

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	33.00	32.95	32.66	33.50	24.00	23.95	23.66	24.50
GPRS 1 Tx slot	33.01	32.96	32.68	33.50	24.01	23.96	23.68	24.50
GPRS 2 Tx slots	32.05	31.81	31.55	32.50	26.05	25.81	25.55	26.50
GPRS 3 Tx slots	29.98	29.68	29.38	30.50	25.72	25.42	25.12	26.24
GPRS 4 Tx slots	28.49	28.19	27.90	29.50	25.49	25.19	24.90	26.50
EDGE 1 Tx slot	26.76	26.50	26.18	27.50	17.76	17.50	17.18	18.50
EDGE 2 Tx slots	26.36	26.15	25.74	27.00	20.36	20.15	19.74	21.00
EDGE 3 Tx slots	24.51	24.25	24.10	25.00	20.25	19.99	19.84	20.74
EDGE 4 Tx slots	22.36	22.51	21.92	23.00	19.36	19.51	18.92	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.42	30.08	29.96	30.50	20.42	21.08	20.96	21.50
GPRS 1 Tx slot	29.43	30.11	29.99	30.50	20.43	21.11	20.99	21.50
GPRS 2 Tx slots	29.01	29.38	29.20	29.70	23.01	23.38	23.20	23.70
GPRS 3 Tx slots	27.03	27.74	27.61	28.00	22.77	23.48	23.35	23.74
GPRS 4 Tx slots	25.99	26.75	26.32	27.00	22.99	23.75	23.32	24.00
EDGE 1 Tx slot	25.82	26.18	26.02	26.50	16.82	17.18	17.02	17.50
EDGE 2 Tx slots	25.41	25.61	25.39	26.00	19.41	19.61	19.39	20.00
EDGE 3 Tx slots	24.44	24.47	24.22	25.00	20.18	20.21	19.96	20.74
EDGE 4 Tx slots	23.08	23.62	22.53	24.00	20.08	20.62	19.53	21.00

Ant 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.78	32.70	32.44	33.50	23.78	23.70	23.44	24.50
GPRS 1 Tx slot	32.79	32.71	32.45	33.50	23.79	23.71	23.45	24.50
GPRS 2 Tx slots	31.93	31.65	31.36	32.50	25.93	25.65	25.36	26.50
GPRS 3 Tx slots	30.01	29.62	29.22	30.50	25.75	25.36	24.96	26.24
GPRS 4 Tx slots	28.60	28.17	27.76	29.50	25.60	25.17	24.76	26.50
EDGE 1 Tx slot	26.86	26.44	26.01	27.50	17.86	17.44	17.01	18.50
EDGE 2 Tx slots	26.33	26.10	25.60	27.00	20.33	20.10	19.60	21.00
EDGE 3 Tx slots	24.44	24.06	23.92	25.00	20.18	19.80	19.66	20.74
EDGE 4 Tx slots	22.24	22.33	21.73	23.00	19.24	19.33	18.73	20.00
Ant 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.39	29.75	29.46	30.00	20.39	20.75	20.46	21.00
GPRS 1 Tx slot	29.40	29.77	29.47	30.00	20.40	20.77	20.47	21.00
GPRS 2 Tx slots	28.79	29.00	28.76	29.20	22.79	23.00	22.76	23.20
GPRS 3 Tx slots	27.24	27.48	27.24	27.50	22.98	23.22	22.98	23.24
GPRS 4 Tx slots	26.14	26.20	25.61	26.50	23.14	23.20	22.61	23.50
EDGE 1 Tx slot	25.56	25.65	25.47	26.00	16.56	16.65	16.47	17.00
EDGE 2 Tx slots	25.25	25.11	24.91	25.50	19.25	19.11	18.91	19.50
EDGE 3 Tx slots	24.00	23.73	23.58	24.50	19.74	19.47	19.32	20.24
EDGE 4 Tx slots	22.87	23.11	22.03	23.50	19.87	20.11	19.03	20.50

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	33.00	32.95	32.66	33.50	24.00	23.95	23.66	24.50
GPRS 1 Tx slot	33.01	32.96	32.68	33.50	24.01	23.96	23.68	24.50
GPRS 2 Tx slots	32.05	31.81	31.55	32.50	26.05	25.81	25.55	26.50
GPRS 3 Tx slots	29.98	29.68	29.38	30.50	25.72	25.42	25.12	26.24
GPRS 4 Tx slots	28.49	28.19	27.90	29.50	25.49	25.19	24.90	26.50
EDGE 1 Tx slot	26.76	26.50	26.18	27.50	17.76	17.50	17.18	18.50
EDGE 2 Tx slots	26.36	26.15	25.74	27.00	20.36	20.15	19.74	21.00
EDGE 3 Tx slots	24.51	24.25	24.10	25.00	20.25	19.99	19.84	20.74
EDGE 4 Tx slots	22.36	22.51	21.92	23.00	19.36	19.51	18.92	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.42	30.08	29.96	30.50	20.42	21.08	20.96	21.50
GPRS 1 Tx slot	29.43	30.11	29.99	30.50	20.43	21.11	20.99	21.50
GPRS 2 Tx slots	29.01	29.38	29.20	29.70	23.01	23.38	23.20	23.70
GPRS 3 Tx slots	27.03	27.74	27.61	28.00	22.77	23.48	23.35	23.74
GPRS 4 Tx slots	25.99	26.75	26.32	27.00	22.99	23.75	23.32	24.00
EDGE 1 Tx slot	25.82	26.18	26.02	26.50	16.82	17.18	17.02	17.50
EDGE 2 Tx slots	25.41	25.61	25.39	26.00	19.41	19.61	19.39	20.00
EDGE 3 Tx slots	24.44	24.47	24.22	25.00	20.18	20.21	19.96	20.74
EDGE 4 Tx slots	23.08	23.62	22.53	24.00	20.08	20.62	19.53	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	31.61	31.95	31.55	33.30	22.61	22.95	22.55	24.30
GPRS 1 Tx slot	31.63	31.96	31.55	33.30	22.63	22.96	22.55	24.30
GPRS 2 Tx slots	28.86	28.92	28.70	30.30	22.86	22.92	22.70	24.30
GPRS 3 Tx slots	27.06	27.02	26.83	28.50	22.80	22.76	22.57	24.24
GPRS 4 Tx slots	25.85	25.90	25.60	27.30	22.85	22.90	22.60	24.30
EDGE 1 Tx slot	25.62	25.80	25.60	27.50	16.62	16.80	16.60	18.50
EDGE 2 Tx slots	25.59	25.52	25.39	27.00	19.59	19.52	19.39	21.00
EDGE 3 Tx slots	23.72	23.94	23.72	25.00	19.46	19.68	19.46	20.74
EDGE 4 Tx slots	21.55	21.90	21.39	23.00	18.55	18.90	18.39	20.00
Ant 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.39	29.75	29.46	30.00	20.39	20.75	20.46	21.00
GPRS 1 Tx slot	29.40	29.77	29.47	30.00	20.40	20.77	20.47	21.00
GPRS 2 Tx slots	28.79	29.00	28.76	29.20	22.79	23.00	22.76	23.20
GPRS 3 Tx slots	27.24	27.48	27.24	27.50	22.98	23.22	22.98	23.24
GPRS 4 Tx slots	26.14	26.20	25.61	26.50	23.14	23.20	22.61	23.50
EDGE 1 Tx slot	25.56	25.65	25.47	26.00	16.56	16.65	16.47	17.00
EDGE 2 Tx slots	25.25	25.11	24.91	25.50	19.25	19.11	18.91	19.50
EDGE 3 Tx slots	24.00	23.73	23.58	24.50	19.74	19.47	19.32	20.24
EDGE 4 Tx slots	22.87	23.11	22.03	23.50	19.87	20.11	19.03	20.50

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	33.00	32.95	32.66	33.50	24.00	23.95	23.66	24.50
GPRS 1 Tx slot	33.01	32.96	32.68	33.50	24.01	23.96	23.68	24.50
GPRS 2 Tx slots	32.05	31.81	31.55	32.50	26.05	25.81	25.55	26.50
GPRS 3 Tx slots	29.98	29.68	29.38	30.50	25.72	25.42	25.12	26.24
GPRS 4 Tx slots	28.49	28.19	27.90	29.50	25.49	25.19	24.90	26.50
EDGE 1 Tx slot	26.76	26.50	26.18	27.50	17.76	17.50	17.18	18.50
EDGE 2 Tx slots	26.36	26.15	25.74	27.00	20.36	20.15	19.74	21.00
EDGE 3 Tx slots	24.51	24.25	24.10	25.00	20.25	19.99	19.84	20.74
EDGE 4 Tx slots	22.36	22.51	21.92	23.00	19.36	19.51	18.92	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.42	30.08	29.96	30.50	20.42	21.08	20.96	21.50
GPRS 1 Tx slot	29.43	30.11	29.99	30.50	20.43	21.11	20.99	21.50
GPRS 2 Tx slots	29.01	29.38	29.20	29.70	23.01	23.38	23.20	23.70
GPRS 3 Tx slots	27.03	27.74	27.61	28.00	22.77	23.48	23.35	23.74
GPRS 4 Tx slots	25.99	26.75	26.32	27.00	22.99	23.75	23.32	24.00
EDGE 1 Tx slot	25.82	26.18	26.02	26.50	16.82	17.18	17.02	17.50
EDGE 2 Tx slots	25.41	25.61	25.39	26.00	19.41	19.61	19.39	20.00
EDGE 3 Tx slots	24.44	24.47	24.22	25.00	20.18	20.21	19.96	20.74
EDGE 4 Tx slots	23.08	23.62	22.53	24.00	20.08	20.62	19.53	21.00

Ant 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.78	32.70	32.44	33.50	23.78	23.70	23.44	24.50
GPRS 1 Tx slot	32.79	32.71	32.45	33.50	23.79	23.71	23.45	24.50
GPRS 2 Tx slots	31.93	31.65	31.36	32.50	25.93	25.65	25.36	26.50
GPRS 3 Tx slots	30.01	29.62	29.22	30.50	25.75	25.36	24.96	26.24
GPRS 4 Tx slots	28.60	28.17	27.76	29.50	25.60	25.17	24.76	26.50
EDGE 1 Tx slot	26.86	26.44	26.01	27.50	17.86	17.44	17.01	18.50
EDGE 2 Tx slots	26.33	26.10	25.60	27.00	20.33	20.10	19.60	21.00
EDGE 3 Tx slots	24.44	24.06	23.92	25.00	20.18	19.80	19.66	20.74
EDGE 4 Tx slots	22.24	22.33	21.73	23.00	19.24	19.33	18.73	20.00
Ant 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.80	28.26	27.88	29.30	18.80	19.26	18.88	20.30
GPRS 1 Tx slot	27.81	28.27	27.90	29.30	18.81	19.27	18.90	20.30
GPRS 2 Tx slots	24.95	25.14	24.89	26.30	18.95	19.14	18.89	20.30
GPRS 3 Tx slots	23.08	23.42	23.03	24.50	18.82	19.16	18.77	20.24
GPRS 4 Tx slots	21.74	22.09	21.72	23.30	18.74	19.09	18.72	20.30
EDGE 1 Tx slot	25.74	25.85	25.57	26.00	16.74	16.85	16.57	17.00
EDGE 2 Tx slots	24.91	24.88	24.52	25.50	18.91	18.88	18.52	19.50
EDGE 3 Tx slots	22.98	23.27	22.50	24.50	18.72	19.01	18.24	20.24
EDGE 4 Tx slots	21.67	21.56	20.58	22.50	18.67	18.56	17.58	19.50

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	33.00	32.95	32.66	33.50	24.00	23.95	23.66	24.50
GPRS 1 Tx slot	33.01	32.96	32.68	33.50	24.01	23.96	23.68	24.50
GPRS 2 Tx slots	32.05	31.81	31.55	32.50	26.05	25.81	25.55	26.50
GPRS 3 Tx slots	29.98	29.68	29.38	30.50	25.72	25.42	25.12	26.24
GPRS 4 Tx slots	28.49	28.19	27.90	29.50	25.49	25.19	24.90	26.50
EDGE 1 Tx slot	26.76	26.50	26.18	27.50	17.76	17.50	17.18	18.50
EDGE 2 Tx slots	26.36	26.15	25.74	27.00	20.36	20.15	19.74	21.00
EDGE 3 Tx slots	24.51	24.25	24.10	25.00	20.25	19.99	19.84	20.74
EDGE 4 Tx slots	22.36	22.51	21.92	23.00	19.36	19.51	18.92	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.42	30.08	29.96	30.50	20.42	21.08	20.96	21.50
GPRS 1 Tx slot	29.43	30.11	29.99	30.50	20.43	21.11	20.99	21.50
GPRS 2 Tx slots	29.01	29.38	29.20	29.70	23.01	23.38	23.20	23.70
GPRS 3 Tx slots	27.03	27.74	27.61	28.00	22.77	23.48	23.35	23.74
GPRS 4 Tx slots	25.99	26.75	26.32	27.00	22.99	23.75	23.32	24.00
EDGE 1 Tx slot	25.82	26.18	26.02	26.50	16.82	17.18	17.02	17.50
EDGE 2 Tx slots	25.41	25.61	25.39	26.00	19.41	19.61	19.39	20.00
EDGE 3 Tx slots	24.44	24.47	24.22	25.00	20.18	20.21	19.96	20.74
EDGE 4 Tx slots	23.08	23.62	22.53	24.00	20.08	20.62	19.53	21.00

Ant 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.78	32.70	32.44	33.50	23.78	23.70	23.44	24.50
GPRS 1 Tx slot	32.79	32.71	32.45	33.50	23.79	23.71	23.45	24.50
GPRS 2 Tx slots	31.93	31.65	31.36	32.50	25.93	25.65	25.36	26.50
GPRS 3 Tx slots	30.01	29.62	29.22	30.50	25.75	25.36	24.96	26.24
GPRS 4 Tx slots	28.60	28.17	27.76	29.50	25.60	25.17	24.76	26.50
EDGE 1 Tx slot	26.86	26.44	26.01	27.50	17.86	17.44	17.01	18.50
EDGE 2 Tx slots	26.33	26.10	25.60	27.00	20.33	20.10	19.60	21.00
EDGE 3 Tx slots	24.44	24.06	23.92	25.00	20.18	19.80	19.66	20.74
EDGE 4 Tx slots	22.24	22.33	21.73	23.00	19.24	19.33	18.73	20.00
Ant 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.80	28.26	27.88	28.50	18.80	19.26	18.88	19.50
GPRS 1 Tx slot	27.81	28.27	27.90	28.50	18.81	19.27	18.90	19.50
GPRS 2 Tx slots	24.95	25.14	24.89	25.50	18.95	19.14	18.89	19.50
GPRS 3 Tx slots	23.08	23.42	23.03	23.70	18.82	19.16	18.77	19.44
GPRS 4 Tx slots	21.74	22.09	21.72	22.50	18.74	19.09	18.72	19.50
EDGE 1 Tx slot	25.74	25.85	25.57	26.00	16.74	16.85	16.57	17.00
EDGE 2 Tx slots	24.91	24.88	24.52	25.50	18.91	18.88	18.52	19.50
EDGE 3 Tx slots	22.98	23.27	22.50	23.70	18.72	19.01	18.24	19.44
EDGE 4 Tx slots	21.67	21.56	20.58	22.50	18.67	18.56	17.58	19.50

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	33.00	32.95	32.66	33.50	24.00	23.95	23.66	24.50
GPRS 1 Tx slot	33.01	32.96	32.68	33.50	24.01	23.96	23.68	24.50
GPRS 2 Tx slots	32.05	31.81	31.55	32.50	26.05	25.81	25.55	26.50
GPRS 3 Tx slots	29.98	29.68	29.38	30.50	25.72	25.42	25.12	26.24
GPRS 4 Tx slots	28.49	28.19	27.90	29.50	25.49	25.19	24.90	26.50
EDGE 1 Tx slot	26.76	26.50	26.18	27.50	17.76	17.50	17.18	18.50
EDGE 2 Tx slots	26.36	26.15	25.74	27.00	20.36	20.15	19.74	21.00
EDGE 3 Tx slots	24.51	24.25	24.10	25.00	20.25	19.99	19.84	20.74
EDGE 4 Tx slots	22.36	22.51	21.92	23.00	19.36	19.51	18.92	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.42	30.08	29.96	30.50	20.42	21.08	20.96	21.50
GPRS 1 Tx slot	29.43	30.11	29.99	30.50	20.43	21.11	20.99	21.50
GPRS 2 Tx slots	29.01	29.38	29.20	29.70	23.01	23.38	23.20	23.70
GPRS 3 Tx slots	27.03	27.74	27.61	28.00	22.77	23.48	23.35	23.74
GPRS 4 Tx slots	25.99	26.75	26.32	27.00	22.99	23.75	23.32	24.00
EDGE 1 Tx slot	25.82	26.18	26.02	26.50	16.82	17.18	17.02	17.50
EDGE 2 Tx slots	25.41	25.61	25.39	26.00	19.41	19.61	19.39	20.00
EDGE 3 Tx slots	24.44	24.47	24.22	25.00	20.18	20.21	19.96	20.74
EDGE 4 Tx slots	23.08	23.62	22.53	24.00	20.08	20.62	19.53	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	31.61	31.95	31.55	32.50	22.61	22.95	22.55	23.50
GPRS 1 Tx slot	31.63	31.96	31.55	32.50	22.63	22.96	22.55	23.50
GPRS 2 Tx slots	28.86	28.92	28.70	29.50	22.86	22.92	22.70	23.50
GPRS 3 Tx slots	27.06	27.02	26.83	27.70	22.80	22.76	22.57	23.44
GPRS 4 Tx slots	25.85	25.90	25.60	26.50	22.85	22.90	22.60	23.50
EDGE 1 Tx slot	25.62	25.80	25.60	27.50	16.62	16.80	16.60	18.50
EDGE 2 Tx slots	25.59	25.52	25.39	27.00	19.59	19.52	19.39	21.00
EDGE 3 Tx slots	23.72	23.94	23.72	25.00	19.46	19.68	19.46	20.74
EDGE 4 Tx slots	21.55	21.90	21.39	23.00	18.55	18.90	18.39	20.00
Ant 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.39	29.75	29.46	30.00	20.39	20.75	20.46	21.00
GPRS 1 Tx slot	29.40	29.77	29.47	30.00	20.40	20.77	20.47	21.00
GPRS 2 Tx slots	28.79	29.00	28.76	29.20	22.79	23.00	22.76	23.20
GPRS 3 Tx slots	27.24	27.48	27.24	27.50	22.98	23.22	22.98	23.24
GPRS 4 Tx slots	26.14	26.20	25.61	26.50	23.14	23.20	22.61	23.50
EDGE 1 Tx slot	25.56	25.65	25.47	26.00	16.56	16.65	16.47	17.00
EDGE 2 Tx slots	25.25	25.11	24.91	25.50	19.25	19.11	18.91	19.50
EDGE 3 Tx slots	24.00	23.73	23.58	24.50	19.74	19.47	19.32	20.24
EDGE 4 Tx slots	22.87	23.11	22.03	23.50	19.87	20.11	19.03	20.50

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	33.00	32.95	32.66	33.50	24.00	23.95	23.66	24.50
GPRS 1 Tx slot	33.01	32.96	32.68	33.50	24.01	23.96	23.68	24.50
GPRS 2 Tx slots	32.05	31.81	31.55	32.50	26.05	25.81	25.55	26.50
GPRS 3 Tx slots	29.98	29.68	29.38	30.50	25.72	25.42	25.12	26.24
GPRS 4 Tx slots	28.49	28.19	27.90	29.50	25.49	25.19	24.90	26.50
EDGE 1 Tx slot	26.76	26.50	26.18	27.50	17.76	17.50	17.18	18.50
EDGE 2 Tx slots	26.36	26.15	25.74	27.00	20.36	20.15	19.74	21.00
EDGE 3 Tx slots	24.51	24.25	24.10	25.00	20.25	19.99	19.84	20.74
EDGE 4 Tx slots	22.36	22.51	21.92	23.00	19.36	19.51	18.92	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.42	30.08	29.96	30.50	20.42	21.08	20.96	21.50
GPRS 1 Tx slot	29.43	30.11	29.99	30.50	20.43	21.11	20.99	21.50
GPRS 2 Tx slots	29.01	29.38	29.20	29.70	23.01	23.38	23.20	23.70
GPRS 3 Tx slots	27.03	27.74	27.61	28.00	22.77	23.48	23.35	23.74
GPRS 4 Tx slots	25.99	26.75	26.32	27.00	22.99	23.75	23.32	24.00
EDGE 1 Tx slot	25.82	26.18	26.02	26.50	16.82	17.18	17.02	17.50
EDGE 2 Tx slots	25.41	25.61	25.39	26.00	19.41	19.61	19.39	20.00
EDGE 3 Tx slots	24.44	24.47	24.22	25.00	20.18	20.21	19.96	20.74
EDGE 4 Tx slots	23.08	23.62	22.53	24.00	20.08	20.62	19.53	21.00

Ant 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.78	32.70	32.44	33.50	23.78	23.70	23.44	24.50
GPRS 1 Tx slot	32.79	32.71	32.45	33.50	23.79	23.71	23.45	24.50
GPRS 2 Tx slots	31.93	31.65	31.36	32.50	25.93	25.65	25.36	26.50
GPRS 3 Tx slots	30.01	29.62	29.22	30.50	25.75	25.36	24.96	26.24
GPRS 4 Tx slots	28.60	28.17	27.76	29.50	25.60	25.17	24.76	26.50
EDGE 1 Tx slot	26.86	26.44	26.01	27.50	17.86	17.44	17.01	18.50
EDGE 2 Tx slots	26.33	26.10	25.60	27.00	20.33	20.10	19.60	21.00
EDGE 3 Tx slots	24.44	24.06	23.92	25.00	20.18	19.80	19.66	20.74
EDGE 4 Tx slots	22.24	22.33	21.73	23.00	19.24	19.33	18.73	20.00
Ant 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.80	28.26	27.88	28.50	18.80	19.26	18.88	19.50
GPRS 1 Tx slot	27.81	28.27	27.90	28.50	18.81	19.27	18.90	19.50
GPRS 2 Tx slots	24.95	25.14	24.89	25.50	18.95	19.14	18.89	19.50
GPRS 3 Tx slots	23.08	23.42	23.03	23.70	18.82	19.16	18.77	19.44
GPRS 4 Tx slots	21.74	22.09	21.72	22.50	18.74	19.09	18.72	19.50
EDGE 1 Tx slot	25.74	25.85	25.57	26.00	16.74	16.85	16.57	17.00
EDGE 2 Tx slots	24.91	24.88	24.52	25.50	18.91	18.88	18.52	19.50
EDGE 3 Tx slots	22.98	23.27	22.50	23.70	18.72	19.01	18.24	19.44
EDGE 4 Tx slots	21.67	21.56	20.58	22.50	18.67	18.56	17.58	19.50

Transmit Antenna		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	24.75	24.95	25.07	25.70	24.77	24.92	24.95	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.76	24.95	25.08	25.70	24.80	24.93	24.96	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	24.19	23.99	24.03	24.70	23.85	23.91	23.95	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	24.16	24.00	24.06	24.70	23.85	23.91	23.93	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	23.64	23.48	23.55	24.20	23.38	23.38	23.46	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	23.70	23.52	23.54	24.20	23.35	23.39	23.46	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	24.14	23.95	23.94	24.70	23.79	23.89	23.92	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	24.14	23.94	23.96	24.70	23.80	23.82	23.92	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.58	23.44	23.50	24.20	23.28	23.33	23.38	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.67	23.45	23.47	24.20	23.29	23.29	23.37	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	23.80	23.98	24.01	24.70	23.97	23.95	24.03	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	21.81	21.61	21.69	22.70	21.45	21.48	21.61	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	22.76	22.58	22.64	23.70	22.50	22.58	22.63	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	21.82	21.59	21.66	22.70	21.52	21.50	21.60	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	23.80	23.55	23.65	24.70	23.50	24.00	23.60	24.70	23.30	23.40	23.22	24.00

Transmit Antenna		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.83	24.97	25.01	25.70	24.59	24.59	24.66	25.70	24.33	24.33	24.31	25.00
3GPP Rel 99	RMC 12.2Kbps	24.84	24.97	25.02	25.70	24.60	24.59	24.67	25.70	24.34	24.36	24.35	25.00
3GPP Rel 6	HSDPA Subtest-1	24.04	24.14	24.23	24.70	23.73	23.76	23.82	24.70	23.35	23.39	23.37	24.00
3GPP Rel 6	HSDPA Subtest-2	24.04	24.12	24.22	24.70	23.76	23.74	23.83	24.70	23.37	23.41	23.38	24.00
3GPP Rel 6	HSDPA Subtest-3	23.51	23.61	23.68	24.20	23.25	23.22	23.35	24.20	22.86	22.91	22.85	23.50
3GPP Rel 6	HSDPA Subtest-4	23.54	23.61	23.71	24.20	23.21	23.28	23.35	24.20	22.84	22.92	22.86	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.99	24.06	24.21	24.70	23.72	23.67	23.81	24.70	23.32	23.39	23.37	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.95	24.02	24.22	24.70	23.68	23.71	23.78	24.70	23.30	23.31	23.35	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.41	23.55	23.60	24.20	23.23	23.17	23.28	24.20	22.78	22.81	22.78	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.44	23.57	23.63	24.20	23.16	23.19	23.35	24.20	22.84	22.88	22.84	23.50
3GPP Rel 6	HSUPA Subtest-1	23.70	24.09	24.17	24.70	23.74	23.79	23.86	24.70	23.34	23.35	23.27	24.00
3GPP Rel 6	HSUPA Subtest-2	21.73	21.77	21.89	22.70	21.44	21.44	21.54	22.70	21.32	21.36	21.27	22.00
3GPP Rel 6	HSUPA Subtest-3	22.77	22.83	22.88	23.70	22.53	22.47	22.46	23.70	22.34	22.36	22.33	23.00
3GPP Rel 6	HSUPA Subtest-4	21.73	21.79	21.91	22.70	21.50	21.50	21.60	22.70	21.34	21.36	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	23.80	23.80	23.90	24.70	23.50	23.50	23.60	24.70	23.30	23.40	23.30	24.00

Transmit Antenna		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	24.75	24.95	25.07	25.70	24.77	24.92	24.95	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.76	24.95	25.08	25.70	24.80	24.93	24.96	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	24.19	23.99	24.03	24.70	23.85	23.91	23.95	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	24.16	24.00	24.06	24.70	23.85	23.91	23.93	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	23.64	23.48	23.55	24.20	23.38	23.38	23.46	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	23.70	23.52	23.54	24.20	23.35	23.39	23.46	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	24.14	23.95	23.94	24.70	23.79	23.89	23.92	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	24.14	23.94	23.96	24.70	23.80	23.82	23.92	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.58	23.44	23.50	24.20	23.28	23.33	23.38	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.67	23.45	23.47	24.20	23.29	23.29	23.37	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	23.80	23.98	24.01	24.70	23.97	23.95	24.03	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	21.81	21.61	21.69	22.70	21.45	21.48	21.61	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	22.76	22.58	22.64	23.70	22.50	22.58	22.63	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	21.82	21.59	21.66	22.70	21.52	21.50	21.60	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	23.80	23.55	23.65	24.70	23.50	24.00	23.60	24.70	23.30	23.40	23.22	24.00

Transmit Antenna		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.83	24.97	25.01	25.70	24.59	24.59	24.66	25.70	23.02	23.01	23.02	24.40
3GPP Rel 99	RMC 12.2Kbps	24.84	24.97	25.02	25.70	24.60	24.59	24.67	25.70	23.05	23.06	23.04	24.40
3GPP Rel 6	HSDPA Subtest-1	24.04	24.14	24.23	24.70	23.73	23.76	23.82	24.70	22.03	22.07	22.05	23.40
3GPP Rel 6	HSDPA Subtest-2	24.04	24.12	24.22	24.70	23.76	23.74	23.83	24.70	22.06	22.05	22.03	23.40
3GPP Rel 6	HSDPA Subtest-3	23.51	23.61	23.68	24.20	23.25	23.22	23.35	24.20	21.56	21.58	21.51	22.90
3GPP Rel 6	HSDPA Subtest-4	23.54	23.61	23.71	24.20	23.21	23.28	23.35	24.20	21.51	21.56	21.56	22.90
3GPP Rel 8	DC-HSDPA Subtest-1	23.99	24.06	24.21	24.70	23.72	23.67	23.81	24.70	21.95	22.07	21.99	23.40
3GPP Rel 8	DC-HSDPA Subtest-2	23.95	24.02	24.22	24.70	23.68	23.71	23.78	24.70	22.01	21.95	22.02	23.40
3GPP Rel 8	DC-HSDPA Subtest-3	23.41	23.55	23.60	24.20	23.23	23.17	23.28	24.20	21.47	21.56	21.47	22.90
3GPP Rel 8	DC-HSDPA Subtest-4	23.44	23.57	23.63	24.20	23.16	23.19	23.35	24.20	21.46	21.46	21.51	22.90
3GPP Rel 6	HSUPA Subtest-1	23.70	24.09	24.17	24.70	23.74	23.79	23.86	24.70	22.06	22.09	22.04	23.40
3GPP Rel 6	HSUPA Subtest-2	21.73	21.77	21.89	22.70	21.44	21.44	21.54	22.70	20.08	20.06	19.96	21.40
3GPP Rel 6	HSUPA Subtest-3	22.77	22.83	22.88	23.70	22.53	22.47	22.46	23.70	21.04	21.09	21.07	22.40
3GPP Rel 6	HSUPA Subtest-4	21.73	21.79	21.91	22.70	21.50	21.50	21.60	22.70	20.07	20.08	20.01	21.40
3GPP Rel 6	HSUPA Subtest-5	23.80	23.80	23.90	24.70	23.50	23.50	23.60	24.70	22.00	22.10	22.10	23.40

Transmit Antenna		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	24.02	24.20	24.20	25.50	24.38	24.41	24.44	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.02	24.21	24.22	25.50	24.39	24.44	24.45	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.20	23.21	24.50	23.40	23.40	23.42	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	23.42	23.15	23.20	24.50	23.36	23.43	23.46	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.68	22.73	24.00	22.88	22.89	22.93	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	22.90	22.71	22.73	24.00	22.85	22.92	22.92	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.34	23.20	23.16	24.50	23.34	23.32	23.39	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.33	23.05	23.10	24.50	23.29	23.37	23.37	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.79	22.60	22.68	24.00	22.81	22.86	22.87	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.89	22.66	22.65	24.00	22.78	22.87	22.88	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	22.88	23.14	23.19	24.50	23.35	23.38	23.41	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	20.69	20.68	22.50	20.98	20.90	21.01	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	21.88	21.69	21.74	23.50	21.94	21.98	22.08	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	20.71	20.77	22.50	20.97	20.99	21.04	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	22.70	22.70	24.50	23.00	23.00	23.00	24.70	23.30	23.40	23.22	24.00

Transmit Antenna		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	19.75	19.77	19.77	21.00	19.80	19.81	19.84	21.40	24.33	24.33	24.31	25.00
3GPP Rel 99	RMC 12.2Kbps	19.76	19.78	19.78	21.00	19.82	19.84	19.85	21.40	24.34	24.36	24.35	25.00
3GPP Rel 6	HSDPA Subtest-1	18.71	18.81	18.80	20.00	18.84	18.80	18.83	20.40	23.35	23.39	23.37	24.00
3GPP Rel 6	HSDPA Subtest-2	18.74	18.81	18.82	20.00	18.83	18.82	18.87	20.40	23.37	23.41	23.38	24.00
3GPP Rel 6	HSDPA Subtest-3	18.33	18.30	18.34	19.50	18.30	18.31	18.38	19.90	22.86	22.91	22.85	23.50
3GPP Rel 6	HSDPA Subtest-4	18.23	18.31	18.31	19.50	18.30	18.34	18.35	19.90	22.84	22.92	22.86	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.67	18.77	18.78	20.00	18.81	18.77	18.79	20.40	23.32	23.39	23.37	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.68	18.71	18.82	20.00	18.80	18.78	18.82	20.40	23.30	23.31	23.35	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.26	18.20	18.27	19.50	18.29	18.27	18.30	19.90	22.78	22.81	22.78	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	18.21	18.27	18.31	19.50	18.20	18.27	18.32	19.90	22.84	22.88	22.84	23.50
3GPP Rel 6	HSUPA Subtest-1	18.75	18.80	18.86	20.00	18.82	18.77	18.88	20.40	23.34	23.35	23.27	24.00
3GPP Rel 6	HSUPA Subtest-2	16.70	16.77	16.84	18.00	16.85	16.78	16.94	18.40	21.32	21.36	21.27	22.00
3GPP Rel 6	HSUPA Subtest-3	17.78	17.84	17.84	19.00	17.82	17.82	17.88	19.40	22.34	22.36	22.33	23.00
3GPP Rel 6	HSUPA Subtest-4	16.75	16.81	16.80	18.00	16.83	16.85	16.85	18.40	21.34	21.36	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	18.80	18.80	18.80	20.00	18.80	18.80	18.90	20.40	23.30	23.40	23.30	24.00

Transmit Antenna		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	24.02	24.20	24.20	24.70	24.38	24.41	24.44	25.20	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.02	24.21	24.22	24.70	24.39	24.44	24.45	25.20	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.20	23.21	23.70	23.40	23.40	23.42	24.20	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	23.42	23.15	23.20	23.70	23.36	23.43	23.46	24.20	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.68	22.73	23.20	22.88	22.89	22.93	23.70	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	22.90	22.71	22.73	23.20	22.85	22.92	22.92	23.70	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.34	23.20	23.16	23.70	23.34	23.32	23.39	24.20	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.33	23.05	23.10	23.70	23.29	23.37	23.37	24.20	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.79	22.60	22.68	23.20	22.81	22.86	22.87	23.70	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.89	22.66	22.65	23.20	22.78	22.87	22.88	23.70	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	22.88	23.14	23.19	23.70	23.35	23.38	23.41	24.20	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	20.69	20.68	21.70	20.98	20.90	21.01	22.20	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	21.88	21.69	21.74	22.70	21.94	21.98	22.08	23.20	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	20.71	20.77	21.70	20.97	20.99	21.04	22.20	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	22.70	22.70	23.70	23.00	23.00	23.00	24.20	23.30	23.40	23.22	24.00

Transmit Antenna		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	19.75	19.77	19.77	20.20	19.80	19.81	19.84	20.60	24.33	24.33	24.31	25.00
3GPP Rel 99	RMC 12.2Kbps	19.76	19.78	19.78	20.20	19.82	19.84	19.85	20.60	24.34	24.36	24.35	25.00
3GPP Rel 6	HSDPA Subtest-1	18.71	18.81	18.80	19.20	18.84	18.80	18.83	19.60	23.35	23.39	23.37	24.00
3GPP Rel 6	HSDPA Subtest-2	18.74	18.81	18.82	19.20	18.83	18.82	18.87	19.60	23.37	23.41	23.38	24.00
3GPP Rel 6	HSDPA Subtest-3	18.33	18.30	18.34	18.70	18.30	18.31	18.38	19.10	22.86	22.91	22.85	23.50
3GPP Rel 6	HSDPA Subtest-4	18.23	18.31	18.31	18.70	18.30	18.34	18.35	19.10	22.84	22.92	22.86	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.67	18.77	18.78	19.20	18.81	18.77	18.79	19.60	23.32	23.39	23.37	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.68	18.71	18.82	19.20	18.80	18.78	18.82	19.60	23.30	23.31	23.35	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.26	18.20	18.27	18.70	18.29	18.27	18.30	19.10	22.78	22.81	22.78	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	18.21	18.27	18.31	18.70	18.20	18.27	18.32	19.10	22.84	22.88	22.84	23.50
3GPP Rel 6	HSUPA Subtest-1	18.75	18.80	18.86	19.20	18.82	18.77	18.88	19.60	23.34	23.35	23.27	24.00
3GPP Rel 6	HSUPA Subtest-2	16.70	16.77	16.84	17.20	16.85	16.78	16.94	17.60	21.32	21.36	21.27	22.00
3GPP Rel 6	HSUPA Subtest-3	17.78	17.84	17.84	18.20	17.82	17.82	17.88	18.60	22.34	22.36	22.33	23.00
3GPP Rel 6	HSUPA Subtest-4	16.75	16.81	16.80	17.20	16.83	16.85	16.85	17.60	21.34	21.36	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	18.80	18.80	18.80	19.20	18.80	18.80	18.90	19.60	23.30	23.40	23.30	24.00

Transmit Antenna		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	24.75	24.95	25.07	25.70	24.77	24.92	24.95	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.76	24.95	25.08	25.70	24.80	24.93	24.96	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	24.19	23.99	24.03	24.70	23.85	23.91	23.95	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	24.16	24.00	24.06	24.70	23.85	23.91	23.93	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	23.64	23.48	23.55	24.20	23.38	23.38	23.46	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	23.70	23.52	23.54	24.20	23.35	23.39	23.46	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	24.14	23.95	23.94	24.70	23.79	23.89	23.92	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	24.14	23.94	23.96	24.70	23.80	23.82	23.92	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.58	23.44	23.50	24.20	23.28	23.33	23.38	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.67	23.45	23.47	24.20	23.29	23.29	23.37	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	23.80	23.98	24.01	24.70	23.97	23.95	24.03	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	21.81	21.61	21.69	22.70	21.45	21.48	21.61	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	22.76	22.58	22.64	23.70	22.50	22.58	22.63	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	21.82	21.59	21.66	22.70	21.52	21.50	21.60	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	23.80	23.55	23.65	24.70	23.50	24.00	23.60	24.70	23.30	23.40	23.22	24.00

Transmit Antenna		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.83	24.97	25.01	25.70	24.59	24.59	24.66	25.70	23.02	23.01	23.02	23.60
3GPP Rel 99	RMC 12.2Kbps	24.84	24.97	25.02	25.70	24.60	24.59	24.67	25.70	23.05	23.06	23.04	23.60
3GPP Rel 6	HSDPA Subtest-1	24.04	24.14	24.23	24.70	23.73	23.76	23.82	24.70	22.03	22.07	22.05	22.60
3GPP Rel 6	HSDPA Subtest-2	24.04	24.12	24.22	24.70	23.76	23.74	23.83	24.70	22.06	22.05	22.03	22.60
3GPP Rel 6	HSDPA Subtest-3	23.51	23.61	23.68	24.20	23.25	23.22	23.35	24.20	21.56	21.58	21.51	22.10
3GPP Rel 6	HSDPA Subtest-4	23.54	23.61	23.71	24.20	23.21	23.28	23.35	24.20	21.51	21.56	21.56	22.10
3GPP Rel 8	DC-HSDPA Subtest-1	23.99	24.06	24.21	24.70	23.72	23.67	23.81	24.70	21.95	22.07	21.99	22.60
3GPP Rel 8	DC-HSDPA Subtest-2	23.95	24.02	24.22	24.70	23.68	23.71	23.78	24.70	22.01	21.95	22.02	22.60
3GPP Rel 8	DC-HSDPA Subtest-3	23.41	23.55	23.60	24.20	23.23	23.17	23.28	24.20	21.47	21.56	21.47	22.10
3GPP Rel 8	DC-HSDPA Subtest-4	23.44	23.57	23.63	24.20	23.16	23.19	23.35	24.20	21.46	21.46	21.51	22.10
3GPP Rel 6	HSUPA Subtest-1	23.70	24.09	24.17	24.70	23.74	23.79	23.86	24.70	22.06	22.09	22.04	22.60
3GPP Rel 6	HSUPA Subtest-2	21.73	21.77	21.89	22.70	21.44	21.44	21.54	22.70	20.08	20.06	19.96	20.60
3GPP Rel 6	HSUPA Subtest-3	22.77	22.83	22.88	23.70	22.53	22.47	22.46	23.70	21.04	21.09	21.07	21.60
3GPP Rel 6	HSUPA Subtest-4	21.73	21.79	21.91	22.70	21.50	21.50	21.60	22.70	20.07	20.08	20.01	20.60
3GPP Rel 6	HSUPA Subtest-5	23.80	23.80	23.90	24.70	23.50	23.50	23.60	24.70	22.00	22.10	22.10	22.60

Transmit Antenna		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	24.02	24.20	24.20	24.70	24.38	24.41	24.44	25.20	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.02	24.21	24.22	24.70	24.39	24.44	24.45	25.20	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.20	23.21	23.70	23.40	23.40	23.42	24.20	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	23.42	23.15	23.20	23.70	23.36	23.43	23.46	24.20	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.68	22.73	23.20	22.88	22.89	22.93	23.70	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	22.90	22.71	22.73	23.20	22.85	22.92	22.92	23.70	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.34	23.20	23.16	23.70	23.34	23.32	23.39	24.20	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.33	23.05	23.10	23.70	23.29	23.37	23.37	24.20	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.79	22.60	22.68	23.20	22.81	22.86	22.87	23.70	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.89	22.66	22.65	23.20	22.78	22.87	22.88	23.70	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	22.88	23.14	23.19	23.70	23.35	23.38	23.41	24.20	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	20.69	20.68	21.70	20.98	20.90	21.01	22.20	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	21.88	21.69	21.74	22.70	21.94	21.98	22.08	23.20	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	20.71	20.77	21.70	20.97	20.99	21.04	22.20	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	22.70	22.70	23.70	23.00	23.00	23.00	24.20	23.30	23.40	23.22	24.00

Transmit Antenna		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	19.75	19.77	19.77	20.20	19.80	19.81	19.84	20.60	24.33	24.33	24.31	25.00
3GPP Rel 99	RMC 12.2Kbps	19.76	19.78	19.78	20.20	19.82	19.84	19.85	20.60	24.34	24.36	24.35	25.00
3GPP Rel 6	HSDPA Subtest-1	18.71	18.81	18.80	19.20	18.84	18.80	18.83	19.60	23.35	23.39	23.37	24.00
3GPP Rel 6	HSDPA Subtest-2	18.74	18.81	18.82	19.20	18.83	18.82	18.87	19.60	23.37	23.41	23.38	24.00
3GPP Rel 6	HSDPA Subtest-3	18.33	18.30	18.34	18.70	18.30	18.31	18.38	19.10	22.86	22.91	22.85	23.50
3GPP Rel 6	HSDPA Subtest-4	18.23	18.31	18.31	18.70	18.30	18.34	18.35	19.10	22.84	22.92	22.86	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.67	18.77	18.78	19.20	18.81	18.77	18.79	19.60	23.32	23.39	23.37	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.68	18.71	18.82	19.20	18.80	18.78	18.82	19.60	23.30	23.31	23.35	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.26	18.20	18.27	18.70	18.29	18.27	18.30	19.10	22.78	22.81	22.78	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	18.21	18.27	18.31	18.70	18.20	18.27	18.32	19.10	22.84	22.88	22.84	23.50
3GPP Rel 6	HSUPA Subtest-1	18.75	18.80	18.86	19.20	18.82	18.77	18.88	19.60	23.34	23.35	23.27	24.00
3GPP Rel 6	HSUPA Subtest-2	16.70	16.77	16.84	17.20	16.85	16.78	16.94	17.60	21.32	21.36	21.27	22.00
3GPP Rel 6	HSUPA Subtest-3	17.78	17.84	17.84	18.20	17.82	17.82	17.88	18.60	22.34	22.36	22.33	23.00
3GPP Rel 6	HSUPA Subtest-4	16.75	16.81	16.80	17.20	16.83	16.85	16.85	17.60	21.34	21.36	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	18.80	18.80	18.80	19.20	18.80	18.80	18.90	19.60	23.30	23.40	23.30	24.00



Transmit Antenna	Ant 0				Ant 2				Ant 0			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.41	23.62	25.50	24.61	24.72	24.80	25.50	24.47	24.41	24.46	25.50
RC3 SO55	24.41	24.48	23.64	25.50	24.66	24.76	24.90	25.50	24.48	24.49	24.48	25.50
RC3 SO32 (F+SCH)	24.39	24.42	23.61	25.50	24.65	24.71	24.77	25.50	24.46	24.41	24.44	25.50
RC3 SO32 (+SCH)	24.36	24.41	23.65	25.50	24.65	24.73	24.86	25.50	24.46	24.46	24.43	25.50
RTAP 153.6Kbps	24.34	24.50	23.62	25.50	24.63	24.72	24.82	25.50	24.41	24.43	24.42	25.50
RETAP 4096Bits	24.40	24.44	23.66	25.50	24.64	24.73	24.83	25.50	24.44	24.42	24.42	25.50

Transmit Antenna	Ant 1				Ant 0				Ant 1			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.42	24.06	25.50	24.55	24.63	24.69	25.50	24.41	24.47	24.46	25.50
RC3 SO55	24.42	24.47	24.04	25.50	24.58	24.64	24.70	25.50	24.47	24.48	24.47	25.50
RC3 SO32 (F+SCH)	24.40	24.46	24.00	25.50	24.52	24.60	24.66	25.50	24.44	24.44	24.44	25.50
RC3 SO32 (+SCH)	24.39	24.45	24.03	25.50	24.55	24.59	24.62	25.50	24.47	24.46	24.47	25.50
RTAP 153.6Kbps	24.44	24.45	24.02	25.50	24.53	24.65	24.69	25.50	24.43	24.46	24.46	25.50
RETAP 4096Bits	24.41	24.40	24.03	25.50	24.49	24.61	24.63	25.50	24.44	24.43	24.41	25.50

Transmit Antenna	Ant 0				Ant 2				Ant 0			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.41	23.62	25.50	24.61	24.72	24.80	25.50	24.47	24.41	24.46	25.50
RC3 SO55	24.41	24.48	23.64	25.50	24.66	24.76	24.90	25.50	24.48	24.49	24.48	25.50
RC3 SO32 (F+SCH)	24.39	24.42	23.61	25.50	24.65	24.71	24.77	25.50	24.46	24.41	24.44	25.50
RC3 SO32 (+SCH)	24.36	24.41	23.65	25.50	24.65	24.73	24.86	25.50	24.46	24.46	24.43	25.50
RTAP 153.6Kbps	24.34	24.50	23.62	25.50	24.63	24.72	24.82	25.50	24.41	24.43	24.42	25.50
RETAP 4096Bits	24.40	24.44	23.66	25.50	24.64	24.73	24.83	25.50	24.44	24.42	24.42	25.50

Transmit Antenna	Ant 1				Ant 0				Ant 1			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	21.20	21.31	21.37	23.20	24.55	24.63	24.69	25.50	23.54	23.70	23.50	25.40
RC3 SO55	21.22	21.25	21.30	23.20	24.58	24.64	24.70	25.50	23.60	23.75	23.58	25.40
RC3 SO32 (F+SCH)	21.21	21.31	21.39	23.20	24.52	24.60	24.66	25.50	23.57	23.65	23.49	25.40
RC3 SO32 (+SCH)	21.27	21.28	21.34	23.20	24.55	24.59	24.62	25.50	23.60	23.66	23.51	25.40
RTAP 153.6Kbps	21.26	21.24	21.20	23.20	24.53	24.65	24.69	25.50	23.51	23.69	23.56	25.40
RETAP 4096Bits	21.23	21.31	21.23	23.20	24.49	24.61	24.63	25.50	23.55	23.66	23.52	25.40

Transmit Antenna	Ant 0				Ant 2				Ant 0			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.41	23.62	25.50	22.95	23.01	23.01	24.70	24.47	24.41	24.46	25.50
RC3 SO55	24.41	24.48	23.64	25.50	22.90	22.98	23.05	24.70	24.48	24.49	24.48	25.50
RC3 SO32 (F+SCH)	24.39	24.42	23.61	25.50	22.98	23.02	23.06	24.70	24.46	24.41	24.44	25.50
RC3 SO32 (+SCH)	24.36	24.41	23.65	25.50	22.94	22.93	22.99	24.70	24.46	24.46	24.43	25.50
RTAP 153.6Kbps	24.34	24.50	23.62	25.50	22.88	22.97	23.03	24.70	24.41	24.43	24.42	25.50
RETAP 4096Bits	24.40	24.44	23.66	25.50	22.94	22.95	22.99	24.70	24.44	24.42	24.42	25.50

Transmit Antenna	Ant 1				Ant 0				Ant 1			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.42	24.06	25.50	19.16	19.20	19.36	21.00	24.41	24.47	24.46	25.50
RC3 SO55	24.42	24.47	24.04	25.50	19.20	19.24	19.28	21.00	24.47	24.48	24.47	25.50
RC3 SO32 (F+SCH)	24.40	24.46	24.00	25.50	19.25	19.30	19.21	21.00	24.44	24.44	24.44	25.50
RC3 SO32 (+SCH)	24.39	24.45	24.03	25.50	19.18	19.32	19.18	21.00	24.47	24.46	24.47	25.50
RTAP 153.6Kbps	24.44	24.45	24.02	25.50	19.19	19.30	19.26	21.00	24.43	24.46	24.46	25.50
RETAP 4096Bits	24.41	24.40	24.03	25.50	19.25	19.33	19.29	21.00	24.44	24.43	24.41	25.50

Transmit Antenna	Ant 0				Ant 2				Ant 0			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.41	23.62	25.50	22.95	23.01	23.01	23.90	24.47	24.41	24.46	25.50
RC3 SO55	24.41	24.48	23.64	25.50	22.90	22.98	23.05	23.90	24.48	24.49	24.48	25.50
RC3 SO32 (F+SCH)	24.39	24.42	23.61	25.50	22.98	23.02	23.06	23.90	24.46	24.41	24.44	25.50
RC3 SO32 (+SCH)	24.36	24.41	23.65	25.50	22.94	22.93	22.99	23.90	24.46	24.46	24.43	25.50
RTAP 153.6Kbps	24.34	24.50	23.62	25.50	22.88	22.97	23.03	23.90	24.41	24.43	24.42	25.50
RETAP 4096Bits	24.40	24.44	23.66	25.50	22.94	22.95	22.99	23.90	24.44	24.42	24.42	25.50

Transmit Antenna	Ant 1				Ant 0				Ant 1			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.42	24.06	25.50	19.16	19.20	19.36	20.20	24.41	24.47	24.46	25.50
RC3 SO55	24.42	24.47	24.04	25.50	19.20	19.24	19.28	20.20	24.47	24.48	24.47	25.50
RC3 SO32 (F+SCH)	24.40	24.46	24.00	25.50	19.25	19.30	19.21	20.20	24.44	24.44	24.44	25.50
RC3 SO32 (+SCH)	24.39	24.45	24.03	25.50	19.18	19.32	19.18	20.20	24.47	24.46	24.47	25.50
RTAP 153.6Kbps	24.44	24.45	24.02	25.50	19.19	19.30	19.26	20.20	24.43	24.46	24.46	25.50
RETAP 4096Bits	24.41	24.40	24.03	25.50	19.25	19.33	19.29	20.20	24.44	24.43	24.41	25.50

Transmit Antenna	Ant 0				Ant 2				Ant 0			
Band	CDMA BC0			DSI 7	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.41	23.62	25.50	24.61	24.72	24.80	25.50	24.47	24.41	24.46	25.50
RC3 SO55	24.41	24.48	23.64	25.50	24.66	24.76	24.90	25.50	24.48	24.49	24.48	25.50
RC3 SO32 (F+SCH)	24.39	24.42	23.61	25.50	24.65	24.71	24.77	25.50	24.46	24.41	24.44	25.50
RC3 SO32 (+SCH)	24.36	24.41	23.65	25.50	24.65	24.73	24.86	25.50	24.46	24.46	24.43	25.50
RTAP 153.6Kbps	24.34	24.50	23.62	25.50	24.63	24.72	24.82	25.50	24.41	24.43	24.42	25.50
RETAP 4096Bits	24.40	24.44	23.66	25.50	24.64	24.73	24.83	25.50	24.44	24.42	24.42	25.50

Transmit Antenna	Ant 1				Ant 0				Ant 1			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	21.20	21.31	21.37	22.40	24.55	24.63	24.69	25.50	23.54	23.70	23.50	24.60
RC3 SO55	21.22	21.25	21.30	22.40	24.58	24.64	24.70	25.50	23.60	23.75	23.58	24.60
RC3 SO32 (F+SCH)	21.21	21.31	21.39	22.40	24.52	24.60	24.66	25.50	23.57	23.65	23.49	24.60
RC3 SO32 (+SCH)	21.27	21.28	21.34	22.40	24.55	24.59	24.62	25.50	23.60	23.66	23.51	24.60
RTAP 153.6Kbps	21.26	21.24	21.20	22.40	24.53	24.65	24.69	25.50	23.51	23.69	23.56	24.60
RETAP 4096Bits	21.23	21.31	21.23	22.40	24.49	24.61	24.63	25.50	23.55	23.66	23.52	24.60

Transmit Antenna	Ant 0				Ant 2				Ant 0			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.41	23.62	25.50	22.95	23.01	23.01	23.90	24.47	24.41	24.46	25.50
RC3 SO55	24.41	24.48	23.64	25.50	22.90	22.98	23.05	23.90	24.48	24.49	24.48	25.50
RC3 SO32 (F+SCH)	24.39	24.42	23.61	25.50	22.98	23.02	23.06	23.90	24.46	24.41	24.44	25.50
RC3 SO32 (+SCH)	24.36	24.41	23.65	25.50	22.94	22.93	22.99	23.90	24.46	24.46	24.43	25.50
RTAP 153.6Kbps	24.34	24.50	23.62	25.50	22.88	22.97	23.03	23.90	24.41	24.43	24.42	25.50
RETAP 4096Bits	24.40	24.44	23.66	25.50	22.94	22.95	22.99	23.90	24.44	24.42	24.42	25.50

Transmit Antenna	Ant 1				Ant 0				Ant 1			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.40	24.42	24.06	25.50	19.16	19.20	19.36	20.20	24.41	24.47	24.46	25.50
RC3 SO55	24.42	24.47	24.04	25.50	19.20	19.24	19.28	20.20	24.47	24.48	24.47	25.50
RC3 SO32 (F+SCH)	24.40	24.46	24.00	25.50	19.25	19.30	19.21	20.20	24.44	24.44	24.44	25.50
RC3 SO32 (+SCH)	24.39	24.45	24.03	25.50	19.18	19.32	19.18	20.20	24.47	24.46	24.47	25.50
RTAP 153.6Kbps	24.44	24.45	24.02	25.50	19.19	19.30	19.26	20.20	24.43	24.46	24.46	25.50
RETAP 4096Bits	24.41	24.40	24.03	25.50	19.25	19.33	19.29	20.20	24.44	24.43	24.41	25.50



Band 2							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. I	Power Middle Ch. I	Power High Ch. I	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.53	24.68	24.96	25.7
20	QPSK	1	49	24.53	24.72	24.75	
20	QPSK	1	99	24.52	24.71	24.80	
20	QPSK	50	0	23.61	23.75	23.86	24.7
20	QPSK	50	24	23.73	23.80	23.89	
20	QPSK	50	50	23.71	23.88	23.97	
20	QPSK	100	0	23.72	23.77	23.87	24.7
20	16QAM	1	0	23.88	24.03	24.14	
20	16QAM	1	49	23.87	24.06	24.07	
20	16QAM	1	99	23.83	24.02	24.16	23.7
20	16QAM	50	0	22.64	22.77	22.88	
20	16QAM	50	24	22.74	22.80	22.88	
20	16QAM	50	50	22.73	22.89	22.97	23.7
20	16QAM	100	0	22.72	22.75	22.89	
20	64QAM	1	0	22.72	22.88	23.02	
20	64QAM	1	49	22.78	22.91	22.11	22.7
20	64QAM	1	99	22.66	22.94	22.63	
20	64QAM	50	0	21.65	21.78	21.34	
20	64QAM	50	24	21.76	21.84	21.35	22.7
20	64QAM	50	50	21.60	21.91	21.61	
20	64QAM	100	0	21.70	21.81	21.42	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.54	24.73	24.81	25.7
15	QPSK	1	37	24.56	24.72	24.81	
15	QPSK	1	74	24.59	24.72	24.85	
15	QPSK	36	0	23.64	23.75	23.85	24.7
15	QPSK	36	20	23.74	23.80	23.98	
15	QPSK	36	39	23.72	23.90	23.99	
15	QPSK	75	0	23.71	23.79	23.91	24.7
15	16QAM	1	0	23.80	24.04	24.13	
15	16QAM	1	37	23.88	24.02	24.12	
15	16QAM	1	74	23.88	24.05	24.19	23.7
15	16QAM	36	0	22.62	22.77	22.86	
15	16QAM	36	20	22.71	22.80	22.96	
15	16QAM	36	39	22.72	22.80	22.99	23.7
15	16QAM	75	0	22.72	22.81	22.91	
15	64QAM	1	0	22.74	22.87	22.37	
15	64QAM	1	37	22.78	22.92	22.37	22.7
15	64QAM	1	74	22.63	22.97	22.76	
15	64QAM	36	0	21.67	21.81	21.25	
15	64QAM	36	20	21.77	21.85	21.57	22.7
15	64QAM	36	39	21.69	21.94	21.75	
15	64QAM	75	0	21.73	21.83	21.44	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.53	24.68	24.83	25.7
10	QPSK	1	25	24.54	24.73	24.84	
10	QPSK	1	49	24.58	24.76	24.85	
10	QPSK	25	0	23.66	23.76	23.86	24.7
10	QPSK	25	12	23.72	23.81	23.91	
10	QPSK	25	25	23.71	23.90	24.02	
10	QPSK	50	0	23.69	23.80	23.93	24.7
10	16QAM	1	0	23.92	24.09	24.18	
10	16QAM	1	25	23.93	24.12	24.27	
10	16QAM	1	49	23.94	24.12	24.24	23.7
10	16QAM	25	0	22.64	22.75	22.85	
10	16QAM	25	12	22.71	22.82	22.91	
10	16QAM	25	25	22.72	22.87	23.02	23.7
10	16QAM	50	0	22.69	22.80	22.92	
10	64QAM	1	0	22.84	22.95	22.38	
10	64QAM	1	25	22.85	23.07	22.89	22.7
10	64QAM	1	49	22.84	23.07	22.94	
10	64QAM	25	0	21.69	21.78	21.47	
10	64QAM	25	12	21.76	21.85	21.75	22.7
10	64QAM	25	25	21.74	21.92	21.76	
10	64QAM	50	0	21.71	21.82	21.56	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.55	24.66	24.86	25.7
5	QPSK	1	12	24.62	24.80	24.92	
5	QPSK	1	24	24.60	24.81	24.95	
5	QPSK	12	0	23.68	23.77	23.98	24.7
5	QPSK	12	7	23.70	23.90	24.00	
5	QPSK	12	13	23.68	23.90	24.03	
5	QPSK	25	0	23.67	23.80	23.98	24.7
5	16QAM	1	0	23.86	23.97	24.26	
5	16QAM	1	12	23.90	24.09	24.24	
5	16QAM	1	24	23.94	24.12	24.28	23.7
5	16QAM	12	0	22.68	22.82	23.00	
5	16QAM	12	7	22.71	22.94	23.02	
5	16QAM	12	13	22.72	22.88	23.03	23.7
5	16QAM	25	0	22.71	22.81	23.04	
5	64QAM	1	0	22.87	22.98	22.73	
5	64QAM	1	12	22.80	23.03	22.88	22.7
5	64QAM	1	24	22.87	23.06	22.75	
5	64QAM	12	0	21.73	21.85	21.81	
5	64QAM	12	7	21.79	21.95	21.84	22.7
5	64QAM	12	13	21.75	21.92	21.72	
5	64QAM	25	0	21.68	21.82	21.64	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.55	24.69	24.88	25.7
3	QPSK	1	8	24.64	24.83	24.95	
3	QPSK	1	14	24.58	24.79	24.93	
3	QPSK	8	0	23.67	23.80	23.97	24.7
3	QPSK	8	4	23.70	23.90	24.01	
3	QPSK	8	7	23.64	23.87	23.99	
3	QPSK	15	0	23.64	23.80	23.99	24.7
3	16QAM	1	0	23.83	23.99	24.18	
3	16QAM	1	8	23.96	24.14	24.25	
3	16QAM	1	14	23.94	24.10	24.25	23.7
3	16QAM	8	0	22.72	22.86	23.05	
3	16QAM	8	4	22.77	22.96	23.06	
3	16QAM	8	7	22.71	22.95	23.06	23.7
3	16QAM	15	0	22.69	22.82	22.99	
3	64QAM	1	0	22.81	23.01	22.83	
3	64QAM	1	8	22.94	23.12	22.86	22.7
3	64QAM	1	14	22.84	23.06	22.70	
3	64QAM	8	0	21.73	21.83	21.74	
3	64QAM	8	4	21.75	21.95	21.76	22.7
3	64QAM	8	7	21.71	21.93	21.68	
3	64QAM	15	0	21.71	21.81	21.66	
Channel				18600	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.46	24.67	24.82	25.7
1.4	QPSK	1	3	24.54	24.74	24.90	
1.4	QPSK	1	5	24.47	24.69	24.84	
1.4	QPSK	3	0	24.54	24.71	24.84	24.7
1.4	QPSK	3	1	24.58	24.77	24.88	
1.4	QPSK	3	3	24.52	24.73	24.85	
1.4	QPSK	6	0	23.58	23.80	23.99	24.7
1.4	16QAM	1	0	23.82	23.99	24.18	
1.4	16QAM	1	3	23.87	24.13	24.23	
1.4	16QAM	1	5	23.82	24.01	24.17	23.7
1.4	16QAM	3	0	23.60	23.79	23.91	
1.4	16QAM	3	1	23.66	23.85	23.97	
1.4	16QAM	3	3	23.59	23.79	23.88	23.7
1.4	16QAM	6	0	22.85	22.84	22.97	
1.4	64QAM	1	0	22.80	22.92	22.63	
1.4	64QAM	1	3	22.84	23.05	22.68	23.7
1.4	64QAM	1	5	22.77	22.96	22.58	
1.4	64QAM	3	0	22.71	22.93	22.63	
1.4	64QAM	3	1	22.79	22.99	22.69	22.7
1.4	64QAM	3	3	22.74	22.94	22.56	
1.4	64QAM	6	0	21.61	21.82	21.53	



Band 4									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20050	Power Middle Ch / 20175	Power High Ch / 20300	Tune-up limit (dBm)		
Channel				1720	1732.5	1745			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	24.42	24.50	24.42	25.7		
20	QPSK	1	49	24.32	24.32	24.33			
20	QPSK	1	99	24.31	24.35	24.31			
20	QPSK	50	0	23.47	23.50	23.54	24.7		
20	QPSK	50	24	23.51	23.53	23.54			
20	QPSK	50	50	23.46	23.43	23.48			
20	QPSK	100	0	23.50	23.60	23.41	24.7		
20	16QAM	1	0	23.78	23.83	23.76			
20	16QAM	1	49	23.66	23.64	23.66			
20	16QAM	1	99	23.69	23.66	23.60	23.7		
20	16QAM	50	0	22.49	22.54	22.55			
20	16QAM	50	24	22.52	22.55	22.53			
20	16QAM	50	50	22.46	22.45	22.46	23.7		
20	16QAM	100	0	22.49	22.56	22.42			
20	64QAM	1	0	22.24	22.68	22.19			
20	64QAM	1	49	22.53	22.52	22.56	23.7		
20	64QAM	1	99	22.58	22.03	22.57			
20	64QAM	50	0	21.50	21.54	21.24			
20	64QAM	50	24	21.54	21.45	21.56	22.7		
20	64QAM	50	50	21.47	21.07	21.46			
20	64QAM	100	0	21.54	21.55	21.48			
Channel				20025	20175	20300	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	24.44	24.48	24.49	25.7		
15	QPSK	1	37	24.29	24.32	24.34			
15	QPSK	1	74	24.31	24.31	24.30			
15	QPSK	36	0	23.55	23.55	23.51	24.7		
15	QPSK	36	20	23.49	23.52	23.53			
15	QPSK	36	39	23.44	23.46	23.45			
15	QPSK	75	0	23.49	23.54	23.45	24.7		
15	16QAM	1	0	23.73	23.80	23.81			
15	16QAM	1	37	23.59	23.63	23.68			
15	16QAM	1	74	23.63	23.62	23.61	23.7		
15	16QAM	36	0	22.53	22.50	22.51			
15	16QAM	36	20	22.47	22.50	22.52			
15	16QAM	36	39	22.45	22.44	22.45	23.7		
15	16QAM	75	0	22.49	22.54	22.45			
15	64QAM	1	0	22.25	22.67	22.48			
15	64QAM	1	37	22.54	22.34	22.63	23.7		
15	64QAM	1	74	22.53	22.12	22.56			
15	64QAM	36	0	21.55	21.58	21.52			
15	64QAM	36	20	21.48	21.41	21.53	22.7		
15	64QAM	36	39	21.45	21.06	21.47			
15	64QAM	75	0	21.49	21.46	21.44			
Channel				20000	20175	20350	Tune-up limit (dBm)		
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.39	24.42	24.45	25.7		
10	QPSK	1	25	24.35	24.42	24.42			
10	QPSK	1	49	24.36	24.38	24.40			
10	QPSK	25	0	23.45	23.47	23.46	24.7		
10	QPSK	25	12	23.50	23.57	23.48			
10	QPSK	25	25	23.52	23.57	23.56			
10	QPSK	50	0	23.53	23.56	23.50	24.7		
10	16QAM	1	0	23.73	23.79	23.81			
10	16QAM	1	25	23.73	23.82	23.81			
10	16QAM	1	49	23.75	23.75	23.81	24.7		
10	16QAM	25	0	22.47	22.45	22.46			
10	16QAM	25	12	22.51	22.57	22.52			
10	16QAM	25	25	22.49	22.54	22.57	23.7		
10	16QAM	50	0	22.50	22.56	22.48			
10	64QAM	1	0	22.08	22.64	22.69			
10	64QAM	1	25	22.65	22.44	22.71	23.7		
10	64QAM	1	49	22.67	22.01	22.71			
10	64QAM	25	0	21.44	21.50	21.52			
10	64QAM	25	12	21.51	21.35	21.52	22.7		
10	64QAM	25	25	21.51	21.03	21.58			
10	64QAM	50	0	21.53	21.32	21.54			
Channel				19975	20175	20375	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.37	24.38	24.40	25.7		
5	QPSK	1	12	24.46	24.48	24.48			
5	QPSK	1	24	24.43	24.48	24.46			
5	QPSK	12	0	23.48	23.44	23.53	24.7		
5	QPSK	12	7	23.52	23.54	23.54			
5	QPSK	12	13	23.51	23.52	23.50			
5	QPSK	25	0	23.46	23.46	23.53	24.7		
5	16QAM	1	0	23.70	23.78	23.79			
5	16QAM	1	12	23.74	23.72	23.79			
5	16QAM	1	24	23.77	23.76	23.82	23.7		
5	16QAM	12	0	22.50	22.46	22.57			
5	16QAM	12	7	22.53	22.57	22.56			
5	16QAM	12	13	22.54	22.57	22.55	23.7		
5	16QAM	25	0	22.51	22.53	22.55			
5	64QAM	1	0	22.06	22.62	22.67			
5	64QAM	1	12	22.43	22.33	22.71	23.7		
5	64QAM	1	24	22.74	22.09	22.71			
5	64QAM	12	0	21.11	21.51	21.57			
5	64QAM	12	7	21.40	21.31	21.64	22.7		
5	64QAM	12	13	21.55	21.08	21.63			
5	64QAM	25	0	21.35	21.27	21.54			
Channel				19965	20175	20385	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.38	24.36	24.41	25.7		
3	QPSK	1	8	24.46	24.48	24.48			
3	QPSK	1	14	24.40	24.43	24.43			
3	QPSK	8	0	23.46	23.44	23.51	24.7		
3	QPSK	8	4	23.52	23.52	23.52			
3	QPSK	8	7	23.46	23.51	23.51			
3	QPSK	15	0	23.46	23.56	23.50	24.7		
3	16QAM	1	0	23.70	23.75	23.76			
3	16QAM	1	8	23.79	23.83	23.81			
3	16QAM	1	14	23.74	23.75	23.78	23.7		
3	16QAM	8	0	22.52	22.49	22.56			
3	16QAM	8	4	22.59	22.62	22.62			
3	16QAM	8	7	22.58	22.56	22.57	23.7		
3	16QAM	15	0	22.50	22.56	22.57			
3	64QAM	1	0	22.01	22.49	22.69			
3	64QAM	1	8	22.30	22.39	22.75	23.7		
3	64QAM	1	14	22.40	22.19	22.71			
3	64QAM	8	0	20.99	21.39	21.60			
3	64QAM	8	4	21.16	21.32	21.61	22.7		
3	64QAM	8	7	21.27	21.20	21.58			
3	64QAM	15	0	21.14	21.29	21.56			
Channel				19957	20175	20393	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.31	24.33	24.33	25.7		
1.4	QPSK	1	3	24.37	24.39	24.42			
1.4	QPSK	1	5	24.30	24.35	24.37			
1.4	QPSK	3	0	24.31	24.35	24.41	24.7		
1.4	QPSK	3	1	24.39	24.41	24.43			
1.4	QPSK	3	3	24.35	24.37	24.36			
1.4	QPSK	6	0	23.39	23.42	23.44	24.7		
1.4	16QAM	1	0	23.66	23.65	23.69			
1.4	16QAM	1	3	23.73	23.72	23.76			
1.4	16QAM	1	5	23.64	23.65	23.66	24.7		
1.4	16QAM	3	0	23.43	23.44	23.47			
1.4	16QAM	3	1	23.49	23.49	23.55			
1.4	16QAM	3	3	23.41	23.45	23.45	23.7		
1.4	16QAM	6	0	22.44	22.50	22.52			
1.4	16QAM	6	1	22.39	22.41	22.46			
1.4	64QAM	1	0	22.08	22.32	22.69	23.7		
1.4	64QAM	1	5	22.09	22.21	22.63			
1.4	64QAM	3	1	22.17	22.46	22.64			
1.4	64QAM	3	3	22.11	22.27	22.61			



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20450	Power Middle Ch / 20525	Power High Ch / 20600	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.72	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.78	23.73	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.80	23.7
10	16QAM	25	0	22.96	22.74	22.71	
10	16QAM	25	12	22.76	22.72	22.75	
10	16QAM	25	25	22.72	22.76	22.78	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	23.7
10	64QAM	1	25	22.92	22.85	22.85	
10	64QAM	1	49	22.89	22.46	21.77	
10	64QAM	25	0	21.67	21.78	21.76	22.7
10	64QAM	25	12	21.80	21.77	21.68	
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20525	20525	20525	Tune-up limit (dBm)
Frequency (MHz)				829.5	836.5	846.5	
5	QPSK	1	0	24.75	24.60	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.78	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.89	
5	64QAM	1	0	22.75	22.94	22.62	
5	64QAM	1	12	22.90	22.85	21.90	22.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.60	21.78	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.76	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.72	23.36	24.7
3	QPSK	8	4	23.68	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.38	
3	16QAM	8	7	22.75	22.76	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.50	21.96	
3	64QAM	1	8	22.66	22.97	21.74	23.7
3	64QAM	1	14	22.84	22.82	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20107	20525	20553	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	846.3	
1.4	QPSK	1	0	24.59	24.53	23.96	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.86	23.28	
1.4	16QAM	1	3	23.93	23.95	23.39	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.28	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.86	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	22.7
1.4	64QAM	3	3	22.64	22.79	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	



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	24.69	24.76	24.80	25.7
20	QPSK	1	49	24.74	24.81	24.78	
20	QPSK	1	99	24.84	24.83	24.83	
20	QPSK	50	0	23.80	23.87	23.88	24.7
20	QPSK	50	24	23.92	23.91	23.91	
20	QPSK	50	50	23.94	23.92	23.92	
20	QPSK	100	0	23.91	23.89	23.91	24.7
20	16QAM	1	0	24.01	24.09	24.15	
20	16QAM	1	49	24.12	24.17	24.15	
20	16QAM	1	99	24.15	24.21	24.14	23.7
20	16QAM	50	0	22.91	22.87	22.91	
20	16QAM	50	24	22.93	22.92	22.94	
20	16QAM	50	50	22.96	23.02	22.98	23.7
20	16QAM	100	0	22.92	22.90	22.92	
20	64QAM	1	0	22.89	22.95	22.99	
20	64QAM	1	49	22.98	23.07	22.88	22.7
20	64QAM	1	99	23.07	23.13	22.92	
20	64QAM	50	0	21.84	21.92	21.92	
20	64QAM	50	24	21.95	21.95	21.71	22.7
20	64QAM	50	50	21.98	22.04	21.56	
20	64QAM	100	0	21.94	21.92	21.71	
Channel				20925	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.07	24.77	24.82	25.7
15	QPSK	1	37	24.72	24.81	24.81	
15	QPSK	1	74	24.80	24.80	24.83	
15	QPSK	36	0	23.77	23.87	23.90	24.7
15	QPSK	36	20	23.93	23.91	23.91	
15	QPSK	36	39	23.94	24.00	23.95	
15	QPSK	75	0	23.88	23.91	23.88	24.7
15	16QAM	1	0	24.00	24.11	24.14	
15	16QAM	1	37	24.05	24.14	24.15	
15	16QAM	1	74	24.14	24.24	24.13	23.7
15	16QAM	36	0	22.80	22.89	22.90	
15	16QAM	36	20	22.92	22.92	22.90	
15	16QAM	36	39	22.95	23.02	22.96	23.7
15	16QAM	75	0	22.91	22.92	22.89	
15	64QAM	1	0	22.89	23.01	23.01	
15	64QAM	1	37	22.99	23.08	22.38	22.7
15	64QAM	1	74	23.01	23.14	22.69	
15	64QAM	36	0	21.85	21.94	21.72	
15	64QAM	36	20	21.93	21.93	21.52	22.7
15	64QAM	36	39	21.97	22.06	21.58	
15	64QAM	75	0	21.91	21.95	21.57	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.68	24.75	24.75	25.7
10	QPSK	1	25	24.64	24.74	24.73	
10	QPSK	1	49	24.71	24.83	24.78	
10	QPSK	25	0	23.84	23.87	23.82	24.7
10	QPSK	25	12	23.88	23.89	23.84	
10	QPSK	25	25	23.85	23.98	23.92	
10	QPSK	50	0	23.88	23.91	23.83	24.7
10	16QAM	1	0	24.04	24.13	24.11	
10	16QAM	1	25	24.04	24.17	24.14	
10	16QAM	1	49	24.13	24.22	24.15	23.7
10	16QAM	25	0	22.85	22.86	22.82	
10	16QAM	25	12	22.86	22.91	22.87	
10	16QAM	25	25	22.89	22.97	22.92	23.7
10	16QAM	50	0	22.87	22.89	22.84	
10	64QAM	1	0	22.97	22.99	22.86	
10	64QAM	1	25	23.00	23.06	22.74	22.7
10	64QAM	1	49	23.01	23.14	22.89	
10	64QAM	25	0	21.88	21.89	21.50	
10	64QAM	25	12	21.92	21.93	21.62	22.7
10	64QAM	25	25	21.92	22.00	21.66	
10	64QAM	50	0	21.92	21.94	21.50	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.59	24.75	24.74	25.7
5	QPSK	1	12	24.75	24.80	24.75	
5	QPSK	1	24	24.74	24.80	24.77	
5	QPSK	12	0	23.83	23.88	23.88	24.7
5	QPSK	12	7	23.87	23.86	23.90	
5	QPSK	12	13	23.84	23.98	23.88	
5	QPSK	25	0	23.84	23.89	23.85	24.7
5	16QAM	1	0	24.05	24.10	24.09	
5	16QAM	1	12	24.06	24.16	24.07	
5	16QAM	1	24	24.07	24.17	24.10	23.7
5	16QAM	12	0	22.88	22.91	22.93	
5	16QAM	12	7	22.88	22.93	22.89	
5	16QAM	12	13	22.90	22.97	22.89	23.7
5	16QAM	25	0	22.88	22.89	22.87	
5	64QAM	1	0	23.00	23.00	22.69	
5	64QAM	1	12	22.99	23.06	22.72	22.7
5	64QAM	1	24	23.01	23.10	22.82	
5	64QAM	12	0	21.91	21.94	21.57	
5	64QAM	12	7	21.87	21.95	21.72	22.7
5	64QAM	12	13	21.91	22.03	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



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				23050	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.64	24.61	24.63	25.7
10	QPSK	1	25	24.63	24.68	24.65	
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	24.7
10	QPSK	25	12	23.87	23.80	23.78	
10	QPSK	25	25	23.88	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	24.7
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	
10	16QAM	1	49	24.12	24.06	24.07	23.7
10	16QAM	25	0	22.76	22.75	22.77	
10	16QAM	25	12	22.82	22.80	22.78	
10	16QAM	25	25	22.81	22.85	22.79	23.7
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	23.7
10	64QAM	1	25	22.76	22.99	22.73	
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.78	21.80	21.79	22.7
10	64QAM	25	12	21.88	21.83	21.81	
10	64QAM	25	25	21.82	21.90	21.84	
10	64QAM	50	0	21.83	21.81	21.80	Tune-up limit (dBm)
Channel				23095	23095	23105	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	25.7
5	QPSK	1	12	24.72	24.73	24.71	
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.79	23.78	24.7
5	QPSK	12	7	23.78	23.75	23.81	
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	24.7
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	
5	16QAM	1	24	24.02	24.07	24.03	23.7
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	
5	16QAM	12	13	22.83	22.82	22.80	23.7
5	16QAM	25	0	22.81	22.82	22.75	
5	64QAM	1	0	22.62	22.73	22.91	
5	64QAM	1	12	22.83	22.94	22.94	23.7
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	
5	64QAM	12	7	21.68	21.85	21.86	22.7
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	25.7
3	QPSK	1	8	24.73	24.74	24.73	
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.79	23.73	24.7
3	QPSK	8	4	23.78	23.74	23.77	
3	QPSK	8	7	23.73	23.76	23.75	
3	QPSK	15	0	23.77	23.75	23.73	24.7
3	16QAM	1	0	24.08	24.01	24.02	
3	16QAM	1	8	24.06	24.08	24.08	
3	16QAM	1	14	24.00	24.05	23.98	23.7
3	16QAM	8	0	22.88	22.83	22.82	
3	16QAM	8	4	22.90	22.83	22.87	
3	16QAM	8	7	22.84	22.94	22.83	23.7
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.67	22.90	22.95	
3	64QAM	1	8	22.61	23.01	22.96	23.7
3	64QAM	1	14	22.92	22.95	22.88	
3	64QAM	8	0	21.82	21.81	21.81	
3	64QAM	8	4	21.87	21.84	21.87	22.7
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.65	21.78	21.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.50	24.50	25.7
1.4	QPSK	1	3	24.68	24.67	24.64	
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	24.7
1.4	QPSK	3	1	24.70	24.64	24.68	
1.4	QPSK	3	3	24.64	24.67	24.61	
1.4	QPSK	6	0	23.71	23.74	23.67	24.7
1.4	16QAM	1	0	23.99	23.93	23.96	
1.4	16QAM	1	3	24.02	24.02	23.98	
1.4	16QAM	1	5	23.92	23.94	23.91	24.7
1.4	16QAM	3	0	23.75	23.69	23.69	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.70	23.73	23.65	23.7
1.4	16QAM	6	0	22.78	22.80	22.76	
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.89	23.7
1.4	64QAM	1	5	22.82	22.85	22.81	
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.86	22.7
1.4	64QAM	3	3	22.83	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.23		25.2
10	QPSK	1	25		24.22		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30		24.2
10	QPSK	25	12		23.34		
10	QPSK	25	25		23.33		
10	QPSK	50	0		23.35		24.2
10	16QAM	1	0		23.56		
10	16QAM	1	25		23.57		
10	16QAM	1	49		23.54		23.2
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		
10	16QAM	25	25		22.38		23.2
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		22.2
10	64QAM	1	49		22.45		
10	64QAM	25	0		21.38		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				770.5	782	784.5	
5	QPSK	1	0	24.23	24.20	24.18	25.2
5	QPSK	1	12	24.26	24.27	24.23	
5	QPSK	1	24	24.30	24.23	24.34	
5	QPSK	12	0	23.38	23.33	23.29	24.2
5	QPSK	12	7	23.41	23.32	23.31	
5	QPSK	12	13	23.38	23.35	23.29	
5	QPSK	25	0	23.37	23.33	23.32	24.2
5	16QAM	1	0	23.51	23.48	23.52	
5	16QAM	1	12	23.50	23.47	23.47	
5	16QAM	1	24	23.59	23.51	23.49	23.2
5	16QAM	12	0	22.43	22.35	22.36	
5	16QAM	12	7	22.42	22.33	22.35	
5	16QAM	12	13	22.40	22.37	22.37	23.2
5	16QAM	25	0	22.43	22.34	22.33	
5	64QAM	1	0	22.14	22.47	22.39	
5	64QAM	1	12	22.50	22.44	22.45	23.2
5	64QAM	1	24	22.47	22.47	22.39	
5	64QAM	12	0	21.47	21.41	21.37	
5	64QAM	12	7	21.47	21.37	21.42	22.2
5	64QAM	12	13	21.44	21.41	21.36	
5	64QAM	25	0	21.41	21.37	21.34	

Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.75			25.7
10	QPSK	1	25	24.63			
10	QPSK	1	49	24.57			
10	QPSK	25	0	23.70			24.7
10	QPSK	25	12	23.70			
10	QPSK	25	25	23.71			
10	QPSK	50	0	23.67			24.7
10	16QAM	1	0	24.06			
10	16QAM	1	25	24.04			
10	16QAM	1	49	23.94			23.7
10	16QAM	25	0	22.67			
10	16QAM	25	12	22.68			
10	16QAM	25	25	22.70			23.7
10	16QAM	50	0	22.68			
10	64QAM	1	0	22.93			
10	64QAM	1	25	22.49			22.7
10	64QAM	1	49	22.88			
10	64QAM	25	0	21.60			
10	64QAM	25	12	21.16			22.7
10	64QAM	25	25	21.16			
10	64QAM	50	0	21.36			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.62	24.61	24.59	25.7
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.7
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.7
5	16QAM	1	0	23.93	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.7
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.7
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.89	22.80	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.7
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.7
5	64QAM	12	13	21.44	20.88	21.93	
5	64QAM	25	0	21.56	21.03	21.17	



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	24.66	24.65	24.61	25.7		
10	QPSK	1	25	24.69	24.70	24.71			
10	QPSK	1	49	24.75	24.80	24.72			
10	QPSK	25	0	23.73	23.76	23.76	24.7		
10	QPSK	25	12	23.88	23.82	23.79			
10	QPSK	25	25	23.88	23.88	23.88			
10	QPSK	50	0	23.79	23.78	23.79	24.7		
10	16QAM	1	0	24.00	23.99	24.01			
10	16QAM	1	25	24.14	24.11	24.08			
10	16QAM	1	49	24.12	24.10	24.09	23.7		
10	16QAM	25	0	22.74	22.74	22.73			
10	16QAM	25	12	22.90	22.79	22.81			
10	16QAM	25	25	22.89	22.90	22.82	23.7		
10	16QAM	50	0	22.80	22.80	22.77			
10	64QAM	1	0	22.65	22.75	22.88			
10	64QAM	1	25	22.71	22.71	22.85	23.7		
10	64QAM	1	49	22.87	22.93	22.76			
10	64QAM	25	0	21.49	21.50	21.47			
10	64QAM	25	12	21.61	21.54	21.52	22.7		
10	64QAM	25	25	21.65	21.76	21.84			
10	64QAM	50	0	21.62	21.68	21.62			
Channel				23755	23790	23825	Tune-up limit (dBm)		
Frequency (MHz)				708.5	710	713.5			
5	QPSK	1	0	24.66	24.66	24.68	25.7		
5	QPSK	1	12	24.74	24.79	24.75			
5	QPSK	1	24	24.79	24.79	24.78			
5	QPSK	12	0	23.76	23.76	23.79	24.7		
5	QPSK	12	7	23.85	23.81	23.82			
5	QPSK	12	13	23.83	23.86	23.83			
5	QPSK	25	0	23.81	23.79	23.82	24.7		
5	16QAM	1	0	23.99	23.98	23.99			
5	16QAM	1	12	24.02	24.06	24.04			
5	16QAM	1	24	24.13	24.14	24.10	23.7		
5	16QAM	12	0	22.79	22.83	22.81			
5	16QAM	12	7	22.89	22.86	22.89			
5	16QAM	12	13	22.84	22.96	22.94	23.7		
5	16QAM	25	0	22.85	22.83	22.87			
5	64QAM	1	0	22.40	22.44	22.79			
5	64QAM	1	12	22.76	22.60	22.94	22.7		
5	64QAM	1	24	22.59	22.57	22.67			
5	64QAM	12	0	21.61	21.45	21.75			
5	64QAM	12	7	21.73	21.52	21.89	22.7		
5	64QAM	12	13	21.65	21.56	21.88			
5	64QAM	25	0	21.55	21.51	21.79			



Band 25											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)				
				Low Ch / 26140	Middle Ch / 26340	High Ch / 26590					
Channel											
Frequency (MHz)				1850	1880	1910					
20	QPSK	1	0	24.65	24.76	24.91	25.7				
20	QPSK	1	49	24.64	24.72	24.82					
20	QPSK	1	99	24.61	24.75	24.23					
20	QPSK	50	0	23.71	23.86	23.94	24.7				
20	QPSK	50	24	23.80	23.95	24.01					
20	QPSK	50	50	23.81	23.92	23.97					
20	16QAM	1	0	23.95	24.06	24.19	24.7				
20	16QAM	1	49	23.98	24.09	24.15					
20	16QAM	1	99	23.99	24.08	23.60					
20	16QAM	50	0	22.72	22.85	22.96	23.7				
20	16QAM	50	24	22.80	22.96	22.98					
20	16QAM	50	50	22.76	22.93	23.05					
20	16QAM	100	0	22.78	22.93	22.94	23.7				
20	64QAM	1	0	22.86	22.94	22.43					
20	64QAM	1	49	22.70	22.91	22.54					
20	64QAM	1	99	22.42	22.97	21.74	22.7				
20	64QAM	50	0	21.75	21.89	21.33					
20	64QAM	50	24	21.66	22.01	21.58					
20	64QAM	50	50	21.43	21.95	21.32	22.7				
20	64QAM	100	0	21.70	21.95	21.16					
Channel				26115	26340	26615	Tune-up limit (dBm)				
Frequency (MHz)				1857.5	1880	1907.5					
15	QPSK	1	0	24.65	24.77	24.86	25.7				
15	QPSK	1	37	24.65	24.76	24.88					
15	QPSK	1	74	24.63	24.77	24.32					
15	QPSK	36	0	23.72	23.86	23.96	24.7				
15	QPSK	36	20	23.79	23.95	24.07					
15	QPSK	36	39	23.74	23.89	23.93					
15	QPSK	75	0	23.77	23.94	23.96	24.7				
15	16QAM	1	0	23.93	24.07	24.15					
15	16QAM	1	37	23.97	24.09	24.18					
15	16QAM	1	74	23.92	24.10	23.69	23.7				
15	16QAM	36	0	22.73	22.87	22.98					
15	16QAM	36	20	22.78	22.96	23.06					
15	16QAM	36	39	22.72	22.90	23.02	23.7				
15	16QAM	75	0	22.77	22.94	22.98					
15	64QAM	1	0	22.83	22.92	22.34	23.7				
15	64QAM	1	37	22.88	22.97	22.77					
15	64QAM	1	74	22.42	22.97	21.81					
15	64QAM	36	0	21.77	21.82	21.56	22.7				
15	64QAM	36	20	21.82	21.96	21.69					
15	64QAM	36	39	21.58	21.93	21.28					
15	64QAM	75	0	21.79	21.95	21.27					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1855	1880	1910					
10	QPSK	1	0	24.65	24.70	24.89	25.7				
10	QPSK	1	25	24.55	24.70	24.90					
10	QPSK	1	49	24.60	24.75	24.20					
10	QPSK	25	0	23.74	23.81	23.94	24.7				
10	QPSK	25	12	23.79	23.93	24.00					
10	QPSK	25	25	23.79	23.93	23.65					
10	QPSK	50	0	23.78	23.93	23.95	24.7				
10	16QAM	1	0	23.98	24.12	24.22					
10	16QAM	1	25	23.98	24.13	24.27					
10	16QAM	1	49	23.98	24.13	23.58	23.7				
10	16QAM	25	0	22.76	22.83	22.96					
10	16QAM	25	12	22.80	22.95	22.97					
10	16QAM	25	25	22.76	22.90	22.84	23.7				
10	16QAM	50	0	22.78	22.91	22.97					
10	64QAM	1	0	22.91	22.95	22.66	23.7				
10	64QAM	1	25	22.92	23.05	22.33					
10	64QAM	1	49	22.91	23.07	21.74					
10	64QAM	25	0	21.79	21.82	21.62	22.7				
10	64QAM	25	12	21.84	21.96	21.46					
10	64QAM	25	25	21.82	21.93	21.00					
10	64QAM	50	0	21.76	21.94	21.20					
Channel				26055	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1880	1912.5					
5	QPSK	1	0	24.60	24.72	24.90	25.7				
5	QPSK	1	12	24.65	24.84	24.43					
5	QPSK	1	24	24.64	24.80	24.08					
5	QPSK	12	0	23.72	23.83	23.86	24.7				
5	QPSK	12	7	23.79	23.91	23.61					
5	QPSK	12	13	23.78	23.94	23.38					
5	QPSK	25	0	23.74	23.90	23.55	24.7				
5	16QAM	1	0	24.03	24.05	24.22					
5	16QAM	1	12	23.94	24.12	23.81					
5	16QAM	1	24	23.97	24.15	23.46	23.7				
5	16QAM	12	0	22.74	22.86	22.99					
5	16QAM	12	7	22.81	22.95	22.77					
5	16QAM	12	13	22.82	22.96	22.55	23.7				
5	16QAM	25	0	22.79	22.90	22.73					
5	64QAM	1	0	22.86	23.00	22.35	23.7				
5	64QAM	1	12	22.84	23.00	21.93					
5	64QAM	1	24	22.86	23.03	21.55					
5	64QAM	12	0	21.76	21.82	21.17	22.7				
5	64QAM	12	7	21.84	21.99	21.00					
5	64QAM	12	13	21.88	22.00	20.74					
5	64QAM	25	0	21.81	21.93	20.87					
Channel				26055	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1913.5					
3	QPSK	1	0	24.54	24.63	24.53	25.7				
3	QPSK	1	8	24.69	24.83	24.34					
3	QPSK	1	14	24.67	24.83	24.09					
3	QPSK	8	0	23.69	23.80	23.60	24.7				
3	QPSK	8	4	23.78	23.90	23.48					
3	QPSK	8	7	23.75	23.89	23.37					
3	QPSK	15	0	23.72	23.90	23.43	24.7				
3	16QAM	1	0	23.90	23.95	23.83					
3	16QAM	1	8	24.00	24.20	23.68					
3	16QAM	1	14	23.99	24.15	23.42	23.7				
3	16QAM	8	0	22.76	22.89	22.72					
3	16QAM	8	4	22.82	22.96	22.61					
3	16QAM	8	7	22.81	22.99	22.48	23.7				
3	16QAM	15	0	22.79	22.91	22.56					
3	64QAM	1	0	22.80	22.87	21.94					
3	64QAM	1	8	22.93	23.11	21.80	22.7				
3	64QAM	1	14	22.90	23.08	21.57					
3	64QAM	8	0	21.76	21.90	20.85					
3	64QAM	8	4	21.84	22.00	20.77	22.7				
3	64QAM	8	7	21.83	21.99	20.64					
3	64QAM	15	0	21.79	21.92	20.73					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1880	1914.3					
1.4	QPSK	1	0	24.51	24.66	24.19	25.7				
1.4	QPSK	1	3	24.62	24.74	24.13					
1.4	QPSK	1	5	24.59	24.76	24.02					
1.4	QPSK	3	0	24.56	24.71	24.13	24.7				
1.4	QPSK	3	1	24.63	24.77	24.14	24.7				
1.4	QPSK	3	3	24.59	24.77	24.04					
1.4	QPSK	6	0	23.67	23.83	23.31					
1.4	16QAM	1	0	23.80	23.98	24.28	24.7				
1.4	16QAM	1	3	23.83	24.12	23.67					
1.4	16QAM	1	5	23.94	24.09	23.36					
1.4	16QAM	3	0	23.60	23.77	23.31	24.7				
1.4	16QAM	3	1	23.70	23.85	23.31					
1.4	16QAM	3	3	23.65	23.82	23.22					
1.4	16QAM	6	0	22.73	22.90	22.41	23.7				
1.4	16QAM	6	1	22.77	22.91	21.82					
1.4	64QAM	1	3	22.85	23.04	21.95					
1.4	64QAM	1	5	22.79	22.99	22.00	23.7				
1.4	64QAM	3	1	22.80	22.97	21.78					
1.4	64QAM	3	3	22.78	22.96	21.73					



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				26785	26865	26955	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.76	24.52	24.57	25.7
15	QPSK	1	37	24.46	24.51	24.50	
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	24.7
15	QPSK	36	20	23.66	23.61	23.63	
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	24.7
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	
15	16QAM	1	74	23.61	23.65	23.62	23.7
15	16QAM	36	0	22.63	22.66	22.67	
15	16QAM	36	20	22.65	22.61	22.60	
15	16QAM	36	39	22.59	22.65	22.62	23.7
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	22.7
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	22.7
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	
Channel				26740	26865	26959	Tune-up limit (dBm)
Frequency (MHz)				810	831.5	844	
10	QPSK	1	0	24.72	24.50	24.80	25.7
10	QPSK	1	25	24.57	24.55	24.59	
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	24.7
10	QPSK	25	12	23.76	23.66	23.65	
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	24.7
10	16QAM	1	0	24.07	23.98	23.98	
10	16QAM	1	25	23.94	24.01	23.97	
10	16QAM	1	49	23.97	24.02	23.73	23.7
10	16QAM	25	0	22.74	22.89	22.66	
10	16QAM	25	12	22.76	22.71	22.67	
10	16QAM	25	25	22.64	22.63	22.63	23.7
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	
10	64QAM	1	25	22.90	22.93	22.93	23.7
10	64QAM	1	49	22.89	22.91	21.83	
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.78	21.69	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.68	21.50	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	25.7
5	QPSK	1	12	24.72	24.63	24.47	
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	24.7
5	QPSK	12	7	23.80	23.72	23.57	
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	24.7
5	16QAM	1	0	24.09	23.94	23.99	
5	16QAM	1	12	24.00	23.97	23.85	
5	16QAM	1	24	23.91	24.01	23.71	23.7
5	16QAM	12	0	22.84	22.72	22.73	
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.66	22.44	23.7
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.59	22.83	
5	64QAM	1	12	22.60	22.36	22.03	23.7
5	64QAM	1	24	22.81	22.89	21.86	
5	64QAM	12	0	21.83	21.78	21.45	
5	64QAM	12	7	21.84	21.81	21.00	22.7
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				26706	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.52	25.7
3	QPSK	1	8	24.75	24.69	24.16	
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	8	0	23.83	23.68	23.39	24.7
3	QPSK	8	4	23.77	23.72	23.28	
3	QPSK	8	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	24.7
3	16QAM	1	0	24.09	23.91	23.81	
3	16QAM	1	8	24.06	24.06	23.47	
3	16QAM	1	14	23.95	23.96	23.55	23.7
3	16QAM	8	0	22.86	22.77	22.54	
3	16QAM	8	4	22.88	22.77	22.42	
3	16QAM	8	7	22.78	22.76	22.45	23.7
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.83	22.00	
3	64QAM	1	8	23.03	22.95	21.88	23.7
3	64QAM	1	14	22.86	22.90	21.83	
3	64QAM	8	0	21.79	21.74	20.85	
3	64QAM	8	4	21.88	21.81	20.77	22.7
3	64QAM	8	7	21.81	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26687	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	25.7
1.4	QPSK	1	3	24.71	24.63	24.26	
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.69	24.55	24.17	24.7
1.4	QPSK	3	1	24.74	24.58	24.22	
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	24.7
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	
1.4	16QAM	1	5	23.93	23.86	23.65	23.7
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	23.7
1.4	16QAM	6	0	22.82	22.75	22.46	
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.89	21.90	23.7
1.4	64QAM	1	5	22.86	22.78	21.85	
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	22.7
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	

Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		21.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.86	22.86	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.06	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.15	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



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	24.77	24.67	24.68	25.7		
20	QPSK	1	49	24.65	24.65	24.65			
20	QPSK	1	99	24.68	24.66	24.61			
20	QPSK	50	0	23.76	23.76	23.72	24.7		
20	QPSK	50	24	23.80	23.74	23.73			
20	QPSK	50	50	23.84	23.78	23.75			
20	QPSK	100	0	23.79	23.71	23.77	24.7		
20	16QAM	1	0	24.06	23.96	24.00			
20	16QAM	1	49	24.01	24.03	24.04			
20	16QAM	1	99	24.03	24.01	23.95	23.7		
20	16QAM	50	0	22.77	22.75	22.75			
20	16QAM	50	24	22.82	22.77	22.73			
20	16QAM	50	50	22.82	22.77	22.76	23.7		
20	64QAM	100	0	22.79	22.73	22.78			
20	64QAM	1	0	22.04	22.83	22.82	23.7		
20	64QAM	1	49	22.63	22.90	22.29			
20	64QAM	1	99	22.94	22.89	22.87			
20	64QAM	50	0	21.00	21.79	21.49	22.7		
20	64QAM	50	24	21.30	21.64	21.57			
20	64QAM	50	50	21.84	21.60	21.74			
20	64QAM	100	0	21.53	21.76	21.80			
Channel				133197	133297	133397	Tune-up limit (dBm)		
Frequency (MHz)				670.5	680.5	690.5			
15	QPSK	1	0	24.74	24.65	24.63	25.7		
15	QPSK	1	37	24.62	24.66	24.61			
15	QPSK	1	74	24.64	24.68	24.64			
15	QPSK	36	0	23.73	23.71	23.69	24.7		
15	QPSK	36	20	23.80	23.73	23.78			
15	QPSK	36	39	23.73	23.76	23.74			
15	QPSK	75	0	23.81	23.74	23.68	24.7		
15	16QAM	1	0	24.05	24.01	23.98			
15	16QAM	1	37	23.95	24.02	24.00			
15	16QAM	1	74	23.97	24.00	23.98	23.7		
15	16QAM	36	0	22.76	22.75	22.71			
15	16QAM	36	20	22.79	22.74	22.79			
15	16QAM	36	39	22.77	22.79	22.76	23.7		
15	16QAM	75	0	22.63	22.73	22.70			
15	64QAM	1	0	22.02	22.43	22.76			
15	64QAM	1	37	21.86	22.94	22.88	23.7		
15	64QAM	1	74	22.88	22.60	22.84			
15	64QAM	36	0	20.97	21.77	21.44			
15	64QAM	36	20	20.94	21.76	21.81	22.7		
15	64QAM	36	39	21.48	21.56	21.78			
15	64QAM	75	0	21.29	21.75	21.67			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				668	678	693			
10	QPSK	1	0	24.76	24.64	24.66	25.7		
10	QPSK	1	25	24.61	24.62	24.63			
10	QPSK	1	49	24.66	24.71	24.62			
10	QPSK	25	0	23.78	23.71	23.69	24.7		
10	QPSK	25	12	23.79	23.82	23.70			
10	QPSK	25	25	23.72	23.78	23.74			
10	QPSK	50	0	23.80	23.81	23.71	24.7		
10	16QAM	1	0	24.10	24.02	24.04			
10	16QAM	1	25	23.98	24.06	24.00			
10	16QAM	1	49	23.98	24.07	23.96	23.7		
10	16QAM	25	0	22.76	22.70	22.68			
10	16QAM	25	12	22.78	22.81	22.68			
10	16QAM	25	25	22.65	22.77	22.73	23.7		
10	16QAM	50	0	22.79	22.80	22.69			
10	64QAM	1	0	21.80	22.30	22.77			
10	64QAM	1	25	22.01	22.95	22.95	23.7		
10	64QAM	1	49	22.14	22.98	22.45			
10	64QAM	25	0	20.82	21.71	21.71			
10	64QAM	25	12	20.84	21.84	21.76	22.7		
10	64QAM	25	25	20.71	21.81	21.64			
10	64QAM	50	0	20.63	21.77	21.69			
Channel				133147	133247	133497	Tune-up limit (dBm)		
Frequency (MHz)				665.5	675.5	695.5			
5	QPSK	1	0	24.57	24.60	24.72	25.7		
5	QPSK	1	12	24.71	24.68	24.70			
5	QPSK	1	24	24.70	24.68	24.63			
5	QPSK	12	0	23.73	23.76	23.74	24.7		
5	QPSK	12	7	23.84	23.79	23.76			
5	QPSK	12	13	23.76	23.76	23.70			
5	QPSK	25	0	23.76	23.76	23.68	24.7		
5	16QAM	1	0	23.75	24.01	24.02			
5	16QAM	1	12	23.97	24.03	23.97			
5	16QAM	1	24	23.95	24.02	23.93	23.7		
5	16QAM	12	0	22.64	22.80	22.78			
5	16QAM	12	7	22.86	22.80	22.78			
5	16QAM	12	13	22.77	22.77	22.70	23.7		
5	16QAM	25	0	22.69	22.81	22.70			
5	64QAM	1	0	21.74	22.06	22.91			
5	64QAM	1	12	21.79	22.94	22.70	23.7		
5	64QAM	1	24	21.96	22.96	22.25			
5	64QAM	12	0	20.82	21.49	21.88			
5	64QAM	12	7	21.00	21.86	21.75	22.7		
5	64QAM	12	13	20.99	21.81	21.61			
5	64QAM	25	0	20.76	21.59	21.48			



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. I	Power Middle Ch. J	Power High Ch. K	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				18600	18800	19000	
20	QPSK	1	0	24.72	24.80	24.91	25.7
20	QPSK	1	49	24.67	24.74	24.77	
20	QPSK	1	99	24.64	24.71	24.79	
20	QPSK	50	0	23.78	23.84	23.88	24.7
20	QPSK	50	24	23.87	23.96	23.91	
20	QPSK	50	50	23.88	23.94	23.99	
20	QPSK	100	0	23.86	23.97	23.94	24.7
20	16QAM	1	0	24.10	24.10	24.20	
20	16QAM	1	49	24.03	24.08	24.18	
20	16QAM	1	99	23.93	24.12	24.12	23.7
20	16QAM	50	0	22.80	22.85	22.86	
20	16QAM	50	24	22.89	22.87	22.94	
20	16QAM	50	50	22.87	22.95	23.00	23.7
20	16QAM	100	0	22.86	22.86	22.89	
20	64QAM	1	0	22.94	22.98	23.03	
20	64QAM	1	49	22.91	22.97	22.98	23.7
20	64QAM	1	99	22.84	23.00	22.49	
20	64QAM	50	0	21.81	21.87	21.54	
20	64QAM	50	24	21.92	21.92	21.54	22.7
20	64QAM	50	50	21.86	21.97	21.58	
20	64QAM	100	0	21.87	21.90	21.49	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	18800	1902.5	
15	QPSK	1	0	24.75	24.83	24.87	25.7
15	QPSK	1	37	24.70	24.80	24.88	
15	QPSK	1	74	24.73	24.80	24.90	
15	QPSK	36	0	23.84	23.87	23.91	24.7
15	QPSK	36	20	23.93	23.90	24.03	
15	QPSK	36	39	23.87	23.97	24.03	
15	QPSK	75	0	23.90	23.91	23.93	24.7
15	16QAM	1	0	24.02	24.13	24.19	
15	16QAM	1	37	24.06	24.14	24.20	
15	16QAM	1	74	24.03	24.13	24.18	23.7
15	16QAM	36	0	22.81	22.86	22.92	
15	16QAM	36	20	22.88	22.90	23.03	
15	16QAM	36	39	22.86	22.97	23.03	23.7
15	16QAM	75	0	22.91	22.91	22.93	
15	64QAM	1	0	22.88	23.01	22.51	
15	64QAM	1	37	22.96	23.01	22.46	23.7
15	64QAM	1	74	22.80	23.04	22.53	
15	64QAM	36	0	21.85	21.91	21.44	
15	64QAM	36	20	21.94	21.91	21.56	22.7
15	64QAM	36	39	21.84	22.04	21.51	
15	64QAM	75	0	21.89	21.91	21.47	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.76	24.72	24.89	25.7
10	QPSK	1	25	24.69	24.82	24.87	
10	QPSK	1	49	24.72	24.83	24.87	
10	QPSK	25	0	23.86	23.85	23.90	24.7
10	QPSK	25	12	23.87	23.89	23.95	
10	QPSK	25	25	23.88	24.00	24.05	
10	QPSK	50	0	23.87	23.89	23.97	24.7
10	16QAM	1	0	24.12	24.15	24.23	
10	16QAM	1	25	24.13	24.18	24.27	
10	16QAM	1	49	24.08	24.18	24.25	23.7
10	16QAM	25	0	22.86	22.85	22.91	
10	16QAM	25	12	22.90	22.90	22.96	
10	16QAM	25	25	22.88	22.97	23.05	23.7
10	16QAM	50	0	22.88	22.88	22.95	
10	64QAM	1	0	23.02	23.03	22.50	
10	64QAM	1	25	23.05	23.16	22.73	23.7
10	64QAM	1	49	22.95	23.10	22.99	
10	64QAM	25	0	21.88	21.88	21.51	
10	64QAM	25	12	21.94	21.92	21.66	22.7
10	64QAM	25	25	21.90	22.00	21.58	
10	64QAM	50	0	21.90	21.92	21.48	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	18800	1907.5	
5	QPSK	1	0	24.73	24.75	24.88	25.7
5	QPSK	1	12	24.78	24.80	24.89	
5	QPSK	1	24	24.79	24.88	24.90	
5	QPSK	12	0	23.83	23.85	24.00	24.7
5	QPSK	12	7	23.91	23.94	24.02	
5	QPSK	12	13	23.88	23.93	24.03	
5	QPSK	25	0	23.85	23.87	24.01	24.7
5	16QAM	1	0	24.07	24.08	24.20	
5	16QAM	1	12	24.05	24.15	24.20	
5	16QAM	1	24	24.08	24.24	24.21	23.7
5	16QAM	12	0	22.87	22.89	23.00	
5	16QAM	12	7	22.92	23.01	23.06	
5	16QAM	12	13	22.86	22.96	23.04	23.7
5	16QAM	25	0	22.86	22.90	23.04	
5	64QAM	1	0	23.04	23.07	22.61	
5	64QAM	1	12	23.00	23.13	22.65	23.7
5	64QAM	1	24	23.02	23.12	22.49	
5	64QAM	12	0	21.92	21.92	21.62	
5	64QAM	12	7	21.96	22.04	21.63	22.7
5	64QAM	12	13	21.93	22.00	21.53	
5	64QAM	25	0	21.90	21.90	21.49	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	18800	1908.5	
3	QPSK	1	0	24.74	24.77	24.88	25.7
3	QPSK	1	8	24.84	24.91	24.96	
3	QPSK	1	14	24.77	24.88	24.95	
3	QPSK	8	0	23.85	23.88	23.98	24.7
3	QPSK	8	4	23.86	23.95	24.02	
3	QPSK	8	7	23.89	23.95	24.01	
3	QPSK	15	0	23.88	23.89	24.02	24.7
3	16QAM	1	0	24.05	24.07	24.19	
3	16QAM	1	8	24.10	24.22	24.26	
3	16QAM	1	14	24.04	24.22	24.25	23.7
3	16QAM	8	0	22.91	22.94	23.06	
3	16QAM	8	4	22.93	23.01	23.12	
3	16QAM	8	7	22.91	23.02	23.06	23.7
3	16QAM	15	0	22.86	22.92	23.05	
3	64QAM	1	0	23.01	22.99	22.62	
3	64QAM	1	8	23.11	23.20	22.62	23.7
3	64QAM	1	14	23.05	23.14	22.49	
3	64QAM	8	0	21.89	21.90	21.55	
3	64QAM	8	4	21.93	22.02	21.56	22.7
3	64QAM	8	7	21.94	21.99	21.50	
3	64QAM	15	0	21.90	21.89	21.50	
Channel				18590	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	18800	1909.3	
1.4	QPSK	1	0	24.71	24.79	24.80	25.7
1.4	QPSK	1	3	24.80	24.85	24.88	
1.4	QPSK	1	5	24.73	24.80	24.84	
1.4	QPSK	3	0	24.74	24.83	24.86	24.7
1.4	QPSK	3	1	24.77	24.86	24.89	
1.4	QPSK	3	3	24.75	24.80	24.87	
1.4	QPSK	6	0	23.79	23.88	23.94	24.7
1.4	16QAM	1	0	24.02	24.14	24.17	
1.4	16QAM	1	3	24.10	24.19	24.21	
1.4	16QAM	1	5	24.02	24.10	24.13	24.7
1.4	16QAM	3	0	23.81	23.88	23.90	
1.4	16QAM	3	1	23.87	23.95	23.98	
1.4	16QAM	3	3	23.82	23.86	23.93	23.7
1.4	16QAM	6	0	22.84	22.93	23.02	
1.4	64QAM	1	0	22.95	23.01	22.45	
1.4	64QAM	1	3	23.02	23.08	22.49	23.7
1.4	64QAM	1	5	22.97	23.03	22.43	
1.4	64QAM	3	0	22.93	23.01	22.46	
1.4	64QAM	3	1	22.97	23.06	22.52	22.7
1.4	64QAM	3	3	22.93	23.02	22.40	
1.4	64QAM	6	0	21.80	21.90	21.36	



Band 4							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20050	Power Middle Ch / 20175	Power High Ch / 20300	Tune-up limit (dBm)
Channel				1720	1732.5	1745	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	24.64	24.72	24.65	25.7
20	QPSK	1	49	24.52	24.51	24.51	
20	QPSK	1	99	24.53	24.54	24.53	
20	QPSK	50	0	23.70	23.72	23.73	24.7
20	QPSK	50	24	23.72	23.70	23.74	
20	QPSK	50	50	23.64	23.70	23.69	
20	QPSK	100	0	23.69	23.75	23.61	24.7
20	16QAM	1	0	23.98	24.04	23.99	
20	16QAM	1	49	23.85	23.87	23.88	
20	16QAM	1	99	23.87	23.96	23.84	23.7
20	16QAM	50	0	22.99	22.71	22.74	
20	16QAM	50	24	22.73	22.73	22.77	
20	16QAM	50	50	22.65	22.64	22.68	23.7
20	16QAM	100	0	22.71	22.73	22.65	
20	64QAM	1	0	22.84	22.90	22.69	
20	64QAM	1	49	22.73	22.72	22.77	22.7
20	64QAM	1	99	22.73	22.64	22.80	
20	64QAM	50	0	21.70	21.76	21.77	
20	64QAM	50	24	21.74	21.75	21.77	22.7
20	64QAM	50	50	21.68	21.64	21.69	
20	64QAM	100	0	21.76	21.76	21.70	
Channel				20025	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1742.5	
15	QPSK	1	0	24.67	24.71	24.70	25.7
15	QPSK	1	37	24.52	24.51	24.57	
15	QPSK	1	74	24.56	24.55	24.57	
15	QPSK	36	0	23.78	23.72	23.72	24.7
15	QPSK	36	20	23.73	23.73	23.76	
15	QPSK	36	39	23.66	23.67	23.71	
15	QPSK	75	0	23.70	23.75	23.68	24.7
15	16QAM	1	0	23.99	24.02	24.04	
15	16QAM	1	37	23.88	23.87	23.92	
15	16QAM	1	74	23.87	23.85	23.89	23.7
15	16QAM	36	0	22.78	22.72	22.76	
15	16QAM	36	20	22.71	22.73	22.76	
15	16QAM	36	39	22.67	22.66	22.71	23.7
15	16QAM	75	0	22.72	22.75	22.69	
15	64QAM	1	0	22.84	22.82	22.93	
15	64QAM	1	37	22.80	22.66	22.81	22.7
15	64QAM	1	74	22.76	22.74	22.80	
15	64QAM	36	0	21.79	21.81	21.78	
15	64QAM	36	20	21.73	21.74	21.75	22.7
15	64QAM	36	39	21.71	21.62	21.76	
15	64QAM	75	0	21.71	21.75	21.67	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.59	24.65	24.66	25.7
10	QPSK	1	25	24.57	24.57	24.71	
10	QPSK	1	49	24.60	24.62	24.66	
10	QPSK	25	0	23.72	23.69	23.70	24.7
10	QPSK	25	12	23.72	23.78	23.75	
10	QPSK	25	25	23.75	23.77	23.81	
10	QPSK	50	0	23.75	23.75	23.76	24.7
10	16QAM	1	0	23.98	24.02	24.06	
10	16QAM	1	25	23.97	24.02	24.03	
10	16QAM	1	49	24.00	23.98	24.05	23.7
10	16QAM	25	0	22.72	22.67	22.73	
10	16QAM	25	12	22.76	22.79	22.77	
10	16QAM	25	25	22.74	22.72	22.78	23.7
10	16QAM	50	0	22.75	22.77	22.74	
10	64QAM	1	0	22.70	22.63	22.90	
10	64QAM	1	25	22.68	22.60	22.98	23.7
10	64QAM	1	49	22.91	22.65	22.95	
10	64QAM	25	0	21.70	21.70	21.74	
10	64QAM	25	12	21.77	21.74	21.79	22.7
10	64QAM	25	25	21.76	21.57	21.83	
10	64QAM	50	0	21.78	21.74	21.79	
Channel				16975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.63	24.62	24.67	25.7
5	QPSK	1	12	24.69	24.67	24.71	
5	QPSK	1	24	24.66	24.69	24.71	
5	QPSK	12	0	23.71	23.69	23.75	24.7
5	QPSK	12	7	23.76	23.77	23.80	
5	QPSK	12	13	23.72	23.76	23.77	
5	QPSK	25	0	23.70	23.73	23.77	24.7
5	16QAM	1	0	23.97	23.92	24.05	
5	16QAM	1	12	23.98	24.00	24.04	
5	16QAM	1	24	24.01	23.99	24.03	23.7
5	16QAM	12	0	22.75	22.69	22.82	
5	16QAM	12	7	22.79	22.80	22.85	
5	16QAM	12	13	22.78	22.80	22.80	23.7
5	16QAM	25	0	22.74	22.76	22.79	
5	64QAM	1	0	22.72	22.87	22.99	
5	64QAM	1	12	22.92	22.74	22.96	23.7
5	64QAM	1	24	22.98	22.61	22.95	
5	64QAM	12	0	21.77	21.72	21.85	
5	64QAM	12	7	21.84	21.77	21.90	22.7
5	64QAM	12	13	21.78	21.62	21.84	
5	64QAM	25	0	21.74	21.65	21.82	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.64	24.60	24.69	25.7
3	QPSK	1	8	24.71	24.71	24.71	
3	QPSK	1	14	24.65	24.69	24.67	
3	QPSK	8	0	23.71	23.65	23.79	24.7
3	QPSK	8	4	23.75	23.75	23.77	
3	QPSK	8	7	23.74	23.76	23.74	
3	QPSK	15	0	23.74	23.73	23.78	24.7
3	16QAM	1	0	23.99	23.92	23.98	
3	16QAM	1	8	24.05	24.07	24.10	
3	16QAM	1	14	23.98	23.97	24.05	23.7
3	16QAM	8	0	22.79	22.75	22.82	
3	16QAM	8	4	22.84	22.84	22.90	
3	16QAM	8	7	22.81	22.79	22.83	23.7
3	16QAM	15	0	22.80	22.74	22.78	
3	64QAM	1	0	22.75	22.84	22.95	
3	64QAM	1	8	23.00	22.91	23.01	23.7
3	64QAM	1	14	22.97	22.69	22.98	
3	64QAM	8	0	21.73	21.73	21.85	
3	64QAM	8	4	21.84	21.72	21.86	22.7
3	64QAM	8	7	21.83	21.64	21.83	
3	64QAM	15	0	21.74	21.70	21.78	
Channel				16957	20175	20395	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.54	24.59	24.58	25.7
1.4	QPSK	1	3	24.63	24.63	24.66	
1.4	QPSK	1	5	24.54	24.61	24.60	
1.4	QPSK	3	0	24.59	24.60	24.67	24.7
1.4	QPSK	3	1	24.65	24.64	24.71	
1.4	QPSK	3	5	24.63	24.59	24.63	
1.4	QPSK	8	0	23.68	23.67	23.72	24.7
1.4	16QAM	1	0	23.89	23.90	23.94	
1.4	16QAM	1	3	23.95	23.97	24.00	
1.4	16QAM	1	5	23.89	23.93	23.94	24.7
1.4	16QAM	3	0	23.69	23.69	23.75	
1.4	16QAM	3	1	23.76	23.73	23.80	
1.4	16QAM	3	5	23.67	23.69	23.71	23.7
1.4	16QAM	6	0	22.73	22.75	22.78	
1.4	64QAM	1	0	22.68	22.71	22.88	
1.4	64QAM	1	3	22.81	22.75	22.94	23.7
1.4	64QAM	1	5	22.79	22.65	22.85	
1.4	64QAM	3	0	22.69	22.75	22.82	
1.4	64QAM	3	1	22.83	22.94	22.91	22.7
1.4	64QAM	3	3	22.79	22.70	22.86	
1.4	64QAM	6	0	21.83	21.62	21.71	

Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20450	Power Middle Ch / 20525	Power High Ch / 20600	Tune-up limit (dBm)
Channel				829.5	836.5	844	25.7
Frequency (MHz)				829.5	836.5	844	
10	QPSK	1	0	24.43	24.46	24.43	25.7
10	QPSK	1	25	24.39	24.46	24.45	
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	24.7
10	QPSK	25	12	23.56	23.57	23.57	
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.56	24.7
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	
10	16QAM	1	49	23.63	23.66	23.76	23.7
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.55	
10	16QAM	25	25	22.54	22.60	22.57	23.7
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	23.7
10	64QAM	1	25	22.73	22.49	22.51	
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.54	21.60	21.58	22.7
10	64QAM	25	12	21.63	21.53	21.47	
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	Tune-up limit (dBm)
Channel				829.5	836.5	844.5	
Frequency (MHz)				829.5	836.5	844.5	25.7
5	QPSK	1	0	24.46	24.40	24.40	
5	QPSK	1	12	24.44	24.46	24.19	24.7
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	
5	QPSK	12	7	23.54	23.61	23.25	24.7
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.54	23.52	23.37	
5	16QAM	1	0	23.91	23.90	23.87	24.7
5	16QAM	1	12	23.78	23.86	23.43	
5	16QAM	1	24	23.79	23.83	23.43	
5	16QAM	12	0	22.65	22.62	22.60	23.7
5	16QAM	12	7	22.57	22.64	22.38	
5	16QAM	12	13	22.52	22.59	22.36	
5	16QAM	25	0	22.57	22.59	22.51	23.7
5	64QAM	1	0	22.87	22.79	22.18	
5	64QAM	1	12	22.72	22.71	21.72	
5	64QAM	1	24	22.72	22.73	21.73	22.7
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.59	21.85	
5	64QAM	12	13	21.60	21.61	20.71	Tune-up limit (dBm)
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	25.7
3	QPSK	1	8	24.43	24.45	24.13	
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	24.7
3	QPSK	8	4	23.55	23.62	23.16	
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.56	23.17	24.7
3	16QAM	1	0	23.87	23.84	23.44	
3	16QAM	1	8	23.89	23.89	23.38	
3	16QAM	1	14	23.74	23.82	23.44	23.7
3	16QAM	8	0	22.66	22.61	22.25	
3	16QAM	8	4	22.66	22.71	22.30	
3	16QAM	8	7	22.60	22.65	22.40	23.7
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	
3	64QAM	1	8	22.83	22.74	21.72	23.7
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	22.7
3	64QAM	8	4	21.66	21.56	20.73	
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	Tune-up limit (dBm)
Channel				23107	20525	23353	
Frequency (MHz)				824.7	836.5	846.3	25.7
1.4	QPSK	1	0	24.42	24.41	24.09	
1.4	QPSK	1	3	24.46	24.45	24.26	25.7
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	
1.4	QPSK	3	1	24.46	24.46	24.30	24.7
1.4	QPSK	3	3	24.41	24.45	24.42	
1.4	QPSK	6	0	23.50	23.51	23.36	
1.4	16QAM	1	0	23.75	23.73	23.46	24.7
1.4	16QAM	1	3	23.79	23.84	23.67	
1.4	16QAM	1	5	23.68	23.74	23.60	
1.4	16QAM	3	0	23.56	23.51	23.29	23.7
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	
1.4	16QAM	6	0	22.58	22.61	22.49	23.7
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	
1.4	64QAM	1	5	22.64	22.61	21.72	23.7
1.4	64QAM	3	0	22.66	22.60	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	
1.4	64QAM	3	3	22.63	22.60	21.75	22.7
1.4	64QAM	6	0	21.54	21.47	20.72	



Band 7							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.06	24.10	24.04	25.7
20	QPSK	1	49	24.12	24.13	24.01	
20	QPSK	1	99	24.25	24.24	24.05	
20	QPSK	50	0	23.18	23.18	23.17	24.7
20	QPSK	50	24	23.32	23.19	23.21	
20	QPSK	50	50	23.33	23.31	23.22	
20	QPSK	100	0	23.28	23.17	23.18	24.7
20	16QAM	1	0	23.42	23.44	23.38	
20	16QAM	1	49	23.49	23.48	23.36	
20	16QAM	1	99	23.53	23.52	23.39	23.7
20	16QAM	50	0	22.17	22.16	22.20	
20	16QAM	50	24	22.31	22.21	22.20	
20	16QAM	50	50	22.31	22.32	22.18	23.7
20	16QAM	100	0	22.26	22.20	22.18	
20	64QAM	1	0	22.25	22.25	22.30	
20	64QAM	1	49	22.37	22.40	22.27	22.7
20	64QAM	1	99	22.39	22.42	22.33	
20	64QAM	50	0	21.20	21.21	21.22	
20	64QAM	50	24	21.31	21.24	21.24	22.7
20	64QAM	50	50	21.32	21.32	21.20	
20	64QAM	100	0	21.30	21.21	21.18	
Channel				20850	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.14	24.13	24.00	25.7
15	QPSK	1	37	24.16	24.15	24.05	
15	QPSK	1	74	24.21	24.23	24.09	
15	QPSK	36	0	23.24	23.21	23.19	24.7
15	QPSK	36	20	23.34	23.26	23.23	
15	QPSK	36	39	23.32	23.33	23.20	
15	QPSK	75	0	23.28	23.24	23.20	24.7
15	16QAM	1	0	23.44	23.47	23.39	
15	16QAM	1	37	23.51	23.53	23.37	
15	16QAM	1	74	23.55	23.56	23.41	23.7
15	16QAM	36	0	22.27	22.21	22.19	
15	16QAM	36	20	22.31	22.23	22.20	
15	16QAM	36	39	22.29	22.30	22.17	23.7
15	16QAM	75	0	22.30	22.22	22.18	
15	64QAM	1	0	22.26	22.30	22.35	
15	64QAM	1	37	22.41	22.43	22.29	22.7
15	64QAM	1	74	22.45	22.41	22.30	
15	64QAM	36	0	21.30	21.25	21.23	
15	64QAM	36	20	21.33	21.27	21.23	22.7
15	64QAM	36	39	21.39	21.36	21.24	
15	64QAM	75	0	21.30	21.22	21.21	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.13	24.09	24.00	25.7
10	QPSK	1	25	24.11	24.11	23.99	
10	QPSK	1	49	24.16	24.19	24.02	
10	QPSK	25	0	23.26	23.23	23.16	24.7
10	QPSK	25	12	23.31	23.24	23.20	
10	QPSK	25	25	23.31	23.31	23.16	
10	QPSK	50	0	23.30	23.24	23.17	24.7
10	16QAM	1	0	23.50	23.46	23.39	
10	16QAM	1	25	23.50	23.52	23.37	
10	16QAM	1	49	23.53	23.56	23.41	23.7
10	16QAM	25	0	22.27	22.18	22.14	
10	16QAM	25	12	22.30	22.24	22.17	
10	16QAM	25	25	22.28	22.30	22.15	23.7
10	16QAM	50	0	22.28	22.23	22.18	
10	64QAM	1	0	22.40	22.33	22.33	
10	64QAM	1	25	22.43	22.43	22.30	22.7
10	64QAM	1	49	22.43	22.45	22.29	
10	64QAM	25	0	21.29	21.25	21.18	
10	64QAM	25	12	21.34	21.29	21.23	22.7
10	64QAM	25	25	21.33	21.33	21.20	
10	64QAM	50	0	21.34	21.28	21.23	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.14	24.10	24.03	25.7
5	QPSK	1	12	24.18	24.18	24.03	
5	QPSK	1	24	24.17	24.17	24.02	
5	QPSK	12	0	23.27	23.25	23.12	24.7
5	QPSK	12	7	23.29	23.21	23.10	
5	QPSK	12	13	23.27	23.31	23.15	
5	QPSK	25	0	23.28	23.23	23.13	24.7
5	16QAM	1	0	23.48	23.45	23.34	
5	16QAM	1	12	23.47	23.51	23.35	
5	16QAM	1	24	23.54	23.50	23.40	23.7
5	16QAM	12	0	22.29	22.25	22.17	
5	16QAM	12	7	22.28	22.28	22.16	
5	16QAM	12	13	22.31	22.30	22.13	23.7
5	16QAM	25	0	22.27	22.23	22.15	
5	64QAM	1	0	22.42	22.38	22.29	
5	64QAM	1	12	22.40	22.44	22.26	22.7
5	64QAM	1	24	22.44	22.43	22.28	
5	64QAM	12	0	21.35	21.30	21.20	
5	64QAM	12	7	21.38	21.26	21.16	22.7
5	64QAM	12	13	21.36	21.36	21.23	
5	64QAM	25	0	21.31	21.25	21.18	



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				23050	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	25.7
10	QPSK	1	25	24.58	24.57	24.54	
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.64	23.68	23.68	24.7
10	QPSK	25	12	23.74	23.70	23.69	
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	24.7
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	
10	16QAM	1	49	24.00	24.00	23.96	23.7
10	16QAM	25	0	22.96	22.71	22.68	
10	16QAM	25	12	22.75	22.69	22.68	
10	16QAM	25	25	22.70	22.76	22.71	23.7
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	22.7
10	64QAM	1	49	22.88	22.85	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23095	23095	23105	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.50	24.50	25.7
5	QPSK	1	12	24.60	24.62	24.60	
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	24.7
5	QPSK	12	7	23.69	23.69	23.74	
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	24.7
5	16QAM	1	0	23.96	23.92	23.87	
5	16QAM	1	12	23.88	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	23.7
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	
5	16QAM	12	13	22.69	22.76	22.68	23.7
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.49	22.84	
5	64QAM	1	12	22.63	22.87	22.86	22.7
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	
5	64QAM	12	7	21.65	21.76	21.81	22.7
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	25.7
3	QPSK	1	8	24.62	24.62	24.60	
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	24.7
3	QPSK	8	4	23.69	23.64	22.71	
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	24.7
3	16QAM	1	0	24.00	24.02	23.95	
3	16QAM	1	8	23.96	23.98	23.98	
3	16QAM	1	14	23.91	23.96	23.91	23.7
3	16QAM	8	0	22.75	22.71	22.71	
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	23.7
3	16QAM	15	0	22.73	22.69	22.68	
3	64QAM	1	0	22.46	22.70	22.87	
3	64QAM	1	8	22.67	22.86	22.90	22.7
3	64QAM	1	14	22.96	22.84	22.81	
3	64QAM	8	0	21.50	21.75	21.71	
3	64QAM	8	4	21.58	21.74	21.78	22.7
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	25.7
1.4	QPSK	1	3	24.60	24.61	24.57	
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	24.7
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	
1.4	QPSK	6	0	23.62	23.64	23.59	24.7
1.4	16QAM	1	0	23.87	23.83	23.87	
1.4	16QAM	1	3	23.89	23.96	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	23.7
1.4	16QAM	3	0	23.64	23.58	23.62	
1.4	16QAM	3	1	23.73	23.66	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	23.7
1.4	16QAM	6	0	22.71	22.71	22.67	
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	23.7
1.4	64QAM	1	5	22.74	22.78	22.68	
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	22.7
1.4	64QAM	3	3	22.60	22.77	22.77	
1.4	64QAM	6	0	21.44	21.65	21.61	

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)				782			
10	QPSK	1	0		24.17		25.2
10	QPSK	1	25		24.10		
10	QPSK	1	49		24.14		
10	QPSK	25	0		23.17		24.2
10	QPSK	25	12		23.21		
10	QPSK	25	25		23.21		
10	QPSK	50	0		23.20		24.2
10	16QAM	1	0		23.42		
10	16QAM	1	25		23.45		
10	16QAM	1	49		23.42		23.2
10	16QAM	25	0		22.20		
10	16QAM	25	12		22.23		
10	16QAM	25	25		22.20		23.2
10	16QAM	50	0		22.23		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.40		22.2
10	64QAM	1	49		22.34		
10	64QAM	25	0		21.24		
10	64QAM	25	12		21.23		22.2
10	64QAM	25	25		21.25		
10	64QAM	50	0		21.26		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				770.5	782	794.5	
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.18	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.23	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.26	21.25	
5	64QAM	25	0	20.96	21.26	21.23	

Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.59		25.7
10	QPSK	1	25		24.53		
10	QPSK	1	49		24.43		
10	QPSK	25	0		23.56		24.7
10	QPSK	25	12		23.56		
10	QPSK	25	25		23.59		
10	QPSK	50	0		23.53		24.7
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.92		
10	16QAM	1	49		23.93		23.7
10	16QAM	25	0		22.55		
10	16QAM	25	12		22.53		
10	16QAM	25	25		22.58		23.7
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.64		22.7
10	64QAM	1	49		22.72		
10	64QAM	25	0		21.39		
10	64QAM	25	12		21.38		22.7
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.44		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.58	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	24.7
5	QPSK	12	7	23.66	23.57	23.53	
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.58	23.53	23.50	24.7
5	16QAM	1	0	23.83	23.80	23.82	
5	16QAM	1	12	23.88	23.88	23.87	
5	16QAM	1	24	23.87	23.80	23.78	23.7
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.56	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.49	
5	64QAM	1	12	22.57	22.35	22.58	23.7
5	64QAM	1	24	22.32	22.41	22.77	
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.28	21.63	22.7
5	64QAM	12	13	21.31	21.27	21.81	
5	64QAM	25	0	21.34	21.28	21.51	

