.18		
10	64QAM	1	49	22.13	22.20	21.93	21.83	21.91	22.5	
10	64QAM	25	0	21.38	21.45	21.26	21.27	21.43		
10	64QAM	25	12	21.44	21.48	21.30	21.40	21.51		
10	64QAM	25	25	21.39	21.48	21.26	21.37	21.41		
10	64QAM	50	0	21.35	21.42	21.23	21.25	21.41		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.2	2593	2639.50	2687.3		
5	QPSK	1	0	24.22	24.22	24.10	24.19	24.21	25.5	
5	QPSK	1	12	24.19	24.17	24.08	24.22	24.22		
5	QPSK	1	24	24.17	24.25	24.02	24.22	24.23		
5	QPSK	12	0	23.30	23.36	23.19	23.28	23.43		
5	QPSK	12	7	23.35	23.43	23.23	23.40	23.47	24.5	
5	QPSK	12	15	23.31	23.40	23.16	23.35	23.39		
5	QPSK	25	0	23.30	23.39	23.18	23.32	23.43		
5	16QAM	1	0	23.37	23.33	23.25	23.27	23.42		
5	16QAM	1	12	23.37	23.45	23.26	23.47	23.54	24.5	
5	16QAM	1	24	23.40	23.44	23.26	23.38	23.44		
5	16QAM	12	0	22.30	22.37	22.19	22.24	22.41		
5	16QAM	12	7	22.34	22.39	22.23	22.37	22.41		
5	16QAM	12	13	22.32	22.38	22.17	22.33	22.41	23.5	
5	16QAM	25	0	22.34	22.45	22.21	22.38	22.46		
5	64QAM	1	0	22.12	22.11	21.97	22.05	22.14		
5	64QAM	1	12	22.12	22.18	21.99	22.14	22.15		
5	64QAM	1	24	22.17	22.19	22.01	22.15	22.19	22.5	
5	64QAM	12	0	21.36	21.44	21.27	21.33	21.48		
5	64QAM	12	7	21.36	21.47	21.30	21.43	21.49		
5	64QAM	12	13	21.38	21.43	21.25	21.39	21.44		
5	64QAM	25	0	21.35	21.43	21.26	21.44	21.49		



Band 48_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Mode Ch. / Freq.	Power High 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	23.78	24.05	24.25	24.28	24.9	
20	QPSK	1	49	23.66	23.91	24.05	24.09		
20	QPSK	1	99	23.68	23.87	24.01	24.04		
20	QPSK	50	0	23.52	23.75	23.96	23.97		
20	QPSK	50	24	23.50	23.80	23.92	23.88	24.7	
20	QPSK	50	50	23.47	23.71	23.87	23.89		
20	QPSK	100	0	23.50	23.76	23.88	23.89		
20	16QAM	1	0	23.59	23.88	24.09	24.09		
20	16QAM	1	49	23.41	23.69	23.86	23.86	24.7	
20	16QAM	1	99	23.43	23.70	23.82	23.83		
20	16QAM	50	0	22.48	22.77	23.01	22.96		
20	16QAM	50	24	22.54	22.81	22.96	22.90		
20	16QAM	50	50	22.48	22.75	22.89	22.89	23.7	
20	16QAM	100	0	22.53	22.80	22.93	22.90		
20	64QAM	1	0	22.25	22.57	22.80	22.75		
20	64QAM	1	49	22.14	22.42	22.57	22.60		23.7
20	64QAM	1	99	22.21	22.43	22.57	22.58		
20	64QAM	50	0	21.50	21.78	22.03	21.97		
20	64QAM	50	24	21.54	21.82	21.97	21.93	22.7	
20	64QAM	50	50	21.50	21.75	21.90	21.92		
20	64QAM	100	0	21.54	21.80	21.96	21.90		
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	23.74	24.00	24.23	24.18	24.9	
15	QPSK	1	37	23.56	23.89	24.00	24.08		
15	QPSK	1	74	23.64	23.86	23.94	24.00		
15	QPSK	36	0	23.43	23.66	23.96	23.96		
15	QPSK	36	20	23.43	23.78	23.88	23.81	24.7	
15	QPSK	36	39	23.43	23.70	23.83	23.85		
15	QPSK	75	0	23.48	23.74	23.85	23.80		
15	16QAM	1	0	23.52	23.78	24.08	23.99		
15	16QAM	1	37	23.32	23.68	23.84	23.82	24.7	
15	16QAM	1	74	23.43	23.63	23.76	23.79		
15	16QAM	36	0	22.46	22.70	22.93	22.89		
15	16QAM	36	20	22.45	22.71	22.92	22.81		23.7
15	16QAM	36	39	22.48	22.69	22.79	22.88		
15	16QAM	75	0	22.44	22.73	22.87	22.85		
15	64QAM	1	0	22.20	22.52	22.80	22.65	23.7	
15	64QAM	1	37	22.05	22.38	22.50	22.52		
15	64QAM	1	74	22.16	22.40	22.54	22.53		
15	64QAM	36	0	21.49	21.78	21.94	21.95		22.7
15	64QAM	36	20	21.48	21.82	21.94	21.92		
15	64QAM	36	39	21.43	21.85	21.83	21.91		
15	64QAM	75	0	21.46	21.78	21.92	21.84		
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	23.77	24.02	24.19	24.24	24.9	
10	QPSK	1	25	23.64	23.87	24.02	24.03		
10	QPSK	1	49	23.62	23.83	23.98	23.99		
10	QPSK	25	0	23.51	23.74	23.91	23.87		
10	QPSK	25	12	23.44	23.70	23.88	23.82	24.7	
10	QPSK	25	25	23.44	23.62	23.79	23.80		
10	QPSK	50	0	23.48	23.75	23.84	23.79		
10	16QAM	1	0	23.58	23.83	23.99	24.01		
10	16QAM	1	25	23.37	23.61	23.76	23.77	24.7	
10	16QAM	1	49	23.34	23.70	23.74	23.74		
10	16QAM	25	0	22.38	22.70	23.00	22.94		
10	16QAM	25	12	22.47	22.74	22.95	22.89		23.7
10	16QAM	25	25	22.48	22.69	22.79	22.81		
10	16QAM	50	0	22.46	22.78	22.84	22.90		
10	64QAM	1	0	22.22	22.50	22.78	22.75	23.7	
10	64QAM	1	25	22.06	22.42	22.51	22.55		
10	64QAM	1	49	22.14	22.36	22.56	22.50		
10	64QAM	25	0	21.48	21.70	21.95	21.92		22.7
10	64QAM	25	12	21.44	21.78	21.88	21.91		
10	64QAM	25	25	21.42	21.71	21.85	21.84		
10	64QAM	50	0	21.46	21.72	21.91	21.90		
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	23.73	23.95	24.16	24.21	24.9	
5	QPSK	1	12	23.59	23.82	23.99	23.99		
5	QPSK	1	24	23.67	23.79	23.95	24.04		
5	QPSK	12	0	23.49	23.67	23.95	23.93		
5	QPSK	12	7	23.48	23.77	23.89	23.81	24.7	
5	QPSK	12	13	23.46	23.65	23.81	23.89		
5	QPSK	25	0	23.48	23.73	23.78	23.88		
5	16QAM	1	0	23.56	23.87	23.99	24.07		
5	16QAM	1	12	23.37	23.59	23.86	23.79	24.7	
5	16QAM	1	24	23.37	23.63	23.76	23.75		
5	16QAM	12	0	22.45	22.67	22.92	22.87		
5	16QAM	12	7	22.49	22.75	22.95	22.89		23.7
5	16QAM	12	13	22.48	22.69	22.85	22.79		
5	16QAM	25	0	22.53	22.70	22.92	22.87		
5	64QAM	1	0	22.24	22.55	22.77	22.68	22.7	
5	64QAM	1	12	22.12	22.35	22.51	22.52		
5	64QAM	1	24	22.14	22.40	22.55	22.53		
5	64QAM	12	0	21.41	21.77	22.03	21.95		22.7
5	64QAM	12	7	21.51	21.79	21.94	21.93		
5	64QAM	12	13	21.46	21.73	21.83	21.91		
5	64QAM	25	0	21.53	21.73	21.88	21.84		



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				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	25.7
20	QPSK	1	49	24.62	24.55	24.47	
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	24.7
20	QPSK	50	24	23.71	23.62	23.61	
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	24.7
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	
20	16QAM	1	99	23.69	23.66	23.61	23.7
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	
20	16QAM	50	50	22.76	22.71	22.62	23.7
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	22.7
20	64QAM	1	99	22.43	22.40	22.31	
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	22.7
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	
Channel				37825	38000	38175	tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	25.7
15	QPSK	1	37	24.55	24.51	24.43	
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	24.7
15	QPSK	36	20	23.71	23.60	23.58	
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	24.7
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	
15	16QAM	1	74	23.72	23.67	23.59	23.7
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	
15	16QAM	36	39	22.66	22.65	22.54	23.7
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	22.7
15	64QAM	1	74	22.46	22.39	22.31	
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	22.7
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	
Channel				37800	38000	38200	tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	25.7
10	QPSK	1	25	24.59	24.60	24.46	
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	24.7
10	QPSK	25	12	23.72	23.65	23.61	
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	24.7
10	16QAM	1	0	23.75	23.68	23.59	
10	16QAM	1	25	23.73	23.69	23.59	
10	16QAM	1	49	23.76	23.70	23.56	23.7
10	16QAM	25	0	22.73	22.62	22.57	
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	23.7
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	22.7
10	64QAM	1	49	22.51	22.42	22.32	
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.68	22.7
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	
Channel				37775	38000	38225	tune-up limit (dBm)
Frequency (MHz)				2372.5	2595	2617.5	
5	QPSK	1	0	24.59	24.51	24.46	25.7
5	QPSK	1	12	24.57	24.55	24.39	
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	24.7
5	QPSK	12	7	23.74	23.72	23.55	
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	24.7
5	16QAM	1	0	23.71	23.65	23.59	
5	16QAM	1	12	23.78	23.76	23.58	
5	16QAM	1	24	23.75	23.74	23.60	23.7
5	16QAM	12	0	22.67	22.62	22.54	
5	16QAM	12	7	22.73	22.70	22.56	
5	16QAM	12	13	22.68	22.67	22.55	23.7
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	23.7
5	64QAM	1	24	22.56	22.51	22.37	
5	64QAM	12	0	21.77	21.65	21.59	
5	64QAM	12	7	21.76	21.74	21.63	22.7
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



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)				2580	2595	2610	
20	QPSK	1	0	26.15	26.16	26.14	
20	QPSK	1	49	26.13	26.16	26.09	27.5
20	QPSK	1	99	26.28	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	
20	QPSK	50	24	25.37	25.43	25.44	26.5
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	
20	16QAM	1	0	25.46	25.56	25.54	26.5
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	
20	16QAM	50	0	24.37	24.45	24.45	25.5
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	
20	16QAM	100	0	24.39	24.44	24.46	25.5
20	64QAM	1	0	24.27	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	
20	64QAM	1	99	24.42	24.44	24.33	24.5
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	
20	64QAM	50	50	23.53	23.54	23.42	24.5
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	
15	QPSK	1	37	26.27	26.11	26.17	27.5
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.50	25.43	25.41	
15	QPSK	36	20	25.50	25.42	25.39	26.5
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	
15	16QAM	1	0	25.63	25.57	25.50	26.5
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	
15	16QAM	36	0	24.52	24.41	24.37	25.5
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	
15	16QAM	75	0	24.53	24.41	24.41	25.5
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	
15	64QAM	1	74	24.48	24.43	24.32	24.5
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	
15	64QAM	36	39	23.53	23.49	23.39	24.5
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	
10	QPSK	1	25	26.20	26.08	26.08	27.5
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	
10	QPSK	25	12	25.43	25.40	25.37	26.5
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.36	
10	16QAM	1	0	25.54	25.51	25.49	26.5
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	
10	16QAM	25	0	24.42	24.40	24.28	25.5
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	
10	16QAM	50	0	24.43	24.40	24.37	25.5
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	
10	64QAM	1	49	24.48	24.38	24.27	24.5
10	64QAM	25	0	23.56	23.36	23.41	
10	64QAM	25	12	23.49	23.35	23.31	
10	64QAM	25	25	23.43	23.39	23.29	24.5
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.22	26.22	26.07	
5	QPSK	1	12	26.22	26.02	26.17	27.5
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	
5	QPSK	12	7	25.44	25.33	25.29	26.5
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	
5	16QAM	1	0	25.59	25.47	25.48	26.5
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	
5	16QAM	12	0	24.50	24.34	24.36	25.5
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	
5	16QAM	25	0	24.50	24.32	24.34	25.5
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	
5	64QAM	1	24	24.36	24.41	24.23	24.5
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	
5	64QAM	12	13	23.49	23.41	23.36	24.5
5	64QAM	25	0	23.52	23.32	23.34	