Band 17									
Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)		
Channel				23780	23790	23800			
Frequency (MHz)				709	710	711			
10	QPSK	1	0	24.60	24.56	24.55	25.7		
10	QPSK	1	25	24.61	24.62	24.59			
10	QPSK	1	49	24.64	24.67	24.63			
10	QPSK	25	0	23.65	23.68	23.66	24.7		
10	QPSK	25	12	23.79	23.75	23.70			
10	QPSK	25	25	23.81	23.82	23.80			
10	QPSK	50	0	23.69	23.72	23.69	24.7		
10	16QAM	1	0	23.93	23.95	23.94			
10	16QAM	1	25	24.03	24.06	24.01			
10	16QAM	1	49	24.01	24.02	23.96	23.7		
10	16QAM	25	0	22.96	22.95	22.95			
10	16QAM	25	12	22.79	22.75	22.73			
10	16QAM	25	25	22.78	22.77	22.76	23.7		
10	16QAM	50	0	22.69	22.69	22.67			
10	64QAM	1	0	22.64	22.70	22.79	22.7		
10	64QAM	1	25	22.72	22.67	22.63			
10	64QAM	1	49	22.84	22.75	22.59			
10	64QAM	25	0	21.42	21.42	21.41	22.7		
10	64QAM	25	12	21.51	21.48	21.48			
10	64QAM	25	25	21.61	21.67	21.66			
10	64QAM	50	0	21.53	21.64	21.57	Tune-up limit (dBm)		
Channel				23785	23790	23805			
Frequency (MHz)				709.5	710	713.5			
5	QPSK	1	0	24.57	24.59	24.58	25.7		
5	QPSK	1	12	24.66	24.65	24.63			
5	QPSK	1	24	24.65	24.66	24.64			
5	QPSK	12	0	23.66	23.69	23.67	24.7		
5	QPSK	12	7	23.76	23.76	23.78			
5	QPSK	12	13	23.74	23.77	23.73			
5	QPSK	25	0	23.74	23.71	23.75	24.7		
5	16QAM	1	0	23.91	23.93	23.91			
5	16QAM	1	12	23.95	23.97	23.96			
5	16QAM	1	24	24.00	24.05	23.99	23.7		
5	16QAM	12	0	22.73	22.71	22.74			
5	16QAM	12	7	22.79	22.77	22.79			
5	16QAM	12	13	22.77	22.80	22.77	23.7		
5	16QAM	25	0	22.74	22.75	22.77			
5	64QAM	1	0	22.26	22.42	22.71			
5	64QAM	1	12	22.62	22.61	22.81	22.7		
5	64QAM	1	24	22.53	22.52	22.48			
5	64QAM	12	0	21.55	21.47	21.65			
5	64QAM	12	7	21.69	21.47	21.76	22.7		
5	64QAM	12	13	21.66	21.50	21.70			
5	64QAM	25	0	21.52	21.44	21.59			



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				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	24.79	24.78	24.93	25.7
20	QPSK	1	49	24.72	24.74	24.80	
20	QPSK	1	99	24.65	24.74	24.59	
20	QPSK	50	0	23.83	23.89	23.94	24.7
20	QPSK	50	24	23.88	23.99	24.01	
20	QPSK	50	50	23.82	23.93	24.00	
20	QPSK	100	0	23.89	23.97	23.98	24.7
20	16QAM	1	0	24.14	24.15	24.16	
20	16QAM	1	49	24.07	24.11	24.17	
20	16QAM	1	99	23.99	24.10	23.73	23.7
20	16QAM	50	0	22.94	22.92	22.95	
20	16QAM	50	24	22.89	22.99	22.95	
20	16QAM	50	50	22.85	22.94	23.02	23.7
20	16QAM	100	0	22.87	22.95	22.93	
20	64QAM	1	0	23.00	22.99	22.68	
20	64QAM	1	49	22.97	22.98	22.38	22.7
20	64QAM	1	99	22.84	22.99	21.87	
20	64QAM	50	0	21.87	21.93	21.49	
20	64QAM	50	24	21.91	22.00	21.57	22.7
20	64QAM	50	50	21.79	21.97	21.23	
20	64QAM	100	0	21.89	22.01	21.26	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1907.5	
15	QPSK	1	0	24.52	24.87	24.80	25.7
15	QPSK	1	37	24.75	24.80	24.87	
15	QPSK	1	74	24.72	24.82	24.39	
15	QPSK	36	0	23.86	23.93	23.99	24.7
15	QPSK	36	20	23.89	24.02	24.06	
15	QPSK	36	39	23.83	23.96	23.88	
15	QPSK	75	0	23.89	23.90	23.95	24.7
15	16QAM	1	0	24.07	24.15	24.19	
15	16QAM	1	37	24.12	24.14	24.22	
15	16QAM	1	74	24.05	24.12	23.75	23.7
15	16QAM	36	0	22.86	22.95	22.97	
15	16QAM	36	20	22.93	23.01	23.05	
15	16QAM	36	39	22.84	22.96	23.00	23.7
15	16QAM	75	0	22.90	22.93	22.98	
15	64QAM	1	0	23.03	23.00	22.46	
15	64QAM	1	37	22.99	23.06	22.62	22.7
15	64QAM	1	74	22.74	23.02	21.89	
15	64QAM	36	0	21.92	21.98	21.61	
15	64QAM	36	20	21.94	22.03	21.57	22.7
15	64QAM	36	39	21.77	22.00	21.24	
15	64QAM	75	0	21.91	21.92	21.31	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	24.77	24.76	24.87	25.7
10	QPSK	1	25	24.70	24.79	24.86	
10	QPSK	1	49	24.74	24.79	24.53	
10	QPSK	25	0	23.90	23.86	23.93	24.7
10	QPSK	25	12	23.95	23.97	23.98	
10	QPSK	25	25	23.92	23.97	23.73	
10	QPSK	50	0	23.93	23.97	23.87	24.7
10	16QAM	1	0	24.14	24.15	24.22	
10	16QAM	1	25	24.13	24.18	24.23	
10	16QAM	1	49	24.11	24.17	23.69	23.7
10	16QAM	25	0	22.93	22.96	22.93	
10	16QAM	25	12	22.92	23.00	22.98	
10	16QAM	25	25	22.89	22.93	22.91	23.7
10	16QAM	50	0	22.92	22.97	22.96	
10	64QAM	1	0	23.01	22.97	22.67	
10	64QAM	1	25	23.08	23.13	22.41	22.7
10	64QAM	1	49	22.98	23.09	21.84	
10	64QAM	25	0	21.94	21.89	21.52	
10	64QAM	25	12	21.98	22.00	21.37	22.7
10	64QAM	25	25	21.94	22.00	21.06	
10	64QAM	50	0	21.96	22.02	21.17	
Channel				26055	26340	26655	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.50	24.75	24.92	25.7
5	QPSK	1	12	24.84	24.89	24.56	
5	QPSK	1	24	24.81	24.88	24.29	
5	QPSK	12	0	23.88	23.91	23.89	24.7
5	QPSK	12	7	23.96	23.99	23.76	
5	QPSK	12	13	23.98	23.99	23.60	
5	QPSK	25	0	23.93	23.93	23.64	24.7
5	16QAM	1	0	24.22	24.11	24.18	
5	16QAM	1	12	24.13	24.19	23.93	
5	16QAM	1	24	24.15	24.18	23.70	23.7
5	16QAM	12	0	22.88	22.95	23.01	
5	16QAM	12	7	22.93	23.02	22.88	
5	16QAM	12	13	22.98	23.02	22.75	23.7
5	16QAM	25	0	22.96	22.97	22.80	
5	64QAM	1	0	23.07	23.01	22.33	
5	64QAM	1	12	23.05	23.07	21.98	22.7
5	64QAM	1	24	23.06	23.11	21.75	
5	64QAM	12	0	21.95	21.98	21.17	
5	64QAM	12	7	22.01	22.06	21.93	22.7
5	64QAM	12	13	22.03	22.08	20.88	
5	64QAM	25	0	21.93	22.00	20.98	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.72	24.71	24.65	25.7
3	QPSK	1	8	24.68	24.91	24.53	
3	QPSK	1	14	24.85	24.90	24.29	
3	QPSK	8	0	23.87	23.89	23.71	24.7
3	QPSK	8	4	23.92	23.98	23.66	
3	QPSK	8	7	23.96	23.97	23.54	
3	QPSK	15	0	23.93	23.96	23.58	24.7
3	16QAM	1	0	24.09	24.01	23.89	
3	16QAM	1	8	24.20	24.26	23.84	
3	16QAM	1	14	24.21	24.24	23.63	23.7
3	16QAM	8	0	22.92	22.95	22.83	
3	16QAM	8	4	23.03	23.04	22.76	
3	16QAM	8	7	23.01	23.02	22.67	23.7
3	16QAM	15	0	22.97	22.97	22.70	
3	64QAM	1	0	22.95	22.96	22.01	
3	64QAM	1	8	23.12	23.20	21.98	22.7
3	64QAM	1	14	23.11	23.16	21.75	
3	64QAM	8	0	21.93	22.00	20.95	
3	64QAM	8	4	21.99	22.07	20.94	22.7
3	64QAM	8	7	22.00	22.06	20.84	
3	64QAM	15	0	21.94	21.96	20.88	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	24.71	24.73	24.37	25.7
1.4	QPSK	1	3	24.80	24.83	24.31	
1.4	QPSK	1	5	24.79	24.84	24.20	
1.4	QPSK	3	0	24.78	24.81	24.32	24.7
1.4	QPSK	3	1	24.82	24.83	24.33	
1.4	QPSK	3	5	24.77	24.85	24.24	
1.4	QPSK	8	0	23.85	23.91	23.41	24.7
1.4	16QAM	1	0	24.05	24.05	23.64	
1.4	16QAM	1	3	24.12	24.17	23.64	
1.4	16QAM	1	5	24.07	24.12	23.54	24.7
1.4	16QAM	3	0	23.81	23.87	23.49	
1.4	16QAM	3	1	23.88	23.93	23.48	
1.4	16QAM	3	3	23.84	23.93	23.42	23.7
1.4	16QAM	6	0	22.93	22.94	22.59	
1.4	64QAM	1	0	22.97	22.97	21.78	
1.4	64QAM	1	3	23.08	23.12	21.71	23.7
1.4	64QAM	1	5	23.03	23.06	21.72	
1.4	64QAM	3	0	22.92	22.98	21.80	
1.4	64QAM	3	1	23.00	23.05	21.85	22.7
1.4	64QAM	3	3	22.98	23.01	21.71	
1.4	64QAM	6	0	21.90	21.93	20.71	



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 26785	Power Middle Ch / 26865	Power High Ch / 26955	Tune-up limit (dBm)
Channel				26785	26865	26955	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.45	24.40	24.62	25.7
15	QPSK	1	37	24.34	24.39	24.41	
15	QPSK	1	74	24.35	24.39	24.31	
15	QPSK	36	0	23.61	23.51	23.54	24.7
15	QPSK	36	20	23.52	23.49	23.50	
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	24.7
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	
15	16QAM	1	74	23.64	23.66	23.59	23.7
15	16QAM	36	0	22.51	22.54	22.56	
15	16QAM	36	20	22.53	22.51	22.50	
15	16QAM	36	39	22.50	22.53	22.54	23.7
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	23.7
15	64QAM	1	37	22.43	22.68	22.68	
15	64QAM	1	74	22.57	22.61	21.80	
15	64QAM	36	0	21.21	21.58	21.60	22.7
15	64QAM	36	20	21.40	21.53	21.54	
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	Tune-up limit (dBm)
Channel				26740	26865	26959	
Frequency (MHz)				810	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	25.7
10	QPSK	1	25	24.44	24.47	24.45	
10	QPSK	1	49	24.46	24.49	24.37	
10	QPSK	25	0	23.64	23.56	23.57	24.7
10	QPSK	25	12	23.58	23.54	23.57	
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.67	23.53	23.49	24.7
10	16QAM	1	0	23.92	23.87	23.87	
10	16QAM	1	25	23.85	23.87	23.86	
10	16QAM	1	49	23.86	23.90	23.75	23.7
10	16QAM	25	0	22.62	22.57	22.57	
10	16QAM	25	12	22.60	22.55	22.57	
10	16QAM	25	25	22.63	22.56	22.53	23.7
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.76	
10	64QAM	1	25	22.33	22.80	22.64	23.7
10	64QAM	1	49	22.74	22.81	21.99	
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.16	21.61	21.57	22.7
10	64QAM	25	25	21.31	21.58	20.80	
10	64QAM	50	0	21.26	21.57	21.38	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	
5	QPSK	1	12	24.56	24.55	24.17	25.7
5	QPSK	1	24	24.46	24.53	24.41	
5	QPSK	12	0	23.64	23.59	23.60	24.7
5	QPSK	12	7	23.63	23.63	23.33	
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	24.7
5	16QAM	1	0	23.95	23.85	23.86	
5	16QAM	1	12	23.84	23.87	23.49	
5	16QAM	1	24	23.77	23.86	23.69	23.7
5	16QAM	12	0	22.71	22.63	22.61	
5	16QAM	12	7	22.67	22.64	22.48	
5	16QAM	12	13	22.55	22.59	22.45	23.7
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	
5	64QAM	1	12	22.31	22.76	21.70	23.7
5	64QAM	1	24	22.14	22.79	21.71	
5	64QAM	12	0	21.36	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.68	20.73	
Channel				26706	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	
3	QPSK	1	8	24.60	24.57	24.26	25.7
3	QPSK	1	14	24.46	24.50	24.37	
3	QPSK	8	0	23.69	23.57	23.20	24.7
3	QPSK	8	4	23.68	23.63	23.32	
3	QPSK	8	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.59	23.29	24.7
3	16QAM	1	0	23.93	23.83	23.53	
3	16QAM	1	8	23.92	23.91	23.53	
3	16QAM	1	14	23.81	23.90	23.67	23.7
3	16QAM	8	0	22.74	22.63	22.36	
3	16QAM	8	4	22.75	22.67	22.45	
3	16QAM	8	7	22.65	22.66	22.54	23.7
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	
3	64QAM	1	8	22.49	22.84	21.84	23.7
3	64QAM	1	14	22.30	22.80	21.76	
3	64QAM	8	0	21.40	21.65	20.75	
3	64QAM	8	4	21.44	21.72	20.79	22.7
3	64QAM	8	7	21.37	21.63	20.72	
3	64QAM	15	0	21.36	21.60	20.82	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	
1.4	QPSK	1	3	24.56	24.54	24.39	25.7
1.4	QPSK	1	5	24.45	24.41	24.28	
1.4	QPSK	3	0	24.56	24.43	24.39	
1.4	QPSK	3	1	24.58	24.46	24.40	24.7
1.4	QPSK	3	3	24.53	24.46	24.36	
1.4	QPSK	6	0	23.60	23.53	23.42	
1.4	16QAM	1	0	23.86	23.73	23.57	24.7
1.4	16QAM	1	3	23.90	23.90	23.76	
1.4	16QAM	1	5	23.79	23.75	23.66	
1.4	16QAM	3	0	23.62	23.52	23.44	23.7
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	
1.4	16QAM	6	0	22.66	22.58	22.52	23.7
1.4	64QAM	1	0	22.39	22.67	21.78	
1.4	64QAM	1	3	22.45	22.75	21.75	
1.4	64QAM	1	5	22.41	22.65	21.74	23.7
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	
1.4	64QAM	3	3	22.43	22.64	21.82	22.7
1.4	64QAM	6	0	21.34	21.56	20.84	

Band 30							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		22.92		23.7
10	QPSK	1	25		22.76		
10	QPSK	1	49		22.77		
10	QPSK	25	0		21.83		22.7
10	QPSK	25	12		21.88		
10	QPSK	25	25		21.97		
10	QPSK	50	0		21.86		22.7
10	16QAM	1	0		22.20		
10	16QAM	1	25		22.17		
10	16QAM	1	49		22.20		21.7
10	16QAM	25	0		20.84		
10	16QAM	25	12		20.88		
10	16QAM	25	25		20.99		21.7
10	16QAM	50	0		20.87		
10	64QAM	1	0		21.04		21.7
10	64QAM	1	25		21.09		
10	64QAM	1	49		21.04		
10	64QAM	25	0		19.87		20.7
10	64QAM	25	12		19.92		
10	64QAM	25	25		20.00		
10	64QAM	50	0		19.89		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.75	22.76	22.76	23.7
5	QPSK	1	12	22.89	22.90	22.87	
5	QPSK	1	24	22.91	22.88	22.86	
5	QPSK	12	0	21.90	21.85	21.87	22.7
5	QPSK	12	7	21.95	21.97	21.93	
5	QPSK	12	13	21.96	21.96	21.93	
5	QPSK	25	0	21.83	21.87	21.90	22.7
5	16QAM	1	0	22.08	22.07	22.10	
5	16QAM	1	12	22.14	22.14	22.12	
5	16QAM	1	24	22.18	22.21	22.15	21.7
5	16QAM	12	0	20.92	20.87	20.90	
5	16QAM	12	7	20.96	20.99	20.95	
5	16QAM	12	13	20.97	20.97	20.94	21.7
5	16QAM	25	0	20.96	20.90	20.93	
5	64QAM	1	0	20.98	21.06	21.06	
5	64QAM	1	12	21.04	21.09	21.07	21.7
5	64QAM	1	24	21.12	21.13	21.12	
5	64QAM	12	0	19.99	19.91	19.96	
5	64QAM	12	7	20.03	20.03	20.00	20.7
5	64QAM	12	13	20.02	20.02	20.00	
5	64QAM	25	0	19.98	19.94	19.94	



Band 66							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	24.56	24.59	24.79	25.7
20	QPSK	1	49	24.39	24.48	24.52	
20	QPSK	1	99	24.55	24.55	24.44	
20	QPSK	50	0	23.67	23.67	23.71	24.7
20	QPSK	50	24	23.64	23.64	23.69	
20	QPSK	50	50	23.65	23.68	23.72	
20	QPSK	100	0	23.63	23.61	23.68	24.7
20	16QAM	1	0	23.91	23.92	24.01	
20	16QAM	1	49	23.77	23.83	23.86	
20	16QAM	1	99	23.67	23.66	23.81	23.7
20	16QAM	50	0	22.58	22.58	22.74	
20	16QAM	50	24	22.64	22.64	22.68	
20	16QAM	50	50	22.64	22.70	22.72	23.7
20	16QAM	100	0	22.63	22.59	22.71	
20	64QAM	1	0	22.74	22.85	22.81	
20	64QAM	1	49	22.64	22.74	22.89	22.7
20	64QAM	1	99	22.76	22.76	22.71	
20	64QAM	50	0	21.59	21.68	21.78	
20	64QAM	50	24	21.67	21.67	21.71	22.7
20	64QAM	50	50	21.63	21.72	21.75	
20	64QAM	100	0	21.69	21.64	21.71	
Channel				132547	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1772.5	
15	QPSK	1	0	24.52	24.62	24.65	25.7
15	QPSK	1	37	24.41	24.54	24.56	
15	QPSK	1	74	24.54	24.58	24.55	
15	QPSK	36	0	23.60	23.67	23.72	24.7
15	QPSK	36	20	23.66	23.65	23.70	
15	QPSK	36	39	23.62	23.70	23.74	
15	QPSK	75	0	23.64	23.64	23.71	24.7
15	16QAM	1	0	23.81	23.98	23.98	
15	16QAM	1	37	23.78	23.88	23.92	
15	16QAM	1	74	23.84	23.92	23.84	23.7
15	16QAM	36	0	22.58	22.68	22.70	
15	16QAM	36	20	22.62	22.65	22.67	
15	16QAM	36	39	22.62	22.71	22.72	23.7
15	16QAM	75	0	22.65	22.67	22.71	
15	64QAM	1	0	22.69	22.80	22.83	
15	64QAM	1	37	22.67	22.74	22.80	22.7
15	64QAM	1	74	22.76	22.81	22.72	
15	64QAM	36	0	21.60	21.71	21.76	
15	64QAM	36	20	21.64	21.64	21.69	22.7
15	64QAM	36	39	21.68	21.72	21.75	
15	64QAM	75	0	21.65	21.67	21.72	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	24.57	24.58	24.70	25.7
10	QPSK	1	25	24.55	24.64	24.65	
10	QPSK	1	49	24.55	24.61	24.66	
10	QPSK	25	0	23.64	23.69	23.73	24.7
10	QPSK	25	12	23.65	23.71	23.72	
10	QPSK	25	25	23.65	23.75	23.78	
10	QPSK	50	0	23.68	23.69	23.74	24.7
10	16QAM	1	0	23.97	24.04	24.05	
10	16QAM	1	25	23.91	24.02	24.03	
10	16QAM	1	49	23.92	23.99	24.04	23.7
10	16QAM	25	0	22.66	22.68	22.73	
10	16QAM	25	12	22.67	22.71	22.74	
10	16QAM	25	25	22.65	22.74	22.77	23.7
10	16QAM	50	0	22.67	22.69	22.73	
10	64QAM	1	0	22.85	22.87	22.77	
10	64QAM	1	25	22.81	22.94	22.98	23.7
10	64QAM	1	49	22.83	22.92	22.95	
10	64QAM	25	0	21.66	21.72	21.75	
10	64QAM	25	12	21.72	21.73	21.76	22.7
10	64QAM	25	25	21.70	21.77	21.78	
10	64QAM	50	0	21.72	21.72	21.78	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1772.5	
5	QPSK	1	0	24.57	24.61	24.73	25.7
5	QPSK	1	12	24.59	24.69	24.71	
5	QPSK	1	24	24.54	24.66	24.71	
5	QPSK	12	0	23.66	23.71	23.81	24.7
5	QPSK	12	7	23.68	23.79	23.81	
5	QPSK	12	13	23.63	23.78	23.81	
5	QPSK	25	0	23.65	23.70	23.79	24.7
5	16QAM	1	0	23.93	23.95	24.04	
5	16QAM	1	12	23.95	24.02	24.03	
5	16QAM	1	24	23.91	23.99	24.03	23.7
5	16QAM	12	0	22.70	22.75	22.85	
5	16QAM	12	7	22.73	22.81	22.86	
5	16QAM	12	13	22.70	22.77	22.81	23.7
5	16QAM	25	0	22.67	22.70	22.79	
5	64QAM	1	0	22.84	22.84	23.03	
5	64QAM	1	12	22.90	22.98	22.98	22.7
5	64QAM	1	24	22.87	22.94	22.91	
5	64QAM	12	0	21.73	21.76	21.87	
5	64QAM	12	7	21.78	21.84	21.87	22.7
5	64QAM	12	13	21.69	21.82	21.82	
5	64QAM	25	0	21.68	21.73	21.83	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1775.5	
3	QPSK	1	0	24.59	24.64	24.72	25.7
3	QPSK	1	8	24.64	24.74	24.78	
3	QPSK	1	14	24.58	24.66	24.67	
3	QPSK	8	0	23.68	23.70	23.76	24.7
3	QPSK	8	4	23.69	23.80	23.79	
3	QPSK	8	7	23.67	23.72	23.76	
3	QPSK	15	0	23.68	23.67	23.78	24.7
3	16QAM	1	0	23.92	23.98	24.05	
3	16QAM	1	8	24.00	24.10	24.14	
3	16QAM	1	14	23.89	24.00	24.00	23.7
3	16QAM	8	0	22.72	22.78	22.86	
3	16QAM	8	4	22.77	22.83	22.89	
3	16QAM	8	7	22.72	22.84	22.81	23.7
3	16QAM	15	0	22.70	22.75	22.79	
3	64QAM	1	0	22.82	22.93	22.94	
3	64QAM	1	8	22.93	23.05	23.03	22.7
3	64QAM	1	14	22.85	22.99	22.97	
3	64QAM	8	0	21.76	21.73	21.81	
3	64QAM	8	4	21.78	21.82	21.87	22.7
3	64QAM	8	7	21.75	21.81	21.84	
3	64QAM	15	0	21.69	21.74	21.81	
Channel				131019	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	24.47	24.62	24.61	25.7
1.4	QPSK	1	3	24.56	24.66	24.71	
1.4	QPSK	1	5	24.51	24.58	24.65	
1.4	QPSK	3	0	24.52	24.63	24.65	24.7
1.4	QPSK	3	1	24.58	24.68	24.71	
1.4	QPSK	3	3	24.53	24.64	24.66	
1.4	QPSK	8	0	23.60	23.70	23.71	24.7
1.4	16QAM	1	0	23.83	23.94	23.95	
1.4	16QAM	1	3	23.92	24.01	24.03	
1.4	16QAM	1	5	23.84	23.93	23.94	24.7
1.4	16QAM	3	0	23.62	23.75	23.76	
1.4	16QAM	3	1	23.68	23.79	23.80	
1.4	16QAM	3	3	23.61	23.71	23.72	23.7
1.4	16QAM	6	0	22.67	22.76	22.77	
1.4	64QAM	1	0	22.76	22.88	22.91	
1.4	64QAM	1	3	22.84	22.94	22.95	23.7
1.4	64QAM	1	5	22.80	22.87	22.89	
1.4	64QAM	3	0	22.76	22.82	22.89	
1.4	64QAM	3	1	22.79	22.88	22.92	22.7
1.4	64QAM	3	3	22.75	22.85	22.87	
1.4	64QAM	6	0	21.62	21.73	21.75	



Band 71							
Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.67	24.60	24.58	25.7
20	QPSK	1	49	24.58	24.59	24.56	
20	QPSK	1	99	24.61	24.56	24.53	
20	QPSK	50	0	23.69	23.68	23.64	24.7
20	QPSK	50	24	23.74	23.67	23.63	
20	QPSK	50	50	23.75	23.69	23.68	
20	QPSK	100	0	23.72	23.66	23.71	24.7
20	16QAM	1	0	23.99	23.90	23.92	
20	16QAM	1	49	23.94	23.93	23.91	
20	16QAM	1	99	23.97	23.91	23.93	23.7
20	16QAM	50	0	22.69	22.68	22.67	
20	16QAM	50	24	22.75	22.68	22.66	
20	16QAM	50	50	22.75	22.73	22.68	23.7
20	16QAM	100	0	22.72	22.65	22.70	
20	64QAM	1	0	21.88	22.69	22.77	
20	64QAM	1	49	22.51	22.82	22.02	22.7
20	64QAM	1	99	22.87	22.66	22.55	
20	64QAM	50	0	20.78	21.69	21.35	
20	64QAM	50	24	21.19	21.42	21.50	22.7
20	64QAM	50	50	21.70	21.49	21.63	
20	64QAM	100	0	21.39	21.66	21.66	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				680.5	690.5	690.6	
15	QPSK	1	0	24.65	24.60	24.56	25.7
15	QPSK	1	37	24.55	24.58	24.52	
15	QPSK	1	74	24.58	24.62	24.55	
15	QPSK	36	0	23.67	23.69	23.61	24.7
15	QPSK	36	20	23.75	23.67	23.71	
15	QPSK	36	39	23.65	23.71	23.65	
15	QPSK	75	0	23.73	23.65	23.60	24.7
15	16QAM	1	0	24.04	23.93	23.89	
15	16QAM	1	37	23.69	23.98	23.91	
15	16QAM	1	74	23.91	23.91	23.90	23.7
15	16QAM	36	0	22.63	22.67	22.63	
15	16QAM	36	20	22.72	22.69	22.71	
15	16QAM	36	39	22.68	22.71	22.66	23.7
15	16QAM	75	0	22.75	22.67	22.82	
15	64QAM	1	0	21.76	22.28	22.61	
15	64QAM	1	37	21.70	22.87	22.80	22.7
15	64QAM	1	74	22.85	22.43	22.62	
15	64QAM	36	0	20.76	21.71	21.42	
15	64QAM	36	20	20.68	21.69	21.75	22.7
15	64QAM	36	39	21.38	21.40	21.71	
15	64QAM	75	0	21.18	21.65	21.52	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.67	24.56	24.57	25.7
10	QPSK	1	25	24.53	24.56	24.57	
10	QPSK	1	49	24.62	24.64	24.53	
10	QPSK	25	0	23.73	23.62	23.60	24.7
10	QPSK	25	12	23.69	23.75	23.62	
10	QPSK	25	25	23.63	23.70	23.65	
10	QPSK	50	0	23.73	23.74	23.61	24.7
10	16QAM	1	0	24.03	23.97	23.96	
10	16QAM	1	25	23.89	23.97	23.94	
10	16QAM	1	49	23.96	24.00	23.86	23.7
10	16QAM	25	0	22.59	22.65	22.60	
10	16QAM	25	12	22.52	22.74	22.63	
10	16QAM	25	25	22.54	22.71	22.65	23.7
10	16QAM	50	0	22.73	22.73	22.59	
10	64QAM	1	0	21.71	22.19	22.73	
10	64QAM	1	25	21.61	22.36	22.80	23.7
10	64QAM	1	49	22.02	22.82	22.25	
10	64QAM	25	0	20.70	21.54	21.63	
10	64QAM	25	12	20.65	21.76	21.61	22.7
10	64QAM	25	25	20.65	21.66	21.37	
10	64QAM	50	0	20.70	21.66	21.58	
Channel				133147	133247	133497	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.6	
5	QPSK	1	0	24.33	24.63	24.62	25.7
5	QPSK	1	12	24.52	24.59	24.59	
5	QPSK	1	24	24.57	24.62	24.51	
5	QPSK	12	0	23.49	23.69	23.64	24.7
5	QPSK	12	7	23.63	23.70	23.68	
5	QPSK	12	13	23.60	23.68	23.61	
5	QPSK	25	0	23.60	23.69	23.59	24.7
5	16QAM	1	0	23.66	23.99	23.92	
5	16QAM	1	12	23.86	23.94	23.87	
5	16QAM	1	24	23.80	23.94	23.83	23.7
5	16QAM	12	0	22.42	22.74	22.69	
5	16QAM	12	7	22.60	22.75	22.70	
5	16QAM	12	13	22.61	22.70	22.63	23.7
5	16QAM	25	0	22.52	22.72	22.63	
5	64QAM	1	0	21.83	21.95	22.65	
5	64QAM	1	12	21.71	22.83	22.44	23.7
5	64QAM	1	24	21.72	22.86	21.98	
5	64QAM	12	0	20.70	21.46	21.42	
5	64QAM	12	7	20.79	21.76	21.57	22.7
5	64QAM	12	13	20.80	21.72	21.38	
5	64QAM	25	0	20.77	21.50	21.21	



Band 2									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)		
Channel				18700	18800	18900			
Frequency (MHz)				18700	18800	19000			
20	QPSK	1	0	24.53	24.68	24.96	25.7		
20	QPSK	1	49	24.53	24.72	24.75			
20	QPSK	1	99	24.52	24.71	24.80			
20	QPSK	50	0	23.61	23.75	23.86	24.7		
20	QPSK	50	24	23.73	23.80	23.89			
20	QPSK	50	50	23.71	23.88	23.97			
20	QPSK	100	0	23.72	23.77	23.87	24.7		
20	16QAM	1	0	23.88	24.03	24.14			
20	16QAM	1	49	23.87	24.06	24.07			
20	16QAM	1	99	23.83	24.02	24.16	23.7		
20	16QAM	50	0	22.84	22.77	22.88			
20	16QAM	50	24	22.74	22.80	22.88			
20	16QAM	50	50	22.73	22.89	22.97	22.7		
20	16QAM	100	0	22.72	22.75	22.89			
20	64QAM	1	0	22.72	22.88	23.02			
20	64QAM	1	49	22.78	22.91	22.11	23.7		
20	64QAM	1	99	22.86	22.94	22.63			
20	64QAM	50	0	21.65	21.78	21.34			
20	64QAM	50	24	21.76	21.84	21.35	22.7		
20	64QAM	50	50	21.60	21.91	21.81			
20	64QAM	100	0	21.70	21.81	21.42			
Channel				18675	18900	19125	Tune-up limit (dBm)		
Frequency (MHz)				18675	18800	19025			
15	QPSK	1	0	24.54	24.73	24.81	25.7		
15	QPSK	1	37	24.56	24.72	24.81			
15	QPSK	1	74	24.59	24.72	24.85			
15	QPSK	36	0	23.64	23.75	23.85	24.7		
15	QPSK	36	20	23.74	23.80	23.98			
15	QPSK	36	39	23.72	23.90	23.99			
15	QPSK	75	0	23.71	23.79	23.91	24.7		
15	16QAM	1	0	23.80	24.04	24.13			
15	16QAM	1	37	23.88	24.02	24.12			
15	16QAM	1	74	23.89	24.05	24.19	23.7		
15	16QAM	36	0	22.62	22.77	22.86			
15	16QAM	36	20	22.71	22.80	22.96			
15	16QAM	36	39	22.72	22.90	22.99	23.7		
15	16QAM	75	0	22.72	22.81	22.91			
15	64QAM	1	0	22.74	22.87	22.97			
15	64QAM	1	37	22.78	22.92	22.97	23.7		
15	64QAM	1	74	22.63	22.97	22.76			
15	64QAM	36	0	21.67	21.81	21.25			
15	64QAM	36	20	21.77	21.85	21.57	22.7		
15	64QAM	36	39	21.68	21.94	21.75			
15	64QAM	75	0	21.73	21.83	21.44			
Channel				18650	18900	19150	Tune-up limit (dBm)		
Frequency (MHz)				18650	18800	19050			
10	QPSK	1	0	24.53	24.68	24.83	25.7		
10	QPSK	1	25	24.54	24.73	24.84			
10	QPSK	1	49	24.58	24.76	24.85			
10	QPSK	25	0	23.66	23.76	23.86	24.7		
10	QPSK	25	12	23.72	23.81	23.91			
10	QPSK	25	25	23.71	23.90	24.02			
10	QPSK	50	0	23.69	23.80	23.93	24.7		
10	16QAM	1	0	23.92	24.09	24.18			
10	16QAM	1	25	23.93	24.12	24.27			
10	16QAM	1	49	23.94	24.12	24.24	23.7		
10	16QAM	25	0	22.84	22.75	22.85			
10	16QAM	25	12	22.71	22.82	22.91			
10	16QAM	25	25	22.72	22.87	23.02	23.7		
10	16QAM	50	0	22.69	22.80	22.92			
10	64QAM	1	0	22.84	22.95	22.38			
10	64QAM	1	25	22.85	23.07	22.86	23.7		
10	64QAM	1	49	22.84	23.07	22.84			
10	64QAM	25	0	21.89	21.78	21.47			
10	64QAM	25	12	21.76	21.85	21.75	22.7		
10	64QAM	25	25	21.74	21.92	21.76			
10	64QAM	50	0	21.71	21.82	21.56			
Channel				18625	18900	19175	Tune-up limit (dBm)		
Frequency (MHz)				18625	18800	19075			
5	QPSK	1	0	24.55	24.66	24.86	25.7		
5	QPSK	1	12	24.62	24.80	24.92			
5	QPSK	1	24	24.60	24.81	24.95			
5	QPSK	12	0	23.68	23.77	23.98	24.7		
5	QPSK	12	7	23.70	23.90	24.00			
5	QPSK	12	13	23.68	23.90	24.03			
5	QPSK	25	0	23.67	23.80	23.98	24.7		
5	16QAM	1	0	23.86	23.97	24.26			
5	16QAM	1	12	23.90	24.09	24.24			
5	16QAM	1	24	23.94	24.12	24.28	23.7		
5	16QAM	12	0	22.68	22.82	23.00			
5	16QAM	12	7	22.71	22.94	23.02			
5	16QAM	12	13	22.72	22.88	23.03	23.7		
5	16QAM	25	0	22.71	22.81	23.04			
5	64QAM	1	0	22.87	22.98	22.73			
5	64QAM	1	12	22.80	23.03	22.88	23.7		
5	64QAM	1	24	22.87	23.06	22.75			
5	64QAM	12	0	21.73	21.85	21.81			
5	64QAM	12	7	21.79	21.95	21.84	22.7		
5	64QAM	12	13	21.75	21.92	21.72			
5	64QAM	25	0	21.68	21.82	21.64			
Channel				18615	18900	19185	Tune-up limit (dBm)		
Frequency (MHz)				18615	18800	19085			
3	QPSK	1	0	24.55	24.69	24.88	25.7		
3	QPSK	1	8	24.64	24.83	24.95			
3	QPSK	1	14	24.58	24.79	24.93			
3	QPSK	8	0	23.67	23.80	23.97	24.7		
3	QPSK	8	4	23.70	23.90	24.01			
3	QPSK	8	7	23.64	23.87	23.99			
3	QPSK	15	0	23.64	23.80	23.99	24.7		
3	16QAM	1	0	23.83	23.99	24.18			
3	16QAM	1	8	23.96	24.14	24.25			
3	16QAM	1	14	23.94	24.10	24.25	23.7		
3	16QAM	8	0	22.72	22.86	23.05			
3	16QAM	8	4	22.77	22.96	23.06			
3	16QAM	8	7	22.71	22.95	23.06	23.7		
3	16QAM	15	0	22.69	22.82	22.99			
3	64QAM	1	0	22.81	23.01	22.83			
3	64QAM	1	8	22.94	23.12	22.86	23.7		
3	64QAM	1	14	22.84	23.06	22.70			
3	64QAM	8	0	21.73	21.83	21.74			
3	64QAM	8	4	21.75	21.95	21.76	22.7		
3	64QAM	8	7	21.71	21.93	21.68			
3	64QAM	15	0	21.71	21.81	21.66			
Channel				18607	18900	19193	Tune-up limit (dBm)		
Frequency (MHz)				18607	18800	19093			
1.4	QPSK	1	0	24.46	24.67	24.82	25.7		
1.4	QPSK	1	3	24.54	24.74	24.90			
1.4	QPSK	1	5	24.47	24.69	24.84			
1.4	QPSK	3	0	24.54	24.71	24.84	24.7		
1.4	QPSK	3	1	24.58	24.77	24.88			
1.4	QPSK	3	3	24.52	24.73	24.85			
1.4	16QAM	1	0	23.82	23.99	24.16	24.7		
1.4	16QAM	1	3	23.87	24.13	24.23			
1.4	16QAM	1	5	23.82	24.01	24.17			
1.4	16QAM	3	0	23.60	23.7	23.81	24.7		
1.4	16QAM	3	1	23.66	23.79	23.91			
1.4	16QAM	3	3	23.59	23.79	23.88			
1.4	16QAM	6	0	22.85	22.84	22.97	23.7		
1.4	16QAM	6	1	22.80	22.82	22.93			
1.4	16QAM	6	3	22.82	22.83	22.94			
1.4	64QAM	1	5	22.77	22.96	22.58	23.7		
1.4	64QAM	3	1	22.79	22.99	22.69			
1.4	64QAM	3	3	22.74	22.94	22.56			



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				20060	20175	20350					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	24.42	24.50	24.45	25.7				
20	QPSK	1	49	24.32	24.32	24.33					
20	QPSK	1	99	24.31	24.35	24.31					
20	QPSK	50	0	23.47	23.50	23.54	24.7				
20	QPSK	50	24	23.51	23.53	23.54					
20	QPSK	50	50	23.46	23.43	23.48					
20	QPSK	100	0	23.50	23.60	23.41	24.7				
20	16QAM	1	0	23.78	23.83	23.76					
20	16QAM	1	49	23.66	23.64	23.66					
20	16QAM	1	99	23.69	23.66	23.60	23.7				
20	16QAM	50	0	22.49	22.54	22.55					
20	16QAM	50	24	22.52	22.55	22.53					
20	16QAM	50	50	22.46	22.45	22.48	22.7				
20	16QAM	100	0	22.49	22.56	22.42					
20	64QAM	1	0	22.24	22.68	22.19					
20	64QAM	1	49	22.53	22.52	22.56	23.7				
20	64QAM	1	99	22.58	22.03	22.57					
20	64QAM	50	0	21.50	21.54	21.24					
20	64QAM	50	24	21.54	21.45	21.56	22.7				
20	64QAM	50	50	21.47	21.07	21.46					
20	64QAM	100	0	21.54	21.56	21.48					
Channel				20025	20175	20325	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	24.44	24.48	24.49	25.7				
15	QPSK	1	37	24.29	24.32	24.34					
15	QPSK	1	74	24.31	24.31	24.30					
15	QPSK	36	0	23.55	23.55	23.51	24.7				
15	QPSK	36	20	23.49	23.52	23.53					
15	QPSK	36	39	23.44	23.46	23.45					
15	QPSK	75	0	23.49	23.54	23.45	24.7				
15	16QAM	1	0	23.73	23.80	23.81					
15	16QAM	1	37	23.59	23.63	23.68					
15	16QAM	1	74	23.63	23.62	23.61	23.7				
15	16QAM	36	0	22.53	22.50	22.51					
15	16QAM	36	20	22.47	22.50	22.52					
15	16QAM	36	39	22.45	22.44	22.45	23.7				
15	16QAM	75	0	22.49	22.54	22.45					
15	64QAM	1	0	22.25	22.67	22.48					
15	64QAM	1	37	22.54	22.34	22.63	23.7				
15	64QAM	1	74	22.53	22.12	22.56					
15	64QAM	36	0	21.55	21.58	21.52					
15	64QAM	36	20	21.46	21.41	21.53	22.7				
15	64QAM	36	39	21.45	21.06	21.47					
15	64QAM	75	0	21.49	21.46	21.44					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	24.39	24.42	24.45	25.7				
10	QPSK	1	25	24.35	24.42	24.42					
10	QPSK	1	49	24.36	24.38	24.40					
10	QPSK	25	0	23.45	23.47	23.46	24.7				
10	QPSK	25	12	23.50	23.57	23.48					
10	QPSK	25	25	23.52	23.57	23.56					
10	QPSK	50	0	23.53	23.55	23.50	24.7				
10	16QAM	1	0	23.73	23.79	23.81					
10	16QAM	1	25	23.73	23.82	23.81					
10	16QAM	1	49	23.75	23.75	23.81	23.7				
10	16QAM	25	0	22.47	22.45	22.46					
10	16QAM	25	12	22.51	22.57	22.52					
10	16QAM	25	25	22.49	22.54	22.57	23.7				
10	16QAM	50	0	22.50	22.56	22.48					
10	64QAM	1	0	22.08	22.64	22.69					
10	64QAM	1	25	22.65	22.44	22.71	23.7				
10	64QAM	1	49	22.67	22.01	22.71					
10	64QAM	25	0	21.44	21.50	21.52					
10	64QAM	25	12	21.51	21.35	21.52	22.7				
10	64QAM	25	25	21.51	21.03	21.58					
10	64QAM	50	0	21.53	21.32	21.54					
Channel				19975	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	24.37	24.38	24.40	25.7				
5	QPSK	1	12	24.46	24.45	24.48					
5	QPSK	1	24	24.43	24.48	24.46					
5	QPSK	12	0	23.48	23.44	23.53	24.7				
5	QPSK	12	7	23.52	23.54	23.54					
5	QPSK	12	13	23.51	23.52	23.50					
5	QPSK	25	0	23.46	23.53	23.50	24.7				
5	16QAM	1	0	23.70	23.76	23.79					
5	16QAM	1	12	23.74	23.72	23.79					
5	16QAM	1	24	23.77	23.78	23.82	23.7				
5	16QAM	12	0	22.50	22.46	22.57					
5	16QAM	12	7	22.53	22.57	22.56					
5	16QAM	12	13	22.54	22.57	22.55	23.7				
5	16QAM	25	0	22.51	22.53	22.55					
5	64QAM	1	0	22.06	22.62	22.67					
5	64QAM	1	12	22.43	22.33	22.71	23.7				
5	64QAM	1	24	22.74	22.09	22.71					
5	64QAM	12	0	21.11	21.51	21.57					
5	64QAM	12	7	21.40	21.31	21.64	22.7				
5	64QAM	12	13	21.52	21.06	21.63					
5	64QAM	25	0	21.35	21.27	21.54					
Channel				19965	20175	20385	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	24.38	24.38	24.41	25.7				
3	QPSK	1	8	24.46	24.48	24.48					
3	QPSK	1	14	24.40	24.43	24.43					
3	QPSK	8	0	23.46	23.44	23.51	24.7				
3	QPSK	8	4	23.52	23.52	23.52					
3	QPSK	8	7	23.46	23.51	23.51					
3	QPSK	15	0	23.46	23.55	23.50	24.7				
3	16QAM	1	0	23.70	23.75	23.76					
3	16QAM	1	8	23.79	23.83	23.81					
3	16QAM	1	14	23.74	23.75	23.78	23.7				
3	16QAM	8	0	22.52	22.49	22.56					
3	16QAM	8	4	22.59	22.62	22.62					
3	16QAM	8	7	22.58	22.58	22.57	23.7				
3	16QAM	15	0	22.50	22.56	22.57					
3	64QAM	1	0	22.01	22.49	22.69					
3	64QAM	1	8	22.30	22.39	22.75	23.7				
3	64QAM	1	14	22.40	22.19	22.71					
3	64QAM	8	0	20.99	21.39	21.60					
3	64QAM	8	4	21.16	21.32	21.61	22.7				
3	64QAM	8	7	21.27	21.20	21.58					
3	64QAM	15	0	21.14	21.29	21.56					
Channel				19957	20175	20393	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	24.31	24.33	24.33	25.7				
1.4	QPSK	1	3	24.37	24.39	24.42					
1.4	QPSK	1	5	24.30	24.35	24.37					
1.4	QPSK	3	0	24.31	24.35	24.41	24.7				
1.4	QPSK	3	1	24.39	24.41	24.43					
1.4	QPSK	3	3	24.35	24.37	24.38					



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20555	20650	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.78	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	
10	QPSK	25	12	23.75	23.74	23.72	24.7
10	QPSK	25	25	23.72	23.78	23.73	
10	QPSK	50	0	23.75	23.70	23.73	
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	24.7
10	16QAM	1	49	24.00	24.04	23.60	
10	16QAM	25	0	22.86	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.78	22.79	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	
10	64QAM	1	49	22.89	22.48	21.77	23.7
10	64QAM	25	0	21.67	21.78	21.76	
10	64QAM	25	12	21.80	21.77	21.68	
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	22.7
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	Tune-up limit (dBm)
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	
5	QPSK	12	7	23.73	23.78	23.42	24.7
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	24.7
5	16QAM	1	24	23.96	23.99	23.34	
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.84	22.82	
5	64QAM	1	12	22.90	22.85	21.90	
5	64QAM	1	24	22.89	22.62	21.71	23.7
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.75	20.81	22.7
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	
3	QPSK	8	4	23.68	23.74	23.21	24.7
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.28	
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	24.7
3	16QAM	1	14	23.89	23.92	23.42	
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	
3	64QAM	1	14	22.64	22.62	21.71	23.7
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	
3	64QAM	8	7	21.70	21.78	20.71	
3	64QAM	15	0	21.74	21.69	20.78	22.7
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	24.58	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	
1.4	QPSK	3	1	24.62	24.57	24.05	24.7
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	
1.4	16QAM	1	0	23.88	23.96	23.26	
1.4	16QAM	1	3	23.93	23.95	23.39	24.7
1.4	16QAM	1	5	23.83	23.89	23.43	
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.28	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	
1.4	64QAM	1	5	22.62	22.79	21.73	23.7
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	
1.4	64QAM	3	3	22.64	22.78	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	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	24.69	24.76	24.80	25.7
20	QPSK	1	49	24.74	24.81	24.78	
20	QPSK	1	99	24.84	24.83	24.83	
20	QPSK	50	0	23.80	23.87	23.89	24.7
20	QPSK	50	24	23.92	23.91	23.91	
20	QPSK	50	50	23.94	23.92	23.92	
20	QPSK	100	0	23.91	23.89	23.91	24.7
20	16QAM	1	0	24.01	24.09	24.15	
20	16QAM	1	49	24.12	24.17	24.15	
20	16QAM	1	99	24.15	24.21	24.14	23.7
20	16QAM	50	0	22.81	22.87	22.91	
20	16QAM	50	24	22.93	22.92	22.94	
20	16QAM	50	50	22.96	23.02	22.98	23.7
20	16QAM	100	0	22.92	22.90	22.92	
20	64QAM	1	0	22.89	22.95	22.99	
20	64QAM	1	49	22.98	23.07	22.88	23.7
20	64QAM	1	99	23.07	23.13	22.92	
20	64QAM	50	0	21.84	21.92	21.92	
20	64QAM	50	24	21.95	21.95	21.71	22.7
20	64QAM	50	50	21.98	22.04	21.58	
20	64QAM	100	0	21.94	21.92	21.71	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.67	24.77	24.82	25.7
15	QPSK	1	37	24.72	24.81	24.81	
15	QPSK	1	74	24.80	24.80	24.83	
15	QPSK	36	0	23.77	23.87	23.90	24.7
15	QPSK	36	20	23.93	23.91	23.91	
15	QPSK	36	39	23.94	24.00	23.95	
15	QPSK	75	0	23.88	23.91	23.88	24.7
15	16QAM	1	0	24.00	24.11	24.14	
15	16QAM	1	37	24.05	24.14	24.15	
15	16QAM	1	74	24.14	24.24	24.13	23.7
15	16QAM	36	0	22.80	22.89	22.90	
15	16QAM	36	20	22.92	22.92	22.90	
15	16QAM	36	39	22.95	23.02	22.95	23.7
15	16QAM	75	0	22.91	22.92	22.89	
15	64QAM	1	0	22.89	23.01	23.01	
15	64QAM	1	37	22.99	23.08	22.38	23.7
15	64QAM	1	74	23.01	23.14	22.68	
15	64QAM	36	0	21.85	21.94	21.72	
15	64QAM	36	20	21.93	21.93	21.52	22.7
15	64QAM	36	39	21.97	22.06	21.58	
15	64QAM	75	0	21.91	21.95	21.57	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.68	24.75	24.75	25.7
10	QPSK	1	25	24.64	24.74	24.73	
10	QPSK	1	49	24.71	24.83	24.78	
10	QPSK	25	0	23.84	23.87	23.82	24.7
10	QPSK	25	12	23.88	23.89	23.84	
10	QPSK	25	25	23.85	23.96	23.92	
10	QPSK	50	0	23.88	23.91	23.83	24.7
10	16QAM	1	0	24.04	24.13	24.11	
10	16QAM	1	25	24.04	24.17	24.14	
10	16QAM	1	49	24.13	24.22	24.15	23.7
10	16QAM	25	0	22.85	22.86	22.82	
10	16QAM	25	12	22.96	22.91	22.87	
10	16QAM	25	25	22.89	22.97	22.92	23.7
10	16QAM	50	0	22.87	22.89	22.84	
10	64QAM	1	0	22.97	22.99	22.66	
10	64QAM	1	25	23.00	23.09	22.74	23.7
10	64QAM	1	49	23.01	23.14	22.89	
10	64QAM	25	0	21.88	21.89	21.50	
10	64QAM	25	12	21.92	21.93	21.62	22.7
10	64QAM	25	25	21.92	22.00	21.66	
10	64QAM	50	0	21.92	21.94	21.50	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.69	24.76	24.74	25.7
5	QPSK	1	12	24.75	24.80	24.75	
5	QPSK	1	24	24.74	24.80	24.77	
5	QPSK	12	0	23.83	23.88	23.88	24.7
5	QPSK	12	7	23.87	23.86	23.90	
5	QPSK	12	13	23.84	23.96	23.88	
5	QPSK	25	0	23.84	23.88	23.85	24.7
5	16QAM	1	0	24.05	24.10	24.09	
5	16QAM	1	12	24.06	24.16	24.07	
5	16QAM	1	24	24.07	24.17	24.10	23.7
5	16QAM	12	0	22.88	22.91	22.93	
5	16QAM	12	7	22.88	22.93	22.89	
5	16QAM	12	13	22.90	22.97	22.89	23.7
5	16QAM	25	0	22.88	22.89	22.87	
5	64QAM	1	0	23.00	23.00	22.69	
5	64QAM	1	12	22.99	23.08	22.72	23.7
5	64QAM	1	24	23.01	23.10	22.82	
5	64QAM	12	0	21.91	21.94	21.57	
5	64QAM	12	7	21.87	21.95	21.72	22.7
5	64QAM	12	13	21.81	22.00	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



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	23150			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.64	24.61	24.63	25.7		
10	QPSK	1	25	24.63	24.68	24.65			
10	QPSK	1	49	24.76	24.71	24.70			
10	QPSK	25	0	23.74	23.78	23.77			
10	QPSK	25	12	23.67	23.80	23.76	24.7		
10	QPSK	25	25	23.88	23.85	23.83			
10	QPSK	50	0	23.83	23.80	23.79			
10	16QAM	1	0	24.03	23.97	23.99			
10	16QAM	1	25	24.06	24.05	24.01	24.7		
10	16QAM	1	49	24.12	24.08	24.07			
10	16QAM	25	0	22.76	22.79	22.77			
10	16QAM	25	12	22.62	22.80	22.78			
10	16QAM	25	25	22.81	22.85	22.79	23.7		
10	16QAM	50	0	22.83	22.78	22.76			
10	64QAM	1	0	22.91	22.84	22.87			
10	64QAM	1	25	22.76	22.99	22.73			
10	64QAM	1	49	23.06	22.96	22.95	23.7		
10	64QAM	25	0	21.78	21.80	21.79			
10	64QAM	25	12	21.88	21.83	21.81			
10	64QAM	25	25	21.82	21.90	21.84			
10	64QAM	50	0	21.83	21.81	21.80	22.7		
Channel				23035	23095	23155			
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.70	24.72	24.67	25.7		
5	QPSK	1	12	24.72	24.73	24.71			
5	QPSK	1	24	24.69	24.71	24.72			
5	QPSK	12	0	23.83	23.79	23.78			
5	QPSK	12	7	23.79	23.75	23.81	24.7		
5	QPSK	12	13	23.75	23.82	23.77			
5	QPSK	25	0	23.79	23.76	23.75			
5	16QAM	1	0	24.02	24.04	23.98			
5	16QAM	1	12	24.03	24.01	24.02	24.7		
5	16QAM	1	24	24.02	24.07	24.03			
5	16QAM	12	0	22.85	22.83	22.80			
5	16QAM	12	7	22.81	22.78	22.85			
5	16QAM	12	13	22.83	22.82	22.80	23.7		
5	16QAM	25	0	22.81	22.82	22.75			
5	64QAM	1	0	22.62	22.75	22.91			
5	64QAM	1	12	22.83	22.94	22.94			
5	64QAM	1	24	22.80	22.98	22.93	23.7		
5	64QAM	12	0	21.81	21.89	21.87			
5	64QAM	12	7	21.88	21.85	21.88			
5	64QAM	12	13	21.82	21.87	21.84			
5	64QAM	25	0	21.83	21.79	21.79	22.7		
Channel				23025	23095	23165			
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.75	24.69	24.72	25.7		
3	QPSK	1	8	24.73	24.74	24.73			
3	QPSK	1	14	24.65	24.71	24.67			
3	QPSK	8	0	23.79	23.78	23.73			
3	QPSK	8	4	23.78	23.74	23.77	24.7		
3	QPSK	8	7	23.73	23.76	23.75			
3	QPSK	15	0	23.77	23.75	23.73			
3	16QAM	1	0	24.08	24.01	24.02			
3	16QAM	1	8	24.06	24.08	24.08	24.7		
3	16QAM	1	14	24.00	24.05	23.98			
3	16QAM	8	0	22.88	22.83	22.82			
3	16QAM	8	4	22.90	22.83	22.87			
3	16QAM	8	7	22.84	22.84	22.83	23.7		
3	16QAM	15	0	22.80	22.80	22.75			
3	64QAM	1	0	22.67	22.90	22.95			
3	64QAM	1	8	22.91	23.01	22.98			
3	64QAM	1	14	22.92	22.95	22.88	23.7		
3	64QAM	8	0	21.82	21.81	21.81			
3	64QAM	8	4	21.87	21.84	21.87			
3	64QAM	8	7	21.82	21.85	21.81			
3	64QAM	15	0	21.65	21.78	21.77	22.7		
Channel				23017	23095	23173			
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.64	24.59	24.59	25.7		
1.4	QPSK	1	3	24.68	24.67	24.64			
1.4	QPSK	1	5	24.60	24.58	24.55			
1.4	QPSK	3	0	24.67	24.60	24.62			
1.4	QPSK	3	1	24.70	24.64	24.68	24.7		
1.4	QPSK	3	3	24.64	24.67	24.61			
1.4	QPSK	6	0	23.71	23.74	23.67			
1.4	16QAM	1	0	23.99	23.93	23.96			
1.4	16QAM	1	3	24.02	24.02	23.98	24.7		
1.4	16QAM	1	5	23.92	23.94	23.91			
1.4	16QAM	3	0	23.75	23.69	23.69			
1.4	16QAM	3	1	23.81	23.75	23.75			
1.4	16QAM	3	3	23.70	23.73	23.65	23.7		
1.4	16QAM	6	0	22.78	22.80	22.76			
1.4	64QAM	1	0	22.73	22.89	22.85			
1.4	64QAM	1	3	22.90	22.97	22.89			
1.4	64QAM	1	5	22.82	22.85	22.81	23.7		
1.4	64QAM	3	0	22.68	22.81	22.82			
1.4	64QAM	3	1	22.78	22.85	22.88			
1.4	64QAM	3	3	22.63	22.85	22.79			
1.4	64QAM	6	0	21.72	21.75	21.71	22.7		

Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.23		25.2
10	QPSK	1	25		24.22		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30		24.2
10	QPSK	25	12		23.33		
10	QPSK	25	25		23.34		
10	QPSK	50	0		23.35		24.2
10	16QAM	1	0		23.58		
10	16QAM	1	25		23.57		
10	16QAM	1	49		23.54		23.2
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		
10	16QAM	25	25		22.38		22.2
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		23.2
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.36		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.23	24.20	24.18	25.2
5	QPSK	1	12	24.26	24.27	24.23	
5	QPSK	1	24	24.30	24.23	24.34	
5	QPSK	12	0	23.38	23.33	23.29	24.2
5	QPSK	12	7	23.41	23.32	23.31	
5	QPSK	12	13	23.38	23.35	23.29	
5	QPSK	25	0	23.37	23.33	23.32	24.2
5	16QAM	1	0	23.51	23.46	23.52	
5	16QAM	1	12	23.50	23.47	23.47	
5	16QAM	1	24	23.59	23.51	23.49	23.2
5	16QAM	12	0	22.43	22.35	22.36	
5	16QAM	12	7	22.42	22.33	22.35	
5	16QAM	12	13	22.40	22.37	22.37	23.2
5	16QAM	25	0	22.43	22.34	22.33	
5	64QAM	1	0	22.14	22.47	22.39	
5	64QAM	1	12	22.50	22.44	22.45	23.2
5	64QAM	1	24	22.47	22.47	22.39	
5	64QAM	12	0	21.47	21.41	21.37	
5	64QAM	12	7	21.47	21.37	21.42	22.2
5	64QAM	12	13	21.44	21.41	21.36	
5	64QAM	25	0	21.41	21.37	21.34	

Band 14							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch.	Power Middle Ch.	Power High Ch.	Tune-up limit (dbm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.66		25.7
10	QPSK	1	25		24.65		
10	QPSK	1	49		24.67		
10	QPSK	25	0		23.71		24.7
10	QPSK	25	12		23.70		
10	QPSK	25	25		23.73		
10	QPSK	50	0		23.68		24.7
10	16QAM	1	0		24.08		
10	16QAM	1	25		24.08		
10	16QAM	1	49		23.86		23.7
10	16QAM	25	0		22.68		
10	16QAM	25	12		22.70		
10	16QAM	25	25		22.71		23.7
10	16QAM	50	0		22.70		
10	64QAM	1	0		22.92		
10	64QAM	1	25		22.66		22.7
10	64QAM	1	49		22.90		
10	64QAM	25	0		21.71		
10	64QAM	25	12		21.37		22.7
10	64QAM	25	25		21.38		
10	64QAM	50	0		21.44		
Channel				23305	23330	23355	Tune-up limit (dbm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.62	24.61	24.59	25.7
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.7
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.7
5	16QAM	1	0	23.83	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.7
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.7
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.89	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.7
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.7
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.03	21.17	

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	24.66	24.65	24.61	25.7
10	QPSK	1	25	24.69	24.70	24.71	
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	24.7
10	QPSK	25	12	23.68	23.82	23.79	
10	QPSK	25	25	23.98	23.86	23.88	
10	QPSK	50	0	23.79	23.78	23.79	24.7
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	
10	16QAM	1	49	24.12	24.10	24.09	23.7
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	
10	16QAM	25	25	22.89	22.90	22.82	23.7
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.75	22.88	
10	64QAM	1	25	22.71	22.71	22.65	23.7
10	64QAM	1	49	22.97	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	22.7
10	64QAM	25	25	21.65	21.76	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.66	24.66	25.7
5	QPSK	1	12	24.74	24.79	24.75	
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	24.7
5	QPSK	12	7	23.85	23.81	23.82	
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	24.7
5	16QAM	1	0	23.99	23.96	23.99	
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	23.7
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	
5	16QAM	12	13	22.84	22.88	22.84	23.7
5	16QAM	25	0	22.65	22.85	22.87	
5	64QAM	1	0	22.40	22.44	22.75	
5	64QAM	1	12	22.76	22.60	22.94	23.7
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



Band 25							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Channel	Power Middle Ch. / Channel	Power High Ch. / Channel	Tune-up limit (dBm)
Frequency (MHz)				26140	26340	26590	
Channel				1860	1880	1905	
20	QPSK	1	0	24.65	24.76	24.91	25.7
20	QPSK	1	49	24.64	24.72	24.82	
20	QPSK	1	99	24.61	24.75	24.23	
20	QPSK	50	0	23.71	23.86	23.94	24.7
20	QPSK	50	24	23.60	23.95	24.01	
20	QPSK	50	50	23.73	23.92	24.00	
20	QPSK	100	0	23.81	23.94	23.97	24.7
20	16QAM	1	0	23.95	24.08	24.19	
20	16QAM	1	49	23.98	24.09	24.15	
20	16QAM	1	99	23.89	24.08	23.60	23.7
20	16QAM	50	0	22.72	22.85	22.96	
20	16QAM	50	24	22.80	22.95	22.98	
20	16QAM	50	50	22.76	22.93	23.05	23.7
20	16QAM	100	0	22.78	22.93	22.94	
20	64QAM	1	0	22.86	22.94	22.43	
20	64QAM	1	49	22.70	22.91	22.54	23.7
20	64QAM	1	99	22.42	22.97	21.74	
20	64QAM	50	0	21.75	21.89	21.33	
20	64QAM	50	24	21.66	22.01	21.58	22.7
20	64QAM	50	50	21.43	21.95	21.32	
20	64QAM	100	0	21.70	21.95	21.16	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	24.65	24.77	24.86	25.7
15	QPSK	1	37	24.65	24.76	24.88	
15	QPSK	1	74	24.63	24.77	24.32	
15	QPSK	36	0	23.72	23.86	23.96	24.7
15	QPSK	36	20	23.79	23.95	24.07	
15	QPSK	36	39	23.74	23.89	23.93	
15	QPSK	75	0	23.77	23.94	23.96	24.7
15	16QAM	1	0	23.93	24.07	24.15	
15	16QAM	1	37	23.97	24.09	24.18	
15	16QAM	1	74	23.92	24.10	23.69	23.7
15	16QAM	36	0	22.73	22.87	22.98	
15	16QAM	36	20	22.78	22.96	23.06	
15	16QAM	36	39	22.72	22.90	23.02	23.7
15	16QAM	75	0	22.77	22.94	22.96	
15	64QAM	1	0	22.63	22.92	22.34	
15	64QAM	1	37	22.88	22.97	22.77	23.7
15	64QAM	1	74	22.42	22.97	21.81	
15	64QAM	36	0	21.77	21.92	21.56	
15	64QAM	36	20	21.82	21.98	21.69	22.7
15	64QAM	36	39	21.58	21.93	21.28	
15	64QAM	75	0	21.79	21.95	21.27	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	24.65	24.70	24.89	25.7
10	QPSK	1	25	24.55	24.70	24.90	
10	QPSK	1	49	24.60	24.75	24.20	
10	QPSK	25	0	23.74	23.81	23.94	24.7
10	QPSK	25	12	23.79	23.93	24.00	
10	QPSK	25	25	23.79	23.93	23.85	
10	QPSK	50	0	23.78	23.93	23.95	24.7
10	16QAM	1	0	23.98	24.12	24.22	
10	16QAM	1	25	23.98	24.13	24.27	
10	16QAM	1	49	23.98	24.13	23.58	23.7
10	16QAM	25	0	22.76	22.85	22.96	
10	16QAM	25	12	22.80	22.95	22.97	
10	16QAM	25	25	22.76	22.90	22.84	23.7
10	16QAM	50	0	22.78	22.91	22.97	
10	64QAM	1	0	22.91	22.95	22.66	
10	64QAM	1	25	22.92	23.05	22.53	23.7
10	64QAM	1	49	22.61	23.07	21.74	
10	64QAM	25	0	21.78	21.82	21.82	
10	64QAM	25	12	21.84	21.98	21.46	22.7
10	64QAM	25	25	21.82	21.93	21.00	
10	64QAM	50	0	21.76	21.94	21.20	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.60	24.72	24.90	25.7
5	QPSK	1	12	24.65	24.84	24.43	
5	QPSK	1	24	24.64	24.80	24.08	
5	QPSK	12	0	23.72	23.83	23.86	24.7
5	QPSK	12	7	23.79	23.91	23.61	
5	QPSK	12	13	23.78	23.94	23.38	
5	QPSK	25	0	23.74	23.90	23.55	24.7
5	16QAM	1	0	24.03	24.05	24.22	
5	16QAM	1	12	23.94	24.12	23.81	
5	16QAM	1	24	23.97	24.15	23.48	23.7
5	16QAM	12	0	22.74	22.86	22.99	
5	16QAM	12	7	22.81	22.95	22.77	
5	16QAM	12	13	22.82	22.98	22.55	23.7
5	16QAM	25	0	22.79	22.90	22.73	
5	64QAM	1	0	22.86	23.00	22.35	
5	64QAM	1	12	22.84	23.00	21.93	23.7
5	64QAM	1	24	22.86	23.03	21.55	
5	64QAM	12	0	21.78	21.92	21.17	
5	64QAM	12	7	21.84	21.99	21.00	22.7
5	64QAM	12	13	21.68	22.00	20.74	
5	64QAM	25	0	21.81	21.93	20.87	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.54	24.63	24.53	25.7
3	QPSK	1	8	24.69	24.83	24.34	
3	QPSK	1	14	24.67	24.83	24.09	
3	QPSK	8	0	23.69	23.80	23.60	24.7
3	QPSK	8	4	23.78	23.90	23.48	
3	QPSK	8	7	23.75	23.89	23.37	
3	QPSK	15	0	23.72	23.90	23.43	24.7
3	16QAM	1	0	23.90	23.95	23.83	
3	16QAM	1	8	24.00	24.20	23.68	
3	16QAM	1	14	23.99	24.16	23.42	23.7
3	16QAM	8	0	22.76	22.89	22.72	
3	16QAM	8	4	22.82	22.96	22.61	
3	16QAM	8	7	22.81	22.99	22.48	23.7
3	16QAM	15	0	22.79	22.91	22.56	
3	64QAM	1	0	22.80	22.87	21.94	
3	64QAM	1	8	22.93	23.11	21.80	23.7
3	64QAM	1	14	22.90	23.08	21.57	
3	64QAM	8	0	21.76	21.90	20.85	
3	64QAM	8	4	21.84	22.00	20.77	22.7
3	64QAM	8	7	21.83	21.99	20.64	
3	64QAM	15	0	21.79	21.92	20.73	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	24.51	24.66	24.19	25.7
1.4	QPSK	1	3	24.62	24.74	24.13	
1.4	QPSK	1	5	24.59	24.76	24.02	
1.4	QPSK	3	0	24.56	24.71	24.13	24.7
1.4	QPSK	3	1	24.63	24.77	24.17	
1.4	QPSK	3	3	24.59	24.77	24.04	
1.4	QPSK	6	0	23.67	23.83	23.21	24.7
1.4	16QAM	1	0	23.80	23.95	23.48	
1.4	16QAM	1	3	23.99	24.12	23.47	
1.4	16QAM	1	5	23.94	24.09	23.36	24.7
1.4	16QAM	3	0	23.80	23.77	23.31	
1.4	16QAM	3	1	23.70	23.85	23.31	
1.4	16QAM	3	3	23.65	23.82	23.22	23.7
1.4	16QAM	6	0	22.73	22.90	22.41	
1.4	64QAM	1	0	22.77	22.91	21.92	
1.4	64QAM	1	3	22.85	23.04	21.85	23.7
1.4	64QAM	1	5	22.79	22.99	22.00	
1.4	64QAM	3	0	22.72	22.92	21.81	
1.4	64QAM	3	1	22.80	22.97	21.78	23.7
1.4	64QAM	3	3	22.78	22.96	21.73	
1.4	64QAM	6	0	21.67	21.85	20.79	



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26745	26865	26990	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.78	24.52	24.57	25.7
15	QPSK	1	37	24.46	24.51	24.50	
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	24.7
15	16QAM	1	37	23.82	23.86	23.85	
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.66	22.67	
15	16QAM	36	20	22.65	22.61	22.60	23.7
15	16QAM	36	39	22.59	22.65	22.62	
15	16QAM	75	0	22.67	22.62	22.65	
15	16QAM	75	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	23.7
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	
15	64QAM	36	39	21.65	21.71	21.58	22.7
15	64QAM	75	0	21.69	21.63	21.63	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	25.7
10	QPSK	1	25	24.57	24.55	24.59	
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	24.07	23.96	23.96	
10	16QAM	1	25	23.94	24.01	23.97	24.7
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	
10	16QAM	25	25	22.64	22.63	22.63	23.7
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.64	22.75	22.88	
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	22.7
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	Tune-up limit (dBm)
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	25.7
5	QPSK	1	12	24.72	24.63	24.47	
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.60	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	
5	16QAM	1	12	24.00	23.97	23.85	24.7
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	23.7
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	
5	64QAM	1	12	22.90	22.88	22.03	
5	64QAM	1	24	22.61	22.66	21.86	22.7
5	64QAM	12	0	21.63	21.78	21.45	
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	Tune-up limit (dBm)
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	25.7
3	QPSK	1	8	24.75	24.69	24.16	
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	8	0	23.83	23.68	23.39	
3	QPSK	8	4	23.77	23.72	23.28	24.7
3	QPSK	8	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	
3	16QAM	1	8	24.06	24.06	23.47	24.7
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	8	0	22.86	22.77	22.54	
3	16QAM	8	4	22.88	22.77	22.42	
3	16QAM	8	7	22.78	22.76	22.45	23.7
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.83	22.00	
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	22.7
3	64QAM	8	0	21.79	21.74	20.85	
3	64QAM	8	4	21.88	21.81	20.77	
3	64QAM	8	7	21.61	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	Tune-up limit (dBm)
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	25.7
1.4	QPSK	1	3	24.71	24.63	24.26	
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.59	24.55	24.17	
1.4	QPSK	3	1	24.74	24.58	24.22	24.7
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	24.7
1.4	16QAM	1	5	23.93	23.86	23.65	
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	23.7
1.4	16QAM	6	0	22.82	22.75	22.46	
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.88	21.90	
1.4	64QAM	1	5	22.86	22.76	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	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				2771.0			
Frequency (MHz)				231.0			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		21.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				2788.5	2771.0	2773.5	Tune-up limit (dbm)
Frequency (MHz)				2307.5	231.0	2312.5	
5	QPSK	1	0	22.88	22.88	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.15	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



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	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	24.35	24.39	24.57	25.7
20	QPSK	1	49	24.22	24.27	24.30	
20	QPSK	1	99	24.34	24.32	24.26	
20	QPSK	50	0	23.40	23.47	23.49	24.7
20	QPSK	50	24	23.46	23.43	23.47	
20	QPSK	50	50	23.47	23.48	23.50	
20	QPSK	100	0	23.46	23.40	23.47	24.7
20	16QAM	1	0	23.67	23.74	23.76	
20	16QAM	1	49	23.56	23.64	23.63	
20	16QAM	1	99	23.70	23.64	23.60	23.7
20	16QAM	50	0	22.37	22.46	22.54	
20	16QAM	50	24	22.46	22.43	22.47	
20	16QAM	50	50	22.44	22.47	22.51	23.7
20	16QAM	100	0	22.44	22.41	22.48	
20	64QAM	1	0	22.46	22.43	22.61	
20	64QAM	1	49	22.44	22.57	22.12	23.7
20	64QAM	1	99	22.58	22.59	22.49	
20	64QAM	50	0	21.39	21.46	21.51	
20	64QAM	50	24	21.48	21.45	21.31	22.7
20	64QAM	50	50	21.45	21.49	21.54	
20	64QAM	100	0	21.49	21.46	21.48	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	24.30	24.41	24.38	25.7
15	QPSK	1	37	24.21	24.29	24.33	
15	QPSK	1	74	24.34	24.36	24.31	
15	QPSK	36	0	23.37	23.44	23.49	24.7
15	QPSK	36	20	23.43	23.43	23.47	
15	QPSK	36	39	23.42	23.48	23.52	
15	QPSK	75	0	23.44	23.43	23.47	24.7
15	16QAM	1	0	23.60	23.74	23.73	
15	16QAM	1	37	23.59	23.63	23.68	
15	16QAM	1	74	23.64	23.66	23.65	23.7
15	16QAM	36	0	22.36	22.46	22.49	
15	16QAM	36	20	22.42	22.40	22.45	
15	16QAM	36	39	22.42	22.46	22.50	23.7
15	16QAM	75	0	22.46	22.41	22.45	
15	64QAM	1	0	22.46	22.59	22.58	
15	64QAM	1	37	22.47	22.56	22.44	23.7
15	64QAM	1	74	22.55	22.58	22.57	
15	64QAM	36	0	21.38	21.49	21.21	
15	64QAM	36	20	21.43	21.44	21.46	22.7
15	64QAM	36	39	21.45	21.50	21.52	
15	64QAM	75	0	21.44	21.42	21.47	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	24.37	24.44	24.45	25.7
10	QPSK	1	25	24.30	24.40	24.44	
10	QPSK	1	49	24.30	24.39	24.41	
10	QPSK	25	0	23.41	23.46	23.49	24.7
10	QPSK	25	12	23.45	23.49	23.49	
10	QPSK	25	25	23.44	23.50	23.57	
10	QPSK	50	0	23.46	23.47	23.49	24.7
10	16QAM	1	0	23.72	23.82	23.84	
10	16QAM	1	25	23.70	23.79	23.81	
10	16QAM	1	49	23.73	23.76	23.81	23.7
10	16QAM	25	0	22.48	22.47	22.50	
10	16QAM	25	12	22.48	22.47	22.52	
10	16QAM	25	25	22.41	22.50	22.55	23.7
10	16QAM	50	0	22.45	22.46	22.48	
10	64QAM	1	0	22.37	22.61	22.08	
10	64QAM	1	25	22.61	22.71	22.78	23.7
10	64QAM	1	49	22.61	22.67	22.72	
10	64QAM	25	0	21.45	21.49	21.49	
10	64QAM	25	12	21.48	21.51	21.55	22.7
10	64QAM	25	25	21.45	21.53	21.60	
10	64QAM	50	0	21.47	21.49	21.52	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	24.35	24.40	24.49	25.7
5	QPSK	1	12	24.39	24.40	24.52	
5	QPSK	1	24	24.33	24.43	24.46	
5	QPSK	12	0	23.44	23.46	23.59	24.7
5	QPSK	12	7	23.47	23.56	23.59	
5	QPSK	12	13	23.44	23.53	23.57	
5	QPSK	25	0	23.43	23.45	23.55	24.7
5	16QAM	1	0	23.75	23.73	23.80	
5	16QAM	1	12	23.73	23.81	23.84	
5	16QAM	1	24	23.67	23.78	23.80	23.7
5	16QAM	12	0	22.46	22.51	22.62	
5	16QAM	12	7	22.50	22.61	22.64	
5	16QAM	12	13	22.47	22.57	22.58	23.7
5	16QAM	25	0	22.46	22.48	22.59	
5	64QAM	1	0	22.41	22.71	22.81	
5	64QAM	1	12	22.64	22.73	22.77	23.7
5	64QAM	1	24	22.65	22.75	22.73	
5	64QAM	12	0	21.47	21.53	21.64	
5	64QAM	12	7	21.53	21.61	21.64	22.7
5	64QAM	12	13	21.49	21.55	21.60	
5	64QAM	25	0	21.44	21.49	21.59	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	24.38	24.42	24.50	25.7
3	QPSK	1	8	24.40	24.52	24.56	
3	QPSK	1	14	24.35	24.45	24.48	
3	QPSK	8	0	23.45	23.49	23.55	24.7
3	QPSK	8	4	23.47	23.53	23.57	
3	QPSK	8	7	23.43	23.52	23.54	
3	QPSK	15	0	23.44	23.49	23.57	24.7
3	16QAM	1	0	23.70	23.70	23.82	
3	16QAM	1	8	23.76	23.83	23.87	
3	16QAM	1	14	23.66	23.78	23.81	23.7
3	16QAM	8	0	22.50	22.53	22.66	
3	16QAM	8	4	22.55	22.61	22.63	
3	16QAM	8	7	22.51	22.58	22.59	23.7
3	16QAM	15	0	22.47	22.49	22.58	
3	64QAM	1	0	22.40	22.69	22.78	
3	64QAM	1	8	22.70	22.83	22.81	23.7
3	64QAM	1	14	22.67	22.73	22.75	
3	64QAM	8	0	21.39	21.53	21.65	
3	64QAM	8	4	21.53	21.64	21.68	22.7
3	64QAM	8	7	21.50	21.58	21.58	
3	64QAM	15	0	21.48	21.49	21.62	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	24.27	24.36	24.43	25.7
1.4	QPSK	1	3	24.30	24.40	24.42	
1.4	QPSK	1	5	24.22	24.37	24.41	
1.4	QPSK	3	0	24.33	24.43	24.44	24.7
1.4	QPSK	3	1	24.35	24.47	24.48	
1.4	QPSK	3	3	24.27	24.38	24.42	
1.4	QPSK	6	0	23.38	23.43	23.48	24.7
1.4	16QAM	1	0	23.59	23.72	23.75	
1.4	16QAM	1	3	23.65	23.80	23.83	
1.4	16QAM	1	5	23.59	23.73	23.76	24.7
1.4	16QAM	3	0	23.40	23.55	23.53	
1.4	16QAM	3	1	23.46	23.57	23.55	
1.4	16QAM	3	3	23.36	23.50	23.50	23.7
1.4	16QAM	6	0	22.44	21.83	22.58	
1.4	64QAM	1	0	22.30	21.79	22.64	
1.4	64QAM	1	3	22.41	21.72	22.74	23.7
1.4	64QAM	1	5	22.41	21.82	22.67	
1.4	64QAM	3	0	22.31	21.74	22.62	
1.4	64QAM	3	1	22.44	21.79	22.68	22.7
1.4	64QAM	3	3	22.43	21.73	22.61	
1.4	64QAM	6	0	21.21	20.71	21.81	



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	24.77	24.67	24.68	25.7
20	QPSK	1	49	24.65	24.65	24.65	
20	QPSK	1	99	24.68	24.66	24.61	
20	QPSK	50	0	23.76	23.76	23.72	24.7
20	QPSK	50	24	23.80	23.74	23.75	
20	QPSK	50	50	23.84	23.78	23.75	
20	QPSK	100	0	23.79	23.71	23.77	24.7
20	16QAM	1	0	24.06	23.96	24.00	
20	16QAM	1	49	24.01	24.03	24.04	
20	16QAM	1	99	24.03	24.01	23.95	23.7
20	16QAM	50	0	22.77	22.75	22.75	
20	16QAM	50	24	22.82	22.77	22.73	
20	16QAM	50	50	22.82	22.77	22.78	23.7
20	16QAM	100	0	22.79	22.73	22.78	
20	64QAM	1	0	22.04	22.83	22.82	23.7
20	64QAM	1	49	22.63	22.90	22.29	
20	64QAM	1	99	22.04	22.89	22.87	
20	64QAM	50	0	21.00	21.70	21.40	22.7
20	64QAM	50	24	21.30	21.64	21.57	
20	64QAM	50	50	21.84	21.60	21.74	
20	64QAM	100	0	21.53	21.76	21.80	Tune-up limit (dBm)
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.74	24.65	24.63	
15	QPSK	1	37	24.02	24.66	24.61	25.7
15	QPSK	1	74	24.05	24.68	24.64	
15	QPSK	36	0	23.73	23.71	23.69	24.7
15	QPSK	36	20	23.80	23.73	23.78	
15	QPSK	36	39	23.73	23.76	23.74	
15	QPSK	75	0	23.81	23.74	23.68	24.7
15	16QAM	1	0	24.05	24.01	23.98	
15	16QAM	1	37	23.95	24.02	24.00	
15	16QAM	1	74	23.97	24.00	23.98	23.7
15	16QAM	36	0	22.76	22.75	22.71	
15	16QAM	36	20	22.79	22.74	22.79	
15	16QAM	36	39	22.77	22.79	22.75	23.7
15	16QAM	75	0	22.63	22.73	22.70	
15	64QAM	1	0	22.02	22.43	22.76	
15	64QAM	1	37	21.86	22.94	22.88	23.7
15	64QAM	1	74	22.88	22.60	22.84	
15	64QAM	36	0	20.97	21.77	21.44	
15	64QAM	36	20	20.94	21.78	21.81	22.7
15	64QAM	36	39	21.48	21.56	21.78	
15	64QAM	75	0	21.29	21.75	21.67	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.76	24.64	24.66	25.7
10	QPSK	1	25	24.61	24.62	24.63	
10	QPSK	1	49	24.66	24.71	24.62	
10	QPSK	25	0	23.78	23.71	23.69	24.7
10	QPSK	25	12	23.79	23.82	23.70	
10	QPSK	25	25	23.72	23.78	23.74	
10	QPSK	50	0	23.80	23.81	23.71	24.7
10	16QAM	1	0	24.10	24.02	24.04	
10	16QAM	1	25	23.98	24.06	24.00	
10	16QAM	1	49	23.98	24.07	23.96	23.7
10	16QAM	25	0	22.76	22.70	22.68	
10	16QAM	25	12	22.78	22.81	22.68	
10	16QAM	25	25	22.65	22.77	22.73	23.7
10	16QAM	50	0	22.79	22.80	22.69	
10	64QAM	1	0	21.80	22.30	22.77	
10	64QAM	1	25	22.01	22.95	22.95	23.7
10	64QAM	1	49	22.14	22.96	22.45	
10	64QAM	25	0	20.82	21.71	21.71	
10	64QAM	25	12	20.84	21.84	21.76	22.7
10	64QAM	25	25	20.71	21.81	21.64	
10	64QAM	50	0	20.83	21.77	21.69	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.57	24.69	24.72	25.7
5	QPSK	1	12	24.71	24.65	24.70	
5	QPSK	1	24	24.70	24.68	24.63	
5	QPSK	12	0	23.73	23.76	23.74	24.7
5	QPSK	12	7	23.84	23.79	23.76	
5	QPSK	12	13	23.76	23.76	23.70	
5	QPSK	25	0	23.76	23.76	23.68	24.7
5	16QAM	1	0	23.75	24.01	24.02	
5	16QAM	1	12	23.97	24.03	23.97	
5	16QAM	1	24	23.95	24.02	23.93	23.7
5	16QAM	12	0	22.64	22.80	22.78	
5	16QAM	12	7	22.86	22.80	22.78	
5	16QAM	12	13	22.77	22.77	22.70	23.7
5	16QAM	25	0	22.69	22.81	22.70	
5	64QAM	1	0	21.74	22.06	22.91	
5	64QAM	1	12	21.79	22.94	22.70	23.7
5	64QAM	1	24	21.96	22.96	22.25	
5	64QAM	12	0	20.82	21.49	21.68	
5	64QAM	12	7	21.00	21.86	21.73	22.7
5	64QAM	12	13	20.99	21.81	21.61	
5	64QAM	25	0	20.76	21.59	21.48	



Band 2											
Ann 0											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)				
Channel				1870.0	1880.0	1900.0					
Frequency (MHz)				1860	1880	1900					
20	QPSK	1	0	24.72	24.80	24.91	25.7				
20	QPSK	1	49	24.67	24.74	24.77					
20	QPSK	1	99	24.64	24.71	24.79					
20	QPSK	50	0	23.78	23.84	23.88	24.7				
20	QPSK	50	24	23.87	23.86	23.91					
20	QPSK	50	50	23.88	23.94	23.99					
20	QPSK	100	0	23.86	23.87	23.94	24.7				
20	16QAM	1	0	24.10	24.10	24.20					
20	16QAM	1	49	24.03	24.06	24.16					
20	16QAM	1	99	23.93	24.12	24.12	23.7				
20	16QAM	50	0	22.80	22.85	22.89					
20	16QAM	50	24	22.89	22.87	22.94					
20	16QAM	50	50	22.87	22.95	23.00	23.7				
20	16QAM	100	0	22.86	22.88	22.89					
20	64QAM	1	0	22.94	22.96	23.03	23.7				
20	64QAM	1	49	22.91	22.97	22.98					
20	64QAM	1	99	22.84	23.00	22.49					
20	64QAM	50	0	21.81	21.87	21.54	22.7				
20	64QAM	50	24	21.92	21.92	21.54					
20	64QAM	50	50	21.86	21.97	21.58					
20	64QAM	100	0	21.87	21.90	21.49	Tune-up limit (dBm)				
Channel				1867.5	1880.0	1912.5					
Frequency (MHz)				1857.5	1880	1902.5					
15	QPSK	1	0	24.75	24.83	24.87	25.7				
15	QPSK	1	37	24.70	24.80	24.88					
15	QPSK	1	74	24.73	24.80	24.90					
15	QPSK	36	0	23.94	23.87	23.91	24.7				
15	QPSK	36	20	23.93	23.90	24.03					
15	QPSK	36	39	23.87	23.97	24.03					
15	QPSK	75	0	23.90	23.91	23.93	24.7				
15	16QAM	1	0	24.02	24.13	24.19					
15	16QAM	1	37	24.06	24.14	24.20					
15	16QAM	1	74	24.03	24.13	24.15	24.7				
15	16QAM	36	0	22.81	22.86	22.92					
15	16QAM	36	20	22.88	22.90	23.03					
15	16QAM	36	39	22.88	22.97	23.03	23.7				
15	16QAM	75	0	22.91	22.91	22.93					
15	64QAM	1	0	22.88	23.01	22.51					
15	64QAM	1	37	22.96	23.01	22.45	23.7				
15	64QAM	1	74	22.80	23.04	22.53					
15	64QAM	36	0	21.85	21.91	21.44					
15	64QAM	36	20	21.94	21.91	21.56	22.7				
15	64QAM	36	39	21.84	22.04	21.61					
15	64QAM	75	0	21.89	21.91	21.47					
Channel				1859.0	1880.0	1915.0	Tune-up limit (dBm)				
Frequency (MHz)				1855	1880	1905					
10	QPSK	1	0	24.76	24.72	24.89	25.7				
10	QPSK	1	25	24.69	24.82	24.87					
10	QPSK	1	49	24.72	24.83	24.87					
10	QPSK	25	0	23.86	23.85	23.90	24.7				
10	QPSK	25	12	23.87	23.89	23.95					
10	QPSK	25	25	23.88	24.00	24.05					
10	QPSK	50	0	23.87	23.89	23.97	24.7				
10	16QAM	1	0	24.12	24.15	24.23					
10	16QAM	1	25	24.13	24.16	24.27					
10	16QAM	1	49	24.08	24.18	24.25	23.7				
10	16QAM	25	0	22.86	22.85	22.91					
10	16QAM	25	12	22.90	22.90	22.98					
10	16QAM	25	25	22.88	22.97	23.05	23.7				
10	16QAM	50	0	22.88	22.88	22.95					
10	64QAM	1	0	23.02	23.03	22.59					
10	64QAM	1	25	23.05	23.16	22.73	23.7				
10	64QAM	1	49	22.95	23.10	22.59					
10	64QAM	25	0	21.88	21.88	21.51					
10	64QAM	25	12	21.94	21.92	21.66	22.7				
10	64QAM	25	25	21.90	22.00	21.58					
10	64QAM	50	0	21.90	21.92	21.48					
Channel				1862.0	1880.0	1917.5	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1880	1907.5					
5	QPSK	1	0	24.73	24.75	24.88	25.7				
5	QPSK	1	12	24.78	24.89	24.89					
5	QPSK	1	24	24.79	24.88	24.90					
5	QPSK	12	0	23.83	23.85	24.00	24.7				
5	QPSK	12	7	23.91	23.94	24.02					
5	QPSK	12	13	23.88	23.93	24.03					
5	QPSK	25	0	23.85	23.87	24.01	24.7				
5	16QAM	1	0	24.07	24.08	24.20					
5	16QAM	1	12	24.05	24.15	24.20					
5	16QAM	1	24	24.08	24.24	24.21	24.7				
5	16QAM	12	0	22.87	22.89	23.00					
5	16QAM	12	7	22.92	23.01	23.08					
5	16QAM	12	13	22.86	22.96	23.04	23.7				
5	16QAM	25	0	22.86	22.90	23.04					
5	64QAM	1	0	23.04	23.07	22.61					
5	64QAM	1	12	23.00	23.13	22.65	23.7				
5	64QAM	1	24	23.02	23.12	22.49					
5	64QAM	12	0	21.92	21.92	21.62					
5	64QAM	12	7	21.95	22.04	21.63	22.7				
5	64QAM	12	13	21.93	22.00	21.53					
5	64QAM	25	0	21.90	21.90	21.49					
Channel				1861.5	1880.0	1918.5	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1908.5					
3	QPSK	1	0	24.74	24.77	24.88	25.7				
3	QPSK	1	8	24.84	24.91	24.96					
3	QPSK	1	14	24.77	24.88	24.95					
3	QPSK	8	0	23.85	23.88	23.98	24.7				
3	QPSK	8	4	23.86	23.95	24.02					
3	QPSK	8	7	23.89	23.95	24.01					
3	QPSK	15	0	23.88	23.89	24.02	24.7				
3	16QAM	1	0	24.05	24.07	24.19					
3	16QAM	1	8	24.10	24.22	24.26					
3	16QAM	1	14	24.04	24.22	24.25	24.7				
3	16QAM	8	0	22.91	22.94	23.06					
3	16QAM	8	4	22.93	23.01	23.12					
3	16QAM	8	7	22.91	23.02	23.06	23.7				
3	16QAM	15	0	22.86	22.92	23.05					
3	64QAM	1	0	23.01	22.99	22.62					
3	64QAM	1	8	23.11	23.20	22.62	23.7				
3	64QAM	1	14	23.05	23.14	22.49					
3	64QAM	8	0	21.89	21.90	21.55					
3	64QAM	8	4	21.93	22.02	21.56	22.7				
3	64QAM	8	7	21.94	21.99	21.50					
3	64QAM	15	0	21.90	21.90	21.50					
Channel				1860.7	1880.0	1919.3	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1880	1909.3					
1.4	QPSK	1	0	24.71	24.79	24.80	25.7				
1.4	QPSK	1	3	24.80	24.85	24.88					
1.4	QPSK	1	5	24.73	24.80	24.84					
1.4	QPSK	3	0	24.74	24.83	24.86	24.7				
1.4	QPSK	3	1	24.77	24.86	24.89					
1.4	QPSK	3	3	24.75	24.80	24.87					
1.4	QPSK	6	0	23.79	23.88	23.94	24.7				
1.4	16QAM	1	0	24.02	24.14	24.17					
1.4	16QAM	1	3	24.07	24.19	24.22					
1.4	16QAM	1	5	24.02	24.10	24.13	24.7				
1.4	16QAM	3	0	23.81	23.88	23.90					
1.4	16QAM	3	1	23.87	23.96	23.98					
1.4	16QAM	3	3	23.82	23.86	23.93	23.7				
1.4	16QAM	6	0	22.84	22.93	23.02					
1.4	16QAM	6	1	22.92	23.01	23.02					
1.4	64QAM	1	3	23.02	23.08	22.49	23.7				
1.4	64QAM	1	5	22.97	23.03	22.43					
1.4	64QAM	3	0	22.93	23.01	22.46					
1.4	64QAM	3	1	22.97	23.06	22.52	23.7				
1.4	64QAM	3	3	22.93	23.02	22.49					
1.4	64QAM	6	0	21.88	21.98	21.49					



Band 4									
Ar 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				2050	2017.5	2030			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	24.64	24.72	24.65	25.7		
20	QPSK	1	49	24.54	24.51	24.51			
20	QPSK	1	99	24.53	24.54	24.53			
20	QPSK	50	0	23.70	23.72	23.73	24.7		
20	QPSK	50	24	23.72	23.70	23.74			
20	QPSK	50	50	23.64	23.70	23.69			
20	QPSK	100	0	23.69	23.75	23.61	24.7		
20	16QAM	1	0	23.98	24.04	23.99			
20	16QAM	1	49	23.85	23.87	23.88			
20	16QAM	1	99	23.87	23.86	23.94	24.7		
20	16QAM	50	0	22.69	22.71	22.74			
20	16QAM	50	24	22.73	22.73	22.77			
20	16QAM	50	50	22.65	22.64	22.68	23.7		
20	16QAM	100	0	22.71	22.73	22.65			
20	64QAM	1	0	22.84	22.90	22.89	23.7		
20	64QAM	1	49	22.73	22.72	22.77			
20	64QAM	1	99	22.73	22.64	22.80			
20	64QAM	50	0	21.70	21.76	21.77	22.7		
20	64QAM	50	24	21.74	21.75	21.77			
20	64QAM	50	50	21.68	21.64	21.70			
20	64QAM	100	0	21.76	21.76	21.70	Tune-up limit (dBm)		
Channel				20025	20175	20325			
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	24.67	24.71	24.70	25.7		
15	QPSK	1	37	24.52	24.51	24.57			
15	QPSK	1	74	24.56	24.55	24.57			
15	QPSK	36	0	23.78	23.72	23.72	24.7		
15	QPSK	36	20	23.73	23.73	23.76			
15	QPSK	36	39	23.68	23.67	23.71			
15	QPSK	75	0	23.70	23.75	23.68	24.7		
15	16QAM	1	0	23.99	24.02	24.04			
15	16QAM	1	37	23.88	23.87	23.92			
15	16QAM	1	74	23.87	23.85	23.99	24.7		
15	16QAM	36	0	22.78	22.72	22.76			
15	16QAM	36	20	22.71	22.73	22.76			
15	16QAM	36	39	22.67	22.68	22.71	23.7		
15	16QAM	75	0	22.72	22.75	22.69			
15	64QAM	1	0	22.84	22.92	22.85	23.7		
15	64QAM	1	37	22.80	22.86	22.81			
15	64QAM	1	74	22.76	22.74	22.80			
15	64QAM	36	0	21.79	21.81	21.78	22.7		
15	64QAM	36	20	21.73	21.74	21.75			
15	64QAM	36	39	21.71	21.62	21.76			
15	64QAM	75	0	21.71	21.75	21.67	Tune-up limit (dBm)		
Channel				20000	20175	20350			
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.59	24.65	24.66	25.7		
10	QPSK	1	25	24.57	24.57	24.71			
10	QPSK	1	49	24.60	24.62	24.66			
10	QPSK	25	0	23.72	23.69	23.70	24.7		
10	QPSK	25	12	23.72	23.78	23.75			
10	QPSK	25	25	23.75	23.77	23.81			
10	QPSK	50	0	23.75	23.75	23.76	24.7		
10	16QAM	1	0	23.98	24.02	24.06			
10	16QAM	1	25	23.87	24.02	24.03			
10	16QAM	1	49	24.00	23.98	24.05	23.7		
10	16QAM	25	0	22.72	22.67	22.73			
10	16QAM	25	12	22.76	22.79	22.77			
10	16QAM	25	25	22.74	22.72	22.78	23.7		
10	16QAM	50	0	22.75	22.77	22.74			
10	64QAM	1	0	22.70	22.83	22.90	23.7		
10	64QAM	1	25	22.86	22.80	22.98			
10	64QAM	1	49	22.91	22.65	22.95			
10	64QAM	25	0	21.70	21.70	21.74	22.7		
10	64QAM	25	12	21.77	21.74	21.79			
10	64QAM	25	25	21.76	21.57	21.83			
10	64QAM	50	0	21.79	21.74	21.79	Tune-up limit (dBm)		
Channel				19975	20175	20375			
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.63	24.62	24.67	25.7		
5	QPSK	1	12	24.69	24.67	24.71			
5	QPSK	1	24	24.66	24.69	24.71			
5	QPSK	12	0	23.71	23.69	23.75	24.7		
5	QPSK	12	7	23.75	23.77	23.80			
5	QPSK	12	13	23.72	23.76	23.77			
5	QPSK	25	0	23.70	23.73	23.77	24.7		
5	16QAM	1	0	23.97	23.92	24.05			
5	16QAM	1	12	23.98	24.00	24.04			
5	16QAM	1	24	24.01	23.99	24.03	24.7		
5	16QAM	12	0	22.75	22.69	22.82			
5	16QAM	12	7	22.79	22.80	22.85			
5	16QAM	12	13	22.78	22.80	22.80	23.7		
5	16QAM	25	0	22.74	22.76	22.79			
5	64QAM	1	0	22.72	22.87	22.99	23.7		
5	64QAM	1	12	22.82	22.74	22.96			
5	64QAM	1	24	22.98	22.61	22.95			
5	64QAM	12	0	21.77	21.72	21.85	22.7		
5	64QAM	12	7	21.84	21.77	21.90			
5	64QAM	12	13	21.78	21.62	21.84			
5	64QAM	25	0	21.74	21.65	21.82	Tune-up limit (dBm)		
Channel				19965	20175	20385			
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.64	24.60	24.69	25.7		
3	QPSK	1	8	24.71	24.71	24.71			
3	QPSK	1	14	24.65	24.69	24.67			
3	QPSK	8	0	23.71	23.68	23.79	24.7		
3	QPSK	8	4	23.75	23.75	23.77			
3	QPSK	8	7	23.74	23.76	23.74			
3	QPSK	15	0	23.74	23.73	23.78	24.7		
3	16QAM	1	0	23.99	23.92	23.98			
3	16QAM	1	8	24.05	24.07	24.10			
3	16QAM	1	14	23.98	23.97	24.05	24.7		
3	16QAM	8	0	22.79	22.75	22.82			
3	16QAM	8	4	22.84	22.84	22.90			
3	16QAM	8	7	22.81	22.79	22.83	23.7		
3	16QAM	15	0	22.80	22.74	22.78			
3	64QAM	1	0	22.75	22.84	22.95	23.7		
3	64QAM	1	8	23.00	22.81	23.01			
3	64QAM	1	14	22.97	22.69	22.98			
3	64QAM	8	0	21.73	21.73	21.85	22.7		
3	64QAM	8	4	21.84	21.72	21.86			
3	64QAM	8	7	21.83	21.64	21.83			
3	64QAM	15	0	21.74	21.70	21.78	Tune-up limit (dBm)		
Channel				19957	20175	20393			
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.54	24.59	24.58	25.7		
1.4	QPSK	1	3	24.63	24.63	24.66			
1.4	QPSK	1	5	24.54	24.61	24.60			
1.4	QPSK	3	0	24.59	24.60	24.67	24.7		
1.4	QPSK	3	1	24.65	24.64	24.71			
1.4	QPSK	3	3	24.63	24.59	24.63			
1.4	16QAM	1	0	23.68	23.67	23.72	24.7		
1.4	16QAM	1	0	23.69	23.69	23.74			
1.4	16QAM	1	3	23.69	23.67	23.70			
1.4	16QAM	1	5	23.69	23.68	23.74	24.7		
1.4	16QAM	3	0	23.69	23.69	23.75			
1.4	16QAM	3	1	23.76	23.73	23.80			
1.4	16QAM	3	3	23.67	23.68	23.71	23.7		
1.4	16QAM	6	0	22.73	22.75	22.78			
1.4	16QAM	1	0	22.71	22.74	22.73	23.7		
1.4	16QAM	1	3	22.81	22.75	22.94			
1.4	16QAM	1	5	22.79	22.65	22.85			
1.4	64QAM	3	0	22.69	22.75	22.82	23.7		
1.4	64QAM	3	1	22.83	22.84	22.91			
1.4	64QAM	3	3	22.79	22.70	22.86			



Band 5							
Ar 1							
Band	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				204.0	205.2	206.0	
Frequency (MHz)				825	836.5	844	
10	QPSK	1	0	23.31	23.29	23.32	25
10	QPSK	1	25	23.24	23.28	23.20	
10	QPSK	1	49	23.30	23.23	23.18	
10	QPSK	25	0	23.31	23.38	23.33	24.7
10	QPSK	25	12	23.42	23.37	23.43	
10	QPSK	25	25	23.38	23.40	23.37	
10	QPSK	50	0	23.42	23.36	23.29	24.7
10	16QAM	1	0	23.71	23.66	23.70	
10	16QAM	1	25	23.61	23.68	23.63	
10	16QAM	1	49	23.65	23.61	23.49	23.7
10	16QAM	25	0	22.95	22.87	22.84	
10	16QAM	25	12	22.96	22.88	22.97	
10	16QAM	25	25	22.89	22.92	22.82	23.7
10	16QAM	50	0	22.95	22.89	22.84	
10	64QAM	1	0	23.02	23.01	23.00	23.7
10	64QAM	1	25	23.03	22.88	22.71	
10	64QAM	1	49	23.01	22.73	21.99	
10	64QAM	25	0	21.90	21.94	21.88	22.7
10	64QAM	25	12	22.00	21.90	21.70	
10	64QAM	25	25	21.94	21.90	21.02	
10	64QAM	50	0	21.99	21.90	21.55	Tune-up limit (dBm)
Channel				204.25	205.25	206.25	
Frequency (MHz)				825.5	836.5	846.5	
5	QPSK	1	0	23.24	23.23	23.32	25
5	QPSK	1	12	23.15	23.25	23.13	
5	QPSK	1	24	23.27	23.13	23.18	
5	QPSK	12	0	23.27	23.33	23.29	24.7
5	QPSK	12	7	23.34	23.31	23.43	
5	QPSK	12	13	23.37	23.36	23.29	
5	QPSK	25	0	23.32	23.36	23.29	24.7
5	16QAM	1	0	23.62	23.57	23.69	
5	16QAM	1	12	23.58	23.61	23.60	
5	16QAM	1	24	23.55	23.54	23.44	23.7
5	16QAM	12	0	22.76	22.77	22.83	
5	16QAM	12	7	22.88	22.83	22.87	
5	16QAM	12	13	22.82	22.90	22.81	23.7
5	16QAM	25	0	22.90	22.87	22.81	
5	64QAM	1	0	22.86	22.96	22.86	
5	64QAM	1	12	23.03	22.82	22.70	23.7
5	64QAM	1	24	22.91	22.68	21.95	
5	64QAM	12	0	21.86	21.92	21.79	
5	64QAM	12	7	21.95	21.82	21.67	22.7
5	64QAM	12	13	21.82	21.93	21.02	
5	64QAM	25	0	21.99	21.89	21.54	
Channel				204.15	205.25	206.35	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.28	23.21	23.28	
3	QPSK	1	8	23.24	23.21	23.11	25
3	QPSK	1	14	23.30	23.13	23.11	
3	QPSK	8	0	23.24	23.37	23.25	24.7
3	QPSK	8	4	23.39	23.37	23.39	
3	QPSK	8	7	23.29	23.34	23.34	
3	QPSK	15	0	23.41	23.33	23.24	24.7
3	16QAM	1	0	23.65	23.57	23.68	
3	16QAM	1	8	23.51	23.59	23.53	
3	16QAM	1	14	23.62	23.55	23.39	23.7
3	16QAM	8	0	22.83	22.79	22.77	
3	16QAM	8	4	22.86	22.79	22.95	
3	16QAM	8	7	22.80	22.87	22.73	23.7
3	16QAM	15	0	22.91	22.89	22.80	
3	64QAM	1	0	22.93	22.91	22.89	
3	64QAM	1	8	22.94	22.78	22.84	23.7
3	64QAM	1	14	23.01	22.71	21.93	
3	64QAM	8	0	21.82	21.91	21.86	
3	64QAM	8	4	22.00	21.82	21.70	22.7
3	64QAM	8	7	21.89	21.88	21.01	
3	64QAM	15	0	21.95	21.82	21.54	
Channel				204.07	205.25	206.43	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.31	23.25	23.22	
1.4	QPSK	1	3	23.19	23.24	23.16	25
1.4	QPSK	1	5	23.29	23.20	23.16	
1.4	QPSK	3	0	23.27	23.32	23.28	24.7
1.4	QPSK	3	1	23.35	23.31	23.36	
1.4	QPSK	3	3	23.30	23.32	23.30	
1.4	QPSK	6	0	23.41	23.33	23.19	24.7
1.4	16QAM	1	0	23.66	23.61	23.63	
1.4	16QAM	1	3	23.58	23.60	23.57	
1.4	16QAM	1	5	23.57	23.61	23.47	24.7
1.4	16QAM	3	0	22.86	22.86	22.78	
1.4	16QAM	3	1	22.95	22.85	22.97	
1.4	16QAM	3	3	22.84	22.86	22.74	23.7
1.4	16QAM	6	0	22.92	22.89	22.81	
1.4	64QAM	1	0	22.98	22.94	22.92	
1.4	64QAM	1	3	22.95	22.81	22.67	23.7
1.4	64QAM	1	5	22.94	22.72	21.95	
1.4	64QAM	3	0	21.85	21.84	21.78	
1.4	64QAM	3	1	21.97	21.84	21.77	22.7
1.4	64QAM	3	3	21.85	21.84	21.72	
1.4	64QAM	6	0	21.94	21.87	21.45	

Band 7							
AR 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				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.06	24.10	24.04	25.7
20	QPSK	1	49	24.12	24.13	24.01	
20	QPSK	1	99	24.25	24.24	24.05	
20	QPSK	50	0	23.18	23.18	23.17	24.7
20	QPSK	50	24	23.32	23.19	23.21	
20	QPSK	50	50	23.33	23.31	23.22	
20	QPSK	100	0	23.28	23.17	23.18	24.7
20	16QAM	1	0	23.42	23.44	23.38	
20	16QAM	1	49	23.49	23.48	23.36	
20	16QAM	1	99	23.53	23.52	23.36	23.7
20	16QAM	50	0	22.17	22.18	22.20	
20	16QAM	50	24	22.31	22.21	22.20	
20	16QAM	50	50	22.31	22.32	22.18	23.7
20	16QAM	100	0	22.26	22.20	22.18	
20	64QAM	1	0	22.25	22.25	22.30	23.7
20	64QAM	1	49	22.37	22.40	22.27	
20	64QAM	1	99	22.39	22.42	22.33	
20	64QAM	50	0	21.20	21.21	21.22	22.7
20	64QAM	50	24	21.31	21.24	21.24	
20	64QAM	50	50	21.32	21.32	21.20	
20	64QAM	100	0	21.30	21.21	21.18	Tune-up limit (dBm)
Channel				20925	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.14	24.13	24.09	25.7
15	QPSK	1	37	24.16	24.15	24.05	
15	QPSK	1	74	24.21	24.23	24.09	
15	QPSK	36	0	23.24	23.21	23.19	24.7
15	QPSK	36	20	23.34	23.26	23.23	
15	QPSK	36	39	23.32	23.33	23.20	
15	QPSK	75	0	23.28	23.24	23.20	24.7
15	16QAM	1	0	23.44	23.47	23.39	
15	16QAM	1	37	23.51	23.53	23.37	
15	16QAM	1	74	23.55	23.56	23.41	23.7
15	16QAM	36	0	22.27	22.21	22.19	
15	16QAM	36	20	22.31	22.23	22.20	
15	16QAM	36	39	22.29	22.33	22.17	23.7
15	16QAM	75	0	22.30	22.22	22.18	
15	64QAM	1	0	22.40	22.30	22.36	
15	64QAM	1	37	22.41	22.43	22.28	23.7
15	64QAM	1	74	22.45	22.41	22.30	
15	64QAM	36	0	21.30	21.25	21.23	
15	64QAM	36	20	21.33	21.27	21.23	22.7
15	64QAM	36	39	21.39	21.36	21.24	
15	64QAM	75	0	21.30	21.22	21.21	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.13	24.09	24.00	25.7
10	QPSK	1	25	24.11	24.11	23.99	
10	QPSK	1	49	24.16	24.19	24.02	
10	QPSK	25	0	23.26	23.23	23.16	24.7
10	QPSK	25	12	23.31	23.24	23.20	
10	QPSK	25	25	23.31	23.31	23.16	
10	QPSK	50	0	23.30	23.24	23.17	24.7
10	16QAM	1	0	23.50	23.46	23.39	
10	16QAM	1	25	23.50	23.52	23.37	
10	16QAM	1	49	23.53	23.56	23.41	23.7
10	16QAM	25	0	22.27	22.18	22.14	
10	16QAM	25	12	22.30	22.24	22.17	
10	16QAM	25	25	22.28	22.30	22.15	23.7
10	16QAM	50	0	22.28	22.23	22.18	
10	64QAM	1	0	22.40	22.33	22.33	
10	64QAM	1	25	22.43	22.43	22.30	23.7
10	64QAM	1	49	22.43	22.45	22.28	
10	64QAM	25	0	21.29	21.25	21.18	
10	64QAM	25	12	21.34	21.29	21.23	22.7
10	64QAM	25	25	21.35	21.33	21.20	
10	64QAM	50	0	21.34	21.28	21.23	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.14	24.10	24.03	25.7
5	QPSK	1	12	24.18	24.18	24.03	
5	QPSK	1	24	24.17	24.17	24.02	
5	QPSK	12	0	23.27	23.25	23.12	24.7
5	QPSK	12	7	23.29	23.21	23.10	
5	QPSK	12	13	23.27	23.31	23.15	
5	QPSK	25	0	23.28	23.23	23.13	24.7
5	16QAM	1	0	23.48	23.45	23.34	
5	16QAM	1	12	23.47	23.51	23.35	
5	16QAM	1	24	23.54	23.50	23.40	23.7
5	16QAM	12	0	22.29	22.25	22.17	
5	16QAM	12	7	22.28	22.28	22.16	
5	16QAM	12	13	22.31	22.30	22.13	23.7
5	16QAM	25	0	22.27	22.23	22.15	
5	64QAM	1	0	22.42	22.38	22.29	
5	64QAM	1	12	22.40	22.44	22.26	23.7
5	64QAM	1	24	22.44	22.43	22.28	
5	64QAM	12	0	21.35	21.30	21.20	
5	64QAM	12	7	21.38	21.28	21.18	22.7
5	64QAM	12	13	21.36	21.36	21.23	
5	64QAM	25	0	21.31	21.25	21.18	



Band 12							
Art 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				704	707.5	711	
Frequency (MHz)							
10	QPSK	1	0	23.51	23.46	23.46	25.4
10	QPSK	1	25	23.43	23.49	23.49	
10	QPSK	1	49	23.54	23.58	23.50	
10	QPSK	25	0	23.59	23.60	23.61	24.4
10	QPSK	25	12	23.67	23.61	23.60	
10	QPSK	25	25	23.68	23.66	23.65	
10	QPSK	50	0	23.66	23.59	23.60	24.4
10	16QAM	1	0	23.67	23.60	23.60	
10	16QAM	1	25	23.66	23.66	23.67	
10	16QAM	1	49	23.65	23.69	23.67	23.4
10	16QAM	25	0	22.67	22.72	22.71	
10	16QAM	25	12	22.78	22.72	22.70	
10	16QAM	25	25	22.71	22.77	22.76	23.4
10	16QAM	50	0	22.75	22.69	22.69	
10	64QAM	1	0	22.63	22.76	22.85	22.4
10	64QAM	1	25	22.67	22.92	22.73	
10	64QAM	1	49	22.99	22.93	22.87	
10	64QAM	25	0	21.66	21.73	21.74	22.4
10	64QAM	25	12	21.71	21.76	21.73	
10	64QAM	25	25	21.77	21.78	21.78	
10	64QAM	50	0	21.74	21.72	21.72	Tune-up limit (dBm)
Channel				703.5	707.5	713.5	
Frequency (MHz)							
5	QPSK	1	0	23.51	23.47	23.47	25.4
5	QPSK	1	12	23.46	23.58	23.57	
5	QPSK	1	24	23.48	23.54	23.50	
5	QPSK	12	0	23.62	23.59	23.60	24.4
5	QPSK	12	7	23.60	23.56	23.65	
5	QPSK	12	13	23.58	23.61	23.58	
5	QPSK	25	0	23.61	23.58	23.57	24.4
5	16QAM	1	0	23.64	23.63	23.60	
5	16QAM	1	12	23.62	23.63	23.63	
5	16QAM	1	24	23.65	23.66	23.65	23.4
5	16QAM	12	0	22.77	22.77	22.73	
5	16QAM	12	7	22.72	22.72	22.78	
5	16QAM	12	13	22.71	22.71	22.73	23.4
5	16QAM	25	0	22.74	22.70	22.67	
5	64QAM	1	0	22.67	22.76	22.80	23.4
5	64QAM	1	12	22.78	22.90	22.90	
5	64QAM	1	24	22.77	22.88	22.85	
5	64QAM	12	0	21.60	21.80	21.81	22.4
5	64QAM	12	7	21.75	21.74	21.80	
5	64QAM	12	13	21.74	21.80	21.77	
5	64QAM	25	0	21.75	21.70	21.73	Tune-up limit (dBm)
Channel				703.5	707.5	713.5	
Frequency (MHz)							
3	QPSK	1	0	23.59	23.52	23.52	25.4
3	QPSK	1	8	23.57	23.59	23.54	
3	QPSK	1	14	23.48	23.54	23.50	
3	QPSK	8	0	23.61	23.59	23.56	24.4
3	QPSK	8	4	23.60	23.58	23.67	
3	QPSK	8	7	23.53	23.63	23.59	
3	QPSK	15	0	23.60	23.58	23.59	24.4
3	16QAM	1	0	23.92	23.85	23.89	
3	16QAM	1	8	23.89	23.90	23.92	
3	16QAM	1	14	23.79	23.87	23.91	23.4
3	16QAM	8	0	22.78	22.77	22.74	
3	16QAM	8	4	22.75	22.76	22.81	
3	16QAM	8	7	22.70	22.78	22.76	23.4
3	16QAM	15	0	22.75	22.70	22.71	
3	64QAM	1	0	22.62	22.67	22.85	
3	64QAM	1	8	22.96	22.92	22.94	22.4
3	64QAM	1	14	22.75	22.90	22.82	
3	64QAM	8	0	21.62	21.75	21.77	
3	64QAM	8	4	21.70	21.74	21.81	22.4
3	64QAM	8	7	21.74	21.75	21.72	
3	64QAM	15	0	21.60	21.70	21.70	
Channel				699.7	707.5	715.3	Tune-up limit (dBm)
Frequency (MHz)							
1.4	QPSK	1	0	23.46	23.42	23.44	25.4
1.4	QPSK	1	3	23.49	23.50	23.49	
1.4	QPSK	1	5	23.40	23.41	23.40	
1.4	QPSK	3	0	23.47	23.45	23.44	24.4
1.4	QPSK	3	1	23.51	23.47	23.45	
1.4	QPSK	3	3	23.45	23.45	23.44	
1.4	QPSK	6	0	23.50	23.57	23.49	24.4
1.4	16QAM	1	0	23.78	23.73	23.75	
1.4	16QAM	1	3	23.82	23.86	23.81	
1.4	16QAM	1	6	23.71	23.78	23.73	23.4
1.4	16QAM	3	0	23.57	23.53	23.50	
1.4	16QAM	3	1	23.61	23.57	23.57	
1.4	16QAM	3	3	23.51	23.54	23.48	23.4
1.4	16QAM	6	0	22.68	22.70	22.65	
1.4	64QAM	1	0	22.59	22.73	22.77	
1.4	64QAM	1	3	22.71	22.65	22.61	23.4
1.4	64QAM	1	5	22.70	22.79	22.75	
1.4	64QAM	3	0	22.58	22.73	22.73	
1.4	64QAM	3	1	22.64	22.78	22.80	22.4
1.4	64QAM	3	3	22.63	22.75	22.74	
1.4	64QAM	6	0	21.48	21.67	21.63	

Band 13							
Alt 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				23230			
Frequency (MHz)				782			
10	QPSK	1	0		23.24		25.2
10	QPSK	1	25		23.22		
10	QPSK	1	49		23.31		
10	QPSK	25	0		23.11		24.2
10	QPSK	25	12		23.20		
10	QPSK	25	25		23.15		
10	QPSK	50	0		23.52		24.2
10	16QAM	1	0		23.69		
10	16QAM	1	25		23.66		
10	16QAM	1	49		23.68		23.2
10	16QAM	25	0		22.43		
10	16QAM	25	12		22.50		
10	16QAM	25	25		22.46		23.2
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.60		23.2
10	64QAM	1	25		22.59		
10	64QAM	1	49		22.63		
10	64QAM	25	0		21.46		22.2
10	64QAM	25	12		21.56		
10	64QAM	25	25		21.46		
10	64QAM	50	0		21.57		
Channel				23205	23230	23255	Tune-Up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.52	23.51	23.52	25.2
5	QPSK	1	12	23.57	23.53	23.53	
5	QPSK	1	24	23.57	23.52	23.60	
5	QPSK	12	0	23.43	23.42	23.40	24.2
5	QPSK	12	7	23.50	23.48	23.49	
5	QPSK	12	13	23.48	23.46	23.47	
5	QPSK	25	0	23.50	23.44	23.43	24.2
5	16QAM	1	0	23.59	23.61	23.58	
5	16QAM	1	12	23.57	23.55	23.54	
5	16QAM	1	24	23.63	23.54	23.65	23.2
5	16QAM	12	0	22.50	22.45	22.47	
5	16QAM	12	7	22.52	22.47	22.52	
5	16QAM	12	13	22.49	22.49	22.51	23.2
5	16QAM	25	0	22.55	22.49	22.49	
5	64QAM	1	0	22.49	22.48	22.44	
5	64QAM	1	12	22.50	22.48	22.53	23.2
5	64QAM	1	24	22.50	22.58	22.54	
5	64QAM	12	0	21.58	21.50	21.50	
5	64QAM	12	7	21.57	21.55	21.53	22.2
5	64QAM	12	13	21.57	21.52	21.53	
5	64QAM	25	0	21.55	21.52	21.50	

Band 14							
Alt 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			
Frequency (MHz)				793			
10	QPSK	1	0		23.64		25.4
10	QPSK	1	25		23.63		
10	QPSK	1	49		23.60		
10	QPSK	25	0		23.69		24.7
10	QPSK	25	12		23.68		
10	QPSK	25	25		23.73		
10	QPSK	50	0		23.68		24.7
10	16QAM	1	0		24.12		
10	16QAM	1	25		24.04		
10	16QAM	1	49		23.99		23.7
10	16QAM	25	0		22.79		
10	16QAM	25	12		22.80		
10	16QAM	25	25		22.83		23.7
10	16QAM	50	0		22.80		
10	64QAM	1	0		22.51		
10	64QAM	1	25		22.49		23.7
10	64QAM	1	49		22.99		
10	64QAM	25	0		21.25		
10	64QAM	25	12		21.23		22.7
10	64QAM	25	25		21.56		
10	64QAM	50	0		21.34		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.66	23.57	23.59	25.4
5	QPSK	1	12	23.73	23.72	23.67	
5	QPSK	1	24	23.69	23.63	23.61	
5	QPSK	12	0	23.77	23.71	23.70	24.7
5	QPSK	12	7	23.76	23.70	23.76	
5	QPSK	12	13	23.74	23.73	23.70	
5	QPSK	25	0	23.75	23.65	23.63	24.7
5	16QAM	1	0	23.96	23.88	23.90	
5	16QAM	1	12	23.99	23.96	23.99	
5	16QAM	1	24	23.95	23.96	23.93	23.7
5	16QAM	12	0	22.88	22.79	22.85	
5	16QAM	12	7	22.92	22.84	22.90	
5	16QAM	12	13	22.86	22.80	22.85	23.7
5	16QAM	25	0	22.88	22.79	22.81	
5	64QAM	1	0	22.47	22.36	22.37	
5	64QAM	1	12	22.31	22.15	22.60	23.7
5	64QAM	1	24	22.06	22.37	23.00	
5	64QAM	12	0	21.36	21.08	21.32	
5	64QAM	12	7	21.26	21.11	21.67	22.7
5	64QAM	12	13	21.10	21.23	21.87	
5	64QAM	25	0	21.15	21.06	21.83	

Band 17							
Ann 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				237.0	237.0	238.0	
Frequency (MHz)				708	710	711	
10	QPSK	1	0	23.48	23.45	23.46	25.4
10	QPSK	1	25	23.48	23.52	23.51	
10	QPSK	1	49	23.53	23.55	23.53	
10	QPSK	25	0	23.55	23.54	23.55	24.4
10	QPSK	25	12	23.72	23.64	23.82	
10	QPSK	25	25	23.71	23.71	23.70	
10	QPSK	50	0	23.62	23.62	23.61	24.4
10	16QAM	1	0	23.86	23.83	23.81	
10	16QAM	1	25	23.53	23.56	23.54	
10	16QAM	1	49	23.54	23.53	23.55	23.4
10	16QAM	25	0	22.95	22.64	22.65	
10	16QAM	25	12	22.79	22.72	22.72	
10	16QAM	25	25	22.77	22.79	22.79	22.4
10	16QAM	50	0	22.71	22.70	22.68	
10	64QAM	1	0	22.59	22.61	22.63	
10	64QAM	1	25	22.76	22.73	22.67	22.4
10	64QAM	1	49	22.85	22.89	22.74	
10	64QAM	25	0	21.51	21.45	21.50	
10	64QAM	25	12	21.65	21.57	21.63	22.4
10	64QAM	25	25	21.67	21.77	21.74	
10	64QAM	50	0	21.63	21.70	21.63	
Channel				237.55	237.90	238.25	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.48	23.47	23.50	25.4
5	QPSK	1	12	23.56	23.63	23.59	
5	QPSK	1	24	23.63	23.60	23.59	
5	QPSK	12	0	23.59	23.63	23.57	24.4
5	QPSK	12	7	23.69	23.63	23.68	
5	QPSK	12	13	23.65	23.65	23.65	
5	QPSK	25	0	23.61	23.59	23.66	24.4
5	16QAM	1	0	23.82	23.83	23.82	
5	16QAM	1	12	23.59	23.67	23.67	
5	16QAM	1	24	23.94	23.92	23.92	23.4
5	16QAM	12	0	22.72	22.75	22.69	
5	16QAM	12	7	22.78	22.73	22.78	
5	16QAM	12	13	22.77	22.79	22.77	23.4
5	16QAM	25	0	22.76	22.74	22.80	
5	64QAM	1	0	22.57	22.57	22.85	
5	64QAM	1	12	22.78	22.71	22.90	23.4
5	64QAM	1	24	22.65	22.64	22.63	
5	64QAM	12	0	21.60	21.59	21.79	
5	64QAM	12	7	21.82	21.68	21.85	22.4
5	64QAM	12	13	21.72	21.62	21.79	
5	64QAM	25	0	21.57	21.50	21.73	



Band 25									
Art 0									
BW (MHz)	Modulation	RB Size	RB Offset	Channel	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Frequency (MHz)					1860	1860	1905		
20	QPSK	1	0		24.79	24.78	24.93		25.7
20	QPSK	1	49		24.72	24.74	24.80		
20	QPSK	1	99		24.65	24.74	24.39		
20	QPSK	50	0		23.83	23.99	23.94		24.7
20	QPSK	50	24		23.88	23.99	24.01		
20	QPSK	50	50		23.82	23.93	24.00		
20	QPSK	100	0		23.89	23.97	23.98		24.7
20	16QAM	1	0		24.14	24.15	24.16		
20	16QAM	1	49		24.07	24.11	24.17		
20	16QAM	1	99		23.99	24.10	23.73		23.7
20	16QAM	50	0		22.84	22.92	22.95		
20	16QAM	50	24		22.89	22.99	22.95		
20	16QAM	50	50		22.85	22.94	23.02		23.7
20	16QAM	100	0		22.87	22.95	22.93		
20	64QAM	1	0		23.00	22.99	22.88		23.7
20	64QAM	1	49		22.97	22.98	22.98		
20	64QAM	1	99		22.84	22.99	21.87		
20	64QAM	50	0		21.87	21.93	21.49		22.7
20	64QAM	50	24		21.91	22.00	21.57		
20	64QAM	50	50		21.79	21.97	21.23		
20	64QAM	100	0		21.89	22.01	21.28		Tune-up limit (dBm)
Channel					2011.5	2034.0	2051.5		
Frequency (MHz)					1857.5	1880	1907.5		
15	QPSK	1	0		24.82	24.87	24.89		25.7
15	QPSK	1	37		24.75	24.80	24.87		
15	QPSK	1	74		24.72	24.82	24.39		
15	QPSK	36	0		23.96	23.93	23.99		24.7
15	QPSK	36	20		23.89	24.02	24.06		
15	QPSK	36	39		23.83	23.96	23.88		
15	QPSK	75	0		23.89	23.90	23.95		24.7
15	16QAM	1	0		24.07	24.15	24.19		
15	16QAM	1	37		24.12	24.14	24.22		
15	16QAM	1	74		24.05	24.12	23.75		23.7
15	16QAM	36	0		22.86	22.95	22.97		
15	16QAM	36	20		22.93	23.01	23.05		
15	16QAM	36	39		22.84	22.96	23.00		23.7
15	16QAM	75	0		22.90	22.93	22.98		
15	64QAM	1	0		23.00	23.00	22.86		23.7
15	64QAM	1	37		22.99	23.06	22.92		
15	64QAM	1	74		22.74	23.02	21.89		
15	64QAM	36	0		21.92	21.98	21.61		22.7
15	64QAM	36	20		21.94	22.03	21.57		
15	64QAM	36	39		21.77	22.00	21.24		
15	64QAM	75	0		21.91	21.92	21.31		Tune-up limit (dBm)
Channel					2009.0	2034.0	2054.0		
Frequency (MHz)					1855	1880	1910		
10	QPSK	1	0		24.77	24.76	24.87		25.7
10	QPSK	1	25		24.70	24.79	24.86		
10	QPSK	1	49		24.74	24.79	24.33		
10	QPSK	25	0		23.96	23.96	23.93		24.7
10	QPSK	25	12		23.95	23.97	23.98		
10	QPSK	25	25		23.92	23.97	23.73		
10	QPSK	50	0		23.93	23.97	23.87		24.7
10	16QAM	1	0		24.14	24.15	24.22		
10	16QAM	1	25		24.13	24.19	24.23		
10	16QAM	1	49		24.11	24.17	23.69		23.7
10	16QAM	25	0		22.93	22.86	22.93		
10	16QAM	25	12		22.92	23.00	22.98		
10	16QAM	25	25		22.89	22.93	22.91		23.7
10	16QAM	50	0		22.92	22.97	22.96		
10	64QAM	1	0		23.07	23.07	22.87		23.7
10	64QAM	1	25		23.08	23.13	22.41		
10	64QAM	1	49		22.88	23.09	21.84		
10	64QAM	25	0		21.94	21.89	21.52		22.7
10	64QAM	25	12		21.98	22.00	21.37		
10	64QAM	25	25		21.84	22.00	21.06		
10	64QAM	50	0		21.96	22.02	21.17		Tune-up limit (dBm)
Channel					2009.5	2034.0	2059.5		
Frequency (MHz)					1852.5	1880	1912.5		
5	QPSK	1	0		24.80	24.75	24.92		25.7
5	QPSK	1	12		24.84	24.89	24.56		
5	QPSK	1	24		24.81	24.88	24.29		
5	QPSK	12	0		23.88	23.91	23.89		24.7
5	QPSK	12	7		23.96	23.99	23.76		
5	QPSK	12	13		23.96	23.99	23.60		
5	QPSK	25	0		23.93	23.93	23.84		24.7
5	16QAM	1	0		24.22	24.11	24.18		
5	16QAM	1	12		24.13	24.19	23.93		
5	16QAM	1	24		24.15	24.18	23.70		23.7
5	16QAM	12	0		22.88	22.95	23.01		
5	16QAM	12	7		22.93	23.02	22.88		
5	16QAM	12	13		22.98	23.02	22.75		23.7
5	16QAM	25	0		22.96	22.97	22.80		
5	64QAM	1	0		23.07	23.01	22.33		23.7
5	64QAM	1	12		23.05	23.07	21.98		
5	64QAM	1	24		23.08	23.11	21.75		
5	64QAM	12	0		21.95	21.98	21.17		22.7
5	64QAM	12	7		22.01	22.06	21.03		
5	64QAM	12	13		22.03	22.08	20.88		
5	64QAM	25	0		21.93	22.00	20.98		Tune-up limit (dBm)
Channel					2009.5	2034.0	2059.5		
Frequency (MHz)					1851.5	1880	1913.5		
3	QPSK	1	0		24.72	24.71	24.65		25.7
3	QPSK	1	8		24.88	24.91	24.53		
3	QPSK	1	14		24.85	24.90	24.29		
3	QPSK	8	0		23.87	23.89	23.71		24.7
3	QPSK	8	4		23.92	23.96	23.66		
3	QPSK	8	7		23.96	23.97	23.54		
3	QPSK	15	0		23.93	23.95	23.58		24.7
3	16QAM	1	0		24.09	24.01	23.89		
3	16QAM	1	8		24.20	24.26	23.84		
3	16QAM	1	14		24.21	24.24	23.83		23.7
3	16QAM	8	0		22.92	22.95	22.83		
3	16QAM	8	4		23.03	23.04	22.76		
3	16QAM	8	7		23.01	23.02	22.67		23.7
3	16QAM	15	0		22.97	22.97	22.70		
3	64QAM	1	0		22.95	22.96	22.01		23.7
3	64QAM	1	8		23.12	23.20	21.98		
3	64QAM	1	14		23.11	23.16	21.75		
3	64QAM	8	0		21.93	22.00	20.95		22.7
3	64QAM	8	4		21.99	22.07	20.94		
3	64QAM	8	7		22.00	22.06	20.84		
3	64QAM	15	0		21.94	21.96	20.88		Tune-up limit (dBm)
Channel					2004.7	2034.0	2063.3		
Frequency (MHz)					1850.7	1880	1914.3		
1.4	QPSK	1	0		24.71	24.73	24.37		25.7
1.4	QPSK	1	3		24.80	24.83	24.31		
1.4	QPSK	1	5		24.79	24.84	24.20		
1.4	QPSK	3	0		24.76	24.81	24.32		24.7
1.4	QPSK	3	1		24.82	24.83	24.33		
1.4	QPSK	3	3		24.77	24.83	24.24		
1.4	QPSK	6	0		23.85	23.91	23.41		24.7
1.4	16QAM	1	0		24.05	24.05	23.64		
1.4	16QAM	1	3		24.12	24.17	23.64		
1.4	16QAM	1	5		24.07	24.12	23.54		24.7
1.4	16QAM	3	0		23.81	23.87	23.49		
1.4	16QAM	3	1		23.88	23.93	23.48		
1.4	16QAM	3	3		23.94	23.93	23.42		23.7
1.4	16QAM	6	0		22.93	22.94	22.99		
1.4	64QAM	1	0		22.97	22.97	21.78		
1.4	64QAM	1	3		23.09	23.12	21.71		23.7
1.4	64QAM	1	5		23.03	23.06	21.72		
1.4	64QAM	3	0		22.92	22.98	21.80		
1.4	64QAM	3	1		23.00	23.05	21.85		22.7
1.4	64QAM	3	3		22.98	23.01	21.71		
1.4	64QAM	6	0		21.90	21.93	20.71		