Band 41_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.	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	24.38	24.49	24.54	24.41	24.26	25.7	
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64		
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78	24.7	
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37		
20	16QAM	1	49	23.48	23.59	23.57	23.82	23.71	24.7	
20	16QAM	1	99	23.54	23.69	23.63	23.38	23.60		
20	16QAM	50	0	22.59	22.66	22.67	22.70	22.65		
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79		
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76	23.7	
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.19	22.32	22.30	22.27	22.09		
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.48		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29	23.7	
20	64QAM	50	0	21.69	21.67	21.68	21.71	21.64		
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79		
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70	22.7	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40	25.7	
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66		
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78	24.7	
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71		
15	16QAM	1	0	23.48	23.65	23.64	23.69	23.51		
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.89	24.7	
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60		
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72		
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70	23.7	
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69		
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22		
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45		
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40	23.7	
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68		
15	64QAM	36	20	21.57	21.70	21.67	21.82	21.79		
15	64QAM	36	39	21.59	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71	22.7	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44	25.7	
10	QPSK	1	24	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72		
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77	24.7	
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70		
10	16QAM	1	0	23.60	23.69	23.70	23.64	23.55		
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78	24.7	
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51		
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81		
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.85	23.7	
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26		
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47		
10	64QAM	1	49	22.33	22.49	22.39	22.57	22.16	22.7	
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.76		
10	64QAM	25	12	21.66	21.79	21.75	21.90	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75	21.7	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	25452	2593	26395	26865		
5	QPSK	1	0	24.48	24.53	24.55	24.69	24.56	25.7	
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77		
5	QPSK	12	7	23.58	23.74	23.70	23.88	23.79	24.7	
5	QPSK	12	15	23.60	23.70	23.68	23.86	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74		
5	16QAM	1	0	23.60	23.65	23.68	23.80	23.76		
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88	24.7	
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75		
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.76		
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77		
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74	23.7	
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79		
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		
5	64QAM	1	12	22.55	22.48	22.48	22.66	22.52		
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45	22.7	
5	64QAM	12	0	21.59	21.72	21.71	21.81	21.80		
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83		
5	64QAM	12	13	21.59	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80	21.7	



Band 48_Ant 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Ch. / Freq.	Power High 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	21.69	22.07	22.19	22.09	23.3	
20	QPSK	1	49	21.56	21.90	22.00	21.85		
20	QPSK	1	99	21.60	21.93	21.90	21.77		
20	QPSK	50	0	21.71	22.05	22.22	22.07		
20	QPSK	50	24	21.69	22.04	22.17	22.04	23.3	
20	QPSK	50	50	21.70	22.02	22.08	21.92		
20	QPSK	100	0	21.72	22.06	22.14	22.01		
20	16QAM	1	0	21.83	22.20	22.37	22.23		
20	16QAM	1	49	21.67	21.98	22.07	21.96	23.3	
20	16QAM	1	99	21.74	22.01	22.07	21.88		
20	16QAM	50	0	21.74	22.07	22.26	22.13		
20	16QAM	50	24	21.79	22.12	22.21	22.04		
20	16QAM	50	50	21.75	22.05	22.12	21.97	23.3	
20	16QAM	100	0	21.75	22.09	22.21	22.05		
20	64QAM	1	0	21.46	21.82	22.05	21.92		
20	64QAM	1	49	21.37	21.69	21.79	21.65		
20	64QAM	1	99	21.47	21.73	21.72	21.54	22.7	
20	64QAM	50	0	21.02	21.36	21.54	21.41		
20	64QAM	50	24	21.09	21.39	21.47	21.37		
20	64QAM	50	50	21.04	21.35	21.43	21.25		
20	64QAM	100	0	21.04	21.38	21.49	21.33	Tune-up limit (dBm)	
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	21.69	21.99	22.19	22.05	23.3	
15	QPSK	1	37	21.47	21.90	21.96	21.77		
15	QPSK	1	74	21.57	21.83	21.88	21.69		
15	QPSK	36	0	21.66	22.01	22.22	22.03		
15	QPSK	36	20	21.70	22.05	22.09	22.03	23.3	
15	QPSK	36	39	21.65	21.92	22.05	21.86		
15	QPSK	75	0	21.62	21.97	22.14	21.96		
15	16QAM	1	0	21.77	22.10	22.32	22.13		
15	16QAM	1	37	21.59	21.99	22.01	21.92	23.3	
15	16QAM	1	74	21.64	21.92	21.97	21.79		
15	16QAM	36	0	21.65	22.07	22.16	22.04		
15	16QAM	36	20	21.78	22.12	22.13	21.96		
15	16QAM	36	39	21.70	22.00	22.09	21.95	23.3	
15	16QAM	75	0	21.65	22.00	22.20	22.04		
15	64QAM	1	0	21.36	21.74	21.96	21.90		
15	64QAM	1	37	21.27	21.62	21.74	21.63		
15	64QAM	1	74	21.41	21.65	21.72	21.49	22.7	
15	64QAM	36	0	20.94	21.34	21.47	21.37		
15	64QAM	36	20	21.04	21.35	21.41	21.32		
15	64QAM	36	39	21.03	21.32	21.36	21.23		
15	64QAM	75	0	20.99	21.30	21.47	21.32	Tune-up limit (dBm)	
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	21.64	22.07	22.10	22.02	23.3	
10	QPSK	1	25	21.46	21.85	21.94	21.76		
10	QPSK	1	49	21.58	21.83	21.87	21.75		
10	QPSK	25	0	21.56	21.95	22.20	22.07		
10	QPSK	25	12	21.66	22.05	22.14	21.99	23.3	
10	QPSK	25	25	21.62	21.96	21.98	21.82		
10	QPSK	50	0	21.66	22.01	22.13	21.92		
10	16QAM	1	0	21.82	22.12	22.32	22.18		
10	16QAM	1	25	21.64	21.90	22.03	21.90	23.3	
10	16QAM	1	49	21.69	21.94	22.02	21.87		
10	16QAM	25	0	21.74	22.01	22.22	22.05		
10	16QAM	25	12	21.77	22.09	22.14	21.96		
10	16QAM	25	25	21.67	21.97	22.03	21.91	23.3	
10	16QAM	50	0	21.73	22.01	22.11	22.00		
10	64QAM	1	0	21.37	21.75	22.05	21.86		
10	64QAM	1	25	21.29	21.64	21.77	21.64		
10	64QAM	1	49	21.37	21.70	21.72	21.52	22.7	
10	64QAM	25	0	20.97	21.33	21.50	21.40		
10	64QAM	25	12	21.00	21.36	21.46	21.34		
10	64QAM	25	25	20.96	21.29	21.35	21.18		
10	64QAM	50	0	20.97	21.36	21.46	21.25	Tune-up limit (dBm)	
Channel				55265	55810	56170	56715		
Frequency (MHz)				35215	3571	3613	36715		
5	QPSK	1	0	21.59	22.06	22.18	22.01	23.3	
5	QPSK	1	12	21.52	21.82	21.93	21.79		
5	QPSK	1	24	21.51	21.89	21.88	21.72		
5	QPSK	12	0	21.65	22.00	22.16	22.03		
5	QPSK	12	7	21.69	22.00	22.15	21.98	23.3	
5	QPSK	12	13	21.63	22.02	21.99	21.82		
5	QPSK	25	0	21.71	22.02	22.09	21.99		
5	16QAM	1	0	21.76	22.15	22.36	22.15		
5	16QAM	1	12	21.58	21.98	22.00	21.95	23.3	
5	16QAM	1	24	21.74	22.00	21.97	21.86		
5	16QAM	12	0	21.74	22.04	22.17	22.08		
5	16QAM	12	7	21.70	22.04	22.21	21.96		
5	16QAM	12	13	21.74	22.02	22.09	21.95	23.3	
5	16QAM	25	0	21.73	22.06	22.12	21.99		
5	64QAM	1	0	21.41	21.81	21.96	21.82		
5	64QAM	1	12	21.28	21.60	21.73	21.58		
5	64QAM	1	24	21.41	21.65	21.63	21.49	22.7	
5	64QAM	12	0	21.01	21.34	21.47	21.33		
5	64QAM	12	7	21.05	21.30	21.37	21.29		
5	64QAM	12	13	20.97	21.27	21.39	21.15		
5	64QAM	25	0	21.00	21.30	21.48	21.26	Tune-up limit (dBm)	



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	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.05	22.91	22.83	
20	QPSK	50	24	23.06	22.88	22.82	24.2
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	24.2
20	16QAM	1	99	22.97	22.90	22.76	
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.66	21.51	
20	64QAM	1	99	21.75	21.68	21.54	22.2
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	
15	QPSK	36	20	23.05	22.87	22.82	24.2
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	24.2
15	16QAM	1	74	23.01	22.92	22.79	
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	
15	64QAM	1	74	21.81	21.67	21.49	22.2
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.97	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	
10	QPSK	25	12	22.98	22.83	22.73	24.2
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.05	22.83	22.79	
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	24.2
10	16QAM	1	49	22.97	22.87	22.73	
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	
10	64QAM	1	49	21.74	21.63	21.47	22.2
10	64QAM	25	0	21.03	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2595	2817.5	
5	QPSK	1	0	23.75	23.76	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	
5	QPSK	12	7	22.97	22.81	22.82	24.2
5	QPSK	12	13	22.96	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	24.2
5	16QAM	1	24	22.96	22.83	22.74	
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.69	21.86	
5	16QAM	12	13	22.04	21.95	21.76	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	
5	64QAM	1	24	21.66	21.59	21.49	22.2
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



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)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	
20	QPSK	1	49	25.53	25.47	25.33	26.7
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	
20	QPSK	50	24	24.87	24.72	24.65	25.7
20	QPSK	50	50	24.84	24.78	24.63	
20	QPSK	100	0	24.86	24.71	24.67	
20	16QAM	1	0	24.96	24.85	24.77	25.7
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	
20	16QAM	50	0	23.91	23.77	23.71	24.7
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	
20	16QAM	100	0	23.92	23.73	23.70	24.7
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	
20	64QAM	1	99	23.77	23.70	23.56	23.7
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.91	22.77	22.69	
20	64QAM	50	50	22.90	22.81	22.69	Tune-up limit (dBm)
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	26.7
15	QPSK	1	37	25.43	25.41	25.33	
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.68	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.68	23.62	
15	64QAM	1	37	23.72	23.68	23.47	23.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.68	Tune-up limit (dBm)
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	26.7
10	QPSK	1	25	25.44	25.37	25.29	
10	QPSK	1	49	25.48	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.78	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	23.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.70	22.63	Tune-up limit (dBm)
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	23.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.88	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	



Band 41_Ant 0										
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.	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	24.19	24.06	23.93	23.84	25.5	
20	QPSK	1	49	24.14	24.25	24.07	24.21	24.26		
20	QPSK	1	99	24.10	24.19	24.04	23.83	24.20		
20	QPSK	50	0	23.28	23.30	23.18	23.18	23.26		
20	QPSK	50	24	23.27	23.36	23.13	23.21	23.40	24.5	
20	QPSK	50	50	23.30	23.38	23.21	23.26	23.41		
20	QPSK	100	0	23.28	23.33	23.16	23.17	23.38		
20	16QAM	1	0	23.23	23.30	23.22	23.06	22.96		
20	16QAM	1	49	23.21	23.30	23.13	23.32	23.36	24.5	
20	16QAM	1	99	23.26	23.38	23.16	22.90	23.31		
20	16QAM	50	0	22.31	22.30	22.23	22.23	22.29		
20	16QAM	50	24	22.32	22.42	22.23	22.29	22.43		
20	16QAM	50	50	22.29	22.43	22.17	22.25	22.44	23.5	
20	16QAM	100	0	22.31	22.40	22.18	22.19	22.35		
20	64QAM	1	0	21.94	21.99	21.91	21.79	21.65		
20	64QAM	1	49	21.96	21.99	21.86	22.08	22.16		
20	64QAM	1	99	21.99	22.16	21.89	21.80	22.07	22.5	
20	64QAM	50	0	21.31	21.34	21.25	21.22	21.30		
20	64QAM	50	24	21.33	21.40	21.22	21.30	21.46		
20	64QAM	50	50	21.30	21.41	21.21	21.25	21.44		
20	64QAM	100	0	21.31	21.40	21.22	21.18	21.35		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.11	24.17	24.06	24.01	23.97	25.5	
15	QPSK	1	37	24.08	24.17	23.97	24.17	24.23		
15	QPSK	1	74	24.12	24.25	24.05	23.99	24.23		
15	QPSK	36	0	23.29	23.34	23.18	23.19	23.30		
15	QPSK	36	20	23.27	23.36	23.16	23.31	23.37	24.5	
15	QPSK	36	39	23.26	23.35	23.13	23.23	23.40		
15	QPSK	75	0	23.28	23.34	23.14	23.25	23.33		
15	16QAM	1	0	23.23	23.32	23.20	23.19	23.09		
15	16QAM	1	37	23.11	23.21	23.02	23.27	23.34	24.5	
15	16QAM	1	74	23.26	23.48	23.21	23.08	23.38		
15	16QAM	36	0	22.24	22.32	22.13	22.18	22.25		
15	16QAM	36	20	22.24	22.31	22.13	22.29	22.36		
15	16QAM	36	39	22.23	22.33	22.11	22.22	22.37	23.5	
15	16QAM	75	0	22.30	22.38	22.19	22.31	22.36		
15	64QAM	1	0	21.94	22.00	21.89	21.91	21.79		
15	64QAM	1	37	22.01	22.05	21.87	22.06	22.10		
15	64QAM	1	74	22.02	22.19	21.94	21.80	22.15	22.5	
15	64QAM	36	0	21.29	21.33	21.20	21.21	21.29		
15	64QAM	36	20	21.32	21.33	21.17	21.36	21.42		
15	64QAM	36	39	21.28	21.38	21.15	21.26	21.41		
15	64QAM	75	0	21.30	21.39	21.17	21.30	21.36		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.21	24.23	24.10	23.93	24.08	25.5	
10	QPSK	1	24	24.20	24.17	24.08	24.23	24.18		
10	QPSK	1	49	24.24	24.20	24.08	24.01	24.08		
10	QPSK	25	0	23.30	23.37	23.21	23.20	23.39		
10	QPSK	25	12	23.33	23.43	23.23	23.31	23.42	24.5	
10	QPSK	25	25	23.31	23.40	23.18	23.28	23.34		
10	QPSK	50	0	23.31	23.39	23.20	23.21	23.37		
10	16QAM	1	0	23.37	23.38	23.23	23.12	23.18		
10	16QAM	1	25	23.32	23.41	23.21	23.38	23.43	24.5	
10	16QAM	1	49	23.30	23.37	23.17	23.12	23.18		
10	16QAM	25	0	22.34	22.40	22.15	22.25	22.40		
10	16QAM	25	12	22.36	22.44	22.24	22.30	22.52		
10	16QAM	25	25	22.34	22.40	22.18	22.32	22.36	23.5	
10	16QAM	50	0	22.37	22.42	22.25	22.27	22.41		
10	64QAM	1	0	22.11	22.06	21.96	21.83	21.87		
10	64QAM	1	25	22.10	22.13	21.98	22.14	22.18		
10	64QAM	1	49	22.13	22.20	21.93	21.83	21.91	22.5	
10	64QAM	25	0	21.38	21.45	21.26	21.27	21.43		
10	64QAM	25	12	21.44	21.48	21.30	21.40	21.51		
10	64QAM	25	25	21.39	21.48	21.26	21.37	21.41		
10	64QAM	50	0	21.35	21.42	21.23	21.25	21.41		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.5	2593	2639.50	2687.5		
5	QPSK	1	0	24.22	24.22	24.10	24.19	24.21	25.5	
5	QPSK	1	12	24.19	24.17	24.08	24.22	24.22		
5	QPSK	1	24	24.17	24.25	24.02	24.22	24.23		
5	QPSK	12	0	23.30	23.36	23.19	23.28	23.43		
5	QPSK	12	7	23.35	23.43	23.23	23.40	23.47	24.5	
5	QPSK	12	15	23.31	23.40	23.16	23.35	23.39		
5	QPSK	25	0	23.30	23.39	23.18	23.32	23.43		
5	16QAM	1	0	23.37	23.33	23.25	23.27	23.42		
5	16QAM	1	12	23.37	23.45	23.26	23.47	23.54	24.5	
5	16QAM	1	24	23.40	23.44	23.26	23.38	23.44		
5	16QAM	12	0	22.30	22.37	22.19	22.24	22.41		
5	16QAM	12	7	22.34	22.39	22.23	22.37	22.41		
5	16QAM	12	13	22.32	22.38	22.17	22.33	22.41	23.5	
5	16QAM	25	0	22.34	22.45	22.21	22.38	22.46		
5	64QAM	1	0	22.12	22.11	21.97	22.05	22.14		
5	64QAM	1	12	22.12	22.18	21.99	22.14	22.15		
5	64QAM	1	24	22.17	22.19	22.01	22.15	22.19	22.5	
5	64QAM	12	0	21.36	21.44	21.27	21.33	21.48		
5	64QAM	12	7	21.36	21.47	21.30	21.43	21.49		
5	64QAM	12	13	21.38	21.43	21.25	21.39	21.44		
5	64QAM	25	0	21.35	21.43	21.26	21.44	21.49		



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	23.03	23.32	23.56	23.51	24.1	
20	QPSK	1	49	22.89	23.18	23.28	23.31		
20	QPSK	1	99	22.88	23.17	23.27	23.25		
20	QPSK	50	0	23.06	23.30	23.50	23.46		
20	QPSK	50	24	23.05	23.29	23.48	23.40	24.1	
20	QPSK	50	50	23.02	23.26	23.38	23.41		
20	QPSK	100	0	23.04	23.29	23.46	23.38		
20	16QAM	1	0	23.15	23.41	23.54	23.53	24.1	
20	16QAM	1	49	22.98	23.22	23.37	23.38		
20	16QAM	1	99	23.00	23.25	23.33	23.34		
20	16QAM	50	0	22.54	22.82	23.03	22.97		
20	16QAM	50	24	22.59	22.84	22.98	22.91	23.7	
20	16QAM	50	50	22.52	22.79	22.92	22.91		
20	16QAM	100	0	22.58	22.81	22.95	22.89		
20	64QAM	1	0	22.31	22.58	22.84	22.79	23.7	
20	64QAM	1	49	22.19	22.45	22.61	22.62		
20	64QAM	1	99	22.26	22.48	22.60	22.60		
20	64QAM	50	0	21.53	21.81	22.05	21.98		
20	64QAM	50	24	21.58	21.86	21.99	21.94	22.7	
20	64QAM	50	50	21.51	21.79	21.93	21.91		
20	64QAM	100	0	21.56	21.84	21.96	21.92		
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.92	23.17	23.40	23.38	24.1	
15	QPSK	1	37	22.83	23.10	23.28	23.29		
15	QPSK	1	74	22.88	23.12	23.25	23.27		
15	QPSK	36	0	23.03	23.22	23.49	23.41		
15	QPSK	36	20	23.00	23.25	23.40	23.42	24.1	
15	QPSK	36	39	22.96	23.22	23.36	23.38		
15	QPSK	75	0	23.01	23.26	23.41	23.37		
15	16QAM	1	0	22.99	23.35	23.53	23.52	24.1	
15	16QAM	1	37	22.85	23.12	23.28	23.28		
15	16QAM	1	74	22.99	23.25	23.40	23.39		
15	16QAM	36	0	22.49	22.67	22.94	22.87		
15	16QAM	36	20	22.43	22.72	22.87	22.90	23.7	
15	16QAM	36	39	22.40	22.68	22.84	22.84		
15	16QAM	75	0	22.50	22.77	22.93	22.87		
15	64QAM	1	0	22.22	22.51	22.76	22.69	23.7	
15	64QAM	1	37	22.16	22.43	22.59	22.62		
15	64QAM	1	74	22.24	22.50	22.63	22.65		
15	64QAM	36	0	21.53	21.74	21.99	21.93		
15	64QAM	36	20	21.48	21.75	21.93	21.93	22.7	
15	64QAM	36	39	21.46	21.74	21.89	21.87		
15	64QAM	75	0	21.50	21.76	21.95	21.88		
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	22.95	23.24	23.48	23.45	24.1	
10	QPSK	1	25	22.82	23.14	23.24	23.31		
10	QPSK	1	49	22.78	23.16	23.23	23.18		
10	QPSK	25	0	23.00	23.30	23.48	23.38		
10	QPSK	25	12	23.01	23.24	23.41	23.31	24.1	
10	QPSK	25	25	22.99	23.24	23.34	23.37		
10	QPSK	50	0	22.99	23.26	23.44	23.37		
10	16QAM	1	0	23.09	23.34	23.49	23.51	24.1	
10	16QAM	1	25	22.98	23.12	23.30	23.29		
10	16QAM	1	49	22.95	23.22	23.25	23.24		
10	16QAM	25	0	22.53	22.75	22.98	22.94	23.7	
10	16QAM	25	12	22.50	22.81	22.98	22.85		
10	16QAM	25	25	22.50	22.75	22.82	22.89		
10	16QAM	50	0	22.55	22.72	22.95	22.81		
10	64QAM	1	0	22.22	22.54	22.75	22.69	23.7	
10	64QAM	1	25	22.11	22.39	22.58	22.60		
10	64QAM	1	49	22.16	22.44	22.54	22.52		
10	64QAM	25	0	21.53	21.77	21.95	21.93		
10	64QAM	25	12	21.52	21.82	21.99	21.93	22.7	
10	64QAM	25	25	21.42	21.79	21.92	21.84		
10	64QAM	50	0	21.48	21.80	21.88	21.88		
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.98	23.28	23.52	23.46	24.1	
5	QPSK	1	12	22.81	23.10	23.20	23.27		
5	QPSK	1	24	22.87	23.13	23.20	23.15		
5	QPSK	12	0	23.00	23.23	23.43	23.44		
5	QPSK	12	7	23.00	23.21	23.40	23.33	24.1	
5	QPSK	12	13	22.92	23.18	23.31	23.36		
5	QPSK	25	0	23.04	23.22	23.40	23.37		
5	16QAM	1	0	23.13	23.39	23.46	23.49	24.1	
5	16QAM	1	12	22.91	23.16	23.30	23.31		
5	16QAM	1	24	22.91	23.23	23.24	23.31		
5	16QAM	12	0	22.51	22.78	23.01	22.88	23.7	
5	16QAM	12	7	22.56	22.82	22.95	22.91		
5	16QAM	12	13	22.49	22.74	22.83	22.89		
5	16QAM	25	0	22.51	22.75	22.95	22.88		
5	64QAM	1	0	22.23	22.51	22.84	22.70	23.7	
5	64QAM	1	12	22.14	22.45	22.51	22.59		
5	64QAM	1	24	22.23	22.47	22.50	22.56		
5	64QAM	12	0	21.50	21.73	21.95	21.93	22.7	
5	64QAM	12	7	21.52	21.82	21.94	21.85		
5	64QAM	12	13	21.47	21.74	21.86	21.88		
5	64QAM	25	0	21.49	21.78	21.94	21.90		



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				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	25.7
20	QPSK	1	49	24.62	24.55	24.47	
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	
20	16QAM	50	50	22.76	22.71	22.62	23.7
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	
20	64QAM	1	99	22.43	22.40	22.31	22.7
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	25.7
15	QPSK	1	0	24.52	24.51	24.43	
15	QPSK	1	37	24.55	24.51	24.43	
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	24.7
15	QPSK	36	20	23.71	23.60	23.58	
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	24.7
15	16QAM	1	37	23.58	23.57	23.46	
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	23.7
15	16QAM	36	39	22.66	22.65	22.54	
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	23.7
15	64QAM	1	74	22.46	22.39	22.31	
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	
15	64QAM	36	39	21.72	21.70	21.58	22.7
15	64QAM	75	0	21.74	21.64	21.59	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	25.7
10	QPSK	1	25	24.59	24.60	24.46	
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	
10	16QAM	1	25	23.73	23.69	23.59	24.7
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	23.7
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	
10	64QAM	1	49	22.51	22.42	22.32	22.7
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.68	
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2372.5	2595	2817.5	25.7
5	QPSK	1	0	24.59	24.51	24.46	
5	QPSK	1	12	24.57	24.55	24.39	
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	24.7
5	QPSK	12	7	23.74	23.72	23.55	
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	24.7
5	16QAM	1	12	23.78	23.76	23.58	
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	
5	16QAM	12	7	22.73	22.70	22.56	23.7
5	16QAM	12	13	22.68	22.67	22.55	
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	23.7
5	64QAM	1	24	22.56	22.51	22.37	
5	64QAM	12	0	21.77	21.65	21.59	
5	64QAM	12	7	21.76	21.74	21.63	
5	64QAM	12	13	21.74	21.74	21.58	22.7
5	64QAM	25	0	21.77	21.71	21.64	