Band 26							
Ann 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				807.6	2685	2685	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.31	23.22	23.23	25
15	QPSK	1	37	23.18	23.23	23.22	
15	QPSK	1	74	23.23	23.22	23.10	
15	QPSK	36	0	23.36	23.36	23.36	24.7
15	QPSK	36	20	23.39	23.40	23.31	
15	QPSK	36	39	23.33	23.36	23.30	
15	QPSK	75	0	23.40	23.33	23.32	24.7
15	16QAM	1	0	23.59	23.53	23.56	
15	16QAM	1	37	23.46	23.54	23.53	
15	16QAM	1	74	23.46	23.50	23.40	23.7
15	16QAM	36	0	22.84	22.84	22.87	
15	16QAM	36	20	22.86	22.86	22.81	
15	16QAM	36	39	22.82	22.83	22.82	23.7
15	16QAM	75	0	22.86	22.80	22.83	
15	64QAM	1	0	22.65	22.69	22.69	23.7
15	64QAM	1	37	22.51	22.94	22.95	
15	64QAM	1	74	22.91	22.92	21.70	
15	64QAM	36	0	21.22	21.89	21.89	22.7
15	64QAM	36	20	21.47	21.95	21.86	
15	64QAM	36	39	21.86	21.92	21.33	
15	64QAM	75	0	21.63	21.84	21.53	Tune-up limit (dBm)
Channel				2674.0	2685	2690.0	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.22	23.17	23.19	25
10	QPSK	1	26	23.16	23.20	23.13	
10	QPSK	1	49	23.19	23.19	23.02	
10	QPSK	25	0	23.28	23.35	23.26	24.7
10	QPSK	25	12	23.37	23.35	23.31	
10	QPSK	25	25	23.24	23.26	23.21	
10	QPSK	50	0	23.34	23.32	23.27	24.7
10	16QAM	1	0	23.55	23.52	23.49	
10	16QAM	1	26	23.45	23.46	23.51	
10	16QAM	1	49	23.43	23.41	23.33	23.7
10	16QAM	25	0	22.77	22.80	22.78	
10	16QAM	25	12	22.81	22.80	22.80	
10	16QAM	25	25	22.81	22.73	22.82	23.7
10	16QAM	50	0	22.81	22.75	22.77	
10	64QAM	1	0	22.62	22.62	22.79	
10	64QAM	1	26	22.50	22.92	22.97	23.7
10	64QAM	1	49	22.85	22.91	21.69	
10	64QAM	25	0	21.14	21.89	21.84	
10	64QAM	25	12	21.42	21.86	21.80	22.7
10	64QAM	25	25	21.80	21.89	21.26	
10	64QAM	50	0	21.62	21.82	21.51	
Channel				2671.5	2685	2701.5	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.30	23.13	23.16	
5	QPSK	1	12	23.10	23.21	23.20	25
5	QPSK	1	24	23.23	23.20	23.01	
5	QPSK	12	0	23.27	23.26	23.30	24.7
5	QPSK	12	7	23.39	23.34	23.31	
5	QPSK	12	13	23.24	23.31	23.29	
5	QPSK	25	0	23.33	23.31	23.31	24.7
5	16QAM	1	0	23.54	23.48	23.55	
5	16QAM	1	12	23.46	23.45	23.44	
5	16QAM	1	24	23.43	23.43	23.33	23.7
5	16QAM	12	0	22.75	22.79	22.86	
5	16QAM	12	7	22.82	22.81	22.72	
5	16QAM	12	13	22.78	22.80	22.72	23.7
5	16QAM	25	0	22.81	22.76	22.78	
5	64QAM	1	0	22.62	22.79	22.85	
5	64QAM	1	12	22.46	22.85	22.94	23.7
5	64QAM	1	24	22.91	22.90	21.60	
5	64QAM	12	0	21.22	21.82	21.83	
5	64QAM	12	7	21.45	21.93	21.83	22.7
5	64QAM	12	13	21.77	21.86	21.35	
5	64QAM	25	0	21.65	21.84	21.45	
Channel				2670.5	2685	2702.5	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.22	23.14	23.17	
3	QPSK	1	8	23.11	23.13	23.20	25
3	QPSK	1	14	23.23	23.18	23.00	
3	QPSK	8	0	23.30	23.35	23.31	24.7
3	QPSK	8	4	23.35	23.32	23.28	
3	QPSK	8	7	23.27	23.30	23.21	
3	QPSK	15	0	23.35	23.33	23.29	24.7
3	16QAM	1	0	23.55	23.46	23.55	
3	16QAM	1	8	23.46	23.46	23.53	
3	16QAM	1	14	23.45	23.43	23.39	23.7
3	16QAM	8	0	22.83	22.83	22.80	
3	16QAM	8	4	22.83	22.87	22.81	
3	16QAM	8	7	22.77	22.73	22.81	23.7
3	16QAM	15	0	22.83	22.78	22.77	
3	64QAM	1	0	22.62	22.84	22.84	
3	64QAM	1	8	22.47	22.91	22.89	23.7
3	64QAM	1	14	22.87	22.92	21.61	
3	64QAM	8	0	21.20	21.80	21.88	
3	64QAM	8	4	21.47	21.95	21.83	22.7
3	64QAM	8	7	21.76	21.85	21.23	
3	64QAM	15	0	21.61	21.75	21.44	
Channel				2669.7	2685	2703.3	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.29	23.19	23.14	
1.4	QPSK	1	3	23.18	23.21	23.19	25
1.4	QPSK	1	5	23.23	23.17	23.09	
1.4	QPSK	3	0	23.26	23.35	23.31	24.7
1.4	QPSK	3	1	23.34	23.36	23.27	
1.4	QPSK	3	3	23.23	23.36	23.21	
1.4	QPSK	6	0	23.33	23.26	23.32	24.7
1.4	16QAM	1	0	23.53	23.53	23.50	
1.4	16QAM	1	3	23.45	23.46	23.53	
1.4	16QAM	1	5	23.46	23.44	23.30	23.7
1.4	16QAM	3	0	22.77	22.81	22.83	
1.4	16QAM	3	1	22.79	22.80	22.71	
1.4	16QAM	3	3	22.76	22.78	22.80	23.7
1.4	16QAM	6	0	22.85	22.73	22.74	
1.4	64QAM	1	0	22.62	22.85	22.79	
1.4	64QAM	1	3	22.47	22.92	22.88	23.7
1.4	64QAM	1	5	22.86	22.91	21.99	
1.4	64QAM	3	0	21.73	21.80	21.79	
1.4	64QAM	3	1	21.72	21.86	21.84	22.7
1.4	64QAM	3	3	21.83	21.82	21.70	
1.4	64QAM	6	0	21.56	21.79	21.81	

Band 30							
Art 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				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		22.92		23.7
10	QPSK	1	25		22.76		
10	QPSK	1	49		22.77		
10	QPSK	25	0		21.83		22.7
10	QPSK	25	12		21.88		
10	QPSK	25	25		21.97		
10	QPSK	50	0		21.86		22.7
10	16QAM	1	0		22.20		
10	16QAM	1	25		22.17		
10	16QAM	1	49		22.20		21.7
10	16QAM	25	0		20.84		
10	16QAM	25	12		20.88		
10	16QAM	25	25		20.99		21.7
10	16QAM	50	0		20.87		
10	64QAM	1	0		21.04		
10	64QAM	1	25		21.09		21.7
10	64QAM	1	49		21.04		
10	64QAM	25	0		19.87		
10	64QAM	25	12		19.92		20.7
10	64QAM	25	25		20.00		
10	64QAM	50	0		19.89		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.75	22.76	22.76	23.7
5	QPSK	1	12	22.89	22.90	22.87	
5	QPSK	1	24	22.91	22.88	22.86	
5	QPSK	12	0	21.90	21.85	21.87	22.7
5	QPSK	12	7	21.95	21.97	21.93	
5	QPSK	12	13	21.98	21.96	21.93	
5	QPSK	25	0	21.93	21.87	21.90	22.7
5	16QAM	1	0	22.08	22.07	22.10	
5	16QAM	1	12	22.14	22.14	22.12	
5	16QAM	1	24	22.18	22.21	22.15	21.7
5	16QAM	12	0	20.92	20.87	20.90	
5	16QAM	12	7	20.98	20.99	20.95	
5	16QAM	12	13	20.97	20.97	20.94	21.7
5	16QAM	25	0	20.96	20.90	20.93	
5	64QAM	1	0	20.98	21.05	21.06	
5	64QAM	1	12	21.04	21.09	21.07	21.7
5	64QAM	1	24	21.12	21.13	21.12	
5	64QAM	12	0	19.99	19.91	19.96	
5	64QAM	12	7	20.03	20.03	20.00	20.7
5	64QAM	12	13	20.02	20.02	20.00	
5	64QAM	25	0	19.98	19.94	19.94	



Band 66										
Art 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	132322	135072				
Frequency (MHz)				1720	1745	1770				
20	QPSK	1	0	24.56	24.59	24.79	25.7			
20	QPSK	1	49	24.39	24.48	24.52				
20	QPSK	1	99	24.55	24.55	24.44				
20	QPSK	50	0	23.57	23.67	23.71	24.7			
20	QPSK	50	24	23.64	23.64	23.69				
20	QPSK	50	50	23.65	23.68	23.72				
20	QPSK	100	0	23.63	23.61	23.68	24.7			
20	16QAM	1	0	23.91	23.92	24.01				
20	16QAM	1	49	23.77	23.83	23.86				
20	16QAM	1	99	23.87	23.88	23.91	23.7			
20	16QAM	50	0	22.58	22.68	22.74				
20	16QAM	50	24	22.64	22.64	22.68				
20	16QAM	50	50	22.64	22.70	22.72	23.7			
20	16QAM	100	0	22.63	22.59	22.71				
20	64QAM	1	0	22.74	22.85	22.81	23.7			
20	64QAM	1	49	22.64	22.74	22.69				
20	64QAM	1	99	22.76	22.76	22.71				
20	64QAM	50	0	21.59	21.68	21.76	22.7			
20	64QAM	50	24	21.67	21.67	21.71				
20	64QAM	50	50	21.63	21.72	21.75				
20	64QAM	100	0	21.69	21.64	21.71	Tune-up limit (dBm)			
Channel				130022	132322	132597				
Frequency (MHz)				1717.5	1745	1772.5				
15	QPSK	1	0	24.52	24.62	24.65	25.7			
15	QPSK	1	37	24.41	24.54	24.56				
15	QPSK	1	74	24.54	24.38	24.55				
15	QPSK	36	0	23.60	23.67	23.72	24.7			
15	QPSK	36	20	23.66	23.65	23.70				
15	QPSK	36	39	23.62	23.70	23.74				
15	QPSK	75	0	23.64	23.64	23.71	24.7			
15	16QAM	1	0	23.81	23.96	23.98				
15	16QAM	1	37	23.78	23.88	23.92				
15	16QAM	1	74	23.84	23.92	23.94	23.7			
15	16QAM	36	0	22.58	22.68	22.70				
15	16QAM	36	20	22.62	22.65	22.67				
15	16QAM	36	39	22.62	22.71	22.72	23.7			
15	16QAM	75	0	22.65	22.67	22.71				
15	64QAM	1	0	22.66	22.80	22.83	23.7			
15	64QAM	1	37	22.67	22.74	22.80				
15	64QAM	1	74	22.76	22.81	22.72				
15	64QAM	36	0	21.60	21.71	21.76	22.7			
15	64QAM	36	20	21.64	21.64	21.69				
15	64QAM	36	39	21.68	21.72	21.75				
15	64QAM	75	0	21.65	21.67	21.73	Tune-up limit (dBm)			
Channel				132022	132322	132522				
Frequency (MHz)				1715	1745	1775				
10	QPSK	1	0	24.57	24.58	24.70	25.7			
10	QPSK	1	25	24.55	24.64	24.65				
10	QPSK	1	49	24.55	24.61	24.66				
10	QPSK	25	0	23.64	23.69	23.73	24.7			
10	QPSK	25	12	23.65	23.71	23.72				
10	QPSK	25	25	23.65	23.75	23.78				
10	QPSK	50	0	23.68	23.69	23.74	24.7			
10	16QAM	1	0	23.97	24.04	24.05				
10	16QAM	1	25	23.91	24.02	24.03				
10	16QAM	1	49	23.92	23.99	24.04	23.7			
10	16QAM	25	0	22.66	22.68	22.73				
10	16QAM	25	12	22.67	22.71	22.74				
10	16QAM	25	25	22.65	22.74	22.77	23.7			
10	16QAM	50	0	22.67	22.69	22.73				
10	64QAM	1	0	22.65	22.67	22.77				
10	64QAM	1	25	22.81	22.94	22.98	22.7			
10	64QAM	1	49	22.83	22.92	22.95				
10	64QAM	25	0	21.66	21.72	21.75				
10	64QAM	25	12	21.72	21.73	21.76	22.7			
10	64QAM	25	25	21.70	21.77	21.78				
10	64QAM	50	0	21.72	21.72	21.78				
Channel				132022	132322	132522				
Frequency (MHz)				1712.5	1745	1777.5				
5	QPSK	1	0	24.57	24.61	24.73	25.7			
5	QPSK	1	12	24.59	24.69	24.71				
5	QPSK	1	24	24.54	24.66	24.71				
5	QPSK	12	0	23.66	23.71	23.81	24.7			
5	QPSK	12	7	23.68	23.79	23.81				
5	QPSK	12	13	23.63	23.78	23.81				
5	QPSK	25	0	23.65	23.70	23.79	24.7			
5	16QAM	1	0	23.93	23.95	24.04				
5	16QAM	1	12	23.95	24.02	24.03				
5	16QAM	1	24	23.91	23.99	24.03	23.7			
5	16QAM	12	0	22.70	22.75	22.85				
5	16QAM	12	7	22.73	22.81	22.86				
5	16QAM	12	13	22.70	22.77	22.81	23.7			
5	16QAM	25	0	22.67	22.70	22.79				
5	64QAM	1	0	22.64	22.84	23.03	23.7			
5	64QAM	1	12	22.90	22.98	22.98				
5	64QAM	1	24	22.87	22.94	22.91				
5	64QAM	12	0	21.73	21.76	21.87	22.7			
5	64QAM	12	7	21.78	21.84	21.87				
5	64QAM	12	13	21.69	21.82	21.82				
5	64QAM	25	0	21.68	21.73	21.83	Tune-up limit (dBm)			
Channel				131997	132322	132597				
Frequency (MHz)				1711.5	1745	1778.5				
3	QPSK	1	0	24.59	24.64	24.72	25.7			
3	QPSK	1	8	24.64	24.74	24.78				
3	QPSK	1	14	24.58	24.68	24.67				
3	QPSK	8	0	23.68	23.70	23.76	24.7			
3	QPSK	8	4	23.69	23.80	23.79				
3	QPSK	8	7	23.67	23.72	23.76				
3	QPSK	15	0	23.68	23.67	23.78	24.7			
3	16QAM	1	0	23.92	23.98	24.05				
3	16QAM	1	8	24.00	24.10	24.14				
3	16QAM	1	14	23.89	24.00	24.00	23.7			
3	16QAM	8	0	22.72	22.78	22.86				
3	16QAM	8	4	22.77	22.83	22.89				
3	16QAM	8	7	22.72	22.84	22.81	23.7			
3	16QAM	15	0	22.70	22.75	22.79				
3	64QAM	1	0	22.62	22.93	23.04	23.7			
3	64QAM	1	8	22.93	23.05	23.03				
3	64QAM	1	14	22.85	22.99	22.97				
3	64QAM	8	0	21.76	21.73	21.81	22.7			
3	64QAM	8	4	21.78	21.82	21.87				
3	64QAM	8	7	21.75	21.81	21.84				
3	64QAM	15	0	21.69	21.74	21.83	Tune-up limit (dBm)			
Channel				131979	132322	132595				
Frequency (MHz)				1710.7	1745	1779.3				
1.4	QPSK	1	0	24.47	24.62	24.61	25.7			
1.4	QPSK	1	3	24.56	24.66	24.71				
1.4	QPSK	1	5	24.51	24.56	24.65				
1.4	QPSK	3	0	24.52	24.63	24.65	24.7			
1.4	QPSK	3	1	24.55	24.68	24.71				
1.4	QPSK	3	3	24.53	24.64	24.68				
1.4	QPSK	6	0	23.60	23.70	23.75	24.7			
1.4	QPSK	6	0	23.63	23.94	23.95				
1.4	QPSK	6	0	23.65	23.94	24.03				
1.4	16QAM	1	3	23.94	23.93	23.94	24.7			
1.4	16QAM	3	5	23.94	23.95	23.96				
1.4	16QAM	3	1	23.68	23.79	23.86				
1.4	16QAM	3	3	23.61	23.71	23.72	23.7			
1.4	16QAM	6	0	22.67	22.76	22.77				
1.4	16QAM	6	0	22.70	22.75	22.79				
1.4	64QAM	1	3	22.64	22.94	22.95	23.7			
1.4	64QAM	1	5	22.80	22.82	22.89				
1.4	64QAM	3	3	22.76	22.85	22.92				

Band 71							
Art 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				13322	13322	13322	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	23.51	23.41	23.36	25.2
20	QPSK	1	49	23.40	23.39	23.36	
20	QPSK	1	99	23.42	23.37	23.31	
20	QPSK	50	0	23.54	23.48	23.43	24.2
20	QPSK	50	24	23.57	23.47	23.44	
20	QPSK	50	50	23.57	23.49	23.46	
20	QPSK	100	0	23.55	23.45	23.43	24.2
20	16QAM	1	0	23.85	23.73	23.69	
20	16QAM	1	49	23.72	23.76	23.70	
20	16QAM	1	99	23.80	23.68	23.64	23.2
20	16QAM	50	0	22.85	22.80	22.76	
20	16QAM	50	24	22.89	22.80	22.74	
20	16QAM	50	50	22.86	22.79	22.77	23.2
20	16QAM	100	0	22.87	22.76	22.71	
20	64QAM	1	0	22.23	22.83	22.83	23.2
20	64QAM	1	49	22.84	22.91	22.55	
20	64QAM	1	99	22.97	22.74	22.48	
20	64QAM	50	0	21.26	21.83	21.78	22.2
20	64QAM	50	24	21.73	21.83	21.77	
20	64QAM	50	50	21.90	21.83	21.79	
20	64QAM	100	0	21.74	21.77	21.74	Tune-up limit (dBm)
Channel				133197	133207	133307	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.54	23.45	23.39	25.2
15	QPSK	1	37	23.41	23.39	23.35	
15	QPSK	1	74	23.43	23.40	23.35	
15	QPSK	36	0	23.52	23.48	23.42	24.2
15	QPSK	36	20	23.58	23.48	23.42	
15	QPSK	36	39	23.47	23.52	23.46	
15	QPSK	75	0	23.58	23.47	23.41	24.2
15	16QAM	1	0	23.84	23.73	23.69	
15	16QAM	1	37	23.76	23.74	23.69	
15	16QAM	1	74	23.74	23.71	23.66	23.2
15	16QAM	36	0	22.85	22.79	22.75	
15	16QAM	36	20	22.86	22.77	22.74	
15	16QAM	36	39	22.82	22.80	22.78	23.2
15	16QAM	75	0	22.90	22.76	22.72	
15	64QAM	1	0	22.09	22.86	22.86	23.2
15	64QAM	1	37	22.04	22.92	22.93	
15	64QAM	1	74	22.94	22.85	22.87	
15	64QAM	36	0	21.06	21.81	21.77	22.2
15	64QAM	36	20	21.25	21.81	21.79	
15	64QAM	36	39	21.83	21.76	21.81	
15	64QAM	75	0	21.63	21.78	21.74	Tune-up limit (dBm)
Channel				133172	133272	133422	
Frequency (MHz)				668	678	683	
10	QPSK	1	0	23.53	23.40	23.40	25.2
10	QPSK	1	25	23.40	23.34	23.36	
10	QPSK	1	49	23.42	23.40	23.31	
10	QPSK	25	0	23.59	23.47	23.44	24.2
10	QPSK	25	12	23.59	23.56	23.45	
10	QPSK	25	25	23.55	23.52	23.46	
10	QPSK	50	0	23.59	23.56	23.43	24.2
10	16QAM	1	0	23.83	23.73	23.77	
10	16QAM	1	25	23.80	23.80	23.78	
10	16QAM	1	49	23.80	23.79	23.71	23.2
10	16QAM	25	0	22.85	22.78	22.72	
10	16QAM	25	12	22.89	22.86	22.71	
10	16QAM	25	25	22.83	22.80	22.76	23.2
10	16QAM	50	0	22.90	22.84	22.72	
10	64QAM	1	0	22.09	22.70	22.86	23.2
10	64QAM	1	25	22.21	23.01	22.94	
10	64QAM	1	49	22.55	22.99	22.85	
10	64QAM	25	0	20.96	21.81	21.76	22.2
10	64QAM	25	12	21.03	21.88	21.78	
10	64QAM	25	25	21.12	21.84	21.81	
10	64QAM	50	0	21.11	21.86	21.73	Tune-up limit (dBm)
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.56	23.46	23.40	25.2
5	QPSK	1	12	23.54	23.43	23.35	
5	QPSK	1	24	23.47	23.41	23.34	
5	QPSK	12	0	23.66	23.52	23.45	24.2
5	QPSK	12	7	23.61	23.55	23.45	
5	QPSK	12	13	23.54	23.49	23.40	
5	QPSK	25	0	23.58	23.54	23.39	24.2
5	16QAM	1	0	23.84	23.79	23.71	
5	16QAM	1	12	23.76	23.77	23.69	
5	16QAM	1	24	23.76	23.72	23.63	23.2
5	16QAM	12	0	22.74	22.87	22.78	
5	16QAM	12	7	22.83	22.88	22.80	
5	16QAM	12	13	22.85	22.83	22.72	23.2
5	64QAM	1	0	21.70	22.53	22.71	
5	64QAM	1	12	21.79	23.04	22.89	
5	64QAM	1	24	22.03	23.04	22.65	22.2
5	64QAM	12	0	20.85	21.90	21.65	
5	64QAM	12	7	20.96	21.91	21.68	
5	64QAM	12	13	20.91	21.88	21.52	22.2
5	64QAM	25	0	20.83	21.87	21.45	



Band 2											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)				
Channel				18700	18800	18900					
Frequency (MHz)				18700	18800	19000					
20	QPSK	1	0	23.08	23.12	23.11	25				
20	QPSK	1	49	23.06	23.03	23.06					
20	QPSK	1	99	23.01	23.05	23.07					
20	QPSK	50	0	23.15	23.17	23.09	24				
20	QPSK	50	24	23.22	23.21	23.20					
20	QPSK	50	50	23.20	23.25	23.21					
20	QPSK	100	0	23.23	23.15	22.99	24				
20	16QAM	1	0	23.39	23.43	23.41					
20	16QAM	1	49	23.39	23.45	22.85					
20	16QAM	1	99	23.31	23.41	23.33	23				
20	16QAM	50	0	22.63	22.67	22.33					
20	16QAM	50	24	22.74	22.71	22.35					
20	16QAM	50	50	22.71	22.75	22.69	23				
20	16QAM	100	0	22.72	22.64	22.52					
20	64QAM	1	0	22.67	22.33	22.32					
20	64QAM	1	49	22.24	22.76	21.22	23				
20	64QAM	1	99	21.79	22.77	21.95					
20	64QAM	50	0	20.33	20.32	20.32					
20	64QAM	50	24	20.31	20.30	20.35	22				
20	64QAM	50	50	20.79	20.33	20.85					
20	64QAM	100	0	21.17	20.35	20.60					
Channel				18675	18900	19125	Tune-up limit (dBm)				
Frequency (MHz)				18675	18800	19025					
15	QPSK	1	0	23.06	23.07	23.06	25				
15	QPSK	1	37	23.06	23.03	23.06					
15	QPSK	1	74	23.01	23.03	23.00					
15	QPSK	36	0	23.10	23.11	22.99	24				
15	QPSK	36	20	23.13	23.14	23.14					
15	QPSK	36	39	23.13	23.19	23.16					
15	QPSK	75	0	23.20	23.10	22.93	24				
15	16QAM	1	0	23.33	23.39	23.35					
15	16QAM	1	37	23.30	23.43	22.94					
15	16QAM	1	74	23.29	23.39	23.25	23				
15	16QAM	36	0	22.53	22.64	22.33					
15	16QAM	36	20	22.69	22.69	22.27					
15	16QAM	36	39	22.69	22.67	22.85	23				
15	16QAM	75	0	22.72	22.54	22.47					
15	64QAM	1	0	22.58	22.25	22.23					
15	64QAM	1	37	22.24	22.73	21.21	23				
15	64QAM	1	74	21.73	22.76	21.93					
15	64QAM	36	0	21.61	21.57	20.29					
15	64QAM	36	20	21.23	21.63	20.34	22				
15	64QAM	36	39	20.73	21.70	20.85					
15	64QAM	75	0	21.14	21.30	20.51					
Channel				18950 <th>18900</th> <th>19150</th> <th colspan="3">Tune-up limit (dBm)</th>	18900	19150	Tune-up limit (dBm)				
Frequency (MHz)				18950 <th>18800</th> <th>19005</th> <th colspan="3"></th>	18800	19005					
10	QPSK	1	0	23.08	23.04	23.01	25				
10	QPSK	1	25	23.06	23.02	23.01					
10	QPSK	1	49	23.00	23.04	23.01					
10	QPSK	25	0	23.08	23.14	23.04	24				
10	QPSK	25	12	23.19	23.17	23.18					
10	QPSK	25	25	23.18	23.20	23.14					
10	QPSK	50	0	23.19	23.14	22.92	24				
10	16QAM	1	0	23.37	23.42	23.33					
10	16QAM	1	25	23.37	23.45	22.80					
10	16QAM	1	49	23.28	23.41	23.32	23				
10	16QAM	25	0	22.59	22.63	22.25					
10	16QAM	25	12	22.73	22.68	22.26					
10	16QAM	25	25	22.62	22.65	22.63	23				
10	16QAM	50	0	22.62	22.55	22.50					
10	64QAM	1	0	22.60	22.32	22.32					
10	64QAM	1	25	22.18	22.66	21.21	23				
10	64QAM	1	49	21.72	22.72	21.90					
10	64QAM	25	0	21.60	21.58	20.23					
10	64QAM	25	12	21.20	21.64	20.27	22				
10	64QAM	25	25	20.72	21.68	20.81					
10	64QAM	50	0	21.16	21.36	20.50					
Channel				18625	18900	19175	Tune-up limit (dBm)				
Frequency (MHz)				18625	18800	19075					
5	QPSK	1	0	23.05	23.07	23.09	25				
5	QPSK	1	12	23.03	23.00	23.02					
5	QPSK	1	24	23.01	23.00	23.03					
5	QPSK	12	0	23.13	23.07	23.07	24				
5	QPSK	12	7	23.18	23.12	23.14					
5	QPSK	12	13	23.14	23.19	23.15					
5	QPSK	25	0	23.17	23.13	22.92	24				
5	16QAM	1	0	23.29	23.36	23.35					
5	16QAM	1	12	23.33	23.38	22.85					
5	16QAM	1	24	23.30	23.32	23.26	23				
5	16QAM	12	0	22.62	22.60	22.32					
5	16QAM	12	7	22.73	22.62	22.25					
5	16QAM	12	13	22.64	22.73	22.68	23				
5	16QAM	25	0	22.70	22.59	22.49					
5	64QAM	1	0	22.57	22.24	22.29					
5	64QAM	1	12	22.24	22.68	21.20	23				
5	64QAM	1	24	21.72	22.67	21.91					
5	64QAM	12	0	21.53	21.54	20.30					
5	64QAM	12	7	21.16	21.69	20.35	22				
5	64QAM	12	13	20.70	21.67	20.76					
5	64QAM	25	0	21.17	21.36	20.55					
Channel				18615	18900	19165	Tune-up limit (dBm)				
Frequency (MHz)				18615	18800	19085					
3	QPSK	1	0	23.07	23.07	23.09	25				
3	QPSK	1	8	23.05	23.06	23.00					
3	QPSK	1	14	23.02	23.00	23.02					
3	QPSK	8	0	23.09	23.11	22.99	24				
3	QPSK	8	4	23.16	23.12	23.10					
3	QPSK	8	7	23.15	23.15	23.12					
3	QPSK	15	0	23.13	23.09	22.98	24				
3	16QAM	1	0	23.29	23.45	23.33					
3	16QAM	1	8	23.30	23.35	22.76					
3	16QAM	1	14	23.31	23.34	23.26	23				
3	16QAM	8	0	22.58	22.67	22.31					
3	16QAM	8	4	22.67	22.69	22.27					
3	16QAM	8	7	22.70	22.73	22.65	23				
3	16QAM	15	0	22.62	22.59	22.47					
3	64QAM	1	0	22.66	22.31	22.30					
3	64QAM	1	8	22.22	22.68	21.22	23				
3	64QAM	1	14	21.70	22.75	21.89					
3	64QAM	8	0	21.54	21.56	20.25					
3	64QAM	8	4	21.16	21.70	20.30	22				
3	64QAM	8	7	20.69	21.67	20.81					
3	64QAM	15	0	21.12	21.37	20.55					
Channel				18607	18900	19193	Tune-up limit (dBm)				
Frequency (MHz)				18607	18800	19093					
1.4	QPSK	1	0	23.06	23.09	23.06	25				
1.4	QPSK	1	3	23.00	23.01	23.05					
1.4	QPSK	1	5	23.00	23.04	23.02					
1.4	QPSK	3	0	23.06	23.10	23.07	24				
1.4	QPSK	3	1	23.20	23.13	23.17					
1.4	QPSK	3	3	23.12	23.23	23.11					
1.4	QPSK	6	0	23.17	23.11	22.91	24				
1.4	16QAM	1	0	23.35	23.44	23.39					
1.4	16QAM	1	3	23.35	23.41	22.82					
1.4	16QAM	1	5	23.35	23.43	22.84	24				
1.4	16QAM	3	0	22.63	22.62	22.25					
1.4	16QAM	3	1	22.72	22.67	22.30					
1.4	16QAM	3	3	22.61	22.69	22.62	23				
1.4	16QAM	6	0	22.66	22.55	22.51					
1.4	16QAM	6	1	22.67	22.28	20.30					
1.4	16QAM	1	3	22.72	22.71	22.62	23				
1.4	64QAM	1	5	21.71	22.67	21.92					
1.4	64QAM	3	1	21.62	21.69	21.68					
1.4	64QAM	3	3	21.66	21.68	21.65					



Band 4									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Mod Ch / 20050	Power Mid Ch / 20175	Power High Ch / 20300	Tune-up limit (dBm)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	23.78	23.80	23.73	24.9		
20	QPSK	1	49	23.59	23.58	23.54			
20	QPSK	1	99	23.60	23.55	23.45			
20	QPSK	50	0	23.63	23.60	23.53	24.7		
20	QPSK	50	24	23.64	23.54	23.45			
20	QPSK	50	50	23.55	23.49	23.42			
20	QPSK	100	0	23.63	23.58	23.41	24.7		
20	16QAM	1	0	23.92	23.96	23.89			
20	16QAM	1	49	23.80	23.77	23.67			
20	16QAM	1	99	23.77	23.65	23.55	23.7		
20	16QAM	50	0	22.61	22.64	22.56			
20	16QAM	50	24	22.64	22.55	22.47			
20	16QAM	50	50	22.57	22.50	22.44	23.7		
20	16QAM	100	0	22.60	22.61	22.41			
20	64QAM	1	0	22.79	22.82	22.11	23.7		
20	64QAM	1	49	22.66	22.32	22.53			
20	64QAM	1	99	22.64	21.87	22.50			
20	64QAM	50	0	21.65	21.64	21.19	22.7		
20	64QAM	50	24	21.66	21.34	21.47			
20	64QAM	50	50	21.57	21.04	21.43			
20	64QAM	100	0	21.66	21.54	21.45	Tune-up limit (dBm)		
Channel				20025	20175	20325			
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	23.78	23.83	23.74	24.9		
15	QPSK	1	37	23.59	23.59	23.52			
15	QPSK	1	74	23.65	23.54	23.51			
15	QPSK	36	0	23.64	23.59	23.52	24.7		
15	QPSK	36	20	23.64	23.61	23.48			
15	QPSK	36	39	23.57	23.53	23.41			
15	QPSK	75	0	23.61	23.55	23.42	24.7		
15	16QAM	1	0	23.91	23.92	23.85			
15	16QAM	1	37	23.75	23.74	23.63			
15	16QAM	1	74	23.78	23.68	23.56	23.7		
15	16QAM	36	0	22.67	22.61	22.54			
15	16QAM	36	20	22.62	22.60	22.49			
15	16QAM	36	39	22.57	22.53	22.44	23.7		
15	16QAM	75	0	22.64	22.56	22.42			
15	64QAM	1	0	22.77	22.75	22.35			
15	64QAM	1	37	22.71	22.13	22.52	23.7		
15	64QAM	1	74	22.67	21.86	22.49			
15	64QAM	36	0	21.68	21.66	21.52			
15	64QAM	36	20	21.62	21.22	21.51	22.7		
15	64QAM	36	39	21.61	20.97	21.45			
15	64QAM	75	0	21.62	21.43	21.43			
Channel				20000	20175	20350			
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	23.77	23.81	23.73	24.9		
10	QPSK	1	25	23.57	23.49	23.52			
10	QPSK	1	49	23.60	23.54	23.42			
10	QPSK	25	0	23.64	23.56	23.48	24.7		
10	QPSK	25	12	23.61	23.52	23.47			
10	QPSK	25	25	23.49	23.50	23.37			
10	QPSK	50	0	23.54	23.45	23.39	24.7		
10	16QAM	1	0	23.91	23.90	23.75			
10	16QAM	1	25	23.71	23.66	23.55			
10	16QAM	1	49	23.76	23.64	23.49	23.7		
10	16QAM	25	0	22.62	22.35	22.52			
10	16QAM	25	12	22.56	22.50	22.41			
10	16QAM	25	25	22.57	22.53	22.42	23.7		
10	16QAM	50	0	22.54	22.51	22.34			
10	64QAM	1	0	22.67	22.72	22.34			
10	64QAM	1	25	22.68	22.09	22.45	23.7		
10	64QAM	1	49	22.61	21.94	22.45			
10	64QAM	25	0	21.58	21.57	21.47			
10	64QAM	25	12	21.61	21.13	21.42	22.7		
10	64QAM	25	25	21.53	20.88	21.41			
10	64QAM	50	0	21.62	21.39	21.41			
Channel				19975	20175	20375			
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	23.70	23.79	23.72	24.9		
5	QPSK	1	12	23.49	23.59	23.45			
5	QPSK	1	24	23.60	23.54	23.48			
5	QPSK	12	0	23.64	23.52	23.44	24.7		
5	QPSK	12	7	23.63	23.53	23.41			
5	QPSK	12	13	23.53	23.48	23.39			
5	QPSK	25	0	23.55	23.50	23.36	24.7		
5	16QAM	1	0	23.91	23.92	23.82			
5	16QAM	1	12	23.71	23.66	23.57			
5	16QAM	1	24	23.77	23.59	23.56	23.7		
5	16QAM	12	0	22.61	22.58	22.47			
5	16QAM	12	7	22.60	22.51	22.39			
5	16QAM	12	13	22.53	22.48	22.35	23.7		
5	16QAM	25	0	22.57	22.46	22.33			
5	64QAM	1	0	22.76	22.68	22.28			
5	64QAM	1	12	22.70	22.10	22.49	23.7		
5	64QAM	1	24	22.60	21.86	22.49			
5	64QAM	12	0	21.59	21.56	21.45			
5	64QAM	12	7	21.61	21.21	21.42	22.7		
5	64QAM	12	13	21.61	20.87	21.43			
5	64QAM	25	0	21.55	21.42	21.36			
Channel				19965	20175	20385			
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	23.68	23.75	23.68	24.9		
3	QPSK	1	8	23.58	23.58	23.51			
3	QPSK	1	14	23.63	23.51	23.46			
3	QPSK	8	0	23.55	23.53	23.50	24.7		
3	QPSK	8	4	23.54	23.54	23.38			
3	QPSK	8	7	23.51	23.46	23.41			
3	QPSK	15	0	23.60	23.45	23.39	24.7		
3	16QAM	1	0	23.85	23.84	23.81			
3	16QAM	1	8	23.73	23.69	23.59			
3	16QAM	1	14	23.76	23.66	23.61	23.7		
3	16QAM	8	0	22.63	22.59	22.52			
3	16QAM	8	4	22.61	22.55	22.43			
3	16QAM	8	7	22.48	22.46	22.35	23.7		
3	16QAM	15	0	22.62	22.56	22.33			
3	64QAM	1	0	22.68	22.74	22.35			
3	64QAM	1	8	22.63	22.12	22.42	23.7		
3	64QAM	1	14	22.66	21.77	22.45			
3	64QAM	8	0	21.60	21.54	21.43			
3	64QAM	8	4	21.62	21.20	21.46	22.7		
3	64QAM	8	7	21.59	20.97	21.45			
3	64QAM	15	0	21.60	21.38	21.34			
Channel				19957	20175	20393			
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	23.62	23.69	23.47	24.9		
1.4	QPSK	1	3	23.69	23.66	23.52			
1.4	QPSK	1	5	23.67	23.64	23.49			
1.4	QPSK	3	0	23.67	23.65	23.52	24.7		
1.4	QPSK	3	1	23.74	23.69	23.56			
1.4	QPSK	3	3	23.67	23.65	23.52			
1.4	QPSK	6	0	23.55	23.50	23.39	24.7		
1.4	16QAM	1	0	23.77	23.75	23.60			
1.4	16QAM	1	3	23.73	23.69	23.65			
1.4	16QAM	1	5	23.80	23.77	23.62	24.7		
1.4	16QAM	3	0	23.56	23.53	23.41			
1.4	16QAM	3	1	23.63	23.56	23.44			
1.4	16QAM	3	3	23.67	23.52	23.39	23.7		
1.4	16QAM	6	0	22.66	22.56	22.43			
1.4	16QAM	6	1	22.62	22.29	22.56			
1.4	16QAM	1	3	22.79	22.17	22.62	23.7		
1.4	64QAM	1	5	22.70	22.06	22.53			
1.4	64QAM	3	1	22.74	22.26	22.57			
1.4	64QAM	3	3	22.69	22.11	22.50			



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.78	23.73	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.60	23.7
10	16QAM	25	0	22.86	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.78	22.79	22.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.48	21.77	
10	64QAM	25	0	21.67	21.78	21.76	
10	64QAM	25	12	21.80	21.77	21.68	22.7
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.78	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.84	22.82	
5	64QAM	1	12	22.90	22.85	21.90	23.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.75	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	24.7
3	QPSK	8	4	23.68	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	23.7
3	64QAM	1	14	22.64	22.62	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.78	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.56	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.96	23.26	
1.4	16QAM	1	3	23.93	23.95	23.39	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.26	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	22.7
1.4	64QAM	3	3	22.64	22.78	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	22.7



Band 7							
Part 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.88	23.95	23.99	25.7
20	QPSK	1	49	23.94	23.99	23.98	
20	QPSK	1	99	23.99	24.08	24.04	
20	QPSK	50	0	23.50	23.86	23.88	24.7
20	QPSK	50	24	23.95	23.91	23.90	
20	QPSK	50	50	23.96	24.03	24.02	
20	QPSK	100	0	23.90	23.91	23.90	24.7
20	16QAM	1	0	24.02	24.08	24.14	
20	16QAM	1	49	24.10	24.16	24.15	
20	16QAM	1	99	24.15	24.26	24.16	23.7
20	16QAM	50	0	22.83	22.88	22.91	
20	16QAM	50	24	22.93	22.91	22.92	
20	16QAM	50	50	22.94	23.03	22.98	23.7
20	16QAM	100	0	22.90	22.89	22.92	
20	64QAM	1	0	22.87	22.95	22.99	
20	64QAM	1	49	22.92	23.04	22.70	23.7
20	64QAM	1	99	23.04	23.13	22.95	
20	64QAM	50	0	21.82	21.89	21.91	
20	64QAM	50	24	21.95	21.94	21.75	22.7
20	64QAM	50	50	21.95	22.02	21.58	
20	64QAM	100	0	21.92	21.90	21.79	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.91	24.01	23.99	25.7
15	QPSK	1	37	23.95	24.02	24.02	
15	QPSK	1	74	24.01	24.10	24.04	
15	QPSK	36	0	23.79	23.86	23.86	24.7
15	QPSK	36	20	23.93	23.92	23.89	
15	QPSK	36	39	23.92	23.97	23.95	
15	QPSK	75	0	23.86	23.87	23.88	24.7
15	16QAM	1	0	23.99	24.11	24.13	
15	16QAM	1	37	24.05	24.14	24.11	
15	16QAM	1	74	24.13	24.19	24.11	23.7
15	16QAM	36	0	22.82	22.87	22.88	
15	16QAM	36	20	22.90	22.90	22.88	
15	16QAM	36	39	22.93	23.00	22.95	23.7
15	16QAM	75	0	22.90	22.95	22.90	
15	64QAM	1	0	22.86	22.95	22.95	
15	64QAM	1	37	22.99	23.07	22.41	23.7
15	64QAM	1	74	23.04	23.12	22.69	
15	64QAM	36	0	21.81	21.91	21.76	
15	64QAM	36	20	21.93	21.93	21.55	22.7
15	64QAM	36	39	21.97	22.02	21.61	
15	64QAM	75	0	21.90	21.90	21.60	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.87	23.94	23.91	25.7
10	QPSK	1	25	23.85	23.93	23.92	
10	QPSK	1	49	23.92	24.02	23.92	
10	QPSK	25	0	23.85	23.86	23.80	24.7
10	QPSK	25	12	23.87	23.90	23.86	
10	QPSK	25	25	23.86	23.96	23.89	
10	QPSK	50	0	23.87	23.89	23.84	24.7
10	16QAM	1	0	24.05	24.11	24.09	
10	16QAM	1	25	24.03	24.15	24.14	
10	16QAM	1	49	24.13	24.21	24.12	23.7
10	16QAM	25	0	22.86	22.85	22.82	
10	16QAM	25	12	22.99	22.88	22.85	
10	16QAM	25	25	22.87	22.95	22.89	23.7
10	16QAM	50	0	22.85	22.88	22.84	
10	64QAM	1	0	22.96	22.98	22.70	
10	64QAM	1	25	22.97	23.07	22.76	23.7
10	64QAM	1	49	23.01	23.12	22.89	
10	64QAM	25	0	21.85	21.88	21.53	
10	64QAM	25	12	21.92	21.92	21.64	22.7
10	64QAM	25	25	21.91	21.97	21.69	
10	64QAM	50	0	21.88	21.92	21.52	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.91	23.93	23.94	25.7
5	QPSK	1	12	23.94	24.05	23.97	
5	QPSK	1	24	23.95	24.04	23.95	
5	QPSK	12	0	23.83	23.90	23.86	24.7
5	QPSK	12	7	23.87	23.91	23.87	
5	QPSK	12	13	23.83	23.93	23.89	
5	QPSK	25	0	23.83	23.86	23.84	24.7
5	16QAM	1	0	24.05	24.12	24.09	
5	16QAM	1	12	24.08	24.15	24.06	
5	16QAM	1	24	24.10	24.17	24.07	23.7
5	16QAM	12	0	22.87	22.90	22.90	
5	16QAM	12	7	22.89	22.94	22.87	
5	16QAM	12	13	22.90	22.96	22.89	23.7
5	16QAM	25	0	22.87	22.89	22.86	
5	64QAM	1	0	22.96	23.02	22.70	
5	64QAM	1	12	22.96	23.08	22.72	23.7
5	64QAM	1	24	23.00	23.10	22.82	
5	64QAM	12	0	21.95	21.93	21.59	
5	64QAM	12	7	21.89	21.95	21.69	22.7
5	64QAM	12	13	21.82	22.02	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



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	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.64	24.61	24.63	25.7
10	QPSK	1	25	24.63	24.68	24.65	
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	24.7
10	QPSK	25	12	23.67	23.80	23.76	
10	QPSK	25	25	23.88	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	24.7
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	
10	16QAM	1	49	24.12	24.08	24.07	23.7
10	16QAM	25	0	22.76	22.79	22.77	
10	16QAM	25	12	22.62	22.80	22.78	
10	16QAM	25	25	22.81	22.85	22.79	23.7
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	25	22.76	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.78	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	22.7
10	64QAM	25	25	21.82	21.90	21.84	
10	64QAM	50	0	21.83	21.81	21.80	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	25.7
5	QPSK	1	12	24.72	24.73	24.71	
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.79	23.78	24.7
5	QPSK	12	7	23.79	23.75	23.81	
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	24.7
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	
5	16QAM	1	24	24.02	24.07	24.03	23.7
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	
5	16QAM	12	13	22.83	22.82	22.80	23.7
5	16QAM	25	0	22.81	22.82	22.75	
5	64QAM	1	0	22.62	22.73	22.91	
5	64QAM	1	12	22.83	22.94	22.94	23.7
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	
5	64QAM	12	7	21.88	21.85	21.88	22.7
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	25.7
3	QPSK	1	8	24.73	24.74	24.73	
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.78	23.73	24.7
3	QPSK	8	4	23.78	23.74	23.77	
3	QPSK	8	7	23.73	23.76	23.75	
3	QPSK	15	0	23.77	23.75	23.73	24.7
3	16QAM	1	0	24.08	24.01	24.02	
3	16QAM	1	8	24.06	24.08	24.08	
3	16QAM	1	14	24.00	24.05	23.98	23.7
3	16QAM	8	0	22.86	22.83	22.82	
3	16QAM	8	4	22.90	22.83	22.87	
3	16QAM	8	7	22.84	22.84	22.83	23.7
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.67	22.90	22.95	
3	64QAM	1	8	22.91	23.01	22.98	23.7
3	64QAM	1	14	22.92	22.95	22.86	
3	64QAM	8	0	21.82	21.81	21.81	
3	64QAM	8	4	21.87	21.84	21.87	22.7
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.65	21.78	21.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.59	24.59	25.7
1.4	QPSK	1	3	24.68	24.67	24.64	
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	24.7
1.4	QPSK	3	1	24.70	24.64	24.68	
1.4	QPSK	3	3	24.64	24.67	24.61	
1.4	QPSK	6	0	23.71	23.74	23.67	24.7
1.4	16QAM	1	0	23.99	23.93	23.96	
1.4	16QAM	1	3	24.02	24.02	23.98	
1.4	16QAM	1	5	23.92	23.94	23.91	24.7
1.4	16QAM	3	0	23.75	23.69	23.69	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.70	23.73	23.65	23.7
1.4	16QAM	6	0	22.78	22.80	22.76	
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.89	23.7
1.4	64QAM	1	5	22.82	22.85	22.81	
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	22.7
1.4	64QAM	3	3	22.63	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	

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)				782			
10	QPSK	1	0		24.23		25.2
10	QPSK	1	25		24.22		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30		24.2
10	QPSK	25	12		23.33		
10	QPSK	25	25		23.34		
10	QPSK	50	0		23.35		24.2
10	16QAM	1	0		23.56		
10	16QAM	1	25		23.57		
10	16QAM	1	49		23.54		23.2
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		
10	16QAM	25	25		22.38		23.2
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		22.2
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.36		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205	23230	23255	Tune-up limit (dbm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.62	24.61	24.59	25.2
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.2
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.2
5	16QAM	1	0	23.63	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.2
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.2
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.69	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.2
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.2
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.03	21.17	

Band 14							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch.	Power Middle Ch.	Power High Ch.	Tune-up limit (dbm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.75		25.7
10	QPSK	1	25		24.69		
10	QPSK	1	49		24.60		
10	QPSK	25	0		23.71		24.7
10	QPSK	25	12		23.70		
10	QPSK	25	25		23.73		
10	QPSK	50	0		23.68		24.7
10	16QAM	1	0		24.08		
10	16QAM	1	25		24.08		
10	16QAM	1	49		23.86		23.7
10	16QAM	25	0		22.68		
10	16QAM	25	12		22.70		
10	16QAM	25	25		22.71		23.7
10	16QAM	50	0		22.70		
10	64QAM	1	0		22.92		
10	64QAM	1	25		22.66		22.7
10	64QAM	1	49		22.90		
10	64QAM	25	0		21.71		
10	64QAM	25	12		21.37		22.7
10	64QAM	25	25		21.38		
10	64QAM	50	0		21.44		
Channel				23305	23330	23355	Tune-up limit (dbm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.64	24.61	24.62	25.7
5	QPSK	1	12	24.72	24.70	24.69	
5	QPSK	1	24	24.70	24.63	24.56	
5	QPSK	12	0	23.74	23.69	23.64	24.7
5	QPSK	12	7	23.77	23.72	23.68	
5	QPSK	12	13	23.74	23.72	23.68	
5	QPSK	25	0	23.74	23.68	23.64	24.7
5	16QAM	1	0	23.97	23.92	23.91	
5	16QAM	1	12	24.03	23.99	23.96	
5	16QAM	1	24	23.99	23.93	23.89	23.7
5	16QAM	12	0	22.79	22.70	22.69	
5	16QAM	12	7	22.81	22.74	22.71	
5	16QAM	12	13	22.75	22.72	22.72	23.7
5	16QAM	25	0	22.76	22.72	22.66	
5	64QAM	1	0	22.86	22.72	22.34	
5	64QAM	1	12	22.94	22.37	22.32	23.7
5	64QAM	1	24	22.49	22.18	22.72	
5	64QAM	12	0	21.82	21.48	21.13	
5	64QAM	12	7	21.85	21.29	21.25	22.7
5	64QAM	12	13	21.60	21.11	21.55	
5	64QAM	25	0	21.69	21.22	21.29	

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	24.66	24.65	24.61	25.7
10	QPSK	1	25	24.69	24.70	24.71	
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	24.7
10	QPSK	25	12	23.68	23.82	23.79	
10	QPSK	25	25	23.98	23.86	23.88	
10	QPSK	50	0	23.79	23.78	23.79	24.7
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	
10	16QAM	1	49	24.12	24.10	24.09	23.7
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	
10	16QAM	25	25	22.89	22.90	22.82	23.7
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.75	22.88	23.7
10	64QAM	1	25	22.71	22.71	22.65	
10	64QAM	1	49	22.97	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	22.7
10	64QAM	25	12	21.61	21.54	21.52	
10	64QAM	25	25	21.65	21.76	21.84	
10	64QAM	50	0	21.62	21.68	21.62	Tune-up limit (dBm)
Channel				23785	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.66	24.66	25.7
5	QPSK	1	12	24.74	24.79	24.75	
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	24.7
5	QPSK	12	7	23.85	23.81	23.82	
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	24.7
5	16QAM	1	0	23.99	23.96	23.99	
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	23.7
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	
5	16QAM	12	13	22.84	22.88	22.84	23.7
5	16QAM	25	0	22.65	22.85	22.87	
5	64QAM	1	0	22.40	22.44	22.75	
5	64QAM	1	12	22.76	22.60	22.94	23.7
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	22.7
5	64QAM	12	7	21.73	21.52	21.89	
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



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	23.09	23.12	23.02	25				
20	QPSK	1	49	23.06	23.08	23.05					
20	QPSK	1	99	23.00	23.04	23.01					
20	QPSK	50	0	23.01	23.16	22.56	24				
20	QPSK	50	24	23.02	23.26	23.04					
20	QPSK	50	50	22.98	23.24	23.26					
20	QPSK	100	0	22.43	23.24	22.31	24				
20	16QAM	1	0	23.09	23.43	22.58					
20	16QAM	1	49	23.09	23.42	22.49					
20	16QAM	1	99	22.40	23.41	22.22	23				
20	16QAM	50	0	22.51	22.72	21.77					
20	16QAM	50	24	22.07	22.79	22.07					
20	16QAM	50	50	21.85	22.75	21.92	23				
20	16QAM	100	0	21.45	21.98	21.45					
20	64QAM	1	0	21.20	21.21	21.22					
20	64QAM	1	49	21.22	21.74	21.24	23				
20	64QAM	1	99	21.20	22.09	21.23					
20	64QAM	50	0	20.89	21.06	21.07					
20	64QAM	50	24	20.17	21.08	20.38	22				
20	64QAM	50	50	20.02	21.11	20.24					
20	64QAM	100	0	20.00	20.03	20.04					
Channel				26115	26340	26615	Tune-up limit (dBm)				
Frequency (MHz)				1857.5	1880	1907.5					
15	QPSK	1	0	23.04	23.11	23.02	25				
15	QPSK	1	37	23.02	23.10	23.05					
15	QPSK	1	74	23.00	23.04	23.06					
15	QPSK	36	0	22.93	23.08	22.50	24				
15	QPSK	36	20	22.99	23.22	23.00					
15	QPSK	36	39	22.81	23.15	23.18					
15	QPSK	75	0	22.42	23.24	22.22	24				
15	16QAM	1	0	23.08	23.42	22.52					
15	16QAM	1	37	23.06	23.35	22.42					
15	16QAM	1	74	22.36	23.40	22.21	23				
15	16QAM	36	0	22.47	22.67	21.74					
15	16QAM	36	20	22.07	22.76	21.97					
15	16QAM	36	39	21.64	22.69	21.85	23				
15	16QAM	75	0	21.45	21.98	21.38					
15	64QAM	1	0	21.17	21.14	21.18					
15	64QAM	1	37	21.21	21.64	21.24	23				
15	64QAM	1	74	21.16	22.01	21.15					
15	64QAM	36	0	20.79	20.98	21.03					
15	64QAM	36	20	20.07	21.06	20.38	22				
15	64QAM	36	39	20.11	21.04	20.15					
15	64QAM	75	0	20.15	20.30	20.12					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1885	1880	1910					
10	QPSK	1	0	23.07	23.07	23.02	25				
10	QPSK	1	25	23.03	23.02	23.01					
10	QPSK	1	49	23.01	23.00	23.03					
10	QPSK	25	0	22.99	23.10	22.56	24				
10	QPSK	25	12	22.99	23.21	23.00					
10	QPSK	25	25	22.88	23.24	23.21					
10	QPSK	50	0	22.36	23.15	22.30	24				
10	16QAM	1	0	23.01	23.35	22.50					
10	16QAM	1	25	23.08	23.34	22.42					
10	16QAM	1	49	22.36	23.32	22.13	23				
10	16QAM	25	0	22.49	22.71	21.76					
10	16QAM	25	12	22.02	22.79	22.06					
10	16QAM	25	25	21.57	22.70	21.83	23				
10	16QAM	50	0	21.37	21.90	21.43					
10	64QAM	1	0	21.14	21.11	21.18					
10	64QAM	1	25	21.17	21.72	21.17	23				
10	64QAM	1	49	21.19	21.99	21.17					
10	64QAM	25	0	20.88	21.02	20.98					
10	64QAM	25	12	20.08	20.98	20.29	22				
10	64QAM	25	25	20.03	21.11	20.21					
10	64QAM	50	0	20.05	20.10	20.02					
Channel				26065	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1880	1912.5					
5	QPSK	1	0	23.06	23.02	23.01	25				
5	QPSK	1	12	23.04	23.04	23.00					
5	QPSK	1	24	23.05	23.03	23.02					
5	QPSK	12	0	22.95	23.15	22.51	24				
5	QPSK	12	7	22.93	23.23	23.01					
5	QPSK	12	13	22.78	23.17	23.26					
5	QPSK	25	0	22.34	23.20	22.27	24				
5	16QAM	1	0	23.02	23.35	22.54					
5	16QAM	1	12	23.07	23.32	22.43					
5	16QAM	1	24	22.34	23.37	22.19	23				
5	16QAM	12	0	22.47	22.64	21.75					
5	16QAM	12	7	22.04	22.76	22.00					
5	16QAM	12	13	21.59	22.68	21.92	23				
5	16QAM	25	0	21.41	21.91	21.42					
5	64QAM	1	0	21.13	21.16	21.14					
5	64QAM	1	12	21.13	21.73	21.24	23				
5	64QAM	1	24	21.12	22.09	21.14					
5	64QAM	12	0	20.84	20.99	21.07					
5	64QAM	12	7	20.17	21.06	20.38	22				
5	64QAM	12	13	20.08	21.10	20.16					
5	64QAM	25	0	20.02	20.01	20.00					
Channel				26055	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1913.5					
3	QPSK	1	0	23.03	23.09	23.04	25				
3	QPSK	1	8	23.01	23.07	23.02					
3	QPSK	1	14	23.05	23.04	23.00					
3	QPSK	8	0	22.94	23.06	22.47	24				
3	QPSK	8	4	22.95	23.20	22.98					
3	QPSK	8	7	22.85	23.23	23.22					
3	QPSK	15	0	22.36	23.21	22.24	24				
3	16QAM	1	0	23.01	23.40	22.52					
3	16QAM	1	8	23.04	23.36	22.46					
3	16QAM	1	14	22.30	23.32	22.14	23				
3	16QAM	8	0	22.51	22.94	21.71					
3	16QAM	8	4	21.98	22.79	22.05					
3	16QAM	8	7	21.62	22.72	21.91	23				
3	16QAM	15	0	21.35	21.94	21.37					
3	64QAM	1	0	21.11	21.19	21.18					
3	64QAM	1	8	21.12	21.68	21.17	23				
3	64QAM	1	14	21.17	22.02	21.15					
3	64QAM	8	0	20.89	21.03	21.00					
3	64QAM	8	4	20.13	21.02	20.31	22				
3	64QAM	8	7	20.03	21.02	20.15					
3	64QAM	15	0	20.05	20.00	20.05					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1880	1914.3					
1.4	QPSK	1	0	23.02	23.05	23.02	25				
1.4	QPSK	1	3	23.05	23.01	23.00					
1.4	QPSK	1	5	23.04	23.00	23.06					
1.4	QPSK	3	0	23.02	23.16	23.00	24				
1.4	QPSK	3	1	23.01	23.19	23.03					
1.4	QPSK	3	3	23.05	23.15	23.24					
1.4	QPSK	6	0	22.34	23.18	22.26	24				
1.4	16QAM	1	0	23.02	23.35	22.57					
1.4	16QAM	1	3	23.08	23.34	22.44					
1.4	16QAM	1									



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26745	26865	26990	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.78	24.52	24.57	25.7
15	QPSK	1	37	24.46	24.51	24.50	
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	24.7
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.66	22.67	
15	16QAM	36	20	22.65	22.61	22.60	
15	16QAM	36	39	22.59	22.65	22.62	23.7
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	
15	64QAM	1	74	22.69	22.72	22.70	23.7
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	22.7
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	25.7
10	QPSK	1	25	24.57	24.55	24.59	
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	24.07	23.96	23.96	
10	16QAM	1	25	23.94	24.01	23.97	24.7
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	
10	16QAM	25	25	22.64	22.63	22.63	23.7
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	22.7
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	Tune-up limit (dBm)
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	25.7
5	QPSK	1	12	24.72	24.63	24.47	
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.60	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	
5	16QAM	1	12	24.00	23.97	23.85	24.7
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	23.7
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	
5	64QAM	1	12	22.90	22.88	22.03	
5	64QAM	1	24	22.61	22.66	21.86	22.7
5	64QAM	12	0	21.63	21.78	21.45	
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	Tune-up limit (dBm)
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	25.7
3	QPSK	1	8	24.75	24.69	24.16	
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	8	0	23.83	23.68	23.39	
3	QPSK	8	4	23.77	23.72	23.28	24.7
3	QPSK	8	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	
3	16QAM	1	8	24.06	24.06	23.47	24.7
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	8	0	22.86	22.77	22.54	
3	16QAM	8	4	22.88	22.77	22.42	
3	16QAM	8	7	22.78	22.76	22.45	23.7
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.63	22.00	
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	22.7
3	64QAM	8	0	21.79	21.74	20.85	
3	64QAM	8	4	21.88	21.81	20.77	
3	64QAM	8	7	21.61	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	Tune-up limit (dBm)
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	25.7
1.4	QPSK	1	3	24.71	24.63	24.26	
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.59	24.55	24.17	
1.4	QPSK	3	1	24.74	24.58	24.22	24.7
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	24.7
1.4	16QAM	1	5	23.93	23.86	23.65	
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	23.7
1.4	16QAM	6	0	22.82	22.75	22.46	
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.88	21.90	
1.4	64QAM	1	5	22.86	22.76	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	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				2771.0			
Frequency (MHz)				231.0			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		21.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				2788.5	2771.0	2773.5	Tune-up limit (dbm)
Frequency (MHz)				2307.5	231.0	2312.5	
5	QPSK	1	0	22.88	22.88	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.15	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132072	132322	132572			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	23.72	23.65	23.50	24.9		
20	QPSK	1	49	23.60	23.46	23.35			
20	QPSK	1	99	23.63	23.41	23.28			
20	QPSK	50	0	23.68	23.47	23.37	24.7		
20	QPSK	50	24	23.64	23.46	23.36			
20	QPSK	50	50	23.59	23.39	23.35			
20	QPSK	100	0	23.64	23.42	23.34	24.7		
20	16QAM	1	0	23.90	23.75	23.69			
20	16QAM	1	49	23.75	23.58	23.50			
20	16QAM	1	99	23.80	23.52	23.44	23.7		
20	16QAM	50	0	22.86	22.44	22.42			
20	16QAM	50	24	22.63	22.44	22.36			
20	16QAM	50	50	22.80	22.40	22.37	23.7		
20	16QAM	100	0	22.62	22.46	22.38			
20	64QAM	1	0	22.74	22.18	22.51			
20	64QAM	1	49	22.61	22.47	22.38	23.7		
20	64QAM	1	99	22.86	22.46	22.35			
20	64QAM	50	0	21.69	21.29	21.42			
20	64QAM	50	24	21.67	21.47	21.37	22.7		
20	64QAM	50	50	21.62	21.42	21.39			
20	64QAM	100	0	21.66	21.47	21.34			
Channel				132047	132322	132597	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	23.71	23.61	23.48	24.9		
15	QPSK	1	37	23.64	23.41	23.38			
15	QPSK	1	74	23.69	23.49	23.36			
15	QPSK	36	0	23.58	23.43	23.38	24.7		
15	QPSK	36	20	23.65	23.40	23.39			
15	QPSK	36	39	23.60	23.38	23.36			
15	QPSK	75	0	23.62	23.43	23.34	24.7		
15	16QAM	1	0	23.81	23.69	23.63			
15	16QAM	1	37	23.77	23.59	23.53			
15	16QAM	1	74	23.86	23.58	23.47	23.7		
15	16QAM	36	0	22.57	22.42	22.36			
15	16QAM	36	20	22.64	22.45	22.39			
15	16QAM	36	39	22.62	22.42	22.37	23.7		
15	16QAM	75	0	22.64	22.46	22.32			
15	64QAM	1	0	22.72	22.26	22.50			
15	64QAM	1	37	22.64	22.45	22.47	23.7		
15	64QAM	1	74	22.72	22.48	22.41			
15	64QAM	36	0	21.60	21.32	21.41			
15	64QAM	36	20	21.63	21.46	21.40	22.7		
15	64QAM	36	39	21.64	21.42	21.38			
15	64QAM	75	0	21.63	21.46	21.33			
Channel				132022	132322	132622	Tune-up limit (dBm)		
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	23.61	23.51	23.44	24.9		
10	QPSK	1	25	23.63	23.31	23.32			
10	QPSK	1	49	23.66	23.46	23.30			
10	QPSK	25	0	23.52	23.34	23.28	24.7		
10	QPSK	25	12	23.62	23.39	23.31			
10	QPSK	25	25	23.53	23.33	23.36			
10	QPSK	50	0	23.58	23.41	23.28	24.7		
10	16QAM	1	0	23.75	23.59	23.63			
10	16QAM	1	25	23.71	23.52	23.49			
10	16QAM	1	49	23.79	23.56	23.47	23.7		
10	16QAM	25	0	22.47	22.36	22.33			
10	16QAM	25	12	22.54	22.41	22.35			
10	16QAM	25	25	22.57	22.42	22.33	23.7		
10	16QAM	50	0	22.54	22.46	22.25			
10	64QAM	1	0	22.63	22.18	22.50			
10	64QAM	1	25	22.58	22.41	22.42	23.7		
10	64QAM	1	49	22.68	22.41	22.36			
10	64QAM	25	0	21.53	21.30	21.33			
10	64QAM	25	12	21.57	21.39	21.34	22.7		
10	64QAM	25	25	21.56	21.37	21.36			
10	64QAM	50	0	21.58	21.40	21.29			
Channel				131997	132322	132647	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	23.70	23.60	23.46	24.9		
5	QPSK	1	12	23.65	23.40	23.38			
5	QPSK	1	24	23.62	23.43	23.30			
5	QPSK	12	0	23.53	23.34	23.35	24.7		
5	QPSK	12	7	23.58	23.40	23.30			
5	QPSK	12	13	23.57	23.28	23.35			
5	QPSK	25	0	23.55	23.35	23.28	24.7		
5	16QAM	1	0	23.76	23.66	23.56			
5	16QAM	1	12	23.69	23.59	23.45			
5	16QAM	1	24	23.80	23.57	23.43	23.7		
5	16QAM	12	0	22.54	22.38	22.31			
5	16QAM	12	7	22.62	22.41	22.34			
5	16QAM	12	13	22.61	22.37	22.33	23.7		
5	16QAM	25	0	22.63	22.44	22.30			
5	64QAM	1	0	22.63	22.25	22.46			
5	64QAM	1	12	22.63	22.38	22.38	23.7		
5	64QAM	1	24	22.65	22.44	22.41			
5	64QAM	12	0	21.55	21.26	21.34			
5	64QAM	12	7	21.53	21.46	21.38	22.7		
5	64QAM	12	13	21.61	21.37	21.28			
5	64QAM	25	0	21.62	21.42	21.28			
Channel				131987	132322	132657	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	23.62	23.54	23.44	24.9		
3	QPSK	1	8	23.62	23.32	23.37			
3	QPSK	1	14	23.69	23.47	23.29			
3	QPSK	8	0	23.51	23.37	23.34	24.7		
3	QPSK	8	4	23.63	23.39	23.30			
3	QPSK	8	7	23.60	23.30	23.36			
3	QPSK	15	0	23.62	23.41	23.33	24.7		
3	16QAM	1	0	23.77	23.65	23.60			
3	16QAM	1	8	23.67	23.59	23.52			
3	16QAM	1	14	23.66	23.54	23.47	23.7		
3	16QAM	8	0	22.50	22.34	22.29			
3	16QAM	8	4	22.56	22.40	22.29			
3	16QAM	8	7	22.60	22.38	22.33	23.7		
3	16QAM	15	0	22.63	22.37	22.22			
3	64QAM	1	0	22.66	22.24	22.43			
3	64QAM	1	8	22.61	22.37	22.46	23.7		
3	64QAM	1	14	22.69	22.43	22.31			
3	64QAM	8	0	21.50	21.32	21.34			
3	64QAM	8	4	21.63	21.44	21.33	22.7		
3	64QAM	8	7	21.54	21.34	21.32			
3	64QAM	15	0	21.53	21.42	21.24			
Channel				131979	132322	132665	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	23.62	23.59	23.46	24.9		
1.4	QPSK	1	3	23.69	23.51	23.53			
1.4	QPSK	1	5	23.61	23.49	23.46			
1.4	QPSK	3	0	23.71	23.52	23.49	24.7		
1.4	QPSK	3	1	23.71	23.57	23.52			
1.4	QPSK	3	3	23.66	23.49	23.46			
1.4	QPSK	6	0	23.58	23.35	23.34	24.7		
1.4	16QAM	1	0	23.82	23.60	23.60			
1.4	16QAM	1	3	23.68	23.69	23.65			
1.4	16QAM	1	5	23.73	23.56	23.56	24.7		
1.4	16QAM	3	0	23.59	23.41	23.38			
1.4	16QAM	3	3	23.66	23.47	23.44			
1.4	16QAM	3	3	23.58	23.40	23.38	24.0		
1.4	16QAM	6	0	22.74	22.45	22.40			
1.4	16QAM	6	0	22.75	22.57	22.55			
1.4	16QAM	1	3	22.82	22.52	22.58	23.7		
1.4	16QAM	1	5	22.72	22.55	22.51			
1.4	64QAM	3	0	22.70	22.52	22.48			
1.4	64QAM	3	1	22.74	22.59	22.52	23.7		
1.4	64QAM	3	3	22.72	22.49	22.46			



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	24.77	24.67	24.68	25.7
20	QPSK	1	49	24.65	24.65	24.65	
20	QPSK	1	99	24.68	24.66	24.61	
20	QPSK	50	0	23.76	23.76	23.72	24.7
20	QPSK	50	24	23.80	23.74	23.75	
20	QPSK	50	50	23.84	23.78	23.75	
20	QPSK	100	0	23.79	23.71	23.77	24.7
20	16QAM	1	0	24.06	23.96	24.00	
20	16QAM	1	49	24.01	24.03	24.04	
20	16QAM	1	99	24.03	24.01	23.95	23.7
20	16QAM	50	0	22.77	22.75	22.75	
20	16QAM	50	24	22.82	22.77	22.73	
20	16QAM	50	50	22.82	22.77	22.78	23.7
20	16QAM	100	0	22.79	22.73	22.78	
20	64QAM	1	0	22.04	22.83	22.82	23.7
20	64QAM	1	49	22.63	22.90	22.29	
20	64QAM	1	99	22.04	22.89	22.87	
20	64QAM	50	0	21.00	21.70	21.40	22.7
20	64QAM	50	24	21.30	21.64	21.57	
20	64QAM	50	50	21.84	21.60	21.74	
20	64QAM	100	0	21.53	21.76	21.80	Tune-up limit (dBm)
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.74	24.65	24.63	
15	QPSK	1	37	24.62	24.66	24.61	25.7
15	QPSK	1	74	24.65	24.68	24.64	
15	QPSK	36	0	23.73	23.71	23.69	24.7
15	QPSK	36	20	23.80	23.73	23.78	
15	QPSK	36	39	23.73	23.76	23.74	
15	QPSK	75	0	23.81	23.74	23.68	24.7
15	16QAM	1	0	24.05	24.01	23.98	
15	16QAM	1	37	23.95	24.02	24.00	
15	16QAM	1	74	23.97	24.00	23.98	23.7
15	16QAM	36	0	22.76	22.75	22.71	
15	16QAM	36	20	22.79	22.74	22.79	
15	16QAM	36	39	22.77	22.79	22.75	23.7
15	16QAM	75	0	22.63	22.73	22.70	
15	64QAM	1	0	22.02	22.43	22.76	
15	64QAM	1	37	21.86	22.94	22.88	23.7
15	64QAM	1	74	22.88	22.60	22.84	
15	64QAM	36	0	20.97	21.77	21.44	
15	64QAM	36	20	20.94	21.78	21.81	22.7
15	64QAM	36	39	21.48	21.56	21.78	
15	64QAM	75	0	21.29	21.75	21.67	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.76	24.64	24.66	25.7
10	QPSK	1	25	24.61	24.62	24.63	
10	QPSK	1	49	24.66	24.71	24.62	
10	QPSK	25	0	23.78	23.71	23.69	24.7
10	QPSK	25	12	23.79	23.82	23.70	
10	QPSK	25	25	23.72	23.78	23.74	
10	QPSK	50	0	23.80	23.81	23.71	24.7
10	16QAM	1	0	24.10	24.02	24.04	
10	16QAM	1	25	23.98	24.06	24.00	
10	16QAM	1	49	23.98	24.07	23.96	23.7
10	16QAM	25	0	22.76	22.70	22.68	
10	16QAM	25	12	22.78	22.81	22.68	
10	16QAM	25	25	22.65	22.77	22.73	23.7
10	16QAM	50	0	22.79	22.80	22.69	
10	64QAM	1	0	21.80	22.30	22.77	
10	64QAM	1	25	22.01	22.95	22.95	23.7
10	64QAM	1	49	22.14	22.96	22.45	
10	64QAM	25	0	20.82	21.71	21.71	
10	64QAM	25	12	20.84	21.84	21.76	22.7
10	64QAM	25	25	20.71	21.81	21.64	
10	64QAM	50	0	20.83	21.77	21.69	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.57	24.69	24.72	25.7
5	QPSK	1	12	24.71	24.65	24.70	
5	QPSK	1	24	24.70	24.68	24.63	
5	QPSK	12	0	23.73	23.76	23.74	24.7
5	QPSK	12	7	23.84	23.79	23.76	
5	QPSK	12	13	23.76	23.76	23.70	
5	QPSK	25	0	23.76	23.76	23.68	24.7
5	16QAM	1	0	23.75	24.01	24.02	
5	16QAM	1	12	23.97	24.03	23.97	
5	16QAM	1	24	23.95	24.02	23.93	23.7
5	16QAM	12	0	22.64	22.80	22.78	
5	16QAM	12	7	22.86	22.80	22.78	
5	16QAM	12	13	22.77	22.77	22.70	23.7
5	16QAM	25	0	22.69	22.81	22.70	
5	64QAM	1	0	21.74	22.06	22.91	
5	64QAM	1	12	21.79	22.94	22.70	23.7
5	64QAM	1	24	21.96	22.96	22.25	
5	64QAM	12	0	20.82	21.49	21.68	
5	64QAM	12	7	21.00	21.86	21.73	22.7
5	64QAM	12	13	20.99	21.81	21.61	
5	64QAM	25	0	20.76	21.59	21.48	



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	18.28	18.29	18.26	20.2		
20	QPSK	1	49	18.22	18.24	18.20			
20	QPSK	1	99	18.20	18.23	18.22			
20	QPSK	50	0	18.33	18.31	18.26	20.2		
20	QPSK	50	24	18.40	18.33	18.34			
20	QPSK	50	50	18.35	18.40	18.35			
20	QPSK	100	0	18.41	18.32	18.37	20.2		
20	16QAM	1	0	18.58	18.62	18.55			
20	16QAM	1	49	18.55	18.53	18.47			
20	16QAM	1	99	18.45	18.50	18.46	20.2		
20	16QAM	50	0	18.32	18.30	18.28			
20	16QAM	50	24	18.39	18.33	18.36			
20	16QAM	50	50	18.38	18.37	18.35	20.2		
20	16QAM	100	0	18.38	18.29	18.35			
20	64QAM	1	0	18.51	18.48	18.46			
20	64QAM	1	49	18.46	18.45	18.44	20.2		
20	64QAM	1	99	18.39	18.46	18.42			
20	64QAM	50	0	18.35	18.35	18.30			
20	64QAM	50	24	18.43	18.37	18.40	20.2		
20	64QAM	50	50	18.39	18.41	18.38			
20	64QAM	100	0	18.40	18.32	18.38			
Channel				18675	18900	19125	Tune-up limit (dBm)		
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	18.21	18.22	18.21	20.2		
15	QPSK	1	37	18.20	18.24	18.24			
15	QPSK	1	74	18.23	18.22	18.22			
15	QPSK	36	0	18.26	18.25	18.20	20.2		
15	QPSK	36	20	18.36	18.24	18.30			
15	QPSK	36	39	18.33	18.40	18.34			
15	QPSK	75	0	18.36	18.28	18.37	20.2		
15	16QAM	1	0	18.50	18.60	18.49			
15	16QAM	1	37	18.52	18.49	18.43			
15	16QAM	1	74	18.39	18.40	18.42	20.2		
15	16QAM	36	0	18.28	18.29	18.22			
15	16QAM	36	20	18.29	18.24	18.27			
15	16QAM	36	39	18.35	18.34	18.28	20.2		
15	16QAM	75	0	18.31	18.32	18.34			
15	64QAM	1	0	18.43	18.40	18.41	20.2		
15	64QAM	1	37	18.44	18.38	18.36			
15	64QAM	1	74	18.30	18.42	18.38			
15	64QAM	36	0	18.31	18.32	18.25	20.2		
15	64QAM	36	20	18.33	18.29	18.39			
15	64QAM	36	39	18.31	18.36	18.32			
15	64QAM	75	0	18.39	18.28	18.34			
Channel				18650	18900	19150		Tune-up limit (dBm)	
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	18.20	18.20	18.24	20.2		
10	QPSK	1	25	18.20	18.22	18.22			
10	QPSK	1	49	18.21	18.22	18.24			
10	QPSK	25	0	18.31	18.24	18.20	20.2		
10	QPSK	25	12	18.33	18.32	18.34			
10	QPSK	25	25	18.29	18.36	18.34			
10	QPSK	50	0	18.36	18.31	18.33	20.2		
10	16QAM	1	0	18.55	18.56	18.49			
10	16QAM	1	25	18.48	18.43	18.45			
10	16QAM	1	49	18.42	18.47	18.43	20.2		
10	16QAM	25	0	18.32	18.25	18.20			
10	16QAM	25	12	18.39	18.23	18.32			
10	16QAM	25	25	18.38	18.30	18.28	20.2		
10	16QAM	50	0	18.33	18.25	18.25			
10	64QAM	1	0	18.42	18.43	18.43	20.2		
10	64QAM	1	25	18.40	18.43	18.38			
10	64QAM	1	49	18.30	18.40	18.36			
10	64QAM	25	0	18.32	18.28	18.21	20.2		
10	64QAM	25	12	18.43	18.37	18.34			
10	64QAM	25	25	18.38	18.38	18.36			
10	64QAM	50	0	18.39	18.23	18.34			
Channel				18625	18900	19175		Tune-up limit (dBm)	
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	18.27	18.22	18.23	20.2		
5	QPSK	1	12	18.21	18.22	18.22			
5	QPSK	1	24	18.21	18.23	18.21			
5	QPSK	12	0	18.26	18.22	18.20	20.2		
5	QPSK	12	7	18.32	18.26	18.25			
5	QPSK	12	13	18.26	18.37	18.30			
5	QPSK	25	0	18.40	18.26	18.29	20.2		
5	16QAM	1	0	18.48	18.61	18.53			
5	16QAM	1	12	18.55	18.52	18.37			
5	16QAM	1	24	18.44	18.48	18.46	20.2		
5	16QAM	12	0	18.25	18.21	18.24			
5	16QAM	12	7	18.33	18.31	18.32			
5	16QAM	12	13	18.33	18.32	18.28	20.2		
5	16QAM	25	0	18.30	18.27	18.33			
5	64QAM	1	0	18.43	18.45	18.40	20.2		
5	64QAM	1	12	18.41	18.45	18.40			
5	64QAM	1	24	18.29	18.44	18.32			
5	64QAM	12	0	18.34	18.27	18.26	20.2		
5	64QAM	12	7	18.40	18.36	18.33			
5	64QAM	12	13	18.35	18.34	18.34			
5	64QAM	25	0	18.35	18.28	18.37			
Channel				18615	18900	19185		Tune-up limit (dBm)	
Frequency (MHz)				1851.5	1880	1908.5			
3	QPSK	1	0	18.23	18.23	18.22	20.2		
3	QPSK	1	8	18.20	18.21	18.23			
3	QPSK	1	14	18.21	18.22	18.22			
3	QPSK	8	0	18.31	18.28	18.24	20.2		
3	QPSK	8	4	18.39	18.32	18.27			
3	QPSK	8	7	18.30	18.37	18.29			
3	QPSK	15	0	18.39	18.28	18.27	20.2		
3	16QAM	1	0	18.55	18.53	18.50			
3	16QAM	1	8	18.50	18.48	18.41			
3	16QAM	1	14	18.40	18.46	18.38	20.2		
3	16QAM	8	0	18.28	18.21	18.22			
3	16QAM	8	4	18.39	18.25	18.29			
3	16QAM	8	7	18.28	18.37	18.34	20.2		
3	16QAM	15	0	18.35	18.20	18.32			
3	64QAM	1	0	18.50	18.42	18.44	20.2		
3	64QAM	1	8	18.44	18.38	18.38			
3	64QAM	1	14	18.39	18.45	18.33			
3	64QAM	8	0	18.31	18.35	18.23	20.2		
3	64QAM	8	4	18.38	18.33	18.32			
3	64QAM	8	7	18.35	18.31	18.31			
3	64QAM	15	0	18.33	18.26	18.32			
Channel				18607	18900	19193		Tune-up limit (dBm)	
Frequency (MHz)				1850.7	1880	1909.3			
1.4	QPSK	1	0	18.21	18.20	18.21	20.2		
1.4	QPSK	1	3	18.21	18.22	18.22			
1.4	QPSK	1	5	18.23	18.20	18.22			
1.4	QPSK	3	0	18.24	18.25	18.24	20.2		
1.4	QPSK	3	1	18.33	18.29	18.31			
1.4	QPSK	3	3	18.31	18.35	18.30			
1.4	QPSK	6	0	18.35	18.30	18.37	20.2		
1.4	16QAM	1	0	18.48	18.44	18.45			
1.4	16QAM	1	3	18.46	18.46	18.44			
1.4	16QAM	1	5	18.42	18.49	18.45	20.2		
1.4	16QAM	3	0	18.31	18.23	18.23			
1.4	16QAM	3	1	18.34	18.26	18.26			
1.4	16QAM	3	3	18.31	18.34	18.26	20.2		
1.4	16QAM	6	0	18.31	18.30	18.31			
1.4	16QAM	6	1	18.34	18.30	18.33			
1.4	16QAM	1	3	18.40	18.44	18.40	20.2		
1.4	64QAM	1	5	18.39	18.40	18.32			
1.4	64QAM	3	1	18.29	18.27	18.23			
1.4	64QAM	3	3	18.33	18.36	18.38	20.2		
1.4	64QAM	3	1	18.37	18.40	18.36			
1.4	64QAM	6	0	18.33	18.33	18.30			



Band 4											
Art 0											
BW (MHz)	Modulation	RB Size	RB Offset	Power Mod Ch / 20050	Power Mid Ch / 20175	Power High Ch / 20300	Tune-up limit (dBm)				
Channel				20050	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	18.94	18.90	18.88	20.8				
20	QPSK	1	49	18.89	18.84	18.86					
20	QPSK	1	99	18.89	18.89	18.90					
20	QPSK	50	0	19.01	18.96	18.98	20.8				
20	QPSK	50	24	19.02	19.03	19.02					
20	QPSK	50	50	18.95	18.89	18.92					
20	QPSK	100	0	18.99	18.99	18.88	20.8				
20	16QAM	1	0	19.31	19.23	19.21					
20	16QAM	1	49	19.13	19.10	19.13					
20	16QAM	1	99	19.19	19.12	19.07	20.8				
20	16QAM	50	0	18.99	18.97	19.00					
20	16QAM	50	24	19.02	19.00	19.02					
20	16QAM	50	50	18.95	18.91	18.95	20.8				
20	16QAM	100	0	18.97	18.99	18.90					
20	64QAM	1	0	19.11	19.09	19.10	20.8				
20	64QAM	1	49	19.00	18.93	18.95					
20	64QAM	1	99	19.02	19.04	19.03					
20	64QAM	50	0	19.00	18.96	18.97	20.8				
20	64QAM	50	24	19.02	18.99	19.00					
20	64QAM	50	50	18.96	18.92	18.93					
20	64QAM	100	0	19.01	18.96	18.93	Tune-up limit (dBm)				
Channel				20025	20175	20325					
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	18.84	18.92	18.94	20.8				
15	QPSK	1	37	18.80	18.80	18.80					
15	QPSK	1	74	18.81	18.80	18.80					
15	QPSK	36	0	19.01	18.95	18.97	20.8				
15	QPSK	36	20	18.93	18.93	18.95					
15	QPSK	36	39	18.91	18.90	18.93					
15	QPSK	75	0	18.97	18.97	18.88	20.8				
15	16QAM	1	0	19.26	19.24	19.27					
15	16QAM	1	37	19.10	19.07	19.12					
15	16QAM	1	74	19.13	19.05	19.10	20.8				
15	16QAM	36	0	19.05	18.94	18.97					
15	16QAM	36	20	18.98	18.93	18.99					
15	16QAM	36	39	18.96	18.88	18.96	20.8				
15	16QAM	75	0	18.99	18.95	18.91					
15	64QAM	1	0	19.08	19.07	19.05					
15	64QAM	1	37	19.04	19.00	19.06	20.8				
15	64QAM	1	74	19.00	18.97	19.00					
15	64QAM	36	0	19.06	18.99	18.97					
15	64QAM	36	20	18.99	18.96	18.97	20.8				
15	64QAM	36	39	18.96	18.92	18.97					
15	64QAM	75	0	18.98	18.97	18.91					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	18.85	18.82	18.85	20.8				
10	QPSK	1	25	18.80	18.80	18.85					
10	QPSK	1	49	18.80	18.81	18.86					
10	QPSK	25	0	18.95	18.88	18.88	20.8				
10	QPSK	25	12	18.99	18.96	18.92					
10	QPSK	25	25	18.98	18.97	19.00					
10	QPSK	50	0	18.99	18.97	18.95	20.8				
10	16QAM	1	0	19.24	19.20	19.23					
10	16QAM	1	25	19.19	19.17	19.24					
10	16QAM	1	49	19.20	19.16	19.23	20.8				
10	16QAM	25	0	18.96	18.93	18.92					
10	16QAM	25	12	18.99	18.97	18.94					
10	16QAM	25	25	18.98	18.93	18.99	20.8				
10	16QAM	50	0	18.99	18.95	18.93					
10	64QAM	1	0	19.17	19.03	19.09					
10	64QAM	1	25	19.15	19.13	19.15	20.8				
10	64QAM	1	49	19.12	19.11	19.11					
10	64QAM	25	0	18.99	18.92	18.93					
10	64QAM	25	12	19.03	19.00	18.98	20.8				
10	64QAM	25	25	19.02	19.00	19.06					
10	64QAM	50	0	19.02	18.99	18.97					
Channel				19975	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	18.88	18.80	18.89	20.8				
5	QPSK	1	12	18.91	18.84	18.92					
5	QPSK	1	24	18.90	18.85	18.91					
5	QPSK	12	0	18.99	18.88	18.94	20.8				
5	QPSK	12	7	19.02	18.95	19.02					
5	QPSK	12	13	19.01	18.95	18.99					
5	QPSK	25	0	18.98	18.94	18.94	20.8				
5	16QAM	1	0	19.22	19.10	19.18					
5	16QAM	1	12	19.26	19.15	19.08					
5	16QAM	1	24	19.26	19.21	19.20	20.8				
5	16QAM	12	0	19.00	18.87	18.98					
5	16QAM	12	7	19.02	18.97	19.02					
5	16QAM	12	13	19.02	18.93	18.99	20.8				
5	16QAM	25	0	18.98	18.97	18.98					
5	64QAM	1	0	19.19	19.08	19.14					
5	64QAM	1	12	19.18	19.10	19.04	20.8				
5	64QAM	1	24	19.22	19.14	19.07					
5	64QAM	12	0	19.06	18.91	19.06					
5	64QAM	12	7	19.09	19.00	19.09	20.8				
5	64QAM	12	13	19.07	19.01	19.05					
5	64QAM	25	0	19.06	18.98	18.99					
Channel				19965	20175	20385	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	18.92	18.80	18.92	20.8				
3	QPSK	1	8	18.95	18.91	18.94					
3	QPSK	1	14	18.90	18.87	18.93					
3	QPSK	8	0	18.96	18.89	18.96	20.8				
3	QPSK	8	4	19.03	18.96	19.03					
3	QPSK	8	7	19.01	18.93	18.99					
3	QPSK	15	0	18.98	18.95	19.00	20.8				
3	16QAM	1	0	19.19	19.09	19.20					
3	16QAM	1	8	19.30	19.23	19.22					
3	16QAM	1	14	19.24	19.17	19.23	20.8				
3	16QAM	8	0	19.03	18.94	18.99					
3	16QAM	8	4	19.08	19.02	19.04					
3	16QAM	8	7	19.05	19.01	18.99	20.8				
3	16QAM	15	0	18.99	18.96	19.00					
3	64QAM	1	0	19.18	19.07	19.10					
3	64QAM	1	8	19.26	19.19	19.15	20.8				
3	64QAM	1	14	19.21	19.13	19.06					
3	64QAM	8	0	19.05	18.91	19.05					
3	64QAM	8	4	19.12	19.01	19.08	20.8				
3	64QAM	8	7	19.07	18.99	19.07					
3	64QAM	15	0	19.03	19.00	19.03					
Channel				19957	20175	20393	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	18.80	18.80	18.80	20.8				
1.4	QPSK	1	3	18.87	18.84	18.87					
1.4	QPSK	1	5	18.82	18.80	18.80					
1.4	QPSK	3	0	18.86	18.80	18.81	20.8				
1.4	QPSK	3	1	18.89	18.83	18.85					
1.4	QPSK	3	3	18.82	18.80	18.84					



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.43	24.46	24.43	25.7
10	QPSK	1	25	24.39	24.46	24.45	
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	24.7
10	QPSK	25	12	23.56	23.57	23.57	
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.56	24.7
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	
10	16QAM	1	49	23.63	23.86	23.78	23.7
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.65	
10	16QAM	25	25	22.54	22.60	22.57	23.7
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	
10	64QAM	1	25	22.73	22.49	22.51	23.7
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.54	21.60	21.58	
10	64QAM	25	12	21.63	21.53	21.47	22.7
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.46	24.46	24.45	25.7
5	QPSK	1	12	24.44	24.46	24.19	
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	24.7
5	QPSK	12	7	23.54	23.61	23.25	
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.54	23.52	23.37	24.7
5	16QAM	1	0	23.91	23.90	23.87	
5	16QAM	1	12	23.78	23.86	23.43	
5	16QAM	1	24	23.79	23.83	23.43	23.7
5	16QAM	12	0	22.65	22.62	22.60	
5	16QAM	12	7	22.57	22.64	22.38	
5	16QAM	12	13	22.52	22.59	22.35	23.7
5	16QAM	25	0	22.57	22.59	22.51	
5	64QAM	1	0	22.87	22.79	22.18	
5	64QAM	1	12	22.72	22.71	21.72	23.7
5	64QAM	1	24	22.72	22.73	21.73	
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.56	21.85	22.7
5	64QAM	12	13	21.60	21.61	20.71	
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	25.7
3	QPSK	1	8	24.43	24.45	24.13	
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	24.7
3	QPSK	8	4	23.55	23.62	23.16	
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.58	23.17	24.7
3	16QAM	1	0	23.87	23.84	23.44	
3	16QAM	1	8	23.89	23.89	23.38	
3	16QAM	1	14	23.74	23.82	23.44	23.7
3	16QAM	8	0	22.66	22.61	22.26	
3	16QAM	8	4	22.66	22.71	22.30	
3	16QAM	8	7	22.60	22.65	22.40	23.7
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	
3	64QAM	1	8	22.63	22.74	21.72	23.7
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	
3	64QAM	8	4	21.66	21.56	20.73	22.7
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.42	24.41	24.09	25.7
1.4	QPSK	1	3	24.46	24.45	24.26	
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	24.7
1.4	QPSK	3	1	24.46	24.46	24.30	
1.4	QPSK	3	3	24.41	24.45	24.42	
1.4	QPSK	6	0	23.50	23.51	23.36	24.7
1.4	16QAM	1	0	23.75	23.73	23.46	
1.4	16QAM	1	3	23.79	23.84	23.67	
1.4	16QAM	1	5	23.68	23.74	23.60	24.7
1.4	16QAM	3	0	23.56	23.51	23.29	
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	23.7
1.4	16QAM	6	0	22.58	22.61	22.49	
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	23.7
1.4	64QAM	1	5	22.64	22.61	21.72	
1.4	64QAM	3	0	22.66	22.60	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	22.7
1.4	64QAM	3	3	22.63	22.60	21.75	
1.4	64QAM	6	0	21.54	21.47	20.72	



Band 7							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.81	20.82	20.83	22.8
20	QPSK	1	49	20.80	20.86	20.81	
20	QPSK	1	99	20.83	20.92	20.89	
20	QPSK	50	0	20.82	20.91	20.93	22.8
20	QPSK	50	24	20.84	20.92	20.96	
20	QPSK	50	50	20.95	21.03	21.02	
20	QPSK	100	0	20.92	20.94	20.93	22.8
20	16QAM	1	0	21.06	21.11	21.16	
20	16QAM	1	49	21.13	21.18	21.17	
20	16QAM	1	99	21.14	21.27	21.23	22.8
20	16QAM	50	0	20.81	20.99	20.94	
20	16QAM	50	24	20.93	20.97	20.96	
20	16QAM	50	50	20.95	21.05	21.03	22.8
20	16QAM	100	0	20.92	20.90	20.93	
20	64QAM	1	0	20.87	20.98	20.99	
20	64QAM	1	49	20.96	21.06	20.98	22.8
20	64QAM	1	99	21.02	21.14	21.12	
20	64QAM	50	0	20.83	20.91	20.93	
20	64QAM	50	24	20.94	20.96	20.96	22.8
20	64QAM	50	50	20.95	21.03	21.05	
20	64QAM	100	0	20.92	20.94	20.94	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.81	20.82	20.81	22.8
15	QPSK	1	37	20.81	20.83	20.81	
15	QPSK	1	74	20.80	20.83	20.85	
15	QPSK	36	0	20.82	20.86	20.91	22.8
15	QPSK	36	20	20.92	20.82	20.89	
15	QPSK	36	39	20.95	20.95	21.00	
15	QPSK	75	0	20.85	20.90	20.91	22.8
15	16QAM	1	0	20.99	21.11	21.14	
15	16QAM	1	37	21.07	21.14	21.11	
15	16QAM	1	74	21.05	21.21	21.18	22.8
15	16QAM	36	0	20.81	20.86	20.92	
15	16QAM	36	20	20.86	20.91	20.94	
15	16QAM	36	39	20.95	21.04	20.93	22.8
15	16QAM	75	0	20.83	20.87	20.93	
15	64QAM	1	0	20.80	20.95	20.89	
15	64QAM	1	37	20.91	20.98	20.95	22.8
15	64QAM	1	74	21.00	21.07	21.12	
15	64QAM	36	0	20.80	20.89	20.85	
15	64QAM	36	20	20.93	20.96	20.95	22.8
15	64QAM	36	39	20.88	21.02	20.96	
15	64QAM	75	0	20.85	20.94	20.86	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.80	20.82	20.80	22.8
10	QPSK	1	25	20.83	20.83	20.81	
10	QPSK	1	49	20.81	20.83	20.84	
10	QPSK	25	0	20.82	20.85	20.93	22.8
10	QPSK	25	12	20.84	20.83	20.85	
10	QPSK	25	25	20.85	21.00	20.98	
10	QPSK	50	0	20.83	20.94	20.87	22.8
10	16QAM	1	0	21.04	21.10	21.13	
10	16QAM	1	25	21.13	21.11	21.12	
10	16QAM	1	49	21.06	21.26	21.16	22.8
10	16QAM	25	0	20.81	20.82	20.91	
10	16QAM	25	12	20.93	20.93	20.86	
10	16QAM	25	25	20.95	21.02	20.98	22.8
10	16QAM	50	0	20.90	20.85	20.91	
10	64QAM	1	0	20.83	20.92	20.98	
10	64QAM	1	25	20.96	20.96	20.88	22.8
10	64QAM	1	49	20.96	21.06	21.03	
10	64QAM	25	0	20.88	20.89	20.93	
10	64QAM	25	12	20.87	20.95	20.96	22.8
10	64QAM	25	25	20.95	20.94	20.95	
10	64QAM	50	0	20.87	20.89	20.92	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.83	20.80	20.82	22.8
5	QPSK	1	12	20.82	20.84	20.85	
5	QPSK	1	24	20.83	20.83	20.86	
5	QPSK	12	0	20.85	20.86	20.91	22.8
5	QPSK	12	7	20.88	20.87	20.89	
5	QPSK	12	13	20.88	20.94	20.95	
5	QPSK	25	0	20.87	20.87	20.93	22.8
5	16QAM	1	0	20.96	21.06	21.12	
5	16QAM	1	12	21.07	21.18	21.14	
5	16QAM	1	24	21.14	21.25	21.23	22.8
5	16QAM	12	0	20.83	20.87	20.92	
5	16QAM	12	7	20.93	20.86	20.91	
5	16QAM	12	13	20.90	20.96	20.95	22.8
5	16QAM	25	0	20.82	20.82	20.89	
5	64QAM	1	0	20.81	20.96	20.93	
5	64QAM	1	12	20.90	20.98	20.97	22.8
5	64QAM	1	24	20.97	21.08	21.10	
5	64QAM	12	0	20.87	20.89	20.90	
5	64QAM	12	7	20.93	20.89	20.87	22.8
5	64QAM	12	13	20.91	20.96	21.05	
5	64QAM	25	0	20.86	20.87	20.90	



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	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	25.7
10	QPSK	1	25	24.58	24.57	24.54	
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.64	23.68	23.68	24.7
10	QPSK	25	12	23.74	23.70	23.69	
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	24.7
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	
10	16QAM	1	49	24.00	24.00	23.96	23.7
10	16QAM	25	0	22.96	22.71	22.88	
10	16QAM	25	12	22.75	22.69	22.68	
10	16QAM	25	25	22.70	22.75	22.71	22.7
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	22.7
10	64QAM	1	49	22.58	22.88	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.59	24.56	25.7
5	QPSK	1	12	24.60	24.62	24.60	
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	24.7
5	QPSK	12	7	23.69	23.69	23.74	
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	24.7
5	16QAM	1	0	23.96	23.92	23.87	
5	16QAM	1	12	23.98	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	23.7
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	
5	16QAM	12	13	22.69	22.76	22.68	23.7
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.42	22.84	
5	64QAM	1	12	22.83	22.87	22.86	22.7
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	
5	64QAM	12	7	21.65	21.76	21.81	22.7
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	25.7
3	QPSK	1	8	24.62	24.62	24.60	
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	24.7
3	QPSK	8	4	23.69	23.94	22.71	
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	24.7
3	16QAM	1	0	24.00	24.02	23.95	
3	16QAM	1	8	23.96	23.98	23.98	
3	16QAM	1	14	23.91	23.96	23.91	23.7
3	16QAM	8	0	22.75	22.71	22.71	
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	23.7
3	16QAM	15	0	22.73	22.69	22.68	
3	64QAM	1	0	22.46	22.70	22.87	
3	64QAM	1	8	22.67	22.88	22.90	22.7
3	64QAM	1	14	22.66	22.94	22.81	
3	64QAM	8	0	21.50	21.75	21.71	
3	64QAM	8	4	21.58	21.74	21.79	22.7
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	25.7
1.4	QPSK	1	3	24.60	24.61	24.57	
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	24.7
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	
1.4	QPSK	6	0	23.62	23.64	23.59	24.7
1.4	16QAM	1	0	23.87	23.93	23.87	
1.4	16QAM	1	3	23.89	23.96	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	24.7
1.4	16QAM	3	0	23.64	23.58	23.62	
1.4	16QAM	3	1	23.73	23.66	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	23.7
1.4	16QAM	6	0	22.71	22.71	22.67	
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	23.7
1.4	64QAM	1	5	22.74	22.78	22.68	
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	22.7
1.4	64QAM	3	3	22.60	22.77	22.77	
1.4	64QAM	6	0	21.44	21.65	21.61	

Band 13							
Ann 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)				782			
10	QPSK	1	0		24.17		25.2
10	QPSK	1	25		24.10		
10	QPSK	1	49		24.14		
10	QPSK	25	0		23.17		24.2
10	QPSK	25	12		23.21		
10	QPSK	25	25		23.21		
10	QPSK	50	0		23.20		24.2
10	16QAM	1	0		23.42		
10	16QAM	1	25		23.45		
10	16QAM	1	49		23.42		23.2
10	16QAM	25	0		22.20		
10	16QAM	25	12		22.23		
10	16QAM	25	25		22.20		23.2
10	16QAM	50	0		22.23		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.40		23.2
10	64QAM	1	49		22.34		
10	64QAM	25	0		21.24		
10	64QAM	25	12		21.23		22.2
10	64QAM	25	25		21.25		
10	64QAM	50	0		21.26		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.18	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.23	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.28	21.25	
5	64QAM	25	0	20.96	21.26	21.23	

Band 14							
Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch.	Power Middle Ch.	Power High Ch.	Tune-up limit (dbm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.59		25.7
10	QPSK	1	25		24.53		
10	QPSK	1	49		24.43		
10	QPSK	25	0		23.56		24.7
10	QPSK	25	12		23.56		
10	QPSK	25	25		23.59		
10	QPSK	50	0		23.53		24.7
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.92		
10	16QAM	1	49		23.83		23.7
10	16QAM	25	0		22.95		
10	16QAM	25	12		22.53		
10	16QAM	25	25		22.58		22.7
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.64		23.7
10	64QAM	1	49		22.72		
10	64QAM	25	0		21.39		
10	64QAM	25	12		21.38		22.7
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.44		
Channel				23305	23330	23355	Tune-up limit (dbm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.56	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	24.7
5	QPSK	12	7	23.66	23.57	23.53	
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.58	23.53	23.50	24.7
5	16QAM	1	0	23.63	23.60	23.62	
5	16QAM	1	12	23.68	23.66	23.67	
5	16QAM	1	24	23.87	23.80	23.78	23.7
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.58	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.49	
5	64QAM	1	12	22.57	22.35	22.58	23.7
5	64QAM	1	24	22.32	22.41	22.77	
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.28	21.63	22.7
5	64QAM	12	13	21.31	21.27	21.61	
5	64QAM	25	0	21.34	21.26	21.51	

Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.60	24.58	24.55	25.7
10	QPSK	1	25	24.61	24.62	24.59	
10	QPSK	1	49	24.64	24.67	24.63	
10	QPSK	25	0	23.65	23.68	23.66	24.7
10	QPSK	25	12	23.79	23.75	23.70	
10	QPSK	25	25	23.81	23.82	23.80	
10	QPSK	50	0	23.69	23.72	23.69	24.7
10	16QAM	1	0	23.93	23.95	23.94	
10	16QAM	1	25	24.03	24.06	24.01	
10	16QAM	1	49	24.01	24.02	23.98	23.7
10	16QAM	25	0	22.86	22.85	22.85	
10	16QAM	25	12	22.79	22.75	22.73	
10	16QAM	25	25	22.78	22.77	22.78	23.7
10	16QAM	50	0	22.69	22.69	22.67	
10	64QAM	1	0	22.64	22.70	22.79	23.7
10	64QAM	1	25	22.72	22.67	22.63	
10	64QAM	1	49	22.84	22.76	22.59	
10	64QAM	25	0	21.42	21.42	21.41	22.7
10	64QAM	25	12	21.51	21.48	21.48	
10	64QAM	25	25	21.61	21.67	21.66	
10	64QAM	50	0	21.53	21.64	21.57	
Channel				23785	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.57	24.58	24.58	25.7
5	QPSK	1	12	24.66	24.65	24.63	
5	QPSK	1	24	24.65	24.66	24.64	
5	QPSK	12	0	23.66	23.69	23.67	24.7
5	QPSK	12	7	23.76	23.76	23.78	
5	QPSK	12	13	23.74	23.77	23.73	
5	QPSK	25	0	23.74	23.71	23.75	24.7
5	16QAM	1	0	23.91	23.93	23.91	
5	16QAM	1	12	23.95	23.97	23.96	
5	16QAM	1	24	24.00	24.05	23.99	23.7
5	16QAM	12	0	22.73	22.71	22.74	
5	16QAM	12	7	22.79	22.77	22.79	
5	16QAM	12	13	22.77	22.80	22.77	23.7
5	16QAM	25	0	22.74	22.76	22.77	
5	64QAM	1	0	22.26	22.42	22.71	
5	64QAM	1	12	22.62	22.61	22.61	22.7
5	64QAM	1	24	22.53	22.52	22.48	
5	64QAM	12	0	21.55	21.47	21.65	
5	64QAM	12	7	21.69	21.47	21.76	22.7
5	64QAM	12	13	21.66	21.50	21.70	
5	64QAM	25	0	21.52	21.44	21.59	



Band 25							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	18.30	18.31	18.23	20.2
20	QPSK	1	49	18.21	18.26	18.23	
20	QPSK	1	99	18.24	18.20	18.21	
20	QPSK	50	0	18.35	18.32	18.28	20.2
20	QPSK	50	24	18.40	18.43	18.35	
20	QPSK	50	50	18.33	18.37	18.33	
20	QPSK	100	0	18.40	18.42	18.29	20.2
20	16QAM	1	0	18.65	18.63	18.61	
20	16QAM	1	49	18.57	18.61	18.55	
20	16QAM	1	99	18.46	18.55	18.48	20.2
20	16QAM	50	0	18.36	18.39	18.33	
20	16QAM	50	24	18.40	18.45	18.31	
20	16QAM	50	50	18.36	18.41	18.36	20.2
20	16QAM	100	0	18.39	18.40	18.32	
20	64QAM	1	0	18.55	18.49	18.48	
20	64QAM	1	49	18.49	18.51	18.43	20.2
20	64QAM	1	99	18.44	18.43	18.47	
20	64QAM	50	0	18.38	18.39	18.32	
20	64QAM	50	24	18.42	18.46	18.33	20.2
20	64QAM	50	50	18.36	18.39	18.37	
20	64QAM	100	0	18.39	18.44	18.31	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	18.30	18.22	18.20	20.2
15	QPSK	1	37	18.24	18.25	18.21	
15	QPSK	1	74	18.22	18.23	18.21	
15	QPSK	36	0	18.29	18.25	18.25	20.2
15	QPSK	36	20	18.30	18.39	18.28	
15	QPSK	36	39	18.28	18.33	18.28	
15	QPSK	75	0	18.31	18.36	18.28	20.2
15	16QAM	1	0	18.64	18.63	18.55	
15	16QAM	1	37	18.57	18.58	18.52	
15	16QAM	1	74	18.37	18.45	18.43	20.2
15	16QAM	36	0	18.32	18.31	18.27	
15	16QAM	36	20	18.34	18.43	18.31	
15	16QAM	36	39	18.32	18.41	18.29	20.2
15	16QAM	75	0	18.39	18.31	18.32	
15	64QAM	1	0	18.50	18.44	18.45	
15	64QAM	1	37	18.39	18.50	18.34	20.2
15	64QAM	1	74	18.42	18.40	18.44	
15	64QAM	36	0	18.31	18.29	18.22	
15	64QAM	36	20	18.33	18.45	18.24	20.2
15	64QAM	36	39	18.33	18.37	18.37	
15	64QAM	75	0	18.30	18.43	18.25	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1885	1880	1910	
10	QPSK	1	0	18.23	18.27	18.22	20.2
10	QPSK	1	25	18.21	18.25	18.21	
10	QPSK	1	49	18.24	18.23	18.23	
10	QPSK	25	0	18.31	18.27	18.24	20.2
10	QPSK	25	12	18.30	18.36	18.26	
10	QPSK	25	25	18.23	18.37	18.27	
10	QPSK	50	0	18.34	18.37	18.26	20.2
10	16QAM	1	0	18.63	18.53	18.52	
10	16QAM	1	25	18.50	18.52	18.52	
10	16QAM	1	49	18.36	18.50	18.43	20.2
10	16QAM	25	0	18.33	18.35	18.27	
10	16QAM	25	12	18.40	18.44	18.21	
10	16QAM	25	25	18.34	18.34	18.34	20.2
10	16QAM	50	0	18.29	18.31	18.26	
10	64QAM	1	0	18.53	18.40	18.45	
10	64QAM	1	25	18.48	18.41	18.41	20.2
10	64QAM	1	49	18.34	18.33	18.36	
10	64QAM	25	0	18.31	18.34	18.24	
10	64QAM	25	12	18.40	18.45	18.32	20.2
10	64QAM	25	25	18.28	18.32	18.28	
10	64QAM	50	0	18.34	18.42	18.27	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.29	18.31	18.22	20.2
5	QPSK	1	12	18.25	18.20	18.23	
5	QPSK	1	24	18.24	18.22	18.24	
5	QPSK	12	0	18.32	18.25	18.23	20.2
5	QPSK	12	7	18.30	18.37	18.25	
5	QPSK	12	13	18.24	18.29	18.23	
5	QPSK	25	0	18.39	18.36	18.21	20.2
5	16QAM	1	0	18.57	18.56	18.51	
5	16QAM	1	12	18.48	18.58	18.45	
5	16QAM	1	24	18.37	18.55	18.44	20.2
5	16QAM	12	0	18.30	18.39	18.26	
5	16QAM	12	7	18.32	18.43	18.24	
5	16QAM	12	13	18.29	18.34	18.28	20.2
5	16QAM	25	0	18.36	18.33	18.24	
5	64QAM	1	0	18.55	18.47	18.45	
5	64QAM	1	12	18.42	18.42	18.38	20.2
5	64QAM	1	24	18.41	18.40	18.43	
5	64QAM	12	0	18.30	18.33	18.28	
5	64QAM	12	7	18.41	18.39	18.26	20.2
5	64QAM	12	13	18.34	18.36	18.31	
5	64QAM	25	0	18.38	18.43	18.25	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.22	18.24	18.24	20.2
3	QPSK	1	8	18.23	18.21	18.20	
3	QPSK	1	14	18.21	18.22	18.21	
3	QPSK	8	0	18.35	18.28	18.28	20.2
3	QPSK	8	4	18.30	18.36	18.33	
3	QPSK	8	7	18.29	18.35	18.33	
3	QPSK	15	0	18.35	18.40	18.26	20.2
3	16QAM	1	0	18.59	18.53	18.61	
3	16QAM	1	8	18.52	18.53	18.50	
3	16QAM	1	14	18.36	18.51	18.39	20.2
3	16QAM	8	0	18.32	18.34	18.32	
3	16QAM	8	4	18.31	18.43	18.29	
3	16QAM	8	7	18.31	18.32	18.28	20.2
3	16QAM	15	0	18.34	18.35	18.31	
3	64QAM	1	0	18.52	18.44	18.45	
3	64QAM	1	8	18.45	18.50	18.33	20.2
3	64QAM	1	14	18.41	18.37	18.47	
3	64QAM	8	0	18.36	18.30	18.31	
3	64QAM	8	4	18.34	18.42	18.32	20.2
3	64QAM	8	7	18.32	18.35	18.37	
3	64QAM	15	0	18.33	18.41	18.27	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	18.30	18.26	18.24	20.2
1.4	QPSK	1	3	18.23	18.25	18.21	
1.4	QPSK	1	5	18.24	18.25	18.22	
1.4	QPSK	3	0	18.25	18.32	18.23	20.2
1.4	QPSK	3	1	18.38	18.33	18.35	
1.4	QPSK	3	3	18.32	18.28	18.33	
1.4	QPSK	6	0	18.37	18.42	18.24	20.2
1.4	16QAM	1	0	18.55	18.55	18.56	
1.4	16QAM	1	3	18.49	18.57	18.55	
1.4	16QAM	1	5	18.44	18.48	18.42	20.2
1.4	16QAM	3	0	18.28	18.30	18.28	
1.4	16QAM	3	1	18.35	18.45	18.28	
1.4	16QAM	3	3	18.34	18.36	18.29	20.2
1.4	16QAM	6	0	18.39	18.34	18.22	
1.4	64QAM	1	0	18.54	18.41	18.40	
1.4	64QAM	1	3	18.45	18.46	18.40	20.2
1.4	64QAM	1	5	18.42	18.38	18.45	
1.4	64QAM	3	0	18.37	18.28	18.30	
1.4	64QAM	3	1	18.33	18.36	18.33	20.2
1.4	64QAM	3	3	18.29	18.35	18.34	
1.4	64QAM	6	0	18.30	18.40	18.21	



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26745	26865	26995	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.45	24.40	24.62	25.7
15	QPSK	1	37	24.34	24.39	24.41	
15	QPSK	1	74	24.35	24.39	24.31	
15	QPSK	36	0	23.51	23.51	23.54	24.7
15	QPSK	36	20	23.52	23.49	23.50	
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	24.7
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	
15	16QAM	1	74	23.64	23.68	23.59	23.7
15	16QAM	36	0	22.51	22.54	22.58	
15	16QAM	36	20	22.53	22.51	22.50	
15	16QAM	36	39	22.50	22.53	22.54	23.7
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	23.7
15	64QAM	1	37	22.43	22.68	22.68	
15	64QAM	1	74	22.57	22.61	21.80	
15	64QAM	36	0	21.21	21.58	21.60	22.7
15	64QAM	36	20	21.40	21.53	21.54	
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	Tune-up limit (dBm)
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	25.7
10	QPSK	1	25	24.44	24.47	24.45	
10	QPSK	1	49	24.46	24.49	24.37	
10	QPSK	25	0	23.64	23.58	23.57	24.7
10	QPSK	25	12	23.58	23.54	23.57	
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.57	23.53	23.49	24.7
10	16QAM	1	0	23.92	23.87	23.87	
10	16QAM	1	25	23.85	23.87	23.86	
10	16QAM	1	49	23.86	23.90	23.75	23.7
10	16QAM	25	0	22.62	22.57	22.57	
10	16QAM	25	12	22.60	22.55	22.57	
10	16QAM	25	25	22.53	22.58	22.53	23.7
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.75	
10	64QAM	1	25	22.33	22.80	22.64	23.7
10	64QAM	1	49	22.74	22.81	21.98	
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.16	21.61	21.57	22.7
10	64QAM	25	25	21.31	21.58	20.89	
10	64QAM	50	0	21.25	21.57	21.38	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	
5	QPSK	1	12	24.56	24.55	24.17	25.7
5	QPSK	1	24	24.46	24.53	24.41	
5	QPSK	12	0	23.64	23.59	23.60	24.7
5	QPSK	12	7	23.63	23.63	23.33	
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	24.7
5	16QAM	1	0	23.95	23.85	23.86	
5	16QAM	1	12	23.84	23.87	23.49	
5	16QAM	1	24	23.77	23.88	23.69	23.7
5	16QAM	12	0	22.71	22.85	22.81	
5	16QAM	12	7	22.67	22.64	22.48	
5	16QAM	12	13	22.55	22.59	22.45	23.7
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	
5	64QAM	1	12	22.31	22.76	21.70	23.7
5	64QAM	1	24	22.14	22.79	21.71	
5	64QAM	12	0	21.36	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.58	20.73	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	
3	QPSK	1	8	24.60	24.57	24.26	25.7
3	QPSK	1	14	24.46	24.50	24.37	
3	QPSK	8	0	23.89	23.57	23.20	24.7
3	QPSK	8	4	23.68	23.63	23.32	
3	QPSK	8	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.58	23.29	24.7
3	16QAM	1	0	23.93	23.83	23.53	
3	16QAM	1	8	23.92	23.91	23.53	
3	16QAM	1	14	23.81	23.90	23.67	23.7
3	16QAM	8	0	22.74	22.63	22.36	
3	16QAM	8	4	22.75	22.67	22.45	
3	16QAM	8	7	22.65	22.66	22.54	23.7
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	
3	64QAM	1	8	22.49	22.84	21.84	23.7
3	64QAM	1	14	22.30	22.80	21.76	
3	64QAM	8	0	21.40	21.65	20.75	
3	64QAM	8	4	21.44	21.72	20.79	22.7
3	64QAM	8	7	21.37	21.63	20.72	
3	64QAM	15	0	21.36	21.60	20.82	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	
1.4	QPSK	1	3	24.56	24.54	24.39	25.7
1.4	QPSK	1	5	24.45	24.41	24.28	
1.4	QPSK	3	0	24.56	24.43	24.39	24.7
1.4	QPSK	3	1	24.58	24.46	24.40	
1.4	QPSK	3	3	24.53	24.46	24.36	
1.4	QPSK	6	0	23.80	23.53	23.42	24.7
1.4	16QAM	1	0	23.86	23.73	23.57	
1.4	16QAM	1	3	23.90	23.90	23.76	
1.4	16QAM	1	5	23.79	23.75	23.66	24.7
1.4	16QAM	3	0	23.62	23.52	23.44	
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	23.7
1.4	16QAM	6	0	22.66	22.58	22.52	
1.4	64QAM	1	0	22.39	22.67	21.78	
1.4	64QAM	1	3	22.45	22.75	21.75	23.7
1.4	64QAM	1	5	22.41	22.65	21.74	
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	22.7
1.4	64QAM	3	3	22.43	22.64	21.82	
1.4	64QAM	6	0	21.34	21.56	20.84	

Band 30							
Annex							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				2771.0			
Frequency (MHz)				231.0			
10	QPSK	1	0		20.72		22.3
10	QPSK	1	25		20.49		
10	QPSK	1	49		20.50		
10	QPSK	25	0		20.56		22.3
10	QPSK	25	12		20.61		
10	QPSK	25	25		20.70		
10	QPSK	50	0		20.59		22.3
10	16QAM	1	0		20.87		
10	16QAM	1	25		20.86		
10	16QAM	1	49		20.88		22.3
10	16QAM	25	0		20.53		
10	16QAM	25	12		20.56		
10	16QAM	25	25		20.68		22.3
10	16QAM	50	0		20.56		
10	64QAM	1	0		20.74		
10	64QAM	1	25		20.80		22.3
10	64QAM	1	49		20.77		
10	64QAM	25	0		19.75		
10	64QAM	25	12		19.81		21.3
10	64QAM	25	25		19.89		
10	64QAM	50	0		19.78		
Channel				2788.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	231.0	2312.5	
5	QPSK	1	0	20.44	20.48	20.45	22.3
5	QPSK	1	12	20.53	20.62	20.56	
5	QPSK	1	24	20.60	20.60	20.52	
5	QPSK	12	0	20.63	20.55	20.59	22.3
5	QPSK	12	7	20.66	20.67	20.62	
5	QPSK	12	13	20.65	20.66	20.59	
5	QPSK	25	0	20.66	20.54	20.55	22.3
5	16QAM	1	0	20.77	20.76	20.76	
5	16QAM	1	12	20.87	20.85	20.86	
5	16QAM	1	24	20.81	20.82	20.85	22.3
5	16QAM	12	0	20.60	20.53	20.59	
5	16QAM	12	7	20.64	20.65	20.65	
5	16QAM	12	13	20.65	20.64	20.64	22.3
5	16QAM	25	0	20.64	20.57	20.63	
5	64QAM	1	0	20.70	20.71	20.72	
5	64QAM	1	12	20.73	20.75	20.74	22.3
5	64QAM	1	24	20.82	20.83	20.84	
5	64QAM	12	0	19.84	19.80	19.83	
5	64QAM	12	7	19.89	19.89	19.87	21.3
5	64QAM	12	13	19.90	19.89	19.87	
5	64QAM	25	0	19.84	19.77	19.81	



Band 66							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132322	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.83	18.90	18.88	20.8
20	QPSK	1	49	18.80	18.82	18.86	
20	QPSK	1	99	18.82	18.88	18.82	
20	QPSK	50	0	18.80	18.81	18.80	20.8
20	QPSK	50	24	18.80	18.82	18.81	
20	QPSK	50	50	18.81	18.83	18.81	
20	QPSK	100	0	18.86	18.84	18.94	20.8
20	16QAM	1	0	19.13	19.15	19.23	
20	16QAM	1	49	19.04	19.08	19.11	
20	16QAM	1	99	19.19	19.09	19.08	20.8
20	16QAM	50	0	18.87	18.91	18.98	
20	16QAM	50	24	18.94	18.90	18.93	
20	16QAM	50	50	18.91	18.94	19.00	20.8
20	16QAM	100	0	18.90	18.88	18.96	
20	64QAM	1	0	19.04	19.05	19.03	20.8
20	64QAM	1	49	18.92	18.91	18.87	
20	64QAM	1	99	19.06	19.05	18.97	
20	64QAM	50	0	18.89	18.93	19.01	20.8
20	64QAM	50	24	18.95	18.90	18.94	
20	64QAM	50	50	18.92	18.95	18.98	
20	64QAM	100	0	18.93	18.88	18.95	Tune-up limit (dBm)
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.80	18.83	18.88	20.8
15	QPSK	1	37	18.80	18.80	18.80	
15	QPSK	1	74	18.80	18.82	18.80	
15	QPSK	36	0	18.81	18.90	18.94	20.8
15	QPSK	36	20	18.86	18.83	18.93	
15	QPSK	36	39	18.88	18.91	18.99	
15	QPSK	75	0	18.89	18.86	18.94	20.8
15	16QAM	1	0	19.12	19.15	19.17	
15	16QAM	1	37	19.03	19.06	19.12	
15	16QAM	1	74	19.12	19.13	19.10	20.8
15	16QAM	36	0	18.86	18.90	18.95	
15	16QAM	36	20	18.92	18.86	18.90	
15	16QAM	36	39	18.90	18.95	18.98	20.8
15	16QAM	75	0	18.94	18.97	18.94	
15	64QAM	1	0	19.04	18.96	19.04	
15	64QAM	1	37	18.96	19.00	19.04	20.8
15	64QAM	1	74	19.02	19.04	19.02	
15	64QAM	36	0	18.87	18.94	18.97	
15	64QAM	36	20	18.91	18.89	18.93	20.8
15	64QAM	36	39	18.91	18.97	19.00	
15	64QAM	75	0	18.92	18.89	18.93	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.81	18.83	18.89	20.8
10	QPSK	1	25	18.80	18.83	18.88	
10	QPSK	1	49	18.80	18.82	18.88	
10	QPSK	25	0	18.82	18.86	18.92	20.8
10	QPSK	25	12	18.90	18.89	18.94	
10	QPSK	25	25	18.86	18.95	18.98	
10	QPSK	50	0	18.89	18.90	18.96	20.8
10	16QAM	1	0	19.21	19.22	19.17	
10	16QAM	1	25	19.12	19.20	19.14	
10	16QAM	1	49	19.12	19.17	19.15	20.8
10	16QAM	25	0	18.91	18.99	18.96	
10	16QAM	25	12	18.94	18.91	18.99	
10	16QAM	25	25	18.89	18.96	19.00	20.8
10	16QAM	50	0	18.92	18.89	18.95	
10	64QAM	1	0	19.04	19.07	19.11	
10	64QAM	1	25	19.05	19.11	19.18	20.8
10	64QAM	1	49	18.99	19.09	19.20	
10	64QAM	25	0	18.92	18.92	19.00	
10	64QAM	25	12	18.95	18.93	19.03	20.8
10	64QAM	25	25	18.90	18.96	19.08	
10	64QAM	50	0	18.94	18.92	19.02	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.80	18.80	18.87	20.8
5	QPSK	1	12	18.87	18.80	18.95	
5	QPSK	1	24	18.80	18.84	18.91	
5	QPSK	12	0	18.92	18.88	19.00	20.8
5	QPSK	12	7	18.93	18.96	19.06	
5	QPSK	12	13	18.92	18.95	19.02	
5	QPSK	25	0	18.91	18.87	18.99	20.8
5	16QAM	1	0	19.14	19.11	19.16	
5	16QAM	1	12	19.18	19.14	19.19	
5	16QAM	1	24	19.10	19.19	19.20	20.8
5	16QAM	12	0	18.93	18.93	19.06	
5	16QAM	12	7	18.96	19.02	19.08	
5	16QAM	12	13	18.95	18.99	19.02	20.8
5	16QAM	25	0	18.92	18.92	19.03	
5	64QAM	1	0	19.10	19.04	19.14	
5	64QAM	1	12	19.11	19.11	19.12	20.8
5	64QAM	1	24	19.07	19.09	19.09	
5	64QAM	12	0	18.96	18.97	19.12	
5	64QAM	12	7	18.97	19.02	19.11	20.8
5	64QAM	12	13	18.96	19.00	19.10	
5	64QAM	25	0	18.91	18.89	19.05	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.82	18.80	18.82	20.8
3	QPSK	1	8	18.91	18.86	18.86	
3	QPSK	1	14	18.86	18.80	18.84	
3	QPSK	8	0	18.89	18.83	18.82	20.8
3	QPSK	8	4	18.86	18.90	18.93	
3	QPSK	8	7	18.93	18.89	18.90	
3	QPSK	15	0	18.91	18.81	18.91	20.8
3	16QAM	1	0	19.07	19.06	19.16	
3	16QAM	1	8	19.15	19.11	19.16	
3	16QAM	1	14	19.15	19.09	19.13	20.8
3	16QAM	8	0	18.90	18.85	18.96	
3	16QAM	8	4	18.99	18.94	18.98	
3	16QAM	8	7	18.99	18.92	18.93	20.8
3	16QAM	15	0	18.96	18.83	18.93	
3	64QAM	1	0	19.05	18.97	19.08	
3	64QAM	1	8	19.15	19.13	19.09	20.8
3	64QAM	1	14	19.07	19.06	19.00	
3	64QAM	8	0	18.97	18.89	18.96	
3	64QAM	8	4	19.04	18.99	19.01	20.8
3	64QAM	8	7	19.00	18.95	18.97	
3	64QAM	15	0	18.97	18.86	18.95	
Channel				131979	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.81	18.87	18.91	20.8
1.4	QPSK	1	3	18.85	18.91	18.96	
1.4	QPSK	1	5	18.80	18.83	18.89	
1.4	QPSK	3	0	18.84	18.90	18.92	20.8
1.4	QPSK	3	1	18.89	18.94	18.96	
1.4	QPSK	3	3	18.85	18.90	18.93	
1.4	QPSK	6	0	18.91	18.96	19.00	20.8
1.4	16QAM	1	0	19.15	19.20	19.22	
1.4	16QAM	1	3	19.22	19.08	19.11	
1.4	16QAM	1	5	19.15	19.17	19.22	20.8
1.4	16QAM	3	0	18.94	18.97	18.99	
1.4	16QAM	3	1	19.02	19.01	19.06	
1.4	16QAM	3	3	18.92	18.97	19.01	20.8
1.4	16QAM	6	0	18.96	19.04	19.10	
1.4	64QAM	1	0	19.11	19.09	19.17	
1.4	64QAM	1	3	19.14	19.15	19.22	20.8
1.4	64QAM	1	5	19.06	19.10	19.16	
1.4	64QAM	3	0	19.03	19.06	19.15	
1.4	64QAM	3	1	19.06	19.13	19.20	20.8
1.4	64QAM	3	3	19.02	19.07	19.14	
1.4	64QAM	6	0	18.91	18.97	19.06	



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	133332	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.67	24.60	24.58	25.7
20	QPSK	1	49	24.58	24.59	24.56	
20	QPSK	1	99	24.61	24.56	24.53	
20	QPSK	50	0	23.69	23.68	23.64	24.7
20	QPSK	50	24	23.74	23.67	23.63	
20	QPSK	50	50	23.75	23.69	23.68	
20	QPSK	100	0	23.72	23.66	23.71	24.7
20	16QAM	1	0	23.99	23.90	23.92	
20	16QAM	1	49	23.94	23.93	23.91	
20	16QAM	1	99	23.97	23.91	23.93	23.7
20	16QAM	50	0	22.69	22.68	22.67	
20	16QAM	50	24	22.75	22.68	22.66	
20	16QAM	50	50	22.75	22.73	22.68	23.7
20	16QAM	100	0	22.72	22.65	22.70	
20	64QAM	1	0	21.88	22.69	22.77	
20	64QAM	1	49	22.51	22.82	22.02	23.7
20	64QAM	1	99	22.87	22.68	22.35	
20	64QAM	50	0	20.78	21.69	21.35	
20	64QAM	50	24	21.19	21.42	21.50	22.7
20	64QAM	50	50	21.70	21.49	21.63	
20	64QAM	100	0	21.39	21.66	21.66	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.65	24.60	24.56	25.7
15	QPSK	1	37	24.55	24.58	24.52	
15	QPSK	1	74	24.58	24.62	24.55	
15	QPSK	36	0	23.67	23.69	23.61	24.7
15	QPSK	36	20	23.75	23.67	23.71	
15	QPSK	36	39	23.65	23.71	23.65	
15	QPSK	75	0	23.73	23.65	23.60	24.7
15	16QAM	1	0	24.04	23.93	23.89	
15	16QAM	1	37	23.69	23.98	23.91	
15	16QAM	1	74	23.91	23.91	23.90	23.7
15	16QAM	36	0	22.63	22.67	22.63	
15	16QAM	36	20	22.72	22.69	22.71	
15	16QAM	36	39	22.69	22.71	22.68	23.7
15	16QAM	75	0	22.75	22.67	22.62	
15	64QAM	1	0	21.76	22.28	22.61	
15	64QAM	1	37	21.70	22.27	22.80	23.7
15	64QAM	1	74	22.85	22.43	22.62	
15	64QAM	36	0	20.76	21.71	21.42	
15	64QAM	36	20	20.88	21.68	21.75	22.7
15	64QAM	36	39	21.38	21.40	21.71	
15	64QAM	75	0	21.18	21.65	21.52	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.57	24.56	24.57	25.7
10	QPSK	1	25	24.53	24.56	24.57	
10	QPSK	1	49	24.62	24.64	24.53	
10	QPSK	25	0	23.73	23.62	23.60	24.7
10	QPSK	25	12	23.69	23.75	23.62	
10	QPSK	25	25	23.63	23.70	23.65	
10	QPSK	50	0	23.73	23.74	23.61	24.7
10	16QAM	1	0	24.03	23.97	23.96	
10	16QAM	1	25	23.89	23.97	23.94	
10	16QAM	1	49	23.96	24.00	23.86	23.7
10	16QAM	25	0	22.59	22.65	22.60	
10	16QAM	25	12	22.52	22.74	22.63	
10	16QAM	25	25	22.54	22.71	22.65	23.7
10	16QAM	50	0	22.73	22.73	22.59	
10	64QAM	1	0	21.71	22.19	22.73	
10	64QAM	1	25	21.61	22.89	22.80	23.7
10	64QAM	1	49	22.02	22.82	22.25	
10	64QAM	25	0	20.70	21.54	21.83	
10	64QAM	25	12	20.65	21.76	21.61	22.7
10	64QAM	25	25	20.65	21.68	21.37	
10	64QAM	50	0	20.70	21.56	21.58	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.63	24.62	25.7
5	QPSK	1	12	24.62	24.59	24.59	
5	QPSK	1	24	24.67	24.62	24.51	
5	QPSK	12	0	23.49	23.69	23.64	24.7
5	QPSK	12	7	23.63	23.70	23.68	
5	QPSK	12	13	23.60	23.68	23.61	
5	QPSK	25	0	23.60	23.69	23.59	24.7
5	16QAM	1	0	23.66	23.99	23.92	
5	16QAM	1	12	23.86	23.94	23.87	
5	16QAM	1	24	23.80	23.94	23.83	23.7
5	16QAM	12	0	22.42	22.74	22.69	
5	16QAM	12	7	22.60	22.75	22.70	
5	16QAM	12	13	22.61	22.70	22.63	23.7
5	16QAM	25	0	22.52	22.72	22.63	
5	64QAM	1	0	21.83	21.95	22.65	
5	64QAM	1	12	21.71	22.83	22.44	23.7
5	64QAM	1	24	21.72	22.88	21.98	
5	64QAM	12	0	20.70	21.46	21.42	
5	64QAM	12	7	20.79	21.76	21.57	22.7
5	64QAM	12	13	20.60	21.72	21.36	
5	64QAM	25	0	20.77	21.50	21.21	