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)				2580	2595	2610	
20	QPSK	1	0	26.15	26.16	26.14	
20	QPSK	1	49	26.13	26.16	26.09	27.5
20	QPSK	1	99	26.28	26.32	26.24	26.5
20	QPSK	50	0	25.38	25.43	25.42	
20	QPSK	50	24	25.37	25.43	25.44	
20	QPSK	50	50	25.44	25.48	25.39	26.5
20	QPSK	100	0	25.42	25.43	25.42	
20	16QAM	1	0	25.46	25.56	25.54	
20	16QAM	1	49	25.52	25.56	25.50	26.5
20	16QAM	1	99	25.45	25.53	25.52	
20	16QAM	50	0	24.37	24.45	24.45	
20	16QAM	50	24	24.47	24.48	24.45	25.5
20	16QAM	50	50	24.48	24.52	24.43	
20	16QAM	100	0	24.39	24.44	24.46	
20	64QAM	1	0	24.27	24.30	24.37	25.5
20	64QAM	1	49	24.44	24.44	24.34	
20	64QAM	1	99	24.42	24.44	24.33	
20	64QAM	50	0	23.43	23.46	23.45	24.5
20	64QAM	50	24	23.43	23.45	23.47	
20	64QAM	50	50	23.53	23.54	23.42	
20	64QAM	100	0	23.41	23.46	23.43	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	27.5
15	QPSK	1	37	26.27	26.11	26.17	
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.50	25.43	25.41	26.5
15	QPSK	36	20	25.50	25.42	25.39	
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	26.5
15	16QAM	1	0	25.63	25.57	25.50	
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	25.5
15	16QAM	36	0	24.52	24.41	24.37	
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	25.5
15	16QAM	75	0	24.53	24.41	24.41	
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	24.5
15	64QAM	1	74	24.48	24.43	24.32	
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	Tune-up limit (dBm)
15	64QAM	36	39	23.53	23.49	23.39	
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	27.5
10	QPSK	1	25	26.20	26.08	26.08	
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	26.5
10	QPSK	25	12	25.43	25.40	25.37	
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.36	26.5
10	16QAM	1	0	25.54	25.51	25.49	
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	25.5
10	16QAM	25	0	24.42	24.40	24.28	
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	25.5
10	16QAM	50	0	24.43	24.40	24.37	
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	24.5
10	64QAM	1	49	24.48	24.38	24.27	
10	64QAM	25	0	23.56	23.36	23.41	
10	64QAM	25	12	23.49	23.35	23.33	Tune-up limit (dBm)
10	64QAM	25	25	23.43	23.39	23.29	
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.22	26.22	26.07	27.5
5	QPSK	1	12	26.22	26.02	26.17	
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	26.5
5	QPSK	12	7	25.44	25.33	25.29	
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	26.5
5	16QAM	1	0	25.59	25.47	25.48	
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	25.5
5	16QAM	12	0	24.50	24.34	24.36	
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	25.5
5	16QAM	25	0	24.50	24.32	24.34	
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	24.5
5	64QAM	1	24	24.36	24.41	24.23	
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	24.5
5	64QAM	12	13	23.49	23.41	23.36	
5	64QAM	25	0	23.52	23.32	23.34	



Band 41_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.	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	24.38	24.49	24.54	24.41	24.26	25.7	
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64		
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78	24.7	
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37		
20	16QAM	1	49	23.49	23.59	23.57	23.82	23.71	24.7	
20	16QAM	1	99	23.54	23.69	23.63	23.38	23.60		
20	16QAM	50	0	22.59	22.66	22.67	22.70	22.65		
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79		
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76	23.7	
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.19	22.32	22.30	22.27	22.09		
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.48		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29	23.7	
20	64QAM	50	0	21.69	21.67	21.68	21.71	21.64		
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79		
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70	22.7	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40	25.7	
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66		
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78	24.7	
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71		
15	16QAM	1	0	23.48	23.65	23.64	23.69	23.51		
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.69	24.7	
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60		
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72		
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70	23.7	
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69		
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22		
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45		
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40	23.7	
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68		
15	64QAM	36	20	21.57	21.70	21.67	21.82	21.79		
15	64QAM	36	39	21.59	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71	22.7	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44	25.7	
10	QPSK	1	24	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72		
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77	24.7	
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70		
10	16QAM	1	0	23.60	23.69	23.70	23.64	23.55		
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78	24.7	
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51		
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81		
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.85	23.7	
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26		
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47		
10	64QAM	1	49	22.33	22.49	22.39	22.57	22.16	23.7	
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.76		
10	64QAM	25	12	21.66	21.79	21.75	21.90	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75	22.7	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	25452	2593	26395	26865		
5	QPSK	1	0	24.48	24.53	24.55	24.69	24.56	25.7	
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77		
5	QPSK	12	7	23.58	23.74	23.70	23.88	23.79	24.7	
5	QPSK	12	15	23.60	23.70	23.68	23.86	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74		
5	16QAM	1	0	23.60	23.65	23.68	23.80	23.76		
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88	24.7	
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75		
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.76		
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77		
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74	23.7	
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79		
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		
5	64QAM	1	12	22.55	22.48	22.48	22.66	22.52		
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45	23.7	
5	64QAM	12	0	21.59	21.72	21.71	21.81	21.80		
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83		
5	64QAM	12	13	21.59	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80	22.7	



Band 48_Ant 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Ch. / Freq.	Power High 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	21.69	22.07	22.19	22.09	23.3	
20	QPSK	1	49	21.56	21.90	22.00	21.85		
20	QPSK	1	99	21.60	21.93	21.90	21.77		
20	QPSK	50	0	21.71	22.05	22.22	22.07		
20	QPSK	50	24	21.69	22.04	22.17	22.04	23.3	
20	QPSK	50	50	21.70	22.02	22.08	21.92		
20	QPSK	100	0	21.72	22.06	22.14	22.01		
20	16QAM	1	0	21.83	22.20	22.37	22.23		
20	16QAM	1	49	21.67	21.98	22.07	21.96	23.3	
20	16QAM	1	99	21.74	22.01	22.07	21.88		
20	16QAM	50	0	21.74	22.07	22.26	22.13		
20	16QAM	50	24	21.79	22.12	22.21	22.04		
20	16QAM	50	50	21.75	22.05	22.12	21.97	23.3	
20	16QAM	100	0	21.75	22.09	22.21	22.05		
20	64QAM	1	0	21.46	21.82	22.05	21.92		
20	64QAM	1	49	21.37	21.69	21.79	21.65		
20	64QAM	1	99	21.47	21.73	21.72	21.54	22.7	
20	64QAM	50	0	21.02	21.36	21.54	21.41		
20	64QAM	50	24	21.09	21.39	21.47	21.37		
20	64QAM	50	50	21.04	21.35	21.43	21.25		
20	64QAM	100	0	21.04	21.38	21.49	21.33	Tune-up limit (dBm)	
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	21.69	21.99	22.19	22.05	23.3	
15	QPSK	1	37	21.47	21.90	21.96	21.77		
15	QPSK	1	74	21.57	21.83	21.88	21.69		
15	QPSK	36	0	21.66	22.01	22.22	22.03		
15	QPSK	36	20	21.70	22.05	22.09	22.03	23.3	
15	QPSK	36	39	21.65	21.92	22.05	21.86		
15	QPSK	75	0	21.62	21.97	22.14	21.96		
15	16QAM	1	0	21.77	22.10	22.32	22.13		
15	16QAM	1	37	21.59	21.99	22.01	21.92	23.3	
15	16QAM	1	74	21.64	21.92	21.97	21.79		
15	16QAM	36	0	21.65	22.07	22.16	22.04		
15	16QAM	36	20	21.78	22.12	22.13	21.96		
15	16QAM	36	39	21.70	22.00	22.09	21.95	23.3	
15	16QAM	75	0	21.65	22.00	22.20	22.04		
15	64QAM	1	0	21.36	21.74	21.96	21.90		
15	64QAM	1	37	21.27	21.62	21.74	21.63		
15	64QAM	1	74	21.41	21.65	21.72	21.49	22.7	
15	64QAM	36	0	20.94	21.34	21.47	21.37		
15	64QAM	36	20	21.04	21.35	21.41	21.32		
15	64QAM	36	39	21.03	21.32	21.36	21.23		
15	64QAM	75	0	20.99	21.30	21.47	21.32	Tune-up limit (dBm)	
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	21.64	22.07	22.10	22.02	23.3	
10	QPSK	1	25	21.46	21.85	21.94	21.76		
10	QPSK	1	49	21.58	21.83	21.87	21.75		
10	QPSK	25	0	21.56	21.95	22.20	22.07		
10	QPSK	25	12	21.66	22.05	22.14	21.99	23.3	
10	QPSK	25	25	21.62	21.96	21.98	21.82		
10	QPSK	50	0	21.66	22.01	22.13	21.92		
10	16QAM	1	0	21.82	22.12	22.32	22.18		
10	16QAM	1	25	21.64	21.90	22.03	21.90	23.3	
10	16QAM	1	49	21.69	21.94	22.02	21.87		
10	16QAM	25	0	21.74	22.01	22.22	22.05		
10	16QAM	25	12	21.77	22.09	22.14	21.96		
10	16QAM	25	25	21.67	21.97	22.03	21.91	23.3	
10	16QAM	50	0	21.73	22.01	22.11	22.00		
10	64QAM	1	0	21.37	21.75	22.05	21.86		
10	64QAM	1	25	21.29	21.64	21.77	21.64		
10	64QAM	1	49	21.37	21.70	21.72	21.52	22.7	
10	64QAM	25	0	20.97	21.33	21.50	21.40		
10	64QAM	25	12	21.00	21.36	21.46	21.34		
10	64QAM	25	25	20.96	21.29	21.35	21.18		
10	64QAM	50	0	20.97	21.36	21.46	21.25	Tune-up limit (dBm)	
Channel				55265	55810	56170	56715		
Frequency (MHz)				35215	3571	3613	36715		
5	QPSK	1	0	21.59	22.06	22.18	22.01	23.3	
5	QPSK	1	12	21.52	21.82	21.93	21.79		
5	QPSK	1	24	21.51	21.89	21.88	21.72		
5	QPSK	12	0	21.65	22.00	22.16	22.03		
5	QPSK	12	7	21.69	22.00	22.15	21.98	23.3	
5	QPSK	12	13	21.63	22.02	21.99	21.82		
5	QPSK	25	0	21.71	22.02	22.09	21.99		
5	16QAM	1	0	21.76	22.15	22.36	22.15		
5	16QAM	1	12	21.58	21.98	22.00	21.95	23.3	
5	16QAM	1	24	21.74	22.00	21.97	21.86		
5	16QAM	12	0	21.74	22.04	22.17	22.08		
5	16QAM	12	7	21.70	22.04	22.21	21.96		
5	16QAM	12	13	21.74	22.02	22.09	21.95	23.3	
5	16QAM	25	0	21.73	22.06	22.12	21.99		
5	64QAM	1	0	21.41	21.81	21.96	21.82		
5	64QAM	1	12	21.28	21.60	21.73	21.58		
5	64QAM	1	24	21.41	21.65	21.63	21.49	22.7	
5	64QAM	12	0	21.01	21.34	21.47	21.33		
5	64QAM	12	7	21.05	21.30	21.37	21.29		
5	64QAM	12	13	20.97	21.27	21.39	21.15		
5	64QAM	25	0	21.00	21.30	21.48	21.26	Tune-up limit (dBm)	



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	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.05	22.91	22.83	
20	QPSK	50	24	23.06	22.88	22.82	
20	QPSK	50	50	23.03	22.92	22.81	24.2
20	QPSK	100	0	23.05	22.86	22.82	
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	24.2
20	16QAM	1	99	22.97	22.90	22.76	
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	23.2
20	16QAM	50	50	22.06	21.96	21.83	
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	23.2
20	64QAM	1	49	21.74	21.66	21.51	
20	64QAM	1	99	21.75	21.68	21.54	
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	
20	64QAM	50	50	21.09	20.95	20.86	22.2
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	
15	QPSK	36	20	23.05	22.87	22.82	
15	QPSK	36	39	23.03	22.95	22.80	24.2
15	QPSK	75	0	23.08	22.88	22.81	
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	24.2
15	16QAM	1	74	23.01	22.92	22.79	
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	23.2
15	16QAM	36	39	22.01	21.90	21.77	
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	23.2
15	64QAM	1	37	21.78	21.67	21.52	
15	64QAM	1	74	21.81	21.67	21.49	
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	
15	64QAM	36	39	21.10	20.97	20.83	22.2
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.97	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	
10	QPSK	25	12	22.98	22.83	22.73	
10	QPSK	25	25	23.03	22.89	22.81	24.2
10	QPSK	50	0	23.05	22.83	22.79	
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	24.2
10	16QAM	1	49	22.97	22.87	22.73	
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	23.2
10	16QAM	25	25	21.95	21.93	21.83	
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	23.2
10	64QAM	1	25	21.67	21.57	21.44	
10	64QAM	1	49	21.74	21.63	21.47	
10	64QAM	25	0	21.03	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	
10	64QAM	25	25	21.05	20.86	20.82	22.2
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2595	2817.5	
5	QPSK	1	0	23.75	23.76	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	
5	QPSK	12	7	22.97	22.81	22.82	
5	QPSK	12	13	22.96	22.90	22.76	24.2
5	QPSK	25	0	23.03	22.83	22.74	
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	24.2
5	16QAM	1	24	22.96	22.83	22.74	
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	23.2
5	16QAM	12	13	22.04	21.95	21.76	
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	23.2
5	64QAM	1	12	21.69	21.61	21.42	
5	64QAM	1	24	21.66	21.59	21.49	
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	
5	64QAM	12	13	21.02	20.95	20.80	22.2
5	64QAM	25	0	21.06	20.89	20.77	



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	26.7
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	
20	QPSK	1	49	25.53	25.47	25.33	26.7
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	
20	QPSK	50	24	24.87	24.72	24.65	25.7
20	QPSK	50	50	24.84	24.78	24.63	
20	QPSK	100	0	24.86	24.71	24.67	
20	16QAM	1	0	24.96	24.85	24.77	25.7
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	
20	16QAM	50	0	23.91	23.77	23.71	24.7
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	
20	16QAM	100	0	23.92	23.73	23.70	24.7
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	
20	64QAM	1	99	23.77	23.70	23.56	23.7
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.91	22.77	22.69	
20	64QAM	50	50	22.90	22.81	22.69	Tune-up limit (dBm)
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	26.7
15	QPSK	1	0	25.53	25.48	25.40	
15	QPSK	1	37	25.43	25.41	25.33	26.7
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.68	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.68	23.62	
15	64QAM	1	37	23.72	23.68	23.47	23.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.68	Tune-up limit (dBm)
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	26.7
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	
10	QPSK	1	25	25.44	25.37	25.29	26.7
10	QPSK	1	49	25.48	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.78	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	23.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.70	22.63	Tune-up limit (dBm)
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	26.7
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	
5	QPSK	1	12	25.43	25.44	25.26	26.7
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	23.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.88	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	



Band 41_Ant 0										
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.	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	24.19	24.06	23.93	23.84	25.5	
20	QPSK	1	49	24.14	24.25	24.07	24.21	24.26		
20	QPSK	1	99	24.10	24.19	24.04	23.83	24.20		
20	QPSK	50	0	23.28	23.30	23.18	23.18	23.26		
20	QPSK	50	24	23.27	23.36	23.13	23.21	23.40	24.5	
20	QPSK	50	50	23.30	23.38	23.21	23.26	23.41		
20	QPSK	100	0	23.28	23.33	23.16	23.17	23.38		
20	16QAM	1	0	23.23	23.30	23.22	23.06	22.96		
20	16QAM	1	49	23.21	23.30	23.13	23.32	23.36	24.5	
20	16QAM	1	99	23.26	23.38	23.16	22.90	23.31		
20	16QAM	50	0	22.31	22.30	22.23	22.23	22.29		
20	16QAM	50	24	22.32	22.42	22.23	22.29	22.43		
20	16QAM	50	50	22.29	22.43	22.17	22.25	22.44	23.5	
20	16QAM	100	0	22.31	22.40	22.18	22.19	22.35		
20	64QAM	1	0	21.94	21.99	21.91	21.79	21.65		
20	64QAM	1	49	21.96	21.99	21.86	22.08	22.16		
20	64QAM	1	99	21.99	22.16	21.89	21.80	22.07	22.5	
20	64QAM	50	0	21.31	21.34	21.25	21.22	21.30		
20	64QAM	50	24	21.33	21.40	21.22	21.30	21.46		
20	64QAM	50	50	21.30	21.41	21.21	21.25	21.44		
20	64QAM	100	0	21.31	21.40	21.22	21.18	21.35		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.11	24.17	24.06	24.01	23.97	25.5	
15	QPSK	1	37	24.08	24.17	23.97	24.17	24.23		
15	QPSK	1	74	24.12	24.25	24.05	23.99	24.23		
15	QPSK	36	0	23.29	23.34	23.18	23.19	23.30		
15	QPSK	36	20	23.27	23.36	23.16	23.31	23.37	24.5	
15	QPSK	36	39	23.26	23.35	23.13	23.23	23.40		
15	QPSK	75	0	23.28	23.34	23.14	23.25	23.33		
15	16QAM	1	0	23.23	23.32	23.20	23.19	23.09		
15	16QAM	1	37	23.11	23.21	23.02	23.27	23.34	24.5	
15	16QAM	1	74	23.26	23.48	23.21	23.08	23.38		
15	16QAM	36	0	22.24	22.32	22.13	22.18	22.25		
15	16QAM	36	20	22.24	22.31	22.13	22.29	22.36		
15	16QAM	36	39	22.23	22.33	22.11	22.22	22.37	23.5	
15	16QAM	75	0	22.30	22.38	22.19	22.31	22.36		
15	64QAM	1	0	21.94	22.00	21.89	21.91	21.79		
15	64QAM	1	37	22.01	22.05	21.87	22.06	22.10		
15	64QAM	1	74	22.02	22.19	21.94	21.80	22.15	22.5	
15	64QAM	36	0	21.29	21.33	21.20	21.21	21.29		
15	64QAM	36	20	21.32	21.33	21.17	21.36	21.42		
15	64QAM	36	39	21.28	21.38	21.15	21.26	21.41		
15	64QAM	75	0	21.30	21.39	21.17	21.30	21.36		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.21	24.23	24.10	23.93	24.08	25.5	
10	QPSK	1	24	24.20	24.17	24.08	24.23	24.18		
10	QPSK	1	49	24.24	24.20	24.08	24.01	24.08		
10	QPSK	25	0	23.30	23.37	23.21	23.20	23.39		
10	QPSK	25	12	23.33	23.43	23.23	23.31	23.42	24.5	
10	QPSK	25	25	23.31	23.40	23.18	23.28	23.34		
10	QPSK	50	0	23.31	23.39	23.20	23.21	23.37		
10	16QAM	1	0	23.37	23.38	23.23	23.12	23.18		
10	16QAM	1	25	23.32	23.41	23.21	23.38	23.43	24.5	
10	16QAM	1	49	23.30	23.37	23.17	23.12	23.18		
10	16QAM	25	0	22.34	22.40	22.15	22.25	22.40		
10	16QAM	25	12	22.36	22.44	22.24	22.30	22.52		
10	16QAM	25	25	22.34	22.40	22.18	22.32	22.36	23.5	
10	16QAM	50	0	22.37	22.42	22.25	22.27	22.41		
10	64QAM	1	0	22.11	22.06	21.96	21.83	21.87		
10	64QAM	1	25	22.10	22.13	21.98	22.14	22.18		
10	64QAM	1	49	22.13	22.20	21.93	21.83	21.91	22.5	
10	64QAM	25	0	21.38	21.45	21.26	21.27	21.43		
10	64QAM	25	12	21.44	21.48	21.30	21.40	21.51		
10	64QAM	25	25	21.39	21.48	21.26	21.37	21.41		
10	64QAM	50	0	21.35	21.42	21.23	21.25	21.41		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.5	2593	2639.50	2687.5		
5	QPSK	1	0	24.22	24.22	24.10	24.19	24.21	25.5	
5	QPSK	1	12	24.19	24.17	24.08	24.22	24.22		
5	QPSK	1	24	24.17	24.25	24.02	24.22	24.23		
5	QPSK	12	0	23.30	23.36	23.19	23.28	23.43		
5	QPSK	12	7	23.35	23.43	23.23	23.40	23.47	24.5	
5	QPSK	12	15	23.31	23.40	23.16	23.35	23.39		
5	QPSK	25	0	23.30	23.39	23.18	23.32	23.43		
5	16QAM	1	0	23.37	23.33	23.25	23.27	23.42		
5	16QAM	1	12	23.37	23.45	23.26	23.47	23.54	24.5	
5	16QAM	1	24	23.40	23.44	23.26	23.38	23.44		
5	16QAM	12	0	22.30	22.37	22.19	22.24	22.41		
5	16QAM	12	7	22.34	22.39	22.23	22.37	22.41		
5	16QAM	12	13	22.32	22.38	22.17	22.33	22.41	23.5	
5	16QAM	25	0	22.34	22.45	22.21	22.38	22.46		
5	64QAM	1	0	22.12	22.11	21.97	22.05	22.14		
5	64QAM	1	12	22.12	22.18	21.99	22.14	22.15		
5	64QAM	1	24	22.17	22.19	22.01	22.15	22.19	22.5	
5	64QAM	12	0	21.36	21.44	21.27	21.33	21.48		
5	64QAM	12	7	21.36	21.47	21.30	21.43	21.49		
5	64QAM	12	13	21.38	21.43	21.25	21.39	21.44		
5	64QAM	25	0	21.35	21.43	21.26	21.44	21.49		



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	23.03	23.32	23.56	23.51	24.1	
20	QPSK	1	49	22.89	23.18	23.28	23.31		
20	QPSK	1	99	22.88	23.17	23.27	23.25		
20	QPSK	50	0	23.06	23.30	23.50	23.46		
20	QPSK	50	24	23.05	23.29	23.48	23.40	24.1	
20	QPSK	50	50	23.02	23.26	23.38	23.41		
20	QPSK	100	0	23.04	23.29	23.46	23.38		
20	16QAM	1	0	23.15	23.41	23.54	23.53	24.1	
20	16QAM	1	49	22.98	23.22	23.37	23.38		
20	16QAM	1	99	23.00	23.25	23.33	23.34		
20	16QAM	50	0	22.54	22.82	23.03	22.97		
20	16QAM	50	24	22.59	22.84	22.98	22.91	23.7	
20	16QAM	50	50	22.52	22.79	22.92	22.91		
20	16QAM	100	0	22.58	22.81	22.95	22.89		
20	64QAM	1	0	22.31	22.58	22.84	22.79	23.7	
20	64QAM	1	49	22.19	22.45	22.61	22.62		
20	64QAM	1	99	22.26	22.48	22.60	22.60		
20	64QAM	50	0	21.53	21.81	22.05	21.98		
20	64QAM	50	24	21.58	21.86	21.99	21.94	22.7	
20	64QAM	50	50	21.51	21.79	21.93	21.91		
20	64QAM	100	0	21.56	21.84	21.96	21.92		
Channel				55315	55820	56160	56665	Tune-up limit (dBm)	
Frequency (MHz)				3657.5	3608	3642	3692.5		
15	QPSK	1	0	22.92	23.17	23.40	23.38	24.1	
15	QPSK	1	37	22.83	23.10	23.28	23.29		
15	QPSK	1	74	22.88	23.12	23.25	23.27		
15	QPSK	36	0	23.03	23.22	23.49	23.41		
15	QPSK	36	20	23.00	23.25	23.40	23.42	24.1	
15	QPSK	36	39	22.96	23.22	23.36	23.38		
15	QPSK	75	0	23.01	23.26	23.41	23.37		
15	16QAM	1	0	22.99	23.35	23.53	23.52	24.1	
15	16QAM	1	37	22.85	23.12	23.28	23.28		
15	16QAM	1	74	22.99	23.25	23.40	23.39		
15	16QAM	36	0	22.49	22.67	22.94	22.87		
15	16QAM	36	20	22.43	22.72	22.87	22.90	23.7	
15	16QAM	36	39	22.40	22.68	22.84	22.84		
15	16QAM	75	0	22.50	22.77	22.93	22.87		
15	64QAM	1	0	22.22	22.51	22.76	22.69	23.7	
15	64QAM	1	37	22.16	22.43	22.59	22.62		
15	64QAM	1	74	22.24	22.50	22.63	22.65		
15	64QAM	36	0	21.53	21.74	21.99	21.93		
15	64QAM	36	20	21.48	21.75	21.83	21.93	22.7	
15	64QAM	36	39	21.46	21.74	21.89	21.87		
15	64QAM	75	0	21.50	21.76	21.95	21.88		
Channel				55290	55815	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	22.95	23.24	23.48	23.45	24.1	
10	QPSK	1	25	22.82	23.14	23.24	23.31		
10	QPSK	1	49	22.78	23.16	23.23	23.18		
10	QPSK	25	0	23.00	23.30	23.48	23.38		
10	QPSK	25	12	23.01	23.24	23.41	23.31	24.1	
10	QPSK	25	25	22.99	23.24	23.34	23.37		
10	QPSK	50	0	22.99	23.26	23.44	23.37		
10	16QAM	1	0	23.09	23.34	23.49	23.51	24.1	
10	16QAM	1	25	22.98	23.12	23.30	23.29		
10	16QAM	1	49	22.95	23.22	23.25	23.24		
10	16QAM	25	0	22.53	22.75	22.98	22.94		
10	16QAM	25	12	22.50	22.81	22.98	22.85	23.7	
10	16QAM	25	25	22.50	22.75	22.82	22.89		
10	16QAM	50	0	22.55	22.72	22.95	22.81		
10	64QAM	1	0	22.22	22.54	22.75	22.69	23.7	
10	64QAM	1	25	22.11	22.39	22.58	22.60		
10	64QAM	1	49	22.16	22.44	22.54	22.52		
10	64QAM	25	0	21.53	21.77	21.95	21.93		
10	64QAM	25	12	21.52	21.82	21.99	21.93	22.7	
10	64QAM	25	25	21.42	21.79	21.92	21.84		
10	64QAM	50	0	21.48	21.80	21.86	21.88		
Channel				55265	55810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.98	23.28	23.52	23.46	24.1	
5	QPSK	1	12	22.81	23.10	23.20	23.27		
5	QPSK	1	24	22.87	23.13	23.20	23.15		
5	QPSK	12	0	23.00	23.23	23.43	23.44		
5	QPSK	12	7	23.00	23.21	23.40	23.33	24.1	
5	QPSK	12	13	22.92	23.18	23.31	23.38		
5	QPSK	25	0	23.04	23.22	23.40	23.37		
5	16QAM	1	0	23.13	23.39	23.46	23.49	24.1	
5	16QAM	1	12	22.91	23.16	23.30	23.31		
5	16QAM	1	24	22.91	23.23	23.24	23.31		
5	16QAM	12	0	22.51	22.78	23.01	22.88		
5	16QAM	12	7	22.56	22.82	22.95	22.91	23.7	
5	16QAM	12	13	22.49	22.74	22.83	22.89		
5	16QAM	25	0	22.51	22.75	22.95	22.88		
5	64QAM	1	0	22.23	22.51	22.84	22.70	23.7	
5	64QAM	1	12	22.14	22.45	22.51	22.59		
5	64QAM	1	24	22.23	22.47	22.50	22.56		
5	64QAM	12	0	21.50	21.73	21.95	21.93	22.7	
5	64QAM	12	7	21.52	21.82	21.94	21.85		
5	64QAM	12	13	21.47	21.74	21.86	21.88		
5	64QAM	25	0	21.49	21.78	21.94	21.90		