Band 2											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)				
Channel				18700	18800	18900					
Frequency (MHz)				18700	18800	19000					
20	QPSK	1	0	23.08	23.12	23.11	24.2				
20	QPSK	1	49	23.06	23.06	23.06					
20	QPSK	1	99	23.01	23.05	23.07					
20	QPSK	50	0	23.15	23.17	23.09	24				
20	QPSK	50	24	23.22	23.21	23.20					
20	QPSK	50	50	23.20	23.25	23.21					
20	QPSK	100	0	23.23	23.15	22.99	24				
20	16QAM	1	0	23.39	23.43	23.41					
20	16QAM	1	49	23.39	23.45	22.85					
20	16QAM	1	99	23.31	23.41	23.33	23				
20	16QAM	50	0	22.63	22.67	22.33					
20	16QAM	50	24	22.74	22.71	22.35					
20	16QAM	50	50	22.71	22.75	22.69	23				
20	16QAM	100	0	22.72	22.64	22.52					
20	64QAM	1	0	22.67	22.33	22.32					
20	64QAM	1	49	22.24	22.76	21.22	23				
20	64QAM	1	99	21.79	22.77	21.95					
20	64QAM	50	0	20.33	20.32	20.32					
20	64QAM	50	24	20.31	20.30	20.35	22				
20	64QAM	50	50	20.79	20.33	20.85					
20	64QAM	100	0	21.17	20.35	20.60					
Channel				18675	18900	19125	Tune-up limit (dBm)				
Frequency (MHz)				1857.5	18800	1902.5					
15	QPSK	1	0	23.06	23.07	23.06	24.2				
15	QPSK	1	37	23.06	23.03	23.06					
15	QPSK	1	74	23.01	23.03	23.00					
15	QPSK	36	0	23.10	23.11	22.99	24				
15	QPSK	36	20	23.13	23.14	23.14					
15	QPSK	36	39	23.13	23.19	23.16					
15	QPSK	75	0	23.20	23.10	22.93	24				
15	16QAM	1	0	23.33	23.39	23.35					
15	16QAM	1	37	23.30	23.43	22.94					
15	16QAM	1	74	23.29	23.39	23.25	23				
15	16QAM	36	0	22.53	22.64	22.33					
15	16QAM	36	20	22.69	22.69	22.27					
15	16QAM	36	39	22.69	22.67	22.85	23				
15	16QAM	75	0	22.72	22.54	22.47					
15	64QAM	1	0	22.58	22.25	22.23					
15	64QAM	1	37	22.24	22.73	21.21	23				
15	64QAM	1	74	21.73	22.76	21.93					
15	64QAM	36	0	21.61	21.57	20.29					
15	64QAM	36	20	21.23	21.63	20.34	22				
15	64QAM	36	39	20.73	21.70	20.85					
15	64QAM	75	0	21.14	21.30	20.51					
Channel				18950	18900	19150	Tune-up limit (dBm)				
Frequency (MHz)				1855	1880	1905					
10	QPSK	1	0	23.08	23.04	23.01	24.2				
10	QPSK	1	25	23.06	23.02	23.01					
10	QPSK	1	49	23.00	23.04	23.01					
10	QPSK	25	0	23.08	23.14	23.04	24				
10	QPSK	25	12	23.19	23.17	23.18					
10	QPSK	25	25	23.18	23.20	23.14					
10	QPSK	50	0	23.19	23.14	22.92	24				
10	16QAM	1	0	23.37	23.42	23.33					
10	16QAM	1	25	23.37	23.45	22.80					
10	16QAM	1	49	23.28	23.41	23.32	23				
10	16QAM	25	0	22.59	22.63	22.25					
10	16QAM	25	12	22.73	22.68	22.26					
10	16QAM	25	25	22.62	22.65	22.63	23				
10	16QAM	50	0	22.62	22.55	22.50					
10	64QAM	1	0	22.60	22.32	22.32					
10	64QAM	1	25	22.18	22.66	21.21	23				
10	64QAM	1	49	21.72	22.72	21.90					
10	64QAM	25	0	21.60	21.58	20.23					
10	64QAM	25	12	21.20	21.64	20.27	22				
10	64QAM	25	25	20.72	21.68	20.81					
10	64QAM	50	0	21.16	21.36	20.50					
Channel				18625	18900	19175	Tune-up limit (dBm)				
Frequency (MHz)				1822.5	18800	1907.5					
5	QPSK	1	0	23.05	23.07	23.09	24.2				
5	QPSK	1	12	23.03	23.00	23.02					
5	QPSK	1	24	23.01	23.00	23.03					
5	QPSK	12	0	23.13	23.07	23.07	24				
5	QPSK	12	7	23.18	23.12	23.14					
5	QPSK	12	13	23.14	23.19	23.15					
5	QPSK	25	0	23.17	23.13	22.92	24				
5	16QAM	1	0	23.29	23.36	23.35					
5	16QAM	1	12	23.33	23.38	22.85					
5	16QAM	1	24	23.30	23.32	23.26	23				
5	16QAM	12	0	22.62	22.60	22.32					
5	16QAM	12	7	22.73	22.62	22.25					
5	16QAM	12	13	22.64	22.73	22.68	23				
5	16QAM	25	0	22.70	22.59	22.49					
5	64QAM	1	0	22.57	22.24	22.29					
5	64QAM	1	12	22.24	22.68	21.20	23				
5	64QAM	1	24	21.72	22.67	21.91					
5	64QAM	12	0	21.53	21.54	20.30					
5	64QAM	12	7	21.16	21.69	20.35	22				
5	64QAM	12	13	20.70	21.67	20.76					
5	64QAM	25	0	21.17	21.36	20.55					
Channel				18615	18900	19165	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1908.5					
3	QPSK	1	0	23.07	23.07	23.09	24.2				
3	QPSK	1	8	23.05	23.06	23.00					
3	QPSK	1	14	23.02	23.00	23.02					
3	QPSK	8	0	23.09	23.11	22.99	24				
3	QPSK	8	4	23.16	23.12	23.10					
3	QPSK	8	7	23.15	23.15	23.12					
3	QPSK	15	0	23.13	23.09	22.98	24				
3	16QAM	1	0	23.29	23.45	23.33					
3	16QAM	1	8	23.30	23.35	22.76					
3	16QAM	1	14	23.31	23.34	23.26	23				
3	16QAM	8	0	22.58	22.67	22.31					
3	16QAM	8	4	22.67	22.69	22.27					
3	16QAM	8	7	22.70	22.73	22.65	23				
3	16QAM	15	0	22.62	22.59	22.47					
3	64QAM	1	0	22.66	22.31	22.30					
3	64QAM	1	8	22.22	22.68	21.22	23				
3	64QAM	1	14	21.70	22.75	21.89					
3	64QAM	8	0	21.54	21.56	20.25					
3	64QAM	8	4	21.16	21.70	20.30	22				
3	64QAM	8	7	20.69	21.67	20.81					
3	64QAM	15	0	21.12	21.37	20.55					
Channel				18607	18900	19193	Tune-up limit (dBm)				
Frequency (MHz)				1820.7	18800	1909.3					
1.4	QPSK	1	0	23.06	23.09	23.05	24.2				
1.4	QPSK	1	3	23.00	23.01	23.05					
1.4	QPSK	1	5	23.00	23.04	23.02					
1.4	QPSK	3	0	23.06	23.10	23.07	24				
1.4	QPSK	3	1	23.20	23.13	23.17					
1.4	QPSK	3	3	23.12	23.23	23.11					
1.4	QPSK	6	0	23.17	23.11	22.91	24				
1.4	16QAM	1	0	23.35	23.44	23.39					
1.4	16QAM	1	3	23.35	23.41	22.82					
1.4	16QAM	1	5	23.35	23.43	22.84	24				
1.4	16QAM	3	0	22.63	22.62	22.25					
1.4	16QAM	3	1	22.72	22.67	22.30					
1.4	16QAM	3	3	22.61	22.69	22.62	23				
1.4	16QAM	6	0	22.66	22.55	22.51					
1.4	16QAM	6	1	22.67	22.28	22.30					
1.4	16QAM	1	5	21.71	22.67	21.92	23				
1.4	64QAM	3	1	21.62	21.69	21.68					
1.4	64QAM	3	3	21.66	21.68	21.65					



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	20350	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.95	23.01	22.99	24.1
20	QPSK	1	49	22.92	22.95	22.90	
20	QPSK	1	99	22.93	22.96	22.92	
20	QPSK	50	0	23.02	23.03	22.99	24.1
20	QPSK	50	24	23.08	22.94	22.91	
20	QPSK	50	50	22.97	22.95	22.92	
20	QPSK	100	0	23.01	23.01	22.87	24.1
20	16QAM	1	0	23.29	23.36	23.31	
20	16QAM	1	49	23.19	23.16	23.14	
20	16QAM	1	99	23.20	23.08	23.03	23.7
20	16QAM	50	0	22.61	22.67	22.60	
20	16QAM	50	24	22.66	22.55	22.52	
20	16QAM	50	50	22.59	22.58	22.53	23.7
20	16QAM	100	0	22.62	22.63	22.46	
20	64QAM	1	0	22.74	22.83	22.06	
20	64QAM	1	49	22.64	22.14	22.62	23.7
20	64QAM	1	99	22.67	21.78	22.63	
20	64QAM	50	0	21.65	21.60	21.22	
20	64QAM	50	24	21.68	21.24	21.56	22.7
20	64QAM	50	50	21.62	21.03	21.54	
20	64QAM	100	0	21.69	21.60	21.54	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.92	22.99	22.98	24.1
15	QPSK	1	37	22.92	22.96	22.91	
15	QPSK	1	74	22.96	22.92	22.93	
15	QPSK	36	0	23.00	23.03	22.95	24.1
15	QPSK	36	20	23.02	22.93	22.90	
15	QPSK	36	39	22.87	22.87	22.91	
15	QPSK	75	0	22.98	22.93	22.87	24.1
15	16QAM	1	0	23.26	23.34	23.27	
15	16QAM	1	37	23.10	23.09	23.11	
15	16QAM	1	74	23.19	23.02	23.02	23.7
15	16QAM	36	0	22.52	22.58	22.54	
15	16QAM	36	20	22.61	22.53	22.50	
15	16QAM	36	39	22.58	22.58	22.49	23.7
15	16QAM	75	0	22.60	22.60	22.45	
15	64QAM	1	0	22.67	22.81	22.00	
15	64QAM	1	37	22.57	22.05	22.55	23.7
15	64QAM	1	74	22.65	21.73	22.56	
15	64QAM	36	0	21.56	21.63	21.16	
15	64QAM	36	20	21.66	21.21	21.50	22.7
15	64QAM	36	39	21.61	21.02	21.47	
15	64QAM	75	0	21.60	21.55	21.45	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.93	22.91	22.94	24.1
10	QPSK	1	25	22.92	22.90	22.93	
10	QPSK	1	49	22.94	22.92	22.91	
10	QPSK	25	0	22.97	23.03	22.93	24.1
10	QPSK	25	12	23.01	22.94	22.87	
10	QPSK	25	25	22.93	22.88	22.84	
10	QPSK	50	0	22.93	22.93	22.78	24.1
10	16QAM	1	0	23.26	23.34	23.22	
10	16QAM	1	25	23.17	23.07	23.07	
10	16QAM	1	49	23.17	23.01	22.96	23.7
10	16QAM	25	0	22.55	22.65	22.59	
10	16QAM	25	12	22.61	22.49	22.49	
10	16QAM	25	25	22.49	22.56	22.53	23.7
10	16QAM	50	0	22.57	22.56	22.43	
10	64QAM	1	0	22.73	22.78	22.04	
10	64QAM	1	25	22.55	22.06	22.62	23.7
10	64QAM	1	49	22.68	21.76	22.55	
10	64QAM	25	0	21.63	21.68	21.13	
10	64QAM	25	12	21.67	21.15	21.52	22.7
10	64QAM	25	25	21.54	21.00	21.46	
10	64QAM	50	0	21.69	21.53	21.53	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.97	22.98	22.96	24.1
5	QPSK	1	12	22.95	22.96	22.92	
5	QPSK	1	24	22.93	22.97	22.96	
5	QPSK	12	0	22.97	22.95	22.98	24.1
5	QPSK	12	7	22.97	22.91	22.83	
5	QPSK	12	13	22.97	22.92	22.91	
5	QPSK	25	0	22.91	22.94	22.80	24.1
5	16QAM	1	0	23.21	23.35	23.31	
5	16QAM	1	12	23.10	23.13	23.08	
5	16QAM	1	24	23.18	23.07	23.02	23.7
5	16QAM	12	0	22.51	22.63	22.60	
5	16QAM	12	7	22.60	22.55	22.44	
5	16QAM	12	13	22.54	22.52	22.46	23.7
5	16QAM	25	0	22.60	22.57	22.45	
5	64QAM	1	0	22.71	22.77	22.02	
5	64QAM	1	12	22.58	22.10	22.61	23.7
5	64QAM	1	24	22.57	21.75	22.58	
5	64QAM	12	0	21.61	21.65	21.17	
5	64QAM	12	7	21.61	21.24	21.56	22.7
5	64QAM	12	13	21.58	20.95	21.46	
5	64QAM	25	0	21.68	21.58	21.49	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.92	22.92	22.98	24.1
3	QPSK	1	8	22.90	22.91	22.94	
3	QPSK	1	14	22.93	22.95	22.96	
3	QPSK	8	0	22.93	23.00	22.92	24.1
3	QPSK	8	4	23.00	22.86	22.86	
3	QPSK	8	7	22.96	22.93	22.88	
3	QPSK	15	0	23.01	22.99	22.78	24.1
3	16QAM	1	0	23.29	23.33	23.30	
3	16QAM	1	8	23.16	23.14	23.11	
3	16QAM	1	14	23.14	23.01	22.94	23.7
3	16QAM	8	0	22.54	22.61	22.59	
3	16QAM	8	4	22.59	22.57	22.50	
3	16QAM	8	7	22.58	22.56	22.49	23.7
3	16QAM	15	0	22.60	22.55	22.43	
3	64QAM	1	0	22.64	22.76	21.96	
3	64QAM	1	8	22.60	22.07	22.57	23.7
3	64QAM	1	14	22.65	21.73	22.61	
3	64QAM	8	0	21.62	21.67	21.12	
3	64QAM	8	4	21.66	21.18	21.53	22.7
3	64QAM	8	7	21.52	20.94	21.51	
3	64QAM	15	0	21.59	21.52	21.54	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.92	22.94	22.95	24.1
1.4	QPSK	1	3	22.96	22.95	22.94	
1.4	QPSK	1	5	22.93	22.94	22.95	
1.4	QPSK	3	0	23.01	22.98	22.98	24.1
1.4	QPSK	3	1	22.99	22.91	22.90	
1.4	QPSK	3	3	22.94	22.93	22.95	
1.4	QPSK	6	0	22.92	22.94	22.87	24.1
1.4	16QAM	1	0	23.27	23.35	23.29	
1.4	16QAM	1	3	23.17	23.14	23.13	
1.4	16QAM	1	5	23.10	23.08	22.97	24.1
1.4	16QAM	3	0	22.75	22.73	22.76	
1.4	16QAM	3	1	22.73	22.72	22.70	
1.4	16QAM	3	3	22.74	22.73	22.74	23.7
1.4	16QAM	6	0	22.55	22.61	22.48	
1.4	64QAM	1	0	22.64	22.81	21.99	
1.4	64QAM	1	3	22.54	22.04	22.59	23.7
1.4	64QAM	1	5	22.59	21.75	22.60	
1.4	64QAM	3	0	21.72	21.77	21.75	
1.4	64QAM	3	1	21.77	21.76	21.76	22.7
1.4	64QAM	3	3	21.74	21.70	21.76	
1.4	64QAM	6	0	21.60	21.56	21.46	



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20555	20650	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	
10	QPSK	25	12	23.75	23.74	23.72	24.7
10	QPSK	25	25	23.72	23.78	23.73	
10	QPSK	50	0	23.75	23.70	23.73	
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	24.7
10	16QAM	1	49	24.00	24.04	23.60	
10	16QAM	25	0	22.86	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.78	22.79	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	
10	64QAM	1	49	22.89	22.48	21.77	23.7
10	64QAM	25	0	21.67	21.78	21.76	
10	64QAM	25	12	21.80	21.77	21.68	
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	22.7
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	Tune-up limit (dBm)
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	
5	QPSK	12	7	23.73	23.78	23.42	24.7
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	24.7
5	16QAM	1	24	23.96	23.99	23.34	
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.84	22.82	
5	64QAM	1	12	22.90	22.85	21.90	
5	64QAM	1	24	22.89	22.62	21.71	23.7
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.75	20.81	22.7
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	
3	QPSK	8	4	23.68	23.74	23.21	24.7
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.28	
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	24.7
3	16QAM	1	14	23.89	23.92	23.42	
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	
3	64QAM	1	14	22.64	22.62	21.71	23.7
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	
3	64QAM	8	7	21.70	21.78	20.71	
3	64QAM	15	0	21.74	21.69	20.78	22.7
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	24.58	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	
1.4	QPSK	3	1	24.62	24.57	24.05	24.7
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	
1.4	16QAM	1	0	23.88	23.96	23.26	
1.4	16QAM	1	3	23.93	23.95	23.39	24.7
1.4	16QAM	1	5	23.83	23.89	23.43	
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.28	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	
1.4	64QAM	1	5	22.62	22.79	21.73	23.7
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	
1.4	64QAM	3	3	22.64	22.78	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	22.7



Band 7							
Part 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.88	23.95	23.99	24.9
20	QPSK	1	49	23.94	23.99	23.98	
20	QPSK	1	99	23.99	24.08	24.04	
20	QPSK	50	0	23.50	23.86	23.88	24.4
20	QPSK	50	24	23.95	23.91	23.90	
20	QPSK	50	50	23.96	24.03	24.02	
20	QPSK	100	0	23.90	23.91	23.90	24.4
20	16QAM	1	0	24.02	24.08	24.14	
20	16QAM	1	49	24.10	24.16	24.15	
20	16QAM	1	99	24.15	24.26	24.16	23.4
20	16QAM	50	0	22.83	22.88	22.91	
20	16QAM	50	24	22.93	22.91	22.92	
20	16QAM	50	50	22.94	23.03	22.98	23.4
20	16QAM	100	0	22.90	22.89	22.92	
20	64QAM	1	0	22.87	22.95	22.99	
20	64QAM	1	49	22.92	23.04	22.70	23.4
20	64QAM	1	99	23.04	23.13	22.95	
20	64QAM	50	0	21.82	21.89	21.91	
20	64QAM	50	24	21.95	21.94	21.75	22.4
20	64QAM	50	50	21.95	22.02	21.58	
20	64QAM	100	0	21.92	21.90	21.79	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.91	24.01	23.99	24.9
15	QPSK	1	37	23.95	24.02	24.02	
15	QPSK	1	74	24.01	24.10	24.04	
15	QPSK	36	0	23.79	23.86	23.86	24.4
15	QPSK	36	20	23.93	23.92	23.89	
15	QPSK	36	39	23.92	23.97	23.95	
15	QPSK	75	0	23.86	23.87	23.88	24.4
15	16QAM	1	0	23.99	24.11	24.13	
15	16QAM	1	37	24.05	24.14	24.11	
15	16QAM	1	74	24.13	24.19	24.11	23.4
15	16QAM	36	0	22.82	22.87	22.88	
15	16QAM	36	20	22.90	22.90	22.88	
15	16QAM	36	39	22.93	23.00	22.95	23.4
15	16QAM	75	0	22.90	22.95	22.90	
15	64QAM	1	0	22.86	22.95	22.95	
15	64QAM	1	37	22.99	23.07	22.41	23.4
15	64QAM	1	74	23.04	23.12	22.69	
15	64QAM	36	0	21.81	21.91	21.76	
15	64QAM	36	20	21.93	21.93	21.55	22.4
15	64QAM	36	39	21.97	22.02	21.61	
15	64QAM	75	0	21.90	21.90	21.60	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.87	23.94	23.91	24.9
10	QPSK	1	25	23.85	23.93	23.92	
10	QPSK	1	49	23.92	24.02	23.92	
10	QPSK	25	0	23.85	23.86	23.80	24.4
10	QPSK	25	12	23.87	23.90	23.86	
10	QPSK	25	25	23.86	23.96	23.89	
10	QPSK	50	0	23.87	23.89	23.84	24.4
10	16QAM	1	0	24.05	24.11	24.09	
10	16QAM	1	25	24.03	24.15	24.14	
10	16QAM	1	49	24.13	24.21	24.12	23.4
10	16QAM	25	0	22.86	22.85	22.82	
10	16QAM	25	12	22.99	22.86	22.85	
10	16QAM	25	25	22.87	22.95	22.89	23.4
10	16QAM	50	0	22.85	22.88	22.84	
10	64QAM	1	0	22.96	22.98	22.70	
10	64QAM	1	25	22.97	23.07	22.76	23.4
10	64QAM	1	49	23.01	23.12	22.89	
10	64QAM	25	0	21.85	21.88	21.53	
10	64QAM	25	12	21.92	21.92	21.64	22.4
10	64QAM	25	25	21.91	21.97	21.69	
10	64QAM	50	0	21.88	21.92	21.52	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.91	23.93	23.94	24.9
5	QPSK	1	12	23.94	24.05	23.97	
5	QPSK	1	24	23.95	24.04	23.95	
5	QPSK	12	0	23.83	23.90	23.86	24.4
5	QPSK	12	7	23.87	23.91	23.87	
5	QPSK	12	13	23.83	23.93	23.89	
5	QPSK	25	0	23.83	23.86	23.84	24.4
5	16QAM	1	0	24.05	24.12	24.09	
5	16QAM	1	12	24.06	24.15	24.06	
5	16QAM	1	24	24.10	24.17	24.07	23.4
5	16QAM	12	0	22.87	22.90	22.90	
5	16QAM	12	7	22.89	22.94	22.87	
5	16QAM	12	13	22.90	22.96	22.89	23.4
5	16QAM	25	0	22.87	22.89	22.86	
5	64QAM	1	0	22.96	23.02	22.70	
5	64QAM	1	12	22.96	23.08	22.72	23.4
5	64QAM	1	24	23.00	23.10	22.82	
5	64QAM	12	0	21.95	21.93	21.59	
5	64QAM	12	7	21.89	21.95	21.69	22.4
5	64QAM	12	13	21.82	22.02	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



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	23150			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.64	24.61	24.63	25.7		
10	QPSK	1	25	24.63	24.68	24.65			
10	QPSK	1	49	24.76	24.71	24.70			
10	QPSK	25	0	23.74	23.78	23.77			
10	QPSK	25	12	23.67	23.80	23.76	24.7		
10	QPSK	25	25	23.88	23.85	23.83			
10	QPSK	50	0	23.83	23.80	23.79			
10	16QAM	1	0	24.03	23.97	23.99			
10	16QAM	1	25	24.06	24.05	24.01	24.7		
10	16QAM	1	49	24.12	24.08	24.07			
10	16QAM	25	0	22.76	22.79	22.77			
10	16QAM	25	12	22.62	22.80	22.78			
10	16QAM	25	25	22.81	22.85	22.79	23.7		
10	16QAM	50	0	22.83	22.78	22.76			
10	64QAM	1	0	22.91	22.84	22.87			
10	64QAM	1	25	22.76	22.99	22.73			
10	64QAM	1	49	23.06	22.96	22.95	23.7		
10	64QAM	25	0	21.78	21.80	21.79			
10	64QAM	25	12	21.88	21.83	21.81			
10	64QAM	25	25	21.82	21.90	21.84			
10	64QAM	50	0	21.83	21.81	21.80	22.7		
Channel				23035	23095	23155			
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.70	24.72	24.67	25.7		
5	QPSK	1	12	24.72	24.73	24.71			
5	QPSK	1	24	24.69	24.71	24.72			
5	QPSK	12	0	23.83	23.79	23.78			
5	QPSK	12	7	23.79	23.75	23.81	24.7		
5	QPSK	12	13	23.75	23.82	23.77			
5	QPSK	25	0	23.79	23.76	23.75			
5	16QAM	1	0	24.02	24.04	23.98			
5	16QAM	1	12	24.03	24.01	24.02	24.7		
5	16QAM	1	24	24.02	24.07	24.03			
5	16QAM	12	0	22.85	22.83	22.80			
5	16QAM	12	7	22.81	22.78	22.85			
5	16QAM	12	13	22.83	22.82	22.80	23.7		
5	16QAM	25	0	22.81	22.82	22.75			
5	64QAM	1	0	22.62	22.73	22.91			
5	64QAM	1	12	22.83	22.94	22.94			
5	64QAM	1	24	22.80	22.98	22.93	23.7		
5	64QAM	12	0	21.81	21.89	21.87			
5	64QAM	12	7	21.88	21.85	21.88			
5	64QAM	12	13	21.82	21.87	21.84			
5	64QAM	25	0	21.83	21.79	21.79	22.7		
Channel				23025	23095	23165			
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.75	24.69	24.72	25.7		
3	QPSK	1	8	24.73	24.74	24.73			
3	QPSK	1	14	24.65	24.71	24.67			
3	QPSK	8	0	23.79	23.78	23.73			
3	QPSK	8	4	23.78	23.74	23.77	24.7		
3	QPSK	8	7	23.73	23.76	23.75			
3	QPSK	15	0	23.77	23.75	23.73			
3	16QAM	1	0	24.08	24.01	24.02			
3	16QAM	1	8	24.06	24.08	24.08	24.7		
3	16QAM	1	14	24.00	24.05	23.98			
3	16QAM	8	0	22.86	22.83	22.82			
3	16QAM	8	4	22.90	22.83	22.87			
3	16QAM	8	7	22.84	22.84	22.83	23.7		
3	16QAM	15	0	22.80	22.80	22.75			
3	64QAM	1	0	22.67	22.90	22.95			
3	64QAM	1	8	22.91	23.01	22.98			
3	64QAM	1	14	22.92	22.95	22.86	23.7		
3	64QAM	8	0	21.82	21.81	21.81			
3	64QAM	8	4	21.87	21.84	21.87			
3	64QAM	8	7	21.82	21.85	21.81			
3	64QAM	15	0	21.65	21.78	21.77	22.7		
Channel				23017	23095	23173			
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.64	24.59	24.59	25.7		
1.4	QPSK	1	3	24.68	24.67	24.64			
1.4	QPSK	1	5	24.60	24.58	24.55			
1.4	QPSK	3	0	24.67	24.60	24.62			
1.4	QPSK	3	1	24.70	24.64	24.68	24.7		
1.4	QPSK	3	3	24.64	24.67	24.61			
1.4	QPSK	6	0	23.71	23.74	23.67			
1.4	16QAM	1	0	23.99	23.93	23.96			
1.4	16QAM	1	3	24.02	24.02	23.98	24.7		
1.4	16QAM	1	5	23.92	23.94	23.91			
1.4	16QAM	3	0	23.75	23.69	23.69			
1.4	16QAM	3	1	23.81	23.75	23.75			
1.4	16QAM	3	3	23.70	23.73	23.65	23.7		
1.4	16QAM	6	0	22.78	22.80	22.76			
1.4	64QAM	1	0	22.73	22.89	22.85			
1.4	64QAM	1	3	22.90	22.97	22.89			
1.4	64QAM	1	5	22.82	22.85	22.81	23.7		
1.4	64QAM	3	0	22.68	22.81	22.82			
1.4	64QAM	3	1	22.78	22.85	22.88			
1.4	64QAM	3	3	22.63	22.83	22.79			
1.4	64QAM	6	0	21.72	21.75	21.71	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				2320			
Frequency (MHz)				782			
10	QPSK	1	0		24.23		25.2
10	QPSK	1	25		24.22		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30		24.2
10	QPSK	25	12		23.33		
10	QPSK	25	25		23.34		
10	QPSK	50	0		23.35		24.2
10	16QAM	1	0		23.56		
10	16QAM	1	25		23.57		
10	16QAM	1	49		23.54		23.2
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		
10	16QAM	25	25		22.38		23.2
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		22.2
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.36		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205	23230	23255	Tune-up limit (dbm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.62	24.61	24.59	25.2
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.2
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.2
5	16QAM	1	0	23.93	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.2
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.2
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.89	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.2
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.2
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.03	21.17	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch.	Power Middle Ch.	Power High Ch.	Tune-up limit (dbm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.66		25.7
10	QPSK	1	25		24.65		
10	QPSK	1	49		24.67		
10	QPSK	25	0		23.71		24.7
10	QPSK	25	12		23.70		
10	QPSK	25	25		23.73		
10	QPSK	50	0		23.68		24.7
10	16QAM	1	0		24.08		
10	16QAM	1	25		24.08		
10	16QAM	1	49		23.86		23.7
10	16QAM	25	0		22.68		
10	16QAM	25	12		22.70		
10	16QAM	25	25		22.71		23.7
10	16QAM	50	0		22.70		
10	64QAM	1	0		22.92		
10	64QAM	1	25		22.66		22.7
10	64QAM	1	49		22.90		
10	64QAM	25	0		21.71		
10	64QAM	25	12		21.37		22.7
10	64QAM	25	25		21.38		
10	64QAM	50	0		21.44		
Channel				23305	23330	23355	Tune-up limit (dbm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.64	24.61	24.62	25.7
5	QPSK	1	12	24.72	24.70	24.69	
5	QPSK	1	24	24.70	24.63	24.56	
5	QPSK	12	0	23.74	23.69	23.64	24.7
5	QPSK	12	7	23.77	23.72	23.68	
5	QPSK	12	13	23.74	23.72	23.68	
5	QPSK	25	0	23.74	23.68	23.64	24.7
5	16QAM	1	0	23.97	23.92	23.91	
5	16QAM	1	12	24.03	23.99	23.96	
5	16QAM	1	24	23.99	23.93	23.89	23.7
5	16QAM	12	0	22.79	22.70	22.69	
5	16QAM	12	7	22.81	22.74	22.71	
5	16QAM	12	13	22.75	22.72	22.72	23.7
5	16QAM	25	0	22.76	22.72	22.66	
5	64QAM	1	0	22.86	22.72	22.34	
5	64QAM	1	12	22.94	22.37	22.32	23.7
5	64QAM	1	24	22.49	22.18	22.72	
5	64QAM	12	0	21.82	21.48	21.13	
5	64QAM	12	7	21.85	21.29	21.25	22.7
5	64QAM	12	13	21.80	21.11	21.55	
5	64QAM	25	0	21.69	21.22	21.29	

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	24.66	24.65	24.61	25.7
10	QPSK	1	25	24.69	24.70	24.71	
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	24.7
10	QPSK	25	12	23.68	23.82	23.79	
10	QPSK	25	25	23.98	23.86	23.88	
10	QPSK	50	0	23.79	23.78	23.79	24.7
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	
10	16QAM	1	49	24.12	24.10	24.09	23.7
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	
10	16QAM	25	25	22.89	22.90	22.82	23.7
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.75	22.88	23.7
10	64QAM	1	25	22.71	22.71	22.65	
10	64QAM	1	49	22.97	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	22.7
10	64QAM	25	12	21.61	21.54	21.52	
10	64QAM	25	25	21.65	21.76	21.84	
10	64QAM	50	0	21.62	21.68	21.62	Tune-up limit (dBm)
Channel				23765	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.66	24.66	25.7
5	QPSK	1	12	24.74	24.79	24.75	
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	24.7
5	QPSK	12	7	23.85	23.81	23.82	
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	24.7
5	16QAM	1	0	23.99	23.96	23.99	
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	23.7
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	
5	16QAM	12	13	22.84	22.88	22.84	23.7
5	16QAM	25	0	22.65	22.85	22.87	
5	64QAM	1	0	22.40	22.44	22.75	
5	64QAM	1	12	22.76	22.60	22.94	23.7
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



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	23.09	23.12	23.02	24.2				
20	QPSK	1	49	23.06	23.08	23.05					
20	QPSK	1	99	23.00	23.04	23.01					
20	QPSK	50	0	23.01	23.16	22.56	24				
20	QPSK	50	24	23.02	23.26	23.04					
20	QPSK	50	50	22.88	23.24	23.26					
20	QPSK	100	0	22.43	23.24	22.31	24				
20	16QAM	1	0	23.09	23.43	22.58					
20	16QAM	1	49	23.09	23.42	22.49					
20	16QAM	1	99	22.40	23.41	22.22	23				
20	16QAM	50	0	22.51	22.72	21.77					
20	16QAM	50	24	22.07	22.79	22.07					
20	16QAM	50	50	21.85	22.75	21.92	23				
20	16QAM	100	0	21.45	21.98	21.45					
20	64QAM	1	0	21.20	21.21	21.22	23				
20	64QAM	1	49	21.22	21.74	21.24					
20	64QAM	1	99	21.20	22.09	21.23					
20	64QAM	50	0	20.89	21.06	21.07	22				
20	64QAM	50	24	20.17	21.08	20.39					
20	64QAM	50	50	20.02	21.11	20.24					
20	64QAM	100	0	20.00	20.03	20.04	Tune-up limit (dBm)				
Channel				26115	26340	26615					
Frequency (MHz)				1857.5	1880	1907.5					
15	QPSK	1	0	23.04	23.11	23.02	24.2				
15	QPSK	1	37	23.02	23.10	23.05					
15	QPSK	1	74	23.00	23.04	23.06					
15	QPSK	36	0	22.93	23.08	22.50	24				
15	QPSK	36	20	22.99	23.22	23.00					
15	QPSK	36	39	22.81	23.15	23.18					
15	QPSK	75	0	22.42	23.24	22.22	24				
15	16QAM	1	0	23.08	23.42	22.52					
15	16QAM	1	37	23.06	23.35	22.42					
15	16QAM	1	74	22.36	23.40	22.21	23				
15	16QAM	36	0	22.47	22.67	21.74					
15	16QAM	36	20	22.07	22.76	21.97					
15	16QAM	36	39	21.64	22.69	21.85	23				
15	16QAM	75	0	21.45	21.98	21.36					
15	64QAM	1	0	21.17	21.14	21.18					
15	64QAM	1	37	21.21	21.64	21.24	23				
15	64QAM	1	74	21.16	22.01	21.15					
15	64QAM	36	0	20.79	20.98	21.03					
15	64QAM	36	20	20.07	21.06	20.38	22				
15	64QAM	36	39	20.11	21.04	20.15					
15	64QAM	75	0	20.15	20.30	20.12					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1855	1880	1910					
10	QPSK	1	0	23.07	23.07	23.02	24.2				
10	QPSK	1	25	23.03	23.02	23.01					
10	QPSK	1	49	23.01	23.00	23.03					
10	QPSK	25	0	22.99	23.10	22.56	24				
10	QPSK	25	12	22.99	23.21	23.00					
10	QPSK	25	25	22.88	23.24	23.21					
10	QPSK	50	0	22.36	23.15	22.30	24				
10	16QAM	1	0	23.01	23.35	22.50					
10	16QAM	1	25	23.08	23.34	22.42					
10	16QAM	1	49	22.36	23.32	22.13	24				
10	16QAM	25	0	22.49	22.71	21.76					
10	16QAM	25	12	22.02	22.79	22.06					
10	16QAM	25	25	21.57	22.70	21.83	23				
10	16QAM	50	0	21.37	21.90	21.43					
10	64QAM	1	0	21.14	21.11	21.18					
10	64QAM	1	25	21.17	21.72	21.17	23				
10	64QAM	1	49	21.19	21.99	21.17					
10	64QAM	25	0	20.88	21.02	20.98					
10	64QAM	25	12	20.08	20.98	20.29	22				
10	64QAM	25	25	20.03	21.11	20.21					
10	64QAM	50	0	20.05	20.10	20.02					
Channel				26065	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1880	1912.5					
5	QPSK	1	0	23.06	23.02	23.01	24.2				
5	QPSK	1	12	23.04	23.04	23.00					
5	QPSK	1	24	23.05	23.03	23.02					
5	QPSK	12	0	22.95	23.15	22.51	24				
5	QPSK	12	7	22.93	23.23	23.01					
5	QPSK	12	13	22.78	23.17	23.26					
5	QPSK	25	0	22.34	23.20	22.27	24				
5	16QAM	1	0	23.02	23.36	22.54					
5	16QAM	1	12	23.07	23.32	22.43					
5	16QAM	1	24	22.34	23.37	22.19	23				
5	16QAM	12	0	22.47	22.64	21.75					
5	16QAM	12	7	22.04	22.76	22.00					
5	16QAM	12	13	21.59	22.68	21.92	23				
5	16QAM	25	0	21.41	21.91	21.42					
5	64QAM	1	0	21.13	21.16	21.14					
5	64QAM	1	12	21.13	21.73	21.24	23				
5	64QAM	1	24	21.12	22.09	21.14					
5	64QAM	12	0	20.84	20.99	21.07					
5	64QAM	12	7	20.17	21.06	20.36	22				
5	64QAM	12	13	20.08	21.10	20.16					
5	64QAM	25	0	20.02	20.01	20.00					
Channel				26055	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1913.5					
3	QPSK	1	0	23.03	23.09	23.04	24.2				
3	QPSK	1	8	23.01	23.07	23.02					
3	QPSK	1	14	23.05	23.04	23.00					
3	QPSK	8	0	22.94	23.06	22.47	24				
3	QPSK	8	4	22.95	23.20	22.98					
3	QPSK	8	7	22.85	23.23	23.22					
3	QPSK	15	0	22.36	23.21	22.24	24				
3	16QAM	1	0	23.01	23.40	22.52					
3	16QAM	1	8	23.04	23.36	22.46					
3	16QAM	1	14	22.30	23.32	22.14	24				
3	16QAM	8	0	22.51	22.64	21.71					
3	16QAM	8	4	21.98	22.79	22.05					
3	16QAM	8	7	21.62	22.72	21.91	23				
3	16QAM	15	0	21.35	21.94	21.37					
3	64QAM	1	0	21.11	21.19	21.18					
3	64QAM	1	8	21.12	21.68	21.17	23				
3	64QAM	1	14	21.17	22.02	21.15					
3	64QAM	8	0	20.89	21.03	21.00					
3	64QAM	8	4	20.13	21.02	20.31	22				
3	64QAM	8	7	20.03	21.02	20.15					
3	64QAM	15	0	20.05	20.00	20.05					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1880	1914.3					
1.4	QPSK	1	0	23.02	23.03	23.02	24.2				
1.4	QPSK	1	3	23.05	23.01	23.00					
1.4	QPSK	1	5	23.04	23.00	23.06					
1.4	QPSK	3	0	23.02	23.16	23.00	24				
1.4	QPSK	3	1	23.01	23.19	23.03					
1.4	QPSK	3	3	23.05	23.15	23.24					
1.4	QPSK	6	0	22.34	23.18	22.26	24				
1.4	16QAM	1	0	23.02	23.36	22.57					
1.4	16QAM	1	3	23.08	23.34	22.44					
1.4	16QAM	1	5	22.32	23.32	22.14	24				
1.4	16QAM	3	0	22.44	22.70	22.01					
1.4	16QAM	3	1	22.06	22.70	22.02					
1.4	16QAM	3	3	22.00	22.69	22.03	24				
1.4	16QAM	6	0	21.45	21.88	21.41					
1.4	64QAM	1	0	21.10	21.15	21.19					
1.4	64QAM	1	3	21.12	21.68	21.18	23				
1.4	64QAM	1	5	21.20	22.02	21.18					
1.4	64QAM	3	0	21.10	21.11	21.01					



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26745	26865	26990	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.78	24.52	24.57	25.7
15	QPSK	1	37	24.46	24.51	24.50	
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	24.7
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.66	22.67	
15	16QAM	36	20	22.65	22.61	22.60	
15	16QAM	36	39	22.59	22.65	22.62	23.7
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	
15	64QAM	1	74	22.69	22.72	22.70	23.7
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	22.7
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	25.7
10	QPSK	1	25	24.57	24.55	24.59	
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	24.07	23.98	23.96	
10	16QAM	1	25	23.94	24.01	23.97	24.7
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	
10	16QAM	25	25	22.64	22.63	22.63	23.7
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	22.7
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	Tune-up limit (dBm)
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	25.7
5	QPSK	1	12	24.72	24.63	24.47	
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.80	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	
5	16QAM	1	12	24.00	23.97	23.85	24.7
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	23.7
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	
5	64QAM	1	12	22.90	22.88	22.03	
5	64QAM	1	24	22.61	22.86	21.86	22.7
5	64QAM	12	0	21.63	21.78	21.45	
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	Tune-up limit (dBm)
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	25.7
3	QPSK	1	8	24.75	24.69	24.16	
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	8	0	23.83	23.68	23.39	
3	QPSK	8	4	23.77	23.72	23.28	24.7
3	QPSK	8	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	
3	16QAM	1	8	24.06	24.06	23.47	24.7
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	8	0	22.86	22.77	22.54	
3	16QAM	8	4	22.88	22.77	22.42	
3	16QAM	8	7	22.78	22.76	22.45	23.7
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.83	22.00	
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	22.7
3	64QAM	8	0	21.79	21.74	20.85	
3	64QAM	8	4	21.88	21.81	20.77	
3	64QAM	8	7	21.61	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	Tune-up limit (dBm)
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	25.7
1.4	QPSK	1	3	24.71	24.63	24.26	
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.59	24.55	24.17	
1.4	QPSK	3	1	24.74	24.58	24.22	24.7
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	24.7
1.4	16QAM	1	5	23.93	23.86	23.65	
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	23.7
1.4	16QAM	6	0	22.82	22.75	22.46	
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.88	21.90	
1.4	64QAM	1	5	22.86	22.76	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	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			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		21.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				27885	27710	27735	Tune-up limit (dbm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.88	22.88	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.15	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



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	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.96	22.88	22.80	24.1
20	QPSK	1	49	22.82	22.68	22.67	
20	QPSK	1	99	22.87	22.70	22.60	
20	QPSK	50	0	23.07	22.99	22.84	24.1
20	QPSK	50	24	23.08	22.93	22.85	
20	QPSK	50	50	23.03	22.89	22.84	
20	QPSK	100	0	23.06	22.90	22.86	24.1
20	16QAM	1	0	23.29	23.23	23.15	
20	16QAM	1	49	23.18	23.03	23.00	
20	16QAM	1	99	23.21	23.06	22.91	23.7
20	16QAM	50	0	22.88	22.99	22.49	
20	16QAM	50	24	22.67	22.54	22.45	
20	16QAM	50	50	22.64	22.50	22.47	23.7
20	16QAM	100	0	22.63	22.51	22.46	
20	64QAM	1	0	22.73	22.06	22.55	
20	64QAM	1	49	22.69	22.54	22.46	23.7
20	64QAM	1	99	22.74	22.55	22.46	
20	64QAM	50	0	21.69	21.24	21.50	
20	64QAM	50	24	21.70	21.54	21.46	22.7
20	64QAM	50	50	21.66	21.49	21.48	
20	64QAM	100	0	21.68	21.52	21.45	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.94	22.88	22.74	24.1
15	QPSK	1	37	22.82	22.67	22.57	
15	QPSK	1	74	22.83	22.68	22.53	
15	QPSK	36	0	23.06	22.80	22.80	24.1
15	QPSK	36	20	23.07	22.86	22.75	
15	QPSK	36	39	22.95	22.85	22.78	
15	QPSK	75	0	23.05	22.83	22.77	24.1
15	16QAM	1	0	23.24	23.19	23.12	
15	16QAM	1	37	23.11	23.03	22.98	
15	16QAM	1	74	23.21	22.97	22.81	23.7
15	16QAM	36	0	22.68	22.50	22.44	
15	16QAM	36	20	22.61	22.51	22.39	
15	16QAM	36	39	22.59	22.40	22.40	23.7
15	16QAM	75	0	22.55	22.43	22.36	
15	64QAM	1	0	22.69	22.05	22.50	
15	64QAM	1	37	22.66	22.54	22.42	23.7
15	64QAM	1	74	22.74	22.47	22.46	
15	64QAM	36	0	21.64	21.15	21.42	
15	64QAM	36	20	21.62	21.47	21.37	22.7
15	64QAM	36	39	21.62	21.42	21.40	
15	64QAM	75	0	21.65	21.43	21.44	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.94	22.81	22.74	24.1
10	QPSK	1	25	22.73	22.68	22.61	
10	QPSK	1	49	22.78	22.65	22.56	
10	QPSK	25	0	23.00	22.84	22.79	24.1
10	QPSK	25	12	23.01	22.86	22.82	
10	QPSK	25	25	22.99	22.80	22.75	
10	QPSK	50	0	22.97	22.88	22.84	24.1
10	16QAM	1	0	23.26	23.23	23.12	
10	16QAM	1	25	23.12	22.99	22.95	
10	16QAM	1	49	23.21	22.94	22.91	23.7
10	16QAM	25	0	22.65	22.45	22.42	
10	16QAM	25	12	22.66	22.52	22.42	
10	16QAM	25	25	22.64	22.41	22.39	23.7
10	16QAM	50	0	22.60	22.46	22.45	
10	64QAM	1	0	22.66	21.98	22.54	
10	64QAM	1	25	22.69	22.46	22.44	23.7
10	64QAM	1	49	22.66	22.50	22.37	
10	64QAM	25	0	21.64	21.19	21.47	
10	64QAM	25	12	21.65	21.51	21.37	22.7
10	64QAM	25	25	21.65	21.47	21.42	
10	64QAM	50	0	21.63	21.47	21.43	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.89	22.78	22.70	24.1
5	QPSK	1	12	22.79	22.61	22.60	
5	QPSK	1	24	22.84	22.70	22.56	
5	QPSK	12	0	22.99	22.88	22.77	24.1
5	QPSK	12	7	23.07	22.93	22.82	
5	QPSK	12	13	22.94	22.86	22.75	
5	QPSK	25	0	23.06	22.88	22.83	24.1
5	16QAM	1	0	23.26	23.21	23.11	
5	16QAM	1	12	23.12	23.01	22.98	
5	16QAM	1	24	23.14	22.93	22.86	23.7
5	16QAM	12	0	22.60	22.41	22.44	
5	16QAM	12	7	22.58	22.48	22.35	
5	16QAM	12	13	22.57	22.50	22.42	23.7
5	16QAM	25	0	22.62	22.51	22.42	
5	64QAM	1	0	22.63	21.98	22.47	
5	64QAM	1	12	22.63	22.44	22.43	23.7
5	64QAM	1	24	22.67	22.53	22.37	
5	64QAM	12	0	21.59	21.21	21.47	
5	64QAM	12	7	21.67	21.47	21.42	22.7
5	64QAM	12	13	21.61	21.39	21.45	
5	64QAM	25	0	21.61	21.46	21.44	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.90	22.84	22.73	24.1
3	QPSK	1	8	22.81	22.59	22.63	
3	QPSK	1	14	22.79	22.62	22.53	
3	QPSK	8	0	22.97	22.88	22.74	24.1
3	QPSK	8	4	23.02	22.91	22.75	
3	QPSK	8	7	22.95	22.87	22.79	
3	QPSK	15	0	23.00	22.85	22.77	24.1
3	16QAM	1	0	23.23	23.17	23.10	
3	16QAM	1	8	23.10	22.97	22.94	
3	16QAM	1	14	23.11	22.99	22.91	23.7
3	16QAM	8	0	22.64	22.40	22.42	
3	16QAM	8	4	22.64	22.48	22.39	
3	16QAM	8	7	22.58	22.45	22.42	23.7
3	16QAM	15	0	22.63	22.46	22.41	
3	64QAM	1	0	22.70	22.02	22.46	
3	64QAM	1	8	22.66	22.45	22.45	23.7
3	64QAM	1	14	22.68	22.45	22.40	
3	64QAM	8	0	21.61	21.15	21.42	
3	64QAM	8	4	21.62	21.53	21.44	22.7
3	64QAM	8	7	21.66	21.45	21.48	
3	64QAM	15	0	21.61	21.44	21.40	
Channel				131979	132322	132695	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.91	22.85	22.75	24.1
1.4	QPSK	1	3	22.73	22.63	22.65	
1.4	QPSK	1	5	22.81	22.60	22.53	
1.4	QPSK	3	0	22.99	22.80	22.84	24.1
1.4	QPSK	3	1	23.07	22.87	22.82	
1.4	QPSK	3	3	23.02	22.81	22.84	
1.4	QPSK	6	0	22.98	22.86	22.82	24.1
1.4	16QAM	1	0	23.28	23.14	23.05	
1.4	16QAM	1	3	23.16	22.98	23.00	
1.4	16QAM	1	5	23.14	22.93	22.85	24.1
1.4	16QAM	3	0	22.59	22.46	22.39	
1.4	16QAM	3	1	22.60	22.51	22.39	
1.4	16QAM	3	3	22.55	22.44	22.44	23.7
1.4	16QAM	6	0	22.59	22.45	22.37	
1.4	64QAM	1	0	22.63	21.97	22.51	
1.4	64QAM	1	3	22.63	22.54	22.42	23.7
1.4	64QAM	1	5	22.71	22.48	22.41	
1.4	64QAM	3	0	21.77	21.74	21.76	
1.4	64QAM	3	1	21.73	21.74	21.75	22.7
1.4	64QAM	3	3	21.72	21.70	21.74	
1.4	64QAM	6	0	21.66	21.50	21.44	



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	24.77	24.67	24.68	25.7
20	QPSK	1	49	24.65	24.65	24.65	
20	QPSK	1	99	24.68	24.66	24.61	
20	QPSK	50	0	23.76	23.76	23.72	24.7
20	QPSK	50	24	23.80	23.74	23.75	
20	QPSK	50	50	23.84	23.78	23.75	
20	QPSK	100	0	23.79	23.71	23.77	24.7
20	16QAM	1	0	24.06	23.96	24.00	
20	16QAM	1	49	24.01	24.03	24.04	
20	16QAM	1	99	24.03	24.01	23.95	23.7
20	16QAM	50	0	22.77	22.75	22.75	
20	16QAM	50	24	22.82	22.77	22.73	
20	16QAM	50	50	22.82	22.77	22.78	23.7
20	16QAM	100	0	22.79	22.73	22.78	
20	64QAM	1	0	22.04	22.83	22.82	23.7
20	64QAM	1	49	22.63	22.90	22.29	
20	64QAM	1	99	22.04	22.89	22.87	
20	64QAM	50	0	21.00	21.70	21.40	22.7
20	64QAM	50	24	21.30	21.64	21.57	
20	64QAM	50	50	21.84	21.60	21.74	
20	64QAM	100	0	21.53	21.76	21.80	Tune-up limit (dBm)
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.74	24.65	24.63	
15	QPSK	1	37	24.62	24.66	24.61	25.7
15	QPSK	1	74	24.65	24.68	24.64	
15	QPSK	36	0	23.73	23.71	23.69	24.7
15	QPSK	36	20	23.80	23.73	23.78	
15	QPSK	36	39	23.73	23.76	23.74	
15	QPSK	75	0	23.81	23.74	23.68	24.7
15	16QAM	1	0	24.05	24.01	23.98	
15	16QAM	1	37	23.95	24.02	24.00	
15	16QAM	1	74	23.97	24.00	23.98	23.7
15	16QAM	36	0	22.76	22.75	22.71	
15	16QAM	36	20	22.79	22.74	22.79	
15	16QAM	36	39	22.77	22.79	22.75	23.7
15	16QAM	75	0	22.63	22.73	22.70	
15	64QAM	1	0	22.02	22.43	22.76	
15	64QAM	1	37	21.86	22.94	22.88	23.7
15	64QAM	1	74	22.88	22.60	22.84	
15	64QAM	36	0	20.97	21.77	21.44	
15	64QAM	36	20	20.94	21.78	21.81	22.7
15	64QAM	36	39	21.48	21.56	21.78	
15	64QAM	75	0	21.29	21.75	21.67	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.76	24.64	24.66	25.7
10	QPSK	1	25	24.61	24.62	24.63	
10	QPSK	1	49	24.66	24.71	24.62	
10	QPSK	25	0	23.78	23.71	23.69	24.7
10	QPSK	25	12	23.79	23.82	23.70	
10	QPSK	25	25	23.72	23.78	23.74	
10	QPSK	50	0	23.80	23.81	23.71	24.7
10	16QAM	1	0	24.10	24.02	24.04	
10	16QAM	1	25	23.98	24.06	24.00	
10	16QAM	1	49	23.98	24.07	23.96	23.7
10	16QAM	25	0	22.76	22.70	22.68	
10	16QAM	25	12	22.78	22.81	22.68	
10	16QAM	25	25	22.65	22.77	22.73	23.7
10	16QAM	50	0	22.79	22.80	22.69	
10	64QAM	1	0	21.80	22.30	22.77	
10	64QAM	1	25	22.01	22.95	22.95	23.7
10	64QAM	1	49	22.14	22.96	22.45	
10	64QAM	25	0	20.82	21.71	21.71	
10	64QAM	25	12	20.84	21.84	21.76	22.7
10	64QAM	25	25	20.71	21.81	21.64	
10	64QAM	50	0	20.83	21.77	21.69	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.57	24.69	24.72	25.7
5	QPSK	1	12	24.71	24.65	24.70	
5	QPSK	1	24	24.70	24.68	24.63	
5	QPSK	12	0	23.73	23.76	23.74	24.7
5	QPSK	12	7	23.84	23.79	23.76	
5	QPSK	12	13	23.76	23.76	23.70	
5	QPSK	25	0	23.76	23.76	23.68	24.7
5	16QAM	1	0	23.75	24.01	24.02	
5	16QAM	1	12	23.97	24.03	23.97	
5	16QAM	1	24	23.95	24.02	23.93	23.7
5	16QAM	12	0	22.64	22.80	22.78	
5	16QAM	12	7	22.86	22.80	22.78	
5	16QAM	12	13	22.77	22.77	22.70	23.7
5	16QAM	25	0	22.69	22.81	22.70	
5	64QAM	1	0	21.74	22.06	22.91	
5	64QAM	1	12	21.79	22.94	22.70	23.7
5	64QAM	1	24	21.96	22.96	22.25	
5	64QAM	12	0	20.82	21.49	21.68	
5	64QAM	12	7	21.00	21.86	21.73	22.7
5	64QAM	12	13	20.99	21.81	21.61	
5	64QAM	25	0	20.76	21.59	21.48	



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	18800	18900			
Frequency (MHz)				18680	18800	19000			
20	QPSK	1	0	18.28	18.29	18.26	19.4		
20	QPSK	1	49	18.22	18.24	18.20			
20	QPSK	1	99	18.20	18.23	18.22			
20	QPSK	50	0	18.33	18.31	18.26	19.4		
20	QPSK	50	24	18.40	18.33	18.34			
20	QPSK	50	50	18.35	18.40	18.35			
20	QPSK	100	0	18.41	18.32	18.37	19.4		
20	16QAM	1	0	18.58	18.62	18.55			
20	16QAM	1	49	18.55	18.53	18.47			
20	16QAM	1	99	18.45	18.50	18.46	19.4		
20	16QAM	50	0	18.32	18.30	18.28			
20	16QAM	50	24	18.39	18.33	18.36			
20	16QAM	50	50	18.38	18.37	18.35	19.4		
20	16QAM	100	0	18.38	18.29	18.35			
20	64QAM	1	0	18.51	18.48	18.46			
20	64QAM	1	49	18.46	18.45	18.44	19.4		
20	64QAM	1	99	18.39	18.46	18.42			
20	64QAM	50	0	18.35	18.35	18.30			
20	64QAM	50	24	18.43	18.37	18.40	19.4		
20	64QAM	50	50	18.39	18.41	18.38			
20	64QAM	100	0	18.40	18.32	18.38			
Channel				18675	18900	19125	Tune-up limit (dBm)		
Frequency (MHz)				1857.5	18800	1902.5			
15	QPSK	1	0	18.21	18.22	18.21	19.4		
15	QPSK	1	37	18.20	18.24	18.24			
15	QPSK	1	74	18.23	18.22	18.22			
15	QPSK	36	0	18.26	18.25	18.20	19.4		
15	QPSK	36	20	18.36	18.24	18.30			
15	QPSK	36	39	18.33	18.40	18.34			
15	QPSK	75	0	18.36	18.28	18.37	19.4		
15	16QAM	1	0	18.50	18.60	18.49			
15	16QAM	1	37	18.52	18.49	18.43			
15	16QAM	1	74	18.39	18.40	18.42	19.4		
15	16QAM	36	0	18.28	18.29	18.22			
15	16QAM	36	20	18.29	18.24	18.27			
15	16QAM	36	39	18.35	18.34	18.28	19.4		
15	16QAM	75	0	18.31	18.32	18.34			
15	64QAM	1	0	18.43	18.38	18.41			
15	64QAM	1	37	18.44	18.38	18.36	19.4		
15	64QAM	1	74	18.30	18.42	18.38			
15	64QAM	36	0	18.31	18.32	18.25			
15	64QAM	36	20	18.33	18.29	18.39	19.4		
15	64QAM	36	39	18.31	18.36	18.32			
15	64QAM	75	0	18.39	18.28	18.34			
Channel				18650	18900	19150	Tune-up limit (dBm)		
Frequency (MHz)				1855	18800	1905			
10	QPSK	1	0	18.20	18.20	18.24	19.4		
10	QPSK	1	25	18.20	18.22	18.22			
10	QPSK	1	49	18.21	18.22	18.24			
10	QPSK	25	0	18.31	18.24	18.20	19.4		
10	QPSK	25	12	18.33	18.32	18.34			
10	QPSK	25	25	18.29	18.36	18.34			
10	QPSK	50	0	18.36	18.31	18.33	19.4		
10	16QAM	1	0	18.55	18.56	18.49			
10	16QAM	1	25	18.48	18.43	18.45			
10	16QAM	1	49	18.42	18.47	18.43	19.4		
10	16QAM	25	0	18.32	18.25	18.20			
10	16QAM	25	12	18.39	18.23	18.32			
10	16QAM	25	25	18.38	18.30	18.28	19.4		
10	16QAM	50	0	18.33	18.25	18.25			
10	64QAM	1	0	18.42	18.43	18.43			
10	64QAM	1	25	18.40	18.43	18.38	19.4		
10	64QAM	1	49	18.30	18.40	18.36			
10	64QAM	25	0	18.32	18.28	18.21			
10	64QAM	25	12	18.43	18.37	18.34	19.4		
10	64QAM	25	25	18.36	18.38	18.36			
10	64QAM	50	0	18.39	18.23	18.34			
Channel				18625	18900	19175	Tune-up limit (dBm)		
Frequency (MHz)				1852.5	18800	1907.5			
5	QPSK	1	0	18.27	18.22	18.23	19.4		
5	QPSK	1	12	18.21	18.22	18.22			
5	QPSK	1	24	18.21	18.23	18.21			
5	QPSK	12	0	18.26	18.22	18.20	19.4		
5	QPSK	12	7	18.32	18.26	18.25			
5	QPSK	12	13	18.26	18.37	18.30			
5	QPSK	25	0	18.40	18.26	18.29	19.4		
5	16QAM	1	0	18.48	18.61	18.53			
5	16QAM	1	12	18.55	18.52	18.37			
5	16QAM	1	24	18.44	18.48	18.46	19.4		
5	16QAM	12	0	18.25	18.21	18.24			
5	16QAM	12	7	18.33	18.31	18.32			
5	16QAM	12	13	18.33	18.32	18.28	19.4		
5	16QAM	25	0	18.30	18.27	18.33			
5	64QAM	1	0	18.43	18.45	18.40			
5	64QAM	1	12	18.41	18.45	18.40	19.4		
5	64QAM	1	24	18.29	18.44	18.32			
5	64QAM	12	0	18.34	18.27	18.26			
5	64QAM	12	7	18.40	18.36	18.33	19.4		
5	64QAM	12	13	18.35	18.34	18.34			
5	64QAM	25	0	18.35	18.28	18.37			
Channel				18615	18900	19185	Tune-up limit (dBm)		
Frequency (MHz)				1851.5	18800	1908.5			
3	QPSK	1	0	18.23	18.23	18.22	19.4		
3	QPSK	1	8	18.20	18.21	18.23			
3	QPSK	1	14	18.21	18.22	18.22			
3	QPSK	8	0	18.31	18.28	18.24	19.4		
3	QPSK	8	4	18.39	18.32	18.27			
3	QPSK	8	7	18.30	18.37	18.29			
3	QPSK	15	0	18.39	18.28	18.27	19.4		
3	16QAM	1	0	18.55	18.53	18.50			
3	16QAM	1	8	18.50	18.48	18.41			
3	16QAM	1	14	18.40	18.46	18.38	19.4		
3	16QAM	8	0	18.28	18.21	18.22			
3	16QAM	8	4	18.39	18.25	18.29			
3	16QAM	8	7	18.28	18.37	18.34	19.4		
3	16QAM	15	0	18.35	18.20	18.32			
3	64QAM	1	0	18.50	18.42	18.44			
3	64QAM	1	8	18.44	18.38	18.38	19.4		
3	64QAM	1	14	18.39	18.45	18.33			
3	64QAM	8	0	18.31	18.35	18.23			
3	64QAM	8	4	18.38	18.33	18.32	19.4		
3	64QAM	8	7	18.35	18.31	18.31			
3	64QAM	15	0	18.33	18.26	18.32			
Channel				18607	18900	19193	Tune-up limit (dBm)		
Frequency (MHz)				18507	18800	1909.3			
1.4	QPSK	1	0	18.21	18.20	18.21	19.4		
1.4	QPSK	1	3	18.21	18.22	18.22			
1.4	QPSK	1	5	18.23	18.20	18.22			
1.4	QPSK	3	0	18.24	18.25	18.24	19.4		
1.4	QPSK	3	1	18.33	18.29	18.31			
1.4	QPSK	3	3	18.31	18.35	18.30			
1.4	QPSK	6	0	18.35	18.30	18.37	19.4		
1.4	16QAM	1	0	18.48	18.44	18.45			
1.4	16QAM	1	3	18.46	18.43	18.44			
1.4	16QAM	1	5	18.42	18.49	18.45	19.4		
1.4	16QAM	3	0	18.31	18.23	18.23			
1.4	16QAM	3	1	18.34	18.26	18.26			
1.4	16QAM	3	3	18.31	18.34	18.26	19.4		
1.4	16QAM	6	0	18.31	18.30	18.31			
1.4	16QAM	6	1	18.34	18.30	18.36			
1.4	64QAM	1	3	18.40	18.44	18.40	19.4		
1.4	64QAM	1	5	18.39	18.40	18.32			
1.4	64QAM	3	1	18.37	18.40	18.36			



Band 4									
Art 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Mod Ch / 20050	Power Mod Ch / 20175	Power Mod Ch / 20300	High Ch /	Tune-up limit (dBm)	
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	18.94	18.90	18.88			20
20	QPSK	1	49	18.89	18.84	18.86			
20	QPSK	1	99	18.89	18.89	18.90			
20	QPSK	50	0	19.01	18.96	18.98			20
20	QPSK	50	24	19.02	19.03	19.02			
20	QPSK	50	50	18.95	18.89	18.92			
20	QPSK	100	0	18.99	18.99	18.88			20
20	16QAM	1	0	19.31	19.23	19.21			
20	16QAM	1	49	19.13	19.10	19.13			
20	16QAM	1	99	19.19	19.12	19.07			20
20	16QAM	50	0	18.99	18.97	19.00			
20	16QAM	50	24	19.02	19.00	19.02			
20	16QAM	50	50	18.95	18.91	18.95			20
20	16QAM	100	0	18.97	18.99	18.90			
20	64QAM	1	0	19.11	19.09	19.10			
20	64QAM	1	49	19.00	18.93	18.95			20
20	64QAM	1	99	19.02	19.04	19.03			
20	64QAM	50	0	19.00	18.96	18.97			
20	64QAM	50	24	19.02	18.99	19.00			20
20	64QAM	50	50	18.96	18.92	18.93			
20	64QAM	100	0	19.01	18.96	18.93			
Channel				20025	20175	20325		Tune-up limit (dBm)	
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	18.84	18.92	18.94			20
15	QPSK	1	37	18.80	18.80	18.80			
15	QPSK	1	74	18.81	18.80	18.80			
15	QPSK	36	0	19.01	18.95	18.97			20
15	QPSK	36	20	18.93	18.93	18.95			
15	QPSK	36	39	18.91	18.90	18.93			
15	QPSK	75	0	18.97	18.97	18.88			20
15	16QAM	1	0	19.26	19.24	19.27			
15	16QAM	1	37	19.10	19.07	19.12			
15	16QAM	1	74	19.13	19.05	19.10			20
15	16QAM	36	0	19.05	18.94	18.97			
15	16QAM	36	20	18.98	18.93	18.99			
15	16QAM	36	39	18.96	18.88	18.96			20
15	16QAM	75	0	18.99	18.95	18.91			
15	64QAM	1	0	19.08	19.07	19.05			
15	64QAM	1	37	19.04	19.00	19.06			20
15	64QAM	1	74	19.00	18.97	19.00			
15	64QAM	36	0	19.06	18.99	18.97			
15	64QAM	36	20	18.99	18.96	18.97			20
15	64QAM	36	39	18.96	18.92	18.97			
15	64QAM	75	0	18.98	18.97	18.91			
Channel				20000	20175	20350		Tune-up limit (dBm)	
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	18.85	18.82	18.85			20
10	QPSK	1	25	18.80	18.80	18.85			
10	QPSK	1	49	18.80	18.81	18.86			
10	QPSK	25	0	18.95	18.88	18.88			20
10	QPSK	25	12	18.99	18.96	18.92			
10	QPSK	25	25	18.98	18.97	19.00			
10	QPSK	50	0	18.99	18.97	18.95			20
10	16QAM	1	0	19.24	19.20	19.23			
10	16QAM	1	25	19.19	19.17	19.24			
10	16QAM	1	49	19.20	19.16	19.23			20
10	16QAM	25	0	18.96	18.93	18.92			
10	16QAM	25	12	18.99	18.97	18.94			
10	16QAM	25	25	18.98	18.93	18.99			20
10	16QAM	50	0	18.99	18.95	18.93			
10	64QAM	1	0	19.17	19.03	19.09			
10	64QAM	1	25	19.15	19.13	19.15			20
10	64QAM	1	49	19.12	19.11	19.11			
10	64QAM	25	0	18.99	18.92	18.93			
10	64QAM	25	12	19.03	19.00	18.98			20
10	64QAM	25	25	19.02	19.00	19.06			
10	64QAM	50	0	19.02	18.99	18.97			
Channel				19975	20175	20375		Tune-up limit (dBm)	
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	18.88	18.80	18.89			20
5	QPSK	1	12	18.91	18.84	18.92			
5	QPSK	1	24	18.90	18.85	18.91			
5	QPSK	12	0	18.99	18.88	18.94			20
5	QPSK	12	7	19.02	18.95	19.02			
5	QPSK	12	13	19.01	18.95	18.99			
5	QPSK	25	0	18.98	18.94	18.94			20
5	16QAM	1	0	19.22	19.10	19.18			
5	16QAM	1	12	19.26	19.15	19.08			
5	16QAM	1	24	19.26	19.21	19.20			20
5	16QAM	12	0	19.00	18.87	18.98			
5	16QAM	12	7	19.02	18.97	19.02			
5	16QAM	12	13	19.02	18.93	18.99			20
5	16QAM	25	0	18.98	18.97	18.98			
5	64QAM	1	0	19.19	19.08	19.14			
5	64QAM	1	12	19.18	19.10	19.04			20
5	64QAM	1	24	19.22	19.14	19.07			
5	64QAM	12	0	19.06	18.91	19.06			
5	64QAM	12	7	19.09	19.00	19.09			20
5	64QAM	12	13	19.07	19.01	19.05			
5	64QAM	25	0	19.06	18.98	18.99			
Channel				19965	20175	20385		Tune-up limit (dBm)	
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	18.92	18.80	18.92			20
3	QPSK	1	8	18.95	18.91	18.94			
3	QPSK	1	14	18.90	18.87	18.93			
3	QPSK	8	0	18.96	18.89	18.96			20
3	QPSK	8	4	19.03	18.96	19.03			
3	QPSK	8	7	19.01	18.93	18.99			
3	QPSK	15	0	18.98	18.95	19.00			20
3	16QAM	1	0	19.19	19.09	19.20			
3	16QAM	1	8	19.30	19.23	19.22			
3	16QAM	1	14	19.24	19.17	19.23			20
3	16QAM	8	0	19.03	18.94	18.99			
3	16QAM	8	4	19.08	19.02	19.04			
3	16QAM	8	7	19.05	19.01	18.99			20
3	16QAM	15	0	18.99	18.96	19.00			
3	64QAM	1	0	19.18	19.07	19.10			
3	64QAM	1	8	19.26	19.19	19.15			20
3	64QAM	1	14	19.21	19.13	19.06			
3	64QAM	8	0	19.05	18.91	19.05			
3	64QAM	8	4	19.12	19.01	19.08			20
3	64QAM	8	7	19.07	18.99	19.07			
3	64QAM	15	0	19.03	19.00	19.03			
Channel				19957	20175	20393		Tune-up limit (dBm)	
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	18.80	18.80	18.80			20
1.4	QPSK	1	3	18.87	18.84	18.87			
1.4	QPSK	1	5	18.82	18.80	18.80			
1.4	QPSK	3	0	18.86	18.80	18.81			20
1.4	QPSK	3	1	18.89	18.83	18.85			
1.4	QPSK	3	3	18.82	18.80	18.84			
1.4	QPSK	6	0	18.91	18.86	18.88			20
1.4	16QAM	1	0	19.15	19.10	19.13			
1.4	16QAM	1	3	19.22	19.15	19.18			
1.4	16QAM	1	5	19.15	19.11	19.12			20
1.4	16QAM	3	0	18.94	18.88	18.88			
1.4	16QAM	3	1	19.00	18.91	18.90			
1.4	16QAM	3	3	18.93	18.87	18.85			20
1.4	16QAM	6	0	18.97	18.91	18.99			
1.4	16QAM	6	1	19.04	19.02	19.04			
1.4	16QAM	1	0	19.19	19.07	19.07			20
1.4	16QAM	1	3	19.16	19.07	19.07			
1.4	16QAM	1	5	19.11	19.04	19.04			
1.4	64QAM	3	0	19.05	19.01	19.02			20
1.4	64QAM	3	1	19.13	19.03	19.07			
1.4	64QAM	3	3	19.07	19.00	19.03			



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.43	24.46	24.43	25.7
10	QPSK	1	25	24.39	24.46	24.45	
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	24.7
10	QPSK	25	12	23.56	23.57	23.57	
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.56	24.7
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	
10	16QAM	1	49	23.63	23.86	23.78	23.7
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.65	
10	16QAM	25	25	22.54	22.60	22.57	23.7
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	
10	64QAM	1	25	22.73	22.49	22.51	23.7
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.54	21.60	21.58	
10	64QAM	25	12	21.63	21.53	21.47	22.7
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.46	24.46	24.45	25.7
5	QPSK	1	12	24.44	24.46	24.19	
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	24.7
5	QPSK	12	7	23.54	23.61	23.25	
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.54	23.52	23.37	24.7
5	16QAM	1	0	23.91	23.90	23.87	
5	16QAM	1	12	23.78	23.86	23.43	
5	16QAM	1	24	23.79	23.83	23.43	23.7
5	16QAM	12	0	22.65	22.62	22.60	
5	16QAM	12	7	22.57	22.64	22.38	
5	16QAM	12	13	22.52	22.59	22.35	23.7
5	16QAM	25	0	22.57	22.56	22.51	
5	64QAM	1	0	22.87	22.79	22.18	
5	64QAM	1	12	22.72	22.71	21.72	23.7
5	64QAM	1	24	22.72	22.73	21.73	
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.56	21.85	22.7
5	64QAM	12	13	21.60	21.61	20.71	
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	25.7
3	QPSK	1	8	24.43	24.45	24.13	
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	24.7
3	QPSK	8	4	23.55	23.62	23.16	
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.58	23.17	24.7
3	16QAM	1	0	23.87	23.84	23.44	
3	16QAM	1	8	23.89	23.89	23.38	
3	16QAM	1	14	23.74	23.82	23.44	23.7
3	16QAM	8	0	22.66	22.61	22.26	
3	16QAM	8	4	22.66	22.71	22.30	
3	16QAM	8	7	22.60	22.65	22.40	23.7
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	
3	64QAM	1	8	22.63	22.74	21.72	23.7
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	
3	64QAM	8	4	21.66	21.56	20.73	22.7
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.42	24.41	24.09	25.7
1.4	QPSK	1	3	24.46	24.45	24.26	
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	24.7
1.4	QPSK	3	1	24.46	24.46	24.30	
1.4	QPSK	3	3	24.41	24.45	24.42	
1.4	QPSK	6	0	23.50	23.51	23.36	24.7
1.4	16QAM	1	0	23.75	23.73	23.46	
1.4	16QAM	1	3	23.79	23.84	23.67	
1.4	16QAM	1	5	23.68	23.74	23.60	24.7
1.4	16QAM	3	0	23.56	23.51	23.29	
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	23.7
1.4	16QAM	6	0	22.58	22.61	22.49	
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	23.7
1.4	64QAM	1	5	22.64	22.61	21.72	
1.4	64QAM	3	0	22.66	22.60	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	22.7
1.4	64QAM	3	3	22.63	22.60	21.75	
1.4	64QAM	6	0	21.54	21.47	20.72	



Band 7							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.81	20.82	20.83	22
20	QPSK	1	49	20.80	20.86	20.81	
20	QPSK	1	99	20.83	20.92	20.89	
20	QPSK	50	0	20.82	20.91	20.93	22
20	QPSK	50	24	20.84	20.92	20.96	
20	QPSK	50	50	20.95	21.03	21.02	
20	QPSK	100	0	20.92	20.94	20.93	22
20	16QAM	1	0	21.06	21.11	21.16	
20	16QAM	1	49	21.13	21.18	21.17	
20	16QAM	1	99	21.14	21.27	21.23	22
20	16QAM	50	0	20.81	20.99	20.94	
20	16QAM	50	24	20.93	20.97	20.96	
20	16QAM	50	50	20.95	21.05	21.03	22
20	16QAM	100	0	20.92	20.90	20.93	
20	64QAM	1	0	20.87	20.98	20.99	
20	64QAM	1	49	20.96	21.06	20.98	22
20	64QAM	1	99	21.02	21.14	21.12	
20	64QAM	50	0	20.83	20.91	20.93	
20	64QAM	50	24	20.94	20.96	20.96	22
20	64QAM	50	50	20.95	21.03	21.05	
20	64QAM	100	0	20.92	20.94	20.94	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.81	20.82	20.81	22
15	QPSK	1	37	20.81	20.83	20.81	
15	QPSK	1	74	20.80	20.83	20.85	
15	QPSK	36	0	20.82	20.86	20.91	22
15	QPSK	36	20	20.92	20.82	20.89	
15	QPSK	36	39	20.95	20.95	21.00	
15	QPSK	75	0	20.85	20.90	20.91	22
15	16QAM	1	0	20.99	21.11	21.14	
15	16QAM	1	37	21.07	21.14	21.11	
15	16QAM	1	74	21.05	21.21	21.18	22
15	16QAM	36	0	20.81	20.86	20.92	
15	16QAM	36	20	20.86	20.91	20.94	
15	16QAM	36	39	20.95	21.04	20.93	22
15	16QAM	75	0	20.83	20.87	20.93	
15	64QAM	1	0	20.80	20.95	20.89	
15	64QAM	1	37	20.91	20.98	20.95	22
15	64QAM	1	74	21.00	21.07	21.12	
15	64QAM	36	0	20.80	20.89	20.85	
15	64QAM	36	20	20.93	20.96	20.95	22
15	64QAM	36	39	20.88	21.02	20.96	
15	64QAM	75	0	20.85	20.94	20.86	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.80	20.82	20.80	22
10	QPSK	1	25	20.83	20.83	20.81	
10	QPSK	1	49	20.81	20.83	20.84	
10	QPSK	25	0	20.82	20.85	20.93	22
10	QPSK	25	12	20.84	20.83	20.85	
10	QPSK	25	25	20.85	21.00	20.98	
10	QPSK	50	0	20.83	20.94	20.87	22
10	16QAM	1	0	21.04	21.10	21.13	
10	16QAM	1	25	21.13	21.11	21.12	
10	16QAM	1	49	21.06	21.26	21.16	22
10	16QAM	25	0	20.81	20.82	20.91	
10	16QAM	25	12	20.93	20.93	20.86	
10	16QAM	25	25	20.95	21.02	20.98	22
10	16QAM	50	0	20.90	20.85	20.91	
10	64QAM	1	0	20.83	20.92	20.98	
10	64QAM	1	25	20.96	20.96	20.88	22
10	64QAM	1	49	20.96	21.06	21.03	
10	64QAM	25	0	20.88	20.89	20.93	
10	64QAM	25	12	20.87	20.95	20.96	22
10	64QAM	25	25	20.95	20.94	20.95	
10	64QAM	50	0	20.87	20.89	20.92	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.83	20.80	20.82	22
5	QPSK	1	12	20.82	20.84	20.85	
5	QPSK	1	24	20.83	20.83	20.86	
5	QPSK	12	0	20.85	20.86	20.91	22
5	QPSK	12	7	20.88	20.87	20.89	
5	QPSK	12	13	20.88	20.94	20.95	
5	QPSK	25	0	20.87	20.87	20.93	22
5	16QAM	1	0	20.96	21.06	21.12	
5	16QAM	1	12	21.07	21.18	21.14	
5	16QAM	1	24	21.14	21.25	21.23	22
5	16QAM	12	0	20.83	20.87	20.92	
5	16QAM	12	7	20.93	20.88	20.91	
5	16QAM	12	13	20.90	20.96	20.95	22
5	16QAM	25	0	20.82	20.82	20.89	
5	64QAM	1	0	20.81	20.96	20.93	
5	64QAM	1	12	20.90	20.98	20.97	22
5	64QAM	1	24	20.97	21.08	21.10	
5	64QAM	12	0	20.87	20.89	20.90	
5	64QAM	12	7	20.93	20.89	20.87	22
5	64QAM	12	13	20.91	20.96	21.05	
5	64QAM	25	0	20.86	20.87	20.90	



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	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	25.7
10	QPSK	1	25	24.58	24.57	24.54	
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.64	23.68	23.68	24.7
10	QPSK	25	12	23.74	23.70	23.69	
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	24.7
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	
10	16QAM	1	49	24.00	24.00	23.96	23.7
10	16QAM	25	0	22.96	22.71	22.88	
10	16QAM	25	12	22.75	22.69	22.68	
10	16QAM	25	25	22.70	22.75	22.71	22.7
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	22.7
10	64QAM	1	49	22.58	22.88	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.59	24.56	25.7
5	QPSK	1	12	24.60	24.62	24.60	
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	24.7
5	QPSK	12	7	23.69	23.69	23.74	
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	24.7
5	16QAM	1	0	23.96	23.92	23.87	
5	16QAM	1	12	23.98	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	23.7
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	
5	16QAM	12	13	22.69	22.76	22.68	23.7
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.42	22.84	
5	64QAM	1	12	22.83	22.87	22.86	22.7
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	
5	64QAM	12	7	21.65	21.76	21.81	22.7
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	25.7
3	QPSK	1	8	24.62	24.62	24.60	
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	24.7
3	QPSK	8	4	23.69	23.94	22.71	
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	24.7
3	16QAM	1	0	24.00	24.02	23.95	
3	16QAM	1	8	23.96	23.98	23.98	
3	16QAM	1	14	23.91	23.96	23.91	23.7
3	16QAM	8	0	22.75	22.71	22.71	
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	23.7
3	16QAM	15	0	22.73	22.69	22.68	
3	64QAM	1	0	22.46	22.70	22.87	
3	64QAM	1	8	22.67	22.88	22.90	22.7
3	64QAM	1	14	22.66	22.94	22.81	
3	64QAM	8	0	21.50	21.75	21.71	
3	64QAM	8	4	21.58	21.74	21.79	22.7
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	25.7
1.4	QPSK	1	3	24.60	24.61	24.57	
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	24.7
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	
1.4	QPSK	6	0	23.62	23.64	23.59	24.7
1.4	16QAM	1	0	23.87	23.93	23.87	
1.4	16QAM	1	3	23.89	23.96	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	24.7
1.4	16QAM	3	0	23.64	23.58	23.62	
1.4	16QAM	3	1	23.73	23.66	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	23.7
1.4	16QAM	6	0	22.71	22.71	22.67	
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	23.7
1.4	64QAM	1	5	22.74	22.78	22.68	
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	22.7
1.4	64QAM	3	3	22.60	22.77	22.77	
1.4	64QAM	6	0	21.44	21.65	21.61	

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				2530			Tune-up limit (dBm)
Frequency (MHz)				782			
10	QPSK	1	0		24.17		25.2
10	QPSK	1	25		24.10		
10	QPSK	1	49		24.14		
10	QPSK	25	0		23.17		24.2
10	QPSK	25	12		23.21		
10	QPSK	25	25		23.21		
10	QPSK	50	0		23.20		24.2
10	16QAM	1	0		23.42		
10	16QAM	1	25		23.45		
10	16QAM	1	49		23.42		23.2
10	16QAM	25	0		22.20		
10	16QAM	25	12		22.23		
10	16QAM	25	25		22.20		23.2
10	16QAM	50	0		22.23		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.40		23.2
10	64QAM	1	49		22.34		
10	64QAM	25	0		21.24		
10	64QAM	25	12		21.23		22.2
10	64QAM	25	25		21.25		
10	64QAM	50	0		21.26		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.18	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.25	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.28	21.25	
5	64QAM	25	0	20.96	21.26	21.23	

Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.59		25.7
10	QPSK	1	25		24.53		
10	QPSK	1	49		24.43		
10	QPSK	25	0		23.56		
10	QPSK	25	12		23.56		24.7
10	QPSK	25	25		23.59		
10	QPSK	50	0		23.53		
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.92		24.7
10	16QAM	1	49		23.83		
10	16QAM	25	0		22.55		
10	16QAM	25	12		22.53		
10	16QAM	25	25		22.58		23.7
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.64		
10	64QAM	1	49		22.72		23.7
10	64QAM	25	0		21.39		
10	64QAM	25	12		21.38		
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.44		22.7
Channel				23305	23330	23355	
Frequency (MHz)				790.5	793	795.5	Tune-up limit (dBm)
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.56	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	
5	QPSK	12	7	23.66	23.57	23.53	24.7
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.58	23.53	23.50	
5	16QAM	1	0	23.63	23.60	23.62	
5	16QAM	1	12	23.68	23.66	23.67	24.7
5	16QAM	1	24	23.87	23.80	23.82	
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.58	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.49	
5	64QAM	1	12	22.57	22.35	22.58	
5	64QAM	1	24	22.32	22.41	22.77	23.7
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.28	21.63	
5	64QAM	12	13	21.31	21.27	21.61	
5	64QAM	25	0	21.34	21.26	21.51	22.7

Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.60	24.58	24.55	25.7
10	QPSK	1	25	24.61	24.62	24.59	
10	QPSK	1	49	24.64	24.67	24.63	
10	QPSK	25	0	23.65	23.68	23.66	
10	QPSK	25	12	23.79	23.75	23.70	24.7
10	QPSK	25	25	23.81	23.82	23.80	
10	QPSK	50	0	23.69	23.72	23.69	
10	16QAM	1	0	23.93	23.95	23.94	
10	16QAM	1	25	24.03	24.06	24.01	24.7
10	16QAM	1	49	24.01	24.02	23.98	
10	16QAM	25	0	22.86	22.85	22.85	
10	16QAM	25	12	22.79	22.75	22.73	
10	16QAM	25	25	22.78	22.77	22.78	23.7
10	16QAM	50	0	22.69	22.69	22.67	
10	64QAM	1	0	22.64	22.70	22.79	
10	64QAM	1	25	22.72	22.67	22.63	
10	64QAM	1	49	22.84	22.76	22.59	23.7
10	64QAM	25	0	21.42	21.42	21.41	
10	64QAM	25	12	21.51	21.48	21.48	
10	64QAM	25	25	21.61	21.67	21.66	
10	64QAM	50	0	21.53	21.64	21.57	22.7
Channel				23785	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.57	24.58	24.58	25.7
5	QPSK	1	12	24.66	24.65	24.63	
5	QPSK	1	24	24.65	24.66	24.64	
5	QPSK	12	0	23.66	23.69	23.67	
5	QPSK	12	7	23.76	23.76	23.78	24.7
5	QPSK	12	13	23.74	23.77	23.73	
5	QPSK	25	0	23.74	23.71	23.75	
5	16QAM	1	0	23.91	23.93	23.91	
5	16QAM	1	12	23.95	23.97	23.96	24.7
5	16QAM	1	24	24.00	24.05	23.99	
5	16QAM	12	0	22.73	22.71	22.74	
5	16QAM	12	7	22.79	22.77	22.79	
5	16QAM	12	13	22.77	22.80	22.77	23.7
5	16QAM	25	0	22.74	22.76	22.77	
5	64QAM	1	0	22.26	22.42	22.71	
5	64QAM	1	12	22.62	22.61	22.61	
5	64QAM	1	24	22.53	22.52	22.48	23.7
5	64QAM	12	0	21.55	21.47	21.65	
5	64QAM	12	7	21.69	21.47	21.76	
5	64QAM	12	13	21.66	21.50	21.70	
5	64QAM	25	0	21.52	21.44	21.59	22.7



Band 25							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	18.30	18.31	18.23	19.4
20	QPSK	1	49	18.21	18.26	18.23	
20	QPSK	1	99	18.24	18.20	18.21	
20	QPSK	50	0	18.35	18.32	18.28	19.4
20	QPSK	50	24	18.40	18.43	18.35	
20	QPSK	50	50	18.33	18.37	18.33	
20	QPSK	100	0	18.40	18.42	18.29	19.4
20	16QAM	1	0	18.65	18.63	18.61	
20	16QAM	1	49	18.57	18.61	18.55	
20	16QAM	1	99	18.46	18.55	18.48	19.4
20	16QAM	50	0	18.36	18.39	18.33	
20	16QAM	50	24	18.40	18.45	18.31	
20	16QAM	50	50	18.36	18.41	18.36	19.4
20	16QAM	100	0	18.39	18.40	18.32	
20	64QAM	1	0	18.55	18.49	18.48	
20	64QAM	1	49	18.49	18.51	18.43	19.4
20	64QAM	1	99	18.44	18.43	18.47	
20	64QAM	50	0	18.38	18.39	18.32	
20	64QAM	50	24	18.42	18.46	18.33	19.4
20	64QAM	50	50	18.36	18.39	18.37	
20	64QAM	100	0	18.39	18.44	18.31	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	18.30	18.22	18.20	19.4
15	QPSK	1	37	18.24	18.25	18.21	
15	QPSK	1	74	18.22	18.23	18.21	
15	QPSK	36	0	18.29	18.25	18.25	19.4
15	QPSK	36	20	18.30	18.39	18.28	
15	QPSK	36	39	18.28	18.33	18.28	
15	QPSK	75	0	18.31	18.36	18.28	19.4
15	16QAM	1	0	18.64	18.63	18.55	
15	16QAM	1	37	18.57	18.58	18.52	
15	16QAM	1	74	18.37	18.45	18.43	19.4
15	16QAM	36	0	18.32	18.31	18.27	
15	16QAM	36	20	18.34	18.43	18.31	
15	16QAM	36	39	18.32	18.41	18.29	19.4
15	16QAM	75	0	18.39	18.31	18.32	
15	64QAM	1	0	18.50	18.44	18.45	
15	64QAM	1	37	18.39	18.50	18.34	19.4
15	64QAM	1	74	18.42	18.40	18.44	
15	64QAM	36	0	18.31	18.29	18.22	
15	64QAM	36	20	18.33	18.45	18.24	19.4
15	64QAM	36	39	18.33	18.37	18.37	
15	64QAM	75	0	18.30	18.43	18.25	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1885	1880	1910	
10	QPSK	1	0	18.23	18.27	18.22	19.4
10	QPSK	1	25	18.21	18.25	18.21	
10	QPSK	1	49	18.24	18.23	18.23	
10	QPSK	25	0	18.31	18.27	18.24	19.4
10	QPSK	25	12	18.30	18.36	18.26	
10	QPSK	25	25	18.23	18.37	18.27	
10	QPSK	50	0	18.34	18.37	18.26	19.4
10	16QAM	1	0	18.63	18.53	18.52	
10	16QAM	1	25	18.50	18.52	18.52	
10	16QAM	1	49	18.36	18.50	18.43	19.4
10	16QAM	25	0	18.33	18.35	18.27	
10	16QAM	25	12	18.40	18.44	18.21	
10	16QAM	25	25	18.34	18.34	18.34	19.4
10	16QAM	50	0	18.29	18.31	18.26	
10	64QAM	1	0	18.53	18.40	18.45	
10	64QAM	1	25	18.48	18.41	18.41	19.4
10	64QAM	1	49	18.34	18.33	18.36	
10	64QAM	25	0	18.31	18.34	18.24	
10	64QAM	25	12	18.40	18.45	18.32	19.4
10	64QAM	25	25	18.28	18.32	18.28	
10	64QAM	50	0	18.34	18.42	18.27	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.29	18.31	18.22	19.4
5	QPSK	1	12	18.25	18.20	18.23	
5	QPSK	1	24	18.24	18.22	18.24	
5	QPSK	12	0	18.32	18.25	18.23	19.4
5	QPSK	12	7	18.30	18.37	18.25	
5	QPSK	12	13	18.24	18.29	18.23	
5	QPSK	25	0	18.39	18.36	18.21	19.4
5	16QAM	1	0	18.57	18.56	18.51	
5	16QAM	1	12	18.48	18.58	18.45	
5	16QAM	1	24	18.37	18.55	18.44	19.4
5	16QAM	12	0	18.30	18.39	18.26	
5	16QAM	12	7	18.32	18.43	18.24	
5	16QAM	12	13	18.29	18.34	18.28	19.4
5	16QAM	25	0	18.36	18.33	18.24	
5	64QAM	1	0	18.55	18.47	18.45	
5	64QAM	1	12	18.42	18.42	18.38	19.4
5	64QAM	1	24	18.41	18.40	18.43	
5	64QAM	12	0	18.30	18.33	18.28	
5	64QAM	12	7	18.41	18.39	18.26	19.4
5	64QAM	12	13	18.34	18.36	18.31	
5	64QAM	25	0	18.38	18.43	18.25	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.22	18.24	18.24	19.4
3	QPSK	1	8	18.23	18.21	18.20	
3	QPSK	1	14	18.21	18.22	18.21	
3	QPSK	8	0	18.35	18.28	18.28	19.4
3	QPSK	8	4	18.30	18.36	18.33	
3	QPSK	8	7	18.29	18.35	18.33	
3	QPSK	15	0	18.35	18.40	18.26	19.4
3	16QAM	1	0	18.59	18.53	18.61	
3	16QAM	1	8	18.52	18.53	18.50	
3	16QAM	1	14	18.36	18.51	18.39	19.4
3	16QAM	8	0	18.32	18.34	18.32	
3	16QAM	8	4	18.31	18.43	18.29	
3	16QAM	8	7	18.31	18.32	18.28	19.4
3	16QAM	15	0	18.34	18.35	18.31	
3	64QAM	1	0	18.52	18.44	18.45	
3	64QAM	1	8	18.45	18.50	18.33	19.4
3	64QAM	1	14	18.41	18.37	18.47	
3	64QAM	8	0	18.36	18.30	18.31	
3	64QAM	8	4	18.34	18.42	18.32	19.4
3	64QAM	8	7	18.32	18.35	18.37	
3	64QAM	15	0	18.33	18.41	18.27	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	18.30	18.26	18.24	19.4
1.4	QPSK	1	3	18.23	18.25	18.21	
1.4	QPSK	1	5	18.24	18.25	18.22	
1.4	QPSK	3	0	18.25	18.32	18.23	19.4
1.4	QPSK	3	1	18.38	18.33	18.35	
1.4	QPSK	3	3	18.32	18.28	18.33	
1.4	QPSK	6	0	18.37	18.42	18.24	19.4
1.4	16QAM	1	0	18.55	18.55	18.56	
1.4	16QAM	1	3	18.49	18.57	18.55	
1.4	16QAM	1	5	18.44	18.48	18.42	19.4
1.4	16QAM	3	0	18.28	18.30	18.28	
1.4	16QAM	3	1	18.35	18.45	18.28	
1.4	16QAM	3	3	18.34	18.36	18.29	19.4
1.4	16QAM	6	0	18.39	18.34	18.22	
1.4	64QAM	1	0	18.54	18.41	18.40	
1.4	64QAM	1	3	18.45	18.46	18.40	19.4
1.4	64QAM	1	5	18.42	18.38	18.45	
1.4	64QAM	3	0	18.37	18.28	18.30	
1.4	64QAM	3	1	18.33	18.36	18.33	19.4
1.4	64QAM	3	3	18.29	18.35	18.34	
1.4	64QAM	6	0	18.30	18.40	18.21	



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26745	26865	26990	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.45	24.40	24.62	25.7
15	QPSK	1	37	24.34	24.39	24.41	
15	QPSK	1	74	24.35	24.39	24.31	
15	QPSK	36	0	23.51	23.51	23.54	24.7
15	QPSK	36	20	23.52	23.49	23.50	
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	24.7
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	
15	16QAM	1	74	23.64	23.68	23.59	23.7
15	16QAM	36	0	22.51	22.54	22.58	
15	16QAM	36	20	22.53	22.51	22.50	
15	16QAM	36	39	22.50	22.53	22.54	23.7
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	23.7
15	64QAM	1	37	22.43	22.68	22.68	
15	64QAM	1	74	22.57	22.61	21.80	
15	64QAM	36	0	21.21	21.58	21.60	22.7
15	64QAM	36	20	21.40	21.53	21.54	
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	Tune-up limit (dBm)
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	25.7
10	QPSK	1	25	24.44	24.47	24.45	
10	QPSK	1	49	24.46	24.49	24.37	
10	QPSK	25	0	23.64	23.58	23.57	24.7
10	QPSK	25	12	23.58	23.54	23.57	
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.57	23.53	23.49	24.7
10	16QAM	1	0	23.92	23.87	23.87	
10	16QAM	1	25	23.85	23.87	23.86	
10	16QAM	1	49	23.86	23.90	23.75	23.7
10	16QAM	25	0	22.62	22.57	22.57	
10	16QAM	25	12	22.60	22.55	22.57	
10	16QAM	25	25	22.53	22.58	22.53	23.7
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.75	
10	64QAM	1	25	22.33	22.80	22.64	23.7
10	64QAM	1	49	22.74	22.81	21.98	
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.16	21.61	21.57	22.7
10	64QAM	25	25	21.31	21.58	20.89	
10	64QAM	50	0	21.25	21.57	21.38	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	
5	QPSK	1	12	24.56	24.55	24.17	25.7
5	QPSK	1	24	24.46	24.53	24.41	
5	QPSK	12	0	23.64	23.59	23.60	24.7
5	QPSK	12	7	23.63	23.63	23.33	
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	24.7
5	16QAM	1	0	23.95	23.85	23.86	
5	16QAM	1	12	23.84	23.87	23.49	
5	16QAM	1	24	23.77	23.88	23.69	23.7
5	16QAM	12	0	22.71	22.85	22.81	
5	16QAM	12	7	22.67	22.64	22.48	
5	16QAM	12	13	22.55	22.59	22.45	23.7
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	
5	64QAM	1	12	22.31	22.76	21.70	23.7
5	64QAM	1	24	22.14	22.79	21.71	
5	64QAM	12	0	21.36	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.58	20.73	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	
3	QPSK	1	8	24.60	24.57	24.26	25.7
3	QPSK	1	14	24.46	24.50	24.37	
3	QPSK	8	0	23.69	23.57	23.20	24.7
3	QPSK	8	4	23.68	23.63	23.32	
3	QPSK	8	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.58	23.29	24.7
3	16QAM	1	0	23.93	23.83	23.53	
3	16QAM	1	8	23.92	23.91	23.53	
3	16QAM	1	14	23.81	23.90	23.67	23.7
3	16QAM	8	0	22.74	22.63	22.36	
3	16QAM	8	4	22.75	22.67	22.45	
3	16QAM	8	7	22.65	22.66	22.54	23.7
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	
3	64QAM	1	8	22.49	22.84	21.84	23.7
3	64QAM	1	14	22.30	22.80	21.76	
3	64QAM	8	0	21.40	21.65	20.75	
3	64QAM	8	4	21.44	21.72	20.79	22.7
3	64QAM	8	7	21.37	21.63	20.72	
3	64QAM	15	0	21.36	21.60	20.82	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	
1.4	QPSK	1	3	24.56	24.54	24.39	25.7
1.4	QPSK	1	5	24.45	24.41	24.28	
1.4	QPSK	3	0	24.56	24.43	24.39	24.7
1.4	QPSK	3	1	24.58	24.46	24.40	
1.4	QPSK	3	3	24.53	24.46	24.36	
1.4	QPSK	6	0	23.80	23.53	23.42	24.7
1.4	16QAM	1	0	23.86	23.73	23.57	
1.4	16QAM	1	3	23.90	23.90	23.76	
1.4	16QAM	1	5	23.79	23.75	23.66	24.7
1.4	16QAM	3	0	23.62	23.52	23.44	
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	23.7
1.4	16QAM	6	0	22.66	22.58	22.52	
1.4	64QAM	1	0	22.39	22.67	21.78	
1.4	64QAM	1	3	22.45	22.75	21.75	23.7
1.4	64QAM	1	5	22.41	22.65	21.74	
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	22.7
1.4	64QAM	3	3	22.43	22.64	21.82	
1.4	64QAM	6	0	21.34	21.56	20.84	

Band 30							
Annex							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				2771.0			
Frequency (MHz)				2310			
10	QPSK	1	0		20.72		21.5
10	QPSK	1	25		20.49		
10	QPSK	1	49		20.50		
10	QPSK	25	0		20.56		21.5
10	QPSK	25	12		20.61		
10	QPSK	25	25		20.70		
10	QPSK	50	0		20.59		21.5
10	16QAM	1	0		20.87		
10	16QAM	1	25		20.86		
10	16QAM	1	49		20.88		21.5
10	16QAM	25	0		20.53		
10	16QAM	25	12		20.56		
10	16QAM	25	25		20.68		21.5
10	16QAM	50	0		20.56		
10	64QAM	1	0		20.74		
10	64QAM	1	25		20.80		21.5
10	64QAM	1	49		20.77		
10	64QAM	25	0		19.75		
10	64QAM	25	12		19.81		20.5
10	64QAM	25	25		19.89		
10	64QAM	50	0		19.78		
Channel				2788.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.44	20.48	20.45	21.5
5	QPSK	1	12	20.53	20.62	20.56	
5	QPSK	1	24	20.60	20.60	20.52	
5	QPSK	12	0	20.63	20.55	20.59	21.5
5	QPSK	12	7	20.66	20.67	20.62	
5	QPSK	12	13	20.65	20.66	20.59	
5	QPSK	25	0	20.66	20.54	20.55	21.5
5	16QAM	1	0	20.77	20.76	20.76	
5	16QAM	1	12	20.87	20.85	20.86	
5	16QAM	1	24	20.81	20.82	20.85	21.5
5	16QAM	12	0	20.60	20.53	20.59	
5	16QAM	12	7	20.64	20.65	20.65	
5	16QAM	12	13	20.65	20.64	20.64	21.5
5	16QAM	25	0	20.64	20.57	20.63	
5	64QAM	1	0	20.70	20.71	20.72	
5	64QAM	1	12	20.73	20.75	20.74	21.5
5	64QAM	1	24	20.82	20.83	20.84	
5	64QAM	12	0	19.84	19.80	19.83	
5	64QAM	12	7	19.89	19.89	19.87	20.5
5	64QAM	12	13	19.90	19.89	19.87	
5	64QAM	25	0	19.84	19.77	19.81	



Band 66							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132322	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.83	18.90	18.88	20
20	QPSK	1	49	18.80	18.82	18.86	
20	QPSK	1	99	18.82	18.88	18.82	
20	QPSK	50	0	18.80	18.81	18.80	20
20	QPSK	50	24	18.80	18.82	18.81	
20	QPSK	50	50	18.81	18.83	18.81	
20	QPSK	100	0	18.86	18.84	18.94	20
20	16QAM	1	0	19.13	19.15	19.23	
20	16QAM	1	49	19.04	19.08	19.11	
20	16QAM	1	99	19.19	19.09	19.08	20
20	16QAM	50	0	18.87	18.91	18.98	
20	16QAM	50	24	18.94	18.90	18.93	
20	16QAM	50	50	18.91	18.94	19.00	20
20	16QAM	100	0	18.90	18.88	18.96	
20	64QAM	1	0	19.04	19.05	19.03	20
20	64QAM	1	49	18.92	18.91	18.87	
20	64QAM	1	99	19.06	19.05	18.97	
20	64QAM	50	0	18.89	18.93	19.01	20
20	64QAM	50	24	18.95	18.90	18.94	
20	64QAM	50	50	18.92	18.95	18.98	
20	64QAM	100	0	18.93	18.88	18.95	Tune-up limit (dBm)
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.80	18.83	18.88	20
15	QPSK	1	37	18.80	18.80	18.80	
15	QPSK	1	74	18.80	18.82	18.80	
15	QPSK	36	0	18.81	18.90	18.94	20
15	QPSK	36	20	18.86	18.83	18.93	
15	QPSK	36	39	18.88	18.91	18.99	
15	QPSK	75	0	18.89	18.86	18.94	20
15	16QAM	1	0	19.12	19.15	19.17	
15	16QAM	1	37	19.03	19.06	19.12	
15	16QAM	1	74	19.12	19.13	19.10	20
15	16QAM	36	0	18.86	18.90	18.95	
15	16QAM	36	20	18.92	18.86	18.90	
15	16QAM	36	39	18.90	18.95	18.98	20
15	16QAM	75	0	18.94	18.97	18.94	
15	64QAM	1	0	19.04	18.96	19.04	
15	64QAM	1	37	18.96	19.00	19.04	20
15	64QAM	1	74	19.02	19.04	19.02	
15	64QAM	36	0	18.87	18.94	18.97	
15	64QAM	36	20	18.91	18.89	18.93	20
15	64QAM	36	39	18.91	18.97	19.00	
15	64QAM	75	0	18.92	18.89	18.93	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.81	18.83	18.89	20
10	QPSK	1	25	18.80	18.83	18.88	
10	QPSK	1	49	18.80	18.82	18.88	
10	QPSK	25	0	18.82	18.86	18.92	20
10	QPSK	25	12	18.90	18.89	18.94	
10	QPSK	25	25	18.86	18.95	18.98	
10	QPSK	50	0	18.89	18.90	18.96	20
10	16QAM	1	0	19.21	19.22	19.17	
10	16QAM	1	25	19.12	19.20	19.14	
10	16QAM	1	49	19.12	19.17	19.15	20
10	16QAM	25	0	18.91	18.99	18.96	
10	16QAM	25	12	18.94	18.91	18.99	
10	16QAM	25	25	18.89	18.96	19.00	20
10	16QAM	50	0	18.92	18.89	18.95	
10	64QAM	1	0	19.04	19.07	19.11	20
10	64QAM	1	25	19.05	19.11	19.18	
10	64QAM	1	49	18.99	19.09	19.20	
10	64QAM	25	0	18.92	18.92	19.00	20
10	64QAM	25	12	18.95	18.93	19.03	
10	64QAM	25	25	18.90	18.96	19.08	
10	64QAM	50	0	18.94	18.92	19.02	Tune-up limit (dBm)
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.80	18.80	18.87	20
5	QPSK	1	12	18.87	18.80	18.95	
5	QPSK	1	24	18.80	18.84	18.91	
5	QPSK	12	0	18.92	18.88	19.00	20
5	QPSK	12	7	18.93	18.96	19.06	
5	QPSK	12	13	18.92	18.95	19.02	
5	QPSK	25	0	18.91	18.87	18.99	20
5	16QAM	1	0	19.14	19.11	19.16	
5	16QAM	1	12	19.18	19.14	19.19	
5	16QAM	1	24	19.10	19.19	19.20	20
5	16QAM	12	0	18.93	18.93	19.06	
5	16QAM	12	7	18.96	19.02	19.08	
5	16QAM	12	13	18.95	18.99	19.02	20
5	16QAM	25	0	18.92	18.92	19.03	
5	64QAM	1	0	19.10	19.04	19.14	
5	64QAM	1	12	19.11	19.11	19.12	20
5	64QAM	1	24	19.07	19.09	19.09	
5	64QAM	12	0	18.96	18.97	19.12	
5	64QAM	12	7	18.97	19.02	19.11	20
5	64QAM	12	13	18.96	19.00	19.10	
5	64QAM	25	0	18.91	18.89	19.05	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.82	18.80	18.82	20
3	QPSK	1	8	18.91	18.86	18.86	
3	QPSK	1	14	18.86	18.80	18.84	
3	QPSK	8	0	18.89	18.83	18.92	20
3	QPSK	8	4	18.86	18.90	18.93	
3	QPSK	8	7	18.93	18.89	18.90	
3	QPSK	15	0	18.91	18.81	18.91	20
3	16QAM	1	0	19.07	19.06	19.16	
3	16QAM	1	8	19.15	19.11	19.16	
3	16QAM	1	14	19.15	19.09	19.13	20
3	16QAM	8	0	18.90	18.85	18.96	
3	16QAM	8	4	18.99	18.94	18.98	
3	16QAM	8	7	18.99	18.92	18.93	20
3	16QAM	15	0	18.96	18.83	18.93	
3	64QAM	1	0	19.05	18.97	19.08	
3	64QAM	1	8	19.15	19.13	19.09	20
3	64QAM	1	14	19.07	19.06	19.00	
3	64QAM	8	0	18.97	18.89	18.96	
3	64QAM	8	4	19.04	18.99	19.01	20
3	64QAM	8	7	19.00	18.95	18.97	
3	64QAM	15	0	18.97	18.86	18.95	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.81	18.87	18.91	20
1.4	QPSK	1	3	18.85	18.91	18.96	
1.4	QPSK	1	5	18.80	18.83	18.89	
1.4	QPSK	3	0	18.84	18.90	18.92	20
1.4	QPSK	3	1	18.89	18.94	18.96	
1.4	QPSK	3	3	18.85	18.90	18.93	
1.4	QPSK	6	0	18.91	18.96	19.00	20
1.4	16QAM	1	0	19.15	19.20	19.22	
1.4	16QAM	1	3	19.22	19.08	19.11	
1.4	16QAM	1	5	19.15	19.17	19.22	20
1.4	16QAM	3	0	18.94	18.97	18.99	
1.4	16QAM	3	1	19.02	19.01	19.06	
1.4	16QAM	3	3	18.92	18.97	19.01	20
1.4	16QAM	6	0	18.96	19.04	19.10	
1.4	64QAM	1	0	19.11	19.09	19.17	
1.4	64QAM	1	3	19.14	19.15	19.22	20
1.4	64QAM	1	5	19.06	19.10	19.16	
1.4	64QAM	3	0	19.03	19.06	19.15	
1.4	64QAM	3	1	19.06	19.13	19.20	20
1.4	64QAM	3	3	19.02	19.07	19.14	
1.4	64QAM	6	0	18.91	18.97	19.06	



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	133332	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.67	24.60	24.58	25.7
20	QPSK	1	49	24.58	24.59	24.56	
20	QPSK	1	99	24.61	24.56	24.53	
20	QPSK	50	0	23.69	23.68	23.64	24.7
20	QPSK	50	24	23.74	23.67	23.63	
20	QPSK	50	50	23.75	23.69	23.68	
20	QPSK	100	0	23.72	23.66	23.71	24.7
20	16QAM	1	0	23.99	23.90	23.92	
20	16QAM	1	49	23.94	23.93	23.91	
20	16QAM	1	99	23.97	23.91	23.93	23.7
20	16QAM	50	0	22.69	22.68	22.67	
20	16QAM	50	24	22.75	22.68	22.66	
20	16QAM	50	50	22.75	22.73	22.68	23.7
20	16QAM	100	0	22.72	22.65	22.70	
20	64QAM	1	0	21.88	22.69	22.77	
20	64QAM	1	49	22.51	22.82	22.02	23.7
20	64QAM	1	99	22.87	22.68	22.35	
20	64QAM	50	0	20.78	21.69	21.35	
20	64QAM	50	24	21.19	21.42	21.50	22.7
20	64QAM	50	50	21.70	21.49	21.63	
20	64QAM	100	0	21.39	21.66	21.66	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.65	24.60	24.56	25.7
15	QPSK	1	37	24.55	24.58	24.52	
15	QPSK	1	74	24.58	24.62	24.55	
15	QPSK	36	0	23.67	23.69	23.61	24.7
15	QPSK	36	20	23.75	23.67	23.71	
15	QPSK	36	39	23.65	23.71	23.65	
15	QPSK	75	0	23.73	23.65	23.60	24.7
15	16QAM	1	0	24.04	23.93	23.89	
15	16QAM	1	37	23.69	23.98	23.91	
15	16QAM	1	74	23.91	23.91	23.90	23.7
15	16QAM	36	0	22.63	22.67	22.63	
15	16QAM	36	20	22.72	22.69	22.71	
15	16QAM	36	39	22.69	22.71	22.68	23.7
15	16QAM	75	0	22.75	22.67	22.62	
15	64QAM	1	0	21.76	22.28	22.61	
15	64QAM	1	37	21.70	22.27	22.80	23.7
15	64QAM	1	74	22.85	22.43	22.62	
15	64QAM	36	0	20.76	21.71	21.42	
15	64QAM	36	20	20.88	21.68	21.75	22.7
15	64QAM	36	39	21.38	21.40	21.71	
15	64QAM	75	0	21.18	21.65	21.52	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.57	24.56	24.57	25.7
10	QPSK	1	25	24.53	24.56	24.57	
10	QPSK	1	49	24.62	24.64	24.53	
10	QPSK	25	0	23.73	23.62	23.60	24.7
10	QPSK	25	12	23.69	23.75	23.62	
10	QPSK	25	25	23.63	23.70	23.65	
10	QPSK	50	0	23.73	23.74	23.61	24.7
10	16QAM	1	0	24.03	23.97	23.96	
10	16QAM	1	25	23.89	23.97	23.94	
10	16QAM	1	49	23.96	24.00	23.86	23.7
10	16QAM	25	0	22.59	22.65	22.60	
10	16QAM	25	12	22.52	22.74	22.63	
10	16QAM	25	25	22.54	22.71	22.65	23.7
10	16QAM	50	0	22.73	22.73	22.59	
10	64QAM	1	0	21.71	22.19	22.73	
10	64QAM	1	25	21.61	22.89	22.80	23.7
10	64QAM	1	49	22.02	22.62	22.25	
10	64QAM	25	0	20.70	21.54	21.83	
10	64QAM	25	12	20.65	21.76	21.61	22.7
10	64QAM	25	25	20.65	21.68	21.37	
10	64QAM	50	0	20.70	21.56	21.58	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.63	24.62	25.7
5	QPSK	1	12	24.62	24.59	24.59	
5	QPSK	1	24	24.67	24.62	24.51	
5	QPSK	12	0	23.49	23.69	23.64	24.7
5	QPSK	12	7	23.63	23.70	23.68	
5	QPSK	12	13	23.60	23.68	23.61	
5	QPSK	25	0	23.60	23.69	23.59	24.7
5	16QAM	1	0	23.66	23.99	23.92	
5	16QAM	1	12	23.86	23.94	23.87	
5	16QAM	1	24	23.80	23.94	23.83	23.7
5	16QAM	12	0	22.42	22.74	22.69	
5	16QAM	12	7	22.60	22.75	22.70	
5	16QAM	12	13	22.61	22.70	22.63	23.7
5	16QAM	25	0	22.52	22.72	22.63	
5	64QAM	1	0	21.83	21.95	22.65	
5	64QAM	1	12	21.71	22.83	22.44	23.7
5	64QAM	1	24	21.72	22.88	21.98	
5	64QAM	12	0	20.70	21.46	21.42	
5	64QAM	12	7	20.79	21.76	21.57	22.7
5	64QAM	12	13	20.60	21.72	21.36	
5	64QAM	25	0	20.77	21.50	21.21	



Band 2											
Ant 2											
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)				18700	18900	19000					
20	QPSK	1	0	24.53	24.68	24.96	25.7				
20	QPSK	1	49	24.54	24.74	24.96					
20	QPSK	1	99	24.52	24.71	24.80					
20	QPSK	50	24	23.73	23.80	23.89	24.7				
20	QPSK	50	50	23.71	23.88	23.97					
20	QPSK	100	0	23.72	23.77	23.87					
20	16QAM	1	49	23.87	24.06	24.07	24.7				
20	16QAM	1	99	23.83	24.02	24.16					
20	16QAM	50	0	22.84	22.77	22.88					
20	16QAM	50	24	22.74	22.80	22.88	23.7				
20	16QAM	50	50	22.73	22.89	22.97					
20	16QAM	100	0	22.72	22.75	22.89					
20	64QAM	1	0	22.72	22.88	23.02	23.7				
20	64QAM	1	49	22.78	22.91	22.11					
20	64QAM	1	99	22.86	22.94	22.63					
20	64QAM	50	0	21.65	21.78	21.34	22.7				
20	64QAM	50	24	21.76	21.84	21.35					
20	64QAM	50	50	21.60	21.91	21.81					
20	64QAM	100	0	21.70	21.81	21.42					
Channel				18675	18900	19125	Tune-up limit (dBm)				
Frequency (MHz)				18675	18800	19025					
15	QPSK	1	0	24.54	24.73	24.81	25.7				
15	QPSK	1	37	24.56	24.72	24.81					
15	QPSK	1	74	24.59	24.72	24.85					
15	QPSK	36	0	23.64	23.75	23.85	24.7				
15	QPSK	36	20	23.74	23.80	23.98					
15	QPSK	36	39	23.72	23.90	23.99					
15	QPSK	75	0	23.71	23.79	23.91	24.7				
15	16QAM	1	0	23.80	24.04	24.13					
15	16QAM	1	37	23.88	24.02	24.12					
15	16QAM	1	74	23.89	24.05	24.19	23.7				
15	16QAM	36	0	22.62	22.77	22.86					
15	16QAM	36	20	22.71	22.80	22.96					
15	16QAM	36	39	22.72	22.90	22.99	23.7				
15	16QAM	75	0	22.72	22.81	22.91					
15	64QAM	1	0	22.74	22.87	22.97					
15	64QAM	1	37	22.78	22.92	22.97	23.7				
15	64QAM	1	74	22.63	22.97	22.76					
15	64QAM	36	0	21.67	21.81	21.25					
15	64QAM	36	20	21.77	21.85	21.57	22.7				
15	64QAM	36	39	21.68	21.94	21.75					
15	64QAM	75	0	21.73	21.83	21.44					
Channel				18650	18900	19150	Tune-up limit (dBm)				
Frequency (MHz)				18650	18800	19005					
10	QPSK	1	0	24.53	24.68	24.83	25.7				
10	QPSK	1	25	24.54	24.73	24.84					
10	QPSK	1	49	24.58	24.76	24.85					
10	QPSK	25	0	23.66	23.76	23.86	24.7				
10	QPSK	25	12	23.71	23.81	23.91					
10	QPSK	25	25	23.71	23.90	24.02					
10	QPSK	50	0	23.69	23.80	23.93	24.7				
10	16QAM	1	0	23.92	24.09	24.18					
10	16QAM	1	25	23.93	24.12	24.27					
10	16QAM	1	49	23.94	24.12	24.24	23.7				
10	16QAM	25	0	22.84	22.75	22.85					
10	16QAM	25	12	22.71	22.82	22.91					
10	16QAM	25	25	22.72	22.87	23.02	23.7				
10	16QAM	50	0	22.69	22.80	22.92					
10	64QAM	1	0	22.84	22.95	22.86					
10	64QAM	1	25	22.85	23.07	22.86	23.7				
10	64QAM	1	49	22.84	23.07	22.84					
10	64QAM	25	0	21.89	21.78	21.47					
10	64QAM	25	12	21.76	21.85	21.75	22.7				
10	64QAM	25	25	21.74	21.92	21.76					
10	64QAM	50	0	21.71	21.82	21.56					
Channel				18625	18900	19175	Tune-up limit (dBm)				
Frequency (MHz)				18625	18800	19075					
5	QPSK	1	0	24.55	24.66	24.86	25.7				
5	QPSK	1	12	24.62	24.80	24.92					
5	QPSK	1	24	24.60	24.81	24.95					
5	QPSK	12	0	23.68	23.77	23.98	24.7				
5	QPSK	12	7	23.70	23.90	24.00					
5	QPSK	12	13	23.68	23.90	24.03					
5	QPSK	25	0	23.67	23.80	23.98	24.7				
5	16QAM	1	0	23.86	23.97	24.26					
5	16QAM	1	12	23.90	24.09	24.24					
5	16QAM	1	24	23.94	24.12	24.28	23.7				
5	16QAM	12	0	22.68	22.82	23.00					
5	16QAM	12	7	22.71	22.94	23.02					
5	16QAM	12	13	22.72	22.88	23.03	23.7				
5	16QAM	25	0	22.71	22.81	23.04					
5	64QAM	1	0	22.87	22.98	22.73					
5	64QAM	1	12	22.80	23.03	22.88	23.7				
5	64QAM	1	24	22.87	23.06	22.75					
5	64QAM	12	0	21.73	21.85	21.81					
5	64QAM	12	7	21.79	21.95	21.84	22.7				
5	64QAM	12	13	21.75	21.82	21.72					
5	64QAM	25	0	21.68	21.82	21.84					
Channel				18615	18900	19185	Tune-up limit (dBm)				
Frequency (MHz)				18615	18800	19085					
3	QPSK	1	0	24.55	24.69	24.88	25.7				
3	QPSK	1	8	24.64	24.83	24.95					
3	QPSK	1	14	24.58	24.79	24.93					
3	QPSK	8	0	23.67	23.80	23.97	24.7				
3	QPSK	8	4	23.70	23.90	24.01					
3	QPSK	8	7	23.64	23.87	23.99					
3	QPSK	15	0	23.64	23.80	23.99	24.7				
3	16QAM	1	0	23.83	23.99	24.18					
3	16QAM	1	8	23.96	24.14	24.25					
3	16QAM	1	14	23.94	24.10	24.25	23.7				
3	16QAM	8	0	22.72	22.86	23.05					
3	16QAM	8	4	22.77	22.96	23.06					
3	16QAM	8	7	22.71	22.95	23.06	23.7				
3	16QAM	15	0	22.69	22.82	22.99					
3	64QAM	1	0	22.81	23.01	22.83					
3	64QAM	1	8	22.94	23.12	22.86	23.7				
3	64QAM	1	14	22.84	23.06	22.70					
3	64QAM	8	0	21.73	21.83	21.74					
3	64QAM	8	4	21.75	21.95	21.76	22.7				
3	64QAM	8	7	21.71	21.93	21.68					
3	64QAM	15	0	21.71	21.81	21.66					
Channel				18607	18900	19193	Tune-up limit (dBm)				
Frequency (MHz)				18607	18800	19093					
1.4	QPSK	1	0	24.46	24.67	24.82	25.7				
1.4	QPSK	1	3	24.54	24.74	24.90					
1.4	QPSK	1	5	24.47	24.69	24.84					
1.4	QPSK	3	0	24.54	24.71	24.84	24.7				
1.4	QPSK	3	1	24.58	24.77	24.88					
1.4	QPSK	3	3	24.52	24.73	24.85					
1.4											



Band 4									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20050	Power Mid Ch / 20175	Power High Ch / 20300	Tune-up limit (dBm)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	24.42	24.50	24.45	25.7		
20	QPSK	1	49	24.32	24.32	24.33			
20	QPSK	1	99	24.31	24.35	24.31			
20	QPSK	50	0	23.47	23.50	23.54	24.7		
20	QPSK	50	24	23.51	23.53	23.54			
20	QPSK	50	50	23.46	23.43	23.48			
20	QPSK	100	0	23.50	23.60	23.41	24.7		
20	16QAM	1	0	23.78	23.83	23.76			
20	16QAM	1	49	23.66	23.64	23.66			
20	16QAM	1	99	23.69	23.66	23.60	23.7		
20	16QAM	50	0	22.49	22.54	22.55			
20	16QAM	50	24	22.52	22.55	22.53			
20	16QAM	50	50	22.46	22.45	22.46	22.7		
20	16QAM	100	0	22.49	22.56	22.42			
20	64QAM	1	0	22.24	22.68	22.19			
20	64QAM	1	49	22.53	22.52	22.56	23.7		
20	64QAM	1	99	22.58	22.03	22.57			
20	64QAM	50	0	21.50	21.54	21.24			
20	64QAM	50	24	21.54	21.45	21.56	22.7		
20	64QAM	50	50	21.47	21.07	21.46			
20	64QAM	100	0	21.54	21.56	21.48			
Channel				20025	20175	20325	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	24.44	24.48	24.49	25.7		
15	QPSK	1	37	24.29	24.32	24.34			
15	QPSK	1	74	24.31	24.31	24.30			
15	QPSK	36	0	23.55	23.55	23.51	24.7		
15	QPSK	36	20	23.49	23.52	23.53			
15	QPSK	36	39	23.44	23.46	23.45			
15	QPSK	75	0	23.49	23.54	23.45	24.7		
15	16QAM	1	0	23.73	23.80	23.81			
15	16QAM	1	37	23.59	23.63	23.68			
15	16QAM	1	74	23.63	23.62	23.61	23.7		
15	16QAM	36	0	22.53	22.50	22.51			
15	16QAM	36	20	22.47	22.50	22.52			
15	16QAM	36	39	22.45	22.44	22.45	23.7		
15	16QAM	75	0	22.49	22.54	22.45			
15	64QAM	1	0	22.25	22.67	22.48			
15	64QAM	1	74	22.53	22.12	22.56	23.7		
15	64QAM	36	0	21.55	21.58	21.52			
15	64QAM	36	20	21.46	21.41	21.53			
15	64QAM	36	39	21.45	21.06	21.47	22.7		
15	64QAM	75	0	21.49	21.46	21.44			
Channel				20000	20175	20350		Tune-up limit (dBm)	
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.39	24.42	24.45	25.7		
10	QPSK	1	25	24.35	24.42	24.42			
10	QPSK	1	49	24.36	24.38	24.40			
10	QPSK	25	0	23.45	23.47	23.46	24.7		
10	QPSK	25	12	23.50	23.57	23.48			
10	QPSK	25	25	23.52	23.57	23.56			
10	QPSK	50	0	23.53	23.55	23.50	24.7		
10	16QAM	1	0	23.73	23.79	23.81			
10	16QAM	1	25	23.73	23.82	23.81			
10	16QAM	1	49	23.75	23.75	23.81	24.7		
10	16QAM	25	0	22.47	22.45	22.46			
10	16QAM	25	12	22.51	22.57	22.52			
10	16QAM	25	25	22.49	22.54	22.57	23.7		
10	16QAM	50	0	22.50	22.56	22.48			
10	64QAM	1	0	22.08	22.64	22.69			
10	64QAM	1	25	22.65	22.44	22.71	23.7		
10	64QAM	1	49	22.67	22.01	22.71			
10	64QAM	25	0	21.44	21.50	21.52			
10	64QAM	25	12	21.51	21.35	21.52	22.7		
10	64QAM	25	25	21.51	21.03	21.58			
10	64QAM	50	0	21.53	21.32	21.54			
Channel				19975	20175	20375	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.37	24.38	24.40	25.7		
5	QPSK	1	12	24.46	24.48	24.48			
5	QPSK	1	24	24.43	24.48	24.46			
5	QPSK	12	0	23.48	23.44	23.53	24.7		
5	QPSK	12	7	23.52	23.54	23.54			
5	QPSK	12	13	23.51	23.52	23.50			
5	QPSK	25	0	23.46	23.53	23.50	24.7		
5	16QAM	1	0	23.70	23.76	23.79			
5	16QAM	1	12	23.74	23.72	23.79			
5	16QAM	1	24	23.77	23.78	23.82	23.7		
5	16QAM	12	0	22.50	22.46	22.57			
5	16QAM	12	7	22.53	22.57	22.56			
5	16QAM	12	13	22.54	22.57	22.55	23.7		
5	16QAM	25	0	22.51	22.53	22.55			
5	64QAM	1	0	22.06	22.62	22.67			
5	64QAM	1	12	22.43	22.33	22.71	23.7		
5	64QAM	1	24	22.74	22.09	22.71			
5	64QAM	12	0	21.11	21.51	21.57			
5	64QAM	12	7	21.40	21.31	21.64	22.7		
5	64QAM	12	13	21.52	21.06	21.63			
5	64QAM	25	0	21.35	21.27	21.54			
Channel				19965	20175	20385	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.38	24.38	24.41	25.7		
3	QPSK	1	8	24.46	24.48	24.48			
3	QPSK	1	14	24.40	24.43	24.43			
3	QPSK	8	0	23.46	23.44	23.51	24.7		
3	QPSK	8	4	23.52	23.52	23.52			
3	QPSK	8	7	23.46	23.51	23.51			
3	QPSK	15	0	23.46	23.55	23.50	24.7		
3	16QAM	1	0	23.70	23.75	23.76			
3	16QAM	1	8	23.79	23.83	23.81			
3	16QAM	1	14	23.74	23.75	23.78	23.7		
3	16QAM	8	0	22.52	22.49	22.56			
3	16QAM	8	4	22.59	22.62	22.62			
3	16QAM	8	7	22.58	22.58	22.57	23.7		
3	16QAM	15	0	22.50	22.56	22.57			
3	64QAM	1	0	22.01	22.49	22.69			
3	64QAM	1	8	22.30	22.39	22.75	23.7		
3	64QAM	1	14	22.40	22.19	22.71			
3	64QAM	8	0	20.99	21.39	21.60			
3	64QAM	8	4	21.16	21.32	21.61	22.7		
3	64QAM	8	7	21.27	21.20	21.58			
3	64QAM	15	0	21.14	21.29	21.56			
Channel				19957	20175	20393	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.31	24.33	24.33	25.7		
1.4	QPSK	1	3	24.37	24.39	24.42			
1.4	QPSK	1	5	24.30	24.35	24.37			
1.4	QPSK	3	0	24.31	24.35	24.41	24.7		
1.4	QPSK	3	1	24.39	24.41	24.43			
1.4	QPSK	3	3	24.35	24.37	24.38			
1.4	16QAM	1	0	23.66	23.65	23.69	24.7		
1.4	16QAM	1	3	23.72	23.72	23.76			
1.4	16QAM	1	5	23.64	23.59	23.65			
1.4	16QAM	3	0	23.43	23.44	23.47	24.7		
1.4	16QAM	3	1	23.49	23.49	23.55			
1.4	16QAM	3	3	23.41	23.45	23.44			
1.4	16QAM	6	0	23.38	23.42	23.44	23.7		
1.4	16QAM	6	1	23.42	23.42	23.43			
1.4	16QAM	6	3	22.98	22.92	22.63			
1.4	16QAM	1	0	22.09	22.21	22.63	23.7		
1.4	64QAM	3	1	22.17	22.46	22.64			
1.4	64QAM	3	3	22.11	22.27	22.61			



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20535	20650	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.78	23.73	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.60	23.7
10	16QAM	25	0	22.96	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.78	22.79	22.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.48	21.77	
10	64QAM	25	0	21.67	21.78	21.76	
10	64QAM	25	12	21.80	21.77	21.68	22.7
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.78	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.84	22.82	
5	64QAM	1	12	22.90	22.85	21.90	23.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.75	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	24.7
3	QPSK	8	4	23.68	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	23.7
3	64QAM	1	14	22.64	22.62	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.78	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.56	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.96	23.26	
1.4	16QAM	1	3	23.93	23.95	23.39	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.26	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	22.7
1.4	64QAM	3	3	22.64	22.78	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	