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	24.09	23.93	23.89	25.0
20	PI/2 BPSK	1	53	23.98	23.95	23.88	
20	PI/2 BPSK	1	104	23.65	23.16	22.72	
20	PI/2 BPSK	50	0	23.60	23.44	23.48	24.5
20	PI/2 BPSK	50	28	24.00	23.94	23.88	25.0
20	PI/2 BPSK	50	56	23.38	23.34	23.27	24.5
20	PI/2 BPSK	100	0	23.51	23.44	23.42	
20	QPSK	1	1	24.19	24.09	24.02	
20	QPSK	1	53	24.09	24.05	23.96	25.0
20	QPSK	1	104	23.84	23.68	23.04	
20	QPSK	50	0	23.05	22.95	23.00	24.0
20	QPSK	50	28	24.03	23.99	23.92	25.0
20	QPSK	50	56	22.92	22.90	22.81	24.0
20	QPSK	100	0	23.03	22.98	22.93	
20	16QAM	1	1	23.41	23.27	23.19	24.0
20	64QAM	1	1	21.95	21.77	21.74	22.5
20	256QAM	1	1	19.75	19.67	19.65	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.04	23.83	23.85	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.09	23.88	23.85	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.99	23.84	23.87	25.0

n5_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	24.09	23.93	23.89	25.0
20	PI/2 BPSK	1	53	23.98	23.95	23.88	
20	PI/2 BPSK	1	104	23.65	23.16	22.72	
20	PI/2 BPSK	50	0	23.60	23.44	23.48	24.5
20	PI/2 BPSK	50	28	24.00	23.94	23.88	25.0
20	PI/2 BPSK	50	56	23.38	23.34	23.27	24.5
20	PI/2 BPSK	100	0	23.51	23.44	23.42	
20	QPSK	1	1	24.19	24.09	24.02	
20	QPSK	1	53	24.09	24.05	23.96	25.0
20	QPSK	1	104	23.84	23.68	23.04	
20	QPSK	50	0	23.05	22.95	23.00	
20	QPSK	50	28	24.03	23.99	23.92	25.0
20	QPSK	50	56	22.92	22.90	22.81	24.0
20	QPSK	100	0	23.03	22.98	22.93	
20	16QAM	1	1	23.41	23.27	23.19	24.0
20	64QAM	1	1	21.95	21.77	21.74	22.5
20	256QAM	1	1	19.75	19.67	19.65	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.04	23.83	23.85	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.09	23.88	23.85	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.99	23.84	23.87	25.0

n5_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	24.09	23.93	23.89	25.0
20	PI/2 BPSK	1	53	23.98	23.95	23.88	
20	PI/2 BPSK	1	104	23.65	23.16	22.72	
20	PI/2 BPSK	50	0	23.60	23.44	23.48	24.5
20	PI/2 BPSK	50	28	24.00	23.94	23.88	25.0
20	PI/2 BPSK	50	56	23.38	23.34	23.27	24.5
20	PI/2 BPSK	100	0	23.51	23.44	23.42	
20	QPSK	1	1	24.19	24.09	24.02	
20	QPSK	1	53	24.09	24.05	23.96	25.0
20	QPSK	1	104	23.84	23.68	23.04	
20	QPSK	50	0	23.05	22.95	23.00	24.0
20	QPSK	50	28	24.03	23.99	23.92	25.0
20	QPSK	50	56	22.92	22.90	22.81	24.0
20	QPSK	100	0	23.03	22.98	22.93	
20	16QAM	1	1	23.41	23.27	23.19	24.0
20	64QAM	1	1	21.95	21.77	21.74	22.5
20	256QAM	1	1	19.75	19.67	19.65	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.04	23.83	23.85	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.09	23.88	23.85	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.99	23.84	23.87	25.0

n5_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	24.09	23.93	23.89	25.0
20	PI/2 BPSK	1	53	23.98	23.95	23.88	
20	PI/2 BPSK	1	104	23.65	23.16	22.72	
20	PI/2 BPSK	50	0	23.60	23.44	23.48	24.5
20	PI/2 BPSK	50	28	24.00	23.94	23.88	25.0
20	PI/2 BPSK	50	56	23.38	23.34	23.27	24.5
20	PI/2 BPSK	100	0	23.51	23.44	23.42	
20	QPSK	1	1	24.19	24.09	24.02	
20	QPSK	1	53	24.09	24.05	23.96	25.0
20	QPSK	1	104	23.84	23.68	23.04	
20	QPSK	50	0	23.05	22.95	23.00	24.0
20	QPSK	50	28	24.03	23.99	23.92	25.0
20	QPSK	50	56	22.92	22.90	22.81	24.0
20	QPSK	100	0	23.03	22.98	22.93	
20	16QAM	1	1	23.41	23.27	23.19	24.0
20	64QAM	1	1	21.95	21.77	21.74	22.5
20	256QAM	1	1	19.75	19.67	19.65	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.04	23.83	23.85	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.09	23.88	23.85	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.99	23.84	23.87	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	23.28	23.10	23.09	25.0
20	PI/2 BPSK	1	53	23.13	23.10	23.05	
20	PI/2 BPSK	1	104	22.66	21.93	21.89	
20	PI/2 BPSK	50	0	22.72	22.70	22.65	24.5
20	PI/2 BPSK	50	28	23.17	23.14	23.06	25.0
20	PI/2 BPSK	50	56	22.54	22.51	22.42	24.5
20	PI/2 BPSK	100	0	22.68	22.61	22.58	
20	QPSK	1	1	23.31	23.19	23.17	25.0
20	QPSK	1	53	23.25	23.18	23.13	
20	QPSK	1	104	23.04	22.35	22.04	
20	QPSK	50	0	22.22	22.20	22.18	24.0
20	QPSK	50	28	23.21	23.12	23.09	25.0
20	QPSK	50	56	22.11	22.07	22.01	24.0
20	QPSK	100	0	22.17	22.13	22.09	
20	16QAM	1	1	22.51	22.37	22.37	24.0
20	64QAM	1	1	21.08	20.95	20.90	22.5
20	256QAM	1	1	18.91	18.84	18.78	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	23.21	23.04	23.06	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	23.10	23.05	23.09	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.10	23.00	23.07	25.0

n77_Ant 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	24.54	24.33	24.48	25.7
100	PI/2 BPSK	1	137	24.35	24.37	24.62	
100	PI/2 BPSK	1	271	24.40	24.52	24.60	
100	PI/2 BPSK	135	0	23.90	23.74	23.92	25.2
100	PI/2 BPSK	135	69	24.33	24.31	24.44	25.7
100	PI/2 BPSK	135	138	23.84	23.89	24.03	25.2
100	PI/2 BPSK	270	0	23.85	23.80	23.92	
100	QPSK	1	1	24.51	24.25	24.46	
100	QPSK	1	137	24.38	24.38	24.60	25.7
100	QPSK	1	271	24.38	24.46	24.52	
100	QPSK	135	0	23.41	23.21	23.45	24.7
100	QPSK	135	69	24.38	24.30	24.55	25.7
100	QPSK	135	138	23.34	23.39	23.48	24.7
100	QPSK	270	0	23.35	23.27	23.47	
100	16QAM	1	1	23.68	23.47	23.61	24.7
100	64QAM	1	1	22.35	22.08	22.26	23.2
100	256QAM	1	1	19.82	19.52	19.71	21.2
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	24.82	24.70	24.79	25.7
Channel				647334	656000	664668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3970.02	
20	PI/2 BPSK	1	1	24.71	24.41	24.65	25.7

n78_Ant 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		24.15		25.0
100	PI/2 BPSK	1	137		23.91		
100	PI/2 BPSK	1	271		23.91		
100	PI/2 BPSK	135	0		23.45		24.5
100	PI/2 BPSK	135	69		23.90		25.0
100	PI/2 BPSK	135	138		23.42		24.5
100	PI/2 BPSK	270	0		23.43		
100	QPSK	1	1		24.01		25.0
100	QPSK	1	137		23.87		
100	QPSK	1	271		23.85		
100	QPSK	135	0		22.95		24.0
100	QPSK	135	69		23.92		25.0
100	QPSK	135	138		22.87		24.0
100	QPSK	270	0		22.90		
100	16QAM	1	1		23.22		24.0
100	64QAM	1	1		22.05		22.5
100	256QAM	1	1		19.48		20.5
Channel				649668	650000	650334	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3755.01	
90	PI/2 BPSK	1	1		24.06	24.05	24.10
Channel				649334	650000	650668	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3760.02	
80	PI/2 BPSK	1	1		23.99	23.99	23.98
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1		23.93	23.94	23.94
Channel				648668	650000	651334	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3770.01	
60	PI/2 BPSK	1	1		23.92	23.96	23.96
Channel				648334	650000	651668	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3775.02	
50	PI/2 BPSK	1	1		24.06	24.04	23.93
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1		24.37	24.31	24.20
Channel				647334	650000	652668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3790.02	
20	PI/2 BPSK	1	1		24.16	24.10	23.95

n78_HPUE_Ant 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		25.62		26.5
100	PI/2 BPSK	1	137		25.42		
100	PI/2 BPSK	1	271		25.28		
100	PI/2 BPSK	135	0		24.93		
100	PI/2 BPSK	135	69		25.34		26.5
100	PI/2 BPSK	135	138		24.87		26.0
100	PI/2 BPSK	270	0		24.86		
100	QPSK	1	1		25.58		26.5
100	QPSK	1	137		25.41		
100	QPSK	1	271		25.26		
100	QPSK	135	0		24.41		
100	QPSK	135	69		25.35		26.5
100	QPSK	135	138		24.38		25.5
100	QPSK	270	0		24.40		
100	16QAM	1	1		24.67		25.5
100	64QAM	1	1		23.26		24.0
100	256QAM	1	1		20.98		22.0
Channel				649668	650000	650334	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3755.01	
90	PI/2 BPSK	1	1	25.58	25.55	25.52	26.5
Channel				649334	650000	650668	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3760.02	
80	PI/2 BPSK	1	1	25.53	25.53	25.47	26.5
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	25.50	25.44	25.49	26.5
Channel				648668	650000	651334	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3770.01	
60	PI/2 BPSK	1	1	25.49	25.50	25.49	26.5
Channel				648334	650000	651668	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3775.02	
50	PI/2 BPSK	1	1	25.63	25.57	25.55	26.5
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	25.93	25.77	25.75	26.5
Channel				647334	650000	652668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3790.02	
20	PI/2 BPSK	1	1	25.70	25.63	25.46	26.5

n77_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				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.63	23.36	23.40	25.5
100	PI/2 BPSK	1	137	23.46	23.35	23.44	
100	PI/2 BPSK	1	271	23.43	23.50	23.37	
100	PI/2 BPSK	135	0	22.98	22.86	22.80	25.0
100	PI/2 BPSK	135	69	23.42	23.50	23.31	25.5
100	PI/2 BPSK	135	138	22.89	22.82	22.88	25.0
100	PI/2 BPSK	270	0	22.90	22.83	22.86	
100	QPSK	1	1	23.64	23.36	23.36	
100	QPSK	1	137	23.47	23.34	23.41	25.5
100	QPSK	1	271	23.43	23.51	23.29	
100	QPSK	135	0	22.47	22.34	22.31	24.5
100	QPSK	135	69	23.47	23.32	23.33	25.5
100	QPSK	135	138	22.45	22.38	22.26	24.5
100	QPSK	270	0	22.46	22.33	22.28	
100	16QAM	1	1	22.69	22.36	22.43	24.5
100	64QAM	1	1	21.51	21.23	20.95	23.0
100	256QAM	1	1	19.14	18.80	18.59	21.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	24.00	23.73	23.52	25.5
Channel				647334	656000	664668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3970.02	
20	PI/2 BPSK	1	1	23.85	23.55	23.35	25.5

n78_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					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		23.14		25.5
100	PI/2 BPSK	1	137		22.96		
100	PI/2 BPSK	1	271		22.92		
100	PI/2 BPSK	135	0		22.52		25.0
100	PI/2 BPSK	135	69		22.99		25.5
100	PI/2 BPSK	135	138		22.48		25.0
100	PI/2 BPSK	270	0		22.49		
100	QPSK	1	1		23.16		25.5
100	QPSK	1	137		22.95		
100	QPSK	1	271		22.81		
100	QPSK	135	0		22.03		24.5
100	QPSK	135	69		22.92		25.5
100	QPSK	135	138		21.86		24.5
100	QPSK	270	0		21.94		
100	16QAM	1	1		22.16		24.5
100	64QAM	1	1		20.88		23.0
100	256QAM	1	1		18.69		21.0
Channel				649668	650000	650334	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3755.01	
90	PI/2 BPSK	1	1	23.15	23.11	23.11	25.5
Channel				649334	650000	650668	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3760.02	
80	PI/2 BPSK	1	1	23.06	23.05	23.05	25.5
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.02	22.98	23.01	25.5
Channel				648668	650000	651334	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3770.01	
60	PI/2 BPSK	1	1	23.09	23.04	23.01	25.5
Channel				648334	650000	651668	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3775.02	
50	PI/2 BPSK	1	1	23.14	23.13	23.11	25.5
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	23.38	23.38	23.30	25.5
Channel				647334	650000	652668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3790.02	
20	PI/2 BPSK	1	1	23.24	23.11	23.07	25.5

n78_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					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		24.44		26.0
100	PI/2 BPSK	1	137		24.29		
100	PI/2 BPSK	1	271		24.10		
100	PI/2 BPSK	135	0		23.80		
100	PI/2 BPSK	135	69		24.21		26.0
100	PI/2 BPSK	135	138		23.69		25.5
100	PI/2 BPSK	270	0		23.77		
100	QPSK	1	1		24.48		26.0
100	QPSK	1	137		24.25		
100	QPSK	1	271		24.21		
100	QPSK	135	0		23.25		
100	QPSK	135	69		24.24		26.0
100	QPSK	135	138		23.25		25.0
100	QPSK	270	0		23.24		
100	16QAM	1	1		23.84		25.0
100	64QAM	1	1		22.23		23.5
100	256QAM	1	1		19.81		21.5
Channel				649668	650000	650334	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3755.01	
90	PI/2 BPSK	1	1		24.42	24.40	24.43
Channel				649334	650000	650668	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3760.02	
80	PI/2 BPSK	1	1		24.37	24.35	24.35
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1		24.35	24.29	24.27
Channel				648668	650000	651334	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3770.01	
60	PI/2 BPSK	1	1		24.36	24.34	24.24
Channel				648334	650000	651668	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3775.02	
50	PI/2 BPSK	1	1		24.51	24.45	24.41
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1		24.68	24.69	24.59
Channel				647334	650000	652668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3790.02	
20	PI/2 BPSK	1	1		24.49	24.41	23.36



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	19.60	20.00	100.00	19.60	20.00	100.00	19.80	20.00	19.20	20.00	22.52	23.0	100.00
		6	2437	19.50	20.00		19.60	20.00		19.90	20.00	19.40	20.00	22.67	23.0	
		11	2462	19.50	20.00		19.60	20.00		19.90	20.00	19.20	20.00	22.57	23.0	
	802.11g 6Mbps	1	2412	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		20.00			20.00			20.00		20.00		23.0	
		11	2462		18.00			18.00			18.00		18.00		21.0	
	802.11n-HT20 MCS0	1	2412		17.50			17.50			17.50		17.50		20.5	
		6	2437		19.50			19.50			19.50		19.50		22.5	
		11	2462		16.00			16.00			16.00		16.00		19.0	
	802.11ac-VHT20 MCS0	1	2412	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	97.94
		6	2437		19.50			19.50			19.50		19.50		22.5	
		11	2462		16.00			16.00			16.00		16.00		19.0	
	802.11ac-VHT20 MCS0	1	2412		17.50			17.50			17.50		17.50		20.5	
		6	2437		19.50			19.50			19.50		19.50		22.5	
		11	2462		16.00			16.00			16.00		16.00		19.0	

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 %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		40	5200		17.50			17.50			17.50		20.5			
		44	5220		17.50			17.50			17.50		20.5			
		48	5240		17.50			17.50			17.50		20.5			
	802.11n-HT20 MCS0	36	5180	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		40	5200		17.50			17.50			17.50		20.5			
		44	5220		17.50			17.50			17.50		20.5			
		48	5240		17.50			17.50			17.50		20.5			
	802.11n-HT40 MCS0	38	5190	Not required	17.00	Not required	Not required	17.00	Not required	Not required	17.00	Not required	17.00	Not required	20.0	Not required
		46	5230		17.50			17.50			17.50		20.5			
		36	5180		17.50			17.50			17.50		20.5			
		40	5200		17.50			17.50			17.50		20.5			
	802.11ac-VHT20 MCS0	44	5220	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		48	5240		17.50			17.50			17.50		20.5			
		38	5190		17.00			17.00			17.00		20.0			
		46	5230		17.50			17.50			17.50		20.5			
	802.11ac-VHT40 MCS0	44	5220	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		48	5240		17.50			17.50			17.50		20.5			
38		5190	17.00		17.00			17.00			20.0					
46		5230	17.50		17.50			17.50			20.5					
802.11ac-VHT80 MCS0	42	5210	Not required	16.50	Not required	Not required	16.50	Not required	Not required	16.50	Not required	16.50	Not required	19.5	Not required	

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 %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		56	5280		17.50			17.50			17.50		17.50		20.5	
		60	5300		17.50			17.50			17.50		17.50		20.5	
		64	5320		17.50			17.50			17.50		17.50		20.5	
	802.11n-HT20 MCS0	52	5260	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		56	5280		17.50			17.50			17.50		17.50		20.5	
		60	5300		17.50			17.50			17.50		17.50		20.5	
		64	5320		17.50			17.50			17.50		17.50		20.5	
	802.11n-HT40 MCS0	54	5270	Not required	17.20	94.90	Not required	17.20	95.96	Not required	17.30	Not required	17.20	Not required	20.26	93.94
		62	5310		17.00			16.10			17.00		16.30		20.0	
		52	5260		17.50			17.50			17.50		17.50		20.5	
		56	5280		17.50			17.50			17.50		17.50		20.5	
	802.11ac-VHT20 MCS0	60	5300	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		64	5320		17.50			17.50			17.50		17.50		20.5	
		54	5270		17.50			17.50			17.50		17.50		20.5	
		62	5310		17.00			17.00			17.00		17.00		20.0	
	802.11ac-VHT40 MCS0	54	5270	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		62	5310		17.00			17.00			17.00		17.00		20.0	
		58	5290		16.00			16.00			16.00		16.00		19.0	



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 %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		116	5580		17.50			17.50			17.50		17.50		20.5	
		124	5620		17.50			17.50			17.50		17.50		20.5	
		132	5660		17.50			17.50			17.50		17.50		20.5	
		144	5720		17.50			17.50			17.50		17.50		20.5	
	802.11n-HT20 MCS0	100	5500	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		116	5580		17.50			17.50			17.50		17.50		20.5	
		124	5620		17.50			17.50			17.50		17.50		20.5	
		132	5660		17.50			17.50			17.50		17.50		20.5	
		144	5720		17.50			17.50			17.50		17.50		20.5	
	802.11n-HT40 MCS0	102	5510	15.40	16.00	94.90	15.30	16.00	95.96	15.90	16.00	15.60	16.00	18.76	19.0	93.94
		110	5550	17.10	17.50		16.40	17.50		17.50	17.50	16.70	17.50	20.13	20.5	
		126	5630	17.10	17.50		16.40	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		134	5670	17.20	17.50		16.80	17.50		17.50	17.50	16.70	17.50	20.13	20.5	
		142	5710	16.70	17.50		16.60	17.50		17.30	17.50	16.50	17.50	19.93	20.5	
	802.11ac-VHT20 MCS0	100	5500	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		116	5580		17.50			17.50			17.50		17.50		20.5	
		124	5620		17.50			17.50			17.50		17.50		20.5	
		132	5660		17.50			17.50			17.50		17.50		20.5	
		144	5720		17.50			17.50			17.50		17.50		20.5	
	802.11ac-VHT40 MCS0	102	5510	Not required	16.00	Not required	Not required	16.00	Not required	Not required	16.00	Not required	16.00	Not required	19.0	Not required
		110	5550		17.50			17.50			17.50		17.50		20.5	
		126	5630		17.50			17.50			17.50		17.50		20.5	
		134	5670		17.50			17.50			17.50		17.50		20.5	
		142	5710		17.50			17.50			17.50		17.50		20.5	
	802.11ac-VHT80 MCS0	106	5530	Not required	14.50	Not required	Not required	14.50	Not required	Not required	14.50	Not required	14.50	Not required	17.5	Not required
		122	5610		17.00			17.00			17.00		17.00		20.0	
		138	5690		17.00			17.00			17.00		17.00		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	19.30	19.50	98.54	19.10	19.50	98.54	19.50	19.50	18.50	19.50	22.04	22.5	98.07
		157	5785	19.20	19.50		19.30	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		165	5825	19.20	19.50		19.10	19.50		18.90	19.50	18.90	19.50	21.91	22.5	
	802.11n-HT20 MCS0	149	5745	Not required	19.50	Not required	Not required	19.50	Not required	Not required	19.50	Not required	19.50	Not required	22.5	Not required
		157	5785		19.50			19.50			19.50		19.50		22.5	
		165	5825		19.50			19.50			19.50		19.50		22.5	
	802.11n-HT40 MCS0	151	5755	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		159	5795		17.50			17.50			17.50		17.50		20.5	
		149	5745		19.50			19.50			19.50		19.50		22.5	
	802.11ac-VHT20 MCS0	157	5785	Not required	19.50	Not required	Not required	19.50	Not required	Not required	19.50	Not required	19.50	Not required	22.5	Not required
		165	5825		19.50			19.50			19.50		19.50		22.5	
		151	5755		17.50			17.50			17.50		17.50		20.5	
	802.11ac-VHT40 MCS0	159	5795	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		155	5775		17.00			17.00			17.00		17.00		20.0	
		155	5775		17.00			17.00			17.00		17.00		20.0	



Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	15.80	16.00	100.00	18.80	19.00	100.00	17.90	18.00	19.80	20.00	21.96	22.1	100.00
		6	2437	15.90	16.00		18.60	19.00		18.00	18.00	19.90	20.00	22.06	22.1	
		11	2462	15.80	16.00		18.90	19.00		17.80	18.00	19.80	20.00	21.92	22.1	
	802.11g 6Mbps	1	2412	Not required	16.00	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		16.00			19.00			18.00		20.00		22.1	
		11	2462		16.00			18.00			18.00		18.00		21.0	
	802.11n-HT20 MCS0	1	2412	Not required	16.00	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		16.00			19.00			18.00		19.50		21.8	
		11	2462		16.00			16.00			16.00		16.00		19.0	
	802.11ac-VHT20 MCS0	1	2412	Not required	16.00	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		16.00			19.00			18.00		19.50		21.8	
		11	2462		16.00			16.00			16.00		16.00		19.0	
	802.11ac-VHT20 MCS0	1	2412	Not required	16.00	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		16.00			19.00			18.00		19.50		21.8	
		11	2462		16.00			16.00			16.00		16.00		19.0	

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.50	Not required	19.6	Not required
		40	5200		15.50			17.00			15.50		17.50		19.6	
		44	5220		15.50			17.00			15.50		17.50		19.6	
		48	5240		15.50			17.00			15.50		17.50		19.6	
	802.11n-HT20 MCS0	36	5180	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.50	Not required	19.6	Not required
		40	5200		15.50			17.00			15.50		17.50		19.6	
		44	5220		15.50			17.00			15.50		17.50		19.6	
		48	5240		15.50			17.00			15.50		17.50		19.6	
	802.11n-HT40 MCS0	38	5190	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.00	Not required	19.3	Not required
		46	5230		15.50			17.00			15.50		17.50		19.6	
		36	5180		15.50			17.00			15.50		17.50		19.6	
		40	5200		15.50			17.00			15.50		17.50		19.6	
	802.11ac-VHT20 MCS0	44	5220	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.50	Not required	19.6	Not required
		48	5240		15.50			17.00			15.50		17.50		19.6	
		38	5190		15.50			17.00			15.50		17.00		19.3	
		46	5230		15.50			17.00			15.50		17.50		19.6	
	802.11ac-VHT40 MCS0	38	5190	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.00	Not required	19.3	Not required
		46	5230		15.50			17.00			15.50		17.50		19.6	
		44	5220		15.50			17.00			15.50		17.50		19.6	
		48	5240		15.50			17.00			15.50		17.50		19.6	
	802.11ac-VHT80 MCS0	42	5210	Not required	15.50	Not required	Not required	16.50	Not required	Not required	15.50	Not required	16.50	Not required	19.0	Not required
		42	5210		15.50			16.50			15.50		16.50		19.0	
		42	5210		15.50			16.50			15.50		16.50		19.0	
		42	5210		15.50			16.50			15.50		16.50		19.0	

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5280	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.50	Not required	19.6	Not required
		56	5280		15.50			17.00			15.50		17.50		19.6	
		60	5300		15.50			17.00			15.50		17.50		19.6	
		64	5320		15.50			17.00			15.50		17.50		19.6	
	802.11n-HT20 MCS0	52	5280	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.50	Not required	19.6	Not required
		56	5280		15.50			17.00			15.50		17.50		19.6	
		60	5300		15.50			17.00			15.50		17.50		19.6	
		64	5320		15.50			17.00			15.50		17.50		19.6	
	802.11n-HT40 MCS0	54	5270	Not required	15.50	Not required	Not required	16.60	95.96	Not required	15.30	Not required	17.20	Not required	19.36	93.94
		62	5310		15.50			16.10			15.50		17.00		19.3	
		52	5280		15.50			17.00			15.50		17.50		19.6	
		56	5280		15.50			17.00			15.50		17.50		19.6	
	802.11ac-VHT20 MCS0	60	5300	Not required	15.50	Not required	Not required	17.00	Not required	Not required	15.50	Not required	17.50	Not required	19.6	Not required
		64	5320		15.50			17.00			15.50		17.50		19.6	
		54	5270		15.50			17.00			15.50		17.50		19.6	
		62	5310		15.50			17.00			15.50		17.00		19.3	
	802.11ac-VHT40 MCS0	58	5290	Not required	15.50	Not required	Not required	16.00	Not required	Not required	15.50	Not required	16.00	Not required	18.8	Not required
		58	5290		15.50			16.00			15.50		16.00		18.8	
		58	5290		15.50			16.00			15.50		16.00		18.8	
		58	5290		15.50			16.00			15.50		16.00		18.8	