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	24.69	24.76	24.80	25.7
20	QPSK	1	49	24.74	24.81	24.78	
20	QPSK	1	99	24.84	24.83	24.83	
20	QPSK	50	0	23.80	23.87	23.89	24.7
20	QPSK	50	24	23.92	23.91	23.91	
20	QPSK	50	50	23.94	23.92	23.92	
20	QPSK	100	0	23.91	23.89	23.91	24.7
20	16QAM	1	0	24.01	24.09	24.15	
20	16QAM	1	49	24.12	24.17	24.15	
20	16QAM	1	99	24.15	24.21	24.14	23.7
20	16QAM	50	0	22.81	22.87	22.91	
20	16QAM	50	24	22.93	22.92	22.94	
20	16QAM	50	50	22.96	23.02	22.98	23.7
20	16QAM	100	0	22.92	22.90	22.92	
20	64QAM	1	0	22.89	22.95	22.99	
20	64QAM	1	49	22.98	23.07	22.88	23.7
20	64QAM	1	99	23.07	23.13	22.92	
20	64QAM	50	0	21.84	21.92	21.92	
20	64QAM	50	24	21.95	21.95	21.71	22.7
20	64QAM	50	50	21.98	22.04	21.58	
20	64QAM	100	0	21.94	21.92	21.71	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.67	24.77	24.82	25.7
15	QPSK	1	37	24.72	24.81	24.81	
15	QPSK	1	74	24.80	24.80	24.83	
15	QPSK	36	0	23.77	23.87	23.90	24.7
15	QPSK	36	20	23.93	23.91	23.91	
15	QPSK	36	39	23.94	24.00	23.95	
15	QPSK	75	0	23.88	23.91	23.88	24.7
15	16QAM	1	0	24.00	24.11	24.14	
15	16QAM	1	37	24.05	24.14	24.15	
15	16QAM	1	74	24.14	24.24	24.13	23.7
15	16QAM	36	0	22.80	22.89	22.90	
15	16QAM	36	20	22.92	22.92	22.90	
15	16QAM	36	39	22.95	23.02	22.95	23.7
15	16QAM	75	0	22.91	22.92	22.89	
15	64QAM	1	0	22.89	23.01	23.01	
15	64QAM	1	37	22.99	23.08	22.38	23.7
15	64QAM	1	74	23.01	23.14	22.89	
15	64QAM	36	0	21.85	21.94	21.72	
15	64QAM	36	20	21.93	21.93	21.52	22.7
15	64QAM	36	39	21.97	22.06	21.58	
15	64QAM	75	0	21.91	21.95	21.57	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.68	24.75	24.75	25.7
10	QPSK	1	25	24.64	24.74	24.73	
10	QPSK	1	49	24.71	24.83	24.78	
10	QPSK	25	0	23.84	23.87	23.82	24.7
10	QPSK	25	12	23.88	23.99	23.84	
10	QPSK	25	25	23.85	23.96	23.92	
10	QPSK	50	0	23.88	23.91	23.83	24.7
10	16QAM	1	0	24.04	24.13	24.11	
10	16QAM	1	25	24.04	24.17	24.14	
10	16QAM	1	49	24.13	24.22	24.15	23.7
10	16QAM	25	0	22.85	22.96	22.82	
10	16QAM	25	12	22.96	22.91	22.87	
10	16QAM	25	25	22.89	22.97	22.92	23.7
10	16QAM	50	0	22.87	22.89	22.84	
10	64QAM	1	0	22.97	22.99	22.66	
10	64QAM	1	25	23.00	23.09	22.74	23.7
10	64QAM	1	49	23.01	23.14	22.89	
10	64QAM	25	0	21.89	21.89	21.50	
10	64QAM	25	12	21.92	21.93	21.82	22.7
10	64QAM	25	25	21.92	22.00	21.66	
10	64QAM	50	0	21.92	21.94	21.50	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.69	24.76	24.74	25.7
5	QPSK	1	12	24.75	24.80	24.75	
5	QPSK	1	24	24.74	24.80	24.77	
5	QPSK	12	0	23.83	23.88	23.88	24.7
5	QPSK	12	7	23.87	23.86	23.90	
5	QPSK	12	13	23.84	23.96	23.88	
5	QPSK	25	0	23.84	23.88	23.85	24.7
5	16QAM	1	0	24.05	24.10	24.09	
5	16QAM	1	12	24.06	24.16	24.07	
5	16QAM	1	24	24.07	24.17	24.10	23.7
5	16QAM	12	0	22.88	22.91	22.93	
5	16QAM	12	7	22.88	22.93	22.89	
5	16QAM	12	13	22.90	22.97	22.89	23.7
5	16QAM	25	0	22.88	22.89	22.87	
5	64QAM	1	0	23.00	23.00	22.69	
5	64QAM	1	12	22.99	23.08	22.72	23.7
5	64QAM	1	24	23.01	23.10	22.82	
5	64QAM	12	0	21.91	21.94	21.57	
5	64QAM	12	7	21.87	21.95	21.72	22.7
5	64QAM	12	13	21.81	22.00	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



Band 12									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Mode Ch. /	Power Mode Ch. /	Power Mode Ch. /	Tune-up limit (dBm)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.64	24.61	24.63	25.7		
10	QPSK	1	25	24.63	24.68	24.65			
10	QPSK	1	49	24.76	24.71	24.70			
10	QPSK	25	0	23.74	23.78	23.77			
10	QPSK	25	12	23.67	23.80	23.78			
10	QPSK	25	25	23.88	23.85	23.83	24.7		
10	QPSK	50	0	23.83	23.80	23.79			
10	16QAM	1	0	24.03	23.97	23.99			
10	16QAM	1	25	24.06	24.05	24.01			
10	16QAM	1	49	24.12	24.08	24.07			
10	16QAM	25	0	22.76	22.79	22.77	23.7		
10	16QAM	25	12	22.62	22.80	22.78			
10	16QAM	25	25	22.81	22.85	22.79			
10	16QAM	50	0	22.83	22.78	22.76			
10	64QAM	1	0	22.91	22.84	22.87			
10	64QAM	1	25	22.76	22.99	22.73	23.7		
10	64QAM	1	49	23.06	22.96	22.95			
10	64QAM	25	0	21.78	21.80	21.79			
10	64QAM	25	12	21.88	21.83	21.81			
10	64QAM	25	25	21.82	21.90	21.84	22.7		
10	64QAM	50	0	21.83	21.81	21.80			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.70	24.72	24.67	25.7		
5	QPSK	1	12	24.72	24.73	24.71			
5	QPSK	1	24	24.69	24.71	24.72			
5	QPSK	12	0	23.83	23.79	23.78			
5	QPSK	12	7	23.79	23.75	23.81			
5	QPSK	12	13	23.75	23.82	23.77	24.7		
5	QPSK	25	0	23.79	23.76	23.75			
5	16QAM	1	0	24.02	24.04	23.98			
5	16QAM	1	12	24.03	24.01	24.02			
5	16QAM	1	24	24.02	24.07	24.03			
5	16QAM	12	0	22.85	22.83	22.80	23.7		
5	16QAM	12	7	22.81	22.78	22.85			
5	16QAM	12	13	22.83	22.82	22.80			
5	16QAM	25	0	22.81	22.82	22.75			
5	64QAM	1	0	22.62	22.73	22.91			
5	64QAM	1	12	22.83	22.94	22.94	23.7		
5	64QAM	1	24	22.80	22.98	22.93			
5	64QAM	12	0	21.81	21.89	21.87			
5	64QAM	12	7	21.88	21.85	21.88			
5	64QAM	12	13	21.82	21.87	21.84	22.7		
5	64QAM	25	0	21.83	21.79	21.79			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.75	24.69	24.72	25.7		
3	QPSK	1	8	24.73	24.74	24.73			
3	QPSK	1	14	24.65	24.71	24.67			
3	QPSK	8	0	23.79	23.78	23.73			
3	QPSK	8	4	23.78	23.74	23.77			
3	QPSK	8	7	23.73	23.76	23.75	24.7		
3	QPSK	15	0	23.77	23.75	23.73			
3	16QAM	1	0	24.08	24.01	24.02			
3	16QAM	1	8	24.06	24.08	24.08			
3	16QAM	1	14	24.00	24.05	23.98			
3	16QAM	8	0	22.88	22.83	22.82	23.7		
3	16QAM	8	4	22.90	22.83	22.87			
3	16QAM	8	7	22.84	22.84	22.83			
3	16QAM	15	0	22.80	22.80	22.75			
3	64QAM	1	0	22.67	22.90	22.95			
3	64QAM	1	8	22.91	23.01	22.98	23.7		
3	64QAM	1	14	22.92	22.95	22.88			
3	64QAM	8	0	21.82	21.81	21.81			
3	64QAM	8	4	21.87	21.84	21.87			
3	64QAM	8	7	21.82	21.85	21.81	22.7		
3	64QAM	15	0	21.65	21.78	21.77			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.64	24.59	24.59	25.7		
1.4	QPSK	1	3	24.68	24.67	24.64			
1.4	QPSK	1	5	24.60	24.58	24.55			
1.4	QPSK	3	0	24.67	24.60	24.62			
1.4	QPSK	3	1	24.70	24.64	24.68			
1.4	QPSK	3	3	24.64	24.67	24.61	24.7		
1.4	QPSK	6	0	23.71	23.74	23.67			
1.4	16QAM	1	0	23.99	23.93	23.96			
1.4	16QAM	1	3	24.02	24.02	23.98			
1.4	16QAM	1	5	23.92	23.94	23.91			
1.4	16QAM	3	0	23.75	23.69	23.69	24.7		
1.4	16QAM	3	1	23.81	23.75	23.75			
1.4	16QAM	3	3	23.70	23.73	23.65			
1.4	16QAM	6	0	22.78	22.80	22.76			
1.4	64QAM	1	0	22.73	22.89	22.85	23.7		
1.4	64QAM	1	3	22.90	22.97	22.89			
1.4	64QAM	1	5	22.82	22.85	22.81			
1.4	64QAM	3	0	22.68	22.81	22.82			
1.4	64QAM	3	1	22.78	22.85	22.88			
1.4	64QAM	3	3	22.63	22.83	22.79	22.7		
1.4	64QAM	6	0	21.72	21.75	21.71			

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				23200			
Frequency (MHz)				782			
10	QPSK	1	0		24.23		25.2
10	QPSK	1	25		24.22		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.39		24.2
10	QPSK	25	12		23.33		
10	QPSK	25	25		23.34		
10	QPSK	50	0		23.35		24.2
10	16QAM	1	0		23.58		
10	16QAM	1	25		23.57		
10	16QAM	1	49		23.54		23.2
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		
10	16QAM	25	25		22.38		22.2
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		23.2
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.36		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.23	24.20	24.18	25.2
5	QPSK	1	12	24.26	24.27	24.23	
5	QPSK	1	24	24.30	24.23	24.34	
5	QPSK	12	0	23.38	23.33	23.29	24.2
5	QPSK	12	7	23.41	23.32	23.31	
5	QPSK	12	13	23.38	23.35	23.29	
5	QPSK	25	0	23.37	23.33	23.32	24.2
5	16QAM	1	0	23.51	23.46	23.52	
5	16QAM	1	12	23.50	23.47	23.47	
5	16QAM	1	24	23.59	23.51	23.49	23.2
5	16QAM	12	0	22.43	22.35	22.36	
5	16QAM	12	7	22.42	22.33	22.35	
5	16QAM	12	13	22.40	22.37	22.37	23.2
5	16QAM	25	0	22.43	22.34	22.33	
5	64QAM	1	0	22.14	22.47	22.39	
5	64QAM	1	12	22.50	22.44	22.45	23.2
5	64QAM	1	24	22.47	22.47	22.39	
5	64QAM	12	0	21.47	21.41	21.37	
5	64QAM	12	7	21.47	21.37	21.42	22.2
5	64QAM	12	13	21.44	21.41	21.36	
5	64QAM	25	0	21.41	21.37	21.34	

Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dbm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.66		25.7
10	QPSK	1	25		24.65		
10	QPSK	1	49		24.67		
10	QPSK	25	0		23.71		24.7
10	QPSK	25	12		23.70		
10	QPSK	25	25		23.73		
10	QPSK	50	0		23.68		24.7
10	16QAM	1	0		24.08		
10	16QAM	1	25		24.08		
10	16QAM	1	49		23.96		23.7
10	16QAM	25	0		22.68		
10	16QAM	25	12		22.70		
10	16QAM	25	25		22.71		23.7
10	16QAM	50	0		22.70		
10	64QAM	1	0		22.92		
10	64QAM	1	25		22.66		22.7
10	64QAM	1	49		22.90		
10	64QAM	25	0		21.71		
10	64QAM	25	12		21.37		22.7
10	64QAM	25	25		21.38		
10	64QAM	50	0		21.44		
Channel				23305	23330	23355	Tune-up limit (dbm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.62	24.61	24.59	25.7
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.7
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.7
5	16QAM	1	0	23.83	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.7
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.68	
5	16QAM	12	13	22.72	22.74	22.70	23.7
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.89	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.7
5	64QAM	1	24	22.33	21.97	22.68	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.7
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.63	21.17	



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	24.66	24.65	24.61	25.7
10	QPSK	1	25	24.69	24.70	24.71	
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	24.7
10	QPSK	25	12	23.68	23.82	23.79	
10	QPSK	25	25	23.98	23.86	23.88	
10	QPSK	50	0	23.79	23.78	23.79	24.7
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	
10	16QAM	1	49	24.12	24.10	24.09	23.7
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	
10	16QAM	25	25	22.89	22.90	22.82	23.7
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.75	22.88	
10	64QAM	1	25	22.71	22.71	22.65	23.7
10	64QAM	1	49	22.97	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	22.7
10	64QAM	25	25	21.65	21.76	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.66	24.66	25.7
5	QPSK	1	12	24.74	24.79	24.75	
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	24.7
5	QPSK	12	7	23.85	23.81	23.82	
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	24.7
5	16QAM	1	0	23.99	23.96	23.99	
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	23.7
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	
5	16QAM	12	13	22.84	22.88	22.84	23.7
5	16QAM	25	0	22.65	22.85	22.87	
5	64QAM	1	0	22.40	22.44	22.75	
5	64QAM	1	12	22.76	22.60	22.94	23.7
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



Band 25									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up		
				Mid Ch /	Ch /	High Ch /			
Channel				26140	26340	26590	limit	(dBm)	
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	24.65	24.76	24.91	25.7		
20	QPSK	1	49	24.64	24.72	24.82			
20	QPSK	1	99	24.61	24.75	24.23			
20	QPSK	50	0	23.71	23.86	23.94	24.7		
20	QPSK	50	24	23.80	23.95	24.01			
20	QPSK	50	50	23.73	23.92	24.00			
20	QPSK	100	0	23.81	23.94	23.97	24.7		
20	16QAM	1	0	23.95	24.08	24.19			
20	16QAM	1	49	23.98	24.09	24.15			
20	16QAM	1	99	23.89	24.08	23.60	23.7		
20	16QAM	50	0	22.72	22.85	22.96			
20	16QAM	50	24	22.80	22.96	22.98			
20	16QAM	50	50	22.76	22.93	23.05	23.7		
20	16QAM	100	0	22.78	22.93	22.94			
20	64QAM	1	0	22.86	22.94	22.43			
20	64QAM	1	49	22.70	22.91	22.54	23.7		
20	64QAM	1	99	22.42	22.97	21.74			
20	64QAM	50	0	21.75	21.89	21.33			
20	64QAM	50	24	21.66	22.01	21.58	22.7		
20	64QAM	50	50	21.43	21.95	21.32			
20	64QAM	100	0	21.70	21.95	21.16			
Channel				26115	26340	26615	Tune-up		
Frequency (MHz)				1857.5	1880	1907.5	limit	(dBm)	
15	QPSK	1	0	24.65	24.77	24.86	25.7		
15	QPSK	1	37	24.65	24.76	24.88			
15	QPSK	1	74	24.63	24.77	24.32			
15	QPSK	36	0	23.72	23.86	23.96	24.7		
15	QPSK	36	20	23.79	23.95	24.07			
15	QPSK	36	39	23.74	23.89	23.93			
15	QPSK	75	0	23.77	23.94	23.96	24.7		
15	16QAM	1	0	23.93	24.07	24.15			
15	16QAM	1	37	23.97	24.09	24.18			
15	16QAM	1	74	23.92	24.10	23.69	23.7		
15	16QAM	36	0	22.73	22.87	22.98			
15	16QAM	36	20	22.78	22.96	23.06			
15	16QAM	36	39	22.72	22.90	23.02	23.7		
15	16QAM	75	0	22.77	22.94	22.96			
15	64QAM	1	0	22.83	22.92	22.34			
15	64QAM	1	74	22.82	22.97	21.81	23.7		
15	64QAM	36	0	21.77	21.92	21.56			
15	64QAM	36	20	21.82	21.98	21.69			
15	64QAM	36	39	21.58	21.93	21.28	22.7		
15	64QAM	75	0	21.79	21.95	21.27			
Channel				26090	26340	26640		Tune-up	
Frequency (MHz)				1855	1880	1910	limit	(dBm)	
10	QPSK	1	0	24.65	24.70	24.89	25.7		
10	QPSK	1	25	24.55	24.70	24.90			
10	QPSK	1	49	24.60	24.75	24.20			
10	QPSK	25	0	23.74	23.81	23.94	24.7		
10	QPSK	25	12	23.79	23.93	24.00			
10	QPSK	25	25	23.79	23.93	23.85			
10	QPSK	50	0	23.78	23.93	23.95	24.7		
10	16QAM	1	0	23.98	24.12	24.22			
10	16QAM	1	25	23.98	24.13	24.27			
10	16QAM	1	49	23.98	24.13	23.58	23.7		
10	16QAM	25	0	22.76	22.85	22.96			
10	16QAM	25	12	22.80	22.95	22.97			
10	16QAM	25	25	22.76	22.90	22.84	23.7		
10	16QAM	50	0	22.78	22.91	22.97			
10	64QAM	1	0	22.91	22.95	22.66			
10	64QAM	1	25	22.92	23.05	22.53	23.7		
10	64QAM	1	49	22.61	23.07	21.74			
10	64QAM	25	0	21.78	21.82	21.82			
10	64QAM	25	12	21.84	21.98	21.46	22.7		
10	64QAM	25	25	21.82	21.93	21.00			
10	64QAM	50	0	21.76	21.94	21.20			
Channel				26065	26340	26665	Tune-up		
Frequency (MHz)				1852.5	1880	1912.5	limit	(dBm)	
5	QPSK	1	0	24.60	24.72	24.90	25.7		
5	QPSK	1	12	24.65	24.84	24.43			
5	QPSK	1	24	24.64	24.80	24.08			
5	QPSK	12	0	23.72	23.83	23.86	24.7		
5	QPSK	12	7	23.79	23.91	23.61			
5	QPSK	12	13	23.78	23.94	23.38			
5	QPSK	25	0	23.74	23.90	23.55	24.7		
5	16QAM	1	0	24.03	24.05	24.22			
5	16QAM	1	12	23.94	24.12	23.81			
5	16QAM	1	24	23.97	24.15	23.46	24.7		
5	16QAM	12	0	22.74	22.86	22.99			
5	16QAM	12	7	22.81	22.95	22.77			
5	16QAM	12	13	22.82	22.98	22.55	23.7		
5	16QAM	25	0	22.79	22.90	22.73			
5	64QAM	1	0	22.86	23.00	22.35			
5	64QAM	1	12	22.84	23.00	21.93	23.7		
5	64QAM	1	24	22.86	23.03	21.55			
5	64QAM	12	0	21.78	21.92	21.17			
5	64QAM	12	7	21.84	21.99	21.00	22.7		
5	64QAM	12	13	21.68	22.00	20.74			
5	64QAM	25	0	21.81	21.93	20.87			
Channel				26055	26340	26675	Tune-up		
Frequency (MHz)				1851.5	1880	1913.5	limit	(dBm)	
3	QPSK	1	0	24.54	24.63	24.53	25.7		
3	QPSK	1	8	24.59	24.83	24.34			
3	QPSK	1	14	24.67	24.83	24.09			
3	QPSK	8	0	23.59	23.80	23.60	24.7		
3	QPSK	8	4	23.78	23.90	23.48			
3	QPSK	8	7	23.75	23.89	23.37			
3	QPSK	15	0	23.72	23.90	23.43	24.7		
3	16QAM	1	0	23.90	23.95	23.83			
3	16QAM	1	8	24.00	24.20	23.68			
3	16QAM	1	14	23.99	24.16	23.42	24.7		
3	16QAM	8	0	22.76	22.89	22.72			
3	16QAM	8	4	22.82	22.96	22.61			
3	16QAM	8	7	22.81	22.99	22.48	23.7		
3	16QAM	15	0	22.79	22.91	22.56			
3	64QAM	1	0	22.80	22.87	21.94			
3	64QAM	1	8	22.93	23.11	21.80	23.7		
3	64QAM	1	14	22.90	23.08	21.57			
3	64QAM	8	0	21.76	21.90	20.85			
3	64QAM	8	4	21.84	22.00	20.77	22.7		
3	64QAM	8	7	21.83	21.99	20.64			
3	64QAM	15	0	21.79	21.92	20.73			
Channel				26047	26340	26683	Tune-up		
Frequency (MHz)				1850.7	1880	1914.3	limit	(dBm)	
1.4	QPSK	1	0	24.51	24.86	24.19	25.7		
1.4	QPSK	1	3	24.62	24.74	24.13			
1.4	QPSK	1	5	24.59	24.76	24.02			
1.4	QPSK	3	0	24.56	24.71	24.13	24.7		
1.4	QPSK	3	1	24.63	24.77	24.17			
1.4	QPSK	3	3	24.59	24.77	24.04			
1.4									
1.4	16QAM	1	0	23.80	23.98	23.48	24.7		
1.4	16QAM	1	3	23.84	24.02	23.47			
1.4	16QAM	1	5	23.94	24.09	23.35			
1.4	16QAM	3	0	23.60	23.77	23.31	24.7		
1.4	16QAM	3	1	23.70	23.85	23.31			
1.4	16QAM	3	3	23.65	23.82	23.22			
1.4	16QAM	1	0	22.73	22.86	22.41	23.7		
1.4	16QAM	1	3	22.79	22.91	22.50			
1.4	16QAM	1	5	22.79	22.99	22.20			
1.4	64QAM	3	0	22.72	22.92	21.81	23.7		
1.4	64QAM	3	1	22.80	22.97	21.78			
1.4	64QAM	3	3	22.86	22.96	21.73			



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26745	26865	26990	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.78	24.52	24.57	25.7
15	QPSK	1	37	24.46	24.51	24.50	
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	24.7
15	QPSK	36	20	23.66	23.61	23.63	
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	24.7
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	
15	16QAM	1	74	23.81	23.83	23.62	23.7
15	16QAM	36	0	22.63	22.66	22.67	
15	16QAM	36	20	22.65	22.61	22.60	
15	16QAM	36	39	22.59	22.65	22.62	23.7
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	23.7
15	64QAM	1	37	22.70	22.80	22.76	
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.68	21.69	21.72	22.7
15	64QAM	36	20	21.69	21.63	21.65	
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	Tune-up limit (dBm)
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	25.7
10	QPSK	1	25	24.57	24.55	24.59	
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	24.7
10	QPSK	25	12	23.76	23.66	23.65	
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	24.7
10	16QAM	1	0	24.07	23.96	23.96	
10	16QAM	1	25	23.94	24.01	23.97	
10	16QAM	1	49	23.97	24.02	23.73	23.7
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	
10	16QAM	25	25	22.64	22.63	22.63	23.7
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	
10	64QAM	1	25	22.90	22.93	22.93	23.7
10	64QAM	1	49	22.89	22.91	21.83	
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	
5	QPSK	1	12	24.72	24.63	24.47	25.7
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	24.7
5	QPSK	12	7	23.80	23.72	23.57	
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	24.7
5	16QAM	1	0	24.09	23.94	23.99	
5	16QAM	1	12	24.00	23.97	23.85	
5	16QAM	1	24	23.91	24.01	23.71	23.7
5	16QAM	12	0	22.84	22.72	22.73	
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	23.7
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	
5	64QAM	1	12	22.90	22.88	22.03	23.7
5	64QAM	1	24	22.61	22.86	21.86	
5	64QAM	12	0	21.63	21.78	21.45	
5	64QAM	12	7	21.84	21.81	21.00	22.7
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	
3	QPSK	1	8	24.75	24.69	24.16	25.7
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	8	0	23.83	23.68	23.39	24.7
3	QPSK	8	4	23.77	23.72	23.28	
3	QPSK	8	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	24.7
3	16QAM	1	0	24.09	23.91	23.81	
3	16QAM	1	8	24.06	24.06	23.47	
3	16QAM	1	14	23.95	23.95	23.55	23.7
3	16QAM	8	0	22.86	22.77	22.54	
3	16QAM	8	4	22.88	22.77	22.42	
3	16QAM	8	7	22.78	22.76	22.45	23.7
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.63	22.00	
3	64QAM	1	8	23.03	22.95	21.88	23.7
3	64QAM	1	14	22.86	22.90	21.83	
3	64QAM	8	0	21.79	21.74	20.85	
3	64QAM	8	4	21.88	21.81	20.77	22.7
3	64QAM	8	7	21.61	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	
1.4	QPSK	1	3	24.71	24.63	24.26	25.7
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.59	24.55	24.17	24.7
1.4	QPSK	3	1	24.74	24.58	24.22	
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	24.7
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	
1.4	16QAM	1	5	23.93	23.86	23.65	24.7
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	23.7
1.4	16QAM	6	0	22.82	22.75	22.46	
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.88	21.90	23.7
1.4	64QAM	1	5	22.86	22.76	21.85	
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	22.7
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	

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				2771.0			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		21.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				2768.5	2771.0	2773.5	Tune-up limit (dbm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.86	22.86	22.85	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.15	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132072	132322	132572			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	24.35	24.39	24.57	25.7		
20	QPSK	1	49	24.22	24.25	24.30			
20	QPSK	1	99	24.34	24.32	24.26			
20	QPSK	50	0	23.40	23.47	23.49	24.7		
20	QPSK	50	24	23.46	23.43	23.47			
20	QPSK	50	50	23.48	23.48	23.50			
20	QPSK	100	0	23.46	23.40	23.47	24.7		
20	16QAM	1	0	23.57	23.74	23.76			
20	16QAM	1	49	23.56	23.64	23.63			
20	16QAM	1	99	23.70	23.64	23.60	23.7		
20	16QAM	50	0	22.37	22.48	22.54			
20	16QAM	50	24	22.46	22.43	22.47			
20	16QAM	50	50	22.44	22.47	22.51	23.7		
20	16QAM	100	0	22.44	22.41	22.48			
20	64QAM	1	0	22.46	22.43	22.61			
20	64QAM	1	49	22.44	22.57	22.12	23.7		
20	64QAM	1	99	22.58	22.59	22.49			
20	64QAM	50	0	21.39	21.48	21.51			
20	64QAM	50	24	21.48	21.45	21.31	22.7		
20	64QAM	50	50	21.45	21.49	21.54			
20	64QAM	100	0	21.49	21.46	21.48			
Channel				132047	132322	132597	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.30	24.41	24.38	25.7		
15	QPSK	1	37	24.21	24.29	24.33			
15	QPSK	1	74	24.34	24.36	24.31			
15	QPSK	36	0	23.37	23.44	23.49	24.7		
15	QPSK	36	20	23.43	23.43	23.47			
15	QPSK	36	39	23.42	23.48	23.52			
15	QPSK	75	0	23.44	23.43	23.47	24.7		
15	16QAM	1	0	23.60	23.74	23.73			
15	16QAM	1	37	23.59	23.63	23.68			
15	16QAM	1	74	23.64	23.66	23.65	23.7		
15	16QAM	36	0	22.36	22.46	22.49			
15	16QAM	36	20	22.42	22.40	22.45			
15	16QAM	36	39	22.42	22.46	22.50	23.7		
15	16QAM	75	0	22.46	22.41	22.45			
15	64QAM	1	0	22.46	22.59	22.44			
15	64QAM	1	37	22.47	22.56	22.44	23.7		
15	64QAM	1	74	22.55	22.58	22.57			
15	64QAM	36	0	21.38	21.49	21.21			
15	64QAM	36	20	21.43	21.44	21.46	22.7		
15	64QAM	36	39	21.45	21.50	21.52			
15	64QAM	75	0	21.44	21.42	21.47			
Channel				132022	132322	132622	Tune-up limit (dBm)		
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	24.37	24.44	24.45	25.7		
10	QPSK	1	25	24.30	24.40	24.44			
10	QPSK	1	49	24.30	24.39	24.41			
10	QPSK	25	0	23.41	23.46	23.49	24.7		
10	QPSK	25	12	23.45	23.49	23.49			
10	QPSK	25	25	23.44	23.50	23.57			
10	QPSK	50	0	23.46	23.47	23.49	24.7		
10	16QAM	1	0	23.72	23.82	23.84			
10	16QAM	1	25	23.70	23.79	23.81			
10	16QAM	1	49	23.73	23.76	23.81	23.7		
10	16QAM	25	0	22.48	22.47	22.50			
10	16QAM	25	12	22.48	22.47	22.52			
10	16QAM	25	25	22.41	22.50	22.55	23.7		
10	16QAM	50	0	22.45	22.46	22.48			
10	64QAM	1	0	22.37	22.61	22.08			
10	64QAM	1	25	22.61	22.71	22.78	23.7		
10	64QAM	1	49	22.61	22.67	22.72			
10	64QAM	25	0	21.45	21.49	21.49			
10	64QAM	25	12	21.48	21.51	21.55	22.7		
10	64QAM	25	25	21.45	21.53	21.60			
10	64QAM	50	0	21.47	21.49	21.52			
Channel				131997	132322	132647	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.35	24.40	24.49	25.7		
5	QPSK	1	12	24.39	24.40	24.52			
5	QPSK	1	24	24.33	24.43	24.46			
5	QPSK	12	0	23.44	23.46	23.59	24.7		
5	QPSK	12	7	23.47	23.56	23.59			
5	QPSK	12	13	23.44	23.53	23.57			
5	QPSK	25	0	23.43	23.45	23.55	24.7		
5	16QAM	1	0	23.75	23.73	23.80			
5	16QAM	1	12	23.73	23.81	23.84			
5	16QAM	1	24	23.67	23.78	23.80	23.7		
5	16QAM	12	0	22.46	22.51	22.62			
5	16QAM	12	7	22.50	22.61	22.64			
5	16QAM	12	13	22.47	22.57	22.58	23.7		
5	16QAM	25	0	22.46	22.48	22.59			
5	64QAM	1	0	22.41	22.71	22.81			
5	64QAM	1	12	22.64	22.73	22.77	23.7		
5	64QAM	1	24	22.65	22.75	22.73			
5	64QAM	12	0	21.47	21.53	21.64			
5	64QAM	12	7	21.53	21.61	21.64	22.7		
5	64QAM	12	13	21.49	21.55	21.60			
5	64QAM	25	0	21.44	21.49	21.59			
Channel				131987	132322	132657	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	24.38	24.42	24.50	25.7		
3	QPSK	1	8	24.40	24.52	24.56			
3	QPSK	1	14	24.35	24.45	24.48			
3	QPSK	8	0	23.45	23.49	23.55	24.7		
3	QPSK	8	4	23.47	23.53	23.57			
3	QPSK	8	7	23.43	23.52	23.54			
3	QPSK	15	0	23.44	23.49	23.57	24.7		
3	16QAM	1	0	23.70	23.70	23.82			
3	16QAM	1	8	23.76	23.83	23.87			
3	16QAM	1	14	23.66	23.78	23.81	23.7		
3	16QAM	8	0	22.50	22.53	22.66			
3	16QAM	8	4	22.55	22.61	22.63			
3	16QAM	8	7	22.51	22.58	22.59	23.7		
3	16QAM	15	0	22.47	22.49	22.58			
3	64QAM	1	0	22.40	22.69	22.78			
3	64QAM	1	8	22.70	22.83	22.81	23.7		
3	64QAM	1	14	22.67	22.73	22.75			
3	64QAM	8	0	21.39	21.53	21.65			
3	64QAM	8	4	21.53	21.64	21.68	22.7		
3	64QAM	8	7	21.50	21.58	21.58			
3	64QAM	15	0	21.48	21.49	21.62			
Channel				131979	132322	132665	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.27	24.36	24.43	25.7		
1.4	QPSK	1	3	24.30	24.40	24.42			
1.4	QPSK	1	5	24.22	24.37	24.41			
1.4	QPSK	3	0	24.33	24.43	24.44	24.7		
1.4	QPSK	3	1	24.35	24.47	24.48			
1.4	QPSK	3	3	24.27	24.38	24.42			



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	24.77	24.67	24.68	25.7
20	QPSK	1	49	24.65	24.65	24.65	
20	QPSK	1	99	24.68	24.66	24.61	
20	QPSK	50	0	23.76	23.76	23.72	24.7
20	QPSK	50	24	23.80	23.74	23.75	
20	QPSK	50	50	23.84	23.78	23.75	
20	QPSK	100	0	23.79	23.71	23.77	24.7
20	16QAM	1	0	24.06	23.96	24.00	
20	16QAM	1	49	24.01	24.03	24.04	
20	16QAM	1	99	24.03	24.01	23.95	23.7
20	16QAM	50	0	22.77	22.75	22.75	
20	16QAM	50	24	22.82	22.77	22.73	
20	16QAM	50	50	22.82	22.77	22.78	23.7
20	16QAM	100	0	22.79	22.73	22.78	
20	64QAM	1	0	22.04	22.83	22.82	23.7
20	64QAM	1	49	22.63	22.90	22.29	
20	64QAM	1	99	22.04	22.89	22.87	
20	64QAM	50	0	21.00	21.70	21.40	22.7
20	64QAM	50	24	21.30	21.64	21.57	
20	64QAM	50	50	21.84	21.60	21.74	
20	64QAM	100	0	21.53	21.76	21.80	Tune-up limit (dBm)
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.74	24.65	24.63	
15	QPSK	1	37	24.02	24.66	24.61	25.7
15	QPSK	1	74	24.05	24.68	24.64	
15	QPSK	36	0	23.73	23.71	23.69	24.7
15	QPSK	36	20	23.80	23.73	23.78	
15	QPSK	36	39	23.73	23.76	23.74	
15	QPSK	75	0	23.81	23.74	23.68	24.7
15	16QAM	1	0	24.05	24.01	23.98	
15	16QAM	1	37	23.95	24.02	24.00	
15	16QAM	1	74	23.97	24.00	23.98	23.7
15	16QAM	36	0	22.76	22.75	22.71	
15	16QAM	36	20	22.79	22.74	22.79	
15	16QAM	36	39	22.77	22.79	22.75	23.7
15	16QAM	75	0	22.63	22.73	22.70	
15	64QAM	1	0	22.02	22.43	22.76	
15	64QAM	1	37	21.86	22.94	22.88	23.7
15	64QAM	1	74	22.88	22.60	22.84	
15	64QAM	36	0	20.97	21.77	21.44	
15	64QAM	36	20	20.94	21.78	21.81	22.7
15	64QAM	36	39	21.48	21.56	21.78	
15	64QAM	75	0	21.29	21.75	21.67	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.76	24.64	24.66	25.7
10	QPSK	1	25	24.61	24.62	24.63	
10	QPSK	1	49	24.66	24.71	24.62	
10	QPSK	25	0	23.78	23.71	23.69	24.7
10	QPSK	25	12	23.79	23.82	23.70	
10	QPSK	25	25	23.72	23.78	23.74	
10	QPSK	50	0	23.80	23.81	23.71	24.7
10	16QAM	1	0	24.10	24.02	24.04	
10	16QAM	1	25	23.98	24.06	24.00	
10	16QAM	1	49	23.98	24.07	23.96	23.7
10	16QAM	25	0	22.76	22.70	22.68	
10	16QAM	25	12	22.78	22.81	22.68	
10	16QAM	25	25	22.65	22.77	22.73	23.7
10	16QAM	50	0	22.79	22.80	22.69	
10	64QAM	1	0	21.80	22.30	22.77	
10	64QAM	1	25	22.01	22.95	22.95	23.7
10	64QAM	1	49	22.14	22.96	22.45	
10	64QAM	25	0	20.82	21.71	21.71	
10	64QAM	25	12	20.84	21.84	21.76	22.7
10	64QAM	25	25	20.71	21.81	21.64	
10	64QAM	50	0	20.83	21.77	21.69	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.57	24.69	24.72	25.7
5	QPSK	1	12	24.71	24.65	24.70	
5	QPSK	1	24	24.70	24.68	24.63	
5	QPSK	12	0	23.73	23.76	23.74	24.7
5	QPSK	12	7	23.84	23.79	23.76	
5	QPSK	12	13	23.76	23.76	23.70	
5	QPSK	25	0	23.76	23.76	23.68	24.7
5	16QAM	1	0	23.75	24.01	24.02	
5	16QAM	1	12	23.97	24.03	23.97	
5	16QAM	1	24	23.95	24.02	23.93	23.7
5	16QAM	12	0	22.64	22.80	22.78	
5	16QAM	12	7	22.86	22.80	22.78	
5	16QAM	12	13	22.77	22.77	22.70	23.7
5	16QAM	25	0	22.69	22.81	22.70	
5	64QAM	1	0	21.74	22.06	22.91	
5	64QAM	1	12	21.79	22.94	22.70	23.7
5	64QAM	1	24	21.96	22.96	22.25	
5	64QAM	12	0	20.82	21.49	21.68	
5	64QAM	12	7	21.00	21.86	21.73	22.7
5	64QAM	12	13	20.99	21.81	21.61	
5	64QAM	25	0	20.76	21.59	21.48	



Band 2									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Mod0 Ch./ 18700	Power Mod0 Ch./ 18900	Power Mod0 Ch./ 19100	Tune-up limit (dBm)		
Channel				18700	18900	19100			
Frequency (MHz)				18670	1880	1900			
20	QPSK	1	0	24.72	24.80	24.91	25.7		
20	QPSK	1	49	24.67	24.74	24.77			
20	QPSK	1	99	24.64	24.71	24.79			
20	QPSK	50	0	23.78	23.84	23.88	24.7		
20	QPSK	50	24	23.87	23.86	23.91			
20	QPSK	50	50	23.88	23.94	23.99			
20	QPSK	100	0	23.86	23.87	23.94	24.7		
20	16QAM	1	0	24.10	24.10	24.20			
20	16QAM	1	49	24.03	24.08	24.18			
20	16QAM	1	99	23.93	24.12	24.12	23.7		
20	16QAM	50	0	22.80	22.85	22.89			
20	16QAM	50	24	22.89	22.87	22.94			
20	16QAM	50	50	22.87	22.95	23.00	23.7		
20	16QAM	100	0	22.86	22.86	22.89			
20	64QAM	1	0	22.94	22.98	23.03			
20	64QAM	1	49	22.91	22.97	22.38	23.7		
20	64QAM	1	99	22.84	23.00	22.49			
20	64QAM	50	0	21.81	21.87	21.54			
20	64QAM	50	24	21.92	21.92	21.54	22.7		
20	64QAM	50	50	21.86	21.97	21.58			
20	64QAM	100	0	21.87	21.90	21.49			
Channel				18675	18900	19125	Tune-up limit (dBm)		
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	24.75	24.83	24.87	25.7		
15	QPSK	1	37	24.70	24.80	24.88			
15	QPSK	1	74	24.73	24.80	24.90			
15	QPSK	36	0	23.84	23.87	23.91	24.7		
15	QPSK	36	20	23.93	23.90	24.03			
15	QPSK	36	39	23.87	23.97	24.03			
15	QPSK	75	0	23.90	23.91	23.93	24.7		
15	16QAM	1	0	24.02	24.13	24.19			
15	16QAM	1	37	24.06	24.14	24.20			
15	16QAM	1	74	24.03	24.13	24.18	23.7		
15	16QAM	36	0	22.81	22.86	22.92			
15	16QAM	36	20	22.88	22.90	23.03			
15	16QAM	36	39	22.88	22.97	23.03	23.7		
15	16QAM	75	0	22.91	22.91	22.93			
15	64QAM	1	0	22.88	23.01	22.51			
15	64QAM	1	37	22.96	23.01	22.46	23.7		
15	64QAM	1	74	22.80	23.04	22.53			
15	64QAM	36	0	21.85	21.91	21.54			
15	64QAM	36	20	21.94	21.91	21.56	22.7		
15	64QAM	36	39	21.84	22.04	21.81			
15	64QAM	75	0	21.89	21.91	21.47			
Channel				18650	18900	19150	Tune-up limit (dBm)		
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	24.76	24.72	24.89	25.7		
10	QPSK	1	25	24.69	24.82	24.87			
10	QPSK	1	49	24.72	24.83	24.87			
10	QPSK	25	0	23.86	23.85	23.90	24.7		
10	QPSK	25	12	23.87	23.89	23.95			
10	QPSK	25	25	23.88	24.00	24.05			
10	QPSK	50	0	23.87	23.89	23.97	24.7		
10	16QAM	1	0	24.12	24.15	24.23			
10	16QAM	1	25	24.13	24.18	24.27			
10	16QAM	1	49	24.08	24.18	24.25	24.7		
10	16QAM	25	0	22.86	22.86	22.91			
10	16QAM	25	12	22.90	22.90	22.96			
10	16QAM	25	25	22.88	22.97	23.05	23.7		
10	16QAM	50	0	22.88	22.88	22.95			
10	64QAM	1	0	23.02	23.03	22.50			
10	64QAM	1	25	23.05	23.16	22.73	23.7		
10	64QAM	1	49	22.95	23.10	22.89			
10	64QAM	25	0	21.88	21.88	21.51			
10	64QAM	25	12	21.94	21.92	21.66	22.7		
10	64QAM	25	25	21.90	22.00	21.58			
10	64QAM	50	0	21.90	21.92	21.48			
Channel				1852.5	18900	19175	Tune-up limit (dBm)		
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	24.73	24.75	24.88	25.7		
5	QPSK	1	12	24.76	24.89	24.89			
5	QPSK	1	24	24.79	24.88	24.90			
5	QPSK	12	0	23.83	23.85	24.00	24.7		
5	QPSK	12	7	23.91	23.94	24.02			
5	QPSK	12	13	23.88	23.93	24.03			
5	QPSK	25	0	23.85	23.87	24.01	24.7		
5	16QAM	1	0	24.07	24.08	24.20			
5	16QAM	1	12	24.05	24.15	24.20			
5	16QAM	1	24	24.08	24.24	24.21	23.7		
5	16QAM	12	0	22.87	22.89	23.00			
5	16QAM	12	7	22.92	23.01	23.06			
5	16QAM	12	13	22.86	22.96	23.04	23.7		
5	16QAM	25	0	22.86	22.90	23.04			
5	64QAM	1	0	23.04	23.07	22.61			
5	64QAM	1	12	23.00	23.13	22.65	23.7		
5	64QAM	1	24	23.02	23.12	22.49			
5	64QAM	12	0	21.92	21.92	21.62			
5	64QAM	12	7	21.95	22.04	21.63	22.7		
5	64QAM	12	13	21.93	22.00	21.53			
5	64QAM	25	0	21.90	21.90	21.48			
Channel				18615	18900	19185	Tune-up limit (dBm)		
Frequency (MHz)				1851.5	1880	1908.5			
3	QPSK	1	0	24.74	24.77	24.88	25.7		
3	QPSK	1	8	24.84	24.91	24.96			
3	QPSK	1	14	24.77	24.88	24.95			
3	QPSK	8	0	23.85	23.88	23.98	24.7		
3	QPSK	8	4	23.86	23.95	24.02			
3	QPSK	8	7	23.89	23.95	24.01			
3	QPSK	15	0	23.88	23.89	24.02	24.7		
3	16QAM	1	0	24.05	24.07	24.19			
3	16QAM	1	8	24.10	24.22	24.26			
3	16QAM	1	14	24.04	24.22	24.25	23.7		
3	16QAM	8	0	22.91	22.94	23.06			
3	16QAM	8	4	22.93	23.01	23.12			
3	16QAM	8	7	22.91	23.02	23.06	23.7		
3	16QAM	15	0	22.86	22.92	23.05			
3	64QAM	1	0	23.01	22.99	22.62			
3	64QAM	1	8	23.11	23.20	22.62	23.7		
3	64QAM	1	14	23.05	23.14	22.49			
3	64QAM	8	0	21.89	21.90	21.55			
3	64QAM	8	4	21.93	22.02	21.56	22.7		
3	64QAM	8	7	21.94	21.99	21.50			
3	64QAM	15	0	21.90	21.89	21.50			
Channel				18607	18900	19193	Tune-up limit (dBm)		
Frequency (MHz)				1850.7	1880	1919.3			
1.4	QPSK	1	0	24.71	24.79	24.80	25.7		
1.4	QPSK	1	3	24.80	24.85	24.88			
1.4	QPSK	1	5	24.73	24.80	24.84			
1.4	QPSK	3	0	24.74	24.83	24.86	24.7		
1.4	QPSK	3	1	24.77	24.86	24.89			
1.4	QPSK	3	3	24.75	24.80	24.87			
1.4	16QAM	1	0	24.02	24.14	24.17	24.7		
1.4	16QAM	1	3	24.06	24.16	24.21			
1.4	16QAM	1	5	24.02	24.10	24.13			
1.4	16QAM	3	0	23.81	23.88	23.93	24.7		
1.4	16QAM	3	1	23.87	23.95	23.98			
1.4	16QAM	3	3	23.82	23.86	23.96			
1.4	16QAM	6	0	22.84	22.83	23.02	23.7		
1.4	16QAM	6	1	22.93	23.01	23.06			
1.4	16QAM	6	3	22.92	23.03	23.05			
1.4	64QAM	1	0	22.93	23.01	22.46	23.7		
1.4	64QAM	3	1	22.97	23.06	22.52			
1.4	64QAM	3	3	22.95	23.02	22.40			



Band 4							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20350	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	24.64	24.72	24.65	25.7
20	QPSK	1	49	24.52	24.51	24.51	
20	QPSK	1	99	24.53	24.54	24.53	
20	QPSK	50	0	23.70	23.72	23.73	24.7
20	QPSK	50	24	23.72	23.70	23.74	
20	QPSK	50	50	23.64	23.70	23.69	
20	QPSK	100	0	23.69	23.75	23.61	24.7
20	16QAM	1	0	23.98	24.04	23.99	
20	16QAM	1	49	23.85	23.87	23.88	
20	16QAM	1	99	23.87	23.86	23.84	23.7
20	16QAM	50	0	22.99	22.71	22.74	
20	16QAM	50	24	22.73	22.75	22.77	
20	16QAM	50	50	22.85	22.64	22.68	23.7
20	16QAM	100	0	22.71	22.73	22.65	
20	64QAM	1	0	22.84	22.90	22.69	
20	64QAM	1	49	22.73	22.72	22.77	23.7
20	64QAM	1	99	22.73	22.64	22.80	
20	64QAM	50	0	21.70	21.76	21.77	
20	64QAM	50	24	21.74	21.75	21.77	22.7
20	64QAM	50	50	21.68	21.64	21.69	
20	64QAM	100	0	21.76	21.76	21.70	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	24.67	24.71	24.70	25.7
15	QPSK	1	37	24.52	24.51	24.57	
15	QPSK	1	74	24.56	24.55	24.57	
15	QPSK	36	0	23.78	23.72	23.72	24.7
15	QPSK	36	20	23.73	23.73	23.76	
15	QPSK	36	39	23.66	23.67	23.71	
15	QPSK	75	0	23.70	23.75	23.68	24.7
15	16QAM	1	0	23.98	24.02	24.04	
15	16QAM	1	37	23.88	23.87	23.92	
15	16QAM	1	74	23.87	23.85	23.89	23.7
15	16QAM	36	0	22.78	22.72	22.76	
15	16QAM	36	20	22.71	22.73	22.78	
15	16QAM	36	39	22.67	22.68	22.71	23.7
15	16QAM	75	0	22.72	22.75	22.69	
15	64QAM	1	0	22.84	22.82	22.92	
15	64QAM	1	37	22.80	22.66	22.81	23.7
15	64QAM	1	74	22.76	22.74	22.80	
15	64QAM	36	0	21.79	21.81	21.78	
15	64QAM	36	20	21.73	21.74	21.75	22.7
15	64QAM	36	39	21.71	21.62	21.76	
15	64QAM	75	0	21.71	21.75	21.67	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.59	24.65	24.66	25.7
10	QPSK	1	25	24.57	24.57	24.71	
10	QPSK	1	49	24.60	24.62	24.66	
10	QPSK	25	0	23.72	23.69	23.70	24.7
10	QPSK	25	12	23.72	23.76	23.75	
10	QPSK	25	25	23.75	23.77	23.81	
10	QPSK	50	0	23.75	23.75	23.76	24.7
10	16QAM	1	0	23.98	24.02	24.06	
10	16QAM	1	25	23.97	24.02	24.03	
10	16QAM	1	49	24.00	23.98	24.05	23.7
10	16QAM	25	0	22.72	22.67	22.75	
10	16QAM	25	12	22.76	22.79	22.77	
10	16QAM	25	25	22.74	22.72	22.78	23.7
10	16QAM	50	0	22.75	22.77	22.74	
10	64QAM	1	0	22.70	22.83	22.90	
10	64QAM	1	25	22.68	22.80	22.98	23.7
10	64QAM	1	49	22.91	22.85	22.96	
10	64QAM	25	0	21.70	21.70	21.74	
10	64QAM	25	12	21.77	21.74	21.79	22.7
10	64QAM	25	25	21.76	21.57	21.83	
10	64QAM	50	0	21.78	21.74	21.79	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.63	24.62	24.67	25.7
5	QPSK	1	12	24.69	24.67	24.71	
5	QPSK	1	24	24.66	24.69	24.71	
5	QPSK	12	0	23.71	23.69	23.75	24.7
5	QPSK	12	7	23.76	23.77	23.80	
5	QPSK	12	13	23.72	23.76	23.77	
5	QPSK	25	0	23.70	23.73	23.77	24.7
5	16QAM	1	0	23.97	23.92	24.05	
5	16QAM	1	12	23.98	24.00	24.04	
5	16QAM	1	24	24.01	23.99	24.03	23.7
5	16QAM	12	0	22.75	22.69	22.82	
5	16QAM	12	7	22.79	22.80	22.85	
5	16QAM	12	13	22.78	22.80	22.80	23.7
5	16QAM	25	0	22.74	22.76	22.79	
5	64QAM	1	0	22.72	22.67	22.99	
5	64QAM	1	12	22.92	22.74	22.98	23.7
5	64QAM	1	24	22.98	22.61	22.95	
5	64QAM	12	0	21.77	21.72	21.85	
5	64QAM	12	7	21.84	21.77	21.90	22.7
5	64QAM	12	13	21.78	21.62	21.84	
5	64QAM	25	0	21.74	21.65	21.82	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.64	24.60	24.69	25.7
3	QPSK	1	8	24.71	24.71	24.71	
3	QPSK	1	14	24.65	24.69	24.67	
3	QPSK	8	0	23.71	23.66	23.79	24.7
3	QPSK	8	4	23.75	23.75	23.77	
3	QPSK	8	7	23.74	23.76	23.74	
3	QPSK	15	0	23.74	23.73	23.78	24.7
3	16QAM	1	0	23.99	23.92	23.98	
3	16QAM	1	8	24.05	24.07	24.10	
3	16QAM	1	14	23.98	23.97	24.05	23.7
3	16QAM	8	0	22.79	22.75	22.82	
3	16QAM	8	4	22.84	22.84	22.90	
3	16QAM	8	7	22.81	22.79	22.83	23.7
3	16QAM	15	0	22.80	22.74	22.78	
3	64QAM	1	0	22.75	22.84	22.95	
3	64QAM	1	8	23.00	22.81	23.01	23.7
3	64QAM	1	14	22.97	22.69	22.98	
3	64QAM	8	0	21.73	21.73	21.85	
3	64QAM	8	4	21.84	21.72	21.88	22.7
3	64QAM	8	7	21.83	21.64	21.83	
3	64QAM	15	0	21.74	21.70	21.78	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.54	24.59	24.59	25.7
1.4	QPSK	1	3	24.63	24.63	24.66	
1.4	QPSK	1	5	24.54	24.61	24.60	
1.4	QPSK	3	0	24.59	24.60	24.67	24.7
1.4	QPSK	3	1	24.65	24.64	24.71	
1.4	QPSK	3	3	24.63	24.59	24.63	
1.4	QPSK	6	0	23.68	23.67	23.72	24.7
1.4	16QAM	1	0	23.69	23.90	23.94	
1.4	16QAM	1	3	23.95	23.97	24.00	
1.4	16QAM	1	5	23.89	23.93	23.94	24.7
1.4	16QAM	3	0	23.69	23.69	23.75	
1.4	16QAM	3	1	23.76	23.73	23.80	
1.4	16QAM	3	3	23.67	23.68	23.71	23.7
1.4	16QAM	6	0	22.73	22.75	22.78	
1.4	64QAM	1	0	22.68	22.71	22.88	
1.4	64QAM	1	3	22.81	22.75	22.94	23.7
1.4	64QAM	1	5	22.79	22.65	22.85	
1.4	64QAM	3	0	22.69	22.75	22.82	
1.4	64QAM	3	1	22.83	22.84	22.91	22.7
1.4	64QAM	3	3	22.79	22.70	22.86	
1.4	64QAM	6	0	21.63	21.62	21.71	



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Modes Ch. /	Power Modes Ch. /	Power Modes Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.31	23.29	23.32	24.2
10	QPSK	1	25	23.24	23.28	23.20	
10	QPSK	1	49	23.30	23.23	23.18	
10	QPSK	25	0	23.31	23.38	23.33	
10	QPSK	25	12	23.42	23.37	23.43	24.2
10	QPSK	25	25	23.38	23.40	23.37	
10	QPSK	50	0	23.42	23.38	23.29	
10	16QAM	1	0	23.71	23.68	23.70	
10	16QAM	1	25	23.61	23.66	23.63	24.2
10	16QAM	1	49	23.65	23.61	23.49	
10	16QAM	25	0	22.86	22.87	22.84	
10	16QAM	25	12	22.96	22.88	22.97	
10	16QAM	25	25	22.89	22.92	22.82	23.7
10	16QAM	50	0	22.95	22.89	22.84	
10	64QAM	1	0	23.02	23.01	23.00	
10	64QAM	1	25	23.03	22.88	22.71	
10	64QAM	1	49	23.01	22.73	21.89	23.7
10	64QAM	25	0	21.90	21.94	21.88	
10	64QAM	25	12	22.00	21.90	21.70	
10	64QAM	25	25	21.94	21.93	21.02	
10	64QAM	50	0	21.99	21.90	21.55	22.7
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.24	23.23	23.32	24.2
5	QPSK	1	12	23.15	23.25	23.13	
5	QPSK	1	24	23.27	23.13	23.18	
5	QPSK	12	0	23.27	23.33	23.29	
5	QPSK	12	7	23.34	23.31	23.43	24.2
5	QPSK	12	13	23.37	23.36	23.29	
5	QPSK	25	0	23.32	23.36	23.29	
5	16QAM	1	0	23.62	23.57	23.69	
5	16QAM	1	12	23.58	23.61	23.60	24.2
5	16QAM	1	24	23.56	23.54	23.44	
5	16QAM	12	0	22.76	22.77	22.83	
5	16QAM	12	7	22.88	22.83	22.87	
5	16QAM	12	13	22.82	22.90	22.81	23.7
5	16QAM	25	0	22.90	22.87	22.81	
5	64QAM	1	0	22.98	22.96	22.98	
5	64QAM	1	12	23.03	22.82	22.70	
5	64QAM	1	24	22.91	22.68	21.95	23.7
5	64QAM	12	0	21.88	21.92	21.79	
5	64QAM	12	7	21.95	21.82	21.67	
5	64QAM	12	13	21.92	21.93	21.02	
5	64QAM	25	0	21.95	21.89	21.54	22.7
Channel				20415	20525	20635 <th>Tune-up limit (dBm)</th>	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.28	23.21	23.28	24.2
3	QPSK	1	8	23.24	23.21	23.11	
3	QPSK	1	14	23.30	23.13	23.11	
3	QPSK	8	0	23.24	23.37	23.25	
3	QPSK	8	4	23.39	23.37	23.39	24.2
3	QPSK	8	7	23.29	23.34	23.34	
3	QPSK	15	0	23.41	23.33	23.24	
3	16QAM	1	0	23.65	23.57	23.68	
3	16QAM	1	8	23.51	23.59	23.53	24.2
3	16QAM	1	14	23.62	23.55	23.39	
3	16QAM	8	0	22.83	22.78	22.77	
3	16QAM	8	4	22.86	22.79	22.95	
3	16QAM	8	7	22.80	22.87	22.73	23.7
3	16QAM	15	0	22.91	22.89	22.80	
3	64QAM	1	0	22.93	22.91	22.99	
3	64QAM	1	8	22.94	22.78	22.64	
3	64QAM	1	14	23.01	22.71	21.93	23.7
3	64QAM	8	0	21.82	21.91	21.86	
3	64QAM	8	4	22.00	21.82	21.70	
3	64QAM	8	7	21.89	21.88	21.01	
3	64QAM	15	0	21.95	21.82	21.54	22.7
Channel				20407	20525	20643 <th>Tune-up limit (dBm)</th>	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.31	23.25	23.22	24.2
1.4	QPSK	1	3	23.19	23.24	23.16	
1.4	QPSK	1	5	23.29	23.20	23.16	
1.4	QPSK	3	0	23.27	23.32	23.28	
1.4	QPSK	3	1	23.35	23.31	23.36	24.2
1.4	QPSK	6	0	23.41	23.33	23.19	
1.4	16QAM	1	0	23.66	23.61	23.63	
1.4	16QAM	1	3	23.58	23.60	23.57	
1.4	16QAM	1	5	23.57	23.61	23.47	24.2
1.4	16QAM	3	0	22.86	22.86	22.78	
1.4	16QAM	3	1	22.95	22.85	22.97	
1.4	16QAM	3	3	22.84	22.86	22.74	
1.4	16QAM	6	0	22.92	22.89	22.81	23.7
1.4	64QAM	1	0	22.98	22.94	22.92	
1.4	64QAM	1	3	22.95	22.81	22.67	
1.4	64QAM	1	5	22.94	22.72	21.95	
1.4	64QAM	3	0	21.85	21.84	21.78	23.7
1.4	64QAM	3	1	21.97	21.84	21.77	
1.4	64QAM	3	3	21.85	21.94	21.72	
1.4	64QAM	6	0	21.94	21.87	21.45	



Band 7							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.06	24.10	24.04	25.7
20	QPSK	1	49	24.12	24.13	24.01	
20	QPSK	1	99	24.25	24.24	24.05	
20	QPSK	50	0	23.18	23.18	23.17	24.7
20	QPSK	50	24	23.32	23.19	23.21	
20	QPSK	50	50	23.33	23.31	23.22	
20	QPSK	100	0	23.28	23.17	23.18	24.7
20	16QAM	1	0	23.42	23.44	23.38	
20	16QAM	1	49	23.49	23.48	23.36	
20	16QAM	1	99	23.53	23.52	23.39	23.7
20	16QAM	50	0	22.17	22.16	22.20	
20	16QAM	50	24	22.31	22.21	22.20	
20	16QAM	50	50	22.31	22.32	22.18	22.7
20	16QAM	100	0	22.26	22.20	22.18	
20	64QAM	1	0	22.25	22.25	22.30	
20	64QAM	1	49	22.37	22.40	22.27	22.7
20	64QAM	1	99	22.39	22.42	22.33	
20	64QAM	50	0	21.20	21.21	21.22	
20	64QAM	50	24	21.31	21.24	21.24	22.7
20	64QAM	50	50	21.32	21.32	21.20	
20	64QAM	100	0	21.30	21.21	21.18	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.14	24.13	24.09	25.7
15	QPSK	1	37	24.16	24.15	24.05	
15	QPSK	1	74	24.21	24.23	24.09	
15	QPSK	36	0	23.24	23.21	23.19	24.7
15	QPSK	36	20	23.34	23.26	23.23	
15	QPSK	36	39	23.32	23.33	23.20	
15	QPSK	75	0	23.28	23.24	23.20	24.7
15	16QAM	1	0	23.44	23.47	23.39	
15	16QAM	1	37	23.51	23.53	23.37	
15	16QAM	1	74	23.55	23.55	23.41	23.7
15	16QAM	36	0	22.27	22.21	22.19	
15	16QAM	36	20	22.31	22.23	22.20	
15	16QAM	36	39	22.29	22.33	22.17	23.7
15	16QAM	75	0	22.30	22.22	22.16	
15	64QAM	1	0	22.26	22.30	22.35	
15	64QAM	1	37	22.41	22.43	22.29	22.7
15	64QAM	1	74	22.45	22.41	22.30	
15	64QAM	36	0	21.30	21.26	21.23	
15	64QAM	36	20	21.33	21.27	21.23	22.7
15	64QAM	36	39	21.39	21.36	21.24	
15	64QAM	75	0	21.30	21.22	21.21	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.13	24.09	24.00	25.7
10	QPSK	1	25	24.11	24.11	23.99	
10	QPSK	1	49	24.16	24.19	24.02	
10	QPSK	25	0	23.26	23.23	23.16	24.7
10	QPSK	25	12	23.31	23.24	23.20	
10	QPSK	25	25	23.31	23.31	23.16	
10	QPSK	50	0	23.30	23.24	23.17	24.7
10	16QAM	1	0	23.50	23.46	23.39	
10	16QAM	1	25	23.50	23.52	23.37	
10	16QAM	1	49	23.53	23.56	23.41	23.7
10	16QAM	25	0	22.27	22.16	22.14	
10	16QAM	25	12	22.30	22.24	22.17	
10	16QAM	25	25	22.28	22.30	22.15	22.7
10	16QAM	50	0	22.28	22.23	22.18	
10	64QAM	1	0	22.40	22.33	22.33	
10	64QAM	1	25	22.43	22.43	22.30	22.7
10	64QAM	1	49	22.43	22.45	22.26	
10	64QAM	25	0	21.29	21.25	21.18	
10	64QAM	25	12	21.34	21.29	21.23	22.7
10	64QAM	25	25	21.33	21.33	21.20	
10	64QAM	50	0	21.34	21.28	21.23	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.14	24.10	24.03	25.7
5	QPSK	1	12	24.18	24.16	24.03	
5	QPSK	1	24	24.17	24.17	24.02	
5	QPSK	12	0	23.27	23.25	23.12	24.7
5	QPSK	12	7	23.29	23.21	23.10	
5	QPSK	12	13	23.27	23.31	23.15	
5	QPSK	25	0	23.28	23.23	23.13	24.7
5	16QAM	1	0	23.48	23.45	23.34	
5	16QAM	1	12	23.47	23.51	23.35	
5	16QAM	1	24	23.54	23.50	23.40	23.7
5	16QAM	12	0	22.29	22.25	22.17	
5	16QAM	12	7	22.28	22.28	22.16	
5	16QAM	12	13	22.31	22.30	22.13	23.7
5	16QAM	25	0	22.27	22.23	22.15	
5	64QAM	1	0	22.42	22.38	22.29	
5	64QAM	1	12	22.40	22.44	22.28	22.7
5	64QAM	1	24	22.44	22.43	22.28	
5	64QAM	12	0	21.35	21.30	21.20	
5	64QAM	12	7	21.38	21.28	21.18	22.7
5	64QAM	12	13	21.36	21.36	21.23	
5	64QAM	25	0	21.31	21.25	21.18	



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	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.51	23.48	23.48	24.6
10	QPSK	1	25	23.43	23.49	23.49	
10	QPSK	1	49	23.54	23.58	23.50	
10	QPSK	25	0	23.59	23.60	23.61	
10	QPSK	25	12	23.67	23.61	23.60	24.1
10	QPSK	25	25	23.68	23.66	23.65	
10	QPSK	50	0	23.66	23.59	23.60	
10	16QAM	1	0	23.87	23.80	23.80	
10	16QAM	1	25	23.86	23.86	23.87	24.1
10	16QAM	1	49	23.96	23.89	23.87	
10	16QAM	25	0	22.87	22.72	22.71	
10	16QAM	25	12	22.78	22.72	22.70	
10	16QAM	25	25	22.71	22.77	22.78	23.1
10	16QAM	50	0	22.75	22.69	22.68	
10	64QAM	1	0	22.83	22.76	22.85	
10	64QAM	1	25	22.67	22.92	22.73	
10	64QAM	1	49	22.99	22.93	22.87	23.1
10	64QAM	25	0	21.68	21.73	21.74	
10	64QAM	25	12	21.71	21.76	21.73	
10	64QAM	25	25	21.77	21.78	21.78	
10	64QAM	50	0	21.74	21.72	21.72	22.1
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.51	23.47	23.47	24.6
5	QPSK	1	12	23.46	23.58	23.57	
5	QPSK	1	24	23.48	23.54	23.50	
5	QPSK	12	0	23.62	23.59	23.60	
5	QPSK	12	7	23.60	23.56	23.65	24.1
5	QPSK	12	13	23.58	23.61	23.58	
5	QPSK	25	0	23.61	23.58	23.57	
5	16QAM	1	0	23.84	23.83	23.80	
5	16QAM	1	12	23.82	23.83	23.83	24.1
5	16QAM	1	24	23.86	23.86	23.85	
5	16QAM	12	0	22.77	22.77	22.73	
5	16QAM	12	7	22.72	22.72	22.78	23.1
5	16QAM	12	13	22.71	22.71	22.73	
5	16QAM	25	0	22.74	22.76	22.67	
5	64QAM	1	0	22.57	22.75	22.80	
5	64QAM	1	12	22.78	22.90	22.90	23.1
5	64QAM	1	24	22.77	22.88	22.85	
5	64QAM	12	0	21.60	21.80	21.81	
5	64QAM	12	7	21.75	21.74	21.80	
5	64QAM	12	13	21.74	21.80	21.77	22.1
5	64QAM	25	0	21.75	21.70	21.73	
Channel				23055	23095	23155	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.59	23.52	23.52	24.6
3	QPSK	1	8	23.57	23.59	23.54	
3	QPSK	1	14	23.48	23.54	23.50	
3	QPSK	8	0	23.61	23.59	23.56	
3	QPSK	8	4	23.60	23.58	23.67	24.1
3	QPSK	8	7	23.53	23.63	23.59	
3	QPSK	15	0	23.60	23.58	23.59	
3	16QAM	1	0	23.92	23.85	23.89	
3	16QAM	1	8	23.89	23.90	23.92	24.1
3	16QAM	1	14	23.79	23.87	23.81	
3	16QAM	8	0	22.78	22.77	22.74	
3	16QAM	8	4	22.75	22.78	22.81	23.1
3	16QAM	8	7	22.70	22.78	22.76	
3	16QAM	15	0	22.75	22.70	22.71	
3	64QAM	1	0	22.62	22.87	22.85	
3	64QAM	1	8	22.66	22.92	22.94	23.1
3	64QAM	1	14	22.75	22.96	22.82	
3	64QAM	8	0	21.62	21.75	21.77	
3	64QAM	8	4	21.70	21.74	21.81	
3	64QAM	8	7	21.74	21.75	21.72	22.1
3	64QAM	15	0	21.60	21.70	21.70	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.46	23.42	23.44	24.6
1.4	QPSK	1	3	23.49	23.50	23.40	
1.4	QPSK	1	5	23.40	23.41	23.40	
1.4	QPSK	3	0	23.47	23.45	23.44	
1.4	QPSK	3	1	23.51	23.47	23.45	24.1
1.4	QPSK	3	3	23.45	23.45	23.44	
1.4	QPSK	6	0	23.50	23.57	23.49	
1.4	16QAM	1	0	23.78	23.73	23.75	
1.4	16QAM	1	3	23.82	23.86	23.81	24.1
1.4	16QAM	1	5	23.71	23.78	23.73	
1.4	16QAM	3	0	23.57	23.53	23.50	
1.4	16QAM	3	1	23.61	23.57	23.57	
1.4	16QAM	3	3	23.51	23.54	23.48	23.1
1.4	16QAM	6	0	22.68	22.70	22.65	
1.4	64QAM	1	0	22.59	22.73	22.77	
1.4	64QAM	1	3	22.71	22.85	22.81	
1.4	64QAM	1	5	22.70	22.79	22.75	23.1
1.4	64QAM	3	0	22.58	22.73	22.73	
1.4	64QAM	3	1	22.64	22.78	22.80	
1.4	64QAM	3	3	22.63	22.75	22.74	
1.4	64QAM	6	0	21.48	21.67	21.63	22.1

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)				782			
10	QPSK	1	0		23.24		24.4
10	QPSK	1	25		23.22		
10	QPSK	1	49		23.30		
10	QPSK	25	0		23.11		24.2
10	QPSK	25	12		23.20		
10	QPSK	25	25		23.15		
10	QPSK	50	0		23.52		24.2
10	16QAM	1	0		23.69		
10	16QAM	1	25		23.66		
10	16QAM	1	49		23.68		23.2
10	16QAM	25	0		22.43		
10	16QAM	25	12		22.50		
10	16QAM	25	25		22.46		23.2
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.60		
10	64QAM	1	25		22.59		22.2
10	64QAM	1	49		22.63		
10	64QAM	25	0		21.46		
10	64QAM	25	12		21.56		22.2
10	64QAM	25	25		21.46		
10	64QAM	50	0		21.57		
Channel				23205	23230	23255	Tune-up limit (dbm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.52	23.51	23.52	24.4
5	QPSK	1	12	23.57	23.53	23.53	
5	QPSK	1	24	23.57	23.52	23.60	
5	QPSK	12	0	23.43	23.42	23.40	24.2
5	QPSK	12	7	23.50	23.48	23.49	
5	QPSK	12	13	23.48	23.46	23.47	
5	QPSK	25	0	23.50	23.44	23.43	24.2
5	16QAM	1	0	23.59	23.61	23.58	
5	16QAM	1	12	23.57	23.55	23.54	
5	16QAM	1	24	23.63	23.64	23.65	23.2
5	16QAM	12	0	22.50	22.45	22.47	
5	16QAM	12	7	22.52	22.47	22.52	
5	16QAM	12	13	22.49	22.49	22.51	23.2
5	16QAM	25	0	22.55	22.49	22.49	
5	64QAM	1	0	22.49	22.48	22.44	
5	64QAM	1	12	22.50	22.48	22.53	23.2
5	64QAM	1	24	22.50	22.58	22.54	
5	64QAM	12	0	21.59	21.50	21.50	
5	64QAM	12	7	21.57	21.51	21.53	22.2
5	64QAM	12	13	21.57	21.52	21.53	
5	64QAM	25	0	21.55	21.52	21.50	

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		23.64		24.6
10	QPSK	1	25		23.63		
10	QPSK	1	49		23.60		
10	QPSK	25	0		23.69		24.6
10	QPSK	25	12		23.68		
10	QPSK	25	25		23.73		
10	QPSK	50	0		23.68		24.6
10	16QAM	1	0		24.12		
10	16QAM	1	25		24.04		
10	16QAM	1	49		23.99		23.6
10	16QAM	25	0		22.79		
10	16QAM	25	12		22.80		
10	16QAM	25	25		22.83		22.6
10	16QAM	50	0		22.80		
10	64QAM	1	0		22.51		
10	64QAM	1	25		22.49		23.6
10	64QAM	1	49		22.99		
10	64QAM	25	0		21.25		
10	64QAM	25	12		21.23		22.6
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.34		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.66	23.57	23.59	24.6
5	QPSK	1	12	23.73	23.72	23.67	
5	QPSK	1	24	23.69	23.63	23.61	
5	QPSK	12	0	23.77	23.71	23.70	24.6
5	QPSK	12	7	23.76	23.70	23.76	
5	QPSK	12	13	23.74	23.73	23.70	
5	QPSK	25	0	23.75	23.65	23.63	24.6
5	16QAM	1	0	23.86	23.86	23.90	
5	16QAM	1	12	23.99	23.96	23.99	
5	16QAM	1	24	23.95	23.96	23.93	23.6
5	16QAM	12	0	22.88	22.79	22.85	
5	16QAM	12	7	22.92	22.84	22.90	
5	16QAM	12	13	22.86	22.80	22.85	23.6
5	16QAM	25	0	22.68	22.79	22.81	
5	64QAM	1	0	22.47	22.26	22.37	
5	64QAM	1	12	22.31	22.15	22.60	23.6
5	64QAM	1	24	22.06	22.37	23.00	
5	64QAM	12	0	21.39	21.08	21.32	
5	64QAM	12	7	21.26	21.11	21.67	22.6
5	64QAM	12	13	21.10	21.23	21.87	
5	64QAM	25	0	21.15	21.06	21.63	

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	23.48	23.45	23.46	24.6
10	QPSK	1	25	23.48	23.52	23.51	
10	QPSK	1	49	23.53	23.55	23.53	
10	QPSK	25	0	23.55	23.54	23.55	
10	QPSK	25	12	23.72	23.64	23.62	24.6
10	QPSK	25	25	23.71	23.71	23.70	
10	QPSK	50	0	23.62	23.62	23.61	
10	16QAM	1	0	23.86	23.83	23.81	
10	16QAM	1	25	23.93	23.96	23.94	24.6
10	16QAM	1	49	23.94	23.93	23.89	
10	16QAM	25	0	22.85	22.84	22.85	
10	16QAM	25	12	22.79	22.72	22.72	
10	16QAM	25	25	22.77	22.79	22.79	23.6
10	16QAM	50	0	22.71	22.70	22.68	
10	64QAM	1	0	22.59	22.81	22.83	
10	64QAM	1	25	22.76	22.73	22.67	
10	64QAM	1	49	22.85	22.89	22.74	23.6
10	64QAM	25	0	21.51	21.45	21.50	
10	64QAM	25	12	21.65	21.57	21.63	
10	64QAM	25	25	21.67	21.77	21.74	
10	64QAM	50	0	21.63	21.70	21.63	22.6
Channel				23785	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.48	23.47	23.50	24.6
5	QPSK	1	12	23.56	23.63	23.59	
5	QPSK	1	24	23.63	23.60	23.59	
5	QPSK	12	0	23.59	23.63	23.57	
5	QPSK	12	7	23.69	23.63	23.68	24.6
5	QPSK	12	13	23.65	23.65	23.65	
5	QPSK	25	0	23.61	23.59	23.66	
5	16QAM	1	0	23.62	23.63	23.62	
5	16QAM	1	12	23.90	23.87	23.87	24.6
5	16QAM	1	24	23.94	23.92	23.92	
5	16QAM	12	0	22.72	22.75	22.69	
5	16QAM	12	7	22.78	22.73	22.78	
5	16QAM	12	13	22.77	22.79	22.77	23.6
5	16QAM	25	0	22.76	22.74	22.80	
5	64QAM	1	0	22.37	22.57	22.85	
5	64QAM	1	12	22.78	22.71	22.90	
5	64QAM	1	24	22.65	22.64	22.63	23.6
5	64QAM	12	0	21.60	21.59	21.79	
5	64QAM	12	7	21.62	21.68	21.85	
5	64QAM	12	13	21.72	21.62	21.79	
5	64QAM	25	0	21.57	21.50	21.73	22.6



Band 25									
Annex									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905			
20	QPSK	1	0	24.79	24.78	24.93	25.7		
20	QPSK	1	49	24.72	24.74	24.80			
20	QPSK	1	99	24.65	24.74	24.39			
20	QPSK	50	0	23.83	23.89	23.94			
20	QPSK	50	24	23.88	23.99	24.01	24.7		
20	QPSK	50	50	23.82	23.93	24.00			
20	QPSK	100	0	23.89	23.97	23.98			
20	16QAM	1	0	24.14	24.15	24.16			
20	16QAM	1	49	24.07	24.11	24.17	24.7		
20	16QAM	1	99	23.99	24.10	23.73			
20	16QAM	50	0	22.84	22.92	22.95			
20	16QAM	50	24	22.89	22.99	22.95			
20	16QAM	50	50	22.85	22.94	23.02	23.7		
20	16QAM	100	0	22.87	22.95	22.93			
20	64QAM	1	0	23.00	22.99	22.68			
20	64QAM	1	49	22.97	22.98	22.58			
20	64QAM	1	99	22.84	22.99	21.67	23.7		
20	64QAM	50	0	21.87	21.93	21.40			
20	64QAM	50	24	21.91	22.00	21.57			
20	64QAM	50	50	21.79	21.97	21.23			
20	64QAM	100	0	21.89	22.01	21.26	22.7		
Channel				26115	26340	26615			
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	24.82	24.87	24.89	25.7		
15	QPSK	1	37	24.75	24.80	24.87			
15	QPSK	1	74	24.72	24.82	24.39			
15	QPSK	36	0	23.86	23.93	23.99			
15	QPSK	36	20	23.89	24.02	24.06	24.7		
15	QPSK	36	39	23.83	23.96	23.88			
15	QPSK	75	0	23.89	23.90	23.95			
15	16QAM	1	0	24.07	24.15	24.19			
15	16QAM	1	37	24.12	24.14	24.22	24.7		
15	16QAM	1	74	24.05	24.12	23.75			
15	16QAM	36	0	22.86	22.95	22.97			
15	16QAM	36	20	22.93	23.01	23.05			
15	16QAM	36	39	22.84	22.96	23.00	23.7		
15	16QAM	75	0	22.90	22.93	22.96			
15	64QAM	1	0	23.03	23.00	22.45			
15	64QAM	1	37	22.99	23.06	22.62			
15	64QAM	1	74	22.74	23.02	21.89	22.7		
15	64QAM	36	0	21.92	21.98	21.61			
15	64QAM	36	20	21.94	22.03	21.57			
15	64QAM	36	39	21.77	22.00	21.24			
15	64QAM	75	0	21.91	21.92	21.31	Tune-up limit (dBm)		
Channel				26090	26340	26640			
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	24.77	24.76	24.87	25.7		
10	QPSK	1	25	24.70	24.79	24.86			
10	QPSK	1	49	24.74	24.79	24.33			
10	QPSK	25	0	23.90	23.86	23.93			
10	QPSK	25	12	23.95	23.97	23.96	24.7		
10	QPSK	25	25	23.92	23.97	23.73			
10	QPSK	50	0	23.93	23.97	23.87			
10	16QAM	1	0	24.14	24.15	24.22			
10	16QAM	1	25	24.13	24.18	24.23	24.7		
10	16QAM	1	49	24.11	24.17	23.69			
10	16QAM	25	0	22.93	22.96	22.93			
10	16QAM	25	12	22.92	23.00	22.98			
10	16QAM	25	25	22.89	22.93	22.91	23.7		
10	16QAM	50	0	22.92	22.97	22.96			
10	64QAM	1	0	23.01	22.97	22.67			
10	64QAM	1	25	23.08	23.13	22.41			
10	64QAM	1	49	22.88	23.09	21.84	22.7		
10	64QAM	25	0	21.94	21.99	21.52			
10	64QAM	25	12	21.98	22.00	21.37			
10	64QAM	25	25	21.94	22.00	21.06			
10	64QAM	50	0	21.96	22.02	21.17	Tune-up limit (dBm)		
Channel				26065	26340	26665			
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	24.80	24.75	24.92	25.7		
5	QPSK	1	12	24.84	24.80	24.56			
5	QPSK	1	24	24.81	24.88	24.29			
5	QPSK	12	0	23.88	23.91	23.89			
5	QPSK	12	7	23.96	23.99	23.76	24.7		
5	QPSK	12	13	23.96	23.99	23.60			
5	QPSK	25	0	23.93	23.93	23.64			
5	16QAM	1	0	24.22	24.11	24.18			
5	16QAM	1	12	24.13	24.19	23.93	24.7		
5	16QAM	1	24	24.15	24.18	23.70			
5	16QAM	12	0	22.88	22.95	23.01			
5	16QAM	12	7	22.93	23.02	22.88			
5	16QAM	12	13	22.98	23.02	22.75	23.7		
5	16QAM	25	0	22.96	22.97	22.80			
5	64QAM	1	0	23.07	23.01	22.33			
5	64QAM	1	12	23.05	23.07	21.98			
5	64QAM	1	24	23.06	23.11	21.75	23.7		
5	64QAM	12	0	21.95	21.98	21.17			
5	64QAM	12	7	22.01	22.06	21.03			
5	64QAM	12	13	22.03	22.06	20.88			
5	64QAM	25	0	21.93	22.00	20.98	Tune-up limit (dBm)		
Channel				26055	26340	26675			
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	24.72	24.71	24.65	25.7		
3	QPSK	1	8	24.88	24.91	24.53			
3	QPSK	1	14	24.85	24.90	24.29			
3	QPSK	8	0	23.87	23.89	23.71			
3	QPSK	8	4	23.92	23.96	23.66	24.7		
3	QPSK	8	7	23.96	23.97	23.54			
3	QPSK	15	0	23.93	23.95	23.58			
3	16QAM	1	0	24.09	24.01	23.89			
3	16QAM	1	8	24.20	24.26	23.84	24.7		
3	16QAM	1	14	24.21	24.24	23.63			
3	16QAM	8	0	22.92	22.95	22.83			
3	16QAM	8	4	23.03	23.04	22.76			
3	16QAM	8	7	23.01	23.02	22.67	23.7		
3	16QAM	15	0	22.97	22.97	22.70			
3	64QAM	1	0	22.95	22.96	22.01			
3	64QAM	1	8	23.12	23.20	21.98			
3	64QAM	1	14	23.11	23.16	21.75	23.7		
3	64QAM	8	0	21.93	22.00	20.95			
3	64QAM	8	4	21.99	22.07	20.94			
3	64QAM	8	7	22.00	22.06	20.84			
3	64QAM	15	0	21.94	21.96	20.88	Tune-up limit (dBm)		
Channel				26047	26340	26683			
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	24.71	24.73	24.37	25.7		
1.4	QPSK	1	3	24.80	24.83	24.31			
1.4	QPSK	1	5	24.79	24.84	24.20			
1.4	QPSK	3	0	24.78	24.81	24.32			
1.4	QPSK	3	1	24.82	24.83	24.33	24.7		
1.4	QPSK	3	3	24.77	24.83	24.24			
1.4	QPSK	6	0	23.85	23.91	23.41			
1.4	16QAM	1	0	24.05	24.05	23.64			
1.4	16QAM	1	3	24.12	24.17	23.64	24.7		
1.4	16QAM	1	5	24.07	24.12	23.54			
1.4	16QAM	3	0	23.81	23.87	23.49			
1.4	16QAM	3	1	23.88	23.93	23.48			
1.4	16QAM	3	3	23.84	23.93	23.42	23.7		
1.4	16QAM	6	0	22.93	22.94	22.99			
1.4	16QAM	6	2	22.97	22.99	22.78			
1.4	64QAM	1	5	23.03	23.06	21.72			
1.4	64QAM	3	1	23.00	23.05	21.85	23.7		
1.4	64QAM	3	3	22.98	23.01	21.71			
1.4	64QAM	3	5	22.99	23.03	21.61			
1.4	64QAM	6	0	22.92	22.97	21.59			

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				26745	26865	26990	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	23.31	23.22	23.23	24.2
15	QPSK	1	37	23.18	23.23	23.22	
15	QPSK	1	74	23.23	23.22	23.10	
15	QPSK	36	0	23.36	23.35	23.36	24.2
15	QPSK	36	20	23.38	23.40	23.31	
15	QPSK	36	39	23.33	23.36	23.30	
15	QPSK	75	0	23.40	23.33	23.32	24.2
15	16QAM	1	0	23.59	23.53	23.56	
15	16QAM	1	37	23.48	23.54	23.53	
15	16QAM	1	74	23.46	23.50	23.40	23.7
15	16QAM	36	0	22.84	22.84	22.87	
15	16QAM	36	20	22.86	22.85	22.81	
15	16QAM	36	39	22.82	22.83	22.82	23.7
15	16QAM	75	0	22.88	22.80	22.83	
15	64QAM	1	0	22.65	22.89	22.89	23.7
15	64QAM	1	37	22.51	22.94	22.95	
15	64QAM	1	74	22.51	22.92	21.70	
15	64QAM	36	0	21.22	21.89	21.89	22.7
15	64QAM	36	20	21.47	21.95	21.86	
15	64QAM	36	39	21.86	21.92	21.33	
15	64QAM	75	0	21.63	21.84	21.53	Tune-up limit (dBm)
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.22	23.17	23.19	24.2
10	QPSK	1	25	23.16	23.20	23.13	
10	QPSK	1	49	23.19	23.19	23.02	
10	QPSK	25	0	23.28	23.35	23.29	24.2
10	QPSK	25	12	23.37	23.35	23.31	
10	QPSK	25	25	23.24	23.26	23.21	
10	QPSK	50	0	23.34	23.32	23.27	24.2
10	16QAM	1	0	23.55	23.52	23.49	
10	16QAM	1	25	23.45	23.46	23.51	
10	16QAM	1	49	23.43	23.41	23.33	23.7
10	16QAM	25	0	22.77	22.80	22.78	
10	16QAM	25	12	22.81	22.80	22.80	
10	16QAM	25	25	22.81	22.73	22.82	23.7
10	16QAM	50	0	22.61	22.75	22.77	
10	64QAM	1	0	22.62	22.82	22.70	
10	64QAM	1	25	22.50	22.92	22.87	23.7
10	64QAM	1	49	22.85	22.91	21.69	
10	64QAM	25	0	21.14	21.89	21.84	
10	64QAM	25	12	21.42	21.86	21.80	22.7
10	64QAM	25	25	21.80	21.89	21.26	
10	64QAM	50	0	21.62	21.82	21.51	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.30	23.13	23.16	24.2
5	QPSK	1	12	23.10	23.21	23.20	
5	QPSK	1	24	23.23	23.20	23.01	
5	QPSK	12	0	23.27	23.26	23.30	24.2
5	QPSK	12	7	23.39	23.34	23.31	
5	QPSK	12	13	23.24	23.31	23.29	
5	QPSK	25	0	23.33	23.31	23.31	24.2
5	16QAM	1	0	23.54	23.48	23.55	
5	16QAM	1	12	23.46	23.45	23.44	
5	16QAM	1	24	23.43	23.43	23.33	23.7
5	16QAM	12	0	22.75	22.79	22.86	
5	16QAM	12	7	22.82	22.81	22.72	
5	16QAM	12	13	22.78	22.80	22.72	23.7
5	16QAM	25	0	22.81	22.76	22.78	
5	64QAM	1	0	22.62	22.79	22.85	
5	64QAM	1	12	22.46	22.85	22.94	23.7
5	64QAM	1	24	22.51	22.90	21.60	
5	64QAM	12	0	21.22	21.82	21.83	
5	64QAM	12	7	21.45	21.93	21.83	22.7
5	64QAM	12	13	21.77	21.86	21.33	
5	64QAM	25	0	21.55	21.84	21.46	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.22	23.14	23.17	24.2
3	QPSK	1	8	23.11	23.13	23.20	
3	QPSK	1	14	23.23	23.18	23.00	
3	QPSK	8	0	23.30	23.35	23.31	24.2
3	QPSK	8	4	23.35	23.32	23.28	
3	QPSK	8	7	23.27	23.30	23.21	
3	QPSK	15	0	23.35	23.33	23.29	24.2
3	16QAM	1	0	23.55	23.46	23.55	
3	16QAM	1	8	23.46	23.48	23.53	
3	16QAM	1	14	23.45	23.43	23.39	23.7
3	16QAM	8	0	22.83	22.83	22.80	
3	16QAM	8	4	22.83	22.87	22.81	
3	16QAM	8	7	22.77	22.73	22.81	23.7
3	16QAM	15	0	22.83	22.78	22.77	
3	64QAM	1	0	22.60	22.94	22.84	
3	64QAM	1	8	22.47	22.91	22.89	23.7
3	64QAM	1	14	22.87	22.92	21.61	
3	64QAM	8	0	21.20	21.80	21.88	
3	64QAM	8	4	21.47	21.95	21.83	22.7
3	64QAM	8	7	21.78	21.85	21.23	
3	64QAM	15	0	21.61	21.75	21.44	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.29	23.19	23.14	24.2
1.4	QPSK	1	3	23.18	23.21	23.19	
1.4	QPSK	1	5	23.23	23.17	23.09	
1.4	QPSK	3	0	23.26	23.35	23.31	24.2
1.4	QPSK	3	1	23.34	23.36	23.27	
1.4	QPSK	3	3	23.23	23.36	23.21	
1.4	QPSK	6	0	23.33	23.26	23.32	24.2
1.4	16QAM	1	0	23.53	23.53	23.50	
1.4	16QAM	1	3	23.45	23.49	23.53	
1.4	16QAM	1	5	23.46	23.44	23.30	24.2
1.4	16QAM	3	0	22.77	22.81	22.83	
1.4	16QAM	3	1	22.79	22.80	22.71	
1.4	16QAM	3	3	22.78	22.78	22.80	23.7
1.4	16QAM	6	0	22.85	22.73	22.74	
1.4	64QAM	1	0	22.62	22.85	22.79	
1.4	64QAM	1	3	22.47	22.92	22.88	23.7
1.4	64QAM	1	5	22.86	22.91	21.99	
1.4	64QAM	3	0	21.73	21.80	21.79	
1.4	64QAM	3	1	21.72	21.88	21.84	22.7
1.4	64QAM	3	3	21.83	21.82	21.70	
1.4	64QAM	6	0	21.55	21.79	21.51	



Band 30							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2771.0			
Frequency (MHz)				231.0			
10	QPSK	1	0		22.92		23.7
10	QPSK	1	25		22.76		
10	QPSK	1	49		22.77		
10	QPSK	25	0		21.83		22.7
10	QPSK	25	12		21.88		
10	QPSK	25	25		21.97		
10	QPSK	50	0		21.86		22.7
10	16QAM	1	0		22.20		
10	16QAM	1	25		22.17		
10	16QAM	1	49		22.20		21.7
10	16QAM	25	0		20.84		
10	16QAM	25	12		20.88		
10	16QAM	25	25		20.99		21.7
10	16QAM	50	0		20.87		
10	64QAM	1	0		21.04		
10	64QAM	1	25		21.09		21.7
10	64QAM	1	49		21.04		
10	64QAM	25	0		19.87		
10	64QAM	25	12		19.92		20.7
10	64QAM	25	25		20.00		
10	64QAM	50	0		19.89		
Channel				2788.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	231.0	2312.5	
5	QPSK	1	0	22.75	22.76	22.76	23.7
5	QPSK	1	12	22.89	22.90	22.87	
5	QPSK	1	24	22.91	22.88	22.86	
5	QPSK	12	0	21.90	21.85	21.87	22.7
5	QPSK	12	7	21.95	21.97	21.93	
5	QPSK	12	13	21.96	21.96	21.93	
5	QPSK	25	0	21.83	21.87	21.90	22.7
5	16QAM	1	0	22.08	22.07	22.10	
5	16QAM	1	12	22.14	22.14	22.12	
5	16QAM	1	24	22.18	22.21	22.15	21.7
5	16QAM	12	0	20.92	20.87	20.90	
5	16QAM	12	7	20.96	20.99	20.95	
5	16QAM	12	13	20.97	20.97	20.94	21.7
5	16QAM	25	0	20.96	20.99	20.93	
5	64QAM	1	0	20.98	21.06	21.06	
5	64QAM	1	12	21.04	21.09	21.07	21.7
5	64QAM	1	24	21.12	21.13	21.12	
5	64QAM	12	0	19.99	19.91	19.96	
5	64QAM	12	7	20.03	20.03	20.00	20.7
5	64QAM	12	13	20.02	20.02	20.00	
5	64QAM	25	0	19.98	19.94	19.94	



Band 66									
Ann 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)		
Channel				132072	132322	132572			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	24.56	24.59	24.79	25.7		
20	QPSK	1	49	24.39	24.44	24.52			
20	QPSK	1	99	24.55	24.55	24.44			
20	QPSK	50	0	23.57	23.67	23.71			
20	QPSK	50	24	23.64	23.64	23.69	24.7		
20	QPSK	50	50	23.65	23.68	23.72			
20	QPSK	100	0	23.63	23.61	23.68			
20	16QAM	1	0	23.91	23.92	24.01			
20	16QAM	1	49	23.77	23.83	23.86	24.7		
20	16QAM	1	99	23.67	23.88	23.81			
20	16QAM	50	0	22.58	22.68	22.74			
20	16QAM	50	24	22.64	22.64	22.68			
20	16QAM	50	50	22.64	22.70	22.72	23.7		
20	16QAM	100	0	22.63	22.59	22.71			
20	64QAM	1	0	22.74	22.85	22.81			
20	64QAM	1	49	22.64	22.74	22.69			
20	64QAM	1	99	22.76	22.76	22.71	23.7		
20	64QAM	50	0	21.59	21.68	21.71			
20	64QAM	50	24	21.67	21.67	21.71			
20	64QAM	50	50	21.63	21.72	21.75			
20	64QAM	100	0	21.69	21.64	21.71	22.7		
Channel				132047	132322	132597		Tune-up limit (dBm)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.52	24.62	24.65	25.7		
15	QPSK	1	37	24.41	24.54	24.56			
15	QPSK	1	74	24.54	24.58	24.55			
15	QPSK	36	0	23.60	23.67	23.72			
15	QPSK	36	20	23.66	23.65	23.70	24.7		
15	QPSK	36	39	23.62	23.70	23.74			
15	QPSK	75	0	23.64	23.64	23.71			
15	16QAM	1	0	23.81	23.96	23.98			
15	16QAM	1	37	23.78	23.88	23.92	24.7		
15	16QAM	1	74	23.84	23.92	23.84			
15	16QAM	36	0	22.58	22.68	22.70			
15	16QAM	36	20	22.62	22.65	22.67			
15	16QAM	36	39	22.62	22.71	22.72	23.7		
15	16QAM	75	0	22.65	22.67	22.71			
15	64QAM	1	0	22.69	22.80	22.83			
15	64QAM	1	37	22.67	22.74	22.80			
15	64QAM	1	74	22.76	22.81	22.72	22.7		
15	64QAM	36	0	21.60	21.71	21.76			
15	64QAM	36	20	21.64	21.64	21.69			
15	64QAM	36	39	21.68	21.72	21.75			
15	64QAM	75	0	21.65	21.67	21.72	Tune-up limit (dBm)		
Channel				132022	132322	132622			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	24.57	24.58	24.70	25.7		
10	QPSK	1	25	24.55	24.64	24.65			
10	QPSK	1	49	24.55	24.61	24.66			
10	QPSK	25	0	23.64	23.69	23.73			
10	QPSK	25	12	23.65	23.71	23.72	24.7		
10	QPSK	25	25	23.65	23.75	23.78			
10	QPSK	50	0	23.68	23.69	23.74			
10	16QAM	1	0	23.97	24.04	24.05			
10	16QAM	1	25	23.91	24.02	24.03	24.7		
10	16QAM	1	49	23.92	23.99	24.04			
10	16QAM	25	0	22.66	22.66	22.73			
10	16QAM	25	12	22.67	22.71	22.74			
10	16QAM	25	25	22.65	22.74	22.77	23.7		
10	16QAM	50	0	22.67	22.69	22.73			
10	64QAM	1	0	22.85	22.87	22.77			
10	64QAM	1	25	22.81	22.94	22.98			
10	64QAM	1	49	22.83	22.92	22.95	22.7		
10	64QAM	25	0	21.66	21.72	21.75			
10	64QAM	25	12	21.72	21.73	21.76			
10	64QAM	25	25	21.70	21.77	21.78			
10	64QAM	50	0	21.72	21.72	21.78	Tune-up limit (dBm)		
Channel				131997	132322	132647			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.57	24.61	24.73	25.7		
5	QPSK	1	12	24.59	24.69	24.71			
5	QPSK	1	24	24.54	24.66	24.71			
5	QPSK	12	0	23.66	23.71	23.81			
5	QPSK	12	7	23.68	23.79	23.81	24.7		
5	QPSK	12	13	23.63	23.78	23.81			
5	QPSK	25	0	23.65	23.70	23.79			
5	16QAM	1	0	23.93	23.95	24.04			
5	16QAM	1	12	23.95	24.02	24.03	24.7		
5	16QAM	1	24	23.91	23.99	24.03			
5	16QAM	12	0	22.70	22.75	22.85			
5	16QAM	12	7	22.73	22.81	22.86			
5	16QAM	12	13	22.70	22.77	22.81	23.7		
5	16QAM	25	0	22.67	22.70	22.79			
5	64QAM	1	0	22.84	22.94	23.03			
5	64QAM	1	12	22.90	22.98	22.98			
5	64QAM	1	24	22.87	22.94	22.91	22.7		
5	64QAM	12	0	21.73	21.76	21.87			
5	64QAM	12	7	21.78	21.84	21.87			
5	64QAM	12	13	21.68	21.82	21.82			
5	64QAM	25	0	21.68	21.73	21.83	Tune-up limit (dBm)		
Channel				131987	132322	132657			
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	24.59	24.64	24.72	25.7		
3	QPSK	1	8	24.64	24.74	24.78			
3	QPSK	1	14	24.58	24.68	24.67			
3	QPSK	8	0	23.68	23.70	23.76			
3	QPSK	8	4	23.69	23.80	23.79	24.7		
3	QPSK	8	7	23.67	23.72	23.76			
3	QPSK	15	0	23.68	23.67	23.78			
3	16QAM	1	0	23.92	23.98	24.05			
3	16QAM	1	8	24.00	24.10	24.14	24.7		
3	16QAM	1	14	23.89	24.00	24.00			
3	16QAM	8	0	22.72	22.78	22.86			
3	16QAM	8	4	22.77	22.83	22.89			
3	16QAM	8	7	22.72	22.84	22.81	23.7		
3	16QAM	15	0	22.70	22.75	22.79			
3	64QAM	1	0	22.82	22.93	22.94			
3	64QAM	1	8	22.93	23.05	23.03			
3	64QAM	1	14	22.85	22.99	22.97	22.7		
3	64QAM	8	0	21.76	21.73	21.81			
3	64QAM	8	4	21.78	21.82	21.87			
3	64QAM	8	7	21.75	21.81	21.84			
3	64QAM	15	0	21.69	21.74	21.81	Tune-up limit (dBm)		
Channel				131979	132322	132685			
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.47	24.52	24.61	25.7		
1.4	QPSK	1	3	24.56	24.66	24.71			
1.4	QPSK	1	5	24.51	24.56	24.65			
1.4	QPSK	3	0	24.52	24.63	24.65			
1.4	QPSK	3	1	24.59	24.68	24.71	24.7		
1.4	QPSK	3	3	24.53	24.64	24.66			
1.4	QPSK	6	0	23.60	23.70	23.71			
1.4	16QAM	1	0	23.83	23.94	23.95	24.7		
1.4	16QAM	1	3	23.80	23.93	23.94			
1.4	16QAM	1	5	23.84	23.93	23.94			
1.4	16QAM	3	0	23.62	23.75	23.76			
1.4	16QAM	3	1	23.68	23.79	23.80	23.7		
1.4	16QAM	3	3	23.61	23.71	23.72			
1.4	16QAM	15	0	22.82	22.76	22.77			
1.4	16QAM	15	2	22.81	22.82	22.91			
1.4	64QAM	1	0	22.84	22.94	22.95	23.7		
1.4	64QAM	1	5	22.80	22.87	22.89			
1.4	64QAM	3	0	22.79	22.88	22.92			
1.4	64QAM	3	1	22.75	22.85	22.87			



Band 71							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	23.51	23.41	23.36	24.4
20	QPSK	1	49	23.40	23.39	23.36	
20	QPSK	1	99	23.42	23.37	23.31	
20	QPSK	50	0	23.54	23.48	23.43	24.2
20	QPSK	50	24	23.57	23.47	23.44	
20	QPSK	50	50	23.57	23.49	23.46	
20	QPSK	100	0	23.55	23.45	23.43	24.2
20	16QAM	1	0	23.85	23.73	23.69	
20	16QAM	1	49	23.72	23.76	23.70	
20	16QAM	1	99	23.80	23.68	23.64	23.2
20	16QAM	50	0	22.85	22.89	22.76	
20	16QAM	50	24	22.89	22.80	22.74	
20	16QAM	50	50	22.86	22.79	22.77	23.2
20	16QAM	100	0	22.87	22.76	22.71	
20	64QAM	1	0	22.23	22.83	22.83	
20	64QAM	1	49	22.84	22.91	22.55	23.2
20	64QAM	1	99	22.97	22.74	22.48	
20	64QAM	50	0	21.26	21.83	21.78	
20	64QAM	50	24	21.73	21.83	21.77	22.2
20	64QAM	50	50	21.90	21.83	21.79	
20	64QAM	100	0	21.74	21.77	21.74	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.54	23.45	23.39	24.4
15	QPSK	1	37	23.41	23.39	23.35	
15	QPSK	1	74	23.43	23.40	23.35	
15	QPSK	36	0	23.52	23.48	23.42	24.2
15	QPSK	36	20	23.59	23.48	23.42	
15	QPSK	36	39	23.47	23.52	23.46	
15	QPSK	75	0	23.58	23.47	23.41	24.2
15	16QAM	1	0	23.84	23.73	23.69	
15	16QAM	1	37	23.76	23.74	23.69	
15	16QAM	1	74	23.74	23.71	23.66	23.2
15	16QAM	36	0	22.85	22.79	22.75	
15	16QAM	36	20	22.86	22.77	22.74	
15	16QAM	36	39	22.82	22.80	22.78	23.2
15	16QAM	75	0	22.90	22.76	22.72	
15	64QAM	1	0	22.19	22.85	22.85	
15	64QAM	1	37	22.04	22.92	22.93	23.2
15	64QAM	1	74	22.94	22.85	22.67	
15	64QAM	36	0	21.06	21.81	21.77	
15	64QAM	36	20	21.25	21.81	21.79	22.2
15	64QAM	36	39	21.83	21.76	21.81	
15	64QAM	75	0	21.63	21.70	21.74	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.53	23.40	23.40	24.4
10	QPSK	1	25	23.40	23.34	23.36	
10	QPSK	1	49	23.42	23.40	23.31	
10	QPSK	25	0	23.58	23.47	23.44	24.2
10	QPSK	25	12	23.59	23.56	23.45	
10	QPSK	25	25	23.55	23.52	23.46	
10	QPSK	50	0	23.59	23.56	23.43	24.2
10	16QAM	1	0	23.83	23.73	23.77	
10	16QAM	1	25	23.80	23.80	23.78	
10	16QAM	1	49	23.80	23.79	23.71	23.2
10	16QAM	25	0	22.85	22.76	22.72	
10	16QAM	25	12	22.89	22.86	22.71	
10	16QAM	25	25	22.83	22.80	22.76	23.2
10	16QAM	50	0	22.90	22.84	22.72	
10	64QAM	1	0	22.08	22.70	22.96	
10	64QAM	1	25	22.21	23.01	22.94	23.2
10	64QAM	1	49	22.55	22.99	22.85	
10	64QAM	25	0	20.98	21.81	21.76	
10	64QAM	25	12	21.03	21.88	21.79	22.2
10	64QAM	25	25	21.12	21.84	21.61	
10	64QAM	50	0	21.11	21.86	21.73	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.56	23.46	23.40	24.4
5	QPSK	1	12	23.54	23.43	23.35	
5	QPSK	1	24	23.47	23.41	23.34	
5	QPSK	12	0	23.66	23.52	23.45	24.2
5	QPSK	12	7	23.61	23.55	23.45	
5	QPSK	12	13	23.54	23.49	23.40	
5	QPSK	25	0	23.58	23.54	23.39	24.2
5	16QAM	1	0	23.84	23.70	23.71	
5	16QAM	1	12	23.76	23.77	23.69	
5	16QAM	1	24	23.76	23.72	23.63	23.2
5	16QAM	12	0	22.74	22.87	22.78	
5	16QAM	12	7	22.83	22.86	22.80	
5	16QAM	12	13	22.85	22.83	22.72	23.2
5	16QAM	25	0	22.78	22.94	22.71	
5	64QAM	1	0	21.70	22.53	22.71	
5	64QAM	1	12	21.79	23.04	22.89	23.2
5	64QAM	1	24	22.03	23.04	22.65	
5	64QAM	12	0	20.85	21.90	21.55	
5	64QAM	12	7	20.96	21.91	21.68	22.2
5	64QAM	12	13	20.61	21.86	21.52	
5	64QAM	25	0	20.83	21.87	21.45	



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. / 18700	Middle Ch. / 18800	High Ch. / 18900	Tune-up limit (dBm)
Channel				18600	18800	19000	
Frequency (MHz)				18600	18800	19000	
20	QPSK	1	0	23.08	23.12	23.11	24.2
20	QPSK	1	49	23.06	23.06	23.06	
20	QPSK	1	99	23.01	23.05	23.07	
20	QPSK	50	0	23.15	23.17	23.09	
20	QPSK	50	24	23.22	23.21	23.20	24.2
20	QPSK	50	50	23.20	23.25	23.21	
20	16QAM	100	0	23.23	23.15	22.99	
20	16QAM	1	0	23.39	23.46	23.41	
20	16QAM	1	49	23.39	23.45	22.85	24
20	16QAM	1	99	23.31	23.41	23.33	
20	16QAM	50	0	22.63	22.67	22.33	
20	16QAM	50	24	22.74	22.71	22.35	
20	16QAM	50	50	22.71	22.75	22.69	23
20	16QAM	100	0	22.72	22.64	22.52	
20	64QAM	1	0	22.67	22.33	22.32	
20	64QAM	1	49	22.24	22.76	21.22	
20	64QAM	1	99	21.79	22.77	21.95	23
20	64QAM	50	0	20.33	20.32	20.32	
20	64QAM	50	24	20.31	20.30	20.35	
20	64QAM	50	50	20.79	20.33	20.85	
20	64QAM	100	0	21.17	20.35	20.60	22
Channel				18675	18800	18925	
Frequency (MHz)				1867.5	1880	1892.5	
15	QPSK	1	0	23.06	23.07	23.06	24.2
15	QPSK	1	37	23.06	23.03	23.06	
15	QPSK	1	74	23.01	23.03	23.00	
15	QPSK	36	0	23.10	23.11	22.99	
15	QPSK	36	20	23.13	23.14	23.14	24.2
15	QPSK	36	36	23.13	23.19	23.16	
15	QPSK	75	0	23.20	23.10	22.93	
15	16QAM	1	0	23.33	23.39	23.35	
15	16QAM	1	37	23.30	23.43	22.84	24
15	16QAM	1	74	23.29	23.39	23.25	
15	16QAM	36	0	22.53	22.64	22.33	
15	16QAM	36	20	22.69	22.69	22.37	
15	16QAM	36	36	22.69	22.67	22.65	23
15	16QAM	75	0	22.72	22.54	22.47	
15	64QAM	1	0	22.88	22.25	22.23	
15	64QAM	1	37	22.24	22.73	21.21	
15	64QAM	1	74	21.73	22.76	21.93	23
15	64QAM	36	0	21.61	21.57	20.29	
15	64QAM	36	20	21.23	21.63	20.34	
15	64QAM	36	36	20.73	21.75	20.85	
15	64QAM	75	0	21.14	21.30	20.51	22
Channel				18650	18600	18550	
Frequency (MHz)				1865	1860	1855	
10	QPSK	1	0	23.08	23.04	23.01	24.2
10	QPSK	1	25	23.06	23.02	23.01	
10	QPSK	1	49	23.00	23.04	23.01	
10	QPSK	25	0	23.08	23.14	23.04	
10	QPSK	25	12	23.19	23.17	23.18	24.2
10	QPSK	25	25	23.18	23.20	23.14	
10	QPSK	50	0	23.18	23.14	22.92	
10	16QAM	1	0	23.37	23.42	23.33	
10	16QAM	1	25	23.37	23.45	22.80	24
10	16QAM	1	49	23.28	23.41	23.32	
10	16QAM	25	0	22.59	22.63	22.25	
10	16QAM	25	12	22.73	22.69	22.26	
10	16QAM	25	25	22.62	22.65	22.63	23
10	16QAM	50	0	22.62	22.55	22.50	
10	64QAM	1	0	22.60	22.32	22.32	
10	64QAM	1	25	22.18	22.66	21.21	
10	64QAM	1	49	21.72	22.72	21.90	23
10	64QAM	25	0	21.60	21.58	20.23	
10	64QAM	25	12	21.20	21.64	20.27	
10	64QAM	25	25	20.72	21.68	20.81	
10	64QAM	50	0	21.16	21.36	20.50	22
Channel				18625	18600	18575	
Frequency (MHz)				1862.5 <th>1860</th> <th>1857.5</th> <th></th>	1860	1857.5	
5	QPSK	1	0	23.05	23.07	23.09	24.2
5	QPSK	1	12	23.03	23.00	23.02	
5	QPSK	1	24	23.01	23.00	23.03	
5	QPSK	12	0	23.13	23.07	23.07	
5	QPSK	12	7	23.18	23.12	23.14	24.2
5	QPSK	12	13	23.14	23.19	23.15	
5	QPSK	25	0	23.17	23.13	22.92	
5	16QAM	1	0	23.29	23.36	23.35	
5	16QAM	1	12	23.33	23.39	23.85	24
5	16QAM	1	24	23.30	23.32	23.26	
5	16QAM	12	7	22.73	22.62	22.25	
5	16QAM	12	13	22.64	22.73	22.69	
5	16QAM	25	0	22.70	22.59	22.48	23
5	64QAM	1	0	22.57	22.24	22.29	
5	64QAM	1	12	22.24	22.68	21.20	
5	64QAM	1	24	21.72	22.67	21.91	
5	64QAM	12	0	21.53	21.54	20.30	23
5	64QAM	12	7	21.16	21.69	20.35	
5	64QAM	12	13	20.70	21.67	20.76	
5	64QAM	25	0	21.17	21.36	20.55	
Channel				18615	18600	18585	
Frequency (MHz)				1861.5 <th>18600</th> <th>1858.5<th></th></th>	18600	1858.5 <th></th>	
3	QPSK	1	0	23.07	23.07	23.09	24.2
3	QPSK	1	8	23.05	23.06	23.00	
3	QPSK	1	14	23.02	23.00	23.02	
3	QPSK	8	0	23.09	23.11	22.99	
3	QPSK	8	4	23.16	23.12	23.10	24.2
3	QPSK	8	7	23.15	23.15	23.12	
3	QPSK	16	0	23.13	23.09	22.98	
3	16QAM	1	0	23.29	23.45	23.33	
3	16QAM	1	8	23.30	23.35	22.76	24
3	16QAM	1	14	23.31	23.34	23.26	
3	16QAM	8	0	22.58	22.65	22.31	
3	16QAM	8	4	22.67	22.69	22.27	
3	16QAM	8	7	22.70	22.73	22.65	23
3	16QAM	15	0	22.62	22.59	22.47	
3	64QAM	1	0	22.66	22.21	22.30	
3	64QAM	1	8	22.22	22.68	21.22	
3	64QAM	1	14	21.70	22.75	21.88	23
3	64QAM	8	0	21.54	21.56	20.25	
3	64QAM	8	4	21.16	21.70	20.30	
3	64QAM	8	7	20.69	21.67	20.81	
3	64QAM	15	0	21.12	21.37	20.55	22
Channel				18607	18600	18593	
Frequency (MHz)				1860.7	18600	1859.3 <th></th>	
1.4	QPSK	1	0	23.06	23.09	23.05	24.2
1.4	QPSK	1	3	23.00	23.01	23.05	
1.4	QPSK	1	5	23.00	23.04	23.02	
1.4	QPSK	3	0	23.06	23.10	23.07	
1.4	QPSK	3	1	23.20	23.13	23.17	24.2
1.4	QPSK	3	3	23.12	23.23	23.11	
1.4	QPSK	6	0	23.17	23.11	22.91	
1.4	16QAM	1	0	23.35	23.44	23.39	
1.4	16QAM	1	3	23.35	23.41	22.82	24
1.4	16QAM	1	5	23.22	23.34	23.24	
1.4	16QAM	3	0	22.63	22.62	22.26	
1.4	16QAM	3	1	22.72	22.67	22.30	
1.4	16QAM	3	3	22.61	22.69	22.62	23
1.4	16QAM	6	0	22.66	22.55	22.51	
1.4	64QAM	1	0	22.67	22.28	22.30	
1.4	64QAM	1	3	22.20	22.72	21.23	
1.4	64QAM	1	5	21.71	22.67	21.62	23
1.4	64QAM	3	0	21.56	21.61	21.62	
1.4	64QAM	3	1	21.02	21.69	21.68	
1.4	64QAM	3	3	21.66	21.68	21.65	
1.4	64QAM	6	0	21.14	21.32	20.56	22



Band 4											
Art 2											
BN (MHz)	Modulation	RB Size	RB Offset	Low Ch. / 20050	Midle Ch. / 20175	High Ch. / 20300	Tune-up limit (dBm)				
Channel				20050	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	22.95	23.01	22.99	24.1				
20	QPSK	1	49	22.92	22.95	22.90					
20	QPSK	1	99	22.93	22.96	22.92					
20	QPSK	50	0	23.02	23.03	22.99					
20	QPSK	50	24	23.06	22.94	22.91	24.1				
20	QPSK	50	50	22.97	22.95	22.92					
20	QPSK	100	0	23.01	23.01	22.87					
20	16QAM	1	0	23.29	23.36	23.31	24.1				
20	16QAM	1	49	23.19	23.16	23.14					
20	16QAM	1	99	23.20	23.08	23.03					
20	16QAM	50	0	22.61	22.67	22.60					
20	16QAM	50	24	22.66	22.58	22.52	23.6				
20	16QAM	50	50	22.59	22.56	22.53					
20	16QAM	100	0	22.62	22.63	22.46					
20	64QAM	1	0	22.74	22.83	22.06	23.6				
20	64QAM	1	49	22.64	22.14	22.62					
20	64QAM	1	99	22.67	21.78	22.63					
20	64QAM	50	0	21.65	21.69	21.22					
20	64QAM	50	24	21.68	21.24	21.56	22.6				
20	64QAM	50	50	21.62	21.03	21.54					
20	64QAM	100	0	21.69	21.60	21.54					
Channel				20050	20175	20300	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	22.92	22.99	22.98	24.1				
15	QPSK	1	37	22.92	22.96	22.91					
15	QPSK	1	74	22.96	22.92	22.93					
15	QPSK	36	0	23.00	23.03	22.95					
15	QPSK	36	20	23.02	22.93	22.90	24.1				
15	QPSK	36	39	22.87	22.87	22.91					
15	QPSK	75	0	22.98	22.93	22.87					
15	16QAM	1	0	23.26	23.34	23.27					
15	16QAM	1	37	23.10	23.09	23.11	24.1				
15	16QAM	1	74	23.19	23.02	23.02					
15	16QAM	36	0	22.52	22.58	22.54					
15	16QAM	36	20	22.61	22.53	22.50					
15	16QAM	36	39	22.58	22.58	22.49	23.6				
15	16QAM	75	0	22.60	22.60	22.45					
15	64QAM	1	0	22.67	22.81	22.00					
15	64QAM	1	37	22.57	22.05	22.55	23.6				
15	64QAM	1	74	22.65	21.73	22.56					
15	64QAM	36	0	21.63	21.68	21.13					
15	64QAM	36	20	21.66	21.21	21.50					
15	64QAM	36	39	21.61	21.02	21.47	22.8				
15	64QAM	75	0	21.60	21.56	21.45					
Channel				20050	20175	20300					
Frequency (MHz)				1715	1732.5	1750	Tune-up limit (dBm)				
10	QPSK	1	0	22.93	22.91	22.94	24.1				
10	QPSK	1	26	22.92	22.90	22.93					
10	QPSK	1	49	22.94	22.92	22.91					
10	QPSK	25	0	22.97	23.03	22.93					
10	QPSK	25	12	23.01	22.84	22.87	24.1				
10	QPSK	25	25	22.93	22.88	22.94					
10	QPSK	50	0	22.93	22.93	22.78					
10	16QAM	1	0	23.26	23.34	23.22					
10	16QAM	1	25	23.17	23.07	23.07	24.1				
10	16QAM	1	49	23.17	23.01	22.96					
10	16QAM	25	0	22.55	22.62	22.59					
10	16QAM	25	12	22.61	22.49	22.49					
10	16QAM	25	25	22.49	22.56	22.53	23.6				
10	16QAM	50	0	22.57	22.56	22.43					
10	64QAM	1	0	22.73	22.78	22.54					
10	64QAM	1	25	22.55	22.06	22.62	23.6				
10	64QAM	1	49	22.66	21.78	22.55					
10	64QAM	25	0	21.63	21.68	21.13					
10	64QAM	25	12	21.67	21.15	21.52					
10	64QAM	25	25	21.54	21.00	21.46	22.6				
10	64QAM	50	0	21.69	21.53	21.53					
Channel				19975	20175	20375					
Frequency (MHz)				1712.5	1732.5	1752.5	Tune-up limit (dBm)				
5	QPSK	1	0	22.97	22.98	22.96	24.1				
5	QPSK	1	12	22.95	22.96	22.92					
5	QPSK	1	24	22.93	22.97	22.96					
5	QPSK	12	0	22.97	22.95	22.96					
5	QPSK	12	7	22.97	22.91	22.93	24.1				
5	QPSK	12	13	22.97	22.92	22.91					
5	QPSK	25	0	22.91	22.94	22.80					
5	16QAM	1	0	23.21	23.35	23.31					
5	16QAM	1	12	23.10	23.13	23.08	24.1				
5	16QAM	1	24	23.18	23.07	23.02					
5	16QAM	12	7	22.60	22.55	22.44					
5	16QAM	12	13	22.54	22.52	22.46					
5	16QAM	25	0	22.60	22.57	22.45	23.6				
5	64QAM	1	0	22.71	22.77	22.02					
5	64QAM	1	12	22.58	22.10	22.61					
5	64QAM	1	24	22.57	21.75	22.56	23.6				
5	64QAM	12	0	21.61	21.65	21.17					
5	64QAM	12	7	21.61	21.24	21.56					
5	64QAM	12	13	21.58	20.95	21.46					
5	64QAM	25	0	21.69	21.58	21.49	22.6				
Channel				19965 <th>20175</th> <th>20395</th>	20175	20395					
Frequency (MHz)				1711.5	1732.5	1753.5				Tune-up limit (dBm)	
3	QPSK	1	0	22.92	22.92	22.96	24.1				
3	QPSK	1	6	22.90	22.91	22.94					
3	QPSK	1	14	22.93	22.95	22.96					
3	QPSK	8	0	22.93	23.00	22.92					
3	QPSK	8	4	23.00	22.86	22.86	24.1				
3	QPSK	8	7	22.96	22.93	22.88					
3	QPSK	15	0	23.01	22.99	22.76					
3	16QAM	1	0	23.25	23.33	23.30					
3	16QAM	1	6	23.16	23.14	23.11	24.1				
3	16QAM	1	14	23.14	23.01	22.94					
3	16QAM	8	0	22.54	22.61	22.55					
3	16QAM	8	4	22.55	22.57	22.50					
3	16QAM	8	7	22.58	22.56	22.49	23.6				
3	16QAM	15	0	22.60	22.55	22.43					
3	64QAM	1	0	22.64	22.76	21.96					
3	64QAM	1	6	22.60	22.07	22.57	23.6				
3	64QAM	1	14	22.65	21.73	22.61					
3	64QAM	8	0	21.62	21.67	21.12					
3	64QAM	8	4	21.66	21.18	21.53					
3	64QAM	8	7	21.52	20.94	21.51	22.6				
3	64QAM	15	0	21.59	21.52	21.54					
Channel				19965	20175	20395					
Frequency (MHz)				1710.7	1732.5	1754.3	Tune-up limit (dBm)				
1.4	QPSK	1	0	22.92	22.91	22.95	24.1				
1.4	QPSK	1	3	22.96	22.95	22.94					
1.4	QPSK	1	5	22.93	22.94	22.95					
1.4	QPSK	3	0	22.99	22.96	22.98					
1.4	QPSK	3	1	22.99	22.91	22.90	24.1				
1.4	QPSK	3	3	22.94	22.93	22.95					
1.4	QPSK	6	0	22.92	22.94	22.87					
1.4	16QAM	1	0	23.27	23.35	23.29					
1.4	16QAM	1	3	23.17	23.14	23.13	24.1				
1.4	16QAM	1	6	23.10	23.08	22.97					
1.4	16QAM	3	0	22.75	22.73	22.76					
1.4	16QAM	3	3	22.74	22.72	22.70					
1.4	16QAM	6	0	22.55	22.61	22.48	23.6				
1.4	64QAM	1	0	22.64	22.81	21.99					
1.4	1	1	22.64	22.04	22.69						
1.4	16QAM	1	3	22.69	21.75	22.69	23.6				
1.4	64QAM	3	0	21.72	21.77	21.75					
1.4	64QAM	3	1	21.77	21.76	21.76					
1.4	64QAM	3	2	21.74	21.76	21.78					
1.4	64QAM	3	3	21.76	21.76	21.78	23.6				
1.4	64QAM	3	4	21.76	21.76	21.78					
1.4	64QAM	3	5	21.76	21.76	21.78					



Band 5							
Arct 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. /	Mid Ch. /	High Ch. /	Time-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	26	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	
10	QPSK	25	12	23.76	23.74	23.72	24.7
10	QPSK	25	25	23.72	23.78	23.73	
10	QPSK	80	0	23.75	23.70	23.73	
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	26	23.98	24.06	24.06	24.7
10	16QAM	1	49	24.00	24.04	23.60	
10	16QAM	25	0	22.66	22.74	22.71	
10	16QAM	25	12	22.76	22.72	22.75	
10	16QAM	25	25	22.72	22.76	22.75	23.7
10	16QAM	80	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	26	22.92	22.85	22.85	
10	64QAM	1	49	22.89	22.48	21.77	23.7
10	64QAM	25	0	21.67	21.78	21.78	
10	64QAM	25	12	21.80	21.77	21.68	
10	64QAM	25	25	21.76	21.64	21.66	
10	64QAM	80	0	21.79	21.74	21.27	22.7
Channel				829.5	836.5	843.5	
Frequency (MHz)				829.5	836.5	843.5	Time-up limit (dBm)
5	QPSK	1	0	24.75	24.68	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	
5	QPSK	12	7	23.73	23.78	23.42	24.7
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	24.7
5	16QAM	1	24	23.96	23.99	23.34	
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.94	22.62	
5	64QAM	1	12	22.96	22.85	21.96	
5	64QAM	1	24	22.85	22.82	21.71	23.7
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	
5	64QAM	12	13	21.76	21.86	20.71	
5	64QAM	25	0	21.73	21.76	20.81	22.7
Channel				20416	20525	20636	
Frequency (MHz)				826.5	836.5	847.5	Time-up limit (dBm)
3	QPSK	1	0	24.70	24.66	24.62	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	
3	QPSK	8	4	23.68	23.74	23.21	24.7
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.20	
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	24.7
3	16QAM	1	14	23.99	23.92	23.42	
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.85	22.90	21.96	
3	64QAM	1	8	22.86	22.97	21.74	
3	64QAM	1	14	22.84	22.82	21.71	22.7
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	22.7
Channel				20407	20520	20643	
Frequency (MHz)				826.7	836.5	848.3	Time-up limit (dBm)
1.4	QPSK	1	0	24.50	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.81	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.95	
1.4	QPSK	3	1	24.62	24.57	24.06	24.7
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.06	
1.4	16QAM	1	0	23.88	23.86	23.28	
1.4	16QAM	1	3	23.93	23.95	23.38	24.7
1.4	16QAM	1	5	23.83	23.89	23.43	
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.28	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.68	22.88	21.78	
1.4	64QAM	1	5	22.62	22.79	21.73	23.7
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	
1.4	64QAM	3	3	22.64	22.79	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	22.7



Band 7											
Ar 2											
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	Tune-up limit (dBm)				
Channel				20650	21100	21550					
Frequency (MHz)				2535	2535	2560					
20	QPSK	1	0	23.88	23.95	23.99	24.9				
20	QPSK	1	49	23.94	23.99	23.98					
20	QPSK	1	99	23.99	24.08	24.04					
20	QPSK	50	0	23.80	23.86	23.88	24.4				
20	QPSK	50	24	23.95	23.91	23.90					
20	QPSK	50	50	23.96	24.03	24.02					
20	QPSK	100	0	23.90	23.91	23.90	24.4				
20	16QAM	1	0	24.02	24.08	24.14					
20	16QAM	1	49	24.10	24.16	24.15					
20	16QAM	1	99	24.15	24.26	24.16	23.4				
20	16QAM	50	0	22.83	22.86	22.91					
20	16QAM	50	24	22.93	22.91	22.92					
20	16QAM	50	50	22.94	23.03	22.98	23.4				
20	16QAM	100	0	22.90	22.89	22.92					
20	64QAM	1	0	22.87	22.95	22.99					
20	64QAM	1	49	22.92	23.04	22.70	23.4				
20	64QAM	1	99	23.04	23.13	22.65					
20	64QAM	50	0	21.82	21.88	21.91					
20	64QAM	50	24	21.95	21.94	21.75	22.4				
20	64QAM	50	50	21.95	22.02	21.58					
20	64QAM	100	0	21.92	21.90	21.79					
Channel				20655	21105	21555	Tune-up limit (dBm)				
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	23.91	24.01	23.99	24.9				
15	QPSK	1	37	23.95	24.02	24.02					
15	QPSK	1	74	24.01	24.10	24.04					
15	QPSK	36	0	23.79	23.86	23.86	24.4				
15	QPSK	36	20	23.93	23.92	23.89					
15	QPSK	36	39	23.92	23.97	23.95					
15	QPSK	75	0	23.86	23.87	23.88	24.4				
15	16QAM	1	0	23.99	24.11	24.13					
15	16QAM	1	37	24.05	24.14	24.11					
15	16QAM	1	74	24.13	24.19	24.11	23.4				
15	16QAM	36	0	22.82	22.87	22.88					
15	16QAM	36	20	22.90	22.90	22.98					
15	16QAM	36	39	22.93	23.00	22.95	23.4				
15	16QAM	75	0	22.90	22.90	22.90					
15	64QAM	1	0	22.86	22.96	22.96					
15	64QAM	1	37	22.96	23.07	22.91	23.4				
15	64QAM	1	74	23.04	23.12	22.89					
15	64QAM	36	0	21.81	21.91	21.76					
15	64QAM	36	20	21.93	21.93	21.55	22.4				
15	64QAM	36	39	21.97	22.02	21.61					
15	64QAM	75	0	21.90	21.90	21.60					
Channel				20660	21100	21600	Tune-up limit (dBm)				
Frequency (MHz)				2505	2535	2565					
10	QPSK	1	0	23.87	23.94	23.91	24.9				
10	QPSK	1	25	23.86	23.93	23.92					
10	QPSK	1	49	23.92	24.02	23.92					
10	QPSK	25	0	23.85	23.86	23.80	24.4				
10	QPSK	25	12	23.87	23.90	23.86					
10	QPSK	25	25	23.86	23.96	23.89					
10	QPSK	50	0	23.87	23.89	23.84	24.4				
10	16QAM	1	0	24.05	24.11	24.09					
10	16QAM	1	25	24.03	24.15	24.14					
10	16QAM	1	49	24.13	24.21	24.12	23.4				
10	16QAM	25	0	22.86	22.85	22.82					
10	16QAM	25	12	22.89	22.86	22.85					
10	16QAM	25	25	22.87	22.95	22.89	23.4				
10	16QAM	50	0	22.85	22.86	22.84					
10	64QAM	1	0	22.96	22.98	22.70					
10	64QAM	1	25	22.97	23.07	22.76	23.4				
10	64QAM	1	49	23.01	23.12	22.89					
10	64QAM	25	0	21.85	21.88	21.53					
10	64QAM	25	12	21.92	21.92	21.64	22.4				
10	64QAM	25	25	21.91	21.97	21.69					
10	64QAM	50	0	21.88	21.92	21.52					
Channel				20775	21100	21625	Tune-up limit (dBm)				
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	23.91	23.93	23.94	24.9				
5	QPSK	1	12	23.94	24.06	23.97					
5	QPSK	1	24	23.95	24.04	23.95					
5	QPSK	12	0	23.83	23.90	23.86	24.4				
5	QPSK	12	7	23.87	23.91	23.87					
5	QPSK	12	13	23.83	23.93	23.89					
5	QPSK	25	0	23.83	23.86	23.84	24.4				
5	16QAM	1	0	24.05	24.12	24.09					
5	16QAM	1	12	24.06	24.15	24.06					
5	16QAM	1	24	24.10	24.17	24.07	23.4				
5	16QAM	12	0	22.87	22.90	22.90					
5	16QAM	12	7	22.89	22.94	22.87					
5	16QAM	12	13	22.90	22.96	22.96	23.4				
5	16QAM	25	0	22.87	22.89	22.86					
5	64QAM	1	0	22.96	23.02	22.70					
5	64QAM	1	12	22.96	23.08	22.72	23.4				
5	64QAM	1	24	23.00	23.10	22.92					
5	64QAM	12	0	21.95	21.93	21.59					
5	64QAM	12	7	21.89	21.95	21.69	22.4				
5	64QAM	12	13	21.92	22.02	21.75					
5	64QAM	25	0	21.87	21.90	21.63					



Band 12							
Arct 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. / 23000	Mid Ch. / 23005	High Ch. / 23130	Tune-up limit (dBm)
Channel				704	707.5	711	
Frequency (MHz)							
10	QPSK	1	0	24.64	24.61	24.63	25.7
10	QPSK	1	25	24.63	24.68	24.65	
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	
10	QPSK	25	12	23.87	23.80	23.78	24.7
10	QPSK	25	25	23.88	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	24.7
10	16QAM	1	49	24.12	24.08	24.07	
10	16QAM	25	0	22.76	22.79	22.77	
10	16QAM	25	12	22.82	22.80	22.78	23.7
10	16QAM	25	25	22.81	22.85	22.79	
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	25	22.76	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.79	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	
10	64QAM	25	25	21.82	21.90	21.84	22.7
10	64QAM	50	0	21.83	21.81	21.80	
Channel				2305	2305.5	2315.5	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	25.7
5	QPSK	1	12	24.72	24.73	24.71	
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.78	23.78	
5	QPSK	12	7	23.78	23.75	23.81	24.7
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	24.7
5	16QAM	1	24	24.02	24.07	24.03	
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	
5	16QAM	12	13	22.83	22.82	22.80	23.7
5	16QAM	25	0	22.81	22.82	22.78	
5	64QAM	1	0	22.82	22.73	22.91	
5	64QAM	1	12	22.85	22.84	22.94	
5	64QAM	1	24	22.80	22.98	22.93	22.7
5	64QAM	12	0	21.81	21.85	21.87	
5	64QAM	12	7	21.88	21.85	21.88	
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	Tune-up limit (dBm)
Channel				23025	23055	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	25.7
3	QPSK	1	8	24.73	24.74	24.73	
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.78	23.73	
3	QPSK	8	4	23.78	23.74	23.77	24.7
3	QPSK	8	7	23.73	23.76	23.75	
3	QPSK	15	0	23.77	23.75	23.73	
3	16QAM	1	0	24.08	24.01	24.02	
3	16QAM	1	8	24.06	24.08	24.08	24.7
3	16QAM	1	14	24.00	24.05	23.98	
3	16QAM	8	0	22.88	22.83	22.82	
3	16QAM	8	4	22.90	22.83	22.87	
3	16QAM	8	7	22.84	22.84	22.83	23.7
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.87	22.90	22.95	
3	64QAM	1	8	22.91	23.01	22.98	
3	64QAM	1	14	22.92	22.95	22.88	22.7
3	64QAM	8	0	21.82	21.81	21.81	
3	64QAM	8	4	21.87	21.84	21.87	
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.65	21.78	21.77	Tune-up limit (dBm)
Channel				23017	23055	23173	
Frequency (MHz)				693.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.59	24.55	25.7
1.4	QPSK	1	3	24.68	24.67	24.64	
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	
1.4	QPSK	3	1	24.70	24.64	24.68	24.7
1.4	QPSK	3	3	24.64	24.67	24.61	
1.4	QPSK	6	0	23.71	23.74	23.67	
1.4	16QAM	1	0	23.99	23.93	23.96	
1.4	16QAM	1	3	24.02	24.02	23.98	24.7
1.4	16QAM	1	5	23.92	23.94	23.91	
1.4	16QAM	3	0	23.75	23.69	23.69	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.76	23.73	23.68	23.7
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.89	
1.4	64QAM	1	5	22.82	22.85	22.91	
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	22.7
1.4	64QAM	3	3	22.83	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	
1.4	64QAM	6	0	21.72	21.75	21.71	