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		14.50			15.00			14.50		15.50		18.0	
		116	5580		14.50			15.00			14.50		15.50			
		124	5620		14.50			15.00			14.50		15.50			
		132	5660		14.50			15.00			14.50		15.50			
		144	5720		14.50			15.00			14.50		15.50			
	802.11n-HT20 MCS0	100	5500	14.50	15.00	14.50	15.50	18.0								
		116	5580	14.50	15.00	14.50	15.50	18.0								
		124	5620	14.50	15.00	14.50	15.50	18.0								
		132	5660	14.50	15.00	14.50	15.50	18.0								
		144	5720	14.50	15.00	14.50	15.50	18.0								
	802.11n-HT40 MCS0	102	5510	14.50	15.00	14.50	15.50	18.0								
		110	5550	14.50	15.00	14.50	15.50	18.0								
		126	5630	Not required	14.50	Not required	15.00	Not required	14.50	Not required	15.50	Not required	18.0	Not required		
		134	5670	14.50	15.00	14.50	15.50	18.0								
		142	5710	14.50	15.00	14.50	15.50	18.0								
	802.11ac-VHT20 MCS0	100	5500	14.50	15.00	14.50	15.50	18.0								
		116	5580	14.50	15.00	14.50	15.50	18.0								
		124	5620	14.50	15.00	14.50	15.50	18.0								
		132	5660	14.50	15.00	14.50	15.50	18.0								
		144	5720	14.50	15.00	14.50	15.50	18.0								
	802.11ac-VHT40 MCS0	102	5510	14.50	15.00	14.50	15.50	18.0								
		110	5550	14.50	15.00	14.50	15.50	18.0								
		126	5630	14.50	15.00	14.50	15.50	18.0								
		134	5670	14.50	15.00	14.50	15.50	18.0								
		142	5710	14.50	15.00	14.50	15.50	18.0								
	802.11ac-VHT80 MCS0	106	5530	14.00	14.50	86.00	13.70	14.50	86.00	14.30	14.50	14.40	14.50	17.31	17.5	86.00
		122	5610	14.50	14.50		14.30	14.50		15.10	15.50	17.73	18.0			
		138	5690	14.10	14.50		14.60	15.00		14.30	14.50	15.50	15.50	17.95	18.0	

5GHz WLAN		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		15.00			15.00			14.50		17.00		18.9	
		157	5785		15.00			15.00			14.50		17.00		18.9	
		165	5825		15.00			15.00			14.50		17.00		18.9	
	802.11n-HT20 MCS0	149	5745	15.00	15.00	14.50	17.00	18.9								
		157	5785	15.00	15.00	14.50	17.00	18.9								
		165	5825	15.00	15.00	14.50	17.00	18.9								
	802.11n-HT40 MCS0	151	5755	Not required	15.00	Not required	Not required	15.00	Not required	Not required	14.50	Not required	17.00	Not required	18.9	Not required
		159	5795	15.00	15.00	14.50	17.00	18.9								
		149	5745	15.00	15.00	14.50	17.00	18.9								
	802.11ac-VHT20 MCS0	157	5785	15.00	15.00	14.50	17.00	18.9								
		165	5825	15.00	15.00	14.50	17.00	18.9								
		151	5755	15.00	15.00	14.50	17.00	18.9								
	802.11ac-VHT40 MCS0	159	5795	15.00	15.00	14.50	17.00	18.9								
		155	5775	14.70	15.00	86.00	14.50	15.00	86.00	14.30	14.50	16.90	17.00	18.80	18.9	86.00



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	19.60	20.00	100.00	19.60	20.00	100.00	19.80	20.00	19.20	20.00	22.52	23.0	100.00					
		6	2437	19.50	20.00		19.60	20.00		19.90	20.00	19.40	20.00	22.67	23.0						
		11	2462	19.50	20.00		19.60	20.00		19.90	20.00	19.20	20.00	22.57	23.0						
	802.11g 6Mbps	1	2412	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		6	2437		20.00		20.00		20.00		20.00		23.0								
		11	2462		18.00		18.00		18.00		18.00		21.0								
	802.11n-HT20 MCS0	1	2412		17.50		17.50		17.50		17.50		20.5								
		6	2437		19.50		19.50		19.50		19.50		22.5								
		11	2462		16.00		16.00		16.00		16.00		19.0								
	802.11ac-VHT20 MCS0	1	2412		17.50		17.50		17.50		17.50		20.5								
		6	2437		19.50		19.50		19.50		19.50		22.5								
		11	2462		16.00				16.00				16.00		19.0						

Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3							
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %					
	802.11a 6Mbps	36	5180	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		40	5200		17.50			17.50			17.50		17.50		20.5						
		44	5220		17.50			17.50			17.50		17.50		20.5						
		48	5240		17.50			17.50			17.50		17.50		20.5						
	802.11n-HT20 MCS0	36	5180		17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		40	5200		17.50			17.50			17.50		17.50		20.5						
		44	5220		17.50			17.50			17.50		17.50		20.5						
		48	5240		17.50			17.50			17.50		17.50		20.5						
	802.11n-HT40 MCS0	38	5190	16.60	17.00	94.90	16.40	17.00	95.96	16.90	17.00	16.20	17.00	19.57	20.0	93.94					
		46	5230	17.00	17.50		16.90	17.50		17.30	17.50	16.70	17.50	20.02	20.5						
	802.11ac-VHT20 MCS0	36	5180	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		40	5200		17.50			17.50			17.50		17.50		20.5						
		44	5220		17.50			17.50			17.50		17.50		20.5						
		48	5240		17.50			17.50			17.50		17.50		20.5						
	802.11ac-VHT40 MCS0	38	5190	Not required	17.00	Not required	Not required	17.00	Not required	Not required	17.00	Not required	17.00	Not required	20.0	Not required					
		46	5230		17.50			17.50			17.50		17.50		20.5						
	802.11ac-VHT80 MCS0	42	5210		16.50			16.50			16.50		19.5								

Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3							
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %					
	802.11a 6Mbps	52	5260	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		56	5280		17.50			17.50			17.50		17.50		20.5						
		60	5300		17.50			17.50			17.50		17.50		20.5						
		64	5320		17.50			17.50			17.50		17.50		20.5						
	802.11n-HT20 MCS0	52	5260		17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		56	5280		17.50			17.50			17.50		17.50		20.5						
		60	5300		17.50			17.50			17.50		17.50		20.5						
		64	5320		17.50			17.50			17.50		17.50		20.5						
	802.11n-HT40 MCS0	54	5270	17.20	17.50	94.90	17.20	17.50	95.96	17.30	17.50	17.20	17.50	20.26	20.5	93.94					
		62	5310	16.40	17.00		16.10	17.00		16.20	17.00	16.30	17.00	19.26	20.0						
	802.11ac-VHT20 MCS0	52	5260	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		56	5280		17.50			17.50			17.50		17.50		20.5						
		60	5300		17.50			17.50			17.50		17.50		20.5						
		64	5320		17.50			17.50			17.50		17.50		20.5						
	802.11ac-VHT40 MCS0	54	5270		17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required					
		62	5310		17.00			17.00			17.00		17.00		20.0						
	802.11ac-VHT80 MCS0	58	5290		16.00			16.00			16.00		19.0								



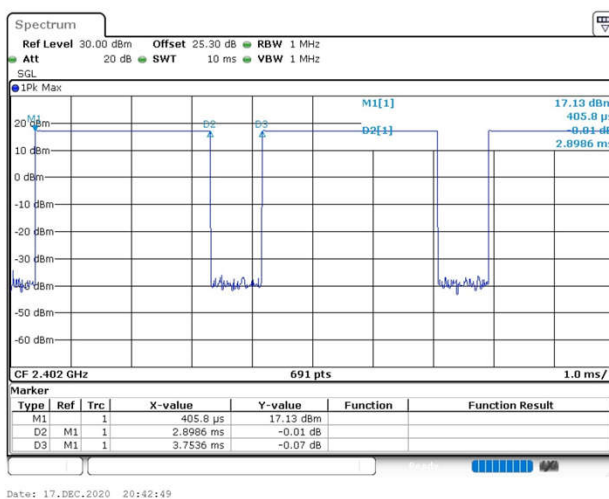
Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not required	17.50	Not required	15.00	15.00	Not required	17.50	17.50	17.50	17.50	20.5	20.5	Not required
		116	5580		17.50											
		124	5620		17.50											
		132	5660		17.50											
		144	5720		17.50											
	802.11n-HT20 MCS0	100	5500	Not required	17.50	Not required	15.00	15.00	Not required	17.50	17.50	17.50	17.50	20.5	20.5	Not required
		116	5580		17.50											
		124	5620		17.50											
		132	5660		17.50											
		144	5720		17.50											
	802.11n-HT40 MCS0	102	5510	15.40	16.00	94.90	Not required	15.00	Not required	15.90	16.00	15.60	16.00	18.76	19.0	93.94
		110	5550	17.10	17.50					17.50	17.50	16.70	17.50	20.13	20.5	
		126	5630	17.10	17.50					17.40	17.50	16.80	17.50	20.12	20.5	
		134	5670	17.20	17.50					17.50	17.50	16.70	17.50	20.13	20.5	
		142	5710	16.70	17.50					17.30	17.50	16.50	17.50	19.93	20.5	
	802.11ac-VHT20 MCS0	100	5500	Not required	17.50	Not required	15.00	15.00	Not required	17.50	17.50	17.50	17.50	20.5	20.5	Not required
		116	5580		17.50											
		124	5620		17.50											
		132	5660		17.50											
		144	5720		17.50											
	802.11ac-VHT40 MCS0	102	5510	Not required	16.00	Not required	15.00	15.00	Not required	16.00	16.00	16.00	16.00	19.0	20.5	Not required
		110	5550		17.50											
		126	5630		17.50											
		134	5670		17.50											
		142	5710		17.50											
	802.11ac-VHT80 MCS0	106	5530	Not required	14.50	Not required	13.70	14.50	86.00	14.50	14.50	14.50	14.50	17.5	20.0	Not required
		122	5610		17.00		14.70	15.00								
		138	5690		17.00		14.70	15.00								

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 %
5.8GHz WLAN	802.11a 6Mbps	149	5745	19.30	19.50	98.54	Not required	17.50	Not required	19.50	19.50	18.50	19.50	22.04	22.5	98.07
		157	5785	19.20	19.50					19.40	19.50	19.00	19.50	22.21	22.5	
		165	5825	19.20	19.50					18.90	19.50	18.90	19.50	21.91	22.5	
	802.11n-HT20 MCS0	149	5745	Not required	19.50	Not required	17.20	17.50	95.96	19.50	19.50	19.50	19.50	22.5	22.5	Not required
		157	5785		19.50											
		165	5825		19.50											
	802.11n-HT40 MCS0	151	5755	Not required	17.50	Not required	17.20	17.50	95.96	17.50	17.50	17.50	17.50	20.5	20.5	Not required
		159	5795		17.50											
	802.11ac-VHT20 MCS0	149	5745	Not required	19.50	Not required	Not required	17.50	Not required	19.50	19.50	19.50	19.50	22.5	22.5	Not required
		157	5785		19.50											
		165	5825		19.50											
	802.11ac-VHT40 MCS0	151	5755	Not required	17.50	Not required	Not required	17.50	Not required	17.50	17.50	17.50	17.50	20.5	20.5	Not required
		159	5795		17.50											
	802.11ac-VHT80 MCS0	155	5775	Not required	17.00	Not required	Not required	17.00	Not required	17.00	17.00	17.00	17.00	20.0	20.0	Not required

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	17.47	17.48	17.49
	CH 39	2441	17.70	17.77	17.87
	CH 78	2480	16.54	17.15	17.20
Tune-up Limit			18.00	18.00	18.00

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	17.80	17.80
	CH 19	2440	17.80	17.80
	CH 39	2480	17.40	17.60
Tune-up Limit			18	18

BT Duty cycle



Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	14.00	12.30	11.90
	CH 39	2441	14.30	12.90	12.60
	CH 78	2480	14.20	13.80	12.50
Tune-up Limit			14.50	14.50	14.50

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	13.40	13.30
	CH 19	2440	13.90	13.70
	CH 39	2480	13.70	13.60
Tune-up Limit			14.50	14.50

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	17.47	17.48	17.49
	CH 39	2441	17.70	17.77	17.87
	CH 78	2480	16.54	17.15	17.20
Tune-up Limit			18.00	18.00	18.00

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	17.80	17.80
	CH 19	2440	17.80	17.80
	CH 39	2480	17.40	17.60
Tune-up Limit			18.00	18.00