Band 13							
Arct 0							
BN (MHz)	Modulation	RB Size	RB Offset	Low Ch / Hz	Middle Ch / Hz	High Ch / Hz	Tune-up limit (dBm)
Channel				762			
Frequency (MHz)							
10	QPSK	1	0	24.23			25.2
10	QPSK	1	25	24.22			
10	QPSK	1	49	24.35			
10	QPSK	25	0	23.30			24.2
10	QPSK	25	12	23.34			
10	QPSK	25	25	23.33			
10	QPSK	50	0	23.35			24.2
10	16QAM	1	0	23.56			
10	16QAM	1	25	23.57			
10	16QAM	1	49	23.54			23.2
10	16QAM	25	0	22.31			
10	16QAM	25	12	22.34			
10	16QAM	25	25	22.36			23.2
10	16QAM	50	0	22.35			
10	64QAM	1	0	22.30			
10	64QAM	1	25	22.52			23.2
10	64QAM	1	49	22.46			
10	64QAM	25	0	21.36			
10	64QAM	25	12	21.38			22.2
10	64QAM	25	25	21.37			
10	64QAM	50	0	21.39			
Channel				23205	21203	23255	Tune-up limit (dBm)
Frequency (MHz)				779.9	762	784.9	
5	QPSK	1	0	24.62	24.61	24.59	25.2
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.2
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.2
5	16QAM	1	0	23.93	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	24.2
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.2
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.89	22.80	22.19	
5	64QAM	1	12	22.92	22.89	22.17	23.2
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.06	21.11	22.2
5	64QAM	12	13	21.44	20.86	21.53	
5	64QAM	25	0	21.56	21.03	21.17	



Band 14									
Ara 0									
BN (MHz)	Modulation	RB Size	RB Offset	Low Ch /	Middle Ch /	High Ch /	Tune-up limit (dBm)		
Channel				793					
Frequency (MHz)				793					
10	QPSK	1	0	24.75			25.7		
10	QPSK	1	25	24.69					
10	QPSK	1	49	24.60					
10	QPSK	25	0	23.71					
10	QPSK	25	12	23.70			24.7		
10	QPSK	25	25	23.73					
10	QPSK	50	0	23.68					
10	16QAM	1	0	24.08					
10	16QAM	1	25	24.08			24.7		
10	16QAM	1	49	23.96					
10	16QAM	25	0	22.68					
10	16QAM	25	12	22.70					
10	16QAM	25	25	22.71			23.7		
10	16QAM	50	0	22.70					
10	64QAM	1	0	22.92					
10	64QAM	1	25	22.86					
10	64QAM	1	49	22.90			23.7		
10	64QAM	25	0	21.71					
10	64QAM	25	12	21.37					
10	64QAM	25	25	21.38					
10	64QAM	50	0	21.44			22.7		
Channel				2330	2333	2336			
Frequency (MHz)				790.5	793	795.5			
5	QPSK	1	0	24.64	24.61	24.62	25.7		
5	QPSK	1	12	24.72	24.70	24.69			
5	QPSK	1	24	24.70	24.63	24.66			
5	QPSK	12	0	23.74	23.69	23.64			
5	QPSK	12	7	23.77	23.72	23.68	24.7		
5	QPSK	12	13	23.74	23.72	23.68			
5	QPSK	25	0	23.74	23.68	23.64			
5	16QAM	1	0	23.97	23.92	23.91			
5	16QAM	1	12	24.03	23.99	23.96	24.7		
5	16QAM	1	24	23.99	23.93	23.89			
5	16QAM	12	0	22.79	22.70	22.69			
5	16QAM	12	7	22.81	22.74	22.71			
5	16QAM	12	13	22.75	22.72	22.72	23.7		
5	16QAM	25	0	22.76	22.72	22.66			
5	64QAM	1	0	22.86	22.72	22.34			
5	64QAM	1	12	22.94	22.37	22.30			
5	64QAM	1	24	22.49	22.18	22.72	23.7		
5	64QAM	12	0	21.82	21.46	21.13			
5	64QAM	12	7	21.85	21.29	21.25			
5	64QAM	12	13	21.60	21.11	21.05			
5	64QAM	25	0	21.69	21.22	21.20	22.7		



Band 17							
Arct 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. / 23760	Middle Ch. / 23760	High Ch. / 23800	Tune-up limit (dBm)
Channel				709	710	711	
Frequency (MHz)							
10	QPSK	1	0	24.66	24.65	24.61	24.7
10	QPSK	1	25	24.69	24.70	24.71	
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	
10	QPSK	25	12	23.88	23.82	23.79	24.7
10	QPSK	25	25	23.88	23.88	23.88	
10	QPSK	50	0	23.79	23.78	23.79	
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	24.7
10	16QAM	1	49	24.12	24.10	24.09	
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	
10	16QAM	25	25	22.89	22.90	22.82	23.7
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.75	22.88	
10	64QAM	1	25	22.71	22.71	22.65	
10	64QAM	1	49	22.87	22.93	22.76	23.7
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	
10	64QAM	25	25	21.65	21.76	21.84	
10	64QAM	50	0	21.62	21.68	21.62	22.7
Channel				23755	23790	23805	
Frequency (MHz)				708.5	710	713.5	
5	QPSK	1	0	24.66	24.66	24.65	25.7
5	QPSK	1	12	24.74	24.79	24.75	
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	
5	QPSK	12	7	23.85	23.81	23.82	24.7
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	
5	16QAM	1	0	23.99	23.98	23.99	
5	16QAM	1	12	24.02	24.06	24.04	24.7
5	16QAM	1	24	24.13	24.14	24.10	
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.88	22.89	
5	16QAM	12	13	22.84	22.88	22.84	23.7
5	16QAM	25	0	22.85	22.83	22.87	
5	64QAM	1	0	22.40	22.44	22.79	
5	64QAM	1	12	22.76	22.80	22.94	
5	64QAM	1	24	22.59	22.57	22.67	23.7
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.81	
5	64QAM	12	13	21.68	21.86	21.68	
5	64QAM	25	0	21.55	21.51	21.79	22.7



Band 25											
Ari 2											
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. / 26140	Mid Ch. / 26340	High Ch. / 26690	Tune-up limit (dBm)				
Channel				1800	1860	1905					
Frequency (MHz)				1800	1860	1905					
20	QPSK	1	0	23.09	23.12	23.02	24.2				
20	QPSK	1	49	23.06	23.08	23.05					
20	QPSK	1	99	23.00	23.04	23.01					
20	QPSK	50	0	23.01	23.16	22.96	24.2				
20	QPSK	50	24	23.02	23.28	23.04					
20	QPSK	50	50	22.88	23.24	23.21					
20	QPSK	100	0	22.43	23.24	22.31	24				
20	16QAM	1	0	23.09	23.43	22.58					
20	16QAM	1	49	23.06	23.42	22.49					
20	16QAM	1	99	22.40	23.41	22.22	23				
20	16QAM	50	0	22.51	22.72	21.77					
20	16QAM	50	24	22.07	22.79	22.07					
20	16QAM	50	50	21.65	22.75	21.62	23				
20	16QAM	100	0	21.45	21.88	21.41					
20	64QAM	1	0	21.20	21.21	21.22					
20	64QAM	1	49	21.22	21.74	21.24	23				
20	64QAM	1	99	21.20	22.09	21.23					
20	64QAM	50	0	20.89	21.06	21.07					
20	64QAM	50	24	20.17	21.08	20.39	22				
20	64QAM	50	50	20.02	21.11	20.24					
20	64QAM	100	0	20.00	20.03	20.04					
Channel				1815	1875	1905	Tune-up limit (dBm)				
Frequency (MHz)				1815	1875	1905					
15	QPSK	1	0	23.04	23.11	23.02	24.2				
15	QPSK	1	37	23.02	23.10	23.05					
15	QPSK	1	74	23.00	23.04	23.06					
15	QPSK	36	0	22.93	23.08	22.90	24.2				
15	QPSK	36	20	22.99	23.22	23.00					
15	QPSK	36	39	22.81	23.15	23.18					
15	QPSK	75	0	22.42	23.24	22.22	24				
15	16QAM	1	0	23.08	23.42	22.52					
15	16QAM	1	37	23.06	23.35	22.42					
15	16QAM	1	74	22.36	23.40	22.21	23				
15	16QAM	36	0	22.47	22.67	21.74					
15	16QAM	36	20	22.07	22.76	21.97					
15	16QAM	36	39	21.64	22.69	21.85	23				
15	16QAM	75	0	21.45	21.98	21.38					
15	64QAM	1	0	21.17	21.14	21.18					
15	64QAM	1	37	21.21	21.84	21.24	23				
15	64QAM	1	74	21.16	22.01	21.15					
15	64QAM	36	0	20.79	20.96	21.03					
15	64QAM	36	20	20.07	21.06	20.38	22				
15	64QAM	36	39	20.11	21.04	20.10					
15	64QAM	75	0	20.15	20.30	20.12					
Channel				2650	26340	26690	Tune-up limit (dBm)				
Frequency (MHz)				1800	1860	1910					
10	QPSK	1	0	23.07	23.07	23.02	24.2				
10	QPSK	1	25	23.03	23.02	23.01					
10	QPSK	1	49	23.01	23.00	23.03					
10	QPSK	25	0	22.99	23.10	22.96	24.2				
10	QPSK	25	12	22.99	23.21	23.00					
10	QPSK	25	25	22.86	23.24	23.21					
10	QPSK	50	0	22.35	23.15	22.40	24				
10	16QAM	1	0	23.01	23.35	22.50					
10	16QAM	1	25	23.08	23.34	22.42					
10	16QAM	1	49	22.36	23.32	22.13	23				
10	16QAM	25	0	22.49	22.71	21.76					
10	16QAM	25	12	22.02	22.79	22.06					
10	16QAM	25	25	21.57	22.70	21.83	23				
10	16QAM	50	0	21.37	21.90	21.43					
10	64QAM	1	0	21.14	21.11	21.18					
10	64QAM	1	25	21.17	21.72	21.17	23				
10	64QAM	1	49	21.19	21.99	21.17					
10	64QAM	25	0	20.88	21.02	20.98					
10	64QAM	25	12	20.08	20.98	20.29	22				
10	64QAM	25	25	20.03	21.11	20.21					
10	64QAM	50	0	20.05	20.10	20.02					
Channel				2605	26340	26695	Tune-up limit (dBm)				
Frequency (MHz)				1802.5	1860	1912.5					
5	QPSK	1	0	23.06	23.02	23.01	24.2				
5	QPSK	1	12	23.04	23.04	23.00					
5	QPSK	1	24	23.05	23.03	23.02					
5	QPSK	12	0	22.95	23.15	22.91	24.2				
5	QPSK	12	7	22.93	23.23	23.01					
5	QPSK	12	13	22.78	23.17	23.26					
5	QPSK	25	0	22.34	23.20	22.27	24				
5	16QAM	1	0	23.02	23.38	22.54					
5	16QAM	1	12	23.07	23.32	22.43					
5	16QAM	1	24	22.34	23.37	22.19	24				
5	16QAM	12	0	22.47	22.64	21.76					
5	16QAM	12	7	22.04	22.76	22.05					
5	16QAM	12	13	21.59	22.88	21.92	23				
5	16QAM	25	0	21.41	21.91	21.42					
5	64QAM	1	0	21.13	21.16	21.14					
5	64QAM	1	12	21.13	21.73	21.24	23				
5	64QAM	1	24	21.12	22.09	21.14					
5	64QAM	12	0	20.84	20.99	21.07					
5	64QAM	12	7	20.17	21.06	20.36	22				
5	64QAM	12	13	20.00	21.10	20.16					
5	64QAM	25	0	20.02	20.07	20.00					
Channel				2605.5	26340	26697.5	Tune-up limit (dBm)				
Frequency (MHz)				1801.5	1860	1913.5					
3	QPSK	1	0	23.03	23.09	23.04	24.2				
3	QPSK	1	8	23.01	23.07	23.02					
3	QPSK	1	14	23.05	23.04	23.06					
3	QPSK	8	0	22.94	23.06	22.47	24.2				
3	QPSK	8	4	22.95	23.20	22.98					
3	QPSK	8	7	22.85	23.23	23.22					
3	QPSK	15	0	22.36	23.21	22.24	24				
3	16QAM	1	0	23.01	23.40	22.52					
3	16QAM	1	8	23.04	23.36	22.46					
3	16QAM	1	14	22.30	23.32	22.14	24				
3	16QAM	8	0	22.51	22.64	21.71					
3	16QAM	8	4	21.98	22.75	22.05					
3	16QAM	8	7	21.62	22.72	21.91	23				
3	16QAM	15	0	21.35	21.94	21.37					
3	64QAM	1	0	21.11	21.19	21.18					
3	64QAM	1	8	21.12	21.68	21.17	23				
3	64QAM	1	14	21.17	22.02	21.15					
3	64QAM	8	0	20.89	21.03	21.00					
3	64QAM	8	4	20.13	21.02	20.31	22				
3	64QAM	8	7	20.03	21.02	20.15					
3	64QAM	15	0	20.05	20.00	20.05					
Channel				26047	26340	26693	Tune-up limit (dBm)				
Frequency (MHz)				1800.7	1860	1914.3					
1.4	QPSK	1	0	23.02	23.03	23.02	24.2				
1.4	QPSK	1	3	23.05	23.01	23.05					
1.4	QPSK	1	5	23.04	23.00	23.06					
1.4	QPSK	3	0	23.02	23.16	23.00	24.2				
1.4	QPSK	3	1	23.01	23.19	23.03					
1.4	QPSK	3	3	23.05	23.15	23.24					
1.4	QPSK	6	0	22.34	23.18	22.26	24.2				
1.4	16QAM	1	0	23.02	23.38	22.57					
1.4	16QAM	1	3	23.08	23.34	22.44					
1.4	16QAM	1	5	22.38	23.33	22.13	24				
1.4	16QAM	3	0	22.44	22.70	22.01					
1.4	16QAM	3	1	22.42	22.70	22.00					
1.4	16QAM	3	3	22.20	22.69	22.03	23				
1.4	64QAM	1	0	21.45	21.88	21.41					
1.4	64QAM	1	0	21.10	21.15	21.19					
1.4	64QAM	3	0	21.22	21.68	21.18	23				
1.4	64QAM	3	1	21.20	21.68	21.18					
1.4	64QAM	3	3	21.12	21.61	21.17					
1.4	64QAM	3	0	21.12	21.01	21.07	23				
1.4	64QAM	3	1	21.08	21.05	21.03					
1.4	64QAM	3	3	21.00	21.02	21.10					
1.4	64QAM	3	0	20.70	20.92	20.95	22				
1.4	64QAM	3	1	20.68	21.00	20.94					
1.4	64QAM	3	3	20.60	21.00	20.93					



Band 26									
Arct 0									
BN	Modulation	RB Size	RB Offset	Low Ch. / Channel	Mid Ch. / Channel	High Ch. / Channel	Tune-up limit (dBm)		
Frequency (MHz)				831.5	831.5	841.5			
15	QPSK	1	0	24.76	24.52	24.57	25.7		
15	QPSK	1	37	24.46	24.51	24.50			
15	QPSK	1	74	24.49	24.48	24.27			
15	QPSK	36	0	23.67	23.65	23.65			
15	QPSK	36	20	23.66	23.61	23.63	24.7		
15	QPSK	36	39	23.60	23.63	23.64			
15	QPSK	75	0	23.68	23.60	23.62			
15	16QAM	1	0	23.93	23.86	23.88			
15	16QAM	1	37	23.82	23.86	23.86	24.7		
15	16QAM	1	74	23.81	23.83	23.82			
15	16QAM	36	0	22.63	22.66	22.67			
15	16QAM	36	20	22.65	22.61	22.60			
15	16QAM	36	39	22.69	22.65	22.62	23.7		
15	16QAM	75	0	22.67	22.62	22.65			
15	64QAM	1	0	22.78	22.72	22.72			
15	64QAM	1	37	22.70	22.80	22.76			
15	64QAM	1	74	22.69	22.72	22.70	23.7		
15	64QAM	36	0	21.68	21.69	21.72			
15	64QAM	36	20	21.69	21.63	21.65			
15	64QAM	36	39	21.65	21.71	21.58			
15	64QAM	75	0	21.69	21.63	21.63	22.7		
Channel				20740	20865	20990			
Frequency (MHz)				831.5	831.5	841.5	Tune-up limit (dBm)		
10	QPSK	1	0	24.72	24.59	24.60	25.7		
10	QPSK	1	25	24.57	24.55	24.59			
10	QPSK	1	49	24.60	24.64	24.38			
10	QPSK	25	0	23.74	23.66	23.68			
10	QPSK	25	12	23.76	23.66	23.65	24.7		
10	QPSK	25	25	23.65	23.68	23.67			
10	QPSK	50	0	23.70	23.65	23.66			
10	16QAM	1	0	24.07	23.98	23.98			
10	16QAM	1	25	23.94	24.01	23.97	24.7		
10	16QAM	1	49	23.97	24.02	23.73			
10	16QAM	25	0	22.74	22.69	22.66			
10	16QAM	25	12	22.76	22.71	22.67			
10	16QAM	25	25	22.64	22.63	22.63	23.7		
10	16QAM	50	0	22.72	22.66	22.63			
10	64QAM	1	0	22.84	22.78	22.88			
10	64QAM	1	25	22.90	22.85	22.93			
10	64QAM	1	49	22.89	22.91	21.83	23.7		
10	64QAM	25	0	21.80	21.71	21.72			
10	64QAM	25	12	21.78	21.69	21.72			
10	64QAM	25	25	21.68	21.70	21.71			
10	64QAM	50	0	21.72	21.68	21.50	22.7		
Channel				20715	20865	21015			
Frequency (MHz)				816.5	831.5	846.5	Tune-up limit (dBm)		
5	QPSK	1	0	24.75	24.61	24.68	25.7		
5	QPSK	1	12	24.72	24.63	24.47			
5	QPSK	1	24	24.56	24.64	24.43			
5	QPSK	12	0	23.79	23.72	23.74			
5	QPSK	12	7	23.80	23.72	23.57	24.7		
5	QPSK	12	13	23.71	23.67	23.31			
5	QPSK	25	0	23.76	23.67	23.64			
5	16QAM	1	0	24.09	23.94	23.99			
5	16QAM	1	12	24.00	23.97	23.85	24.7		
5	16QAM	1	24	23.91	24.01	23.71			
5	16QAM	12	0	22.84	22.72	22.73			
5	16QAM	12	7	22.81	22.76	22.71			
5	16QAM	12	13	22.73	22.68	22.44	23.7		
5	16QAM	25	0	22.78	22.66	22.72			
5	64QAM	1	0	22.89	22.90	22.83			
5	64QAM	1	12	22.90	22.88	22.63			
5	64QAM	1	24	22.81	22.89	21.86	23.7		
5	64QAM	12	0	21.83	21.78	21.45			
5	64QAM	12	7	21.84	21.81	21.00			
5	64QAM	12	13	21.74	21.78	20.80			
5	64QAM	25	0	21.77	21.69	20.99	22.7		
Channel				20705	20865	21020			
Frequency (MHz)				816.5	831.5	847.5	Tune-up limit (dBm)		
3	QPSK	1	0	24.72	24.62	24.52	25.7		
3	QPSK	1	8	24.75	24.69	24.16			
3	QPSK	1	14	24.63	24.66	24.26			
3	QPSK	8	0	23.83	23.66	23.39			
3	QPSK	8	4	23.77	23.72	23.28	24.7		
3	QPSK	8	7	23.74	23.70	23.28			
3	QPSK	15	0	23.78	23.67	23.30			
3	16QAM	1	0	24.09	23.91	23.81			
3	16QAM	1	8	24.06	24.06	23.47	24.7		
3	16QAM	1	14	23.95	23.95	23.55			
3	16QAM	8	0	22.86	22.77	22.54			
3	16QAM	8	4	22.88	22.77	22.42			
3	16QAM	8	7	22.78	22.76	22.46	23.7		
3	16QAM	15	0	22.78	22.70	22.47			
3	64QAM	1	0	22.72	22.83	22.00			
3	64QAM	1	8	23.03	22.95	21.88			
3	64QAM	1	14	22.96	22.90	21.93	23.7		
3	64QAM	8	0	21.79	21.74	20.85			
3	64QAM	8	4	21.88	21.81	20.77			
3	64QAM	8	7	21.81	21.72	20.92			
3	64QAM	15	0	21.81	21.67	20.96	22.7		
Channel				20915	20865	21015			
Frequency (MHz)				814.7	831.5	848.3	Tune-up limit (dBm)		
1.4	QPSK	1	0	24.68	24.52	24.13	25.7		
1.4	QPSK	1	3	24.71	24.63	24.26			
1.4	QPSK	1	6	24.61	24.55	24.29			
1.4	QPSK	3	0	24.69	24.55	24.17			
1.4	QPSK	3	1	24.74	24.58	24.22	24.7		
1.4	QPSK	3	3	24.67	24.55	24.37			
1.4	QPSK	6	0	23.71	23.63	23.29			
1.4	16QAM	1	0	24.01	23.86	23.40			
1.4	16QAM	1	3	24.04	23.96	23.59	24.7		
1.4	16QAM	1	6	23.93	23.86	23.65			
1.4	16QAM	3	0	23.75	23.65	23.27			
1.4	16QAM	3	1	23.75	23.65	23.30			
1.4	16QAM	3	3	23.71	23.67	23.46	23.7		
1.4	16QAM	6	0	22.82	22.75	22.46			
1.4	64QAM	1	0	22.74	22.76	21.86			
1.4	64QAM	1	3	22.86	22.86	21.90			
1.4	64QAM	1	6	22.86	22.78	21.85	23.7		
1.4	64QAM	3	0	22.76	22.73	21.85			
1.4	64QAM	3	1	22.82	22.82	21.93			
1.4	64QAM	3	1	22.84	22.78	21.86			
1.4	64QAM	6	0	21.65	21.68	20.87	22.7		

Band 30							
Art 2							
BN (MHz)	Modulation	RB Size	RB Offset	Low Ch. / 2770	Mid Ch. / 2770	High Ch. / 2770	Tune-up limit (dBm)
Channel				Frequency (MHz)			
10	QPSK	1	0	23.02			23.7
10	QPSK	1	25	23.01			
10	QPSK	1	49	22.92			
10	QPSK	25	0	21.98			
10	QPSK	25	12	22.00			22.7
10	QPSK	25	25	22.11			
10	QPSK	50	0	22.00			
10	16QAM	1	0	22.30			
10	16QAM	1	25	22.28			22.7
10	16QAM	1	49	22.31			
10	16QAM	25	0	20.98			
10	16QAM	25	12	20.98			
10	16QAM	25	25	21.11			21.7
10	16QAM	50	0	20.98			
10	64QAM	1	0	21.18			
10	64QAM	1	25	21.21			
10	64QAM	1	49	21.22			21.7
10	64QAM	25	0	19.98			
10	64QAM	25	12	20.04			
10	64QAM	25	25	20.13			
10	64QAM	50	0	20.02			20.7
Channel				22.86	22.86	22.86	
Frequency (MHz)				23.07.5	23.10	23.12.5	
5	QPSK	1	0	22.86	22.86	22.86	
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	23.7
5	QPSK	12	0	22.02	21.96	21.97	
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.15	
5	16QAM	1	12	22.28	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	
5	16QAM	12	0	21.08	21.01	21.03	21.7
5	16QAM	12	7	21.09	21.09	21.08	
5	16QAM	12	13	21.07	21.10	21.05	
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	21.7
5	64QAM	1	12	21.19	21.20	21.16	
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.14	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.02	



Band 66											
Arct 2											
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. /	Mid Ch. /	High Ch. /	Tune-up limit (dBm)				
Channel				150072	150322	150572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	22.96	22.88	22.80	24.1				
20	QPSK	1	49	22.82	22.68	22.67					
20	QPSK	1	99	22.87	22.70	22.60					
20	QPSK	50	0	23.07	22.90	22.84					
20	QPSK	50	24	23.08	22.93	22.85	24.1				
20	QPSK	50	50	23.03	22.89	22.84					
20	QPSK	100	0	23.06	22.90	22.86					
20	16QAM	1	0	23.29	23.23	23.15	24.1				
20	16QAM	1	49	23.18	23.03	23.00					
20	16QAM	1	99	23.21	23.00	22.91					
20	16QAM	50	0	22.88	22.50	22.49					
20	16QAM	50	24	22.87	22.54	22.45	23.6				
20	16QAM	50	50	22.84	22.50	22.47					
20	16QAM	100	0	22.83	22.51	22.46					
20	64QAM	1	0	22.73	22.06	22.55	23.6				
20	64QAM	1	49	22.69	22.54	22.48					
20	64QAM	1	99	22.74	22.55	22.46					
20	64QAM	50	0	21.69	21.24	21.50					
20	64QAM	50	24	21.70	21.54	21.46	22.6				
20	64QAM	50	50	21.65	21.49	21.48					
20	64QAM	100	0	21.68	21.52	21.45					
Channel				150572	150822	151072	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	22.84	22.88	22.74	24.1				
15	QPSK	1	37	22.82	22.67	22.57					
15	QPSK	1	74	22.83	22.68	22.53					
15	QPSK	36	0	23.06	22.80	22.80					
15	QPSK	36	20	23.07	22.86	22.75	24.1				
15	QPSK	36	39	22.95	22.85	22.78					
15	QPSK	75	0	23.05	22.83	22.77					
15	16QAM	1	0	23.24	23.19	23.12					
15	16QAM	1	37	23.11	23.03	22.98	24.1				
15	16QAM	1	74	23.21	22.97	22.81					
15	16QAM	36	0	22.88	22.50	22.44					
15	16QAM	36	20	22.81	22.51	22.39					
15	16QAM	36	39	22.59	22.40	22.40	23.6				
15	16QAM	75	0	22.55	22.43	22.36					
15	64QAM	1	0	22.69	22.05	22.50					
15	64QAM	1	37	22.66	22.54	22.42					
15	64QAM	1	74	22.74	22.47	22.45	22.6				
15	64QAM	36	0	21.64	21.15	21.42					
15	64QAM	36	20	21.62	21.47	21.37					
15	64QAM	36	39	21.62	21.42	21.40					
15	64QAM	75	0	21.85	21.43	21.44					
Channel				150822	151072	151322	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	22.94	22.81	22.74	24.1				
10	QPSK	1	25	22.73	22.68	22.61					
10	QPSK	1	49	22.78	22.65	22.55					
10	QPSK	25	0	23.00	22.84	22.79					
10	QPSK	25	12	23.01	22.86	22.82	24.1				
10	QPSK	25	25	22.99	22.80	22.76					
10	QPSK	50	0	22.97	22.88	22.84					
10	16QAM	1	0	23.26	23.23	23.12					
10	16QAM	1	25	23.12	22.99	22.95	24.1				
10	16QAM	1	49	23.21	22.94	22.91					
10	16QAM	25	0	22.85	22.45	22.42					
10	16QAM	25	12	22.86	22.52	22.42					
10	16QAM	25	25	22.64	22.41	22.39	23.6				
10	16QAM	50	0	22.60	22.46	22.45					
10	64QAM	1	0	22.66	21.98	22.54					
10	64QAM	1	25	22.69	22.46	22.44					
10	64QAM	1	49	22.66	22.50	22.37	23.6				
10	64QAM	25	0	21.64	21.19	21.47					
10	64QAM	25	12	21.65	21.51	21.37					
10	64QAM	25	25	21.65	21.47	21.42					
10	64QAM	50	0	21.63	21.47	21.43					
Channel				151072	151322	151572	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1772.5					
5	QPSK	1	0	22.89	22.78	22.70	24.1				
5	QPSK	1	12	22.79	22.61	22.60					
5	QPSK	1	24	22.84	22.70	22.58					
5	QPSK	12	0	22.95	22.88	22.77					
5	QPSK	12	7	23.07	22.93	22.82	24.1				
5	QPSK	12	13	22.94	22.86	22.75					
5	QPSK	25	0	23.06	22.88	22.83					
5	16QAM	1	0	23.26	23.21	23.11					
5	16QAM	1	12	23.12	23.01	22.98	24.1				
5	16QAM	1	24	23.14	22.93	22.88					
5	16QAM	12	7	22.58	22.48	22.35					
5	16QAM	12	13	22.57	22.39	22.42					
5	16QAM	25	0	22.62	22.51	22.42	23.6				
5	64QAM	1	0	22.63	21.96	22.47					
5	64QAM	1	12	22.63	22.44	22.43					
5	64QAM	1	24	22.67	22.53	22.37					
5	64QAM	12	0	21.58	21.21	21.47	22.6				
5	64QAM	12	7	21.67	21.47	21.42					
5	64QAM	12	13	21.61	21.39	21.45					
5	64QAM	25	0	21.61	21.46	21.44					
Channel				151572	151822	152072	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	22.90	22.84	22.75	24.1				
3	QPSK	1	6	22.81	22.59	22.63					
3	QPSK	1	14	22.79	22.62	22.53					
3	QPSK	8	0	22.97	22.88	22.74					
3	QPSK	8	4	23.02	22.91	22.75	24.1				
3	QPSK	8	7	22.95	22.87	22.79					
3	QPSK	15	0	23.00	22.85	22.77					
3	16QAM	1	0	23.23	23.17	23.10					
3	16QAM	1	6	23.10	22.97	22.94	24.1				
3	16QAM	1	14	23.11	22.99	22.91					
3	16QAM	8	0	22.64	22.40	22.42					
3	16QAM	8	4	22.64	22.48	22.39					
3	16QAM	8	7	22.58	22.45	22.42	23.6				
3	16QAM	15	0	22.63	22.46	22.41					
3	64QAM	1	0	22.70	22.02	22.46					
3	64QAM	1	6	22.66	22.45	22.40					
3	64QAM	1	14	22.68	22.45	22.40	22.6				
3	64QAM	8	0	21.61	21.15	21.42					
3	64QAM	8	4	21.62	21.53	21.44					
3	64QAM	8	7	21.66	21.43	21.48					
3	64QAM	15	0	21.61	21.44	21.40					
Channel				151978	152122	152668	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1775.3					
1.4	QPSK	1	0	22.91	22.85	22.75	24.1				
1.4	QPSK	1	3	22.73	22.63	22.65					
1.4	QPSK	1	5	22.81	22.60	22.53					
1.4	QPSK	3	0	22.99	22.80	22.84					
1.4	QPSK	3	1	23.07	22.87	22.82	24.1				
1.4	QPSK	3	3	23.02	22.81	22.84					
1.4	QPSK	6	0	22.98	22.86	22.82					
1.4	16QAM	1	0	23.24	23.19	23.12	24.1				
1.4	16QAM	1	5	23.14	22.93	22.85					
1.4	16QAM	3	0	22.89	22.48	22.39					
1.4	16QAM	3	25	22.81	22.54	22.42					
1.4	16QAM	3	3	22.55	22.44	22.44	23.6				
1.4	16QAM	6	0	22.59	22.45	22.37					
1.4	64QAM	1	0	22.63	21.97	22.51					
1.4	64QAM	1	3	22.63	22.54	22.42					
1.4	64QAM	3	0	22.71	22.48	22.41	23.6				
1.4	64QAM	3	1	21.77	21.74	21.76					
1.4	64QAM	3	1	21.73	21.74	21.75					
1.4	64QAM	3	21	21.72	21.70	21.74					



Band 71											
Ara 0											
BW (kHz)	Modulation	RB Size	RB Offset	Low Ch. / 153222	Mid Ch. / 153222	High Ch. / 153272	Tune-up limit (dBm)				
Channel				673	663	668					
Frequency (MHz)											
20	QPSK	1	0	24.77	24.67	24.68	25.7				
20	QPSK	1	49	24.65	24.65	24.65					
20	QPSK	1	99	24.68	24.66	24.61					
20	QPSK	50	0	23.78	23.76	23.72					
20	QPSK	50	50	24	23.80	23.74	24.7				
20	QPSK	50	50	24	23.84	23.78		23.75			
20	QPSK	100	0	23.79	23.71	23.77					
20	16QAM	1	0	24.06	23.96	24.00	24.7				
20	16QAM	1	49	24.01	24.03	24.04					
20	16QAM	1	99	24.03	24.01	23.95					
20	16QAM	50	0	22.77	22.75	22.75					
20	16QAM	50	24	22.82	22.77	22.73	23.7				
20	16QAM	50	50	22.82	22.77	22.76					
20	16QAM	100	0	22.79	22.73	22.76					
20	64QAM	1	0	22.04	22.83	22.82	23.7				
20	64QAM	1	49	22.83	22.80	22.29					
20	64QAM	1	99	22.93	22.89	22.87					
20	64QAM	50	0	21.00	21.79	21.49					
20	64QAM	50	24	21.30	21.64	21.57	22.7				
20	64QAM	50	50	21.84	21.60	21.74					
20	64QAM	100	0	21.53	21.76	21.80					
Channel				153157	153217	153257	Tune-up limit (dBm)				
Frequency (MHz)				670.5	680.5	690.5					
15	QPSK	1	0	24.74	24.65	24.63	25.7				
15	QPSK	1	37	24.62	24.66	24.61					
15	QPSK	1	74	24.65	24.68	24.64					
15	QPSK	36	0	23.73	23.71	23.69					
15	QPSK	36	20	23.80	23.73	23.78	24.7				
15	QPSK	36	39	23.73	23.76	23.74					
15	QPSK	75	0	23.81	23.74	23.68					
15	16QAM	1	0	24.05	24.01	23.98					
15	16QAM	1	37	23.95	24.02	24.00	24.7				
15	16QAM	1	74	23.97	24.00	23.98					
15	16QAM	36	0	22.76	22.75	22.71					
15	16QAM	36	20	22.79	22.74	22.75					
15	16QAM	36	39	22.77	22.79	22.75	23.7				
15	16QAM	75	0	22.83	22.73	22.70					
15	64QAM	1	0	22.02	22.43	22.76					
15	64QAM	1	37	21.86	22.94	22.86					
15	64QAM	1	74	22.85	22.80	22.84	22.7				
15	64QAM	36	0	20.97	21.77	21.44					
15	64QAM	36	20	20.94	21.78	21.81					
15	64QAM	36	39	21.46	21.86	21.78					
15	64QAM	75	0	21.25	21.75	21.67	22.7				
Channel				153172	153272	153422	Tune-up limit (dBm)				
Frequency (MHz)				668	678	693					
10	QPSK	1	0	24.76	24.64	24.66	25.7				
10	QPSK	1	25	24.61	24.62	24.63					
10	QPSK	1	49	24.66	24.71	24.62					
10	QPSK	25	0	23.78	23.71	23.69					
10	QPSK	25	12	23.79	23.82	23.70	24.7				
10	QPSK	25	25	23.72	23.78	23.74					
10	QPSK	50	0	23.80	23.81	23.71					
10	16QAM	1	0	24.10	24.02	24.04					
10	16QAM	1	25	23.98	24.06	24.00	24.7				
10	16QAM	1	49	23.98	24.07	23.96					
10	16QAM	25	0	22.76	22.70	22.68					
10	16QAM	25	12	22.78	22.81	22.68					
10	16QAM	25	25	22.65	22.77	22.73	23.7				
10	16QAM	50	0	22.79	22.80	22.69					
10	64QAM	1	0	21.80	22.30	22.77					
10	64QAM	1	25	22.01	22.95	22.95					
10	64QAM	1	49	22.14	22.98	22.45	22.7				
10	64QAM	25	0	20.82	21.71	21.71					
10	64QAM	25	12	20.84	21.84	21.76					
10	64QAM	25	25	20.71	21.81	21.64					
10	64QAM	50	0	20.83	21.77	21.69	22.7				
Channel				153147	153247	153447	Tune-up limit (dBm)				
Frequency (MHz)				665.5	675.5	695.5					
5	QPSK	1	0	24.57	24.69	24.72	25.7				
5	QPSK	1	12	24.71	24.68	24.70					
5	QPSK	1	24	24.70	24.68	24.63					
5	QPSK	12	0	23.73	23.76	23.74					
5	QPSK	12	7	23.84	23.79	23.76	24.7				
5	QPSK	12	13	23.78	23.76	23.70					
5	QPSK	25	0	23.76	23.76	23.68					
5	16QAM	1	0	23.75	24.01	24.02					
5	16QAM	1	12	23.97	24.03	23.97	24.7				
5	16QAM	1	24	23.95	24.02	23.93					
5	16QAM	12	0	22.64	22.80	22.78					
5	16QAM	12	7	22.86	22.80	22.78					
5	16QAM	12	13	22.77	22.77	22.70	23.7				
5	16QAM	25	0	22.68	22.81	22.70					
5	64QAM	1	0	21.74	22.06	22.91					
5	64QAM	1	12	21.79	22.94	22.70					
5	64QAM	1	24	21.96	22.96	22.25	22.7				
5	64QAM	12	0	20.82	21.49	21.68					
5	64QAM	12	7	21.00	21.86	21.73					
5	64QAM	12	13	20.99	21.81	21.61					
5	64QAM	25	0	20.76	21.69	21.48					



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	18800	18900			
Frequency (MHz)				18680	1880	1900			
20	QPSK	1	0	18.28	18.29	18.26	19.4		
20	QPSK	1	49	18.22	18.24	18.20			
20	QPSK	1	99	18.20	18.23	18.22			
20	QPSK	50	0	18.33	18.31	18.26	19.4		
20	QPSK	50	24	18.40	18.33	18.34			
20	QPSK	50	50	18.35	18.40	18.35			
20	QPSK	100	0	18.41	18.32	18.37	19.4		
20	16QAM	1	0	18.58	18.62	18.55			
20	16QAM	1	49	18.55	18.53	18.47			
20	16QAM	1	99	18.45	18.50	18.46	19.4		
20	16QAM	50	0	18.32	18.30	18.28			
20	16QAM	50	24	18.39	18.33	18.36			
20	16QAM	50	50	18.38	18.37	18.35	19.4		
20	16QAM	100	0	18.38	18.29	18.35			
20	64QAM	1	0	18.51	18.48	18.46			
20	64QAM	1	49	18.46	18.45	18.44	19.4		
20	64QAM	1	99	18.39	18.46	18.42			
20	64QAM	50	0	18.35	18.35	18.30			
20	64QAM	50	24	18.43	18.37	18.40	19.4		
20	64QAM	50	50	18.39	18.41	18.38			
20	64QAM	100	0	18.40	18.32	18.38			
Channel				18675	18900	19125	Tune-up limit (dBm)		
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	18.21	18.22	18.21	19.4		
15	QPSK	1	37	18.20	18.24	18.24			
15	QPSK	1	74	18.23	18.22	18.22			
15	QPSK	36	0	18.26	18.25	18.20	19.4		
15	QPSK	36	20	18.36	18.24	18.30			
15	QPSK	36	39	18.33	18.40	18.34			
15	QPSK	75	0	18.36	18.28	18.37	19.4		
15	16QAM	1	0	18.50	18.60	18.49			
15	16QAM	1	37	18.52	18.49	18.43			
15	16QAM	1	74	18.39	18.40	18.42	19.4		
15	16QAM	36	0	18.28	18.29	18.22			
15	16QAM	36	20	18.29	18.24	18.27			
15	16QAM	36	39	18.35	18.34	18.28	19.4		
15	16QAM	75	0	18.31	18.32	18.34			
15	64QAM	1	0	18.43	18.38	18.41			
15	64QAM	1	37	18.44	18.38	18.36	19.4		
15	64QAM	1	74	18.30	18.42	18.38			
15	64QAM	36	0	18.31	18.32	18.25			
15	64QAM	36	20	18.33	18.29	18.39	19.4		
15	64QAM	36	39	18.31	18.36	18.32			
15	64QAM	75	0	18.39	18.28	18.34			
Channel				18650 <th>18900</th> <th>19150</th> <th colspan="3">Tune-up limit (dBm)</th>	18900	19150	Tune-up limit (dBm)		
Frequency (MHz)				1855 <th>1880</th> <th>1905</th> <th colspan="3"></th>	1880	1905			
10	QPSK	1	0	18.20	18.20	18.24	19.4		
10	QPSK	1	25	18.20	18.22	18.22			
10	QPSK	1	49	18.21	18.22	18.24			
10	QPSK	25	0	18.31	18.24	18.20	19.4		
10	QPSK	25	12	18.33	18.32	18.34			
10	QPSK	25	25	18.29	18.36	18.34			
10	QPSK	50	0	18.36	18.31	18.33	19.4		
10	16QAM	1	0	18.55	18.56	18.49			
10	16QAM	1	25	18.48	18.43	18.45			
10	16QAM	1	49	18.42	18.47	18.43	19.4		
10	16QAM	25	0	18.32	18.25	18.20			
10	16QAM	25	12	18.39	18.23	18.32			
10	16QAM	25	25	18.38	18.30	18.28	19.4		
10	16QAM	50	0	18.33	18.25	18.25			
10	64QAM	1	0	18.42	18.43	18.43			
10	64QAM	1	25	18.40	18.43	18.38	19.4		
10	64QAM	1	49	18.30	18.40	18.36			
10	64QAM	25	0	18.32	18.28	18.21			
10	64QAM	25	12	18.43	18.37	18.34	19.4		
10	64QAM	25	25	18.36	18.38	18.36			
10	64QAM	50	0	18.39	18.23	18.34			
Channel				18575	18800	19075	Tune-up limit (dBm)		
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	18.27	18.22	18.23	19.4		
5	QPSK	1	12	18.21	18.22	18.22			
5	QPSK	1	24	18.21	18.23	18.21			
5	QPSK	12	0	18.26	18.22	18.20	19.4		
5	QPSK	12	7	18.32	18.26	18.25			
5	QPSK	12	13	18.26	18.37	18.30			
5	QPSK	25	0	18.40	18.26	18.29	19.4		
5	16QAM	1	0	18.48	18.61	18.53			
5	16QAM	1	12	18.55	18.52	18.37			
5	16QAM	1	24	18.44	18.48	18.46	19.4		
5	16QAM	12	0	18.25	18.21	18.24			
5	16QAM	12	7	18.33	18.31	18.32			
5	16QAM	12	13	18.33	18.32	18.28	19.4		
5	16QAM	25	0	18.30	18.27	18.33			
5	64QAM	1	0	18.43	18.45	18.40			
5	64QAM	1	12	18.41	18.45	18.40	19.4		
5	64QAM	1	24	18.29	18.44	18.32			
5	64QAM	12	0	18.34	18.27	18.26			
5	64QAM	12	7	18.40	18.36	18.33	19.4		
5	64QAM	12	13	18.35	18.34	18.34			
5	64QAM	25	0	18.35	18.28	18.37			
Channel				18615	18900	19185	Tune-up limit (dBm)		
Frequency (MHz)				1851.5	1880	1908.5			
3	QPSK	1	0	18.23	18.23	18.22	19.4		
3	QPSK	1	8	18.20	18.21	18.23			
3	QPSK	1	14	18.21	18.22	18.22			
3	QPSK	8	0	18.31	18.28	18.24	19.4		
3	QPSK	8	4	18.39	18.32	18.27			
3	QPSK	8	7	18.30	18.37	18.29			
3	QPSK	15	0	18.39	18.28	18.27	19.4		
3	16QAM	1	0	18.55	18.53	18.50			
3	16QAM	1	8	18.50	18.48	18.41			
3	16QAM	1	14	18.40	18.46	18.38	19.4		
3	16QAM	8	0	18.28	18.21	18.22			
3	16QAM	8	4	18.39	18.25	18.29			
3	16QAM	8	7	18.28	18.37	18.34	19.4		
3	16QAM	15	0	18.35	18.20	18.32			
3	64QAM	1	0	18.50	18.42	18.44			
3	64QAM	1	8	18.44	18.38	18.38	19.4		
3	64QAM	1	14	18.39	18.45	18.33			
3	64QAM	8	0	18.31	18.35	18.23			
3	64QAM	8	4	18.38	18.33	18.32	19.4		
3	64QAM	8	7	18.35	18.31	18.31			
3	64QAM	15	0	18.33	18.26	18.32			
Channel				18607	18900	19193	Tune-up limit (dBm)		
Frequency (MHz)				1850.7	1880	1909.3			
1.4	QPSK	1	0	18.21	18.20	18.21	19.4		
1.4	QPSK	1	3	18.21	18.22	18.22			
1.4	QPSK	1	5	18.23	18.20	18.22			
1.4	QPSK	3	0	18.24	18.25	18.24	19.4		
1.4	QPSK	3	1	18.33	18.29	18.31			
1.4	QPSK	3	3	18.31	18.35	18.30			
1.4	16QAM	1	0	18.45	18.44	18.45	19.4		
1.4	16QAM	1	3	18.46	18.43	18.44			
1.4	16QAM	1	5	18.42	18.49	18.45			
1.4	16QAM	3	0	18.31	18.23	18.23	19.4		
1.4	16QAM	3	1	18.34	18.26	18.26			
1.4	16QAM	3	3	18.31	18.34	18.26			
1.4	16QAM	3	5	18.31	18.30	18.31	19.4		
1.4	16QAM	3	7	18.34	18.30	18.33			
1.4	16QAM	3	9	18.37	18.40	18.36			



Band 4									
Art 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Mod Ch / 20050	Power Mod Ch / 20175	Power Mod Ch / 20300	High Ch /	Tune-up limit (dBm)	
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	18.94	18.90	18.88			20
20	QPSK	1	49	18.89	18.88	18.86			
20	QPSK	1	99	18.89	18.89	18.90			
20	QPSK	50	0	19.01	18.96	18.98			20
20	QPSK	50	24	19.02	19.03	19.02			
20	QPSK	50	50	18.95	18.89	18.92			
20	QPSK	100	0	18.99	18.99	18.88			20
20	16QAM	1	0	19.31	19.23	19.21			
20	16QAM	1	49	19.13	19.10	19.13			
20	16QAM	1	99	19.19	19.12	19.07			20
20	16QAM	50	0	18.99	18.97	19.00			
20	16QAM	50	24	19.02	19.00	19.02			
20	16QAM	50	50	18.95	18.91	18.95			20
20	16QAM	100	0	18.97	18.99	18.90			
20	64QAM	1	0	19.11	19.09	19.10			20
20	64QAM	1	49	19.00	18.93	18.95			
20	64QAM	1	99	19.02	19.04	19.03			
20	64QAM	50	0	19.00	18.96	18.97			20
20	64QAM	50	24	19.02	18.99	19.00			
20	64QAM	50	50	18.96	18.92	18.93			
20	64QAM	100	0	19.01	18.96	18.93			
Channel				20025	20175	20325		Tune-up limit (dBm)	
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	18.84	18.92	18.94			20
15	QPSK	1	37	18.80	18.80	18.80			
15	QPSK	1	74	18.81	18.80	18.80			
15	QPSK	36	0	19.01	18.95	18.97			20
15	QPSK	36	20	18.93	18.93	18.95			
15	QPSK	36	39	18.91	18.90	18.93			
15	QPSK	75	0	18.97	18.97	18.88			20
15	16QAM	1	0	19.26	19.24	19.27			
15	16QAM	1	37	19.10	19.07	19.12			
15	16QAM	1	74	19.13	19.05	19.10			20
15	16QAM	36	0	19.05	18.94	18.97			
15	16QAM	36	20	18.98	18.93	18.99			
15	16QAM	36	39	18.96	18.88	18.96			20
15	16QAM	75	0	18.99	18.95	18.91			
15	64QAM	1	0	19.08	19.07	19.05			
15	64QAM	1	37	19.04	19.00	19.06			20
15	64QAM	1	74	19.00	18.97	19.00			
15	64QAM	36	0	19.06	18.99	18.97			
15	64QAM	36	20	18.99	18.96	18.97			20
15	64QAM	36	39	18.96	18.92	18.97			
15	64QAM	75	0	18.98	18.97	18.91			
Channel				20000	20175	20350		Tune-up limit (dBm)	
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	18.85	18.82	18.85			20
10	QPSK	1	25	18.80	18.80	18.85			
10	QPSK	1	49	18.80	18.81	18.86			
10	QPSK	25	0	18.95	18.88	18.88			20
10	QPSK	25	12	18.99	18.96	18.92			
10	QPSK	25	25	18.98	18.97	19.00			
10	QPSK	50	0	18.99	18.97	18.95			20
10	16QAM	1	0	19.24	19.20	19.23			
10	16QAM	1	25	19.19	19.17	19.24			
10	16QAM	1	49	19.20	19.16	19.23			20
10	16QAM	25	0	18.96	18.93	18.92			
10	16QAM	25	12	18.99	18.97	18.94			
10	16QAM	25	25	18.98	18.93	18.99			20
10	16QAM	50	0	18.99	18.95	18.93			
10	64QAM	1	0	19.17	19.03	19.09			
10	64QAM	1	25	19.15	19.13	19.15			20
10	64QAM	1	49	19.12	19.11	19.11			
10	64QAM	25	0	18.99	18.92	18.93			
10	64QAM	25	12	19.03	19.00	18.98			20
10	64QAM	25	25	19.02	19.00	19.06			
10	64QAM	50	0	19.02	18.99	18.97			
Channel				19975	20175	20375		Tune-up limit (dBm)	
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	18.88	18.80	18.89			20
5	QPSK	1	12	18.91	18.84	18.92			
5	QPSK	1	24	18.90	18.85	18.91			
5	QPSK	12	0	18.99	18.88	18.94			20
5	QPSK	12	7	19.02	18.95	19.02			
5	QPSK	12	13	19.01	18.95	18.99			
5	QPSK	25	0	18.98	18.94	18.94			20
5	16QAM	1	0	19.22	19.10	19.18			
5	16QAM	1	12	19.26	19.15	19.08			
5	16QAM	1	24	19.26	19.21	19.20			20
5	16QAM	12	0	19.00	18.87	18.98			
5	16QAM	12	7	19.02	18.97	19.02			
5	16QAM	12	13	19.02	18.93	18.99			20
5	16QAM	25	0	18.98	18.97	18.98			
5	64QAM	1	0	19.19	19.08	19.14			
5	64QAM	1	12	19.18	19.10	19.04			20
5	64QAM	1	24	19.22	19.14	19.07			
5	64QAM	12	0	19.06	18.91	19.06			
5	64QAM	12	7	19.09	19.00	19.09			20
5	64QAM	12	13	19.07	19.01	19.05			
5	64QAM	25	0	19.06	18.98	18.99			
Channel				19965	20175	20385		Tune-up limit (dBm)	
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	18.92	18.80	18.92			20
3	QPSK	1	8	18.95	18.91	18.94			
3	QPSK	1	14	18.90	18.87	18.93			
3	QPSK	8	0	18.96	18.89	18.96			20
3	QPSK	8	4	19.03	18.96	19.03			
3	QPSK	8	7	19.01	18.93	18.99			
3	QPSK	15	0	18.98	18.95	19.00			20
3	16QAM	1	0	19.19	19.09	19.20			
3	16QAM	1	8	19.30	19.23	19.22			
3	16QAM	1	14	19.24	19.17	19.23			20
3	16QAM	8	0	19.03	18.94	18.99			
3	16QAM	8	4	19.08	19.02	19.04			
3	16QAM	8	7	19.05	19.01	18.99			20
3	16QAM	15	0	18.99	18.96	19.00			
3	64QAM	1	0	19.18	19.07	19.10			
3	64QAM	1	8	19.26	19.19	19.15			20
3	64QAM	1	14	19.21	19.13	19.06			
3	64QAM	8	0	19.05	18.91	19.05			
3	64QAM	8	4	19.12	19.01	19.08			20
3	64QAM	8	7	19.07	18.99	19.07			
3	64QAM	15	0	19.03	19.00	19.03			
Channel				19957	20175	20393		Tune-up limit (dBm)	
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	18.80	18.80	18.80			20
1.4	QPSK	1	3	18.87	18.84	18.87			
1.4	QPSK	1	5	18.82	18.80	18.80			
1.4	QPSK	3	0	18.86	18.80	18.81			20
1.4	QPSK	3	1	18.89	18.83	18.85			
1.4	QPSK	3	3	18.82	18.80	18.84			
1.4	QPSK	6	0	18.91	18.86	18.88			20
1.4	16QAM	1	0	19.15	19.10	19.13			
1.4	16QAM	1	3	19.22	19.15	19.18			
1.4	16QAM	1	5	19.15	19.11	19.12			20
1.4	16QAM	3	0	18.94	18.88	18.88			
1.4	16QAM	3	1	19.00	18.91	18.90			
1.4	16QAM	3	3	19.03	18.87	18.85			20
1.4	16QAM	6	0	18.97	18.91	18.99			
1.4	16QAM	6	1	19.04	19.02	19.04			
1.4	16QAM	1	3	19.16	19.07	19.07			20
1.4	64QAM	1	5	19.11	19.04	19.04			
1.4	64QAM	3	0	19.05	19.01	19.02			
1.4	64QAM	3	1	19.13	19.03	19.07			20
1.4	64QAM	3	3	19.07	19.00	19.03			
1.4	64QAM	3	5	18.98	18.93	18.93			



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.43	24.46	24.43	25.7
10	QPSK	1	25	24.39	24.46	24.45	
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	24.7
10	QPSK	25	12	23.56	23.57	23.57	
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.56	24.7
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	
10	16QAM	1	49	23.63	23.86	23.78	23.7
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.65	
10	16QAM	25	25	22.54	22.60	22.57	23.7
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	
10	64QAM	1	25	22.73	22.49	22.51	23.7
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.54	21.60	21.58	
10	64QAM	25	12	21.63	21.53	21.47	22.7
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.46	24.46	24.45	25.7
5	QPSK	1	12	24.44	24.46	24.19	
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	24.7
5	QPSK	12	7	23.54	23.61	23.25	
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.54	23.52	23.37	24.7
5	16QAM	1	0	23.91	23.90	23.87	
5	16QAM	1	12	23.78	23.86	23.43	
5	16QAM	1	24	23.79	23.83	23.43	23.7
5	16QAM	12	0	22.65	22.62	22.60	
5	16QAM	12	7	22.57	22.64	22.38	
5	16QAM	12	13	22.52	22.59	22.35	23.7
5	16QAM	25	0	22.57	22.59	22.51	
5	64QAM	1	0	22.87	22.79	22.18	
5	64QAM	1	12	22.72	22.71	21.72	23.7
5	64QAM	1	24	22.72	22.73	21.73	
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.56	21.85	22.7
5	64QAM	12	13	21.60	21.61	20.71	
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	25.7
3	QPSK	1	8	24.43	24.45	24.13	
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	24.7
3	QPSK	8	4	23.55	23.62	23.16	
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.58	23.17	24.7
3	16QAM	1	0	23.87	23.84	23.44	
3	16QAM	1	8	23.89	23.89	23.38	
3	16QAM	1	14	23.74	23.82	23.44	23.7
3	16QAM	8	0	22.66	22.61	22.26	
3	16QAM	8	4	22.66	22.71	22.30	
3	16QAM	8	7	22.60	22.65	22.40	23.7
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	
3	64QAM	1	8	22.63	22.74	21.72	23.7
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	
3	64QAM	8	4	21.66	21.56	20.73	22.7
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.42	24.41	24.09	25.7
1.4	QPSK	1	3	24.46	24.45	24.26	
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	24.7
1.4	QPSK	3	1	24.46	24.46	24.30	
1.4	QPSK	3	3	24.41	24.45	24.42	
1.4	QPSK	6	0	23.50	23.51	23.36	24.7
1.4	16QAM	1	0	23.75	23.73	23.46	
1.4	16QAM	1	3	23.79	23.84	23.67	
1.4	16QAM	1	5	23.68	23.74	23.60	24.7
1.4	16QAM	3	0	23.56	23.51	23.29	
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	23.7
1.4	16QAM	6	0	22.58	22.61	22.49	
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	23.7
1.4	64QAM	1	5	22.64	22.61	21.72	
1.4	64QAM	3	0	22.66	22.60	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	22.7
1.4	64QAM	3	3	22.63	22.60	21.75	
1.4	64QAM	6	0	21.54	21.47	20.72	



Band 7							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.81	20.82	20.83	22
20	QPSK	1	49	20.80	20.86	20.81	
20	QPSK	1	99	20.83	20.92	20.89	
20	QPSK	50	0	20.82	20.91	20.93	22
20	QPSK	50	24	20.84	20.92	20.96	
20	QPSK	50	50	20.95	21.03	21.02	
20	QPSK	100	0	20.92	20.94	20.93	22
20	16QAM	1	0	21.06	21.11	21.16	
20	16QAM	1	49	21.13	21.18	21.17	
20	16QAM	1	99	21.14	21.27	21.23	22
20	16QAM	50	0	20.81	20.99	20.94	
20	16QAM	50	24	20.93	20.97	20.96	
20	16QAM	50	50	20.95	21.05	21.03	22
20	16QAM	100	0	20.92	20.90	20.93	
20	64QAM	1	0	20.87	20.98	20.99	
20	64QAM	1	49	20.96	21.06	20.98	22
20	64QAM	1	99	21.02	21.14	21.12	
20	64QAM	50	0	20.83	20.91	20.93	
20	64QAM	50	24	20.94	20.96	20.96	22
20	64QAM	50	50	20.95	21.03	21.05	
20	64QAM	100	0	20.92	20.94	20.94	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.81	20.82	20.81	22
15	QPSK	1	37	20.81	20.83	20.81	
15	QPSK	1	74	20.80	20.83	20.85	
15	QPSK	36	0	20.82	20.86	20.91	22
15	QPSK	36	20	20.92	20.82	20.89	
15	QPSK	36	39	20.95	20.95	21.00	
15	QPSK	75	0	20.85	20.90	20.91	22
15	16QAM	1	0	20.99	21.11	21.14	
15	16QAM	1	37	21.07	21.14	21.11	
15	16QAM	1	74	21.05	21.21	21.18	22
15	16QAM	36	0	20.81	20.86	20.92	
15	16QAM	36	20	20.86	20.91	20.94	
15	16QAM	36	39	20.95	21.04	20.93	22
15	16QAM	75	0	20.83	20.87	20.93	
15	64QAM	1	0	20.80	20.95	20.89	
15	64QAM	1	37	20.91	20.98	20.95	22
15	64QAM	1	74	21.00	21.07	21.12	
15	64QAM	36	0	20.80	20.89	20.85	
15	64QAM	36	20	20.93	20.96	20.95	22
15	64QAM	36	39	20.88	21.02	20.96	
15	64QAM	75	0	20.85	20.94	20.86	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.80	20.82	20.80	22
10	QPSK	1	25	20.83	20.83	20.81	
10	QPSK	1	49	20.81	20.83	20.84	
10	QPSK	25	0	20.82	20.85	20.93	22
10	QPSK	25	12	20.84	20.83	20.85	
10	QPSK	25	25	20.85	21.00	20.98	
10	QPSK	50	0	20.83	20.94	20.87	22
10	16QAM	1	0	21.04	21.10	21.13	
10	16QAM	1	25	21.13	21.11	21.12	
10	16QAM	1	49	21.06	21.26	21.16	22
10	16QAM	25	0	20.81	20.82	20.91	
10	16QAM	25	12	20.93	20.93	20.86	
10	16QAM	25	25	20.95	21.02	20.98	22
10	16QAM	50	0	20.90	20.85	20.91	
10	64QAM	1	0	20.83	20.92	20.98	
10	64QAM	1	25	20.96	20.96	20.88	22
10	64QAM	1	49	20.96	21.06	21.03	
10	64QAM	25	0	20.88	20.89	20.93	
10	64QAM	25	12	20.87	20.95	20.96	22
10	64QAM	25	25	20.95	20.94	20.95	
10	64QAM	50	0	20.87	20.89	20.92	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.83	20.80	20.82	22
5	QPSK	1	12	20.82	20.84	20.85	
5	QPSK	1	24	20.83	20.83	20.86	
5	QPSK	12	0	20.85	20.86	20.91	22
5	QPSK	12	7	20.88	20.87	20.89	
5	QPSK	12	13	20.88	20.94	20.95	
5	QPSK	25	0	20.87	20.87	20.93	22
5	16QAM	1	0	20.96	21.06	21.12	
5	16QAM	1	12	21.07	21.18	21.14	
5	16QAM	1	24	21.14	21.25	21.23	22
5	16QAM	12	0	20.83	20.87	20.92	
5	16QAM	12	7	20.93	20.88	20.91	
5	16QAM	12	13	20.90	20.96	20.95	22
5	16QAM	25	0	20.82	20.82	20.89	
5	64QAM	1	0	20.81	20.96	20.93	
5	64QAM	1	12	20.90	20.98	20.97	22
5	64QAM	1	24	20.97	21.08	21.10	
5	64QAM	12	0	20.87	20.89	20.90	
5	64QAM	12	7	20.93	20.89	20.87	22
5	64QAM	12	13	20.91	20.96	21.05	
5	64QAM	25	0	20.86	20.87	20.90	



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	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	25.7
10	QPSK	1	25	24.58	24.57	24.54	
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.64	23.68	23.68	24.7
10	QPSK	25	12	23.74	23.70	23.69	
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	24.7
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	
10	16QAM	1	49	24.00	24.00	23.96	23.7
10	16QAM	25	0	22.96	22.71	22.88	
10	16QAM	25	12	22.75	22.69	22.68	
10	16QAM	25	25	22.70	22.75	22.71	22.7
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	22.7
10	64QAM	1	49	22.58	22.88	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.59	24.56	25.7
5	QPSK	1	12	24.60	24.62	24.60	
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	24.7
5	QPSK	12	7	23.69	23.69	23.74	
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	24.7
5	16QAM	1	0	23.96	23.92	23.87	
5	16QAM	1	12	23.98	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	23.7
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	
5	16QAM	12	13	22.69	22.76	22.68	23.7
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.42	22.84	
5	64QAM	1	12	22.83	22.87	22.86	22.7
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	
5	64QAM	12	7	21.65	21.76	21.81	22.7
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	25.7
3	QPSK	1	8	24.62	24.62	24.60	
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	24.7
3	QPSK	8	4	23.69	23.94	22.71	
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	24.7
3	16QAM	1	0	24.00	24.02	23.95	
3	16QAM	1	8	23.96	23.98	23.98	
3	16QAM	1	14	23.91	23.96	23.91	23.7
3	16QAM	8	0	22.75	22.71	22.71	
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	23.7
3	16QAM	15	0	22.73	22.69	22.68	
3	64QAM	1	0	22.46	22.70	22.87	
3	64QAM	1	8	22.67	22.88	22.90	22.7
3	64QAM	1	14	22.66	22.94	22.81	
3	64QAM	8	0	21.50	21.75	21.71	
3	64QAM	8	4	21.58	21.74	21.79	22.7
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	25.7
1.4	QPSK	1	3	24.60	24.61	24.57	
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	24.7
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	
1.4	QPSK	6	0	23.62	23.64	23.59	24.7
1.4	16QAM	1	0	23.87	23.93	23.87	
1.4	16QAM	1	3	23.89	23.96	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	24.7
1.4	16QAM	3	0	23.64	23.58	23.62	
1.4	16QAM	3	1	23.73	23.66	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	23.7
1.4	16QAM	6	0	22.71	22.71	22.67	
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	23.7
1.4	64QAM	1	5	22.74	22.78	22.68	
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	22.7
1.4	64QAM	3	3	22.60	22.77	22.77	
1.4	64QAM	6	0	21.44	21.65	21.61	

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)				782			
10	QPSK	1	0		24.17		25.2
10	QPSK	1	25		24.10		
10	QPSK	1	49		24.14		
10	QPSK	25	0		23.17		24.2
10	QPSK	25	12		23.21		
10	QPSK	25	25		23.21		
10	QPSK	50	0		23.20		24.2
10	16QAM	1	0		23.42		
10	16QAM	1	25		23.45		
10	16QAM	1	49		23.42		24.2
10	16QAM	25	0		22.20		
10	16QAM	25	12		22.23		
10	16QAM	25	25		22.20		23.2
10	16QAM	50	0		22.23		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.40		23.2
10	64QAM	1	49		22.34		
10	64QAM	25	0		21.24		
10	64QAM	25	12		21.23		22.2
10	64QAM	25	25		21.25		
10	64QAM	50	0		21.26		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.18	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.25	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.28	21.25	
5	64QAM	25	0	20.96	21.26	21.23	

Band 14							
Ann 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		24.59		25.7
10	QPSK	1	25		24.53		
10	QPSK	1	49		24.43		
10	QPSK	25	0		23.56		
10	QPSK	25	12		23.56		24.7
10	QPSK	25	25		23.59		
10	QPSK	50	0		23.53		
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.92		24.7
10	16QAM	1	49		23.83		
10	16QAM	25	0		22.95		
10	16QAM	25	12		22.53		
10	16QAM	25	25		22.58		23.7
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.64		
10	64QAM	1	49		22.72		23.7
10	64QAM	25	0		21.39		
10	64QAM	25	12		21.38		
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.44		22.7
Channel				23305	23330	23355	
Frequency (MHz)				790.5	793	795.5	Tune-up limit (dbm)
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.56	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	
5	QPSK	12	7	23.66	23.57	23.53	24.7
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.58	23.53	23.50	
5	16QAM	1	0	23.63	23.60	23.62	
5	16QAM	1	12	23.68	23.66	23.67	24.7
5	16QAM	1	24	23.87	23.80	23.78	
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.58	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.49	
5	64QAM	1	12	22.57	22.35	22.58	
5	64QAM	1	24	22.32	22.41	22.77	23.7
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.28	21.63	
5	64QAM	12	13	21.31	21.27	21.61	
5	64QAM	25	0	21.34	21.26	21.51	22.7

Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.60	24.56	24.55	25.7
10	QPSK	1	25	24.61	24.62	24.59	
10	QPSK	1	49	24.64	24.67	24.63	
10	QPSK	25	0	23.65	23.68	23.66	24.7
10	QPSK	25	12	23.79	23.75	23.70	
10	QPSK	25	25	23.81	23.82	23.80	
10	QPSK	50	0	23.69	23.72	23.69	24.7
10	16QAM	1	0	23.93	23.95	23.94	
10	16QAM	1	25	24.03	24.06	24.01	
10	16QAM	1	49	24.01	24.02	23.98	23.7
10	16QAM	25	0	22.66	22.65	22.65	
10	16QAM	25	12	22.79	22.75	22.73	
10	16QAM	25	25	22.78	22.77	22.78	23.7
10	16QAM	50	0	22.69	22.69	22.67	
10	64QAM	1	0	22.64	22.70	22.79	
10	64QAM	1	25	22.72	22.67	22.63	23.7
10	64QAM	1	49	22.84	22.76	22.59	
10	64QAM	25	0	21.42	21.42	21.41	
10	64QAM	25	12	21.51	21.48	21.48	22.7
10	64QAM	25	25	21.61	21.67	21.66	
10	64QAM	50	0	21.53	21.64	21.57	
Channel				23785	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.57	24.58	24.58	25.7
5	QPSK	1	12	24.66	24.65	24.63	
5	QPSK	1	24	24.65	24.66	24.64	
5	QPSK	12	0	23.66	23.69	23.67	24.7
5	QPSK	12	7	23.76	23.76	23.78	
5	QPSK	12	13	23.74	23.77	23.73	
5	QPSK	25	0	23.74	23.71	23.75	24.7
5	16QAM	1	0	23.91	23.93	23.91	
5	16QAM	1	12	23.95	23.97	23.96	
5	16QAM	1	24	24.00	24.05	23.99	23.7
5	16QAM	12	0	22.73	22.71	22.74	
5	16QAM	12	7	22.79	22.77	22.79	
5	16QAM	12	13	22.77	22.80	22.77	23.7
5	16QAM	25	0	22.74	22.76	22.77	
5	64QAM	1	0	22.26	22.42	22.71	
5	64QAM	1	12	22.62	22.61	22.61	23.7
5	64QAM	1	24	22.53	22.52	22.48	
5	64QAM	12	0	21.55	21.47	21.65	
5	64QAM	12	7	21.69	21.47	21.76	22.7
5	64QAM	12	13	21.66	21.50	21.70	
5	64QAM	25	0	21.52	21.44	21.59	



Band 25							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	18.30	18.31	18.23	19.4
20	QPSK	1	49	18.21	18.26	18.23	
20	QPSK	1	99	18.24	18.20	18.21	
20	QPSK	50	0	18.35	18.32	18.28	19.4
20	QPSK	50	24	18.40	18.43	18.35	
20	QPSK	50	50	18.33	18.37	18.33	
20	QPSK	100	0	18.40	18.42	18.29	19.4
20	16QAM	1	0	18.65	18.63	18.61	
20	16QAM	1	49	18.57	18.61	18.55	
20	16QAM	1	99	18.46	18.55	18.48	19.4
20	16QAM	50	0	18.36	18.39	18.33	
20	16QAM	50	24	18.40	18.45	18.31	
20	16QAM	50	50	18.36	18.41	18.36	19.4
20	16QAM	100	0	18.39	18.40	18.32	
20	64QAM	1	0	18.55	18.49	18.48	
20	64QAM	1	49	18.49	18.51	18.43	19.4
20	64QAM	1	99	18.44	18.43	18.47	
20	64QAM	50	0	18.38	18.39	18.32	
20	64QAM	50	24	18.42	18.46	18.33	19.4
20	64QAM	50	50	18.36	18.39	18.37	
20	64QAM	100	0	18.39	18.44	18.31	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	18.30	18.22	18.20	19.4
15	QPSK	1	37	18.24	18.25	18.21	
15	QPSK	1	74	18.22	18.23	18.21	
15	QPSK	36	0	18.29	18.25	18.25	19.4
15	QPSK	36	20	18.30	18.39	18.28	
15	QPSK	36	39	18.28	18.33	18.28	
15	QPSK	75	0	18.31	18.36	18.28	19.4
15	16QAM	1	0	18.64	18.63	18.55	
15	16QAM	1	37	18.57	18.58	18.52	
15	16QAM	1	74	18.37	18.45	18.43	19.4
15	16QAM	36	0	18.32	18.31	18.27	
15	16QAM	36	20	18.34	18.43	18.31	
15	16QAM	36	39	18.32	18.41	18.29	19.4
15	16QAM	75	0	18.39	18.31	18.32	
15	64QAM	1	0	18.50	18.44	18.45	
15	64QAM	1	37	18.39	18.50	18.34	19.4
15	64QAM	1	74	18.42	18.40	18.44	
15	64QAM	36	0	18.31	18.29	18.22	
15	64QAM	36	20	18.33	18.45	18.24	19.4
15	64QAM	36	39	18.33	18.37	18.37	
15	64QAM	75	0	18.30	18.43	18.25	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1885	1880	1910	
10	QPSK	1	0	18.23	18.27	18.22	19.4
10	QPSK	1	25	18.21	18.25	18.21	
10	QPSK	1	49	18.24	18.23	18.23	
10	QPSK	25	0	18.31	18.27	18.24	19.4
10	QPSK	25	12	18.30	18.36	18.26	
10	QPSK	25	25	18.23	18.37	18.27	
10	QPSK	50	0	18.34	18.37	18.26	19.4
10	16QAM	1	0	18.63	18.53	18.52	
10	16QAM	1	25	18.50	18.52	18.52	
10	16QAM	1	49	18.36	18.50	18.43	19.4
10	16QAM	25	0	18.33	18.35	18.27	
10	16QAM	25	12	18.40	18.44	18.21	
10	16QAM	25	25	18.34	18.34	18.34	19.4
10	16QAM	50	0	18.29	18.31	18.26	
10	64QAM	1	0	18.53	18.40	18.45	
10	64QAM	1	25	18.48	18.41	18.41	19.4
10	64QAM	1	49	18.34	18.33	18.36	
10	64QAM	25	0	18.31	18.34	18.24	
10	64QAM	25	12	18.40	18.45	18.32	19.4
10	64QAM	25	25	18.28	18.32	18.28	
10	64QAM	50	0	18.34	18.42	18.27	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.29	18.31	18.22	19.4
5	QPSK	1	12	18.25	18.20	18.23	
5	QPSK	1	24	18.24	18.22	18.24	
5	QPSK	12	0	18.32	18.25	18.23	19.4
5	QPSK	12	7	18.30	18.37	18.25	
5	QPSK	12	13	18.24	18.29	18.23	
5	QPSK	25	0	18.39	18.36	18.21	19.4
5	16QAM	1	0	18.57	18.56	18.51	
5	16QAM	1	12	18.48	18.58	18.45	
5	16QAM	1	24	18.37	18.55	18.44	19.4
5	16QAM	12	0	18.30	18.39	18.26	
5	16QAM	12	7	18.32	18.43	18.24	
5	16QAM	12	13	18.29	18.34	18.28	19.4
5	16QAM	25	0	18.36	18.33	18.24	
5	64QAM	1	0	18.55	18.47	18.45	
5	64QAM	1	12	18.42	18.42	18.38	19.4
5	64QAM	1	24	18.41	18.40	18.43	
5	64QAM	12	0	18.30	18.33	18.28	
5	64QAM	12	7	18.41	18.39	18.26	19.4
5	64QAM	12	13	18.34	18.36	18.31	
5	64QAM	25	0	18.38	18.43	18.25	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.22	18.24	18.24	19.4
3	QPSK	1	8	18.23	18.21	18.20	
3	QPSK	1	14	18.21	18.22	18.21	
3	QPSK	8	0	18.35	18.28	18.28	19.4
3	QPSK	8	4	18.30	18.36	18.33	
3	QPSK	8	7	18.29	18.35	18.33	
3	QPSK	15	0	18.35	18.40	18.26	19.4
3	16QAM	1	0	18.59	18.53	18.61	
3	16QAM	1	8	18.52	18.53	18.50	
3	16QAM	1	14	18.36	18.51	18.39	19.4
3	16QAM	8	0	18.32	18.34	18.32	
3	16QAM	8	4	18.31	18.43	18.29	
3	16QAM	8	7	18.31	18.32	18.28	19.4
3	16QAM	15	0	18.34	18.35	18.31	
3	64QAM	1	0	18.52	18.44	18.45	
3	64QAM	1	8	18.45	18.50	18.33	19.4
3	64QAM	1	14	18.41	18.37	18.47	
3	64QAM	8	0	18.36	18.30	18.31	
3	64QAM	8	4	18.34	18.42	18.32	19.4
3	64QAM	8	7	18.32	18.35	18.37	
3	64QAM	15	0	18.33	18.41	18.27	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	18.30	18.26	18.24	19.4
1.4	QPSK	1	3	18.23	18.25	18.21	
1.4	QPSK	1	5	18.24	18.25	18.22	
1.4	QPSK	3	0	18.25	18.32	18.23	19.4
1.4	QPSK	3	1	18.38	18.33	18.35	
1.4	QPSK	3	3	18.32	18.28	18.33	
1.4	QPSK	6	0	18.37	18.42	18.24	19.4
1.4	16QAM	1	0	18.55	18.55	18.56	
1.4	16QAM	1	3	18.49	18.57	18.55	
1.4	16QAM	1	5	18.44	18.48	18.42	19.4
1.4	16QAM	3	0	18.28	18.30	18.28	
1.4	16QAM	3	1	18.35	18.45	18.28	
1.4	16QAM	3	3	18.34	18.36	18.29	19.4
1.4	16QAM	6	0	18.39	18.34	18.22	
1.4	64QAM	1	0	18.54	18.41	18.40	
1.4	64QAM	1	3	18.45	18.46	18.40	19.4
1.4	64QAM	1	5	18.42	18.38	18.45	
1.4	64QAM	3	0	18.37	18.28	18.30	
1.4	64QAM	3	1	18.33	18.36	18.33	19.4
1.4	64QAM	3	3	18.29	18.35	18.34	
1.4	64QAM	6	0	18.30	18.40	18.21	



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26745	26865	26990	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.45	24.40	24.62	25.7
15	QPSK	1	37	24.34	24.39	24.41	
15	QPSK	1	74	24.35	24.39	24.31	
15	QPSK	36	0	23.51	23.51	23.54	24.7
15	QPSK	36	20	23.52	23.49	23.50	
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	24.7
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	
15	16QAM	1	74	23.64	23.68	23.59	23.7
15	16QAM	36	0	22.51	22.54	22.58	
15	16QAM	36	20	22.53	22.51	22.50	
15	16QAM	36	39	22.50	22.53	22.54	23.7
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	23.7
15	64QAM	1	37	22.43	22.68	22.68	
15	64QAM	1	74	22.57	22.61	21.80	
15	64QAM	36	0	21.21	21.58	21.60	22.7
15	64QAM	36	20	21.40	21.53	21.54	
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	Tune-up limit (dBm)
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	25.7
10	QPSK	1	25	24.44	24.47	24.45	
10	QPSK	1	49	24.46	24.49	24.37	
10	QPSK	25	0	23.64	23.58	23.57	24.7
10	QPSK	25	12	23.58	23.54	23.57	
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.57	23.53	23.49	24.7
10	16QAM	1	0	23.92	23.87	23.87	
10	16QAM	1	25	23.85	23.87	23.86	
10	16QAM	1	49	23.86	23.90	23.75	23.7
10	16QAM	25	0	22.62	22.57	22.57	
10	16QAM	25	12	22.60	22.55	22.57	
10	16QAM	25	25	22.53	22.58	22.53	23.7
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.75	
10	64QAM	1	25	22.33	22.80	22.64	22.7
10	64QAM	1	49	22.74	22.81	21.98	
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.16	21.61	21.57	Tune-up limit (dBm)
10	64QAM	25	25	21.31	21.58	20.89	
10	64QAM	50	0	21.25	21.57	21.38	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	25.7
5	QPSK	1	12	24.56	24.55	24.17	
5	QPSK	1	24	24.46	24.53	24.41	
5	QPSK	12	0	23.64	23.59	23.60	24.7
5	QPSK	12	7	23.63	23.63	23.33	
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	24.7
5	16QAM	1	0	23.95	23.85	23.86	
5	16QAM	1	12	23.84	23.87	23.49	
5	16QAM	1	24	23.77	23.88	23.69	23.7
5	16QAM	12	0	22.71	22.85	22.81	
5	16QAM	12	7	22.67	22.64	22.48	
5	16QAM	12	13	22.55	22.59	22.45	23.7
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	
5	64QAM	1	12	22.31	22.76	21.70	23.7
5	64QAM	1	24	22.14	22.79	21.71	
5	64QAM	12	0	21.36	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.58	20.73	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	25.7
3	QPSK	1	8	24.60	24.57	24.26	
3	QPSK	1	14	24.46	24.50	24.37	
3	QPSK	8	0	23.69	23.57	23.20	24.7
3	QPSK	8	4	23.68	23.63	23.32	
3	QPSK	8	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.58	23.29	24.7
3	16QAM	1	0	23.93	23.83	23.53	
3	16QAM	1	8	23.92	23.91	23.53	
3	16QAM	1	14	23.81	23.90	23.67	23.7
3	16QAM	8	0	22.74	22.63	22.36	
3	16QAM	8	4	22.75	22.67	22.45	
3	16QAM	8	7	22.65	22.66	22.54	23.7
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	
3	64QAM	1	8	22.49	22.84	21.84	23.7
3	64QAM	1	14	22.30	22.80	21.76	
3	64QAM	8	0	21.40	21.65	20.75	
3	64QAM	8	4	21.44	21.72	20.79	22.7
3	64QAM	8	7	21.37	21.63	20.72	
3	64QAM	15	0	21.36	21.60	20.82	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	25.7
1.4	QPSK	1	3	24.56	24.54	24.39	
1.4	QPSK	1	5	24.45	24.41	24.28	
1.4	QPSK	3	0	24.56	24.43	24.39	24.7
1.4	QPSK	3	1	24.58	24.46	24.40	
1.4	QPSK	3	3	24.53	24.46	24.36	
1.4	QPSK	6	0	23.80	23.53	23.42	24.7
1.4	16QAM	1	0	23.86	23.73	23.57	
1.4	16QAM	1	3	23.90	23.90	23.76	
1.4	16QAM	1	5	23.79	23.75	23.66	24.7
1.4	16QAM	3	0	23.62	23.52	23.44	
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	23.7
1.4	16QAM	6	0	22.66	22.58	22.52	
1.4	64QAM	1	0	22.39	22.67	21.78	
1.4	64QAM	1	3	22.45	22.75	21.75	23.7
1.4	64QAM	1	5	22.41	22.65	21.74	
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	22.7
1.4	64QAM	3	3	22.43	22.64	21.82	
1.4	64QAM	6	0	21.34	21.56	20.84	



Band 30							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2771.0			
Frequency (MHz)				231.0			
10	QPSK	1	0		20.72		21.5
10	QPSK	1	25		20.49		
10	QPSK	1	49		20.50		
10	QPSK	25	0		20.56		21.5
10	QPSK	25	12		20.61		
10	QPSK	25	25		20.70		
10	QPSK	50	0		20.59		21.5
10	16QAM	1	0		20.87		
10	16QAM	1	25		20.86		
10	16QAM	1	49		20.88		21.5
10	16QAM	25	0		20.53		
10	16QAM	25	12		20.56		
10	16QAM	25	25		20.68		21.5
10	16QAM	50	0		20.56		
10	64QAM	1	0		20.74		
10	64QAM	1	25		20.80		21.5
10	64QAM	1	49		20.77		
10	64QAM	25	0		19.75		
10	64QAM	25	12		19.81		20.5
10	64QAM	25	25		19.89		
10	64QAM	50	0		19.78		
Channel				2788.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	231.0	2312.5	
5	QPSK	1	0	20.44	20.48	20.45	21.5
5	QPSK	1	12	20.53	20.62	20.56	
5	QPSK	1	24	20.60	20.60	20.52	
5	QPSK	12	0	20.63	20.55	20.59	21.5
5	QPSK	12	7	20.66	20.67	20.62	
5	QPSK	12	13	20.65	20.66	20.59	
5	QPSK	25	0	20.66	20.54	20.55	21.5
5	16QAM	1	0	20.77	20.76	20.76	
5	16QAM	1	12	20.67	20.85	20.86	
5	16QAM	1	24	20.81	20.82	20.85	21.5
5	16QAM	12	0	20.60	20.53	20.59	
5	16QAM	12	7	20.64	20.65	20.65	
5	16QAM	12	13	20.65	20.64	20.64	21.5
5	16QAM	25	0	20.64	20.57	20.63	
5	64QAM	1	0	20.70	20.71	20.72	
5	64QAM	1	12	20.73	20.75	20.74	21.5
5	64QAM	1	24	20.82	20.83	20.84	
5	64QAM	12	0	19.84	19.80	19.83	
5	64QAM	12	7	19.89	19.90	19.87	20.5
5	64QAM	12	13	19.90	19.89	19.87	
5	64QAM	25	0	19.84	19.77	19.81	



Band 66							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132322	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.83	18.90	18.88	20
20	QPSK	1	49	18.80	18.82	18.86	
20	QPSK	1	99	18.82	18.88	18.82	
20	QPSK	50	0	18.80	18.81	18.80	20
20	QPSK	50	24	18.80	18.82	18.81	
20	QPSK	50	50	18.81	18.83	18.81	
20	QPSK	100	0	18.86	18.84	18.94	20
20	16QAM	1	0	19.13	19.15	19.23	
20	16QAM	1	49	19.04	19.08	19.11	
20	16QAM	1	99	19.19	19.09	19.08	20
20	16QAM	50	0	18.87	18.91	18.98	
20	16QAM	50	24	18.94	18.90	18.93	
20	16QAM	50	50	18.91	18.94	19.00	20
20	16QAM	100	0	18.90	18.88	18.96	
20	64QAM	1	0	19.04	19.05	19.03	
20	64QAM	1	49	18.92	18.91	18.87	20
20	64QAM	1	99	19.06	19.05	18.97	
20	64QAM	50	0	18.89	18.93	19.01	
20	64QAM	50	24	18.95	18.90	18.94	20
20	64QAM	50	50	18.92	18.95	18.98	
20	64QAM	100	0	18.93	18.88	18.95	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.80	18.83	18.88	20
15	QPSK	1	37	18.80	18.80	18.80	
15	QPSK	1	74	18.80	18.82	18.80	
15	QPSK	36	0	18.81	18.90	18.94	20
15	QPSK	36	20	18.86	18.83	18.93	
15	QPSK	36	39	18.88	18.91	18.99	
15	QPSK	75	0	18.89	18.86	18.94	20
15	16QAM	1	0	19.12	19.15	19.17	
15	16QAM	1	37	19.03	19.06	19.12	
15	16QAM	1	74	19.12	19.13	19.10	20
15	16QAM	36	0	18.86	18.90	18.95	
15	16QAM	36	20	18.92	18.86	18.90	
15	16QAM	36	39	18.90	18.95	18.98	20
15	16QAM	75	0	18.94	18.97	18.94	
15	64QAM	1	0	19.04	18.96	19.04	
15	64QAM	1	37	18.96	19.00	19.04	20
15	64QAM	1	74	19.02	19.04	19.02	
15	64QAM	36	0	18.87	18.94	18.97	
15	64QAM	36	20	18.91	18.89	18.93	20
15	64QAM	36	39	18.91	18.97	19.00	
15	64QAM	75	0	18.92	18.89	18.93	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.81	18.83	18.89	20
10	QPSK	1	25	18.80	18.83	18.88	
10	QPSK	1	49	18.80	18.82	18.88	
10	QPSK	25	0	18.82	18.86	18.92	20
10	QPSK	25	12	18.90	18.89	18.94	
10	QPSK	25	25	18.86	18.95	18.98	
10	QPSK	50	0	18.89	18.90	18.96	20
10	16QAM	1	0	19.21	19.22	19.17	
10	16QAM	1	25	19.12	19.20	19.14	
10	16QAM	1	49	19.12	19.17	19.15	20
10	16QAM	25	0	18.91	18.99	18.96	
10	16QAM	25	12	18.94	18.91	18.99	
10	16QAM	25	25	18.89	18.96	19.00	20
10	16QAM	50	0	18.92	18.89	18.95	
10	64QAM	1	0	19.04	19.07	19.11	
10	64QAM	1	25	19.05	19.11	19.18	20
10	64QAM	1	49	18.99	19.09	19.20	
10	64QAM	25	0	18.92	18.92	19.00	
10	64QAM	25	12	18.95	18.93	19.03	20
10	64QAM	25	25	18.90	18.96	19.08	
10	64QAM	50	0	18.94	18.92	19.02	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.80	18.80	18.87	20
5	QPSK	1	12	18.87	18.80	18.95	
5	QPSK	1	24	18.80	18.84	18.91	
5	QPSK	12	0	18.92	18.88	19.00	20
5	QPSK	12	7	18.93	18.96	19.06	
5	QPSK	12	13	18.92	18.95	19.02	
5	QPSK	25	0	18.91	18.87	18.99	20
5	16QAM	1	0	19.14	19.11	19.16	
5	16QAM	1	12	19.18	19.14	19.19	
5	16QAM	1	24	19.10	19.19	19.20	20
5	16QAM	12	0	18.93	18.93	19.06	
5	16QAM	12	7	18.96	19.02	19.08	
5	16QAM	12	13	18.95	18.99	19.02	20
5	16QAM	25	0	18.92	18.92	19.03	
5	64QAM	1	0	19.10	19.04	19.14	
5	64QAM	1	12	19.11	19.11	19.12	20
5	64QAM	1	24	19.07	19.09	19.09	
5	64QAM	12	0	18.96	18.97	19.12	
5	64QAM	12	7	18.97	19.02	19.11	20
5	64QAM	12	13	18.96	19.00	19.10	
5	64QAM	25	0	18.91	18.89	19.05	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.82	18.80	18.82	20
3	QPSK	1	8	18.91	18.86	18.86	
3	QPSK	1	14	18.86	18.80	18.84	
3	QPSK	8	0	18.89	18.83	18.82	20
3	QPSK	8	4	18.86	18.90	18.93	
3	QPSK	8	7	18.93	18.89	18.90	
3	QPSK	15	0	18.91	18.81	18.91	20
3	16QAM	1	0	19.07	19.06	19.16	
3	16QAM	1	8	19.15	19.11	19.16	
3	16QAM	1	14	19.15	19.09	19.13	20
3	16QAM	8	0	18.90	18.85	18.96	
3	16QAM	8	4	18.99	18.94	18.98	
3	16QAM	8	7	18.99	18.92	18.93	20
3	16QAM	15	0	18.96	18.83	18.93	
3	64QAM	1	0	19.05	18.97	19.08	
3	64QAM	1	8	19.15	19.13	19.09	20
3	64QAM	1	14	19.07	19.06	19.00	
3	64QAM	8	0	18.97	18.89	18.96	
3	64QAM	8	4	19.04	18.99	19.01	20
3	64QAM	8	7	19.00	18.95	18.97	
3	64QAM	15	0	18.97	18.86	18.95	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.81	18.87	18.91	20
1.4	QPSK	1	3	18.85	18.91	18.96	
1.4	QPSK	1	5	18.80	18.83	18.89	
1.4	QPSK	3	0	18.84	18.90	18.92	20
1.4	QPSK	3	1	18.89	18.94	18.96	
1.4	QPSK	3	3	18.85	18.90	18.93	
1.4	QPSK	6	0	18.91	18.96	19.00	20
1.4	16QAM	1	0	19.16	19.20	19.22	
1.4	16QAM	1	3	19.22	19.08	19.11	
1.4	16QAM	1	5	19.15	19.17	19.22	20
1.4	16QAM	3	0	18.94	18.97	18.99	
1.4	16QAM	3	1	19.02	19.01	19.06	
1.4	16QAM	3	3	18.92	18.97	19.01	20
1.4	16QAM	6	0	18.96	19.04	19.10	
1.4	64QAM	1	0	19.11	19.09	19.17	
1.4	64QAM	1	3	19.14	19.15	19.22	20
1.4	64QAM	1	5	19.06	19.10	19.16	
1.4	64QAM	3	0	19.03	19.06	19.15	
1.4	64QAM	3	1	19.06	19.13	19.20	20
1.4	64QAM	3	3	19.02	19.07	19.14	
1.4	64QAM	6	0	18.91	18.97	19.06	



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	133332	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.67	24.60	24.58	25.7
20	QPSK	1	49	24.58	24.59	24.56	
20	QPSK	1	99	24.61	24.56	24.53	
20	QPSK	50	0	23.69	23.68	23.64	24.7
20	QPSK	50	24	23.74	23.67	23.63	
20	QPSK	50	50	23.75	23.69	23.68	
20	QPSK	100	0	23.72	23.66	23.71	24.7
20	16QAM	1	0	23.99	23.90	23.92	
20	16QAM	1	49	23.94	23.93	23.91	
20	16QAM	1	99	23.97	23.91	23.93	23.7
20	16QAM	50	0	22.69	22.68	22.67	
20	16QAM	50	24	22.75	22.68	22.66	
20	16QAM	50	50	22.75	22.73	22.68	23.7
20	16QAM	100	0	22.72	22.65	22.70	
20	64QAM	1	0	21.88	22.69	22.77	
20	64QAM	1	49	22.51	22.82	22.02	23.7
20	64QAM	1	99	22.87	22.68	22.85	
20	64QAM	50	0	20.78	21.69	21.35	
20	64QAM	50	24	21.19	21.42	21.50	22.7
20	64QAM	50	50	21.70	21.49	21.63	
20	64QAM	100	0	21.39	21.66	21.66	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.65	24.60	24.56	25.7
15	QPSK	1	37	24.55	24.58	24.52	
15	QPSK	1	74	24.58	24.62	24.55	
15	QPSK	36	0	23.67	23.69	23.61	24.7
15	QPSK	36	20	23.75	23.67	23.71	
15	QPSK	36	39	23.65	23.71	23.65	
15	QPSK	75	0	23.73	23.65	23.60	24.7
15	16QAM	1	0	24.04	23.93	23.89	
15	16QAM	1	37	23.69	23.98	23.91	
15	16QAM	1	74	23.91	23.91	23.90	23.7
15	16QAM	36	0	22.63	22.67	22.63	
15	16QAM	36	20	22.72	22.69	22.71	
15	16QAM	36	39	22.69	22.71	22.68	23.7
15	16QAM	75	0	22.75	22.67	22.62	
15	64QAM	1	0	21.76	22.28	22.61	
15	64QAM	1	37	21.70	22.27	22.80	23.7
15	64QAM	1	74	22.85	22.43	22.62	
15	64QAM	36	0	20.76	21.71	21.42	
15	64QAM	36	20	20.88	21.68	21.75	22.7
15	64QAM	36	39	21.38	21.40	21.71	
15	64QAM	75	0	21.18	21.65	21.52	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.57	24.56	24.57	25.7
10	QPSK	1	25	24.53	24.56	24.57	
10	QPSK	1	49	24.62	24.64	24.53	
10	QPSK	25	0	23.73	23.62	23.60	24.7
10	QPSK	25	12	23.69	23.75	23.62	
10	QPSK	25	25	23.63	23.70	23.65	
10	QPSK	50	0	23.73	23.74	23.61	24.7
10	16QAM	1	0	24.03	23.97	23.96	
10	16QAM	1	25	23.89	23.97	23.94	
10	16QAM	1	49	23.96	24.00	23.86	23.7
10	16QAM	25	0	22.59	22.65	22.60	
10	16QAM	25	12	22.52	22.74	22.63	
10	16QAM	25	25	22.54	22.71	22.65	23.7
10	16QAM	50	0	22.73	22.73	22.59	
10	64QAM	1	0	21.71	22.19	22.73	
10	64QAM	1	25	21.61	22.89	22.80	23.7
10	64QAM	1	49	22.02	22.82	22.25	
10	64QAM	25	0	20.70	21.54	21.83	
10	64QAM	25	12	20.65	21.76	21.61	22.7
10	64QAM	25	25	20.65	21.68	21.37	
10	64QAM	50	0	20.70	21.56	21.58	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.63	24.62	25.7
5	QPSK	1	12	24.62	24.59	24.59	
5	QPSK	1	24	24.67	24.62	24.51	
5	QPSK	12	0	23.49	23.69	23.64	24.7
5	QPSK	12	7	23.63	23.70	23.68	
5	QPSK	12	13	23.60	23.68	23.61	
5	QPSK	25	0	23.60	23.69	23.59	24.7
5	16QAM	1	0	23.66	23.99	23.92	
5	16QAM	1	12	23.86	23.94	23.87	
5	16QAM	1	24	23.80	23.94	23.83	23.7
5	16QAM	12	0	22.42	22.74	22.69	
5	16QAM	12	7	22.60	22.75	22.70	
5	16QAM	12	13	22.61	22.70	22.63	23.7
5	16QAM	25	0	22.52	22.72	22.63	
5	64QAM	1	0	21.83	21.95	22.65	
5	64QAM	1	12	21.71	22.83	22.44	23.7
5	64QAM	1	24	21.72	22.88	21.98	
5	64QAM	12	0	20.70	21.46	21.42	
5	64QAM	12	7	20.79	21.76	21.57	22.7
5	64QAM	12	13	20.60	21.72	21.36	
5	64QAM	25	0	20.77	21.50	21.21	



Band 38							
Ann 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	24.95	24.88	24.81	25.7
20	QPSK	1	49	24.94	24.82	24.75	
20	QPSK	1	99	24.93	24.78	24.75	
20	QPSK	50	0	24.19	24.05	23.86	
20	QPSK	50	24	24.17	24.04	24.00	
20	QPSK	50	50	24.03	24.05	23.91	24.7
20	QPSK	100	0	24.11	23.94	23.93	
20	16QAM	1	0	24.07	24.04	23.89	
20	16QAM	1	49	24.07	23.95	23.82	24.7
20	16QAM	1	99	23.95	23.97	23.90	
20	16QAM	50	0	23.16	23.06	22.97	
20	16QAM	50	24	23.17	23.00	22.93	23.7
20	16QAM	50	50	23.08	23.06	22.99	
20	16QAM	100	0	23.11	23.01	22.95	
20	64QAM	1	0	22.81	22.78	22.67	23.7
20	64QAM	1	49	22.71	22.71	22.77	
20	64QAM	1	99	22.68	22.82	22.78	
20	64QAM	50	0	22.15	22.02	21.92	22.7
20	64QAM	50	24	22.14	22.04	22.04	
20	64QAM	50	50	22.08	22.09	21.91	
20	64QAM	100	0	22.08	21.96	22.05	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.92	24.90	24.81	25.7
15	QPSK	1	37	24.91	24.87	24.80	
15	QPSK	1	74	24.90	24.81	24.78	
15	QPSK	36	0	24.18	23.95	23.89	
15	QPSK	36	20	24.14	24.00	23.91	
15	QPSK	36	39	24.07	24.05	23.90	24.7
15	QPSK	75	0	24.06	24.00	23.82	
15	16QAM	1	0	24.07	24.03	23.92	
15	16QAM	1	37	23.92	23.82	23.86	24.7
15	16QAM	1	74	23.96	23.92	23.87	
15	16QAM	36	0	23.07	22.98	22.86	
15	16QAM	36	20	23.01	22.94	22.81	23.7
15	16QAM	36	39	23.04	22.97	22.92	
15	16QAM	75	0	23.13	22.97	22.88	
15	64QAM	1	0	22.75	22.74	22.75	23.7
15	64QAM	1	37	22.74	22.82	22.75	
15	64QAM	1	74	22.70	22.71	22.72	
15	64QAM	36	0	22.14	22.02	21.86	22.7
15	64QAM	36	20	22.08	21.98	21.93	
15	64QAM	36	39	22.16	22.03	21.92	
15	64QAM	75	0	22.16	21.95	21.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.91	24.78	24.80	25.7
10	QPSK	1	25	24.81	24.78	24.76	
10	QPSK	1	49	24.85	24.71	24.65	
10	QPSK	25	0	24.13	23.95	23.83	
10	QPSK	25	12	24.04	23.87	23.71	
10	QPSK	25	25	24.06	23.98	23.79	24.7
10	QPSK	50	0	23.99	23.96	23.90	
10	16QAM	1	0	24.02	23.97	23.87	
10	16QAM	1	25	23.92	23.83	23.72	24.7
10	16QAM	1	49	23.88	23.95	23.91	
10	16QAM	25	0	23.08	22.91	22.84	
10	16QAM	25	12	23.04	22.90	22.89	23.7
10	16QAM	25	25	23.02	22.93	22.89	
10	16QAM	50	0	23.11	22.95	22.77	
10	64QAM	1	0	22.75	22.69	22.69	23.7
10	64QAM	1	25	22.70	22.77	22.72	
10	64QAM	1	49	22.77	22.78	22.73	
10	64QAM	25	0	22.11	21.96	21.85	22.7
10	64QAM	25	12	22.11	21.94	21.85	
10	64QAM	25	25	22.11	21.98	21.80	
10	64QAM	50	0	22.12	21.92	21.84	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.90	24.92	24.77	25.7
5	QPSK	1	12	24.93	24.92	24.78	
5	QPSK	1	24	24.91	24.92	24.76	
5	QPSK	12	0	24.16	23.96	23.94	
5	QPSK	12	7	24.13	24.04	23.94	
5	QPSK	12	13	24.09	24.02	23.96	24.7
5	QPSK	25	0	24.17	24.04	23.92	
5	16QAM	1	0	24.23	24.02	23.93	
5	16QAM	1	12	24.22	24.10	23.95	24.7
5	16QAM	1	24	24.19	24.14	24.05	
5	16QAM	12	0	23.14	22.96	22.88	
5	16QAM	12	7	23.13	23.13	22.93	23.7
5	16QAM	12	13	23.12	23.07	22.90	
5	16QAM	25	0	23.12	22.99	22.99	
5	64QAM	1	0	22.92	22.80	22.74	23.7
5	64QAM	1	12	22.93	22.87	22.72	
5	64QAM	1	24	22.92	22.85	22.78	
5	64QAM	12	0	22.17	22.04	22.00	22.7
5	64QAM	12	7	22.21	22.07	22.02	
5	64QAM	12	13	22.17	22.10	21.97	
5	64QAM	25	0	22.24	22.04	22.00	



Band 41										
Ann 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.36	24.32	24.31	24.29	24.12	25.7	
20	QPSK	1	49	24.33	24.31	24.18	24.57	24.42		
20	QPSK	1	99	24.33	24.30	24.25	24.12	24.27		
20	QPSK	50	0	23.53	23.47	23.28	23.52	23.42	24.7	
20	QPSK	50	24	23.54	23.48	23.35	23.57	23.55		
20	QPSK	50	50	23.48	23.44	23.34	23.51	23.50		
20	QPSK	100	0	23.52	23.48	23.36	23.53	23.44	24.7	
20	16QAM	1	0	23.52	23.45	23.45	23.44	23.23		
20	16QAM	1	49	23.45	23.43	23.32	23.65	23.52		
20	16QAM	1	99	23.47	23.47	23.35	23.26	23.35	23.7	
20	16QAM	50	0	22.56	22.48	22.33	22.56	22.45		
20	16QAM	50	24	22.56	22.51	22.41	22.59	22.54		
20	16QAM	50	50	22.52	22.46	22.36	22.52	22.53	23.7	
20	16QAM	100	0	22.54	22.50	22.39	22.49	22.47		
20	64QAM	1	0	22.26	22.14	22.13	22.10	21.89		
20	64QAM	1	49	22.19	22.22	22.04	22.46	22.27	23.7	
20	64QAM	1	99	22.19	22.25	22.08	22.02	22.03		
20	64QAM	50	0	21.55	21.50	21.35	21.55	21.44		
20	64QAM	50	24	21.57	21.51	21.40	21.60	21.56	22.7	
20	64QAM	50	50	21.52	21.48	21.38	21.50	21.53		
20	64QAM	100	0	21.56	21.50	21.41	21.51	21.47		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.36	24.32	24.25	24.42	24.22	25.7	
15	QPSK	1	37	24.32	24.25	24.18	24.53	24.39		
15	QPSK	1	74	24.34	24.36	24.27	24.27	24.35		
15	QPSK	36	0	23.41	23.47	23.31	23.53	23.47	24.7	
15	QPSK	36	20	23.51	23.45	23.37	23.64	23.51		
15	QPSK	36	39	23.46	23.44	23.33	23.53	23.47		
15	QPSK	75	0	23.50	23.46	23.36	23.58	23.47	24.7	
15	16QAM	1	0	23.53	23.48	23.43	23.56	23.36		
15	16QAM	1	37	23.41	23.39	23.25	23.65	23.52		
15	16QAM	1	74	23.49	23.57	23.45	23.46	23.44	23.7	
15	16QAM	36	0	22.40	22.46	22.27	22.48	22.40		
15	16QAM	36	20	22.47	22.45	22.33	22.60	22.48		
15	16QAM	36	39	22.45	22.42	22.31	22.53	22.46	23.7	
15	16QAM	75	0	22.52	22.48	22.38	22.59	22.49		
15	64QAM	1	0	22.24	22.18	22.07	22.26	22.05		
15	64QAM	1	37	22.22	22.20	22.07	22.42	22.27	23.7	
15	64QAM	1	74	22.17	22.34	22.15	22.21	22.16		
15	64QAM	36	0	21.44	21.49	21.34	21.56	21.47		
15	64QAM	36	20	21.54	21.47	21.38	21.65	21.57	22.7	
15	64QAM	36	39	21.48	21.48	21.36	21.57	21.51		
15	64QAM	75	0	21.54	21.48	21.39	21.61	21.51		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.25	24.32	24.17	24.41	24.12	25.7	
10	QPSK	1	25	24.24	24.24	24.09	24.48	24.33		
10	QPSK	1	49	24.29	24.33	24.20	24.21	24.31		
10	QPSK	25	0	23.38	23.37	23.21	23.49	23.39	24.7	
10	QPSK	25	12	23.42	23.35	23.29	23.57	23.47		
10	QPSK	25	25	23.39	23.43	23.27	23.48	23.39		
10	QPSK	50	0	23.48	23.43	23.35	23.56	23.41	24.7	
10	16QAM	1	0	23.45	23.42	23.33	23.56	23.32		
10	16QAM	1	25	23.37	23.29	23.23	23.64	23.48		
10	16QAM	1	49	23.47	23.47	23.43	23.40	23.41	23.7	
10	16QAM	25	0	22.35	22.49	22.21	22.47	22.39		
10	16QAM	25	12	22.45	22.37	22.21	22.52	22.44		
10	16QAM	25	25	22.39	22.40	22.28	22.48	22.44	23.7	
10	16QAM	50	0	22.46	22.44	22.28	22.57	22.47		
10	64QAM	1	0	22.18	22.09	22.05	22.19	22.05		
10	64QAM	1	25	22.12	22.20	22.03	22.37	22.24	23.7	
10	64QAM	1	49	22.06	22.30	22.07	22.17	22.12		
10	64QAM	25	0	21.37	21.47	21.24	21.55	21.40		
10	64QAM	25	12	21.47	21.38	21.37	21.63	21.47	22.7	
10	64QAM	25	25	21.43	21.44	21.26	21.49	21.46		
10	64QAM	50	0	21.50	21.43	21.35	21.58	21.51		
Channel				39675	40130	40620	41055	41500	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.48	24.39	24.27	24.54	24.46	25.7	
5	QPSK	1	12	24.46	24.39	24.32	24.56	24.43		
5	QPSK	1	24	24.39	24.38	24.25	24.52	24.33		
5	QPSK	12	0	23.57	23.52	23.43	23.64	23.57	24.7	
5	QPSK	12	7	23.57	23.52	23.47	23.67	23.56		
5	QPSK	12	13	23.56	23.48	23.44	23.68	23.51		
5	QPSK	25	0	23.55	23.50	23.42	23.63	23.53	24.7	
5	16QAM	1	0	23.60	23.53	23.37	23.66	23.59		
5	16QAM	1	12	23.61	23.60	23.51	23.73	23.68		
5	16QAM	1	24	23.61	23.55	23.49	23.68	23.54	23.7	
5	16QAM	12	0	22.55	22.49	22.38	22.64	22.52		
5	16QAM	12	7	22.55	22.52	22.43	22.66	22.57		
5	16QAM	12	13	22.53	22.50	22.40	22.65	22.52	23.7	
5	16QAM	25	0	22.35	22.35	22.18	22.41	22.30		
5	16QAM	1	12	22.38	22.36	22.20	22.47	22.28		
5	64QAM	1	24	22.38	22.36	22.23	22.46	22.23	22.7	
5	64QAM	12	0	21.61	21.53	21.50	21.67	21.57		
5	64QAM	12	7	21.63	21.58	21.50	21.70	21.61		
5	64QAM	12	13	21.58	21.57	21.46	21.73	21.64	22.7	
5	64QAM	25	0	21.61	21.56	21.46	21.69	21.60		



Band 41 HPUE										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.95	25.94	26.04	26.10	25.81	27.5	
20	QPSK	1	49	26.01	26.04	26.01	26.39	26.18		
20	QPSK	1	99	25.92	25.97	25.99	25.89	25.96		
20	QPSK	50	0	25.19	25.21	25.15	25.40	25.22	26.5	
20	QPSK	50	24	25.21	25.24	25.21	25.45	25.34		
20	QPSK	50	50	25.18	25.21	25.19	25.34	25.29		
20	QPSK	100	0	25.22	25.22	25.20	25.35	25.24	26.0	
20	16QAM	1	0	25.28	25.37	25.40	25.48	25.12		
20	16QAM	1	49	25.27	25.32	25.32	25.69	25.49		
20	16QAM	1	99	25.31	25.32	25.32	25.23	25.28	25.5	
20	16QAM	50	0	24.24	24.26	24.18	24.43	24.24		
20	16QAM	50	24	24.24	24.29	24.22	24.50	24.36		
20	16QAM	50	50	24.21	24.26	24.21	24.40	24.30	25.0	
20	16QAM	100	0	24.22	24.25	24.22	24.38	24.27		
20	64QAM	1	0	24.15	24.12	24.20	24.26	24.00		
20	64QAM	1	49	24.10	24.16	24.13	24.58	24.38	25.5	
20	64QAM	1	99	24.13	24.20	24.17	24.13	24.18		
20	64QAM	50	0	23.26	23.27	23.18	23.45	23.24		
20	64QAM	50	24	23.27	23.28	23.27	23.49	23.37	24.5	
20	64QAM	50	50	23.21	23.27	23.23	23.39	23.32		
20	64QAM	100	0	23.26	23.26	23.23	23.38	23.25		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.97	26.01	25.98	26.26	25.97	27.5	
15	QPSK	1	37	26.01	25.97	25.98	26.35	26.18		
15	QPSK	1	74	25.97	26.08	26.03	26.12	26.10		
15	QPSK	36	0	25.05	25.18	25.09	25.40	25.23	26.5	
15	QPSK	36	20	25.13	25.17	25.13	25.46	25.29		
15	QPSK	36	39	25.12	25.17	25.10	25.36	25.26		
15	QPSK	75	0	25.16	25.17	25.14	25.42	25.25	26.0	
15	16QAM	1	0	25.29	25.27	25.23	25.56	25.26		
15	16QAM	1	37	25.21	25.21	25.19	25.63	25.44		
15	16QAM	1	74	25.25	25.34	25.29	25.45	25.32	26.5	
15	16QAM	36	0	24.06	24.17	24.05	24.35	24.20		
15	16QAM	36	20	24.13	24.15	24.11	24.47	24.26		
15	16QAM	36	39	24.09	24.14	24.09	24.37	24.23	25.5	
15	16QAM	75	0	24.15	24.19	24.15	24.45	24.26		
15	64QAM	1	0	24.10	24.09	24.04	24.37	24.09		
15	64QAM	1	37	24.06	24.10	24.06	24.51	24.29	25.5	
15	64QAM	1	74	24.09	24.24	24.14	24.31	24.21		
15	64QAM	36	0	23.08	23.22	23.10	23.40	23.26		
15	64QAM	36	20	23.15	23.20	23.15	23.51	23.34	24.5	
15	64QAM	36	39	23.13	23.18	23.14	23.37	23.27		
15	64QAM	75	0	23.16	23.19	23.16	23.45	23.27		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.92	25.92	25.81	26.20	26.11	27.5	
10	QPSK	1	25	25.92	25.94	26.00	26.30	26.13		
10	QPSK	1	49	25.97	25.96	25.90	26.26	26.00		
10	QPSK	25	0	25.10	25.11	25.09	25.41	25.24	26.5	
10	QPSK	25	12	25.16	25.13	25.12	25.41	25.26		
10	QPSK	25	25	25.10	25.19	25.11	25.49	25.22		
10	QPSK	50	0	25.15	25.18	25.16	25.45	25.26	26.0	
10	16QAM	1	0	25.29	25.26	25.20	25.53	25.38		
10	16QAM	1	25	25.26	25.28	25.35	25.67	25.40		
10	16QAM	1	49	25.32	25.29	25.25	25.57	25.40	26.5	
10	16QAM	25	0	24.20	24.10	24.13	24.46	24.35		
10	16QAM	25	12	24.25	24.19	24.20	24.45	24.28		
10	16QAM	25	25	24.15	24.19	24.10	24.47	24.21	25.5	
10	16QAM	50	0	24.16	24.19	24.12	24.46	24.29		
10	64QAM	1	0	24.20	24.16	24.07	24.48	24.27		
10	64QAM	1	25	24.13	24.17	24.17	24.50	24.33	25.5	
10	64QAM	1	49	24.14	24.18	24.21	24.47	24.31		
10	64QAM	25	0	23.21	23.18	23.18	23.44	23.25		
10	64QAM	25	12	23.24	23.32	23.24	23.48	23.36	24.5	
10	64QAM	25	25	23.13	23.16	23.20	23.52	23.21		
10	64QAM	50	0	23.18	23.23	23.19	23.44	23.27		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2495.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	26.01	26.01	25.91	26.29	26.11	27.5	
5	QPSK	1	12	26.02	26.03	26.02	26.38	26.14		
5	QPSK	1	24	25.99	26.02	25.96	26.31	26.04		
5	QPSK	12	0	25.16	25.19	25.16	25.44	25.31	26.5	
5	QPSK	12	7	25.19	25.23	25.19	25.47	25.27		
5	QPSK	12	13	25.18	25.20	25.16	25.52	25.29		
5	QPSK	25	0	25.16	25.18	25.18	25.46	25.27	26.5	
5	16QAM	1	0	25.38	25.36	25.30	25.61	25.46		
5	16QAM	1	12	25.33	25.34	25.37	25.68	25.45		
5	16QAM	1	24	25.36	25.39	25.35	25.65	25.43	26.0	
5	16QAM	12	0	24.20	24.20	24.21	24.51	24.36		
5	16QAM	12	7	24.27	24.24	24.24	24.53	24.32		
5	16QAM	12	13	24.20	24.21	24.18	24.49	24.28	25.5	
5	16QAM	25	0	24.18	24.26	24.20	24.48	24.34		
5	64QAM	1	0	24.26	24.24	24.15	24.51	24.37		
5	64QAM	1	12	24.20	24.24	24.23	24.59	24.36	25.5	
5	64QAM	1	24	24.24	24.23	24.21	24.54	24.31		
5	64QAM	12	0	23.23	23.28	23.21	23.50	23.35		
5	64QAM	12	7	23.25	23.32	23.27	23.50	23.37	24.5	
5	64QAM	12	13	23.22	23.26	23.23	23.54	23.31		
5	64QAM	25	0	23.20	23.29	23.24	23.53	23.37		



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	24.21	24.24	24.10	24.13	25.2		
20	QPSK	1	49	24.02	24.06	23.89	23.89			
20	QPSK	1	99	23.99	23.98	23.84	23.82			
20	QPSK	50	0	23.24	23.27	23.16	23.16			
20	QPSK	50	24	23.21	23.13	23.07	23.07	24.2		
20	QPSK	50	50	23.05	23.08	22.94	22.94			
20	QPSK	100	0	23.15	23.18	23.10	23.10			
20	16QAM	1	0	23.33	23.38	23.25	23.28			
20	16QAM	1	49	23.12	23.15	22.99	22.98	24.2		
20	16QAM	1	99	23.10	23.09	22.96	22.96			
20	16QAM	50	0	22.27	22.28	22.19	22.20			
20	16QAM	50	24	22.23	22.17	22.13	22.14			
20	16QAM	50	50	22.08	22.11	21.97	21.97	23.2		
20	16QAM	100	0	22.21	22.14	22.12	22.10			
20	64QAM	1	0	22.04	22.12	22.00	22.00			
20	64QAM	1	49	21.86	21.87	21.78	21.75			
20	64QAM	1	99	21.83	21.79	21.65	21.68	22.2		
20	64QAM	50	0	21.27	21.30	21.19	21.19			
20	64QAM	50	24	21.23	21.17	21.15	21.14			
20	64QAM	50	50	21.09	21.11	20.98	20.98			
20	64QAM	100	0	21.21	21.17	21.12	21.12	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	24.20	24.16	24.05	24.07	25.2		
15	QPSK	1	37	23.95	24.02	23.86	23.84			
15	QPSK	1	74	23.98	23.92	23.78	23.81			
15	QPSK	36	0	23.23	23.25	23.06	23.10			
15	QPSK	36	20	23.14	23.07	23.00	23.04	24.2		
15	QPSK	36	39	23.03	23.04	22.91	22.90			
15	QPSK	75	0	23.09	23.07	23.07	23.04			
15	16QAM	1	0	23.29	23.28	23.18	23.24			
15	16QAM	1	37	23.08	23.14	22.97	22.92	24.2		
15	16QAM	1	74	23.06	23.00	22.89	22.91			
15	16QAM	36	0	22.18	22.23	22.13	22.13			
15	16QAM	36	20	22.18	22.10	22.13	22.13			
15	16QAM	36	39	22.04	22.01	21.92	21.91	23.2		
15	16QAM	75	0	22.18	22.14	22.05	22.03			
15	64QAM	1	0	21.97	22.09	21.93	21.97			
15	64QAM	1	37	21.82	21.86	21.76	21.70			
15	64QAM	1	74	21.80	21.77	21.56	21.67	22.2		
15	64QAM	36	0	21.20	21.30	21.10	21.13			
15	64QAM	36	20	21.21	21.09	21.06	21.05			
15	64QAM	36	39	21.05	21.09	20.94	20.88			
15	64QAM	75	0	21.21	21.10	21.09	21.11	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	24.11	24.17	24.02	24.12	25.2		
10	QPSK	1	25	24.02	23.99	23.87	23.79			
10	QPSK	1	49	23.94	23.90	23.75	23.72			
10	QPSK	25	0	23.14	23.20	23.09	23.13			
10	QPSK	25	12	23.11	23.06	23.04	22.97	24.2		
10	QPSK	25	25	22.97	23.03	22.86	22.85			
10	QPSK	50	0	23.17	23.05	23.03	23.05			
10	16QAM	1	0	23.27	23.29	23.17	23.28			
10	16QAM	1	25	23.06	23.11	22.97	22.90	24.2		
10	16QAM	1	49	23.00	23.01	22.94	22.86			
10	16QAM	25	0	22.21	22.24	22.15	22.11			
10	16QAM	25	12	22.18	22.17	22.10	22.14			
10	16QAM	25	25	22.08	22.09	21.88	21.88	23.2		
10	16QAM	50	0	22.12	22.08	22.11	22.00			
10	64QAM	1	0	22.02	22.07	21.95	21.90			
10	64QAM	1	25	21.86	21.79	21.77	21.71			
10	64QAM	1	49	21.80	21.70	21.57	21.55	22.2		
10	64QAM	25	0	21.18	21.26	21.15	21.10			
10	64QAM	25	12	21.23	21.12	21.12	21.08			
10	64QAM	25	25	21.06	21.01	20.98	20.94			
10	64QAM	50	0	21.13	21.09	21.09	21.05	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	24.12	24.19	24.10	24.10	25.2		
5	QPSK	1	12	23.99	23.99	23.86	23.79			
5	QPSK	1	24	23.99	23.96	23.80	23.80			
5	QPSK	12	0	23.17	23.22	23.09	23.09			
5	QPSK	12	7	23.11	23.10	23.04	23.00	24.2		
5	QPSK	12	13	22.95	23.05	22.92	22.87			
5	QPSK	25	0	23.09	23.04	23.02	23.00			
5	16QAM	1	0	23.32	23.30	23.19	23.18			
5	16QAM	1	12	23.04	23.13	22.97	22.93	24.2		
5	16QAM	1	24	23.10	23.07	22.94	22.87			
5	16QAM	12	0	22.25	22.21	22.09	22.20			
5	16QAM	12	7	22.16	22.09	22.03	22.12			
5	16QAM	12	13	22.01	22.11	21.96	21.88	23.2		
5	16QAM	25	0	22.15	22.10	22.04	22.10			
5	64QAM	1	0	21.96	22.10	21.91	21.90			
5	64QAM	1	12	21.86	21.85	21.75	21.67			
5	64QAM	1	24	21.77	21.72	21.57	21.64	22.2		
5	64QAM	12	0	21.19	21.23	21.19	21.15			
5	64QAM	12	7	21.15	21.17	21.11	21.07			
5	64QAM	12	13	21.06	21.11	20.89	20.97			
5	64QAM	25	0	21.16	21.09	21.02	21.02	Tune-up limit (dBm)		

Band 38							
Ann 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.16	24.06	24.03	25.7
20	QPSK	1	49	24.08	24.02	23.96	
20	QPSK	1	99	24.06	23.99	23.92	
20	QPSK	50	0	23.25	23.14	23.06	
20	QPSK	50	24	23.24	23.12	23.11	
20	QPSK	50	50	23.20	23.14	23.07	24.7
20	QPSK	100	0	23.23	23.10	23.11	
20	16QAM	1	0	23.23	23.16	23.08	
20	16QAM	1	49	23.16	23.12	23.03	24.7
20	16QAM	1	99	23.14	23.12	23.01	
20	16QAM	50	0	22.29	22.16	22.07	
20	16QAM	50	24	22.25	22.14	22.13	23.7
20	16QAM	50	50	22.24	22.17	22.09	
20	16QAM	100	0	22.25	22.13	22.11	
20	64QAM	1	0	21.95	21.88	21.77	23.7
20	64QAM	1	49	21.90	21.84	21.75	
20	64QAM	1	99	21.88	21.83	21.72	
20	64QAM	50	0	21.30	21.18	21.09	22.7
20	64QAM	50	24	21.27	21.13	21.14	
20	64QAM	50	50	21.26	21.19	21.10	
20	64QAM	100	0	21.26	21.13	21.12	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.09	24.04	23.96	25.7
15	QPSK	1	37	24.03	24.01	23.91	
15	QPSK	1	74	24.07	24.02	23.92	
15	QPSK	36	0	23.25	23.12	23.03	
15	QPSK	36	20	23.24	23.08	23.01	
15	QPSK	36	39	23.19	23.15	23.04	24.7
15	QPSK	75	0	23.21	23.08	23.02	
15	16QAM	1	0	23.23	23.17	23.10	
15	16QAM	1	37	23.06	23.03	22.98	24.7
15	16QAM	1	74	23.19	23.14	23.06	
15	16QAM	36	0	22.22	22.10	22.02	
15	16QAM	36	20	22.20	22.05	21.96	23.7
15	16QAM	36	39	22.16	22.11	22.02	
15	16QAM	75	0	22.25	22.11	22.03	
15	64QAM	1	0	21.88	21.84	21.73	
15	64QAM	1	37	21.94	21.84	21.77	23.7
15	64QAM	1	74	21.89	21.83	21.73	
15	64QAM	36	0	21.26	21.14	21.07	
15	64QAM	36	20	21.24	21.10	21.00	22.7
15	64QAM	36	39	21.25	21.17	21.06	
15	64QAM	75	0	21.25	21.12	21.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.09	23.99	23.91	25.7
10	QPSK	1	25	24.00	23.96	23.91	
10	QPSK	1	49	24.03	24.01	23.91	
10	QPSK	25	0	23.15	23.12	23.01	
10	QPSK	25	12	23.19	23.07	22.99	
10	QPSK	25	25	23.10	23.13	22.99	24.7
10	QPSK	50	0	23.11	23.03	22.95	
10	16QAM	1	0	23.13	23.08	23.03	
10	16QAM	1	25	23.04	22.97	22.94	24.7
10	16QAM	1	49	23.10	23.08	23.02	
10	16QAM	25	0	22.17	22.00	21.97	
10	16QAM	25	12	22.13	21.96	21.91	23.7
10	16QAM	25	25	22.10	22.06	22.00	
10	16QAM	50	0	22.20	22.02	21.99	
10	64QAM	1	0	21.86	21.76	21.70	
10	64QAM	1	25	21.92	21.79	21.70	23.7
10	64QAM	1	49	21.83	21.75	21.70	
10	64QAM	25	0	21.19	21.12	21.05	
10	64QAM	25	12	21.18	21.08	21.00	22.7
10	64QAM	25	25	21.19	21.11	21.01	
10	64QAM	50	0	21.17	21.04	21.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.15	24.05	23.94	25.7
5	QPSK	1	12	24.09	24.02	23.94	
5	QPSK	1	24	24.10	23.99	23.95	
5	QPSK	12	0	23.21	23.11	23.08	
5	QPSK	12	7	23.26	23.20	23.06	
5	QPSK	12	13	23.20	23.18	23.05	24.7
5	QPSK	25	0	23.25	23.09	23.06	
5	16QAM	1	0	23.28	23.17	23.11	
5	16QAM	1	12	23.28	23.26	23.18	24.7
5	16QAM	1	24	23.28	23.22	23.12	
5	16QAM	12	0	22.21	22.09	22.05	
5	16QAM	12	7	22.23	22.13	22.06	23.7
5	16QAM	12	13	22.18	22.13	22.02	
5	16QAM	25	0	22.24	22.14	22.10	
5	64QAM	1	0	21.80	21.74	21.70	23.7
5	64QAM	1	12	21.90	21.84	21.76	
5	64QAM	1	24	21.81	21.82	21.70	
5	64QAM	12	0	21.27	21.07	20.97	22.7
5	64QAM	12	7	21.20	21.02	20.91	
5	64QAM	12	13	21.19	21.14	21.05	
5	64QAM	25	0	21.19	21.02	20.97	



Band 41										
Ant 2										
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low-Middle Ch / Freq	Power Middle Ch / Freq	Power High-Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.84	23.81	23.87	23.85	23.52	25.7	
20	QPSK	1	49	23.85	23.79	23.76	24.08	23.88		
20	QPSK	1	99	23.84	23.79	23.82	23.58	23.75		
20	QPSK	50	0	23.05	22.96	22.85	23.02	22.86	24.7	
20	QPSK	50	24	23.04	22.97	22.93	23.06	22.98		
20	QPSK	50	50	22.88	22.94	22.90	22.98	22.93		
20	QPSK	100	0	23.04	22.96	22.91	23.05	22.89	24.7	
20	16QAM	1	0	23.06	22.93	22.96	22.98	22.83		
20	16QAM	1	49	22.97	22.92	22.87	23.18	22.98		
20	16QAM	1	99	22.97	22.97	22.94	22.70	22.84	23.7	
20	16QAM	50	0	22.08	22.00	21.90	22.06	21.87		
20	16QAM	50	24	22.10	22.01	21.96	22.08	22.01		
20	16QAM	50	50	22.03	21.98	21.94	22.01	21.96	23.7	
20	16QAM	100	0	22.06	21.98	21.95	21.99	21.91		
20	64QAM	1	0	21.82	21.66	21.68	21.59	21.40		
20	64QAM	1	49	21.73	21.71	21.65	21.83	21.80	22.7	
20	64QAM	1	99	21.74	21.75	21.66	21.43	21.61		
20	64QAM	50	0	21.10	21.02	20.92	21.07	20.90		
20	64QAM	50	24	21.11	21.01	20.97	21.12	20.99	Tune-up limit (dBm)	
20	64QAM	50	50	21.02	20.98	20.95	21.03	20.96		
20	64QAM	100	0	21.07	21.01	20.98	21.01	20.93		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.90	23.82	23.79	23.94	23.70	25.7	
15	QPSK	1	37	23.85	23.76	23.72	24.02	23.86		
15	QPSK	1	74	23.84	23.86	23.84	23.77	23.82		
15	QPSK	36	0	22.83	22.95	22.85	23.06	22.90	24.7	
15	QPSK	36	20	23.02	22.91	22.91	23.12	22.99		
15	QPSK	36	39	22.88	22.94	22.89	23.03	22.95		
15	QPSK	75	0	23.03	22.95	22.93	23.07	22.95	24.7	
15	16QAM	1	0	23.09	22.99	22.98	23.10	22.78		
15	16QAM	1	37	22.93	22.90	22.82	23.13	22.96		
15	16QAM	1	74	23.00	23.05	23.00	22.94	22.95	23.7	
15	16QAM	36	0	21.95	21.93	21.82	22.01	21.85		
15	16QAM	36	20	22.03	21.90	21.89	22.09	21.95		
15	16QAM	36	39	21.97	21.91	21.86	22.00	21.92	23.7	
15	16QAM	75	0	22.05	21.97	21.93	22.09	21.96		
15	64QAM	1	0	21.79	21.79	21.73	21.76	21.71		
15	64QAM	1	37	21.74	21.72	21.70	21.90	21.73	22.7	
15	64QAM	1	74	21.74	21.86	21.71	21.75	21.78		
15	64QAM	36	0	20.87	20.99	20.90	21.07	20.82		
15	64QAM	36	20	21.02	20.97	20.93	21.14	21.01	Tune-up limit (dBm)	
15	64QAM	36	39	21.01	20.97	20.94	21.07	20.96		
15	64QAM	75	0	21.09	20.97	20.94	21.11	20.95		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.88	23.75	23.72	23.84	23.70	25.7	
10	QPSK	1	25	23.83	23.70	23.70	23.94	23.84		
10	QPSK	1	49	23.75	23.78	23.84	23.77	23.74		
10	QPSK	25	0	22.81	22.91	22.82	23.04	22.89	24.7	
10	QPSK	25	12	22.82	22.81	22.91	23.02	22.97		
10	QPSK	25	25	22.89	22.86	22.87	22.84	22.86		
10	QPSK	50	0	22.94	22.85	22.92	23.05	22.95	24.7	
10	16QAM	1	0	23.04	22.97	22.92	23.05	22.70		
10	16QAM	1	25	22.83	22.90	22.72	23.12	22.87		
10	16QAM	1	49	22.83	23.00	22.99	22.92	22.87	23.7	
10	16QAM	25	0	21.81	21.92	21.74	21.91	21.85		
10	16QAM	25	12	22.01	21.81	21.85	22.06	21.85		
10	16QAM	25	25	21.94	21.89	21.78	21.98	21.83	23.7	
10	16QAM	50	0	21.97	21.96	21.86	22.02	21.91		
10	64QAM	1	0	21.76	21.70	21.74	21.79	21.71		
10	64QAM	1	25	21.72	21.77	21.75	21.81	21.77	22.7	
10	64QAM	1	49	21.70	21.79	21.70	21.79	21.70		
10	64QAM	25	0	20.87	20.93	20.80	21.07	20.84		
10	64QAM	25	12	20.99	20.88	20.92	21.10	20.97	Tune-up limit (dBm)	
10	64QAM	25	25	20.87	20.87	20.89	21.00	20.92		
10	64QAM	50	0	21.03	20.87	20.84	21.08	20.89		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.04	23.87	23.75	24.02	23.89	25.7	
5	QPSK	1	12	23.95	23.87	23.86	24.04	23.88		
5	QPSK	1	24	23.88	23.85	23.81	24.02	23.79		
5	QPSK	12	0	23.09	22.98	22.96	23.15	23.03	24.7	
5	QPSK	12	7	23.09	23.01	22.95	23.17	23.02		
5	QPSK	12	13	23.07	22.96	22.95	23.17	23.03		
5	QPSK	25	0	23.08	22.98	22.92	23.12	22.98	24.7	
5	16QAM	1	0	23.12	22.99	22.92	23.13	23.02		
5	16QAM	1	12	23.15	23.03	23.04	23.26	23.11		
5	16QAM	1	24	23.14	23.00	23.00	23.18	23.01	23.7	
5	16QAM	12	0	22.07	21.97	21.94	22.11	22.03		
5	16QAM	12	7	22.09	22.01	21.97	22.13	22.00		
5	16QAM	12	13	22.06	21.98	21.95	22.12	21.97	22.7	
5	16QAM	25	0	22.14	22.03	21.99	22.14	22.02		
5	64QAM	1	0	21.83	21.95	21.88	21.91	21.88		
5	64QAM	1	12	21.88	21.84	21.86	22.00	21.90	23.7	
5	64QAM	1	24	21.94	22.02	21.86	21.95	21.88		
5	64QAM	12	0	21.16	21.13	21.04	21.27	21.06		
5	64QAM	12	7	21.14	21.10	21.13	21.25	21.20	22.7	
5	64QAM	12	13	21.18	21.13	21.06	21.19	21.11		
5	64QAM	25	0	21.27	21.15	21.08	21.21	21.08		



Band 41 HPUE									
Ant 9									
6W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low-Middle Ch / Freq	Power Middle Ch / Freq	Power High-Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.71	25.60	25.64	25.74	25.50	27.5
20	QPSK	1	49	25.74	25.66	25.64	26.04	25.86	
20	QPSK	1	99	25.81	25.58	25.61	25.50	25.64	
20	QPSK	50	0	24.93	24.86	24.76	25.02	24.88	26.5
20	QPSK	50	24	24.94	24.85	24.84	25.09	25.00	
20	QPSK	50	50	24.86	24.83	24.82	25.01	24.97	
20	QPSK	100	0	24.82	24.86	24.83	24.95	24.90	26.5
20	16QAM	1	0	25.07	24.95	25.03	25.13	24.75	
20	16QAM	1	49	24.99	24.95	24.92	25.34	25.14	
20	16QAM	1	99	24.97	24.92	24.94	24.82	24.98	25.5
20	16QAM	50	0	23.94	23.89	23.79	24.07	23.89	
20	16QAM	50	24	23.96	23.91	23.87	24.11	24.01	
20	16QAM	50	50	23.81	23.88	23.86	24.01	23.98	24.5
20	16QAM	100	0	23.97	23.88	23.87	23.98	23.94	
20	64QAM	1	0	23.88	23.75	23.80	23.88	23.64	
20	64QAM	1	49	23.80	23.79	23.74	24.20	23.99	24.5
20	64QAM	1	99	23.82	23.80	23.79	23.70	23.86	
20	64QAM	50	0	22.99	22.89	22.81	23.09	22.93	
20	64QAM	50	24	22.96	22.91	22.86	23.10	23.03	24.5
20	64QAM	50	50	22.92	22.89	22.86	23.05	23.01	
20	64QAM	100	0	22.96	22.90	22.87	23.01	22.94	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	(dBm)
15	QPSK	1	0	25.80	25.70	25.65	25.91	25.65	27.5
15	QPSK	1	37	25.76	25.64	25.60	26.02	25.84	
15	QPSK	1	74	25.69	25.76	25.72	25.74	25.79	
15	QPSK	36	0	24.83	24.86	24.75	25.05	24.90	26.5
15	QPSK	36	20	24.91	24.82	24.82	25.12	24.99	
15	QPSK	36	39	24.86	24.82	24.80	25.02	24.95	
15	QPSK	75	0	24.83	24.84	24.83	25.08	24.95	26.5
15	16QAM	1	0	25.08	25.00	24.98	25.21	24.97	
15	16QAM	1	37	24.97	24.91	24.83	25.28	25.15	
15	16QAM	1	74	24.95	25.03	24.98	25.06	25.08	25.5
15	16QAM	36	0	23.84	23.86	23.75	24.04	23.87	
15	16QAM	36	20	23.89	23.83	23.80	24.12	23.96	
15	16QAM	36	39	23.85	23.83	23.77	24.02	23.96	25.5
15	16QAM	75	0	23.94	23.87	23.82	24.10	23.95	
15	64QAM	1	0	23.87	23.76	23.70	24.04	23.77	
15	64QAM	1	37	23.86	23.79	23.71	24.19	23.97	24.5
15	64QAM	1	74	23.84	23.89	23.82	23.90	23.95	
15	64QAM	36	0	22.86	22.87	22.77	23.06	22.84	
15	64QAM	36	20	22.96	22.85	22.82	23.16	23.01	24.5
15	64QAM	36	39	22.92	22.85	22.81	23.04	22.97	
15	64QAM	75	0	22.95	22.88	22.86	23.10	22.96	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	(dBm)
10	QPSK	1	0	25.80	25.66	25.54	25.82	25.81	27.5
10	QPSK	1	25	25.72	25.61	25.64	25.99	25.85	
10	QPSK	1	49	25.67	25.68	25.58	25.97	25.69	
10	QPSK	25	0	24.93	24.78	24.87	25.13	25.03	26.5
10	QPSK	25	12	25.00	24.86	24.87	25.12	24.99	
10	QPSK	25	25	24.92	24.83	24.79	25.15	24.99	
10	QPSK	50	0	24.92	24.78	24.88	25.11	25.00	26.5
10	16QAM	1	0	25.12	25.05	24.90	25.26	25.10	
10	16QAM	1	25	25.12	24.95	24.93	25.25	25.18	
10	16QAM	1	49	25.16	24.97	25.02	25.30	25.05	25.5
10	16QAM	25	0	24.00	23.85	23.84	24.11	23.98	
10	16QAM	25	12	24.07	23.95	23.87	24.13	24.10	
10	16QAM	25	25	23.91	23.85	23.85	24.12	24.00	24.5
10	16QAM	50	0	23.92	23.84	23.91	24.17	24.06	
10	64QAM	1	0	24.05	23.82	23.86	24.20	24.06	
10	64QAM	1	25	23.93	23.85	23.91	24.20	24.03	24.5
10	64QAM	1	49	23.97	23.95	23.86	24.15	24.04	
10	64QAM	25	0	23.02	22.86	22.90	23.12	23.08	
10	64QAM	25	12	23.04	22.96	22.94	23.14	23.02	24.5
10	64QAM	25	25	22.94	22.84	22.91	23.21	23.01	
10	64QAM	50	0	22.97	22.96	22.84	23.10	23.03	
Channel				39875	40148	40620	41093	41555	Tune-up limit (dBm)
Frequency (MHz)				2495.5	2545.8	2593	2640.0	2687.5	(dBm)
5	QPSK	1	0	25.84	25.69	25.61	25.94	25.85	27.5
5	QPSK	1	12	25.82	25.68	25.74	26.03	25.87	
5	QPSK	1	24	25.77	25.68	25.66	25.98	25.75	
5	QPSK	12	0	24.99	24.87	24.88	25.18	25.07	26.5
5	QPSK	12	7	25.00	24.91	24.90	25.20	25.06	
5	QPSK	12	13	24.98	24.89	24.87	25.24	25.00	
5	QPSK	25	0	24.98	24.88	24.88	25.14	25.02	26.5
5	16QAM	1	0	25.19	25.05	24.98	25.29	25.18	
5	16QAM	1	12	25.14	25.05	25.03	25.35	25.18	
5	16QAM	1	24	25.16	25.05	25.05	25.31	25.13	25.5
5	16QAM	12	0	24.02	23.90	23.92	24.20	24.07	
5	16QAM	12	7	24.07	23.95	23.96	24.23	24.13	
5	16QAM	12	13	24.01	23.92	23.90	24.21	24.04	24.5
5	16QAM	25	0	24.02	23.94	23.91	24.20	24.10	
5	64QAM	1	0	24.06	23.91	23.87	24.20	24.07	
5	64QAM	1	12	24.03	23.92	23.91	24.25	24.07	24.5
5	64QAM	1	24	24.04	23.95	23.94	24.22	24.05	
5	64QAM	12	0	23.07	22.94	22.92	23.22	23.13	
5	64QAM	12	7	23.05	22.98	22.95	23.24	23.11	24.5
5	64QAM	12	13	23.03	22.94	22.94	23.26	23.07	
5	64QAM	25	0	23.04	22.97	22.93	23.20	23.09	



Band 48 (3.5G Band)										
Ann 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	56160	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	20.81	20.91	20.73	20.73	22.3		
20	QPSK	1	49	20.66	20.68	20.51	20.50			
20	QPSK	1	99	20.59	20.64	20.45	20.44			
20	QPSK	50	0	20.65	20.66	20.54	20.55			
20	QPSK	50	24	20.60	20.52	20.50	20.48	21.3		
20	QPSK	50	50	20.48	20.46	20.32	20.32			
20	QPSK	100	0	20.58	20.53	20.48	20.49			
20	16QAM	1	0	20.69	20.77	20.64	20.68			
20	16QAM	1	49	20.51	20.50	20.42	20.39	21.3		
20	16QAM	1	99	20.52	20.50	20.33	20.36			
20	16QAM	50	0	19.69	19.69	19.58	19.57			
20	16QAM	50	24	19.64	19.57	19.51	19.52			
20	16QAM	50	50	19.52	19.51	19.34	19.36	20.3		
20	16QAM	100	0	19.64	19.56	19.51	19.51			
20	64QAM	1	0	19.42	19.53	19.40	19.41			
20	64QAM	1	49	19.31	19.31	19.32	19.33			
20	64QAM	1	99	19.30	19.31	19.33	19.35	19.3		
20	64QAM	50	0	18.67	18.73	18.59	18.58			
20	64QAM	50	24	18.67	18.59	18.52	18.53			
20	64QAM	50	50	18.52	18.52	18.37	18.37			
20	64QAM	100	0	18.64	18.56	18.50	18.51	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	20.72	20.77	20.60	20.34	22.3		
15	QPSK	1	37	20.63	20.65	20.47	20.31			
15	QPSK	1	74	20.62	20.64	20.45	20.30			
15	QPSK	36	0	20.61	20.65	20.52	20.34			
15	QPSK	36	20	20.59	20.58	20.46	20.30	21.3		
15	QPSK	36	39	20.47	20.46	20.30	20.31			
15	QPSK	75	0	20.52	20.62	20.47	20.33			
15	16QAM	1	0	20.64	20.70	20.61	20.32			
15	16QAM	1	37	20.42	20.49	20.32	20.31	21.3		
15	16QAM	1	74	20.55	20.56	20.40	20.33			
15	16QAM	36	0	19.60	19.62	19.49	19.19			
15	16QAM	36	20	19.55	19.54	19.42	19.12			
15	16QAM	36	39	19.44	19.42	19.27	19.06	20.3		
15	16QAM	75	0	19.53	19.60	19.48	19.18			
15	64QAM	1	0	19.36	19.47	19.35	19.06			
15	64QAM	1	37	19.28	19.31	19.17	18.88			
15	64QAM	1	74	19.25	19.29	19.11	18.80	19.3		
15	64QAM	36	0	18.64	18.67	18.54	18.27			
15	64QAM	36	20	18.61	18.60	18.47	18.16			
15	64QAM	36	39	18.50	18.47	18.35	18.09			
15	64QAM	75	0	18.53	18.62	18.47	18.19	Tune-up limit (dBm)		
Channel				55290	55815	56165	56660			
Frequency (MHz)				3555	3607.5	3642.5	3693			
10	QPSK	1	0	20.67	20.76	20.60	20.32	22.3		
10	QPSK	1	25	20.55	20.62	20.41	20.31			
10	QPSK	1	49	20.60	20.60	20.39	20.32			
10	QPSK	25	0	20.60	20.62	20.52	20.38			
10	QPSK	25	12	20.59	20.50	20.46	20.35	21.3		
10	QPSK	25	25	20.44	20.44	20.30	20.33			
10	QPSK	50	0	20.47	20.58	20.39	20.31			
10	16QAM	1	0	20.61	20.65	20.53	20.30			
10	16QAM	1	25	20.36	20.46	20.31	20.33	21.3		
10	16QAM	1	49	20.50	20.52	20.36	20.32			
10	16QAM	25	0	19.54	19.61	19.49	19.12			
10	16QAM	25	12	19.45	19.53	19.37	19.11			
10	16QAM	25	25	19.34	19.34	19.25	19.04	20.3		
10	16QAM	50	0	19.44	19.59	19.48	19.08			
10	64QAM	1	0	19.32	19.42	19.34	19.03			
10	64QAM	1	25	19.27	19.25	19.08	18.87			
10	64QAM	1	49	19.16	19.29	19.09	18.81	19.3		
10	64QAM	25	0	18.56	18.66	18.51	18.17			
10	64QAM	25	12	18.52	18.56	18.44	18.09			
10	64QAM	25	25	18.40	18.38	18.33	18.07			
10	64QAM	50	0	18.49	18.57	18.37	18.12	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3693.5			
5	QPSK	1	0	20.70	20.74	20.53	20.34	22.3		
5	QPSK	1	12	20.59	20.57	20.47	20.31			
5	QPSK	1	24	20.54	20.61	20.36	20.32			
5	QPSK	12	0	20.54	20.62	20.48	20.36			
5	QPSK	12	7	20.59	20.53	20.41	20.33	21.3		
5	QPSK	12	13	20.38	20.42	20.35	20.34			
5	QPSK	25	0	20.50	20.52	20.47	20.32			
5	16QAM	1	0	20.63	20.67	20.58	20.32			
5	16QAM	1	12	20.42	20.41	20.31	20.30	21.3		
5	16QAM	1	24	20.50	20.46	20.35	20.31			
5	16QAM	12	0	19.51	19.56	19.39	19.18			
5	16QAM	12	7	19.45	19.49	19.35	19.09			
5	16QAM	12	13	19.37	19.41	19.21	19.04	20.3		
5	16QAM	25	0	19.52	19.51	19.42	19.10			
5	64QAM	1	0	19.28	19.42	19.31	18.98			
5	64QAM	1	12	19.19	19.31	19.13	18.83			
5	64QAM	1	24	19.17	19.29	19.10	18.81	19.3		
5	64QAM	12	0	18.60	18.62	18.47	18.24			
5	64QAM	12	7	18.53	18.53	18.46	18.14			
5	64QAM	12	13	18.42	18.46	18.36	18.00			
5	64QAM	25	0	18.43	18.61	18.42	18.15	Tune-up limit (dBm)		



Band 38							
Ann 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	24.95	24.88	24.81	25.7
20	QPSK	1	49	24.94	24.82	24.75	
20	QPSK	1	99	24.93	24.78	24.75	
20	QPSK	50	0	24.19	24.05	23.86	
20	QPSK	50	24	24.17	24.04	24.00	
20	QPSK	50	50	24.03	24.05	23.91	24.7
20	QPSK	100	0	24.11	23.94	23.93	
20	16QAM	1	0	24.07	24.04	23.89	
20	16QAM	1	49	24.07	23.85	23.82	24.7
20	16QAM	1	99	23.95	23.97	23.90	
20	16QAM	50	0	23.16	23.06	22.97	
20	16QAM	50	24	23.17	23.00	22.93	23.7
20	16QAM	50	50	23.08	23.06	22.99	
20	16QAM	100	0	23.11	23.01	22.95	
20	64QAM	1	0	22.81	22.78	22.67	23.7
20	64QAM	1	49	22.71	22.71	22.77	
20	64QAM	1	99	22.68	22.82	22.78	
20	64QAM	50	0	22.15	22.02	21.92	22.7
20	64QAM	50	24	22.14	22.04	22.04	
20	64QAM	50	50	22.08	22.09	21.91	
20	64QAM	100	0	22.08	21.96	22.05	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.92	24.90	24.81	25.7
15	QPSK	1	37	24.91	24.87	24.80	
15	QPSK	1	74	24.90	24.81	24.78	
15	QPSK	36	0	24.18	23.95	23.89	
15	QPSK	36	20	24.14	24.00	23.91	
15	QPSK	36	39	24.07	24.05	23.90	24.7
15	QPSK	75	0	24.06	24.00	23.82	
15	16QAM	1	0	24.07	24.03	23.92	
15	16QAM	1	37	23.92	23.82	23.86	24.7
15	16QAM	1	74	23.96	23.92	23.87	
15	16QAM	36	0	23.07	22.98	22.86	
15	16QAM	36	20	23.01	22.94	22.81	23.7
15	16QAM	36	39	23.04	22.97	22.92	
15	16QAM	75	0	23.13	22.97	22.88	
15	64QAM	1	0	22.75	22.74	22.75	23.7
15	64QAM	1	37	22.74	22.82	22.75	
15	64QAM	1	74	22.70	22.71	22.72	
15	64QAM	36	0	22.14	22.02	21.86	22.7
15	64QAM	36	20	22.08	21.98	21.93	
15	64QAM	36	39	22.16	22.03	21.92	
15	64QAM	75	0	22.16	21.95	21.86	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.91	24.78	24.80	25.7
10	QPSK	1	25	24.81	24.78	24.76	
10	QPSK	1	49	24.85	24.71	24.65	
10	QPSK	25	0	24.13	23.95	23.83	
10	QPSK	25	12	24.04	23.87	23.71	
10	QPSK	25	25	24.06	23.98	23.79	24.7
10	QPSK	50	0	23.99	23.96	23.90	
10	16QAM	1	0	24.02	23.97	23.87	
10	16QAM	1	25	23.92	23.83	23.72	24.7
10	16QAM	1	49	23.88	23.95	23.91	
10	16QAM	25	0	23.08	22.91	22.84	
10	16QAM	25	12	23.04	22.90	22.89	23.7
10	16QAM	25	25	23.02	22.93	22.89	
10	16QAM	50	0	23.11	22.95	22.77	
10	64QAM	1	0	22.75	22.69	22.69	23.7
10	64QAM	1	25	22.70	22.77	22.72	
10	64QAM	1	49	22.77	22.78	22.73	
10	64QAM	25	0	22.11	21.96	21.85	22.7
10	64QAM	25	12	22.11	21.94	21.85	
10	64QAM	25	25	22.11	21.98	21.80	
10	64QAM	50	0	22.12	21.92	21.84	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.90	24.92	24.77	25.7
5	QPSK	1	12	24.93	24.92	24.78	
5	QPSK	1	24	24.91	24.92	24.76	
5	QPSK	12	0	24.16	23.96	23.94	
5	QPSK	12	7	24.13	24.04	23.94	
5	QPSK	12	13	24.09	24.02	23.96	24.7
5	QPSK	25	0	24.17	24.04	23.92	
5	16QAM	1	0	24.23	24.02	23.93	
5	16QAM	1	12	24.22	24.10	23.95	24.7
5	16QAM	1	24	24.19	24.14	24.05	
5	16QAM	12	0	23.14	22.96	22.88	
5	16QAM	12	7	23.13	23.13	22.93	23.7
5	16QAM	12	13	23.12	23.07	22.90	
5	16QAM	25	0	23.12	22.99	22.99	
5	64QAM	1	0	22.92	22.80	22.74	23.7
5	64QAM	1	12	22.93	22.87	22.72	
5	64QAM	1	24	22.92	22.85	22.78	
5	64QAM	12	0	22.17	22.04	22.00	22.7
5	64QAM	12	7	22.21	22.07	22.02	
5	64QAM	12	13	22.17	22.10	21.97	
5	64QAM	25	0	22.24	22.04	22.00	



Band 41										
Ant. 2										
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.36	24.32	24.31	24.29	24.12	25.7	
20	QPSK	1	49	24.33	24.31	24.18	24.57	24.42		
20	QPSK	1	99	24.33	24.30	24.25	24.12	24.27		
20	QPSK	50	0	23.53	23.47	23.28	23.52	23.42	24.7	
20	QPSK	50	24	23.54	23.48	23.35	23.57	23.55		
20	QPSK	50	50	23.48	23.44	23.34	23.51	23.50		
20	QPSK	100	0	23.52	23.48	23.36	23.53	23.44	24.7	
20	16QAM	1	0	23.52	23.45	23.45	23.44	23.23		
20	16QAM	1	49	23.45	23.43	23.32	23.65	23.52		
20	16QAM	1	99	23.47	23.47	23.35	23.26	23.35	23.7	
20	16QAM	50	0	22.56	22.48	22.33	22.56	22.45		
20	16QAM	50	24	22.56	22.51	22.41	22.59	22.54		
20	16QAM	50	50	22.52	22.46	22.36	22.52	22.53	23.7	
20	16QAM	100	0	22.54	22.50	22.39	22.49	22.47		
20	64QAM	1	0	22.26	22.14	22.13	22.10	21.89		
20	64QAM	1	49	22.19	22.22	22.04	22.46	22.27	22.7	
20	64QAM	1	99	22.19	22.25	22.08	22.02	22.03		
20	64QAM	50	0	21.55	21.50	21.35	21.55	21.44		
20	64QAM	50	24	21.57	21.51	21.40	21.60	21.56	Tune-up limit (dBm)	
20	64QAM	50	50	21.52	21.48	21.38	21.50	21.53		
20	64QAM	100	0	21.56	21.50	21.41	21.51	21.47		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.36	24.32	24.25	24.42	24.22	25.7	
15	QPSK	1	37	24.32	24.25	24.18	24.53	24.39		
15	QPSK	1	74	24.34	24.36	24.27	24.27	24.35		
15	QPSK	36	0	23.41	23.47	23.31	23.53	23.47	24.7	
15	QPSK	36	20	23.51	23.45	23.37	23.64	23.51		
15	QPSK	36	39	23.46	23.44	23.33	23.53	23.47		
15	QPSK	75	0	23.50	23.46	23.36	23.58	23.47	24.7	
15	16QAM	1	0	23.53	23.48	23.43	23.56	23.36		
15	16QAM	1	37	23.41	23.39	23.25	23.65	23.52		
15	16QAM	1	74	23.49	23.57	23.45	23.46	23.44	23.7	
15	16QAM	36	0	22.40	22.46	22.27	22.48	22.40		
15	16QAM	36	20	22.47	22.45	22.33	22.60	22.48		
15	16QAM	36	39	22.45	22.42	22.31	22.53	22.46	23.7	
15	16QAM	75	0	22.52	22.48	22.38	22.59	22.49		
15	64QAM	1	0	22.24	22.18	22.07	22.26	22.05		
15	64QAM	1	37	22.22	22.20	22.07	22.42	22.27	22.7	
15	64QAM	1	74	22.17	22.34	22.15	22.21	22.16		
15	64QAM	36	0	21.44	21.49	21.34	21.56	21.47		
15	64QAM	36	20	21.54	21.47	21.38	21.65	21.57	Tune-up limit (dBm)	
15	64QAM	36	39	21.48	21.48	21.36	21.57	21.51		
15	64QAM	75	0	21.54	21.48	21.39	21.61	21.51		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.25	24.32	24.17	24.41	24.12	25.7	
10	QPSK	1	25	24.24	24.24	24.09	24.48	24.33		
10	QPSK	1	49	24.29	24.33	24.20	24.21	24.31		
10	QPSK	25	0	23.38	23.37	23.21	23.49	23.39	24.7	
10	QPSK	25	12	23.42	23.35	23.29	23.57	23.47		
10	QPSK	25	25	23.39	23.43	23.27	23.48	23.39		
10	QPSK	50	0	23.48	23.43	23.35	23.56	23.41	24.7	
10	16QAM	1	0	23.45	23.42	23.33	23.56	23.32		
10	16QAM	1	25	23.37	23.29	23.23	23.64	23.48		
10	16QAM	1	49	23.47	23.47	23.43	23.40	23.41	23.7	
10	16QAM	25	0	22.35	22.49	22.21	22.47	22.39		
10	16QAM	25	12	22.45	22.37	22.21	22.52	22.44		
10	16QAM	25	25	22.39	22.40	22.28	22.48	22.44	23.7	
10	16QAM	50	0	22.46	22.44	22.28	22.57	22.47		
10	64QAM	1	0	22.18	22.09	22.05	22.19	22.05		
10	64QAM	1	25	22.12	22.20	22.03	22.37	22.24	22.7	
10	64QAM	1	49	22.06	22.30	22.07	22.17	22.12		
10	64QAM	25	0	21.37	21.47	21.24	21.55	21.40		
10	64QAM	25	12	21.47	21.38	21.37	21.63	21.47	Tune-up limit (dBm)	
10	64QAM	25	25	21.43	21.44	21.26	21.49	21.46		
10	64QAM	50	0	21.50	21.43	21.35	21.58	21.51		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2493.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.48	24.36	24.27	24.54	24.46	25.7	
5	QPSK	1	12	24.46	24.39	24.32	24.56	24.43		
5	QPSK	1	24	24.39	24.38	24.25	24.52	24.33		
5	QPSK	12	0	23.57	23.52	23.43	23.64	23.57	24.7	
5	QPSK	12	7	23.57	23.52	23.47	23.67	23.56		
5	QPSK	12	13	23.56	23.48	23.44	23.68	23.51		
5	QPSK	25	0	23.55	23.50	23.42	23.63	23.53	24.7	
5	16QAM	1	0	23.60	23.53	23.37	23.66	23.59		
5	16QAM	1	12	23.61	23.60	23.51	23.73	23.68		
5	16QAM	1	24	23.61	23.55	23.49	23.68	23.54	23.7	
5	16QAM	12	0	22.55	22.49	22.38	22.64	22.52		
5	16QAM	12	7	22.55	22.52	22.43	22.66	22.57		
5	16QAM	12	13	22.53	22.50	22.40	22.65	22.52	22.7	
5	16QAM	25	0	22.60	22.54	22.45	22.65	22.58		
5	64QAM	1	0	22.35	22.35	22.18	22.41	22.30		
5	64QAM	1	12	22.38	22.36	22.20	22.47	22.28	Tune-up limit (dBm)	
5	64QAM	1	24	22.38	22.36	22.23	22.46	22.23		
5	64QAM	12	0	21.61	21.53	21.50	21.67	21.57		
5	64QAM	12	7	21.63	21.58	21.50	21.70	21.61	22.7	
5	64QAM	12	13	21.58	21.57	21.46	21.73	21.64		
5	64QAM	25	0	21.61	21.56	21.46	21.69	21.60		



Band 41 HPUE										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.95	25.94	26.04	26.10	25.81	27.5	
20	QPSK	1	49	26.01	26.04	26.01	26.39	26.18		
20	QPSK	1	99	25.92	25.97	25.99	25.89	25.96		
20	QPSK	50	0	25.19	25.21	25.15	25.40	25.22	26.5	
20	QPSK	50	24	25.21	25.24	25.21	25.45	25.34		
20	QPSK	50	50	25.18	25.21	25.19	25.34	25.29		
20	QPSK	100	0	25.22	25.22	25.20	25.35	25.24	26.0	
20	16QAM	1	0	25.28	25.37	25.40	25.48	25.12		
20	16QAM	1	49	25.27	25.32	25.32	25.69	25.49		
20	16QAM	1	99	25.31	25.32	25.32	25.23	25.28	25.5	
20	16QAM	50	0	24.24	24.26	24.18	24.43	24.24		
20	16QAM	50	24	24.24	24.29	24.22	24.50	24.36		
20	16QAM	50	50	24.21	24.26	24.21	24.40	24.30	25.0	
20	16QAM	100	0	24.22	24.25	24.22	24.38	24.27		
20	64QAM	1	0	24.15	24.12	24.20	24.26	24.00		
20	64QAM	1	49	24.10	24.16	24.13	24.58	24.38	24.5	
20	64QAM	1	99	24.13	24.20	24.17	24.13	24.18		
20	64QAM	50	0	23.26	23.27	23.18	23.45	23.24		
20	64QAM	50	24	23.27	23.28	23.27	23.49	23.37	24.0	
20	64QAM	50	50	23.21	23.27	23.23	23.39	23.32		
20	64QAM	100	0	23.26	23.26	23.23	23.38	23.25		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.97	26.01	25.98	26.26	25.97	27.5	
15	QPSK	1	37	26.01	25.97	25.98	26.35	26.18		
15	QPSK	1	74	25.97	26.08	26.03	26.12	26.10		
15	QPSK	36	0	25.05	25.18	25.09	25.40	25.23	26.5	
15	QPSK	36	20	25.13	25.17	25.13	25.46	25.29		
15	QPSK	36	39	25.12	25.17	25.10	25.36	25.26		
15	QPSK	75	0	25.16	25.17	25.14	25.42	25.25	26.0	
15	16QAM	1	0	25.29	25.27	25.23	25.56	25.26		
15	16QAM	1	37	25.21	25.21	25.19	25.63	25.44		
15	16QAM	1	74	25.25	25.34	25.29	25.45	25.32	25.5	
15	16QAM	36	0	24.06	24.17	24.05	24.35	24.20		
15	16QAM	36	20	24.13	24.15	24.11	24.47	24.26		
15	16QAM	36	39	24.09	24.14	24.09	24.37	24.23	25.0	
15	16QAM	75	0	24.15	24.19	24.15	24.45	24.26		
15	64QAM	1	0	24.10	24.09	24.04	24.37	24.09		
15	64QAM	1	37	24.06	24.10	24.06	24.51	24.29	25.5	
15	64QAM	1	74	24.09	24.24	24.14	24.31	24.21		
15	64QAM	36	0	23.08	23.22	23.10	23.40	23.26		
15	64QAM	36	20	23.15	23.20	23.15	23.51	23.34	24.5	
15	64QAM	36	39	23.13	23.18	23.14	23.37	23.27		
15	64QAM	75	0	23.16	23.19	23.16	23.45	23.27		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.92	25.92	25.81	26.20	26.11	27.5	
10	QPSK	1	25	25.92	25.94	26.00	26.30	26.13		
10	QPSK	1	49	25.97	25.96	25.90	26.26	26.00		
10	QPSK	25	0	25.10	25.11	25.09	25.41	25.24	26.5	
10	QPSK	25	12	25.16	25.13	25.12	25.41	25.26		
10	QPSK	25	25	25.10	25.19	25.11	25.49	25.22		
10	QPSK	50	0	25.15	25.18	25.16	25.45	25.26	26.0	
10	16QAM	1	0	25.29	25.26	25.20	25.53	25.38		
10	16QAM	1	25	25.26	25.28	25.35	25.67	25.40		
10	16QAM	1	49	25.32	25.29	25.25	25.57	25.40	25.5	
10	16QAM	25	0	24.20	24.10	24.13	24.46	24.35		
10	16QAM	25	12	24.25	24.19	24.20	24.45	24.28		
10	16QAM	25	25	24.15	24.19	24.10	24.47	24.21	25.0	
10	16QAM	50	0	24.16	24.19	24.12	24.46	24.29		
10	64QAM	1	0	24.20	24.16	24.07	24.48	24.27		
10	64QAM	1	25	24.13	24.17	24.17	24.50	24.33	25.5	
10	64QAM	1	49	24.14	24.18	24.21	24.47	24.31		
10	64QAM	25	0	23.21	23.18	23.18	23.44	23.25		
10	64QAM	25	12	23.24	23.32	23.24	23.48	23.36	24.5	
10	64QAM	25	25	23.13	23.16	23.20	23.52	23.21		
10	64QAM	50	0	23.18	23.23	23.19	23.44	23.27		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	26.01	26.01	25.91	26.29	26.11	27.5	
5	QPSK	1	12	26.02	26.03	26.02	26.38	26.14		
5	QPSK	1	24	25.99	26.02	25.96	26.31	26.04		
5	QPSK	12	0	25.16	25.19	25.16	25.44	25.31	26.5	
5	QPSK	12	7	25.19	25.23	25.19	25.47	25.27		
5	QPSK	12	13	25.18	25.20	25.16	25.52	25.29		
5	QPSK	25	0	25.16	25.18	25.18	25.46	25.27	26.0	
5	16QAM	1	0	25.38	25.36	25.30	25.61	25.46		
5	16QAM	1	12	25.33	25.34	25.37	25.68	25.45		
5	16QAM	1	24	25.36	25.39	25.35	25.65	25.43	25.5	
5	16QAM	12	0	24.20	24.20	24.21	24.51	24.36		
5	16QAM	12	7	24.27	24.24	24.24	24.53	24.32		
5	16QAM	12	13	24.20	24.21	24.18	24.49	24.28	25.0	
5	16QAM	25	0	24.18	24.26	24.20	24.48	24.34		
5	64QAM	1	0	24.26	24.24	24.15	24.51	24.37		
5	64QAM	1	12	24.20	24.24	24.23	24.59	24.36	25.5	
5	64QAM	1	24	24.24	24.23	24.21	24.54	24.31		
5	64QAM	12	0	23.23	23.28	23.21	23.50	23.35		
5	64QAM	12	7	23.25	23.32	23.27	23.50	23.37	24.5	
5	64QAM	12	13	23.22	23.26	23.23	23.54	23.31		
5	64QAM	25	0	23.20	23.29	23.24	23.53	23.37		



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	24.21	24.24	24.10	24.13	25.2		
20	QPSK	1	49	24.02	24.06	23.89	23.89			
20	QPSK	1	99	23.99	23.98	23.84	23.82			
20	QPSK	50	0	23.24	23.27	23.16	23.16			
20	QPSK	50	24	23.21	23.13	23.07	23.07	24.2		
20	QPSK	50	50	23.05	23.08	22.94	22.94			
20	QPSK	100	0	23.15	23.18	23.10	23.10			
20	16QAM	1	0	23.33	23.38	23.25	23.28			
20	16QAM	1	49	23.12	23.15	22.99	22.98	24.2		
20	16QAM	1	99	23.10	23.09	22.96	22.96			
20	16QAM	50	0	22.27	22.28	22.19	22.20			
20	16QAM	50	24	22.23	22.17	22.13	22.14			
20	16QAM	50	50	22.08	22.11	21.97	21.97	23.2		
20	16QAM	100	0	22.21	22.14	22.12	22.10			
20	64QAM	1	0	22.04	22.12	22.00	22.00			
20	64QAM	1	49	21.86	21.87	21.78	21.75			
20	64QAM	1	99	21.83	21.79	21.65	21.68	22.2		
20	64QAM	50	0	21.27	21.30	21.19	21.19			
20	64QAM	50	24	21.23	21.17	21.15	21.14			
20	64QAM	50	50	21.09	21.11	20.98	20.98			
20	64QAM	100	0	21.21	21.17	21.12	21.12	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	24.20	24.16	24.05	24.07	25.2		
15	QPSK	1	37	23.95	24.02	23.86	23.84			
15	QPSK	1	74	23.98	23.92	23.78	23.81			
15	QPSK	36	0	23.23	23.25	23.06	23.10			
15	QPSK	36	20	23.14	23.07	23.00	23.04	24.2		
15	QPSK	36	39	23.03	23.04	22.91	22.90			
15	QPSK	75	0	23.09	23.07	23.07	23.04			
15	16QAM	1	0	23.29	23.28	23.18	23.24			
15	16QAM	1	37	23.08	23.14	22.97	22.92	24.2		
15	16QAM	1	74	23.06	23.00	22.89	22.91			
15	16QAM	36	0	22.18	22.23	22.13	22.13			
15	16QAM	36	20	22.18	22.10	22.13	22.13			
15	16QAM	36	39	22.04	22.01	21.92	21.91	23.2		
15	16QAM	75	0	22.18	22.14	22.05	22.03			
15	64QAM	1	0	21.97	22.09	21.93	21.97			
15	64QAM	1	37	21.82	21.86	21.76	21.70			
15	64QAM	1	74	21.80	21.77	21.56	21.67	22.2		
15	64QAM	36	0	21.20	21.30	21.10	21.13			
15	64QAM	36	20	21.21	21.09	21.06	21.05			
15	64QAM	36	39	21.05	21.09	20.94	20.88			
15	64QAM	75	0	21.21	21.10	21.09	21.11	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	24.11	24.17	24.02	24.12	25.2		
10	QPSK	1	25	24.02	23.99	23.87	23.79			
10	QPSK	1	49	23.94	23.90	23.75	23.72			
10	QPSK	25	0	23.14	23.20	23.09	23.13			
10	QPSK	25	12	23.11	23.06	23.04	22.97	24.2		
10	QPSK	25	25	22.97	23.03	22.86	22.85			
10	QPSK	50	0	23.17	23.05	23.03	23.05			
10	16QAM	1	0	23.27	23.29	23.17	23.28			
10	16QAM	1	25	23.06	23.11	22.97	22.90	24.2		
10	16QAM	1	49	23.00	23.01	22.94	22.86			
10	16QAM	25	0	22.21	22.24	22.15	22.11			
10	16QAM	25	12	22.18	22.17	22.10	22.14			
10	16QAM	25	25	22.08	22.09	21.88	21.88	23.2		
10	16QAM	50	0	22.12	22.08	22.11	22.00			
10	64QAM	1	0	22.02	22.07	21.95	21.90			
10	64QAM	1	25	21.86	21.79	21.77	21.71			
10	64QAM	1	49	21.80	21.70	21.57	21.55	22.2		
10	64QAM	25	0	21.18	21.26	21.15	21.10			
10	64QAM	25	12	21.23	21.12	21.12	21.08			
10	64QAM	25	25	21.06	21.01	20.98	20.94			
10	64QAM	50	0	21.13	21.09	21.09	21.05	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	24.12	24.19	24.10	24.10	25.2		
5	QPSK	1	12	23.99	23.99	23.86	23.79			
5	QPSK	1	24	23.99	23.96	23.80	23.80			
5	QPSK	12	0	23.17	23.22	23.09	23.09			
5	QPSK	12	7	23.11	23.10	23.04	23.00	24.2		
5	QPSK	12	13	22.95	23.05	22.92	22.87			
5	QPSK	25	0	23.09	23.04	23.02	23.00			
5	16QAM	1	0	23.32	23.30	23.19	23.18			
5	16QAM	1	12	23.04	23.13	22.97	22.93	24.2		
5	16QAM	1	24	23.10	23.07	22.94	22.87			
5	16QAM	12	0	22.25	22.21	22.09	22.20			
5	16QAM	12	7	22.16	22.09	22.03	22.12			
5	16QAM	12	13	22.01	22.11	21.96	21.88	23.2		
5	16QAM	25	0	22.15	22.10	22.04	22.10			
5	64QAM	1	0	21.96	22.10	21.91	21.90			
5	64QAM	1	12	21.86	21.85	21.75	21.67			
5	64QAM	1	24	21.77	21.72	21.57	21.64	22.2		
5	64QAM	12	0	21.19	21.23	21.19	21.15			
5	64QAM	12	7	21.15	21.17	21.11	21.07			
5	64QAM	12	13	21.06	21.11	20.89	20.97			
5	64QAM	25	0	21.16	21.09	21.02	21.02	Tune-up limit (dBm)		

Band 38							
Ann 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.16	24.06	24.03	25.7
20	QPSK	1	49	24.08	24.02	23.96	
20	QPSK	1	99	24.06	23.99	23.92	
20	QPSK	50	0	23.25	23.14	23.06	
20	QPSK	50	24	23.26	23.15	23.11	
20	QPSK	50	50	23.20	23.14	23.07	24.7
20	QPSK	100	0	23.23	23.10	23.11	
20	16QAM	1	0	23.23	23.16	23.06	
20	16QAM	1	49	23.16	23.12	23.03	24.7
20	16QAM	1	99	23.14	23.12	23.01	
20	16QAM	50	0	22.29	22.16	22.07	
20	16QAM	50	24	22.25	22.14	22.13	23.7
20	16QAM	50	50	22.24	22.17	22.09	
20	16QAM	100	0	22.25	22.13	22.11	
20	64QAM	1	0	21.95	21.88	21.77	23.7
20	64QAM	1	49	21.90	21.84	21.75	
20	64QAM	1	99	21.88	21.83	21.72	
20	64QAM	50	0	21.30	21.18	21.09	22.7
20	64QAM	50	24	21.27	21.13	21.14	
20	64QAM	50	50	21.26	21.19	21.10	
20	64QAM	100	0	21.26	21.13	21.12	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.09	24.04	23.96	25.7
15	QPSK	1	37	24.03	24.01	23.91	
15	QPSK	1	74	24.07	24.02	23.92	
15	QPSK	36	0	23.25	23.12	23.03	
15	QPSK	36	20	23.24	23.08	23.01	
15	QPSK	36	39	23.19	23.15	23.04	24.7
15	QPSK	75	0	23.21	23.08	23.02	
15	16QAM	1	0	23.23	23.17	23.10	
15	16QAM	1	37	23.06	23.03	22.98	24.7
15	16QAM	1	74	23.19	23.14	23.06	
15	16QAM	36	0	22.22	22.10	22.02	
15	16QAM	36	20	22.20	22.05	21.96	23.7
15	16QAM	36	39	22.16	22.11	22.02	
15	16QAM	75	0	22.25	22.11	22.03	
15	64QAM	1	0	21.88	21.84	21.73	
15	64QAM	1	37	21.94	21.84	21.77	23.7
15	64QAM	1	74	21.89	21.83	21.73	
15	64QAM	36	0	21.26	21.14	21.07	
15	64QAM	36	20	21.24	21.10	21.00	22.7
15	64QAM	36	39	21.25	21.17	21.06	
15	64QAM	75	0	21.25	21.12	21.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.09	23.99	23.91	25.7
10	QPSK	1	25	24.00	23.96	23.91	
10	QPSK	1	49	24.03	24.01	23.91	
10	QPSK	25	0	23.15	23.12	23.01	
10	QPSK	25	12	23.19	23.07	22.99	
10	QPSK	25	25	23.10	23.13	22.99	24.7
10	QPSK	50	0	23.11	23.03	22.95	
10	16QAM	1	0	23.13	23.08	23.03	
10	16QAM	1	25	23.04	22.97	22.94	24.7
10	16QAM	1	49	23.10	23.08	23.02	
10	16QAM	25	0	22.17	22.00	21.97	
10	16QAM	25	12	22.13	21.96	21.91	23.7
10	16QAM	25	25	22.10	22.06	22.00	
10	16QAM	50	0	22.20	22.02	21.99	
10	64QAM	1	0	21.86	21.76	21.70	
10	64QAM	1	25	21.92	21.79	21.70	23.7
10	64QAM	1	49	21.83	21.75	21.70	
10	64QAM	25	0	21.19	21.12	21.05	
10	64QAM	25	12	21.18	21.08	21.00	22.7
10	64QAM	25	25	21.19	21.11	21.01	
10	64QAM	50	0	21.17	21.04	21.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.15	24.05	23.94	25.7
5	QPSK	1	12	24.09	24.02	23.94	
5	QPSK	1	24	24.10	23.99	23.95	
5	QPSK	12	0	23.21	23.11	23.08	
5	QPSK	12	7	23.26	23.20	23.06	
5	QPSK	12	13	23.20	23.18	23.05	24.7
5	QPSK	25	0	23.25	23.09	23.06	
5	16QAM	1	0	23.28	23.17	23.11	
5	16QAM	1	12	23.28	23.26	23.18	24.7
5	16QAM	1	24	23.28	23.22	23.12	
5	16QAM	12	0	22.21	22.09	22.05	
5	16QAM	12	7	22.23	22.13	22.06	23.7
5	16QAM	12	13	22.18	22.13	22.02	
5	16QAM	25	0	22.24	22.14	22.10	
5	64QAM	1	0	21.80	21.74	21.70	23.7
5	64QAM	1	12	21.90	21.84	21.76	
5	64QAM	1	24	21.81	21.82	21.70	
5	64QAM	12	0	21.27	21.07	20.97	22.7
5	64QAM	12	7	21.20	21.02	20.91	
5	64QAM	12	13	21.19	21.14	21.05	
5	64QAM	25	0	21.19	21.02	20.97	



Band 41										
Ann 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Mid / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.94	23.81	23.87	23.85	23.52	25.7	
20	QPSK	1	49	23.85	23.79	23.76	24.08	23.88		
20	QPSK	1	99	23.84	23.79	23.82	23.58	23.75		
20	QPSK	50	0	23.05	22.96	22.85	23.02	22.86	24.7	
20	QPSK	50	24	23.04	22.97	22.93	23.06	22.98		
20	QPSK	50	50	22.88	22.94	22.90	22.98	22.93		
20	QPSK	100	0	23.04	22.96	22.91	23.05	22.89	24.7	
20	16QAM	1	0	23.09	22.93	22.99	22.98	22.93		
20	16QAM	1	49	22.97	22.92	22.87	23.18	22.98		
20	16QAM	1	99	22.97	22.97	22.94	22.70	22.84	23.7	
20	16QAM	50	0	22.08	22.00	21.90	22.06	21.87		
20	16QAM	50	24	22.10	22.01	21.96	22.08	22.01		
20	16QAM	50	50	22.03	21.98	21.94	22.01	21.96	23.7	
20	16QAM	100	0	22.06	21.98	21.95	21.99	21.91		
20	64QAM	1	0	21.82	21.68	21.68	21.59	21.40		
20	64QAM	1	49	21.73	21.71	21.65	21.83	21.80	23.7	
20	64QAM	1	99	21.74	21.75	21.66	21.43	21.61		
20	64QAM	50	0	21.10	21.02	20.92	21.07	20.90		
20	64QAM	50	24	21.11	21.01	20.97	21.12	20.99	22.7	
20	64QAM	50	50	21.02	20.98	20.95	21.03	20.96		
20	64QAM	100	0	21.07	21.01	20.98	21.01	20.93		
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	23.90	23.82	23.79	23.94	23.70	25.7	
15	QPSK	1	37	23.85	23.76	23.72	24.02	23.86		
15	QPSK	1	74	23.84	23.86	23.84	23.77	23.82		
15	QPSK	36	0	22.83	22.95	22.85	23.06	22.90	24.7	
15	QPSK	36	20	23.02	22.91	22.91	23.12	22.99		
15	QPSK	36	39	22.88	22.94	22.89	23.03	22.95		
15	QPSK	75	0	23.03	22.95	22.93	23.07	22.95	24.7	
15	16QAM	1	0	23.09	22.99	22.98	23.10	22.78		
15	16QAM	1	37	22.93	22.90	22.82	23.13	22.96		
15	16QAM	1	74	23.00	23.05	23.00	22.94	22.95	23.7	
15	16QAM	36	0	21.95	21.93	21.82	22.01	21.85		
15	16QAM	36	20	22.03	21.90	21.89	22.09	21.95		
15	16QAM	36	39	21.97	21.91	21.86	22.00	21.92	23.7	
15	16QAM	75	0	22.05	21.97	21.93	22.09	21.96		
15	64QAM	1	0	21.79	21.79	21.73	21.76	21.71		
15	64QAM	1	37	21.74	21.72	21.70	21.90	21.73	23.7	
15	64QAM	1	74	21.74	21.86	21.71	21.75	21.78		
15	64QAM	36	0	20.87	20.99	20.96	21.07	20.82		
15	64QAM	36	20	21.02	20.97	20.93	21.14	21.01	22.7	
15	64QAM	36	39	21.01	20.97	20.94	21.07	20.96		
15	64QAM	75	0	21.09	20.97	20.94	21.11	20.95		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.88	23.75	23.72	23.84	23.70	25.7	
10	QPSK	1	25	23.83	23.70	23.70	23.94	23.84		
10	QPSK	1	49	23.75	23.78	23.84	23.77	23.74		
10	QPSK	25	0	22.81	22.91	22.82	23.04	22.89	24.7	
10	QPSK	25	12	22.82	22.81	22.91	23.02	22.97		
10	QPSK	25	25	22.89	22.86	22.87	22.84	22.86		
10	QPSK	50	0	22.94	22.85	22.92	23.05	22.95	24.7	
10	16QAM	1	0	23.04	22.97	22.92	23.05	22.70		
10	16QAM	1	25	22.83	22.90	22.72	23.12	22.87		
10	16QAM	1	49	22.83	23.00	22.99	22.92	22.87	23.7	
10	16QAM	25	0	21.81	21.92	21.74	21.91	21.85		
10	16QAM	25	12	22.01	21.81	21.85	22.06	21.85		
10	16QAM	25	25	21.94	21.89	21.78	21.98	21.83	23.7	
10	16QAM	50	0	21.97	21.96	21.86	22.02	21.91		
10	64QAM	1	0	21.76	21.70	21.74	21.79	21.71		
10	64QAM	1	25	21.72	21.77	21.75	21.81	21.77	23.7	
10	64QAM	1	49	21.70	21.79	21.70	21.79	21.70		
10	64QAM	25	0	20.87	20.93	20.80	21.07	20.84		
10	64QAM	25	12	20.99	20.88	20.92	21.10	20.97	22.7	
10	64QAM	25	25	20.87	20.87	20.89	21.00	20.92		
10	64QAM	50	0	21.03	20.87	20.84	21.08	20.89		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2495.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.04	23.87	23.79	24.02	23.89	25.7	
5	QPSK	1	12	23.95	23.87	23.86	24.04	23.88		
5	QPSK	1	24	23.88	23.85	23.81	24.02	23.79		
5	QPSK	12	0	23.09	22.98	22.96	23.15	23.03	24.7	
5	QPSK	12	7	23.09	23.01	22.95	23.17	23.02		
5	QPSK	12	13	23.07	22.96	22.95	23.17	23.03		
5	QPSK	25	0	23.08	22.98	22.92	23.12	22.98	24.7	
5	16QAM	1	0	23.12	22.99	22.92	23.13	23.02		
5	16QAM	1	12	23.14	23.03	23.04	23.26	23.11		
5	16QAM	1	24	23.14	23.00	23.00	23.18	23.01	23.7	
5	16QAM	12	0	22.07	21.97	21.94	22.11	22.03		
5	16QAM	12	7	22.09	22.01	21.97	22.13	22.00		
5	16QAM	12	13	22.06	21.98	21.95	22.12	21.97	23.7	
5	16QAM	25	0	22.14	22.03	21.99	22.14	22.02		
5	64QAM	1	0	21.83	21.95	21.88	21.91	21.88		
5	64QAM	1	12	21.88	21.84	21.86	22.00	21.90	23.7	
5	64QAM	1	24	21.94	22.02	21.86	21.95	21.88		
5	64QAM	12	0	21.16	21.13	21.04	21.27	21.06		
5	64QAM	12	7	21.14	21.10	21.13	21.25	21.20	22.7	
5	64QAM	12	13	21.18	21.13	21.06	21.19	21.11		
5	64QAM	25	0	21.27	21.15	21.08	21.21	21.08		



Band 41 HPUE									
Ant 2									
6W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low-Middle Ch / Freq	Power Middle Ch / Freq	Power High-Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.71	25.60	25.64	25.74	25.50	27.5
20	QPSK	1	49	25.74	25.66	25.64	26.04	25.86	
20	QPSK	1	99	25.81	25.58	25.61	25.50	25.64	
20	QPSK	50	0	24.93	24.86	24.76	25.02	24.88	26.5
20	QPSK	50	24	24.94	24.85	24.84	25.09	25.00	
20	QPSK	50	50	24.86	24.83	24.82	25.01	24.97	
20	QPSK	100	0	24.82	24.86	24.83	24.95	24.90	26.5
20	16QAM	1	0	25.07	24.95	25.03	25.13	24.75	
20	16QAM	1	49	24.99	24.95	24.92	25.34	25.14	
20	16QAM	1	99	24.97	24.92	24.94	24.82	24.98	25.5
20	16QAM	50	0	23.94	23.89	23.79	24.07	23.89	
20	16QAM	50	24	23.96	23.91	23.87	24.11	24.01	
20	16QAM	50	50	23.81	23.88	23.86	24.01	23.98	24.5
20	16QAM	100	0	23.97	23.88	23.87	23.98	23.94	
20	64QAM	1	0	23.88	23.75	23.80	23.88	23.64	
20	64QAM	1	49	23.80	23.79	23.74	24.20	23.99	24.5
20	64QAM	1	99	23.82	23.80	23.79	23.70	23.86	
20	64QAM	50	0	22.99	22.89	22.81	23.09	22.93	
20	64QAM	50	24	22.96	22.91	22.86	23.10	23.03	24.5
20	64QAM	50	50	22.92	22.89	22.86	23.05	23.01	
20	64QAM	100	0	22.96	22.90	22.87	23.01	22.94	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.80	25.70	25.65	25.91	25.65	27.5
15	QPSK	1	37	25.76	25.64	25.60	26.02	25.84	
15	QPSK	1	74	25.69	25.76	25.72	25.74	25.79	
15	QPSK	36	0	24.83	24.86	24.75	25.05	24.90	26.5
15	QPSK	36	20	24.91	24.82	24.82	25.12	24.99	
15	QPSK	36	39	24.86	24.82	24.80	25.02	24.95	
15	QPSK	75	0	24.83	24.84	24.83	25.08	24.95	26.5
15	16QAM	1	0	25.08	25.00	24.98	25.21	24.97	
15	16QAM	1	37	24.97	24.91	24.83	25.28	25.15	
15	16QAM	1	74	24.95	25.03	24.98	25.06	25.08	25.5
15	16QAM	36	0	23.84	23.86	23.75	24.04	23.87	
15	16QAM	36	20	23.89	23.83	23.80	24.12	23.96	
15	16QAM	36	39	23.85	23.83	23.77	24.02	23.96	25.5
15	16QAM	75	0	23.94	23.87	23.82	24.10	23.95	
15	64QAM	1	0	23.87	23.76	23.70	24.04	23.77	
15	64QAM	1	37	23.86	23.79	23.71	24.19	23.97	24.5
15	64QAM	1	74	23.84	23.89	23.82	23.90	23.95	
15	64QAM	36	0	22.86	22.87	22.77	23.06	22.84	
15	64QAM	36	20	22.96	22.85	22.82	23.16	23.01	24.5
15	64QAM	36	39	22.92	22.85	22.81	23.04	22.97	
15	64QAM	75	0	22.95	22.88	22.86	23.10	22.96	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.80	25.66	25.54	25.82	25.81	27.5
10	QPSK	1	25	25.72	25.61	25.64	25.99	25.85	
10	QPSK	1	49	25.67	25.68	25.58	25.97	25.69	
10	QPSK	25	0	24.83	24.78	24.87	25.13	25.03	26.5
10	QPSK	25	12	25.00	24.86	24.87	25.12	24.99	
10	QPSK	25	25	24.92	24.83	24.79	25.15	24.99	
10	QPSK	50	0	24.92	24.78	24.88	25.11	25.00	26.5
10	16QAM	1	0	25.12	25.05	24.90	25.26	25.10	
10	16QAM	1	25	25.12	24.95	24.93	25.25	25.18	
10	16QAM	1	49	25.16	24.97	25.02	25.30	25.05	25.5
10	16QAM	25	0	24.00	23.85	23.84	24.11	23.98	
10	16QAM	25	12	24.07	23.95	23.87	24.13	24.10	
10	16QAM	25	25	23.91	23.85	23.85	24.12	24.00	24.5
10	16QAM	50	0	23.92	23.84	23.91	24.17	24.06	
10	64QAM	1	0	24.05	23.82	23.86	24.20	24.06	
10	64QAM	1	25	23.93	23.85	23.91	24.20	24.03	24.5
10	64QAM	1	49	23.97	23.95	23.86	24.15	24.04	
10	64QAM	25	0	23.02	22.86	22.90	23.12	23.08	
10	64QAM	25	12	23.04	22.96	22.94	23.14	23.02	24.5
10	64QAM	25	25	22.94	22.84	22.91	23.21	23.01	
10	64QAM	50	0	22.97	22.96	22.84	23.10	23.03	
Channel				39675	40148	40620	41093	41555	Tune-up limit (dBm)
Frequency (MHz)				2495.5	2545.8	2593	2640.0	2687.5	
5	QPSK	1	0	25.84	25.69	25.61	25.94	25.85	27.5
5	QPSK	1	12	25.82	25.68	25.74	26.03	25.87	
5	QPSK	1	24	25.77	25.68	25.66	25.98	25.75	
5	QPSK	12	0	24.99	24.87	24.88	25.18	25.07	26.5
5	QPSK	12	7	25.00	24.91	24.90	25.20	25.06	
5	QPSK	12	13	24.98	24.89	24.87	25.24	25.00	
5	QPSK	25	0	24.98	24.88	24.88	25.14	25.02	26.5
5	16QAM	1	0	25.19	25.05	24.98	25.29	25.18	
5	16QAM	1	12	25.14	25.05	25.03	25.35	25.18	
5	16QAM	1	24	25.16	25.05	25.05	25.31	25.13	25.5
5	16QAM	12	0	24.02	23.90	23.92	24.20	24.07	
5	16QAM	12	7	24.07	23.95	23.96	24.23	24.13	
5	16QAM	12	13	24.01	23.92	23.90	24.21	24.04	24.5
5	16QAM	25	0	24.02	23.94	23.91	24.20	24.10	
5	64QAM	1	0	24.06	23.91	23.87	24.20	24.07	
5	64QAM	1	12	24.03	23.92	23.91	24.25	24.07	24.5
5	64QAM	1	24	24.04	23.95	23.94	24.22	24.05	
5	64QAM	12	0	23.07	22.94	22.92	23.22	23.13	
5	64QAM	12	7	23.05	22.98	22.95	23.24	23.11	24.5
5	64QAM	12	13	23.03	22.94	22.94	23.26	23.07	
5	64QAM	25	0	23.04	22.97	22.93	23.20	23.09	



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	56160	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	21.79	21.71	21.58	21.42	22.3		
20	QPSK	1	49	21.57	21.45	21.36	21.12			
20	QPSK	1	99	21.53	21.43	21.28	21.03			
20	QPSK	50	0	20.81	20.67	20.59	20.38			
20	QPSK	50	24	20.78	20.68	20.53	20.31	21.3		
20	QPSK	50	50	20.63	20.49	20.36	20.11			
20	QPSK	100	0	20.78	20.56	20.49	20.30			
20	16QAM	1	0	20.92	20.80	20.71	20.54			
20	16QAM	1	49	20.65	20.53	20.42	20.22	21.3		
20	16QAM	1	99	20.69	20.53	20.39	20.15			
20	16QAM	50	0	19.87	19.73	19.62	19.41			
20	16QAM	50	24	19.81	19.57	19.54	19.33			
20	16QAM	50	50	19.68	19.51	19.39	19.15	20.3		
20	16QAM	100	0	19.80	19.58	19.54	19.33			
20	64QAM	1	0	19.63	19.57	19.46	19.27			
20	64QAM	1	49	19.42	19.31	19.19	18.97			
20	64QAM	1	99	19.39	19.24	19.13	18.85	19.3		
20	64QAM	50	0	18.87	18.73	18.63	18.41			
20	64QAM	50	24	18.82	18.61	18.56	18.33			
20	64QAM	50	50	18.69	18.53	18.40	18.15			
20	64QAM	100	0	18.81	18.58	18.55	18.31	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	21.67	21.60	21.50	21.28	22.3		
15	QPSK	1	37	21.53	21.46	21.30	21.05			
15	QPSK	1	74	21.54	21.45	21.31	21.02			
15	QPSK	36	0	20.81	20.68	20.54	20.32			
15	QPSK	36	20	20.74	20.62	20.49	20.24	21.3		
15	QPSK	36	39	20.64	20.49	20.35	20.17			
15	QPSK	75	0	20.68	20.64	20.51	20.24			
15	16QAM	1	0	20.77	20.76	20.60	20.41			
15	16QAM	1	37	20.61	20.51	20.33	20.14	21.3		
15	16QAM	1	74	20.72	20.60	20.46	20.19			
15	16QAM	36	0	19.77	19.65	19.53	19.29			
15	16QAM	36	20	19.74	19.60	19.45	19.20			
15	16QAM	36	39	19.63	19.49	19.32	19.14	20.3		
15	16QAM	75	0	19.71	19.65	19.52	19.24			
15	64QAM	1	0	19.58	19.51	19.39	19.12			
15	64QAM	1	37	19.42	19.34	19.19	18.96	20.3		
15	64QAM	1	74	19.43	19.29	19.16	18.87			
15	64QAM	36	0	18.93	18.70	18.57	18.34			
15	64QAM	36	20	18.77	18.63	18.50	18.26			
15	64QAM	36	39	18.66	18.51	18.37	18.17	19.3		
15	64QAM	75	0	18.72	18.66	18.52	18.26			
Channel				55290	55815	56165	56690	Tune-up limit (dBm)		
Frequency (MHz)				3525	3597.5	3642.5	3695			
10	QPSK	1	0	21.66	21.62	21.49	21.26	22.3		
10	QPSK	1	25	21.45	21.38	21.26	21.05			
10	QPSK	1	49	21.51	21.41	21.26	20.95			
10	QPSK	25	0	20.75	20.64	20.44	20.31			
10	QPSK	25	12	20.67	20.52	20.48	20.15	21.3		
10	QPSK	25	25	20.59	20.46	20.33	20.12			
10	QPSK	50	0	20.63	20.62	20.42	20.14			
10	16QAM	1	0	20.76	20.67	20.51	20.35			
10	16QAM	1	25	20.58	20.47	20.33	20.05	21.3		
10	16QAM	1	49	20.72	20.54	20.42	20.11			
10	16QAM	25	0	19.70	19.56	19.43	19.29			
10	16QAM	25	12	19.64	19.57	19.45	19.14			
10	16QAM	25	25	19.62	19.45	19.28	19.11	20.3		
10	16QAM	50	0	19.64	19.59	19.52	19.20			
10	64QAM	1	0	19.50	19.51	19.37	19.12			
10	64QAM	1	25	19.42	19.31	19.13	18.95	20.3		
10	64QAM	1	49	19.43	19.22	19.11	18.84			
10	64QAM	25	0	18.81	18.66	18.47	18.27			
10	64QAM	25	12	18.77	18.55	18.41	18.22			
10	64QAM	25	25	18.56	18.49	18.31	18.15	19.3		
10	64QAM	50	0	18.62	18.63	18.48	18.23			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3524.5	3597	3643	3697.5			
5	QPSK	1	0	21.65	21.56	21.51	21.57	22.3		
5	QPSK	1	12	21.61	21.51	21.45	21.52			
5	QPSK	1	24	21.53	21.43	21.39	21.47			
5	QPSK	12	0	20.77	20.64	20.64	20.70			
5	QPSK	12	7	20.77	20.67	20.58	20.67	21.3		
5	QPSK	12	13	20.70	20.65	20.52	20.62			
5	QPSK	25	0	20.72	20.63	20.53	20.63			
5	16QAM	1	0	20.73	20.70	20.63	20.69			
5	16QAM	1	12	20.82	20.72	20.64	20.74	21.3		
5	16QAM	1	24	20.73	20.63	20.54	20.62			
5	16QAM	12	0	19.74	19.67	19.62	19.65			
5	16QAM	12	7	19.77	19.65	19.58	19.66			
5	16QAM	12	13	19.70	19.59	19.50	19.60	20.3		
5	16QAM	25	0	19.77	19.70	19.56	19.65			
5	64QAM	1	0	19.52	19.47	19.42	19.47			
5	64QAM	1	12	19.52	19.41	19.36	19.47			
5	64QAM	1	24	19.54	19.42	19.34	19.37	19.3		
5	64QAM	12	0	18.79	18.74	18.68	18.74			
5	64QAM	12	7	18.83	18.69	18.62	18.70			
5	64QAM	12	13	18.77	18.67	18.56	18.68			
5	64QAM	25	0	18.79	18.70	18.58	18.70			

Band 38							
Ann 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	24.48	24.44	24.35	25.7
20	QPSK	1	49	24.49	24.48	24.36	
20	QPSK	1	99	24.48	24.44	24.35	
20	QPSK	50	0	24.07	24.06	23.96	
20	QPSK	50	24	24.19	24.09	24.05	
20	QPSK	50	50	24.15	24.08	24.02	24.7
20	QPSK	100	0	24.16	24.03	24.03	
20	16QAM	1	0	24.09	24.04	23.97	
20	16QAM	1	49	24.07	24.02	23.95	
20	16QAM	1	99	24.07	24.01	23.93	
20	16QAM	50	0	23.11	23.10	22.99	23.7
20	16QAM	50	24	23.19	23.07	23.07	
20	16QAM	50	50	23.18	23.13	23.03	
20	16QAM	100	0	23.18	23.07	23.05	
20	64QAM	1	0	22.80	22.75	22.68	
20	64QAM	1	49	22.82	22.75	22.69	22.7
20	64QAM	1	99	22.81	22.76	22.64	
20	64QAM	50	0	22.12	22.10	22.00	
20	64QAM	50	24	22.20	22.09	22.09	
20	64QAM	50	50	22.15	22.14	22.06	
20	64QAM	100	0	22.20	22.08	22.07	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.47	24.43	24.26	
15	QPSK	1	37	24.47	24.46	24.35	25.7
15	QPSK	1	74	24.43	24.38	24.34	
15	QPSK	36	0	24.03	24.00	23.93	
15	QPSK	36	20	24.18	23.96	24.01	
15	QPSK	36	39	24.09	24.03	24.00	
15	QPSK	75	0	24.11	23.99	23.97	24.7
15	16QAM	1	0	24.06	24.04	23.93	
15	16QAM	1	37	24.05	24.01	23.88	
15	16QAM	1	74	24.00	24.01	23.91	
15	16QAM	36	0	23.04	23.00	22.96	
15	16QAM	36	20	23.15	23.03	23.03	23.7
15	16QAM	36	39	23.11	23.12	23.00	
15	16QAM	75	0	23.15	22.98	23.02	
15	64QAM	1	0	22.79	22.70	22.67	
15	64QAM	1	37	22.75	22.72	22.60	
15	64QAM	1	74	22.79	22.67	22.61	22.7
15	64QAM	36	0	22.07	22.02	21.91	
15	64QAM	36	20	22.18	22.08	22.08	
15	64QAM	36	39	22.10	22.05	21.98	
15	64QAM	75	0	22.16	22.04	22.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.46	24.33	24.25	25.7
10	QPSK	1	25	24.42	24.40	24.35	
10	QPSK	1	49	24.39	24.39	24.35	
10	QPSK	25	0	24.00	24.03	23.92	
10	QPSK	25	12	24.15	23.95	24.03	
10	QPSK	25	25	24.05	24.09	24.00	24.7
10	QPSK	50	0	24.14	23.96	23.93	
10	16QAM	1	0	24.09	23.99	23.90	
10	16QAM	1	25	24.03	24.02	23.88	
10	16QAM	1	49	24.06	23.91	23.87	
10	16QAM	25	0	23.07	23.09	22.93	23.7
10	16QAM	25	12	23.14	23.06	23.02	
10	16QAM	25	25	23.13	23.09	22.94	
10	16QAM	50	0	23.13	23.02	23.05	
10	64QAM	1	0	22.76	22.75	22.65	
10	64QAM	1	25	22.73	22.74	22.66	22.7
10	64QAM	1	49	22.79	22.70	22.57	
10	64QAM	25	0	22.06	22.02	21.94	
10	64QAM	25	12	22.19	22.06	22.06	
10	64QAM	25	25	22.09	22.04	22.04	
10	64QAM	50	0	22.18	22.02	22.01	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.41	24.40	24.28	
5	QPSK	1	12	24.44	24.45	24.32	25.7
5	QPSK	1	24	24.38	24.38	24.26	
5	QPSK	12	0	24.06	24.03	23.94	
5	QPSK	12	7	24.11	23.95	24.03	
5	QPSK	12	13	24.08	24.08	23.99	24.7
5	QPSK	25	0	24.12	24.03	24.02	
5	16QAM	1	0	24.06	23.98	23.91	
5	16QAM	1	12	24.04	23.97	23.91	
5	16QAM	1	24	24.05	23.97	23.89	
5	16QAM	12	0	23.05	23.08	22.96	23.7
5	16QAM	12	7	23.17	23.05	23.06	
5	16QAM	12	13	23.11	23.11	22.98	
5	16QAM	25	0	23.12	23.05	22.98	
5	64QAM	1	0	22.79	22.65	22.61	
5	64QAM	1	12	22.73	22.71	22.67	22.7
5	64QAM	1	24	22.72	22.74	22.56	
5	64QAM	12	0	22.02	22.10	21.96	
5	64QAM	12	7	22.12	22.04	22.02	
5	64QAM	12	13	22.10	22.10	22.06	
5	64QAM	25	0	22.13	21.98	21.99	



Band 41										
Ann 2										
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low-Middle Ch / Freq	Power Middle Ch / Freq	Power High-Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.23	24.38	24.45	24.14	23.88	25.7	
20	QPSK	1	49	24.21	24.35	24.33	24.40	24.10		
20	QPSK	1	99	24.22	24.37	24.43	24.00	24.09		
20	QPSK	50	0	23.79	23.94	23.94	24.05	23.90	24.7	
20	QPSK	50	24	23.90	24.07	24.16	24.15	24.02		
20	QPSK	50	50	23.88	24.04	24.01	24.07	24.01		
20	QPSK	100	0	23.89	24.05	24.01	24.10	23.97	24.7	
20	16QAM	1	0	23.80	23.95	24.05	23.94	23.87		
20	16QAM	1	49	23.90	23.95	23.92	24.23	24.04		
20	16QAM	1	99	23.84	24.03	24.00	23.79	23.87	23.7	
20	16QAM	50	0	22.82	22.96	22.97	23.09	22.93		
20	16QAM	50	24	22.91	23.09	23.05	23.22	23.06		
20	16QAM	50	50	22.90	23.07	23.04	23.08	23.02	23.7	
20	16QAM	100	0	22.90	23.06	23.02	23.11	22.97		
20	64QAM	1	0	22.51	22.60	22.65	22.60	22.35		
20	64QAM	1	49	22.51	22.71	22.68	22.99	22.79	22.7	
20	64QAM	1	99	22.66	22.76	22.68	22.53	22.55		
20	64QAM	50	0	21.82	21.98	21.98	22.09	21.93		
20	64QAM	50	24	21.93	22.07	22.07	22.21	22.06	Tune-up limit (dBm)	
20	64QAM	50	50	21.92	22.07	22.05	22.08	22.03		
20	64QAM	100	0	21.91	22.08	22.04	22.14	21.96		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.16	24.23	24.44	24.13	23.82	25.7	
15	QPSK	1	37	24.11	24.31	24.25	24.32	24.22		
15	QPSK	1	74	24.21	24.34	24.40	23.97	24.02		
15	QPSK	36	0	23.75	23.94	23.86	24.04	23.85	24.7	
15	QPSK	36	20	23.89	23.99	23.94	24.16	23.92		
15	QPSK	36	39	23.80	24.03	24.00	23.98	23.98		
15	QPSK	75	0	23.89	23.99	24.01	24.08	23.95	24.7	
15	16QAM	1	0	23.70	23.88	24.03	23.89	23.58		
15	16QAM	1	37	23.75	23.89	23.83	24.14	23.98		
15	16QAM	1	74	23.79	23.98	23.97	23.78	23.81	23.7	
15	16QAM	36	0	22.79	22.88	22.89	23.03	22.84		
15	16QAM	36	20	22.83	23.00	23.01	23.15	22.98		
15	16QAM	36	39	22.90	23.06	23.04	23.00	22.95	23.7	
15	16QAM	75	0	22.89	23.05	22.92	23.04	22.95		
15	64QAM	1	0	22.44	22.53	22.58	22.54	22.29		
15	64QAM	1	37	22.41	22.68	22.59	22.94	22.72	22.7	
15	64QAM	1	74	22.48	22.71	22.59	22.43	22.51		
15	64QAM	36	0	21.77	21.98	21.95	22.07	21.88		
15	64QAM	36	20	21.88	22.01	22.05	22.15	21.96	Tune-up limit (dBm)	
15	64QAM	36	39	21.87	22.01	21.95	22.06	22.03		
15	64QAM	75	0	21.86	22.02	21.96	22.10	21.95		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.20	24.32	24.38	24.11	23.83	25.7	
10	QPSK	1	25	24.15	24.28	24.26	24.38	24.22		
10	QPSK	1	49	24.13	24.30	24.38	23.91	24.05		
10	QPSK	25	0	23.69	23.91	23.90	23.98	23.84	24.7	
10	QPSK	25	12	23.81	24.01	23.97	24.19	23.93		
10	QPSK	25	25	23.81	24.03	23.98	23.97	23.94		
10	QPSK	50	0	23.83	23.96	23.96	24.05	23.96	24.7	
10	16QAM	1	0	23.80	23.88	23.97	23.86	23.65		
10	16QAM	1	25	23.74	23.95	23.87	24.17	24.02		
10	16QAM	1	49	23.78	23.95	23.94	23.71	23.87	23.7	
10	16QAM	25	0	22.79	22.94	22.94	23.09	22.86		
10	16QAM	25	12	22.90	23.07	22.95	23.14	22.96		
10	16QAM	25	25	22.90	23.03	23.00	23.00	23.02	22.7	
10	16QAM	50	0	22.81	23.02	22.97	23.05	22.94		
10	64QAM	1	0	22.43	22.59	22.64	22.52	22.35		
10	64QAM	1	25	22.43	22.65	22.68	22.96	22.73	23.7	
10	64QAM	1	49	22.46	22.70	22.66	22.52	22.50		
10	64QAM	25	0	21.73	21.88	21.95	22.07	21.88		
10	64QAM	25	12	21.85	22.03	22.01	22.15	21.98	Tune-up limit (dBm)	
10	64QAM	25	25	21.82	21.97	22.01	21.98	21.99		
10	64QAM	50	0	21.87	21.99	21.99	22.14	21.90		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	24.16	24.23	24.40	24.14	23.78	25.7	
5	QPSK	1	12	24.17	24.33	24.30	24.30	24.22		
5	QPSK	1	24	24.13	24.31	24.43	23.91	24.05		
5	QPSK	12	0	23.72	23.88	23.92	23.99	23.84	24.7	
5	QPSK	12	7	23.81	24.05	24.00	24.15	24.02		
5	QPSK	12	13	23.82	24.01	23.94	23.99	23.99		
5	QPSK	25	0	23.66	23.97	23.99	24.05	23.92	24.7	
5	16QAM	1	0	23.71	23.90	23.98	23.89	23.61		
5	16QAM	1	12	23.79	23.91	23.86	24.18	24.03		
5	16QAM	1	24	23.83	23.99	23.90	23.74	23.79	23.7	
5	16QAM	12	0	22.79	22.89	22.93	23.06	22.86		
5	16QAM	12	7	22.81	22.99	23.01	23.22	23.04		
5	16QAM	12	13	22.90	23.05	23.03	22.99	22.94	22.7	
5	16QAM	25	0	22.81	22.96	22.98	23.07	22.95		
5	64QAM	1	0	22.51	22.59	22.65	22.52	22.35		
5	64QAM	1	12	22.46	22.68	22.65	22.83	22.69	Tune-up limit (dBm)	
5	64QAM	1	24	22.54	22.71	22.69	22.50	22.47		
5	64QAM	12	0	21.81	21.90	21.89	22.07	21.85		
5	64QAM	12	7	21.83	21.99	22.07	22.16	22.03	22.7	
5	64QAM	12	13	21.92	22.05	22.01	22.04	22.02		
5	64QAM	25	0	21.90	22.03	22.01	22.05	21.91		



Band 41 HPUE									
Ant.2									
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low-Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High-Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.76	25.92	26.00	25.74	25.50	27.5
20	QPSK	1	49	25.76	25.92	25.89	25.59	25.81	
20	QPSK	1	99	25.83	26.00	26.01	25.58	25.70	
20	QPSK	50	0	25.56	25.73	25.73	25.96	25.82	26.5
20	QPSK	50	24	25.67	25.84	25.98	25.94	25.95	
20	QPSK	50	50	25.66	25.83	25.81	25.96	25.88	
20	QPSK	100	0	25.68	25.84	25.81	26.01	25.85	26.5
20	16QAM	1	0	25.72	25.86	26.00	25.93	25.69	
20	16QAM	1	49	25.74	25.93	25.91	26.23	26.92	
20	16QAM	1	99	25.72	25.99	25.93	25.81	25.86	25.5
20	16QAM	50	0	24.61	24.75	24.78	24.99	24.83	
20	16QAM	50	24	24.71	24.86	24.85	25.14	24.96	
20	16QAM	50	50	24.67	24.87	24.83	24.99	24.94	24.5
20	16QAM	100	0	24.66	24.86	24.84	25.03	24.90	
20	64QAM	1	0	24.58	24.94	24.66	24.76	24.54	
20	64QAM	1	49	24.62	24.74	24.71	25.09	24.58	24.5
20	64QAM	1	99	24.62	24.82	24.79	24.66	23.81	
20	64QAM	50	0	23.59	23.77	23.75	23.99	23.58	
20	64QAM	50	24	23.69	23.86	23.84	24.15	23.40	24.5
20	64QAM	50	50	23.68	23.87	23.83	24.01	23.13	
20	64QAM	100	0	23.70	23.86	23.83	24.05	23.28	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.71	25.90	26.00	25.68	25.51	27.5
15	QPSK	1	37	25.67	25.89	25.82	25.91	25.81	
15	QPSK	1	74	25.82	25.92	25.92	25.58	25.69	
15	QPSK	36	0	25.53	25.67	25.70	25.86	25.78	26.5
15	QPSK	36	20	25.67	25.84	25.95	25.91	25.90	
15	QPSK	36	39	25.62	25.81	25.71	25.86	25.79	
15	QPSK	75	0	25.60	25.82	25.76	25.97	25.84	26.5
15	16QAM	1	0	25.63	25.85	25.87	25.92	25.84	
15	16QAM	1	37	25.74	25.89	25.85	26.17	26.00	
15	16QAM	1	74	25.67	25.96	25.87	25.77	25.84	25.5
15	16QAM	36	0	24.54	24.73	24.75	24.93	24.75	
15	16QAM	36	20	24.71	24.77	24.82	25.13	24.93	
15	16QAM	36	39	24.65	24.86	24.77	24.92	24.87	25.5
15	16QAM	75	0	24.61	24.83	24.82	25.00	24.89	
15	64QAM	1	0	24.50	24.59	24.56	24.73	24.46	
15	64QAM	1	37	24.64	24.66	24.67	25.09	24.50	24.5
15	64QAM	1	74	24.54	24.75	24.76	24.59	23.73	
15	64QAM	36	0	23.51	23.70	23.72	23.91	23.46	
15	64QAM	36	20	23.85	23.82	23.79	24.12	23.40	24.5
15	64QAM	36	39	23.60	23.80	23.75	23.95	23.12	
15	64QAM	75	0	23.70	23.84	23.74	23.98	23.22	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.75	25.89	25.94	25.66	25.52	27.5
10	QPSK	1	25	25.72	25.84	25.79	25.94	25.76	
10	QPSK	1	49	25.77	25.91	26.01	25.49	25.70	
10	QPSK	25	0	25.46	25.67	25.72	25.91	25.74	26.5
10	QPSK	25	12	25.59	25.81	25.89	25.86	25.85	
10	QPSK	25	25	25.61	25.77	25.76	25.90	25.79	
10	QPSK	50	0	25.60	25.82	25.71	25.91	25.76	26.5
10	16QAM	1	0	25.62	25.80	25.94	25.85	25.61	
10	16QAM	1	25	25.73	25.92	25.91	26.15	25.97	
10	16QAM	1	49	25.71	25.93	25.84	25.75	25.78	25.5
10	16QAM	25	0	24.51	24.73	24.72	24.96	24.82	
10	16QAM	25	12	24.63	24.84	24.82	25.04	24.86	
10	16QAM	25	25	24.64	24.77	24.79	24.89	24.84	25.5
10	16QAM	50	0	24.60	24.86	24.74	24.96	24.82	
10	64QAM	1	0	24.65	24.60	24.56	24.66	24.49	
10	64QAM	1	25	24.56	24.74	24.69	25.08	24.50	24.5
10	64QAM	1	49	24.55	24.79	24.71	24.61	23.76	
10	64QAM	25	0	23.59	23.73	23.75	23.97	23.51	
10	64QAM	25	12	23.59	23.86	23.84	24.13	23.39	24.5
10	64QAM	25	25	23.64	23.79	23.80	23.94	23.12	
10	64QAM	50	0	23.68	23.83	23.82	24.02	23.21	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5	
5	QPSK	1	0	25.69	25.88	25.92	25.70	25.53	27.5
5	QPSK	1	12	25.68	25.84	25.82	25.93	25.80	
5	QPSK	1	24	25.83	25.91	26.01	25.53	25.60	
5	QPSK	12	0	25.54	25.65	25.64	25.95	25.72	26.5
5	QPSK	12	7	25.60	25.82	25.97	25.94	25.89	
5	QPSK	12	13	25.59	25.75	25.75	25.92	25.87	
5	QPSK	25	0	25.60	25.76	25.73	25.92	25.82	26.5
5	16QAM	1	0	25.63	25.81	25.92	25.84	25.69	
5	16QAM	1	12	25.64	25.85	25.83	26.15	25.97	
5	16QAM	1	24	25.68	25.95	25.84	25.71	25.81	25.5
5	16QAM	12	0	24.57	24.65	24.72	24.99	24.74	
5	16QAM	12	7	24.69	24.77	24.83	25.12	24.87	
5	16QAM	12	13	24.58	24.82	24.81	24.93	24.87	24.5
5	16QAM	25	0	24.63	24.78	24.82	24.97	24.81	
5	64QAM	1	0	24.52	24.60	24.62	24.66	24.47	
5	64QAM	1	12	24.57	24.67	24.64	25.01	24.53	24.5
5	64QAM	1	24	24.59	24.76	24.74	24.56	23.77	
5	64QAM	12	0	23.52	23.74	23.71	23.90	23.56	
5	64QAM	12	7	23.62	23.85	23.81	24.08	23.40	24.5
5	64QAM	12	13	23.64	23.83	23.76	23.95	23.12	
5	64QAM	25	0	23.60	23.85	23.80	23.96	23.16	



Band 48									
Ant 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	23.60	23.51	23.39	23.25	24.6	
20	QPSK	1	49	23.40	23.27	23.12	22.88		
20	QPSK	1	99	23.37	23.23	23.04	22.81		
20	QPSK	50	0	23.15	23.02	22.88	22.63		
20	QPSK	50	24	23.10	22.88	22.83	22.55	24.1	
20	QPSK	50	50	22.95	22.82	22.64	22.40		
20	QPSK	100	0	23.06	22.88	22.81	22.55		
20	16QAM	1	0	23.25	23.14	22.98	22.75		
20	16QAM	1	49	22.97	22.87	22.69	22.45	24.1	
20	16QAM	1	99	22.99	22.84	22.66	22.42		
20	16QAM	50	0	22.16	22.06	21.91	21.66		
20	16QAM	50	24	22.11	21.91	21.83	21.60		
20	16QAM	50	50	21.95	21.84	21.69	21.44	23.1	
20	16QAM	100	0	22.11	21.92	21.84	21.56		
20	64QAM	1	0	21.99	21.89	21.74	21.48		
20	64QAM	1	49	21.79	21.65	21.47	21.21		
20	64QAM	1	99	21.72	21.55	21.35	21.15	22.1	
20	64QAM	50	0	21.19	21.06	20.92	20.66		
20	64QAM	50	24	21.10	20.92	20.87	20.59		
20	64QAM	50	50	20.96	20.85	20.69	20.44		
20	64QAM	100	0	21.11	20.93	20.84	20.59		
Channel				55315	55820	56160	56665	Tune-up limit (dBm)	
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	23.51	23.41	23.23	23.00	24.6	
15	QPSK	1	37	23.39	23.27	23.07	22.81		
15	QPSK	1	74	23.37	23.25	23.02	22.81		
15	QPSK	36	0	23.11	23.00	22.85	22.58		
15	QPSK	36	20	23.06	22.93	22.78	22.53	24.1	
15	QPSK	36	39	22.93	22.83	22.63	22.47		
15	QPSK	75	0	22.96	22.86	22.79	22.51		
15	16QAM	1	0	23.16	23.06	22.88	22.62		
15	16QAM	1	37	22.90	22.83	22.65	22.40	24.1	
15	16QAM	1	74	23.04	22.91	22.69	22.47		
15	16QAM	36	0	22.08	21.98	21.80	21.56		
15	16QAM	36	20	22.01	21.90	21.71	21.48		
15	16QAM	36	39	21.91	21.80	21.60	21.44	23.1	
15	16QAM	75	0	21.99	21.88	21.80	21.54		
15	64QAM	1	0	21.82	21.82	21.63	21.33		
15	64QAM	1	37	21.76	21.63	21.44	21.20	23.1	
15	64QAM	1	74	21.75	21.60	21.41	21.16		
15	64QAM	36	0	21.12	21.02	20.86	20.60		
15	64QAM	36	20	21.07	20.95	20.79	20.54		
15	64QAM	36	39	20.95	20.84	20.65	20.47	22.1	
15	64QAM	75	0	21.02	20.97	20.79	20.55		
Channel				55290	55815	56165	56669	Tune-up limit (dBm)	
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	23.46	23.36	23.15	22.90	24.6	
10	QPSK	1	25	23.34	23.17	23.01	22.72		
10	QPSK	1	49	23.31	23.25	23.02	22.81		
10	QPSK	25	0	23.04	22.91	22.76	22.49		
10	QPSK	25	12	22.97	22.90	22.70	22.43	24.1	
10	QPSK	25	25	22.89	22.80	22.60	22.40		
10	QPSK	50	0	22.95	22.94	22.79	22.49		
10	16QAM	1	0	23.09	23.00	22.85	22.53		
10	16QAM	1	25	22.82	22.79	22.57	22.38	24.1	
10	16QAM	1	49	22.95	22.89	22.63	22.47		
10	16QAM	25	0	22.01	21.94	21.72	21.47		
10	16QAM	25	12	21.96	21.90	21.66	21.39		
10	16QAM	25	25	21.91	21.72	21.54	21.38	23.1	
10	16QAM	50	0	21.93	21.96	21.77	21.45		
10	64QAM	1	0	21.82	21.80	21.55	21.25		
10	64QAM	1	25	21.68	21.54	21.34	21.13		
10	64QAM	1	49	21.67	21.54	21.41	21.12	23.1	
10	64QAM	25	0	21.08	20.95	20.85	20.54		
10	64QAM	25	12	21.05	20.88	20.71	20.49		
10	64QAM	25	25	20.94	20.77	20.57	20.38		
10	64QAM	50	0	20.94	20.91	20.69	20.53		
Channel				55265	55810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	23.48	23.39	23.29	23.35	24.6	
5	QPSK	1	12	23.47	23.36	23.24	23.37		
5	QPSK	1	24	23.41	23.29	23.21	23.31		
5	QPSK	12	0	23.11	22.99	22.88	22.98		
5	QPSK	12	7	23.08	22.97	22.87	22.92	24.1	
5	QPSK	12	13	23.07	22.91	22.80	22.90		
5	QPSK	25	0	23.05	22.93	22.84	22.93		
5	16QAM	1	0	23.09	22.99	22.92	23.06		
5	16QAM	1	12	23.19	23.02	22.98	23.11	24.1	
5	16QAM	1	24	23.10	22.99	22.82	22.93		
5	16QAM	12	0	22.04	21.93	21.89	21.97		
5	16QAM	12	7	22.07	21.96	21.82	21.97		
5	16QAM	12	13	22.05	21.95	21.83	21.92	23.1	
5	16QAM	25	0	22.10	21.97	21.85	21.96		
5	64QAM	1	0	21.85	21.77	21.71	21.82		
5	64QAM	1	12	21.86	21.73	21.69	21.77		
5	64QAM	1	24	21.88	21.76	21.59	21.73	23.1	
5	64QAM	12	0	21.10	20.98	20.97	21.02		
5	64QAM	12	7	21.14	21.02	20.92	20.98		
5	64QAM	12	13	21.13	21.00	20.89	20.94		
5	64QAM	25	0	21.13	21.03	20.90	20.97		



Band 38							
Ann 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	21.98	21.98	21.86	23.2
20	QPSK	1	49	21.99	22.00	21.90	
20	QPSK	1	99	22.00	21.98	21.85	
20	QPSK	50	0	22.07	22.08	21.97	
20	QPSK	50	24	22.15	22.07	22.02	
20	QPSK	50	50	22.15	22.13	22.00	23.2
20	QPSK	100	0	22.15	22.06	22.04	
20	16QAM	1	0	22.12	22.11	22.01	
20	16QAM	1	49	22.08	22.07	21.98	23.2
20	16QAM	1	99	22.12	22.09	21.97	
20	16QAM	50	0	22.12	22.09	22.01	
20	16QAM	50	24	22.20	22.09	22.06	23.2
20	16QAM	50	50	22.18	22.14	22.06	
20	16QAM	100	0	22.16	22.08	22.06	
20	64QAM	1	0	21.75	21.77	21.66	23.2
20	64QAM	1	49	21.80	21.80	21.68	
20	64QAM	1	99	21.80	21.79	21.64	
20	64QAM	50	0	21.62	21.62	21.41	22.7
20	64QAM	50	24	21.59	21.49	21.49	
20	64QAM	50	50	21.58	21.56	21.44	
20	64QAM	100	0	21.58	21.47	21.46	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.94	21.92	21.83	23.2
15	QPSK	1	37	21.93	21.91	21.82	
15	QPSK	1	74	21.98	21.94	21.82	
15	QPSK	36	0	22.14	22.08	21.94	
15	QPSK	36	20	22.14	22.02	21.94	
15	QPSK	36	39	22.13	22.09	21.98	23.2
15	QPSK	75	0	22.15	22.03	21.92	
15	16QAM	1	0	22.10	22.09	22.00	
15	16QAM	1	37	22.05	22.02	21.90	23.2
15	16QAM	1	74	22.13	22.10	21.95	
15	16QAM	36	0	22.12	22.03	21.95	
15	16QAM	36	20	22.09	22.02	21.90	23.2
15	16QAM	36	39	22.08	22.08	21.96	
15	16QAM	75	0	22.15	22.06	21.97	
15	64QAM	1	0	21.74	21.72	21.60	23.2
15	64QAM	1	37	21.81	21.78	21.68	
15	64QAM	1	74	21.84	21.78	21.64	
15	64QAM	36	0	21.59	21.49	21.36	22.7
15	64QAM	36	20	21.55	21.45	21.32	
15	64QAM	36	39	21.55	21.53	21.41	
15	64QAM	75	0	21.67	21.47	21.35	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.91	21.91	21.77	23.2
10	QPSK	1	25	21.86	21.88	21.73	
10	QPSK	1	49	21.93	21.85	21.81	
10	QPSK	25	0	22.06	22.07	21.88	
10	QPSK	25	12	22.05	22.01	21.90	
10	QPSK	25	25	22.04	22.01	21.88	23.2
10	QPSK	50	0	22.09	21.98	21.85	
10	16QAM	1	0	22.00	22.03	21.90	
10	16QAM	1	25	21.95	21.96	21.90	23.2
10	16QAM	1	49	22.11	22.03	21.87	
10	16QAM	25	0	22.08	21.95	21.94	
10	16QAM	25	12	22.06	21.98	21.88	23.2
10	16QAM	25	25	21.99	22.01	21.94	
10	16QAM	50	0	22.13	22.02	21.87	
10	64QAM	1	0	21.74	21.62	21.59	23.2
10	64QAM	1	25	21.71	21.68	21.67	
10	64QAM	1	49	21.75	21.75	21.56	
10	64QAM	25	0	21.49	21.46	21.36	22.7
10	64QAM	25	12	21.51	21.43	21.31	
10	64QAM	25	25	21.48	21.47	21.38	
10	64QAM	50	0	21.51	21.41	21.32	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.04	21.98	21.90	23.2
5	QPSK	1	12	22.03	21.99	21.88	
5	QPSK	1	24	22.04	21.98	21.84	
5	QPSK	12	0	22.15	22.07	21.98	
5	QPSK	12	7	22.19	22.16	22.04	
5	QPSK	12	13	22.14	22.16	22.02	23.2
5	QPSK	25	0	22.14	22.07	21.98	
5	16QAM	1	0	22.16	22.09	22.04	
5	16QAM	1	12	22.15	22.18	22.03	23.2
5	16QAM	1	24	22.19	22.17	22.03	
5	16QAM	12	0	22.13	22.07	21.96	
5	16QAM	12	7	22.12	22.16	22.00	23.2
5	16QAM	12	13	22.12	22.13	21.98	
5	16QAM	25	0	22.18	22.08	22.00	
5	64QAM	1	0	21.92	21.90	21.79	23.2
5	64QAM	1	12	21.89	21.91	21.79	
5	64QAM	1	24	21.92	21.93	21.80	
5	64QAM	12	0	21.58	21.49	21.41	22.7
5	64QAM	12	7	21.56	21.56	21.47	
5	64QAM	12	13	21.57	21.53	21.41	
5	64QAM	25	0	21.60	21.53	21.45	



Band 41										
Ann 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.73	21.74	21.85	21.48	21.20	23.2	
20	QPSK	1	49	21.73	21.76	21.79	21.73	21.65		
20	QPSK	1	99	21.69	21.77	21.85	21.28	21.45		
20	QPSK	50	0	21.81	21.84	21.86	21.70	21.52	23.2	
20	QPSK	50	24	21.90	21.95	21.96	21.85	21.68		
20	QPSK	50	50	21.85	21.93	21.93	21.67	21.65		
20	QPSK	100	0	21.88	21.95	21.93	21.73	21.58	23.2	
20	16QAM	1	0	21.80	21.83	21.92	21.59	21.27		
20	16QAM	1	49	21.83	21.84	21.87	21.85	21.70		
20	16QAM	1	99	21.83	21.89	21.95	21.38	21.57	23.2	
20	16QAM	50	0	21.74	21.73	21.76	21.73	21.54		
20	16QAM	50	24	21.80	21.84	21.85	21.87	21.69		
20	16QAM	50	50	21.79	21.82	21.84	21.70	21.69	23.2	
20	16QAM	100	0	21.82	21.83	21.84	21.75	21.62		
20	64QAM	1	0	21.46	21.38	21.48	21.24	21.20		
20	64QAM	1	49	21.46	21.42	21.49	21.60	21.45	23.2	
20	64QAM	1	99	21.51	21.46	21.52	21.20	21.28		
20	64QAM	50	0	20.76	20.74	20.78	20.85	20.70		
20	64QAM	50	24	20.86	20.85	20.87	20.96	20.80	22.7	
20	64QAM	50	50	20.79	20.82	20.85	20.81	20.81		
20	64QAM	100	0	20.82	20.83	20.85	20.87	20.72		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	21.73	21.77	21.79	21.61	21.32	23.2	
15	QPSK	1	37	21.69	21.75	21.73	21.75	21.54		
15	QPSK	1	74	21.66	21.85	21.86	21.48	21.54		
15	QPSK	36	0	21.86	21.85	21.85	21.71	21.56	23.2	
15	QPSK	36	20	21.85	21.91	21.91	21.74	21.67		
15	QPSK	36	39	21.84	21.93	21.93	21.71	21.64		
15	QPSK	75	0	21.87	21.93	21.94	21.68	21.60	23.2	
15	16QAM	1	0	21.87	21.85	21.89	21.75	21.44		
15	16QAM	1	37	21.76	21.75	21.82	21.82	21.68		
15	16QAM	1	74	21.87	21.90	21.90	21.62	21.67	23.2	
15	16QAM	36	0	21.74	21.69	21.69	21.71	21.52		
15	16QAM	36	20	21.75	21.73	21.78	21.73	21.63		
15	16QAM	36	39	21.72	21.77	21.76	21.70	21.64	23.2	
15	16QAM	75	0	21.82	21.81	21.82	21.73	21.63		
15	64QAM	1	0	21.45	21.38	21.44	21.45	21.20		
15	64QAM	1	37	21.47	21.45	21.48	21.57	21.45	23.2	
15	64QAM	1	74	21.49	21.55	21.55	21.29	21.43		
15	64QAM	36	0	20.77	20.75	20.76	20.84	20.70		
15	64QAM	36	20	20.77	20.82	20.81	20.88	20.79	22.7	
15	64QAM	36	39	20.76	20.81	20.82	20.83	20.80		
15	64QAM	75	0	20.81	20.80	20.82	20.83	20.74		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.63	21.71	21.73	21.52	21.30	23.2	
10	QPSK	1	25	21.64	21.69	21.64	21.65	21.46		
10	QPSK	1	49	21.62	21.79	21.76	21.41	21.52		
10	QPSK	25	0	21.85	21.80	21.80	21.65	21.53	23.2	
10	QPSK	25	12	21.80	21.86	21.82	21.66	21.59		
10	QPSK	25	25	21.84	21.87	21.87	21.61	21.58		
10	QPSK	50	0	21.81	21.91	21.94	21.61	21.57	23.2	
10	16QAM	1	0	21.79	21.76	21.87	21.67	21.44		
10	16QAM	1	25	21.74	21.68	21.73	21.76	21.62		
10	16QAM	1	49	21.67	21.88	21.86	21.56	21.62	23.2	
10	16QAM	25	0	21.71	21.68	21.61	21.61	21.45		
10	16QAM	25	12	21.86	21.69	21.75	21.66	21.57		
10	16QAM	25	25	21.69	21.71	21.67	21.65	21.58	23.2	
10	16QAM	50	0	21.72	21.75	21.80	21.67	21.61		
10	64QAM	1	0	21.45	21.31	21.43	21.41	21.25	23.2	
10	64QAM	1	25	21.47	21.35	21.48	21.48	21.40		
10	64QAM	1	49	21.45	21.46	21.49	21.27	21.34		
10	64QAM	25	0	20.72	20.73	20.71	20.84	20.77	22.7	
10	64QAM	25	12	20.75	20.80	20.79	20.80	20.77		
10	64QAM	25	25	20.72	20.72	20.76	20.76	20.76		
10	64QAM	50	0	20.73	20.77	20.77	20.79	20.75	Tune-up limit (dBm)	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	21.89	21.72	21.75	21.74	21.58	23.2	
5	QPSK	1	12	21.79	21.75	21.81	21.76	21.57		
5	QPSK	1	24	21.81	21.78	21.81	21.68	21.52		
5	QPSK	12	0	21.94	21.91	21.92	21.79	21.70	23.2	
5	QPSK	12	7	21.95	21.95	21.97	21.85	21.71		
5	QPSK	12	13	21.93	21.91	21.94	21.83	21.69		
5	QPSK	25	0	21.92	21.91	21.95	21.82	21.71	23.2	
5	16QAM	1	0	21.96	21.84	21.89	21.85	21.74		
5	16QAM	1	12	21.94	21.95	22.00	21.98	21.82		
5	16QAM	1	24	21.98	21.92	21.97	21.88	21.70	23.2	
5	16QAM	12	0	21.79	21.75	21.83	21.82	21.67		
5	16QAM	12	7	21.82	21.83	21.83	21.82	21.72		
5	16QAM	12	13	21.76	21.79	21.79	21.83	21.65	23.2	
5	16QAM	25	0	21.84	21.83	21.86	21.86	21.72		
5	64QAM	1	0	21.64	21.47	21.54	21.60	21.43		
5	64QAM	1	12	21.60	21.54	21.60	21.65	21.45	23.2	
5	64QAM	1	24	21.63	21.56	21.63	21.61	21.43		
5	64QAM	12	0	20.85	20.82	20.87	20.97	20.82		
5	64QAM	12	7	20.88	20.84	20.87	20.98	20.87	22.7	
5	64QAM	12	13	20.83	20.81	20.87	21.02	20.81		
5	64QAM	25	0	20.87	20.85	20.90	20.96	20.87		



Band 41 HPUE										
Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.33	23.26	23.40	23.10	23.00	25	
20	QPSK	1	49	23.29	23.31	23.33	23.36	23.27		
20	QPSK	1	99	23.26	23.34	23.41	23.00	23.08		
20	QPSK	50	0	23.49	23.49	23.54	23.43	23.26		
20	QPSK	50	24	23.56	23.61	23.61	23.57	23.39	25	
20	QPSK	50	50	23.53	23.58	23.62	23.40	23.39		
20	QPSK	100	0	23.58	23.60	23.61	23.46	23.31		
20	16QAM	1	0	23.70	23.68	23.72	23.47	23.10		
20	16QAM	1	49	23.70	23.72	23.74	23.76	23.52	25	
20	16QAM	1	99	23.70	23.71	23.77	23.26	23.40		
20	16QAM	50	0	23.54	23.54	23.57	23.47	23.29		
20	16QAM	50	24	23.64	23.65	23.68	23.60	23.41		
20	16QAM	50	50	23.59	23.64	23.65	23.44	23.41	25	
20	16QAM	100	0	23.62	23.65	23.65	23.50	23.33		
20	64QAM	1	0	23.52	23.45	23.52	23.26	23.00		
20	64QAM	1	49	23.50	23.49	23.55	23.56	23.38		
20	64QAM	1	99	23.54	23.53	23.59	23.09	23.28	24.5	
20	64QAM	50	0	22.53	22.54	22.60	22.79	22.59		
20	64QAM	50	24	22.63	22.68	22.66	22.92	22.72		
20	64QAM	50	50	22.59	22.63	22.67	22.74	22.73		
20	64QAM	100	0	22.63	22.62	22.68	22.80	22.64	Tune-up limit (dBm)	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.43	23.40	23.45	23.31	23.03	25	
15	QPSK	1	37	23.37	23.43	23.46	23.41	23.24		
15	QPSK	1	74	23.35	23.52	23.51	23.19	23.22		
15	QPSK	36	0	23.58	23.51	23.55	23.46	23.30		
15	QPSK	36	20	23.58	23.61	23.62	23.49	23.37	25	
15	QPSK	36	39	23.55	23.60	23.62	23.47	23.37		
15	QPSK	75	0	23.50	23.61	23.62	23.44	23.36		
15	16QAM	1	0	23.73	23.70	23.71	23.62	23.31		
15	16QAM	1	37	23.63	23.65	23.68	23.72	23.54	25	
15	16QAM	1	74	23.67	23.81	23.80	23.49	23.50		
15	16QAM	36	0	23.67	23.51	23.52	23.43	23.26		
15	16QAM	36	20	23.67	23.59	23.60	23.45	23.39		
15	16QAM	36	39	23.64	23.58	23.59	23.44	23.37	25	
15	16QAM	75	0	23.61	23.63	23.65	23.46	23.36		
15	64QAM	1	0	23.53	23.48	23.50	23.41	23.11		
15	64QAM	1	37	23.64	23.54	23.55	23.54	23.35		
15	64QAM	1	74	23.63	23.68	23.67	23.30	23.35	24.5	
15	64QAM	36	0	22.59	22.53	22.56	22.77	22.62		
15	64QAM	36	20	22.59	22.54	22.65	22.81	22.73		
15	64QAM	36	39	22.56	22.63	22.63	22.79	22.70		
15	64QAM	75	0	22.64	22.63	22.66	22.73	22.65	Tune-up limit (dBm)	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.49	23.36	23.39	23.17	23.01	25	
10	QPSK	1	25	23.38	23.38	23.43	23.38	23.20		
10	QPSK	1	49	23.39	23.49	23.43	23.20	23.04		
10	QPSK	25	0	23.61	23.52	23.58	23.50	23.37		
10	QPSK	25	12	23.64	23.63	23.67	23.62	23.48	25	
10	QPSK	25	25	23.58	23.64	23.67	23.54	23.36		
10	QPSK	50	0	23.61	23.63	23.67	23.56	23.36		
10	16QAM	1	0	23.66	23.82	23.84	23.52	23.38		
10	16QAM	1	25	23.76	23.83	23.80	23.80	23.58	25	
10	16QAM	1	49	23.77	23.82	23.82	23.54	23.31		
10	16QAM	25	0	23.68	23.54	23.59	23.50	23.36		
10	16QAM	25	12	23.66	23.66	23.71	23.65	23.48		
10	16QAM	25	25	23.62	23.61	23.65	23.55	23.33	25	
10	16QAM	50	0	23.66	23.67	23.70	23.57	23.39		
10	64QAM	1	0	23.77	23.62	23.67	23.41	23.27		
10	64QAM	1	25	23.76	23.74	23.77	23.65	23.54		
10	64QAM	1	49	23.69	23.73	23.73	23.39	23.23	24.5	
10	64QAM	25	0	22.71	22.65	22.66	22.86	22.73		
10	64QAM	25	12	22.77	22.76	22.79	23.00	22.84		
10	64QAM	25	25	22.72	22.72	22.76	22.89	22.70		
10	64QAM	50	0	22.65	22.67	22.70	22.87	22.69	Tune-up limit (dBm)	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	23.47	23.28	23.31	23.16	23.04	25	
5	QPSK	1	12	23.34	23.36	23.41	23.34	23.17		
5	QPSK	1	24	23.36	23.43	23.43	23.17	23.01		
5	QPSK	12	0	23.56	23.50	23.57	23.42	23.27		
5	QPSK	12	7	23.56	23.53	23.59	23.55	23.46	25	
5	QPSK	12	13	23.57	23.58	23.63	23.54	23.32		
5	QPSK	25	0	23.60	23.59	23.59	23.55	23.27		
5	16QAM	1	0	23.77	23.72	23.74	23.52	23.38		
5	16QAM	1	12	23.67	23.78	23.72	23.75	23.52	25	
5	16QAM	1	24	23.77	23.72	23.72	23.51	23.29		
5	16QAM	12	0	23.64	23.50	23.49	23.45	23.34		
5	16QAM	12	7	23.61	23.64	23.64	23.56	23.45		
5	16QAM	12	13	23.59	23.57	23.62	23.47	23.32	24.5	
5	16QAM	25	0	23.64	23.66	23.69	23.53	23.36		
5	64QAM	1	0	23.73	23.61	23.65	23.40	23.27		
5	64QAM	1	12	23.69	23.69	23.67	23.57	23.54		
5	64QAM	1	24	23.69	23.69	23.70	23.35	23.13	25	
5	64QAM	12	0	22.70	22.62	22.59	22.76	22.73		
5	64QAM	12	7	22.73	22.74	22.75	22.93	22.75		
5	64QAM	12	13	22.69	22.65	22.67	22.89	22.62		
5	64QAM	25	0	22.67	22.62	22.63	22.79	22.63		



Band 48										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	21.18	21.13	21.00	20.75	22.3		
20	QPSK	1	49	20.99	20.87	20.75	20.53			
20	QPSK	1	99	20.96	20.85	20.69	20.41			
20	QPSK	50	0	20.83	20.67	20.58	20.36			
20	QPSK	50	24	20.77	20.54	20.52	20.29	21.3		
20	QPSK	50	50	20.62	20.46	20.36	20.09			
20	QPSK	100	0	20.78	20.54	20.49	20.29			
20	16QAM	1	0	20.89	20.81	20.71	20.49			
20	16QAM	1	49	20.65	20.51	20.41	20.19	21.3		
20	16QAM	1	99	20.65	20.55	20.39	20.13			
20	16QAM	50	0	19.87	19.72	19.60	19.39			
20	16QAM	50	24	19.79	19.56	19.54	19.31			
20	16QAM	50	50	19.66	19.49	19.38	19.14	20.3		
20	16QAM	100	0	19.79	19.57	19.53	19.29			
20	64QAM	1	0	19.62	19.56	19.45	19.25			
20	64QAM	1	49	19.45	19.31	19.17	18.95			
20	64QAM	1	99	19.37	19.23	19.11	18.84	19.3		
20	64QAM	50	0	18.85	18.72	18.61	18.40			
20	64QAM	50	24	18.83	18.59	18.55	18.31			
20	64QAM	50	50	18.68	18.53	18.39	18.15			
20	64QAM	100	0	18.80	18.57	18.53	18.30	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	21.12	21.01	20.89	20.65	22.3		
15	QPSK	1	37	20.95	20.87	20.73	20.41			
15	QPSK	1	74	20.93	20.87	20.70	20.38			
15	QPSK	36	0	20.79	20.68	20.54	20.31			
15	QPSK	36	20	20.74	20.62	20.49	20.22	21.3		
15	QPSK	36	39	20.62	20.47	20.34	20.14			
15	QPSK	75	0	20.68	20.61	20.49	20.24			
15	16QAM	1	0	20.83	20.76	20.62	20.39			
15	16QAM	1	37	20.61	20.48	20.38	20.09	21.3		
15	16QAM	1	74	20.70	20.59	20.43	20.19			
15	16QAM	36	0	19.78	19.63	19.52	19.27			
15	16QAM	36	20	19.71	19.60	19.44	19.19			
15	16QAM	36	39	19.59	19.47	19.32	19.13	20.3		
15	16QAM	75	0	19.71	19.65	19.50	19.27			
15	64QAM	1	0	19.54	19.51	19.39	19.12			
15	64QAM	1	37	19.42	19.32	19.18	18.95			
15	64QAM	1	74	19.41	19.29	19.15	18.89	19.3		
15	64QAM	36	0	18.81	18.69	18.55	18.32			
15	64QAM	36	20	18.78	18.63	18.51	18.24			
15	64QAM	36	39	18.65	18.51	18.35	18.17			
15	64QAM	75	0	18.70	18.64	18.49	18.25	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3525	3577.5	3612.5	3669			
10	QPSK	1	0	21.10	20.93	20.80	20.55	22.3		
10	QPSK	1	25	20.94	20.84	20.67	20.39			
10	QPSK	1	49	20.84	20.83	20.64	20.30			
10	QPSK	25	0	20.77	20.65	20.46	20.31			
10	QPSK	25	12	20.67	20.52	20.42	20.15	21.3		
10	QPSK	25	25	20.59	20.37	20.32	20.14			
10	QPSK	50	0	20.67	20.55	20.40	20.16			
10	16QAM	1	0	20.82	20.70	20.60	20.35			
10	16QAM	1	25	20.53	20.47	20.30	20.06	21.3		
10	16QAM	1	49	20.68	20.58	20.33	20.19			
10	16QAM	25	0	19.76	19.62	19.45	19.23			
10	16QAM	25	12	19.62	19.59	19.44	19.16			
10	16QAM	25	25	19.49	19.47	19.27	19.10	20.3		
10	16QAM	50	0	19.68	19.55	19.44	19.23			
10	64QAM	1	0	19.54	19.46	19.34	19.03			
10	64QAM	1	25	19.39	19.26	19.12	18.92			
10	64QAM	1	49	19.35	19.27	19.09	18.85	19.3		
10	64QAM	25	0	18.72	18.61	18.53	18.26			
10	64QAM	25	12	18.69	18.57	18.45	18.20			
10	64QAM	25	25	18.56	18.48	18.30	18.12			
10	64QAM	50	0	18.69	18.55	18.47	18.17	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3522.5	3567	3613	3677.5			
5	QPSK	1	0	21.03	20.98	20.93	21.03	22.3		
5	QPSK	1	12	20.98	20.93	20.89	20.97			
5	QPSK	1	24	20.98	20.85	20.77	20.86			
5	QPSK	12	0	20.76	20.66	20.61	20.71			
5	QPSK	12	7	20.74	20.69	20.53	20.62	21.3		
5	QPSK	12	13	20.70	20.61	20.55	20.60			
5	QPSK	25	0	20.70	20.64	20.52	20.61			
5	16QAM	1	0	20.78	20.66	20.66	20.73			
5	16QAM	1	12	20.81	20.75	20.63	20.75	21.3		
5	16QAM	1	24	20.77	20.67	20.52	20.65			
5	16QAM	12	0	19.71	19.65	19.62	19.70			
5	16QAM	12	7	19.74	19.68	19.56	19.63			
5	16QAM	12	13	19.72	19.65	19.53	19.57	20.3		
5	16QAM	25	0	19.76	19.67	19.56	19.68			
5	64QAM	1	0	19.50	19.47	19.43	19.46			
5	64QAM	1	12	19.49	19.40	19.36	19.45			
5	64QAM	1	24	19.53	19.43	19.33	19.43	19.3		
5	64QAM	12	0	18.77	18.74	18.66	18.73			
5	64QAM	12	7	18.79	18.69	18.64	18.71			
5	64QAM	12	13	18.78	18.67	18.54	18.63			
5	64QAM	25	0	18.81	18.70	18.60	18.68	Tune-up limit (dBm)		

Band 38							
Ann 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	24.48	24.44	24.35	25.1
20	QPSK	1	49	24.49	24.48	24.36	
20	QPSK	1	99	24.48	24.44	24.35	
20	QPSK	50	0	24.07	24.06	23.96	24.7
20	QPSK	50	24	24.19	24.09	24.05	
20	QPSK	50	50	24.15	24.08	24.02	
20	QPSK	100	0	24.16	24.03	24.03	24.7
20	16QAM	1	0	24.09	24.04	23.97	
20	16QAM	1	49	24.07	24.02	23.95	
20	16QAM	1	99	24.07	24.01	23.93	23.7
20	16QAM	50	0	23.11	23.10	22.99	
20	16QAM	50	24	23.19	23.07	23.07	
20	16QAM	50	50	23.18	23.13	23.03	22.7
20	16QAM	100	0	23.18	23.07	23.05	
20	64QAM	1	0	22.80	22.75	22.68	
20	64QAM	1	49	22.82	22.75	22.69	22.7
20	64QAM	1	99	22.81	22.76	22.64	
20	64QAM	50	0	22.12	22.10	22.00	
20	64QAM	50	24	22.20	22.09	22.09	22.7
20	64QAM	50	50	22.15	22.14	22.06	
20	64QAM	100	0	22.20	22.08	22.07	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.47	24.43	24.26	25.1
15	QPSK	1	37	24.47	24.46	24.35	
15	QPSK	1	74	24.43	24.38	24.34	
15	QPSK	36	0	24.03	24.00	23.93	24.7
15	QPSK	36	20	24.18	23.96	24.01	
15	QPSK	36	39	24.09	24.03	24.00	
15	QPSK	75	0	24.11	23.99	23.97	24.7
15	16QAM	1	0	24.06	24.04	23.93	
15	16QAM	1	37	24.05	24.01	23.88	
15	16QAM	1	74	24.00	24.01	23.91	23.7
15	16QAM	36	0	23.04	23.00	22.96	
15	16QAM	36	20	23.15	23.03	23.03	
15	16QAM	36	39	23.11	23.12	23.00	23.7
15	16QAM	75	0	23.15	22.98	23.02	
15	64QAM	1	0	22.79	22.70	22.67	
15	64QAM	1	37	22.75	22.72	22.60	23.7
15	64QAM	1	74	22.79	22.67	22.61	
15	64QAM	36	0	22.07	22.02	21.91	
15	64QAM	36	20	22.18	22.08	22.08	22.7
15	64QAM	36	39	22.10	22.05	21.98	
15	64QAM	75	0	22.16	22.04	22.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.46	24.33	24.25	25.1
10	QPSK	1	25	24.42	24.40	24.35	
10	QPSK	1	49	24.39	24.39	24.35	
10	QPSK	25	0	24.00	24.03	23.92	24.7
10	QPSK	25	12	24.15	23.95	24.03	
10	QPSK	25	25	24.05	24.09	24.00	
10	QPSK	50	0	24.14	23.96	23.93	24.7
10	16QAM	1	0	24.09	23.99	23.90	
10	16QAM	1	25	24.03	24.02	23.88	
10	16QAM	1	49	24.06	23.91	23.87	23.7
10	16QAM	25	0	23.07	23.09	22.93	
10	16QAM	25	12	23.14	23.06	23.02	
10	16QAM	25	25	23.13	23.09	22.94	23.7
10	16QAM	50	0	23.13	23.02	23.05	
10	64QAM	1	0	22.76	22.75	22.65	
10	64QAM	1	25	22.73	22.74	22.66	23.7
10	64QAM	1	49	22.79	22.70	22.57	
10	64QAM	25	0	22.06	22.02	21.94	
10	64QAM	25	12	22.19	22.06	22.06	22.7
10	64QAM	25	25	22.09	22.04	22.04	
10	64QAM	50	0	22.18	22.02	22.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.41	24.40	24.28	25.1
5	QPSK	1	12	24.44	24.45	24.32	
5	QPSK	1	24	24.38	24.38	24.26	
5	QPSK	12	0	24.06	24.03	23.94	24.7
5	QPSK	12	7	24.11	23.95	24.03	
5	QPSK	12	13	24.08	24.08	23.99	
5	QPSK	25	0	24.12	24.03	24.02	24.7
5	16QAM	1	0	24.06	23.98	23.91	
5	16QAM	1	12	24.04	23.97	23.91	
5	16QAM	1	24	24.05	23.97	23.89	23.7
5	16QAM	12	0	23.05	23.08	22.96	
5	16QAM	12	7	23.17	23.05	23.06	
5	16QAM	12	13	23.11	23.11	22.98	23.7
5	16QAM	25	0	23.12	23.05	22.98	
5	64QAM	1	0	22.79	22.65	22.61	
5	64QAM	1	12	22.73	22.71	22.67	22.7
5	64QAM	1	24	22.72	22.74	22.56	
5	64QAM	12	0	22.02	22.10	21.96	
5	64QAM	12	7	22.12	22.04	22.02	22.7
5	64QAM	12	13	22.10	22.10	22.06	
5	64QAM	25	0	22.13	21.98	21.99	



Band 41										
Ann 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.23	24.38	24.45	24.14	23.88	25.1	
20	QPSK	1	49	24.21	24.35	24.33	24.40	24.10		
20	QPSK	1	99	24.22	24.37	24.43	24.00	24.09		
20	QPSK	50	0	23.79	23.94	23.94	24.05	23.90	24.7	
20	QPSK	50	24	23.90	24.07	24.16	24.15	24.02		
20	QPSK	50	50	23.88	24.04	24.01	24.07	24.01		
20	QPSK	100	0	23.89	24.05	24.01	24.10	23.97	24.7	
20	16QAM	1	0	23.80	23.95	24.05	23.94	23.87		
20	16QAM	1	49	23.80	23.96	23.92	24.23	24.04		
20	16QAM	1	99	23.84	24.03	24.00	23.79	23.87	23.7	
20	16QAM	50	0	22.82	22.96	22.97	23.09	22.93		
20	16QAM	50	24	22.91	23.09	23.05	23.22	23.06		
20	16QAM	50	50	22.90	23.07	23.04	23.08	23.02	23.7	
20	16QAM	100	0	22.90	23.06	23.02	23.11	22.97		
20	64QAM	1	0	22.51	22.60	22.65	22.60	22.35		
20	64QAM	1	49	22.51	22.71	22.68	22.99	22.79	23.7	
20	64QAM	1	99	22.56	22.76	22.68	22.53	22.55		
20	64QAM	50	0	21.82	21.98	21.98	22.09	21.93		
20	64QAM	50	24	21.93	22.07	22.07	22.21	22.06	22.7	
20	64QAM	50	50	21.92	22.07	22.05	22.08	22.03		
20	64QAM	100	0	21.91	22.08	22.04	22.14	21.96		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.16	24.23	24.44	24.13	23.82	25.1	
15	QPSK	1	37	24.11	24.31	24.25	24.32	24.22		
15	QPSK	1	74	24.21	24.34	24.40	23.97	24.02		
15	QPSK	36	0	23.75	23.94	23.86	24.04	23.85	24.7	
15	QPSK	36	20	23.89	23.99	23.94	24.16	23.92		
15	QPSK	36	39	23.80	24.03	24.00	23.98	23.98		
15	QPSK	75	0	23.89	23.99	24.01	24.08	23.95	24.7	
15	16QAM	1	0	23.70	23.88	24.03	23.89	23.58		
15	16QAM	1	37	23.75	23.89	23.83	24.14	23.98		
15	16QAM	1	74	23.79	23.98	23.97	23.78	23.81	23.7	
15	16QAM	36	0	22.79	22.88	22.89	23.03	22.84		
15	16QAM	36	20	22.83	23.00	23.01	23.15	22.98		
15	16QAM	36	39	22.90	23.06	23.04	23.00	22.95	23.7	
15	16QAM	75	0	22.89	23.05	22.92	23.04	22.95		
15	64QAM	1	0	22.44	22.53	22.58	22.54	22.29		
15	64QAM	1	37	22.41	22.68	22.59	22.94	22.72	23.7	
15	64QAM	1	74	22.48	22.71	22.59	22.43	22.51		
15	64QAM	36	0	21.77	21.98	21.95	22.07	21.88		
15	64QAM	36	20	21.88	22.01	22.05	22.15	21.96	22.7	
15	64QAM	36	39	21.87	22.01	21.95	22.06	22.03		
15	64QAM	75	0	21.86	22.02	21.96	22.10	21.95		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.20	24.32	24.38	24.11	23.83	25.1	
10	QPSK	1	25	24.15	24.28	24.26	24.38	24.22		
10	QPSK	1	49	24.13	24.30	24.38	23.91	24.05		
10	QPSK	25	0	23.69	23.91	23.90	23.98	23.84	24.7	
10	QPSK	25	12	23.81	24.01	23.97	24.19	23.93		
10	QPSK	25	25	23.81	24.03	23.98	23.97	23.94		
10	QPSK	50	0	23.83	23.96	23.96	24.05	23.96	24.7	
10	16QAM	1	0	23.80	23.88	23.97	23.86	23.65		
10	16QAM	1	25	23.74	23.95	23.87	24.17	24.02		
10	16QAM	1	49	23.78	23.95	23.94	23.71	23.87	23.7	
10	16QAM	25	0	22.79	22.94	22.94	23.09	22.86		
10	16QAM	25	12	22.90	23.07	22.95	23.14	22.96		
10	16QAM	25	25	22.90	23.03	23.00	23.00	23.02	23.7	
10	16QAM	50	0	22.81	23.02	22.97	23.05	22.94		
10	64QAM	1	0	22.43	22.59	22.64	22.52	22.35		
10	64QAM	1	25	22.43	22.65	22.68	22.96	22.73	23.7	
10	64QAM	1	49	22.46	22.70	22.66	22.52	22.50		
10	64QAM	25	0	21.73	21.88	21.96	22.07	21.88		
10	64QAM	25	12	21.85	22.03	22.01	22.15	21.98	22.7	
10	64QAM	25	25	21.82	21.97	22.01	21.98	21.99		
10	64QAM	50	0	21.87	21.99	21.99	22.14	21.90		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.16	24.23	24.40	24.14	23.78	25.1	
5	QPSK	1	12	24.17	24.33	24.30	24.30	24.22		
5	QPSK	1	24	24.13	24.31	24.43	23.91	24.05		
5	QPSK	12	0	23.72	23.88	23.92	23.99	23.84	24.7	
5	QPSK	12	7	23.81	24.05	24.00	24.15	24.02		
5	QPSK	12	13	23.82	24.01	23.94	23.99	23.99		
5	QPSK	25	0	23.66	23.97	23.99	24.05	23.92	24.7	
5	16QAM	1	0	23.71	23.90	23.98	23.89	23.61		
5	16QAM	1	12	23.79	23.91	23.86	24.18	24.03		
5	16QAM	1	24	23.83	23.99	23.90	23.74	23.79	23.7	
5	16QAM	12	0	22.79	22.89	22.93	23.06	22.86		
5	16QAM	12	7	22.81	22.99	23.01	23.22	23.04		
5	16QAM	12	13	22.90	23.05	23.03	22.99	22.94	23.7	
5	16QAM	25	0	22.81	22.96	22.99	23.07	22.95		
5	64QAM	1	0	22.51	22.59	22.65	22.52	22.35		
5	64QAM	1	12	22.46	22.68	22.65	22.93	22.69	23.7	
5	64QAM	1	24	22.54	22.71	22.66	22.50	22.47		
5	64QAM	12	0	21.81	21.90	21.89	22.07	21.85		
5	64QAM	12	7	21.83	21.99	22.07	22.16	22.03	22.7	
5	64QAM	12	13	21.92	22.05	22.01	22.04	22.02		
5	64QAM	25	0	21.90	22.03	22.01	22.05	21.91		



Band 41 HPUE									
Ant.2									
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low-Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High-Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.76	25.92	26.00	25.74	25.50	26.9
20	QPSK	1	49	25.76	25.92	25.89	25.59	25.81	
20	QPSK	1	99	25.83	26.00	26.01	25.58	25.70	
20	QPSK	50	0	25.56	25.73	25.73	25.96	25.82	26.4
20	QPSK	50	24	25.67	25.84	25.98	25.94	25.95	
20	QPSK	50	50	25.66	25.83	25.81	25.96	25.88	
20	QPSK	100	0	25.68	25.84	25.81	26.01	25.85	26.4
20	16QAM	1	0	25.72	25.86	26.00	25.93	25.69	
20	16QAM	1	49	25.74	25.93	25.91	26.23	26.92	
20	16QAM	1	99	25.72	25.99	25.93	25.81	25.86	25.4
20	16QAM	50	0	24.61	24.75	24.78	24.99	24.83	
20	16QAM	50	24	24.71	24.86	24.85	25.14	24.96	
20	16QAM	50	50	24.67	24.87	24.83	24.99	24.94	25.4
20	16QAM	100	0	24.66	24.86	24.84	25.03	24.90	
20	64QAM	1	0	24.58	24.94	24.66	24.76	24.54	
20	64QAM	1	49	24.62	24.74	24.71	25.09	24.58	24.4
20	64QAM	1	99	24.62	24.82	24.79	24.66	23.81	
20	64QAM	50	0	23.59	23.77	23.75	23.99	23.58	
20	64QAM	50	24	23.69	23.86	23.84	24.15	23.40	24.4
20	64QAM	50	50	23.68	23.87	23.83	24.01	23.13	
20	64QAM	100	0	23.70	23.86	23.83	24.05	23.28	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.71	25.90	26.00	25.68	25.51	26.9
15	QPSK	1	37	25.67	25.89	25.82	25.91	25.81	
15	QPSK	1	74	25.82	25.92	25.92	25.58	25.69	
15	QPSK	36	0	25.53	25.67	25.70	25.86	25.78	26.4
15	QPSK	36	20	25.67	25.84	25.95	25.91	25.90	
15	QPSK	36	39	25.62	25.81	25.71	25.86	25.79	
15	QPSK	75	0	25.60	25.82	25.76	25.97	25.84	26.4
15	16QAM	1	0	25.63	25.85	25.87	25.92	25.64	
15	16QAM	1	37	25.74	25.89	25.85	26.17	26.00	
15	16QAM	1	74	25.67	25.96	25.87	25.77	25.84	25.4
15	16QAM	36	0	24.54	24.73	24.75	24.93	24.75	
15	16QAM	36	20	24.71	24.77	24.82	25.13	24.93	
15	16QAM	36	39	24.65	24.86	24.77	24.92	24.87	25.4
15	16QAM	75	0	24.61	24.83	24.82	25.00	24.89	
15	64QAM	1	0	24.50	24.59	24.56	24.73	24.46	
15	64QAM	1	37	24.64	24.66	24.67	25.09	24.50	24.4
15	64QAM	1	74	24.54	24.75	24.76	24.59	23.73	
15	64QAM	36	0	23.51	23.70	23.72	23.91	23.46	
15	64QAM	36	20	23.65	23.82	23.79	24.12	23.40	24.4
15	64QAM	36	39	23.60	23.80	23.75	23.95	23.12	
15	64QAM	75	0	23.70	23.84	23.74	23.98	23.22	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.75	25.89	25.94	25.66	25.52	26.9
10	QPSK	1	25	25.72	25.84	25.79	25.94	25.76	
10	QPSK	1	49	25.77	25.91	26.01	25.49	25.70	
10	QPSK	25	0	25.46	25.67	25.72	25.91	25.74	26.4
10	QPSK	25	12	25.59	25.81	25.89	25.86	25.85	
10	QPSK	25	25	25.61	25.77	25.76	25.90	25.79	
10	QPSK	50	0	25.60	25.82	25.71	25.91	25.76	26.4
10	16QAM	1	0	25.62	25.80	25.94	25.85	25.61	
10	16QAM	1	25	25.73	25.92	25.91	26.15	25.97	
10	16QAM	1	49	25.71	25.93	25.84	25.75	25.78	25.4
10	16QAM	25	0	24.51	24.73	24.72	24.96	24.82	
10	16QAM	25	12	24.63	24.84	24.82	25.04	24.86	
10	16QAM	25	25	24.64	24.77	24.79	24.89	24.84	25.4
10	16QAM	50	0	24.60	24.86	24.74	24.96	24.82	
10	64QAM	1	0	24.55	24.60	24.56	24.66	24.49	
10	64QAM	1	25	24.56	24.74	24.69	25.08	24.50	24.4
10	64QAM	1	49	24.55	24.79	24.71	24.61	23.76	
10	64QAM	25	0	23.59	23.73	23.75	23.97	23.51	
10	64QAM	25	12	23.59	23.86	23.84	24.13	23.39	24.4
10	64QAM	25	25	23.64	23.79	23.80	23.94	23.12	
10	64QAM	50	0	23.68	23.83	23.82	24.02	23.21	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5	
5	QPSK	1	0	25.69	25.88	25.92	25.70	25.53	26.9
5	QPSK	1	12	25.68	25.84	25.82	25.93	25.80	
5	QPSK	1	24	25.83	25.91	26.01	25.53	25.60	
5	QPSK	12	0	25.54	25.65	25.64	25.95	25.72	26.4
5	QPSK	12	7	25.60	25.82	25.97	25.94	25.89	
5	QPSK	12	13	25.59	25.75	25.75	25.92	25.87	
5	QPSK	25	0	25.60	25.76	25.73	25.92	25.82	26.4
5	16QAM	1	0	25.63	25.81	25.92	25.84	25.69	
5	16QAM	1	12	25.64	25.85	25.83	26.15	25.97	
5	16QAM	1	24	25.68	25.95	25.84	25.71	25.81	25.4
5	16QAM	12	0	24.57	24.65	24.72	24.99	24.74	
5	16QAM	12	7	24.69	24.77	24.83	25.12	24.87	
5	16QAM	12	13	24.58	24.82	24.81	24.93	24.87	24.4
5	16QAM	25	0	24.63	24.78	24.82	24.97	24.81	
5	64QAM	1	0	24.52	24.60	24.62	24.66	24.47	
5	64QAM	1	12	24.57	24.67	24.64	25.01	24.53	24.4
5	64QAM	1	24	24.59	24.76	24.74	24.56	23.77	
5	64QAM	12	0	23.52	23.74	23.71	23.90	23.56	
5	64QAM	12	7	23.62	23.85	23.81	24.08	23.40	24.4
5	64QAM	12	13	23.64	23.83	23.76	23.95	23.12	
5	64QAM	25	0	23.60	23.85	23.80	23.96	23.16	



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	22.80	22.72	22.60	22.45	23.8		
20	QPSK	1	49	22.59	22.48	22.31	22.10			
20	QPSK	1	99	22.55	22.41	22.25	22.04			
20	QPSK	50	0	22.80	22.73	22.58	22.33			
20	QPSK	50	24	22.77	22.67	22.50	22.25	23.3		
20	QPSK	50	50	22.61	22.48	22.34	22.09			
20	QPSK	100	0	22.76	22.57	22.51	22.24			
20	16QAM	1	0	22.92	22.81	22.67	22.43			
20	16QAM	1	49	22.68	22.55	22.37	22.15	23.3		
20	16QAM	1	99	22.66	22.50	22.35	22.10			
20	16QAM	50	0	22.13	22.04	21.89	21.65			
20	16QAM	50	24	22.09	21.89	21.80	21.59			
20	16QAM	50	50	21.93	21.82	21.66	21.41	22.3		
20	16QAM	100	0	22.08	21.89	21.80	21.55			
20	64QAM	1	0	21.92	21.85	21.72	21.46			
20	64QAM	1	49	21.76	21.62	21.46	21.32			
20	64QAM	1	99	21.68	21.52	21.38	21.31	21.3		
20	64QAM	50	0	21.15	21.06	20.90	20.66			
20	64QAM	50	24	21.10	20.91	20.83	20.57			
20	64QAM	50	50	20.95	20.82	20.66	20.42			
20	64QAM	100	0	21.09	20.88	20.82	20.56	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	22.72	22.59	22.50	22.21	23.8		
15	QPSK	1	37	22.57	22.47	22.29	22.03			
15	QPSK	1	74	22.57	22.46	22.24	22.01			
15	QPSK	36	0	22.80	22.70	22.52	22.29			
15	QPSK	36	20	22.76	22.66	22.48	22.20	23.3		
15	QPSK	36	39	22.62	22.51	22.33	22.15			
15	QPSK	75	0	22.66	22.66	22.47	22.24			
15	16QAM	1	0	22.86	22.76	22.61	22.32			
15	16QAM	1	37	22.61	22.47	22.30	22.05	23.3		
15	16QAM	1	74	22.69	22.59	22.40	22.16			
15	16QAM	36	0	22.05	21.95	21.80	21.54			
15	16QAM	36	20	21.99	21.90	21.72	21.47			
15	16QAM	36	39	21.87	21.77	21.59	21.44	22.3		
15	16QAM	75	0	21.97	21.88	21.79	21.53			
15	64QAM	1	0	21.86	21.81	21.63	21.36			
15	64QAM	1	37	21.74	21.64	21.42	21.19			
15	64QAM	1	74	21.71	21.59	21.38	21.15	21.3		
15	64QAM	36	0	21.12	21.02	20.85	20.59			
15	64QAM	36	20	21.05	20.95	20.77	20.51			
15	64QAM	36	39	20.93	20.82	20.63	20.47			
15	64QAM	75	0	20.99	20.94	20.77	20.52	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	22.69	22.55	22.49	22.16	23.8		
10	QPSK	1	25	22.49	22.44	22.20	21.94			
10	QPSK	1	49	22.57	22.36	22.23	21.91			
10	QPSK	25	0	22.76	22.69	22.46	22.29			
10	QPSK	25	12	22.72	22.64	22.41	22.16	23.3		
10	QPSK	25	25	22.58	22.48	22.28	22.06			
10	QPSK	50	0	22.56	22.61	22.43	22.22			
10	16QAM	1	0	22.76	22.68	22.60	22.27			
10	16QAM	1	25	22.60	22.38	22.22	21.98	23.3		
10	16QAM	1	49	22.61	22.55	22.34	22.09			
10	16QAM	25	0	22.00	21.90	21.71	21.48			
10	16QAM	25	12	21.91	21.81	21.70	21.42			
10	16QAM	25	25	21.79	21.75	21.55	21.43	22.3		
10	16QAM	50	0	21.87	21.91	21.71	21.47			
10	64QAM	1	0	21.85	21.80	21.55	21.31			
10	64QAM	1	25	21.73	21.59	21.38	21.10			
10	64QAM	1	49	21.66	21.51	21.30	21.12	21.3		
10	64QAM	25	0	21.07	20.96	20.75	20.52			
10	64QAM	25	12	20.95	20.87	20.74	20.44			
10	64QAM	25	25	20.84	20.74	20.60	20.41			
10	64QAM	50	0	20.93	20.85	20.68	20.43	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	22.66	22.54	22.50	22.55	23.8		
5	QPSK	1	12	22.63	22.50	22.44	22.53			
5	QPSK	1	24	22.57	22.51	22.36	22.48			
5	QPSK	12	0	22.78	22.62	22.60	22.69			
5	QPSK	12	7	22.77	22.65	22.56	22.67	23.3		
5	QPSK	12	13	22.75	22.63	22.53	22.63			
5	QPSK	25	0	22.72	22.64	22.51	22.62			
5	16QAM	1	0	22.77	22.70	22.61	22.73			
5	16QAM	1	12	22.84	22.71	22.67	22.78	23.3		
5	16QAM	1	24	22.76	22.68	22.53	22.61			
5	16QAM	12	0	22.04	21.91	21.89	21.95			
5	16QAM	12	7	22.08	21.93	21.81	21.95			
5	16QAM	12	13	22.04	21.92	21.75	21.90	22.3		
5	16QAM	25	0	22.06	21.97	21.84	21.95			
5	64QAM	1	0	21.87	21.75	21.67	21.79			
5	64QAM	1	12	21.82	21.72	21.67	21.76			
5	64QAM	1	24	21.85	21.74	21.58	21.71	21.3		
5	64QAM	12	0	21.08	20.97	20.94	21.00			
5	64QAM	12	7	21.11	21.00	20.88	21.01			
5	64QAM	12	13	21.10	20.99	20.84	20.92			
5	64QAM	25	0	21.12	21.01	20.89	20.97			



Band 38							
Ann 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	21.20	21.19	21.08	22.4
20	QPSK	1	49	21.22	21.22	21.12	
20	QPSK	1	99	21.21	21.20	21.07	
20	QPSK	50	0	21.28	21.29	21.22	
20	QPSK	50	24	21.40	21.30	21.25	
20	QPSK	50	50	21.36	21.34	21.23	22.4
20	QPSK	100	0	21.37	21.30	21.27	
20	16QAM	1	0	21.34	21.31	21.23	
20	16QAM	1	49	21.33	21.34	21.22	
20	16QAM	1	99	21.37	21.32	21.19	
20	16QAM	50	0	21.33	21.34	21.24	22.4
20	16QAM	50	24	21.45	21.34	21.30	
20	16QAM	50	50	21.41	21.40	21.28	
20	16QAM	100	0	21.42	21.32	21.30	
20	64QAM	1	0	21.04	21.02	20.91	
20	64QAM	1	49	21.05	21.06	20.98	22.4
20	64QAM	1	99	21.07	21.09	20.90	
20	64QAM	50	0	21.35	21.34	21.25	
20	64QAM	50	24	21.41	21.35	21.32	
20	64QAM	50	50	21.42	21.38	21.28	
20	64QAM	100	0	21.40	21.34	21.30	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	Tune-up limit (dBm)
15	QPSK	1	0	21.17	21.17	21.06	22.4
15	QPSK	1	37	21.17	21.15	21.04	
15	QPSK	1	74	21.17	21.19	21.03	
15	QPSK	36	0	21.38	21.29	21.17	
15	QPSK	36	20	21.34	21.27	21.15	
15	QPSK	36	39	21.36	21.34	21.22	22.4
15	QPSK	75	0	21.36	21.27	21.15	
15	16QAM	1	0	21.34	21.33	21.25	
15	16QAM	1	37	21.26	21.25	21.18	
15	16QAM	1	74	21.37	21.36	21.21	
15	16QAM	36	0	21.37	21.26	21.13	22.4
15	16QAM	36	20	21.34	21.25	21.12	
15	16QAM	36	39	21.36	21.29	21.20	
15	16QAM	75	0	21.37	21.28	21.21	
15	64QAM	1	0	20.97	20.98	20.89	
15	64QAM	1	37	21.06	21.04	20.93	22.4
15	64QAM	1	74	21.08	21.06	20.92	
15	64QAM	36	0	21.42	21.32	21.20	
15	64QAM	36	20	21.38	21.26	21.14	
15	64QAM	36	39	21.38	21.35	21.24	
15	64QAM	75	0	21.38	21.30	21.20	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	Tune-up limit (dBm)
10	QPSK	1	0	21.08	21.08	21.00	22.4
10	QPSK	1	25	21.12	21.13	20.94	
10	QPSK	1	49	21.17	21.10	21.01	
10	QPSK	25	0	21.31	21.28	21.17	
10	QPSK	25	12	21.28	21.21	21.08	
10	QPSK	25	25	21.35	21.31	21.15	22.4
10	QPSK	50	0	21.29	21.17	21.13	
10	16QAM	1	0	21.29	21.28	21.20	
10	16QAM	1	25	21.24	21.23	21.10	
10	16QAM	1	49	21.35	21.34	21.12	
10	16QAM	25	0	21.32	21.20	21.13	22.4
10	16QAM	25	12	21.27	21.24	21.07	
10	16QAM	25	25	21.27	21.29	21.10	
10	16QAM	50	0	21.34	21.27	21.15	
10	64QAM	1	0	20.97	20.92	20.80	
10	64QAM	1	25	21.04	20.97	20.83	22.4
10	64QAM	1	49	21.02	20.96	20.86	
10	64QAM	25	0	21.37	21.24	21.11	
10	64QAM	25	12	21.33	21.16	21.09	
10	64QAM	25	25	21.37	21.26	21.22	
10	64QAM	50	0	21.28	21.27	21.15	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	Tune-up limit (dBm)
5	QPSK	1	0	21.11	21.17	20.98	22.4
5	QPSK	1	12	21.20	21.21	21.05	
5	QPSK	1	24	21.16	21.17	21.07	
5	QPSK	12	0	21.24	21.24	21.22	
5	QPSK	12	7	21.37	21.22	21.17	
5	QPSK	12	13	21.31	21.27	21.23	22.4
5	QPSK	25	0	21.27	21.27	21.24	
5	16QAM	1	0	21.31	21.27	21.13	
5	16QAM	1	12	21.24	21.24	21.20	
5	16QAM	1	24	21.32	21.22	21.11	
5	16QAM	12	0	21.32	21.32	21.17	22.4
5	16QAM	12	7	21.24	21.32	21.30	
5	16QAM	12	13	21.34	21.33	21.26	
5	16QAM	25	0	21.32	21.23	21.20	
5	64QAM	1	0	20.99	20.94	20.88	
5	64QAM	1	12	20.96	21.06	20.92	22.4
5	64QAM	1	24	21.02	21.07	20.81	
5	64QAM	12	0	21.33	21.34	21.25	
5	64QAM	12	7	21.38	21.34	21.22	
5	64QAM	12	13	21.38	21.32	21.19	
5	64QAM	25	0	21.40	21.25	21.21	



Band 41										
Ann 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	20.06	20.95	21.07	20.71	20.50	22.4	
20	QPSK	1	49	20.97	20.98	20.99	20.96	20.82		
20	QPSK	1	99	20.93	20.97	21.06	20.52	20.69		
20	QPSK	50	0	21.05	21.08	21.09	20.94	20.74		
20	QPSK	50	24	21.12	21.16	21.15	21.06	20.88	22.4	
20	QPSK	50	50	21.09	21.14	21.15	20.90	20.87		
20	QPSK	100	0	21.12	21.15	21.14	20.96	20.80		
20	16QAM	1	0	21.13	21.06	21.21	20.74	20.49		
20	16QAM	1	49	21.05	21.07	21.10	21.00	20.89	22.4	
20	16QAM	1	99	21.13	21.12	21.23	20.95	20.79		
20	16QAM	50	0	21.10	21.08	21.11	20.97	20.76		
20	16QAM	50	24	21.16	21.18	21.21	21.08	20.92		
20	16QAM	50	50	21.15	21.18	21.17	20.93	20.90	22.4	
20	16QAM	100	0	21.16	21.18	21.16	20.99	20.83		
20	64QAM	1	0	20.82	20.73	20.82	20.50	20.50		
20	64QAM	1	49	20.79	20.79	20.84	20.85	20.65	22.4	
20	64QAM	1	99	20.84	20.84	20.91	20.50	20.54		
20	64QAM	50	0	20.80	20.76	20.79	20.89	20.70		
20	64QAM	50	24	20.87	20.88	20.90	21.03	20.83		
20	64QAM	50	50	20.83	20.86	20.88	20.84	20.79	22.4	
20	64QAM	100	0	20.84	20.84	20.88	20.92	20.76		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	20.97	20.94	21.00	20.84	20.57	22.4	
15	QPSK	1	37	20.94	20.94	20.97	20.99	20.77		
15	QPSK	1	74	20.90	21.05	21.08	20.73	20.75		
15	QPSK	36	0	21.12	21.04	21.08	20.94	20.79		
15	QPSK	36	20	21.10	21.14	21.13	20.97	20.92	22.4	
15	QPSK	36	39	21.07	21.12	21.14	20.95	20.88		
15	QPSK	75	0	21.12	21.13	21.15	20.83	20.83		
15	16QAM	1	0	21.17	21.13	21.18	20.92	20.87		
15	16QAM	1	37	21.01	21.02	21.03	20.96	20.90	22.4	
15	16QAM	1	74	21.10	21.20	21.20	20.79	20.89		
15	16QAM	36	0	21.11	21.02	21.08	20.91	20.74		
15	16QAM	36	20	21.11	21.11	21.12	20.94	20.84		
15	16QAM	36	39	21.07	21.11	21.11	20.93	20.86	22.4	
15	16QAM	75	0	21.16	21.17	21.19	20.94	20.88		
15	64QAM	1	0	20.81	20.73	20.76	20.81	20.50		
15	64QAM	1	37	20.80	20.81	20.83	20.79	20.61	22.4	
15	64QAM	1	74	20.82	20.91	20.95	20.51	20.83		
15	64QAM	36	0	20.80	20.77	20.77	20.87	20.71		
15	64QAM	36	20	20.81	20.84	20.85	20.91	20.82		
15	64QAM	36	39	20.78	20.84	20.84	20.86	20.82	22.4	
15	64QAM	75	0	20.84	20.84	20.87	20.85	20.78		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	20.88	20.89	20.96	20.77	20.55	22.4	
10	QPSK	1	25	20.90	20.84	20.89	20.93	20.75		
10	QPSK	1	49	20.85	20.97	21.00	20.65	20.67		
10	QPSK	25	0	21.02	20.96	21.07	20.91	20.70		
10	QPSK	25	12	21.08	21.08	21.05	20.90	20.84	22.4	
10	QPSK	25	25	21.03	21.03	21.09	20.95	20.80		
10	QPSK	40	0	21.02	21.10	21.15	20.85	20.75		
10	16QAM	1	0	21.11	21.13	21.14	20.82	20.57		
10	16QAM	1	25	21.00	20.96	20.94	20.93	20.87	22.4	
10	16QAM	1	49	21.00	21.13	21.18	20.79	20.85		
10	16QAM	25	0	21.05	20.99	21.07	20.81	20.72		
10	16QAM	25	12	21.02	21.08	21.05	20.91	20.82		
10	16QAM	25	25	21.05	21.05	21.10	20.90	20.77	22.4	
10	16QAM	50	0	21.06	21.14	21.13	20.87	20.77		
10	64QAM	1	0	20.78	20.73	20.72	20.59	20.48		
10	64QAM	1	25	20.80	20.74	20.80	20.69	20.56	22.4	
10	64QAM	1	49	20.75	20.86	20.85	20.43	20.55		
10	64QAM	25	0	20.72	20.76	20.88	20.78	20.71		
10	64QAM	25	12	20.78	20.80	20.81	20.82	20.77		
10	64QAM	25	25	20.73	20.76	20.76	20.84	20.79	22.4	
10	64QAM	50	0	20.74	20.76	20.81	20.83	20.74		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	20.97	20.94	21.05	20.92	20.42	22.4	
5	QPSK	1	12	20.86	20.96	20.92	20.94	20.82		
5	QPSK	1	24	20.83	20.94	20.98	20.43	20.66		
5	QPSK	12	0	21.05	21.02	21.04	20.84	20.72		
5	QPSK	12	7	21.08	21.07	21.09	21.06	20.81	22.4	
5	QPSK	12	13	21.03	21.05	21.07	20.89	20.87		
5	QPSK	25	0	21.03	21.15	21.13	20.87	20.79		
5	16QAM	1	0	21.07	20.98	21.17	20.84	20.45		
5	16QAM	1	12	20.99	21.01	21.01	20.97	20.82	22.4	
5	16QAM	1	24	21.05	21.03	21.15	20.55	20.70		
5	16QAM	12	0	21.04	21.00	21.02	20.91	20.71		
5	16QAM	12	7	21.06	21.18	21.20	21.02	20.84		
5	16QAM	12	13	21.14	21.12	21.12	20.89	20.81	22.4	
5	16QAM	25	0	21.14	21.15	21.15	20.92	20.81		
5	64QAM	1	0	20.77	20.67	20.73	20.45	20.46		
5	64QAM	1	12	20.79	20.70	20.80	20.75	20.61	22.4	
5	64QAM	1	24	20.82	20.81	20.82	20.44	20.50		
5	64QAM	12	0	20.73	20.71	20.77	20.79	20.69		
5	64QAM	12	7	20.82	20.82	20.83	20.99	20.80		
5	64QAM	12	13	20.74	20.77	20.86	20.83	20.74	22.4	
5	64QAM	25	0	20.79	20.76	20.84	20.82	20.69		



Band 41 HPUE										
Ant 9										
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low-Middle Ch / Freq	Power Middle Ch / Freq	Power High-Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.56	22.49	22.63	22.33	22.30	24.2	
20	QPSK	1	49	22.51	22.54	22.54	22.57	22.39		
20	QPSK	1	99	22.53	22.58	22.64	22.30	22.31		
20	QPSK	50	0	22.72	22.71	22.77	22.63	22.46	24.2	
20	QPSK	50	24	22.82	22.83	22.87	22.78	22.60		
20	QPSK	50	50	22.76	22.82	22.83	22.61	22.58		
20	QPSK	100	0	22.80	22.81	22.83	22.66	22.50	24.2	
20	16QAM	1	0	22.82	22.87	22.96	22.70	22.36		
20	16QAM	1	49	22.86	22.91	22.96	22.57	22.77		
20	16QAM	1	99	22.89	22.91	23.01	22.47	22.66	24.2	
20	16QAM	50	0	22.76	22.72	22.78	22.68	22.48		
20	16QAM	50	24	22.82	22.86	22.87	22.82	22.63		
20	16QAM	50	50	22.81	22.84	22.87	22.64	22.62	24.2	
20	16QAM	100	0	22.82	22.85	22.87	22.72	22.54		
20	64QAM	1	0	22.73	22.67	22.74	22.47	22.30		
20	64QAM	1	49	22.72	22.76	22.73	22.83	22.63	24.2	
20	64QAM	1	99	22.77	22.77	22.85	22.30	22.51		
20	64QAM	50	0	22.57	22.57	22.61	22.68	22.52		
20	64QAM	50	24	22.65	22.70	22.70	22.81	22.61	24.2	
20	64QAM	50	50	22.80	22.66	22.69	22.64	22.54		
20	64QAM	100	0	22.84	22.65	22.69	22.73	22.55		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	22.64	22.62	22.64	22.49	22.25	24.2	
15	QPSK	1	37	22.56	22.58	22.67	22.61	22.43		
15	QPSK	1	74	22.57	22.73	22.75	22.37	22.43		
15	QPSK	36	0	22.80	22.74	22.78	22.63	22.49	24.2	
15	QPSK	36	20	22.83	22.78	22.86	22.68	22.62		
15	QPSK	36	39	22.76	22.81	22.81	22.68	22.59		
15	QPSK	75	0	22.82	22.82	22.86	22.63	22.54	24.2	
15	16QAM	1	0	22.86	22.86	22.94	22.84	22.53		
15	16QAM	1	37	22.85	22.87	22.86	22.93	22.72		
15	16QAM	1	74	22.85	23.00	23.00	22.68	22.76	24.2	
15	16QAM	36	0	22.78	22.73	22.70	22.65	22.48		
15	16QAM	36	20	22.77	22.77	22.80	22.68	22.59		
15	16QAM	36	39	22.73	22.77	22.80	22.68	22.61	24.2	
15	16QAM	75	0	22.83	22.82	22.86	22.64	22.59		
15	64QAM	1	0	22.70	22.72	22.71	22.64	22.33		
15	64QAM	1	37	22.75	22.73	22.76	22.80	22.59	24.2	
15	64QAM	1	74	22.73	22.85	22.89	22.50	22.59		
15	64QAM	36	0	22.81	22.58	22.59	22.71	22.65		
15	64QAM	36	20	22.63	22.63	22.64	22.73	22.65	24.2	
15	64QAM	36	39	22.56	22.63	22.65	22.70	22.62		
15	64QAM	75	0	22.84	22.64	22.66	22.66	22.57		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	22.56	22.40	22.54	22.28	22.26	24.2	
10	QPSK	1	25	22.47	22.51	22.52	22.48	22.29		
10	QPSK	1	49	22.53	22.49	22.63	22.29	22.22		
10	QPSK	25	0	22.69	22.71	22.77	22.63	22.42	24.2	
10	QPSK	25	12	22.81	22.75	22.87	22.70	22.57		
10	QPSK	25	25	22.71	22.81	22.76	22.61	22.53		
10	QPSK	50	0	22.79	22.76	22.83	22.65	22.48	24.2	
10	16QAM	1	0	22.83	22.84	22.98	22.69	22.32		
10	16QAM	1	25	22.86	22.85	22.89	22.95	22.71		
10	16QAM	1	49	22.89	22.82	22.96	22.38	22.59	24.2	
10	16QAM	25	0	22.70	22.70	22.78	22.60	22.40		
10	16QAM	25	12	22.73	22.80	22.82	22.73	22.60		
10	16QAM	25	25	22.81	22.83	22.80	22.58	22.57	24.2	
10	16QAM	50	0	22.73	22.79	22.85	22.71	22.53		
10	64QAM	1	0	22.68	22.58	22.70	22.44	22.25		
10	64QAM	1	25	22.62	22.74	22.71	22.74	22.55	24.2	
10	64QAM	1	49	22.71	22.77	22.76	22.28	22.45		
10	64QAM	25	0	22.57	22.54	22.60	22.59	22.46		
10	64QAM	25	12	22.62	22.63	22.61	22.79	22.59	24.2	
10	64QAM	25	25	22.55	22.62	22.67	22.58	22.54		
10	64QAM	50	0	22.84	22.63	22.67	22.73	22.50		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	22.56	22.44	22.57	22.33	22.26	24.2	
5	QPSK	1	12	22.47	22.54	22.54	22.56	22.30		
5	QPSK	1	24	22.48	22.55	22.63	22.21	22.25		
5	QPSK	12	0	22.66	22.63	22.71	22.56	22.44	24.2	
5	QPSK	12	7	22.82	22.77	22.87	22.72	22.59		
5	QPSK	12	13	22.72	22.81	22.74	22.59	22.51		
5	QPSK	25	0	22.72	22.73	22.79	22.66	22.49	24.2	
5	16QAM	1	0	22.86	22.85	22.96	22.69	22.35		
5	16QAM	1	12	22.80	22.84	22.89	22.95	22.70		
5	16QAM	1	24	22.84	22.86	22.98	22.39	22.63	24.2	
5	16QAM	12	0	22.75	22.71	22.70	22.59	22.48		
5	16QAM	12	7	22.79	22.84	22.84	22.80	22.61		
5	16QAM	12	13	22.79	22.79	22.81	22.56	22.58	24.2	
5	16QAM	25	0	22.72	22.81	22.84	22.64	22.53		
5	64QAM	1	0	22.89	22.66	22.73	22.47	22.20		
5	64QAM	1	12	22.68	22.73	22.73	22.61	22.60	24.2	
5	64QAM	1	24	22.77	22.76	22.85	22.20	22.41		
5	64QAM	12	0	22.55	22.55	22.51	22.67	22.45		
5	64QAM	12	7	22.69	22.70	22.69	22.80	22.53	24.2	
5	64QAM	12	13	22.53	22.62	22.64	22.62	22.61		
5	64QAM	25	0	22.84	22.58	22.68	22.71	22.48		



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	20.38	20.29	20.20	20.20	21.7		
20	QPSK	1	49	20.18	20.07	19.96	19.96			
20	QPSK	1	99	20.14	20.03	19.90	19.89			
20	QPSK	50	0	20.39	20.31	20.19	20.17			
20	QPSK	50	24	20.33	20.15	20.11	20.11	21.2		
20	QPSK	50	50	20.21	20.09	19.97	19.96			
20	QPSK	100	0	20.32	20.18	20.11	20.09			
20	16QAM	1	0	20.51	20.44	20.31	20.33			
20	16QAM	1	49	20.28	20.15	20.07	20.06	21.2		
20	16QAM	1	99	20.29	20.13	20.03	20.01			
20	16QAM	50	0	19.86	19.72	19.62	19.61			
20	16QAM	50	24	19.81	19.59	19.54	19.53			
20	16QAM	50	50	19.66	19.51	19.40	19.39	20.2		
20	16QAM	100	0	19.80	19.56	19.51	19.52			
20	64QAM	1	0	20.19	20.18	20.09	20.06			
20	64QAM	1	49	20.09	19.98	19.87	19.82	20.2		
20	64QAM	1	99	20.12	19.96	19.79	19.80			
20	64QAM	50	0	19.79	19.65	19.56	19.53			
20	64QAM	50	24	19.74	19.52	19.47	19.48			
20	64QAM	50	50	19.62	19.47	19.33	19.30	19.2		
20	64QAM	100	0	19.84	19.59	19.56	19.57			
Channel				55315	55820	56160	56665	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	20.25	20.19	20.08	19.85	21.7		
15	QPSK	1	37	20.14	20.04	19.89	19.71			
15	QPSK	1	74	20.11	20.01	19.88	19.70			
15	QPSK	36	0	20.34	20.28	20.14	19.91			
15	QPSK	36	20	20.29	20.20	20.06	19.83	21.2		
15	QPSK	36	39	20.18	20.09	19.95	19.76			
15	QPSK	75	0	20.23	20.23	20.08	19.86			
15	16QAM	1	0	20.42	20.36	20.22	20.02			
15	16QAM	1	37	20.23	20.11	19.92	19.76	21.2		
15	16QAM	1	74	20.29	20.21	20.06	19.79			
15	16QAM	36	0	19.75	19.64	19.51	19.27			
15	16QAM	36	20	19.72	19.55	19.43	19.21			
15	16QAM	36	39	19.59	19.46	19.33	19.20	20.2		
15	16QAM	75	0	19.69	19.64	19.50	19.25			
15	64QAM	1	0	20.22	20.15	20.04	19.78			
15	64QAM	1	37	20.02	19.96	19.80	19.56	20.2		
15	64QAM	1	74	20.11	19.97	19.81	19.59			
15	64QAM	36	0	19.80	19.67	19.53	19.32			
15	64QAM	36	20	19.75	19.61	19.48	19.24			
15	64QAM	36	39	19.63	19.48	19.36	19.17	19.2		
15	64QAM	75	0	19.70	19.62	19.49	19.25			
Channel				55290	55815	56165	56690	Tune-up limit (dBm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	20.25	20.15	20.04	19.83	21.7		
10	QPSK	1	25	20.12	19.97	19.79	19.72			
10	QPSK	1	49	20.01	20.00	19.87	19.70			
10	QPSK	25	0	20.26	20.19	20.10	19.81			
10	QPSK	25	12	20.22	20.15	20.03	19.81	21.2		
10	QPSK	25	25	20.16	20.00	19.90	19.70			
10	QPSK	50	0	20.16	20.20	20.08	19.83			
10	16QAM	1	0	20.40	20.29	20.20	19.94			
10	16QAM	1	25	20.22	20.09	19.84	19.76	21.2		
10	16QAM	1	49	20.24	20.19	20.00	19.77			
10	16QAM	25	0	19.71	19.59	19.42	19.25			
10	16QAM	25	12	19.69	19.47	19.42	19.22			
10	16QAM	25	25	19.58	19.39	19.24	19.21	20.2		
10	16QAM	50	0	19.69	19.63	19.50	19.22			
10	64QAM	1	0	20.12	20.09	19.97	19.70			
10	64QAM	1	25	19.93	19.88	19.77	19.47	20.2		
10	64QAM	1	49	20.07	19.97	19.72	19.57			
10	64QAM	25	0	19.73	19.57	19.43	19.28			
10	64QAM	25	12	19.72	19.59	19.48	19.17			
10	64QAM	25	25	19.54	19.44	19.33	19.08	19.2		
10	64QAM	50	0	19.67	19.56	19.39	19.22			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	20.28	20.15	20.07	20.21	21.7		
5	QPSK	1	12	20.25	20.11	20.04	20.16			
5	QPSK	1	24	20.23	20.03	19.98	20.12			
5	QPSK	12	0	20.37	20.23	20.15	20.30			
5	QPSK	12	7	20.40	20.27	20.11	20.28	21.2		
5	QPSK	12	13	20.32	20.24	20.06	20.21			
5	QPSK	25	0	20.34	20.27	20.12	20.23			
5	16QAM	1	0	20.36	20.26	20.26	20.28			
5	16QAM	1	12	20.44	20.32	20.25	20.33	21.2		
5	16QAM	1	24	20.38	20.29	20.17	20.24			
5	16QAM	12	0	19.73	19.63	19.61	19.66			
5	16QAM	12	7	19.77	19.65	19.56	19.65			
5	16QAM	12	13	19.73	19.64	19.47	19.57	20.2		
5	16QAM	25	0	19.78	19.69	19.57	19.64			
5	64QAM	1	0	20.15	20.06	19.99	20.10			
5	64QAM	1	12	20.15	20.02	20.01	20.07			
5	64QAM	1	24	20.14	20.01	19.91	19.97	19.2		
5	64QAM	12	0	19.73	19.64	19.56	19.67			
5	64QAM	12	7	19.77	19.65	19.51	19.62			
5	64QAM	12	13	19.71	19.59	19.51	19.59			
5	64QAM	25	0	19.73	19.64	19.53	19.59			



Band 38							
Ann 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	24.95	24.88	24.81	25.7
20	QPSK	1	49	24.94	24.82	24.75	
20	QPSK	1	99	24.93	24.78	24.75	
20	QPSK	50	0	24.19	24.05	23.86	
20	QPSK	50	24	24.17	24.04	24.00	
20	QPSK	50	50	24.03	24.05	23.91	24.7
20	QPSK	100	0	24.11	23.94	23.93	
20	16QAM	1	0	24.07	24.04	23.89	
20	16QAM	1	49	24.07	23.95	23.82	24.7
20	16QAM	1	99	23.95	23.97	23.90	
20	16QAM	50	0	23.16	23.06	22.97	
20	16QAM	50	24	23.17	23.00	22.93	23.7
20	16QAM	50	50	23.08	23.06	22.99	
20	16QAM	100	0	23.11	23.01	22.95	
20	64QAM	1	0	22.81	22.78	22.67	23.7
20	64QAM	1	49	22.71	22.71	22.77	
20	64QAM	1	99	22.68	22.82	22.78	
20	64QAM	50	0	22.15	22.02	21.92	22.7
20	64QAM	50	24	22.14	22.04	22.04	
20	64QAM	50	50	22.08	22.09	21.91	
20	64QAM	100	0	22.08	21.96	22.05	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.92	24.90	24.81	25.7
15	QPSK	1	37	24.91	24.87	24.80	
15	QPSK	1	74	24.90	24.81	24.78	
15	QPSK	36	0	24.18	23.95	23.89	
15	QPSK	36	20	24.14	24.00	23.91	
15	QPSK	36	39	24.07	24.05	23.90	24.7
15	QPSK	75	0	24.06	24.00	23.82	
15	16QAM	1	0	24.07	24.03	23.92	
15	16QAM	1	37	23.92	23.82	23.86	24.7
15	16QAM	1	74	23.96	23.92	23.87	
15	16QAM	36	0	23.07	22.98	22.86	
15	16QAM	36	20	23.01	22.94	22.81	23.7
15	16QAM	36	39	23.04	22.97	22.92	
15	16QAM	75	0	23.13	22.97	22.88	
15	64QAM	1	0	22.75	22.74	22.75	23.7
15	64QAM	1	37	22.74	22.82	22.75	
15	64QAM	1	74	22.70	22.71	22.72	
15	64QAM	36	0	22.14	22.02	21.86	22.7
15	64QAM	36	20	22.08	21.98	21.93	
15	64QAM	36	39	22.16	22.03	21.92	
15	64QAM	75	0	22.16	21.95	21.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.91	24.78	24.80	25.7
10	QPSK	1	25	24.81	24.78	24.76	
10	QPSK	1	49	24.85	24.71	24.65	
10	QPSK	25	0	24.13	23.95	23.83	
10	QPSK	25	12	24.04	23.87	23.71	
10	QPSK	25	25	24.06	23.98	23.79	24.7
10	QPSK	50	0	23.99	23.96	23.90	
10	16QAM	1	0	24.02	23.97	23.87	
10	16QAM	1	25	23.92	23.83	23.72	24.7
10	16QAM	1	49	23.88	23.95	23.91	
10	16QAM	25	0	23.08	22.91	22.84	
10	16QAM	25	12	23.04	22.90	22.89	23.7
10	16QAM	25	25	23.02	22.93	22.89	
10	16QAM	50	0	23.11	22.95	22.77	
10	64QAM	1	0	22.75	22.69	22.69	23.7
10	64QAM	1	25	22.70	22.77	22.72	
10	64QAM	1	49	22.77	22.78	22.73	
10	64QAM	25	0	22.11	21.96	21.85	22.7
10	64QAM	25	12	22.11	21.94	21.85	
10	64QAM	25	25	22.11	21.98	21.80	
10	64QAM	50	0	22.12	21.92	21.84	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.90	24.92	24.77	25.7
5	QPSK	1	12	24.93	24.92	24.78	
5	QPSK	1	24	24.91	24.92	24.76	
5	QPSK	12	0	24.16	23.96	23.94	
5	QPSK	12	7	24.13	24.04	23.94	
5	QPSK	12	13	24.09	24.02	23.96	24.7
5	QPSK	25	0	24.17	24.04	23.92	
5	16QAM	1	0	24.23	24.02	23.93	
5	16QAM	1	12	24.22	24.10	23.95	24.7
5	16QAM	1	24	24.19	24.14	24.05	
5	16QAM	12	0	23.14	22.96	22.88	
5	16QAM	12	7	23.13	23.13	22.93	23.7
5	16QAM	12	13	23.12	23.07	22.90	
5	16QAM	25	0	23.12	22.99	22.99	
5	64QAM	1	0	22.92	22.80	22.74	23.7
5	64QAM	1	12	22.93	22.87	22.72	
5	64QAM	1	24	22.92	22.85	22.78	
5	64QAM	12	0	22.17	22.04	22.00	22.7
5	64QAM	12	7	22.21	22.07	22.02	
5	64QAM	12	13	22.17	22.10	21.97	
5	64QAM	25	0	22.24	22.04	22.00	



Band 41										
Ann 2										
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.36	24.32	24.31	24.29	24.12	25.7	
20	QPSK	1	49	24.33	24.31	24.18	24.57	24.42		
20	QPSK	1	99	24.33	24.30	24.25	24.12	24.27		
20	QPSK	50	0	23.53	23.47	23.28	23.52	23.42	24.7	
20	QPSK	50	24	23.54	23.48	23.35	23.57	23.55		
20	QPSK	50	50	23.48	23.44	23.34	23.51	23.50		
20	QPSK	100	0	23.52	23.48	23.36	23.53	23.44	24.7	
20	16QAM	1	0	23.52	23.45	23.45	23.44	23.23		
20	16QAM	1	49	23.45	23.43	23.32	23.65	23.52		
20	16QAM	1	99	23.47	23.47	23.35	23.26	23.35	23.7	
20	16QAM	50	0	22.56	22.48	22.33	22.56	22.45		
20	16QAM	50	24	22.56	22.51	22.41	22.59	22.54		
20	16QAM	50	50	22.52	22.46	22.36	22.52	22.53	23.7	
20	16QAM	100	0	22.54	22.50	22.39	22.49	22.47		
20	64QAM	1	0	22.26	22.14	22.13	22.10	21.89		
20	64QAM	1	49	22.19	22.22	22.04	22.46	22.27	22.7	
20	64QAM	1	99	22.19	22.25	22.08	22.02	22.03		
20	64QAM	50	0	21.55	21.50	21.35	21.55	21.44		
20	64QAM	50	24	21.57	21.51	21.40	21.60	21.56	Tune-up limit (dBm)	
20	64QAM	50	50	21.52	21.48	21.38	21.50	21.53		
20	64QAM	100	0	21.56	21.50	21.41	21.51	21.47		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.36	24.32	24.25	24.42	24.22	25.7	
15	QPSK	1	37	24.32	24.25	24.18	24.53	24.39		
15	QPSK	1	74	24.34	24.36	24.27	24.27	24.35		
15	QPSK	36	0	23.41	23.47	23.31	23.53	23.47	24.7	
15	QPSK	36	20	23.51	23.45	23.37	23.64	23.51		
15	QPSK	36	39	23.46	23.44	23.33	23.53	23.47		
15	QPSK	75	0	23.50	23.46	23.36	23.58	23.47	24.7	
15	16QAM	1	0	23.53	23.48	23.43	23.56	23.36		
15	16QAM	1	37	23.41	23.39	23.25	23.65	23.52		
15	16QAM	1	74	23.49	23.57	23.45	23.46	23.44	23.7	
15	16QAM	36	0	22.40	22.46	22.27	22.48	22.40		
15	16QAM	36	20	22.47	22.45	22.33	22.60	22.48		
15	16QAM	36	39	22.45	22.42	22.31	22.53	22.46	23.7	
15	16QAM	75	0	22.52	22.48	22.38	22.59	22.49		
15	64QAM	1	0	22.24	22.18	22.07	22.26	22.05		
15	64QAM	1	37	22.22	22.20	22.07	22.42	22.27	22.7	
15	64QAM	1	74	22.17	22.34	22.15	22.21	22.16		
15	64QAM	36	0	21.44	21.49	21.34	21.56	21.47		
15	64QAM	36	20	21.54	21.47	21.38	21.65	21.57	Tune-up limit (dBm)	
15	64QAM	36	39	21.48	21.48	21.36	21.57	21.51		
15	64QAM	75	0	21.54	21.48	21.39	21.61	21.51		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.25	24.32	24.17	24.41	24.12	25.7	
10	QPSK	1	25	24.24	24.24	24.09	24.48	24.33		
10	QPSK	1	49	24.29	24.33	24.20	24.21	24.31		
10	QPSK	25	0	23.38	23.37	23.21	23.49	23.39	24.7	
10	QPSK	25	12	23.42	23.35	23.29	23.57	23.47		
10	QPSK	25	25	23.39	23.43	23.27	23.48	23.39		
10	QPSK	50	0	23.48	23.43	23.35	23.56	23.41	24.7	
10	16QAM	1	0	23.45	23.42	23.33	23.56	23.32		
10	16QAM	1	25	23.37	23.29	23.23	23.64	23.48		
10	16QAM	1	49	23.47	23.47	23.43	23.40	23.41	23.7	
10	16QAM	25	0	22.35	22.49	22.21	22.47	22.39		
10	16QAM	25	12	22.45	22.37	22.21	22.52	22.44		
10	16QAM	25	25	22.39	22.40	22.28	22.48	22.44	23.7	
10	16QAM	50	0	22.46	22.44	22.28	22.57	22.47		
10	64QAM	1	0	22.18	22.09	22.05	22.19	22.05	22.7	
10	64QAM	1	25	22.12	22.20	22.03	22.37	22.24		
10	64QAM	1	49	22.06	22.30	22.07	22.17	22.12		
10	64QAM	25	0	21.37	21.47	21.24	21.55	21.40	Tune-up limit (dBm)	
10	64QAM	25	12	21.47	21.38	21.37	21.63	21.47		
10	64QAM	25	25	21.43	21.44	21.26	21.49	21.46		
10	64QAM	50	0	21.50	21.43	21.35	21.58	21.51		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2493.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.48	24.36	24.27	24.54	24.46	25.7	
5	QPSK	1	12	24.46	24.39	24.32	24.56	24.43		
5	QPSK	1	24	24.39	24.38	24.25	24.52	24.33		
5	QPSK	12	0	23.57	23.52	23.43	23.64	23.57	24.7	
5	QPSK	12	7	23.57	23.52	23.47	23.67	23.56		
5	QPSK	12	13	23.56	23.48	23.44	23.68	23.51		
5	QPSK	25	0	23.55	23.50	23.42	23.63	23.53	24.7	
5	16QAM	1	0	23.60	23.53	23.37	23.66	23.59		
5	16QAM	1	12	23.61	23.60	23.51	23.73	23.68		
5	16QAM	1	24	23.61	23.55	23.49	23.68	23.54	23.7	
5	16QAM	12	0	22.55	22.49	22.38	22.64	22.52		
5	16QAM	12	7	22.55	22.52	22.43	22.66	22.57		
5	16QAM	12	13	22.53	22.50	22.40	22.65	22.52	22.7	
5	16QAM	25	0	22.60	22.54	22.45	22.65	22.58		
5	64QAM	1	0	22.35	22.35	22.18	22.41	22.30		
5	64QAM	1	12	22.38	22.36	22.20	22.47	22.28	Tune-up limit (dBm)	
5	64QAM	1	24	22.38	22.36	22.23	22.46	22.23		
5	64QAM	12	0	21.61	21.53	21.50	21.67	21.57		
5	64QAM	12	7	21.63	21.58	21.50	21.70	21.61	22.7	
5	64QAM	12	13	21.58	21.57	21.46	21.73	21.64		
5	64QAM	25	0	21.61	21.56	21.46	21.69	21.60		



Band 41 HPUE										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.95	25.94	26.04	26.10	25.81	27.5	
20	QPSK	1	49	26.01	26.04	26.01	26.39	26.18		
20	QPSK	1	99	25.92	25.97	25.99	25.89	25.96		
20	QPSK	50	0	25.19	25.21	25.15	25.40	25.22	26.5	
20	QPSK	50	24	25.21	25.24	25.21	25.45	25.34		
20	QPSK	50	50	25.18	25.21	25.19	25.34	25.29		
20	QPSK	100	0	25.22	25.22	25.20	25.35	25.24	26.5	
20	16QAM	1	0	25.28	25.37	25.40	25.48	25.12		
20	16QAM	1	49	25.27	25.32	25.32	25.69	25.49		
20	16QAM	1	99	25.31	25.32	25.32	25.23	25.28	25.5	
20	16QAM	50	0	24.24	24.26	24.18	24.43	24.24		
20	16QAM	50	24	24.24	24.29	24.22	24.50	24.36		
20	16QAM	50	50	24.21	24.26	24.21	24.40	24.30	24.5	
20	16QAM	100	0	24.22	24.25	24.22	24.38	24.27		
20	64QAM	1	0	24.15	24.12	24.20	24.26	24.00		
20	64QAM	1	49	24.10	24.16	24.13	24.58	24.38	25.5	
20	64QAM	1	99	24.13	24.20	24.17	24.13	24.18		
20	64QAM	50	0	23.26	23.27	23.18	23.45	23.24		
20	64QAM	50	24	23.27	23.28	23.27	23.49	23.37	24.5	
20	64QAM	50	50	23.21	23.27	23.23	23.39	23.32		
20	64QAM	100	0	23.26	23.26	23.23	23.38	23.25		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.97	26.01	25.98	26.26	25.97	27.5	
15	QPSK	1	37	26.01	25.97	25.98	26.35	26.18		
15	QPSK	1	74	25.97	26.08	26.03	26.12	26.10		
15	QPSK	36	0	25.05	25.18	25.09	25.40	25.23	26.5	
15	QPSK	36	20	25.13	25.17	25.13	25.46	25.29		
15	QPSK	36	39	25.12	25.17	25.10	25.36	25.26		
15	QPSK	75	0	25.16	25.17	25.14	25.42	25.25	26.5	
15	16QAM	1	0	25.29	25.27	25.23	25.56	25.26		
15	16QAM	1	37	25.21	25.21	25.19	25.63	25.44		
15	16QAM	1	74	25.25	25.34	25.29	25.45	25.32	25.5	
15	16QAM	36	0	24.06	24.17	24.05	24.35	24.20		
15	16QAM	36	20	24.13	24.15	24.11	24.47	24.26		
15	16QAM	36	39	24.09	24.14	24.09	24.37	24.23	25.5	
15	16QAM	75	0	24.15	24.19	24.15	24.45	24.26		
15	64QAM	1	0	24.10	24.09	24.04	24.37	24.09		
15	64QAM	1	37	24.06	24.10	24.06	24.51	24.29	25.5	
15	64QAM	1	74	24.09	24.24	24.14	24.31	24.21		
15	64QAM	36	0	23.08	23.22	23.10	23.40	23.26		
15	64QAM	36	20	23.15	23.20	23.15	23.51	23.34	24.5	
15	64QAM	36	39	23.13	23.18	23.14	23.37	23.27		
15	64QAM	75	0	23.16	23.19	23.16	23.45	23.27		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.92	25.92	25.81	26.20	26.11	27.5	
10	QPSK	1	25	25.92	25.94	26.00	26.30	26.13		
10	QPSK	1	49	25.97	25.96	25.90	26.26	26.00		
10	QPSK	25	0	25.10	25.11	25.09	25.41	25.24	26.5	
10	QPSK	25	12	25.16	25.13	25.12	25.41	25.26		
10	QPSK	25	25	25.10	25.19	25.11	25.49	25.22		
10	QPSK	50	0	25.15	25.18	25.16	25.45	25.26	26.5	
10	16QAM	1	0	25.29	25.26	25.20	25.53	25.38		
10	16QAM	1	25	25.26	25.28	25.35	25.67	25.40		
10	16QAM	1	49	25.32	25.29	25.25	25.57	25.40	25.5	
10	16QAM	25	0	24.20	24.10	24.13	24.46	24.35		
10	16QAM	25	12	24.25	24.19	24.20	24.45	24.28		
10	16QAM	25	25	24.15	24.19	24.10	24.47	24.21	24.5	
10	16QAM	50	0	24.16	24.19	24.12	24.46	24.29		
10	64QAM	1	0	24.20	24.16	24.07	24.48	24.27		
10	64QAM	1	25	24.13	24.17	24.17	24.50	24.33	25.5	
10	64QAM	1	49	24.14	24.18	24.21	24.47	24.31		
10	64QAM	25	0	23.21	23.18	23.18	23.44	23.25		
10	64QAM	25	12	23.24	23.32	23.24	23.48	23.36	24.5	
10	64QAM	25	25	23.13	23.16	23.20	23.52	23.21		
10	64QAM	50	0	23.18	23.23	23.19	23.44	23.27		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2495.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	26.01	26.01	25.91	26.29	26.11	27.5	
5	QPSK	1	12	26.02	26.03	26.02	26.38	26.14		
5	QPSK	1	24	25.99	26.02	25.96	26.31	26.04		
5	QPSK	12	0	25.16	25.19	25.16	25.44	25.31	26.5	
5	QPSK	12	7	25.19	25.23	25.19	25.47	25.27		
5	QPSK	12	13	25.18	25.20	25.16	25.52	25.29		
5	QPSK	25	0	25.16	25.18	25.18	25.46	25.27	26.5	
5	16QAM	1	0	25.38	25.36	25.30	25.61	25.46		
5	16QAM	1	12	25.33	25.34	25.37	25.68	25.45		
5	16QAM	1	24	25.36	25.39	25.35	25.65	25.43	25.5	
5	16QAM	12	0	24.20	24.20	24.21	24.51	24.36		
5	16QAM	12	7	24.27	24.24	24.24	24.53	24.32		
5	16QAM	12	13	24.20	24.21	24.18	24.49	24.28	24.5	
5	16QAM	25	0	24.18	24.26	24.20	24.48	24.34		
5	64QAM	1	0	24.26	24.24	24.15	24.51	24.37		
5	64QAM	1	12	24.20	24.24	24.23	24.59	24.36	25.5	
5	64QAM	1	24	24.24	24.23	24.21	24.54	24.31		
5	64QAM	12	0	23.23	23.28	23.21	23.50	23.35		
5	64QAM	12	7	23.25	23.32	23.27	23.50	23.37	24.5	
5	64QAM	12	13	23.22	23.26	23.23	23.54	23.31		
5	64QAM	25	0	23.20	23.29	23.24	23.53	23.37		



Band 48										
Ant 7										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3599	3641	3690			
20	QPSK	1	0	24.21	24.24	24.10	24.13	25.2		
20	QPSK	1	49	24.02	24.06	23.89	23.89			
20	QPSK	1	99	23.99	23.98	23.84	23.82			
20	QPSK	50	0	23.24	23.27	23.16	23.16			
20	QPSK	50	24	23.21	23.13	23.07	23.07	24.2		
20	QPSK	50	50	23.05	23.08	22.94	22.94			
20	QPSK	100	0	23.15	23.18	23.10	23.10			
20	16QAM	1	0	23.33	23.38	23.25	23.28			
20	16QAM	1	49	23.12	23.15	22.99	22.98	24.2		
20	16QAM	1	99	23.10	23.09	22.96	22.96			
20	16QAM	50	0	22.27	22.28	22.19	22.20			
20	16QAM	50	24	22.23	22.17	22.13	22.14			
20	16QAM	50	50	22.08	22.11	21.97	21.97	23.2		
20	16QAM	100	0	22.21	22.14	22.12	22.10			
20	64QAM	1	0	22.04	22.12	22.00	22.00			
20	64QAM	1	49	21.86	21.87	21.78	21.75			
20	64QAM	1	99	21.83	21.79	21.65	21.68	22.2		
20	64QAM	50	0	21.27	21.30	21.19	21.19			
20	64QAM	50	24	21.23	21.17	21.15	21.14			
20	64QAM	50	50	21.09	21.11	20.98	20.98			
20	64QAM	100	0	21.21	21.17	21.12	21.12	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	24.20	24.16	24.05	24.07	25.2		
15	QPSK	1	37	23.95	24.02	23.86	23.84			
15	QPSK	1	74	23.98	23.92	23.78	23.81			
15	QPSK	36	0	23.23	23.25	23.06	23.10			
15	QPSK	36	20	23.14	23.07	23.00	23.04	24.2		
15	QPSK	36	39	23.03	23.04	22.91	22.90			
15	QPSK	75	0	23.09	23.07	23.07	23.04			
15	16QAM	1	0	23.29	23.28	23.18	23.24			
15	16QAM	1	37	23.08	23.14	22.97	22.92	24.2		
15	16QAM	1	74	23.06	23.00	22.89	22.91			
15	16QAM	36	0	22.18	22.23	22.13	22.13			
15	16QAM	36	20	22.18	22.10	22.13	22.13			
15	16QAM	36	39	22.04	22.01	21.92	21.91	23.2		
15	16QAM	75	0	22.14	22.14	22.05	22.03			
15	64QAM	1	0	21.97	22.09	21.93	21.97			
15	64QAM	1	37	21.82	21.86	21.76	21.70			
15	64QAM	1	74	21.80	21.77	21.56	21.67	23.2		
15	64QAM	36	0	21.20	21.30	21.10	21.13			
15	64QAM	36	20	21.21	21.09	21.08	21.05			
15	64QAM	36	39	21.05	21.09	20.94	20.88			
15	64QAM	75	0	21.21	21.10	21.09	21.11	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	24.11	24.17	24.02	24.12	25.2		
10	QPSK	1	25	24.02	23.99	23.87	23.79			
10	QPSK	1	49	23.94	23.90	23.75	23.72			
10	QPSK	25	0	23.14	23.20	23.09	23.13			
10	QPSK	25	12	23.11	23.06	23.04	22.97	24.2		
10	QPSK	25	25	22.97	23.03	22.86	22.85			
10	QPSK	50	0	23.17	23.05	23.03	23.05			
10	16QAM	1	0	23.27	23.29	23.17	23.28			
10	16QAM	1	25	23.06	23.11	22.97	22.90	24.2		
10	16QAM	1	49	23.00	23.01	22.94	22.86			
10	16QAM	25	0	22.21	22.24	22.15	22.11			
10	16QAM	25	12	22.19	22.17	22.10	22.14			
10	16QAM	25	25	22.08	22.09	21.88	21.88	23.2		
10	16QAM	50	0	22.12	22.08	22.11	22.00			
10	64QAM	1	0	22.02	22.07	21.95	21.90			
10	64QAM	1	25	21.86	21.79	21.77	21.71			
10	64QAM	1	49	21.80	21.70	21.57	21.55	23.2		
10	64QAM	25	0	21.18	21.26	21.15	21.10			
10	64QAM	25	12	21.23	21.12	21.12	21.08			
10	64QAM	25	25	21.06	21.01	20.98	20.94			
10	64QAM	50	0	21.13	21.09	21.09	21.05	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	24.12	24.19	24.10	24.10	25.2		
5	QPSK	1	12	23.99	23.99	23.86	23.79			
5	QPSK	1	24	23.99	23.96	23.80	23.80			
5	QPSK	12	0	23.17	23.22	23.09	23.09			
5	QPSK	12	7	23.11	23.10	23.04	23.00	24.2		
5	QPSK	12	13	22.95	23.05	22.92	22.87			
5	QPSK	25	0	23.09	23.04	23.02	23.00			
5	16QAM	1	0	23.32	23.30	23.19	23.18			
5	16QAM	1	12	23.04	23.13	22.97	22.93	24.2		
5	16QAM	1	24	23.10	23.07	22.94	22.87			
5	16QAM	12	0	22.25	22.21	22.09	22.20			
5	16QAM	12	7	22.16	22.09	22.03	22.12			
5	16QAM	12	13	22.01	22.11	21.96	21.88	23.2		
5	16QAM	25	0	22.15	22.10	22.04	22.10			
5	64QAM	1	0	21.96	22.10	21.91	21.91			
5	64QAM	1	12	21.86	21.85	21.75	21.67			
5	64QAM	1	24	21.77	21.72	21.57	21.64	22.2		
5	64QAM	12	0	21.19	21.23	21.19	21.15			
5	64QAM	12	7	21.15	21.17	21.11	21.07			
5	64QAM	12	13	21.06	21.11	20.89	20.97			
5	64QAM	25	0	21.16	21.09	21.02	21.02	Tune-up limit (dBm)		



Band 38							
Ann 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.16	24.06	24.03	25.7
20	QPSK	1	49	24.08	24.02	23.96	
20	QPSK	1	99	24.06	23.99	23.92	
20	QPSK	50	0	23.25	23.14	23.06	
20	QPSK	50	24	23.26	23.15	23.11	
20	QPSK	50	50	23.20	23.14	23.07	24.7
20	QPSK	100	0	23.23	23.10	23.11	
20	16QAM	1	0	23.23	23.16	23.06	
20	16QAM	1	49	23.16	23.12	23.03	24.7
20	16QAM	1	99	23.14	23.12	23.01	
20	16QAM	50	0	22.29	22.16	22.07	
20	16QAM	50	24	22.25	22.14	22.13	23.7
20	16QAM	50	50	22.24	22.17	22.09	
20	16QAM	100	0	22.25	22.13	22.11	
20	64QAM	1	0	21.95	21.88	21.77	23.7
20	64QAM	1	49	21.90	21.84	21.75	
20	64QAM	1	99	21.88	21.83	21.72	
20	64QAM	50	0	21.30	21.18	21.09	22.7
20	64QAM	50	24	21.27	21.13	21.14	
20	64QAM	50	50	21.26	21.19	21.10	
20	64QAM	100	0	21.26	21.13	21.12	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.09	24.04	23.96	25.7
15	QPSK	1	37	24.03	24.01	23.91	
15	QPSK	1	74	24.07	24.02	23.92	
15	QPSK	36	0	23.25	23.12	23.03	
15	QPSK	36	20	23.24	23.08	23.01	
15	QPSK	36	39	23.19	23.15	23.04	24.7
15	QPSK	75	0	23.21	23.08	23.02	
15	16QAM	1	0	23.23	23.17	23.10	
15	16QAM	1	37	23.06	23.03	22.98	24.7
15	16QAM	1	74	23.19	23.14	23.06	
15	16QAM	36	0	22.22	22.10	22.02	
15	16QAM	36	20	22.20	22.05	21.96	23.7
15	16QAM	36	39	22.16	22.11	22.02	
15	16QAM	75	0	22.25	22.11	22.03	
15	64QAM	1	0	21.88	21.84	21.73	23.7
15	64QAM	1	37	21.94	21.84	21.77	
15	64QAM	1	74	21.89	21.83	21.73	
15	64QAM	36	0	21.26	21.14	21.07	22.7
15	64QAM	36	20	21.24	21.10	21.00	
15	64QAM	36	39	21.25	21.17	21.06	
15	64QAM	75	0	21.25	21.12	21.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.09	23.99	23.91	25.7
10	QPSK	1	25	24.00	23.96	23.91	
10	QPSK	1	49	24.03	24.01	23.91	
10	QPSK	25	0	23.15	23.12	23.01	
10	QPSK	25	12	23.19	23.07	22.99	
10	QPSK	25	25	23.10	23.13	22.99	24.7
10	QPSK	50	0	23.11	23.03	22.95	
10	16QAM	1	0	23.13	23.08	23.03	
10	16QAM	1	25	23.04	22.97	22.94	24.7
10	16QAM	1	49	23.10	23.08	23.02	
10	16QAM	25	0	22.17	22.00	21.97	
10	16QAM	25	12	22.13	21.96	21.91	23.7
10	16QAM	25	25	22.10	22.06	22.00	
10	16QAM	50	0	22.20	22.02	21.99	
10	64QAM	1	0	21.86	21.76	21.70	23.7
10	64QAM	1	25	21.92	21.79	21.70	
10	64QAM	1	49	21.83	21.75	21.70	
10	64QAM	25	0	21.19	21.12	21.05	22.7
10	64QAM	25	12	21.18	21.08	21.00	
10	64QAM	25	25	21.19	21.11	21.01	
10	64QAM	50	0	21.17	21.04	21.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.15	24.05	23.94	25.7
5	QPSK	1	12	24.09	24.02	23.94	
5	QPSK	1	24	24.10	23.99	23.95	
5	QPSK	12	0	23.21	23.11	23.08	
5	QPSK	12	7	23.26	23.20	23.06	
5	QPSK	12	13	23.20	23.18	23.05	24.7
5	QPSK	25	0	23.25	23.09	23.06	
5	16QAM	1	0	23.28	23.17	23.11	
5	16QAM	1	12	23.28	23.26	23.18	24.7
5	16QAM	1	24	23.28	23.22	23.12	
5	16QAM	12	0	22.21	22.09	22.05	
5	16QAM	12	7	22.23	22.13	22.06	23.7
5	16QAM	12	13	22.18	22.13	22.02	
5	16QAM	25	0	22.24	22.14	22.10	
5	64QAM	1	0	21.80	21.74	21.70	23.7
5	64QAM	1	12	21.90	21.84	21.76	
5	64QAM	1	24	21.81	21.82	21.70	
5	64QAM	12	0	21.27	21.07	20.97	22.7
5	64QAM	12	7	21.20	21.02	20.91	
5	64QAM	12	13	21.19	21.14	21.05	
5	64QAM	25	0	21.19	21.02	20.97	



Band 41										
Ann 2										
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low-Middle Ch / Freq	Power Middle Ch / Freq	Power High-Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.84	23.81	23.87	23.85	23.52	25.7	
20	QPSK	1	49	23.85	23.79	23.76	24.08	23.88		
20	QPSK	1	99	23.84	23.79	23.82	23.58	23.75		
20	QPSK	50	0	23.05	22.96	22.85	23.02	22.86	24.7	
20	QPSK	50	24	23.06	22.97	22.93	23.06	22.98		
20	QPSK	50	50	22.88	22.94	22.90	22.98	22.93		
20	QPSK	100	0	23.04	22.96	22.91	23.05	22.89	24.7	
20	16QAM	1	0	23.06	22.93	22.96	22.98	22.83		
20	16QAM	1	49	22.97	22.92	22.87	23.18	22.98		
20	16QAM	1	99	22.97	22.97	22.94	22.70	22.84	23.7	
20	16QAM	50	0	22.08	22.00	21.90	22.06	21.87		
20	16QAM	50	24	22.10	22.01	21.96	22.08	22.01		
20	16QAM	50	50	22.03	21.98	21.94	22.01	21.96	23.7	
20	16QAM	100	0	22.06	21.98	21.95	21.99	21.91		
20	64QAM	1	0	21.82	21.66	21.68	21.59	21.40		
20	64QAM	1	49	21.73	21.71	21.65	21.83	21.80	22.7	
20	64QAM	1	99	21.74	21.75	21.66	21.43	21.61		
20	64QAM	50	0	21.10	21.02	20.92	21.07	20.90		
20	64QAM	50	24	21.11	21.01	20.97	21.12	20.99	22.7	
20	64QAM	50	50	21.02	20.98	20.95	21.03	20.96		
20	64QAM	100	0	21.07	21.01	20.98	21.01	20.93		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.90	23.82	23.79	23.94	23.70	25.7	
15	QPSK	1	37	23.85	23.76	23.72	24.02	23.86		
15	QPSK	1	74	23.84	23.86	23.84	23.77	23.82		
15	QPSK	36	0	22.83	22.95	22.85	23.06	22.90	24.7	
15	QPSK	36	20	23.02	22.91	22.91	23.12	22.99		
15	QPSK	36	39	22.88	22.94	22.89	23.03	22.95		
15	QPSK	75	0	23.03	22.95	22.93	23.07	22.95	24.7	
15	16QAM	1	0	23.09	22.99	22.98	23.10	22.78		
15	16QAM	1	37	22.93	22.90	22.82	23.13	22.96		
15	16QAM	1	74	23.00	23.05	23.00	22.94	22.95	23.7	
15	16QAM	36	0	21.95	21.93	21.82	22.01	21.85		
15	16QAM	36	20	22.03	21.90	21.89	22.09	21.95		
15	16QAM	36	39	21.97	21.91	21.86	22.00	21.92	23.7	
15	16QAM	75	0	22.05	21.97	21.93	22.09	21.96		
15	64QAM	1	0	21.79	21.79	21.73	21.76	21.71		
15	64QAM	1	37	21.74	21.72	21.70	21.90	21.73	22.7	
15	64QAM	1	74	21.74	21.86	21.71	21.75	21.78		
15	64QAM	36	0	20.87	20.99	20.90	21.07	20.82		
15	64QAM	36	20	21.02	20.97	20.93	21.14	21.01	22.7	
15	64QAM	36	39	21.01	20.97	20.94	21.07	20.96		
15	64QAM	75	0	21.09	20.97	20.94	21.11	20.95		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.88	23.75	23.72	23.84	23.70	25.7	
10	QPSK	1	25	23.83	23.70	23.70	23.94	23.84		
10	QPSK	1	49	23.75	23.78	23.84	23.77	23.74		
10	QPSK	25	0	22.81	22.91	22.82	23.04	22.89	24.7	
10	QPSK	25	12	22.82	22.81	22.91	23.02	22.97		
10	QPSK	25	25	22.89	22.86	22.87	22.84	22.86		
10	QPSK	50	0	22.94	22.85	22.92	23.05	22.95	24.7	
10	16QAM	1	0	23.04	22.97	22.92	23.05	22.70		
10	16QAM	1	25	22.83	22.90	22.72	23.12	22.87		
10	16QAM	1	49	22.83	23.00	22.99	22.92	22.87	23.7	
10	16QAM	25	0	21.81	21.92	21.74	21.91	21.85		
10	16QAM	25	12	22.01	21.81	21.85	22.06	21.85		
10	16QAM	25	25	21.94	21.89	21.78	21.98	21.83	23.7	
10	16QAM	50	0	21.97	21.96	21.86	22.02	21.91		
10	64QAM	1	0	21.76	21.70	21.74	21.79	21.71		
10	64QAM	1	25	21.72	21.77	21.75	21.81	21.77	23.7	
10	64QAM	1	49	21.70	21.79	21.70	21.79	21.70		
10	64QAM	25	0	20.87	20.93	20.80	21.07	20.84		
10	64QAM	25	12	20.99	20.88	20.92	21.10	20.97	22.7	
10	64QAM	25	25	20.87	20.87	20.89	21.00	20.92		
10	64QAM	50	0	21.03	20.87	20.84	21.08	20.89		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2495.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.04	23.87	23.75	24.02	23.89	25.7	
5	QPSK	1	12	23.95	23.87	23.86	24.04	23.88		
5	QPSK	1	24	23.88	23.85	23.81	24.02	23.79		
5	QPSK	12	0	23.09	22.98	22.96	23.15	23.03	24.7	
5	QPSK	12	7	23.09	23.01	22.95	23.17	23.02		
5	QPSK	12	13	23.07	22.96	22.95	23.17	23.03		
5	QPSK	25	0	23.08	22.98	22.92	23.12	22.98	24.7	
5	16QAM	1	0	23.12	22.99	22.92	23.13	23.02		
5	16QAM	1	12	23.15	23.03	23.04	23.26	23.11		
5	16QAM	1	24	23.14	23.00	23.00	23.18	23.01	23.7	
5	16QAM	12	0	22.07	21.97	21.94	22.11	22.03		
5	16QAM	12	7	22.09	22.01	21.97	22.13	22.00		
5	16QAM	12	13	22.06	21.98	21.95	22.12	21.97	23.7	
5	16QAM	25	0	22.14	22.03	21.99	22.14	22.02		
5	64QAM	1	0	21.83	21.95	21.88	21.91	21.88		
5	64QAM	1	12	21.86	21.84	21.86	22.00	21.90	23.7	
5	64QAM	1	24	21.84	22.02	21.86	21.95	21.88		
5	64QAM	12	0	21.16	21.13	21.04	21.27	21.06		
5	64QAM	12	7	21.14	21.10	21.13	21.25	21.20	22.7	
5	64QAM	12	13	21.18	21.13	21.06	21.19	21.11		
5	64QAM	25	0	21.27	21.15	21.08	21.21	21.08		



Band 41 HPUE									
Ant 9									
6W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low-Middle Ch / Freq	Power Middle Ch / Freq	Power High-Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.71	25.60	25.64	25.74	25.50	27.5
20	QPSK	1	49	25.74	25.66	25.64	26.04	25.86	
20	QPSK	1	99	25.81	25.58	25.61	25.50	25.64	
20	QPSK	50	0	24.93	24.86	24.76	25.02	24.88	26.5
20	QPSK	50	24	24.94	24.85	24.84	25.09	25.00	
20	QPSK	50	50	24.86	24.83	24.82	25.01	24.97	
20	QPSK	100	0	24.82	24.86	24.83	24.95	24.90	26.5
20	16QAM	1	0	25.07	24.95	25.03	25.13	24.75	
20	16QAM	1	49	24.99	24.95	24.92	25.34	25.14	
20	16QAM	1	99	24.97	24.92	24.94	24.82	24.98	25.5
20	16QAM	50	0	23.94	23.89	23.79	24.07	23.89	
20	16QAM	50	24	23.96	23.91	23.87	24.11	24.01	
20	16QAM	50	50	23.81	23.88	23.86	24.01	23.98	24.5
20	16QAM	100	0	23.97	23.88	23.87	23.98	23.94	
20	64QAM	1	0	23.88	23.75	23.80	23.88	23.64	
20	64QAM	1	49	23.80	23.79	23.74	24.20	23.99	24.5
20	64QAM	1	99	23.82	23.80	23.79	23.70	23.86	
20	64QAM	50	0	22.99	22.89	22.81	23.09	22.93	
20	64QAM	50	24	22.96	22.91	22.86	23.10	23.03	24.5
20	64QAM	50	50	22.92	22.89	22.86	23.05	23.01	
20	64QAM	100	0	22.96	22.90	22.87	23.01	22.94	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	(dBm)
15	QPSK	1	0	25.80	25.70	25.65	25.91	25.65	27.5
15	QPSK	1	37	25.76	25.64	25.60	26.02	25.84	
15	QPSK	1	74	25.69	25.76	25.72	25.74	25.79	
15	QPSK	36	0	24.83	24.86	24.75	25.05	24.90	26.5
15	QPSK	36	20	24.91	24.82	24.82	25.12	24.99	
15	QPSK	36	39	24.86	24.82	24.80	25.02	24.95	
15	QPSK	75	0	24.83	24.84	24.83	25.08	24.95	26.5
15	16QAM	1	0	25.08	25.00	24.98	25.21	24.97	
15	16QAM	1	37	24.97	24.91	24.83	25.28	25.15	
15	16QAM	1	74	24.95	25.03	24.98	25.06	25.08	25.5
15	16QAM	36	0	23.84	23.86	23.75	24.04	23.87	
15	16QAM	36	20	23.89	23.83	23.80	24.12	23.96	
15	16QAM	36	39	23.85	23.83	23.77	24.02	23.96	25.5
15	16QAM	75	0	23.94	23.87	23.82	24.10	23.95	
15	64QAM	1	0	23.87	23.76	23.70	24.04	23.77	
15	64QAM	1	37	23.86	23.79	23.71	24.19	23.97	24.5
15	64QAM	1	74	23.84	23.89	23.82	23.90	23.95	
15	64QAM	36	0	22.86	22.87	22.77	23.06	22.84	
15	64QAM	36	20	22.96	22.85	22.82	23.16	23.01	24.5
15	64QAM	36	39	22.92	22.85	22.81	23.04	22.97	
15	64QAM	75	0	22.95	22.88	22.86	23.10	22.96	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	(dBm)
10	QPSK	1	0	25.80	25.66	25.54	25.82	25.81	27.5
10	QPSK	1	25	25.72	25.61	25.64	25.99	25.85	
10	QPSK	1	49	25.67	25.68	25.58	25.97	25.69	
10	QPSK	25	0	24.83	24.78	24.87	25.13	25.03	26.5
10	QPSK	25	12	25.00	24.86	24.87	25.12	24.99	
10	QPSK	25	25	24.92	24.83	24.79	25.15	24.99	
10	QPSK	50	0	24.92	24.78	24.88	25.11	25.00	26.5
10	16QAM	1	0	25.12	25.05	24.90	25.26	25.10	
10	16QAM	1	25	25.12	24.95	24.93	25.25	25.18	
10	16QAM	1	49	25.16	24.97	25.02	25.30	25.05	25.5
10	16QAM	25	0	24.00	23.85	23.84	24.11	23.98	
10	16QAM	25	12	24.07	23.95	23.87	24.13	24.10	
10	16QAM	25	25	23.91	23.85	23.85	24.12	24.00	24.5
10	16QAM	50	0	23.92	23.84	23.91	24.17	24.06	
10	64QAM	1	0	24.05	23.82	23.86	24.20	24.06	
10	64QAM	1	25	23.93	23.85	23.91	24.20	24.03	24.5
10	64QAM	1	49	23.97	23.95	23.86	24.15	24.04	
10	64QAM	25	0	23.02	22.86	22.90	23.12	23.08	
10	64QAM	25	12	23.04	22.96	22.94	23.14	23.02	24.5
10	64QAM	25	25	22.94	22.84	22.91	23.21	23.01	
10	64QAM	50	0	22.97	22.96	22.84	23.10	23.03	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2495.5	2545.8	2593	2640.0	2687.5	(dBm)
5	QPSK	1	0	25.84	25.69	25.61	25.94	25.85	27.5
5	QPSK	1	12	25.82	25.68	25.74	26.03	25.87	
5	QPSK	1	24	25.77	25.68	25.66	25.98	25.75	
5	QPSK	12	0	24.99	24.87	24.88	25.18	25.07	26.5
5	QPSK	12	7	25.00	24.91	24.90	25.20	25.06	
5	QPSK	12	13	24.98	24.89	24.87	25.24	25.00	
5	QPSK	25	0	24.98	24.88	24.88	25.14	25.02	26.5
5	16QAM	1	0	25.19	25.05	24.98	25.29	25.18	
5	16QAM	1	12	25.14	25.05	25.03	25.35	25.18	
5	16QAM	1	24	25.16	25.05	25.05	25.31	25.13	25.5
5	16QAM	12	0	24.02	23.90	23.92	24.20	24.07	
5	16QAM	12	7	24.07	23.95	23.96	24.23	24.13	
5	16QAM	12	13	24.01	23.92	23.90	24.21	24.04	24.5
5	16QAM	25	0	24.02	23.94	23.91	24.20	24.10	
5	64QAM	1	0	24.06	23.91	23.87	24.20	24.07	
5	64QAM	1	12	24.03	23.92	23.91	24.25	24.07	24.5
5	64QAM	1	24	24.04	23.95	23.94	24.22	24.05	
5	64QAM	12	0	23.07	22.94	22.92	23.22	23.13	
5	64QAM	12	7	23.05	22.98	22.95	23.24	23.11	24.5
5	64QAM	12	13	23.03	22.94	22.94	23.26	23.07	
5	64QAM	25	0	23.04	22.97	22.93	23.20	23.09	



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	56160	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	21.79	21.71	21.58	21.42	22.3		
20	QPSK	1	49	21.57	21.45	21.36	21.12			
20	QPSK	1	99	21.53	21.43	21.28	21.03			
20	QPSK	50	0	20.81	20.67	20.59	20.38			
20	QPSK	50	24	20.78	20.68	20.53	20.31	21.3		
20	QPSK	50	50	20.63	20.49	20.36	20.11			
20	QPSK	100	0	20.78	20.56	20.49	20.30			
20	16QAM	1	0	20.92	20.80	20.71	20.54			
20	16QAM	1	49	20.65	20.53	20.42	20.22	21.3		
20	16QAM	1	99	20.69	20.53	20.39	20.15			
20	16QAM	50	0	19.87	19.73	19.62	19.41			
20	16QAM	50	24	19.81	19.57	19.54	19.33			
20	16QAM	50	50	19.68	19.51	19.39	19.15	20.3		
20	16QAM	100	0	19.80	19.58	19.54	19.33			
20	64QAM	1	0	19.63	19.57	19.46	19.27			
20	64QAM	1	49	19.42	19.31	19.19	18.97			
20	64QAM	1	99	19.39	19.24	19.13	18.85	19.3		
20	64QAM	50	0	18.87	18.73	18.63	18.41			
20	64QAM	50	24	18.82	18.61	18.56	18.33			
20	64QAM	50	50	18.69	18.53	18.40	18.15			
20	64QAM	100	0	18.81	18.58	18.55	18.31	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	21.67	21.60	21.50	21.28	22.3		
15	QPSK	1	37	21.53	21.46	21.30	21.05			
15	QPSK	1	74	21.54	21.45	21.31	21.02			
15	QPSK	36	0	20.81	20.68	20.54	20.32			
15	QPSK	36	20	20.74	20.62	20.49	20.24	21.3		
15	QPSK	36	39	20.64	20.49	20.35	20.17			
15	QPSK	75	0	20.68	20.64	20.51	20.24			
15	16QAM	1	0	20.77	20.76	20.60	20.41			
15	16QAM	1	37	20.61	20.51	20.33	20.14	21.3		
15	16QAM	1	74	20.72	20.60	20.46	20.19			
15	16QAM	36	0	19.77	19.65	19.53	19.29			
15	16QAM	36	20	19.74	19.60	19.45	19.20			
15	16QAM	36	39	19.63	19.49	19.32	19.14	20.3		
15	16QAM	75	0	19.71	19.65	19.52	19.24			
15	64QAM	1	0	19.58	19.51	19.39	19.12			
15	64QAM	1	37	19.42	19.34	19.19	18.96			
15	64QAM	1	74	19.43	19.29	19.16	18.87	19.3		
15	64QAM	36	0	18.93	18.70	18.57	18.34			
15	64QAM	36	20	18.77	18.63	18.50	18.26			
15	64QAM	36	39	18.66	18.51	18.37	18.17			
15	64QAM	75	0	18.72	18.66	18.52	18.26	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3525	3597.5	3642.5	3695			
10	QPSK	1	0	21.66	21.62	21.49	21.26	22.3		
10	QPSK	1	25	21.45	21.38	21.26	21.05			
10	QPSK	1	49	21.51	21.41	21.26	20.95			
10	QPSK	25	0	20.75	20.64	20.44	20.31			
10	QPSK	25	12	20.67	20.52	20.48	20.15	21.3		
10	QPSK	25	25	20.59	20.46	20.33	20.12			
10	QPSK	50	0	20.63	20.62	20.42	20.14			
10	16QAM	1	0	20.76	20.67	20.51	20.35			
10	16QAM	1	25	20.58	20.47	20.33	20.05	21.3		
10	16QAM	1	49	20.72	20.54	20.42	20.11			
10	16QAM	25	0	19.70	19.56	19.43	19.29			
10	16QAM	25	12	19.64	19.57	19.45	19.14			
10	16QAM	25	25	19.62	19.45	19.28	19.11	20.3		
10	16QAM	50	0	19.64	19.59	19.52	19.20			
10	64QAM	1	0	19.50	19.51	19.37	19.12			
10	64QAM	1	25	19.42	19.31	19.13	18.95			
10	64QAM	1	49	19.43	19.22	19.11	18.84	19.3		
10	64QAM	25	0	18.81	18.66	18.47	18.27			
10	64QAM	25	12	18.77	18.55	18.41	18.22			
10	64QAM	25	25	18.56	18.49	18.31	18.15			
10	64QAM	50	0	18.62	18.63	18.48	18.23	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3524.5	3597	3643	3697.5			
5	QPSK	1	0	21.65	21.56	21.51	21.57	22.3		
5	QPSK	1	12	21.61	21.51	21.45	21.52			
5	QPSK	1	24	21.53	21.43	21.39	21.47			
5	QPSK	12	0	20.77	20.64	20.64	20.70			
5	QPSK	12	7	20.77	20.67	20.58	20.67	21.3		
5	QPSK	12	13	20.70	20.65	20.52	20.62			
5	QPSK	25	0	20.72	20.63	20.53	20.63			
5	16QAM	1	0	20.73	20.70	20.63	20.69			
5	16QAM	1	12	20.82	20.72	20.64	20.74	21.3		
5	16QAM	1	24	20.73	20.63	20.54	20.62			
5	16QAM	12	0	19.74	19.67	19.62	19.65			
5	16QAM	12	7	19.77	19.65	19.58	19.66			
5	16QAM	12	13	19.70	19.59	19.50	19.60	20.3		
5	16QAM	25	0	19.77	19.70	19.56	19.65			
5	64QAM	1	0	19.52	19.47	19.42	19.47			
5	64QAM	1	12	19.52	19.41	19.36	19.47			
5	64QAM	1	24	19.54	19.42	19.34	19.37	19.3		
5	64QAM	12	0	18.79	18.74	18.68	18.74			
5	64QAM	12	7	18.83	18.69	18.62	18.70			
5	64QAM	12	13	18.77	18.67	18.56	18.68			
5	64QAM	25	0	18.79	18.70	18.58	18.70			



Band 38							
Ann 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	24.48	24.44	24.35	25.1
20	QPSK	1	49	24.49	24.48	24.36	
20	QPSK	1	99	24.48	24.44	24.35	
20	QPSK	50	0	24.07	24.06	23.96	
20	QPSK	50	24	24.19	24.09	24.05	24.7
20	QPSK	50	50	24.15	24.08	24.02	
20	QPSK	100	0	24.16	24.03	24.03	
20	16QAM	1	0	24.09	24.04	23.97	
20	16QAM	1	49	24.07	24.02	23.95	24.7
20	16QAM	1	99	24.07	24.01	23.93	
20	16QAM	50	0	23.11	23.10	22.99	
20	16QAM	50	24	23.19	23.07	23.07	
20	16QAM	50	50	23.18	23.13	23.03	23.7
20	16QAM	100	0	23.18	23.07	23.05	
20	64QAM	1	0	22.80	22.75	22.68	
20	64QAM	1	49	22.82	22.75	22.69	
20	64QAM	1	99	22.81	22.76	22.64	22.7
20	64QAM	50	0	22.12	22.10	22.00	
20	64QAM	50	24	22.20	22.09	22.09	
20	64QAM	50	50	22.15	22.14	22.06	
20	64QAM	100	0	22.20	22.08	22.07	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.47	24.43	24.26	25.1
15	QPSK	1	37	24.47	24.46	24.35	
15	QPSK	1	74	24.43	24.38	24.34	
15	QPSK	36	0	24.03	24.00	23.93	
15	QPSK	36	20	24.18	23.96	24.01	24.7
15	QPSK	36	39	24.09	24.03	24.00	
15	QPSK	75	0	24.11	23.99	23.97	
15	16QAM	1	0	24.06	24.04	23.93	
15	16QAM	1	37	24.05	24.01	23.88	24.7
15	16QAM	1	74	24.00	24.01	23.91	
15	16QAM	36	0	23.04	23.00	22.96	
15	16QAM	36	20	23.15	23.03	23.03	
15	16QAM	36	39	23.11	23.12	23.00	23.7
15	16QAM	75	0	23.15	22.98	23.02	
15	64QAM	1	0	22.79	22.70	22.67	
15	64QAM	1	37	22.75	22.72	22.60	
15	64QAM	1	74	22.79	22.67	22.61	22.7
15	64QAM	36	0	22.07	22.02	21.91	
15	64QAM	36	20	22.18	22.08	22.08	
15	64QAM	36	39	22.10	22.05	21.98	
15	64QAM	75	0	22.16	22.04	22.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.46	24.33	24.25	25.1
10	QPSK	1	25	24.42	24.40	24.35	
10	QPSK	1	49	24.39	24.39	24.35	
10	QPSK	25	0	24.00	24.03	23.92	
10	QPSK	25	12	24.15	23.95	24.03	24.7
10	QPSK	25	25	24.05	24.09	24.00	
10	QPSK	50	0	24.14	23.96	23.93	
10	16QAM	1	0	24.09	23.99	23.90	
10	16QAM	1	25	24.03	24.02	23.88	24.7
10	16QAM	1	49	24.06	23.91	23.87	
10	16QAM	25	0	23.07	23.09	22.93	
10	16QAM	25	12	23.14	23.06	23.02	
10	16QAM	25	25	23.13	23.09	22.94	23.7
10	16QAM	50	0	23.13	23.02	23.05	
10	64QAM	1	0	22.76	22.75	22.65	
10	64QAM	1	25	22.73	22.74	22.66	
10	64QAM	1	49	22.79	22.70	22.57	22.7
10	64QAM	25	0	22.06	22.02	21.94	
10	64QAM	25	12	22.19	22.06	22.06	
10	64QAM	25	25	22.09	22.04	22.04	
10	64QAM	50	0	22.18	22.02	22.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.41	24.40	24.28	25.1
5	QPSK	1	12	24.44	24.45	24.32	
5	QPSK	1	24	24.38	24.38	24.26	
5	QPSK	12	0	24.06	24.03	23.94	
5	QPSK	12	7	24.11	23.95	24.03	24.7
5	QPSK	12	13	24.08	24.08	23.99	
5	QPSK	25	0	24.12	24.03	24.02	
5	16QAM	1	0	24.06	23.98	23.91	
5	16QAM	1	12	24.04	23.97	23.91	24.7
5	16QAM	1	24	24.05	23.97	23.89	
5	16QAM	12	0	23.05	23.08	22.96	
5	16QAM	12	7	23.17	23.05	23.06	
5	16QAM	12	13	23.11	23.11	22.98	23.7
5	16QAM	25	0	23.12	23.05	22.98	
5	64QAM	1	0	22.79	22.65	22.61	
5	64QAM	1	12	22.73	22.71	22.67	
5	64QAM	1	24	22.72	22.74	22.56	22.7
5	64QAM	12	0	22.02	22.10	21.96	
5	64QAM	12	7	22.12	22.04	22.02	
5	64QAM	12	13	22.10	22.10	22.06	
5	64QAM	25	0	22.13	21.98	21.99	



Band 41										
Ann 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.23	24.38	24.45	24.14	23.88	25.1	
20	QPSK	1	49	24.21	24.35	24.33	24.40	24.10		
20	QPSK	1	99	24.22	24.37	24.43	24.00	24.09		
20	QPSK	50	0	23.79	23.94	23.94	24.05	23.90	24.7	
20	QPSK	50	24	23.90	24.07	24.16	24.15	24.02		
20	QPSK	50	50	23.88	24.04	24.01	24.07	24.01		
20	QPSK	100	0	23.89	24.05	24.01	24.10	23.97	24.7	
20	16QAM	1	0	23.80	23.95	24.05	23.94	23.87		
20	16QAM	1	49	23.84	23.96	23.92	24.24	24.04		
20	16QAM	1	99	23.80	24.03	24.00	23.79	23.87	23.7	
20	16QAM	50	0	22.82	22.96	22.97	23.09	22.93		
20	16QAM	50	24	22.91	23.09	23.05	23.22	23.06		
20	16QAM	50	50	22.90	23.07	23.04	23.08	23.02	23.7	
20	16QAM	100	0	22.90	23.06	23.02	23.11	22.97		
20	64QAM	1	0	22.51	22.60	22.65	22.60	22.35		
20	64QAM	1	49	22.51	22.71	22.68	22.99	22.79	23.7	
20	64QAM	1	99	22.56	22.76	22.68	22.53	22.55		
20	64QAM	50	0	21.82	21.98	21.98	22.09	21.93		
20	64QAM	50	24	21.93	22.07	22.07	22.21	22.06	22.7	
20	64QAM	50	50	21.92	22.07	22.05	22.08	22.03		
20	64QAM	100	0	21.91	22.08	22.04	22.14	21.96		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.16	24.23	24.44	24.13	23.82	25.1	
15	QPSK	1	37	24.11	24.31	24.25	24.32	24.22		
15	QPSK	1	74	24.21	24.34	24.40	23.97	24.02		
15	QPSK	36	0	23.75	23.94	23.86	24.04	23.85	24.7	
15	QPSK	36	20	23.89	23.99	23.94	24.16	23.92		
15	QPSK	36	39	23.80	24.03	24.00	23.98	23.98		
15	QPSK	75	0	23.89	23.99	24.01	24.08	23.95	24.7	
15	16QAM	1	0	23.70	23.88	24.03	23.89	23.58		
15	16QAM	1	37	23.75	23.89	23.83	24.14	23.98		
15	16QAM	1	74	23.79	23.98	23.97	23.78	23.81	23.7	
15	16QAM	36	0	22.79	22.88	22.89	23.03	22.84		
15	16QAM	36	20	22.83	23.00	23.01	23.15	22.98		
15	16QAM	36	39	22.90	23.06	23.04	23.00	22.95	23.7	
15	16QAM	75	0	22.89	23.05	22.92	23.04	22.95		
15	64QAM	1	0	22.44	22.53	22.58	22.54	22.29		
15	64QAM	1	37	22.41	22.68	22.59	22.94	22.72	23.7	
15	64QAM	1	74	22.48	22.71	22.59	22.43	22.51		
15	64QAM	36	0	21.77	21.98	21.95	22.07	21.88		
15	64QAM	36	20	21.88	22.01	22.05	22.15	21.96	22.7	
15	64QAM	36	39	21.87	22.01	21.95	22.06	22.03		
15	64QAM	75	0	21.86	22.02	21.96	22.10	21.95		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.20	24.32	24.38	24.11	23.83	25.1	
10	QPSK	1	25	24.15	24.28	24.26	24.38	24.22		
10	QPSK	1	49	24.13	24.30	24.38	23.91	24.05		
10	QPSK	25	0	23.69	23.91	23.90	23.98	23.84	24.7	
10	QPSK	25	12	23.81	24.01	23.97	24.19	23.93		
10	QPSK	25	25	23.81	24.03	23.98	23.97	23.94		
10	QPSK	50	0	23.83	23.96	23.96	24.06	23.96	24.7	
10	16QAM	1	0	23.80	23.88	23.97	23.86	23.65		
10	16QAM	1	25	23.74	23.95	23.87	24.17	24.02		
10	16QAM	1	49	23.78	23.95	23.94	23.71	23.87	24.7	
10	16QAM	25	0	22.79	22.94	22.94	23.09	22.86		
10	16QAM	25	12	22.90	23.07	22.95	23.14	22.96		
10	16QAM	25	25	22.90	23.03	23.00	23.00	23.02	23.7	
10	16QAM	50	0	22.81	23.02	22.97	23.05	22.94		
10	64QAM	1	0	22.43	22.59	22.64	22.52	22.35		
10	64QAM	1	25	22.43	22.65	22.68	22.96	22.73	23.7	
10	64QAM	1	49	22.46	22.70	22.66	22.52	22.50		
10	64QAM	25	0	21.73	21.88	21.96	22.07	21.88		
10	64QAM	25	12	21.85	22.03	22.01	22.15	21.98	22.7	
10	64QAM	25	25	21.82	21.97	22.01	21.98	21.99		
10	64QAM	50	0	21.87	21.99	21.99	22.14	21.90		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	24.16	24.23	24.40	24.14	23.78	25.1	
5	QPSK	1	12	24.17	24.33	24.30	24.30	24.22		
5	QPSK	1	24	24.13	24.31	24.43	23.91	24.05		
5	QPSK	12	0	23.72	23.88	23.92	23.99	23.84	24.7	
5	QPSK	12	7	23.81	24.05	24.00	24.15	24.02		
5	QPSK	12	13	23.82	24.01	23.94	23.99	23.99		
5	QPSK	25	0	23.86	23.97	23.99	24.05	23.92	24.7	
5	16QAM	1	0	23.71	23.90	23.98	23.89	23.61		
5	16QAM	1	12	23.79	23.91	23.86	24.18	24.03		
5	16QAM	1	24	23.83	23.99	23.90	23.74	23.79	23.7	
5	16QAM	12	0	22.79	22.89	22.93	23.06	22.86		
5	16QAM	12	7	22.81	22.99	23.01	23.22	23.04		
5	16QAM	12	13	22.90	23.05	23.03	22.99	22.94	23.7	
5	16QAM	25	0	22.81	22.96	22.99	23.07	22.95		
5	64QAM	1	0	22.51	22.59	22.65	22.52	22.35		
5	64QAM	1	12	22.46	22.68	22.65	22.93	22.69	23.7	
5	64QAM	1	24	22.54	22.71	22.66	22.50	22.47		
5	64QAM	12	0	21.81	21.90	21.89	22.07	21.85		
5	64QAM	12	7	21.83	21.99	22.07	22.16	22.03	22.7	
5	64QAM	12	13	21.92	22.05	22.01	22.04	22.02		
5	64QAM	25	0	21.90	22.03	22.01	22.05	21.91		



Band 41 HPUE									
Ant.2									
5W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.76	25.92	26.00	25.74	25.50	26.9
20	QPSK	1	49	25.76	25.92	25.89	25.59	25.81	
20	QPSK	1	99	25.83	26.00	26.01	25.58	25.70	
20	QPSK	50	0	25.56	25.73	25.73	25.96	25.82	
20	QPSK	50	24	25.67	25.84	25.98	25.94	25.95	26.4
20	QPSK	50	50	25.66	25.83	25.81	25.96	25.88	
20	QPSK	100	0	25.68	25.84	25.81	26.01	25.85	
20	16QAM	1	0	25.72	25.96	26.00	25.93	25.69	
20	16QAM	1	49	25.74	25.93	25.91	26.23	26.92	26.4
20	16QAM	1	99	25.72	25.99	25.93	25.81	25.86	
20	16QAM	50	0	24.61	24.75	24.78	24.99	24.83	
20	16QAM	50	24	24.71	24.86	24.85	25.14	24.96	
20	16QAM	50	50	24.67	24.87	24.83	24.99	24.94	25.4
20	16QAM	100	0	24.66	24.86	24.84	25.03	24.90	
20	64QAM	1	0	24.58	24.94	24.66	24.76	24.54	
20	64QAM	1	49	24.62	24.74	24.71	25.09	24.58	
20	64QAM	1	99	24.62	24.82	24.79	24.66	23.81	24.4
20	64QAM	50	0	23.59	23.77	23.75	23.99	23.58	
20	64QAM	50	24	23.69	23.86	23.84	24.15	23.40	
20	64QAM	50	50	23.68	23.87	23.83	24.01	23.13	
20	64QAM	100	0	23.70	23.86	23.83	24.05	23.28	Tune-up limit (dBm)
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.71	25.90	26.00	25.68	25.51	26.9
15	QPSK	1	37	25.67	25.89	25.82	25.91	25.81	
15	QPSK	1	74	25.82	25.92	25.92	25.58	25.69	
15	QPSK	36	0	25.53	25.67	25.70	25.86	25.78	
15	QPSK	36	20	25.67	25.84	25.95	25.91	25.90	26.4
15	QPSK	36	39	25.62	25.81	25.71	25.86	25.79	
15	QPSK	75	0	25.60	25.82	25.78	25.97	25.84	
15	16QAM	1	0	25.63	25.85	25.87	25.92	25.64	
15	16QAM	1	37	25.74	25.89	25.85	26.17	26.00	26.4
15	16QAM	1	74	25.67	25.96	25.87	25.77	25.84	
15	16QAM	36	0	24.54	24.73	24.75	24.93	24.75	
15	16QAM	36	20	24.71	24.77	24.82	25.13	24.93	
15	16QAM	36	39	24.65	24.86	24.77	24.92	24.87	25.4
15	16QAM	75	0	24.61	24.83	24.82	25.00	24.89	
15	64QAM	1	0	24.50	24.59	24.56	24.73	24.46	
15	64QAM	1	37	24.64	24.66	24.67	25.09	24.50	
15	64QAM	1	74	24.54	24.75	24.76	24.59	23.73	24.4
15	64QAM	36	0	23.51	23.70	23.72	23.91	23.46	
15	64QAM	36	20	23.85	23.82	23.79	24.12	23.40	
15	64QAM	36	39	23.60	23.80	23.75	23.95	23.12	
15	64QAM	75	0	23.70	23.84	23.74	23.98	23.22	Tune-up limit (dBm)
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.75	25.89	25.94	25.66	25.52	26.9
10	QPSK	1	25	25.72	25.84	25.79	25.94	25.76	
10	QPSK	1	49	25.77	25.91	26.01	25.49	25.70	
10	QPSK	25	0	25.46	25.67	25.72	25.91	25.74	
10	QPSK	25	12	25.59	25.81	25.89	25.86	25.85	26.4
10	QPSK	25	25	25.61	25.77	25.76	25.90	25.79	
10	QPSK	50	0	25.60	25.82	25.71	25.91	25.76	
10	16QAM	1	0	25.62	25.80	25.94	25.85	25.61	
10	16QAM	1	25	25.73	25.92	25.91	26.15	25.97	26.4
10	16QAM	1	49	25.71	25.93	25.84	25.75	25.78	
10	16QAM	25	0	24.51	24.73	24.72	24.96	24.82	
10	16QAM	25	12	24.63	24.84	24.82	25.04	24.86	
10	16QAM	25	25	24.64	24.77	24.79	24.89	24.84	25.4
10	16QAM	50	0	24.60	24.86	24.74	24.96	24.82	
10	64QAM	1	0	24.65	24.60	24.56	24.66	24.49	
10	64QAM	1	25	24.56	24.74	24.69	25.08	24.50	
10	64QAM	1	49	24.55	24.79	24.71	24.61	23.76	24.4
10	64QAM	25	0	23.59	23.73	23.75	23.97	23.51	
10	64QAM	25	12	23.59	23.86	23.84	24.13	23.39	
10	64QAM	25	25	23.64	23.79	23.80	23.94	23.12	
10	64QAM	50	0	23.68	23.83	23.82	24.02	23.21	Tune-up limit (dBm)
Channel				39675	40148	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	25.69	25.88	25.92	25.70	25.53	26.9
5	QPSK	1	12	25.68	25.84	25.82	25.93	25.80	
5	QPSK	1	24	25.83	25.91	26.01	25.53	25.60	
5	QPSK	12	0	25.54	25.65	25.64	25.95	25.72	
5	QPSK	12	7	25.60	25.82	25.97	25.94	25.88	26.4
5	QPSK	12	13	25.59	25.75	25.75	25.92	25.87	
5	QPSK	25	0	25.60	25.76	25.73	25.92	25.82	
5	16QAM	1	0	25.63	25.81	25.92	25.84	25.69	
5	16QAM	1	12	25.64	25.85	25.83	26.15	25.97	26.4
5	16QAM	1	24	25.68	25.95	25.84	25.71	25.81	
5	16QAM	12	0	24.57	24.65	24.72	24.99	24.74	
5	16QAM	12	7	24.69	24.77	24.83	25.12	24.87	
5	16QAM	12	13	24.58	24.82	24.81	24.93	24.87	25.4
5	16QAM	25	0	24.63	24.78	24.82	24.97	24.81	
5	64QAM	1	0	24.52	24.60	24.62	24.66	24.47	
5	64QAM	1	12	24.57	24.67	24.64	25.01	24.53	
5	64QAM	1	24	24.59	24.76	24.74	24.56	23.77	24.4
5	64QAM	12	0	23.52	23.74	23.71	23.90	23.56	
5	64QAM	12	7	23.62	23.85	23.81	24.08	23.40	
5	64QAM	12	13	23.64	23.83	23.76	23.95	23.12	
5	64QAM	25	0	23.60	23.85	23.80	23.96	23.16	



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	22.80	22.72	22.60	22.45	23.8	
20	QPSK	1	49	22.59	22.48	22.31	22.10		
20	QPSK	1	99	22.55	22.41	22.25	22.04		
20	QPSK	50	0	22.80	22.73	22.58	22.33		
20	QPSK	50	24	22.77	22.57	22.50	22.25	23.3	
20	QPSK	50	50	22.61	22.48	22.34	22.09		
20	QPSK	100	0	22.76	22.57	22.51	22.24		
20	16QAM	1	0	22.92	22.81	22.67	22.43		
20	16QAM	1	49	22.68	22.55	22.37	22.15	23.3	
20	16QAM	1	99	22.66	22.50	22.35	22.10		
20	16QAM	50	0	22.13	22.04	21.89	21.65		
20	16QAM	50	24	22.09	21.89	21.80	21.59		
20	16QAM	50	50	21.93	21.82	21.66	21.41	22.3	
20	16QAM	100	0	22.08	21.89	21.80	21.55		
20	64QAM	1	0	21.92	21.85	21.72	21.46		
20	64QAM	1	49	21.76	21.62	21.46	21.32		
20	64QAM	1	99	21.68	21.52	21.38	21.31	22.3	
20	64QAM	50	0	21.15	21.06	20.90	20.66		
20	64QAM	50	24	21.10	20.91	20.83	20.57		
20	64QAM	50	50	20.95	20.82	20.66	20.42		
20	64QAM	100	0	21.09	20.88	20.82	20.56	21.3	
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.72	22.59	22.50	22.21	23.8	
15	QPSK	1	37	22.57	22.47	22.29	22.03		
15	QPSK	1	74	22.57	22.46	22.24	22.01		
15	QPSK	36	0	22.80	22.70	22.52	22.29		
15	QPSK	36	20	22.76	22.66	22.48	22.20	23.3	
15	QPSK	36	39	22.62	22.51	22.33	22.15		
15	QPSK	75	0	22.66	22.66	22.47	22.24		
15	16QAM	1	0	22.86	22.76	22.61	22.32		
15	16QAM	1	37	22.61	22.47	22.30	22.05	23.3	
15	16QAM	1	74	22.69	22.59	22.40	22.16		
15	16QAM	36	0	22.05	21.95	21.80	21.54		
15	16QAM	36	20	21.99	21.90	21.72	21.47		
15	16QAM	36	39	21.87	21.77	21.59	21.44	22.3	
15	16QAM	75	0	21.97	21.88	21.79	21.53		
15	64QAM	1	0	21.86	21.81	21.63	21.36		
15	64QAM	1	37	21.74	21.64	21.42	21.19		
15	64QAM	1	74	21.71	21.59	21.38	21.15	22.3	
15	64QAM	36	0	21.12	21.02	20.85	20.59		
15	64QAM	36	20	21.05	20.95	20.77	20.51		
15	64QAM	36	39	20.93	20.82	20.63	20.47		
15	64QAM	75	0	20.99	20.94	20.77	20.52	21.3	
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3597.5	3642.5	3695		
10	QPSK	1	0	22.63	22.55	22.49	22.16	23.8	
10	QPSK	1	25	22.49	22.44	22.20	21.94		
10	QPSK	1	49	22.57	22.36	22.23	21.91		
10	QPSK	25	0	22.76	22.69	22.46	22.29		
10	QPSK	25	12	22.72	22.64	22.41	22.16	23.3	
10	QPSK	25	25	22.58	22.48	22.28	22.06		
10	QPSK	50	0	22.56	22.51	22.43	22.22		
10	16QAM	1	0	22.76	22.68	22.60	22.27		
10	16QAM	1	25	22.60	22.38	22.22	21.98	23.3	
10	16QAM	1	49	22.61	22.55	22.34	22.09		
10	16QAM	25	0	22.00	21.90	21.71	21.48		
10	16QAM	25	12	21.91	21.81	21.70	21.42		
10	16QAM	25	25	21.79	21.75	21.55	21.43	22.3	
10	16QAM	50	0	21.87	21.91	21.71	21.47		
10	64QAM	1	0	21.85	21.80	21.55	21.31		
10	64QAM	1	25	21.73	21.59	21.38	21.10		
10	64QAM	1	49	21.66	21.51	21.30	21.12	22.3	
10	64QAM	25	0	21.07	20.96	20.75	20.52		
10	64QAM	25	12	20.95	20.87	20.74	20.44		
10	64QAM	25	25	20.84	20.74	20.60	20.41		
10	64QAM	50	0	20.93	20.85	20.68	20.43	21.3	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3597	3643	3697.5		
5	QPSK	1	0	22.65	22.54	22.50	22.55	23.8	
5	QPSK	1	12	22.63	22.50	22.44	22.53		
5	QPSK	1	24	22.57	22.51	22.36	22.48		
5	QPSK	12	0	22.78	22.62	22.60	22.69		
5	QPSK	12	7	22.77	22.65	22.56	22.67	23.3	
5	QPSK	12	13	22.75	22.63	22.53	22.63		
5	QPSK	25	0	22.72	22.64	22.51	22.62		
5	16QAM	1	0	22.77	22.70	22.61	22.73		
5	16QAM	1	12	22.84	22.71	22.67	22.78	23.3	
5	16QAM	1	24	22.76	22.66	22.53	22.61		
5	16QAM	12	0	22.04	21.91	21.89	21.95		
5	16QAM	12	7	22.08	21.93	21.81	21.95		
5	16QAM	12	13	22.04	21.92	21.75	21.90	22.3	
5	16QAM	25	0	22.06	21.97	21.84	21.95		
5	64QAM	1	0	21.87	21.75	21.67	21.79		
5	64QAM	1	12	21.82	21.72	21.67	21.76		
5	64QAM	1	24	21.85	21.74	21.58	21.71	22.3	
5	64QAM	12	0	21.08	20.97	20.94	21.00		
5	64QAM	12	7	21.11	21.00	20.88	21.01		
5	64QAM	12	13	21.10	20.99	20.84	20.92		
5	64QAM	25	0	21.12	21.01	20.89	20.97		



Band 38							
Ann 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	21.20	21.19	21.08	22.4
20	QPSK	1	49	21.22	21.22	21.12	
20	QPSK	1	99	21.21	21.20	21.07	
20	QPSK	50	0	21.28	21.29	21.22	
20	QPSK	50	24	21.40	21.30	21.25	
20	QPSK	50	50	21.36	21.34	21.23	22.4
20	QPSK	100	0	21.37	21.30	21.27	
20	16QAM	1	0	21.34	21.31	21.23	
20	16QAM	1	49	21.33	21.34	21.22	
20	16QAM	1	99	21.37	21.32	21.19	
20	16QAM	50	0	21.33	21.34	21.24	22.4
20	16QAM	50	24	21.45	21.34	21.30	
20	16QAM	50	50	21.41	21.40	21.28	
20	16QAM	100	0	21.42	21.32	21.30	
20	64QAM	1	0	21.04	21.02	20.91	
20	64QAM	1	49	21.05	21.06	20.98	22.4
20	64QAM	1	99	21.07	21.09	20.90	
20	64QAM	50	0	21.35	21.34	21.25	
20	64QAM	50	24	21.41	21.35	21.32	
20	64QAM	50	50	21.42	21.38	21.28	
20	64QAM	100	0	21.40	21.34	21.30	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	Tune-up limit (dBm)
15	QPSK	1	0	21.17	21.17	21.06	22.4
15	QPSK	1	37	21.17	21.15	21.04	
15	QPSK	1	74	21.17	21.19	21.03	
15	QPSK	36	0	21.38	21.29	21.17	
15	QPSK	36	20	21.34	21.27	21.15	
15	QPSK	36	39	21.36	21.34	21.22	22.4
15	QPSK	75	0	21.36	21.27	21.15	
15	16QAM	1	0	21.34	21.33	21.25	
15	16QAM	1	37	21.26	21.25	21.18	
15	16QAM	1	74	21.37	21.36	21.21	
15	16QAM	36	0	21.37	21.26	21.13	22.4
15	16QAM	36	20	21.34	21.25	21.12	
15	16QAM	36	39	21.36	21.29	21.20	
15	16QAM	75	0	21.37	21.28	21.21	
15	64QAM	1	0	20.97	20.98	20.89	
15	64QAM	1	37	21.06	21.04	20.93	22.4
15	64QAM	1	74	21.08	21.06	20.92	
15	64QAM	36	0	21.42	21.32	21.20	
15	64QAM	36	20	21.38	21.26	21.14	
15	64QAM	36	39	21.38	21.35	21.24	
15	64QAM	75	0	21.38	21.30	21.20	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	Tune-up limit (dBm)
10	QPSK	1	0	21.08	21.08	21.00	22.4
10	QPSK	1	25	21.12	21.13	20.94	
10	QPSK	1	49	21.17	21.10	21.01	
10	QPSK	25	0	21.31	21.28	21.17	
10	QPSK	25	12	21.28	21.21	21.08	
10	QPSK	25	25	21.35	21.31	21.15	22.4
10	QPSK	50	0	21.29	21.17	21.13	
10	16QAM	1	0	21.29	21.28	21.20	
10	16QAM	1	25	21.24	21.23	21.10	
10	16QAM	1	49	21.35	21.34	21.12	
10	16QAM	25	0	21.32	21.20	21.13	22.4
10	16QAM	25	12	21.27	21.24	21.07	
10	16QAM	25	25	21.27	21.29	21.10	
10	16QAM	50	0	21.34	21.27	21.15	
10	64QAM	1	0	20.97	20.92	20.80	
10	64QAM	1	25	21.04	20.97	20.83	22.4
10	64QAM	1	49	21.02	20.96	20.86	
10	64QAM	25	0	21.37	21.24	21.11	
10	64QAM	25	12	21.33	21.16	21.09	
10	64QAM	25	25	21.37	21.26	21.22	
10	64QAM	50	0	21.28	21.27	21.15	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	Tune-up limit (dBm)
5	QPSK	1	0	21.11	21.17	20.98	22.4
5	QPSK	1	12	21.20	21.21	21.05	
5	QPSK	1	24	21.16	21.17	21.07	
5	QPSK	12	0	21.24	21.24	21.22	
5	QPSK	12	7	21.37	21.22	21.17	
5	QPSK	12	13	21.31	21.27	21.23	22.4
5	QPSK	25	0	21.27	21.27	21.24	
5	16QAM	1	0	21.31	21.27	21.13	
5	16QAM	1	12	21.24	21.24	21.20	
5	16QAM	1	24	21.32	21.22	21.11	
5	16QAM	12	0	21.32	21.32	21.17	22.4
5	16QAM	12	7	21.24	21.32	21.30	
5	16QAM	12	13	21.34	21.33	21.26	
5	16QAM	25	0	21.32	21.23	21.20	
5	64QAM	1	0	20.99	20.94	20.88	
5	64QAM	1	12	20.96	21.06	20.92	22.4
5	64QAM	1	24	21.02	21.07	20.81	
5	64QAM	12	0	21.33	21.34	21.25	
5	64QAM	12	7	21.38	21.34	21.22	
5	64QAM	12	13	21.38	21.32	21.19	
5	64QAM	25	0	21.40	21.25	21.21	



Band 41										
Ann 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	20.99	20.95	21.07	20.71	20.50	22.4	
20	QPSK	1	49	20.95	20.98	20.99	20.96	20.82		
20	QPSK	1	99	20.93	21.00	21.06	20.52	20.69		
20	QPSK	50	0	21.05	21.08	21.09	20.94	20.74		
20	QPSK	50	24	21.12	21.16	21.15	21.06	20.88	22.4	
20	QPSK	50	50	21.09	21.14	21.15	20.90	20.87		
20	QPSK	100	0	21.12	21.15	21.14	20.96	20.80		
20	16QAM	1	0	21.13	21.06	21.21	20.74	20.49		
20	16QAM	1	49	21.05	21.07	21.10	21.00	20.89	22.4	
20	16QAM	1	99	21.13	21.12	21.23	20.95	20.79		
20	16QAM	50	0	21.10	21.08	21.11	20.97	20.76		
20	16QAM	50	24	21.16	21.18	21.21	21.08	20.92		
20	16QAM	50	50	21.15	21.18	21.17	20.93	20.90	22.4	
20	16QAM	100	0	21.16	21.18	21.16	20.99	20.83		
20	64QAM	1	0	20.82	20.73	20.82	20.50	20.50		
20	64QAM	1	49	20.79	20.79	20.84	20.85	20.65		
20	64QAM	1	99	20.84	20.84	20.91	20.50	20.54	22.4	
20	64QAM	50	0	20.80	20.76	20.79	20.89	20.70		
20	64QAM	50	24	20.87	20.88	20.90	21.03	20.83		
20	64QAM	50	50	20.83	20.86	20.88	20.84	20.79		
20	64QAM	100	0	20.84	20.84	20.88	20.92	20.76	Tune-up limit (dBm)	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	20.97	20.94	21.00	20.84	20.57	22.4	
15	QPSK	1	37	20.94	20.94	20.97	20.99	20.77		
15	QPSK	1	74	20.90	21.05	21.08	20.73	20.75		
15	QPSK	36	0	21.12	21.04	21.08	20.94	20.79		
15	QPSK	36	20	21.10	21.14	21.13	20.97	20.92	22.4	
15	QPSK	36	39	21.07	21.12	21.14	20.95	20.88		
15	QPSK	75	0	21.12	21.13	21.15	20.83	20.83		
15	16QAM	1	0	21.17	21.13	21.18	20.92	20.87		
15	16QAM	1	37	21.01	21.02	21.03	20.96	20.90	22.4	
15	16QAM	1	74	21.10	21.20	21.20	20.79	20.89		
15	16QAM	36	0	21.11	21.02	21.08	20.91	20.74		
15	16QAM	36	20	21.11	21.11	21.12	20.94	20.84		
15	16QAM	36	39	21.07	21.11	21.11	20.93	20.86	22.4	
15	16QAM	75	0	21.16	21.17	21.19	20.94	20.88		
15	64QAM	1	0	20.81	20.73	20.76	20.81	20.50		
15	64QAM	1	37	20.80	20.81	20.83	20.79	20.61		
15	64QAM	1	74	20.82	20.91	20.95	20.51	20.83	22.4	
15	64QAM	36	0	20.80	20.77	20.77	20.87	20.71		
15	64QAM	36	20	20.81	20.84	20.85	20.91	20.82		
15	64QAM	36	39	20.78	20.84	20.84	20.86	20.82		
15	64QAM	75	0	20.84	20.84	20.87	20.85	20.78	Tune-up limit (dBm)	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	20.88	20.89	20.96	20.77	20.55	22.4	
10	QPSK	1	25	20.90	20.84	20.89	20.93	20.75		
10	QPSK	1	49	20.85	20.97	21.00	20.65	20.67		
10	QPSK	25	0	21.02	20.96	21.07	20.81	20.70		
10	QPSK	25	12	21.08	21.08	21.05	20.90	20.84	22.4	
10	QPSK	25	25	21.03	21.03	21.09	20.95	20.80		
10	QPSK	50	0	21.02	21.10	21.15	20.85	20.75		
10	16QAM	1	0	21.11	21.13	21.14	20.82	20.57		
10	16QAM	1	25	21.00	20.96	20.94	20.93	20.87	22.4	
10	16QAM	1	49	21.00	21.13	21.18	20.79	20.85		
10	16QAM	25	0	21.05	20.99	21.07	20.81	20.72		
10	16QAM	25	12	21.02	21.08	21.05	20.91	20.82		
10	16QAM	25	25	21.05	21.05	21.10	20.90	20.77	22.4	
10	16QAM	50	0	21.06	21.14	21.13	20.87	20.77		
10	64QAM	1	0	20.78	20.73	20.72	20.59	20.48		
10	64QAM	1	25	20.80	20.74	20.80	20.69	20.56		
10	64QAM	1	49	20.75	20.86	20.85	20.43	20.55	22.4	
10	64QAM	25	0	20.72	20.76	20.88	20.78	20.71		
10	64QAM	25	12	20.78	20.80	20.81	20.82	20.77		
10	64QAM	25	25	20.73	20.76	20.76	20.84	20.79		
10	64QAM	50	0	20.74	20.76	20.81	20.83	20.74	Tune-up limit (dBm)	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	20.97	20.94	21.05	20.92	20.42	22.4	
5	QPSK	1	12	20.86	20.96	20.92	20.94	20.82		
5	QPSK	1	24	20.83	20.94	20.98	20.43	20.66		
5	QPSK	12	0	21.05	21.02	21.04	20.84	20.72		
5	QPSK	12	7	21.08	21.07	21.09	21.06	20.81	22.4	
5	QPSK	12	13	21.03	21.05	21.07	20.89	20.87		
5	QPSK	25	0	21.03	21.15	21.13	20.87	20.79		
5	16QAM	1	0	21.07	20.98	21.17	20.84	20.45		
5	16QAM	1	12	20.99	21.01	21.01	20.97	20.82	22.4	
5	16QAM	1	24	21.05	21.03	21.15	20.55	20.70		
5	16QAM	12	0	21.04	21.00	21.02	20.91	20.71		
5	16QAM	12	7	21.06	21.18	21.20	21.02	20.84	22.4	
5	16QAM	12	13	21.14	21.12	21.12	20.89	20.81		
5	16QAM	25	0	21.14	21.15	21.15	20.92	20.81		
5	64QAM	1	0	20.77	20.67	20.73	20.45	20.46	22.4	
5	64QAM	1	12	20.79	20.70	20.80	20.75	20.61		
5	64QAM	1	24	20.82	20.81	20.82	20.44	20.50		
5	64QAM	12	0	20.73	20.71	20.77	20.79	20.69		
5	64QAM	12	7	20.82	20.82	20.83	20.99	20.80	22.4	
5	64QAM	12	13	20.74	20.77	20.86	20.83	20.74		
5	64QAM	25	0	20.79	20.76	20.84	20.82	20.69		



Band 41 HPUE										
Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.56	22.49	22.63	22.33	22.30	24.2	
20	QPSK	1	49	22.51	22.54	22.54	22.57	22.39		
20	QPSK	1	99	22.53	22.58	22.64	22.30	22.31		
20	QPSK	50	0	22.72	22.71	22.77	22.63	22.46	24.2	
20	QPSK	50	24	22.82	22.82	22.83	22.78	22.60		
20	QPSK	50	50	22.76	22.82	22.83	22.61	22.58		
20	QPSK	100	0	22.80	22.81	22.83	22.66	22.50	24.2	
20	16QAM	1	0	22.92	22.87	22.98	22.70	22.38		
20	16QAM	1	49	22.89	22.91	22.96	22.57	22.77		
20	16QAM	1	99	22.89	22.97	23.01	22.47	22.66	24.2	
20	16QAM	50	0	22.78	22.72	22.78	22.68	22.48		
20	16QAM	50	24	22.82	22.86	22.87	22.82	22.63		
20	16QAM	50	50	22.81	22.84	22.87	22.64	22.62	24.2	
20	16QAM	100	0	22.82	22.85	22.87	22.72	22.54		
20	64QAM	1	0	22.73	22.67	22.74	22.47	22.30		
20	64QAM	1	49	22.72	22.76	22.73	22.83	22.63	24.2	
20	64QAM	1	99	22.77	22.77	22.85	22.30	22.51		
20	64QAM	50	0	22.57	22.57	22.61	22.68	22.52		
20	64QAM	50	24	22.65	22.70	22.70	22.81	22.61	24.2	
20	64QAM	50	50	22.80	22.66	22.69	22.64	22.54		
20	64QAM	100	0	22.84	22.65	22.69	22.73	22.55		
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	22.64	22.62	22.64	22.49	22.25	24.2	
15	QPSK	1	37	22.56	22.58	22.67	22.61	22.43		
15	QPSK	1	74	22.57	22.73	22.75	22.37	22.43		
15	QPSK	36	0	22.80	22.74	22.78	22.63	22.49	24.2	
15	QPSK	36	20	22.83	22.78	22.86	22.68	22.62		
15	QPSK	36	39	22.76	22.81	22.81	22.68	22.59		
15	QPSK	75	0	22.82	22.82	22.86	22.63	22.54	24.2	
15	16QAM	1	0	22.86	22.86	22.94	22.84	22.53		
15	16QAM	1	37	22.85	22.87	22.86	22.93	22.72		
15	16QAM	1	74	22.85	23.00	23.00	22.68	22.76	24.2	
15	16QAM	36	0	22.78	22.73	22.70	22.65	22.48		
15	16QAM	36	20	22.77	22.77	22.80	22.68	22.59		
15	16QAM	36	39	22.73	22.77	22.80	22.68	22.61	24.2	
15	16QAM	75	0	22.83	22.82	22.86	22.64	22.59		
15	64QAM	1	0	22.70	22.72	22.71	22.64	22.33		
15	64QAM	1	37	22.75	22.73	22.76	22.80	22.59	24.2	
15	64QAM	1	74	22.73	22.85	22.89	22.50	22.59		
15	64QAM	36	0	22.81	22.58	22.59	22.71	22.85		
15	64QAM	36	20	22.63	22.63	22.64	22.73	22.65	24.2	
15	64QAM	36	39	22.56	22.63	22.65	22.70	22.62		
15	64QAM	75	0	22.84	22.64	22.66	22.66	22.57		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	22.56	22.40	22.54	22.28	22.26	24.2	
10	QPSK	1	25	22.47	22.51	22.52	22.48	22.29		
10	QPSK	1	49	22.53	22.49	22.63	22.29	22.22		
10	QPSK	25	0	22.69	22.71	22.77	22.63	22.42	24.2	
10	QPSK	25	12	22.81	22.75	22.87	22.70	22.57		
10	QPSK	25	25	22.71	22.81	22.76	22.61	22.53		
10	QPSK	50	0	22.79	22.76	22.83	22.65	22.48	24.2	
10	16QAM	1	0	22.83	22.84	22.98	22.69	22.32		
10	16QAM	1	25	22.86	22.85	22.89	22.95	22.71		
10	16QAM	1	49	22.89	22.82	22.96	22.38	22.59	24.2	
10	16QAM	25	0	22.70	22.70	22.78	22.60	22.40		
10	16QAM	25	12	22.73	22.80	22.82	22.73	22.60		
10	16QAM	25	25	22.81	22.83	22.80	22.58	22.57	24.2	
10	16QAM	50	0	22.73	22.79	22.85	22.71	22.53		
10	64QAM	1	0	22.68	22.58	22.70	22.44	22.25		
10	64QAM	1	25	22.62	22.74	22.71	22.74	22.55	24.2	
10	64QAM	1	49	22.71	22.77	22.76	22.28	22.45		
10	64QAM	25	0	22.57	22.54	22.60	22.59	22.46		
10	64QAM	25	12	22.62	22.63	22.61	22.79	22.59	24.2	
10	64QAM	25	25	22.55	22.62	22.67	22.58	22.54		
10	64QAM	50	0	22.84	22.63	22.67	22.73	22.50		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	22.56	22.44	22.57	22.33	22.26	24.2	
5	QPSK	1	12	22.47	22.54	22.54	22.56	22.30		
5	QPSK	1	24	22.48	22.55	22.63	22.21	22.25		
5	QPSK	12	0	22.66	22.63	22.71	22.56	22.44	24.2	
5	QPSK	12	7	22.82	22.77	22.87	22.72	22.55		
5	QPSK	12	13	22.72	22.81	22.74	22.59	22.51		
5	QPSK	25	0	22.72	22.73	22.79	22.66	22.49	24.2	
5	16QAM	1	0	22.86	22.85	22.96	22.69	22.35		
5	16QAM	1	12	22.80	22.84	22.89	22.95	22.70		
5	16QAM	1	24	22.84	22.86	22.98	22.39	22.63	24.2	
5	16QAM	12	0	22.75	22.71	22.70	22.59	22.48		
5	16QAM	12	7	22.79	22.84	22.84	22.80	22.61		
5	16QAM	12	13	22.79	22.79	22.81	22.56	22.58	24.2	
5	16QAM	25	0	22.72	22.81	22.84	22.64	22.53		
5	64QAM	1	0	22.89	22.66	22.73	22.47	22.20		
5	64QAM	1	12	22.68	22.73	22.73	22.61	22.60	24.2	
5	64QAM	1	24	22.77	22.76	22.85	22.20	22.41		
5	64QAM	12	0	22.55	22.55	22.51	22.67	22.45		
5	64QAM	12	7	22.69	22.70	22.69	22.80	22.53	24.2	
5	64QAM	12	13	22.53	22.62	22.62	22.62	22.61		
5	64QAM	25	0	22.84	22.58	22.68	22.71	22.48		



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	20.38	20.29	20.20	20.20	21.7		
20	QPSK	1	49	20.18	20.07	19.96	19.96			
20	QPSK	1	99	20.14	20.03	19.90	19.89			
20	QPSK	50	0	20.39	20.31	20.19	20.17			
20	QPSK	50	24	20.33	20.15	20.11	20.11	21.2		
20	QPSK	50	50	20.21	20.09	19.97	19.96			
20	QPSK	100	0	20.32	20.18	20.11	20.09			
20	16QAM	1	0	20.51	20.44	20.31	20.33			
20	16QAM	1	49	20.28	20.16	20.07	20.06	21.2		
20	16QAM	1	99	20.29	20.13	20.03	20.01			
20	16QAM	50	0	19.86	19.72	19.62	19.61			
20	16QAM	50	24	19.81	19.59	19.54	19.53			
20	16QAM	50	50	19.66	19.51	19.40	19.39	20.2		
20	16QAM	100	0	19.80	19.56	19.51	19.52			
20	64QAM	1	0	20.19	20.18	20.09	20.06			
20	64QAM	1	49	20.09	19.98	19.87	19.82			
20	64QAM	1	99	20.12	19.96	19.79	19.80	19.2		
20	64QAM	50	0	19.79	19.65	19.56	19.53			
20	64QAM	50	24	19.74	19.52	19.47	19.48			
20	64QAM	50	50	19.62	19.47	19.33	19.30			
20	64QAM	100	0	19.84	19.59	19.56	19.57	Tune-up limit (dBm)		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	20.25	20.19	20.08	19.85	21.7		
15	QPSK	1	37	20.14	20.04	19.89	19.71			
15	QPSK	1	74	20.11	20.01	19.88	19.70			
15	QPSK	36	0	20.34	20.28	20.14	19.91			
15	QPSK	36	20	20.29	20.20	20.06	19.83	21.2		
15	QPSK	36	39	20.18	20.09	19.95	19.76			
15	QPSK	75	0	20.23	20.23	20.08	19.86			
15	16QAM	1	0	20.42	20.36	20.22	20.02			
15	16QAM	1	37	20.23	20.11	19.92	19.76	21.2		
15	16QAM	1	74	20.29	20.21	20.06	19.79			
15	16QAM	36	0	19.75	19.64	19.51	19.27			
15	16QAM	36	20	19.72	19.55	19.43	19.21			
15	16QAM	36	39	19.59	19.46	19.33	19.20	20.2		
15	16QAM	75	0	19.69	19.64	19.50	19.25			
15	64QAM	1	0	20.22	20.15	20.04	19.78			
15	64QAM	1	37	20.02	19.96	19.80	19.56			
15	64QAM	1	74	20.11	19.97	19.81	19.59	19.2		
15	64QAM	36	0	19.80	19.67	19.53	19.32			
15	64QAM	36	20	19.75	19.61	19.48	19.24			
15	64QAM	36	39	19.63	19.48	19.36	19.17			
15	64QAM	75	0	19.70	19.62	19.49	19.25	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	20.25	20.15	20.04	19.83	21.7		
10	QPSK	1	25	20.12	19.97	19.79	19.72			
10	QPSK	1	49	20.01	20.00	19.87	19.70			
10	QPSK	25	0	20.26	20.19	20.10	19.81			
10	QPSK	25	12	20.22	20.15	20.03	19.81	21.2		
10	QPSK	25	25	20.15	20.00	19.90	19.70			
10	QPSK	50	0	20.16	20.20	20.08	19.83			
10	16QAM	1	0	20.40	20.29	20.20	19.94			
10	16QAM	1	25	20.22	20.09	19.84	19.76	21.2		
10	16QAM	1	49	20.24	20.19	20.00	19.77			
10	16QAM	25	0	19.71	19.59	19.42	19.25			
10	16QAM	25	12	19.68	19.47	19.42	19.22			
10	16QAM	25	25	19.58	19.39	19.24	19.21	20.2		
10	16QAM	50	0	19.69	19.63	19.50	19.22			
10	64QAM	1	0	20.12	20.09	19.97	19.70			
10	64QAM	1	25	19.93	19.88	19.77	19.47			
10	64QAM	1	49	20.07	19.97	19.72	19.57	20.2		
10	64QAM	25	0	19.73	19.57	19.43	19.28			
10	64QAM	25	12	19.72	19.59	19.48	19.17			
10	64QAM	25	25	19.54	19.44	19.33	19.08			
10	64QAM	50	0	19.67	19.56	19.39	19.22	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	20.28	20.15	20.07	20.21	21.7		
5	QPSK	1	12	20.25	20.11	20.04	20.16			
5	QPSK	1	24	20.23	20.03	19.98	20.12			
5	QPSK	12	0	20.37	20.23	20.15	20.30			
5	QPSK	12	7	20.40	20.27	20.11	20.28	21.2		
5	QPSK	12	13	20.32	20.24	20.06	20.21			
5	QPSK	25	0	20.34	20.27	20.12	20.23			
5	16QAM	1	0	20.36	20.26	20.26	20.28			
5	16QAM	1	12	20.44	20.32	20.25	20.33	21.2		
5	16QAM	1	24	20.38	20.29	20.17	20.24			
5	16QAM	12	0	19.73	19.63	19.61	19.66			
5	16QAM	12	7	19.77	19.65	19.56	19.65			
5	16QAM	12	13	19.73	19.64	19.47	19.57	20.2		
5	16QAM	25	0	19.78	19.69	19.57	19.64			
5	64QAM	1	0	20.15	20.06	19.99	20.07			
5	64QAM	1	12	20.15	20.02	20.01	20.07			
5	64QAM	1	24	20.14	20.01	19.91	19.97	19.2		
5	64QAM	12	0	19.73	19.64	19.56	19.67			
5	64QAM	12	7	19.77	19.65	19.51	19.62			
5	64QAM	12	13	19.71	19.59	19.51	19.59			
5	64QAM	25	0	19.73	19.64	19.53	19.59	Tune-up limit (dBm)		



n2							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tune-up (dBm) limit
Channel				372000	376000	380000	limit
Frequency (MHz)				1600	1650	1700	limit
20	Pl2 BPSK	1	1	24.65	24.74	24.70	25.7
20	Pl2 BPSK	1	53	24.65	24.69	24.68	
20	Pl2 BPSK	1	104	24.65	24.65	24.66	
20	Pl2 BPSK	50	0	24.15	24.34	24.19	
20	Pl2 BPSK	50	28	24.70	24.79	24.73	25.7
20	Pl2 BPSK	50	56	24.28	24.28	24.31	
20	Pl2 BPSK	100	0	24.29	24.32	24.27	
20	QPSK	1	1	24.00	24.09	24.04	
20	QPSK	1	53	23.95	24.00	24.05	25.2
20	QPSK	1	104	24.00	24.03	23.97	
20	QPSK	50	0	23.03	23.24	23.06	
20	QPSK	50	28	23.55	23.62	23.63	
20	QPSK	50	56	23.10	23.08	23.16	24.7
20	QPSK	100	0	23.10	23.17	23.07	
20	16QAM	1	1	23.00	23.08	23.01	
20	16QAM	1	53	22.98	23.04	23.02	
20	16QAM	1	104	23.02	22.97	23.01	24.2
20	16QAM	50	0	22.15	22.35	22.24	
20	16QAM	50	28	22.78	22.86	22.79	
20	16QAM	50	56	22.36	22.27	22.38	
20	16QAM	100	0	22.35	22.33	22.34	23.2
20	64QAM	1	1	21.96	22.13	22.00	
20	64QAM	1	53	21.98	22.07	22.03	
20	64QAM	1	104	21.95	21.98	22.01	
20	64QAM	50	0	21.52	21.68	21.54	23.2
20	64QAM	50	28	22.08	22.13	22.08	
20	64QAM	50	56	21.57	21.65	21.62	
20	64QAM	100	0	21.68	21.66	21.58	
20	256QAM	1	1	19.48	19.61	19.56	21.2
20	256QAM	1	53	19.47	19.52	19.49	
20	256QAM	1	104	19.53	19.52	19.48	
20	256QAM	50	0	19.51	19.69	19.55	
20	256QAM	50	28	20.10	20.18	20.13	21.2
20	256QAM	50	56	19.57	19.58	19.68	
20	256QAM	100	0	19.62	19.66	19.67	
Channel				371500	376000	380500	limit
Frequency (MHz)				1607.5	1600	1602.5	limit
15	Pl2 BPSK	1	1	24.32	24.36	24.34	25.7
Channel				371000	376000	381000	limit
Frequency (MHz)				1655	1650	1645	limit
10	Pl2 BPSK	1	1	24.26	24.43	24.39	25.7
Channel				370500	376000	381000	limit
Frequency (MHz)				1652.5	1650	1647.5	limit
5	Pl2 BPSK	1	1	24.27	24.38	24.34	25.7



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	167800	167800	Turn-up limit (dBm)
Frequency (MHz)				834	834.5	834	
20	Pi2 BPSK	1	1	23.71	23.72	23.63	25.0
20	Pi2 BPSK	1	53	23.64	23.67	23.62	
20	Pi2 BPSK	1	104	23.52	23.60	23.40	
20	Pi2 BPSK	50	0	23.52	23.60	23.48	25.0
20	Pi2 BPSK	50	28	23.85	23.70	23.63	
20	Pi2 BPSK	50	56	23.51	23.47	23.34	
20	Pi2 BPSK	100	0	23.55	23.62	23.61	24.5
20	QPSK	1	1	23.08	23.09	23.03	24.5
20	QPSK	1	53	23.05	23.01	23.02	
20	QPSK	1	104	22.89	22.89	22.70	
20	QPSK	50	0	22.36	22.42	22.29	24.5
20	QPSK	50	28	22.50	22.52	22.43	
20	QPSK	50	56	22.40	22.31	22.22	
20	QPSK	100	0	22.43	22.50	22.49	24.0
20	16QAM	1	1	22.59	22.89	22.54	23.5
20	16QAM	1	53	22.67	22.73	22.67	
20	16QAM	1	104	22.57	22.53	22.39	
20	16QAM	50	0	21.65	21.77	21.58	23.5
20	16QAM	50	28	21.74	21.81	21.74	
20	16QAM	50	56	21.57	21.99	21.50	
20	16QAM	100	0	21.59	21.72	21.59	22.5
20	64QAM	1	1	21.03	21.14	20.99	22.5
20	64QAM	1	53	21.05	21.16	21.09	
20	64QAM	1	104	21.06	21.22	21.04	
20	64QAM	50	0	21.01	21.22	21.04	22.5
20	64QAM	50	28	21.00	21.20	20.99	
20	64QAM	50	56	21.05	21.13	20.99	
20	64QAM	100	0	21.00	21.22	20.99	22.5
20	256QAM	1	1	19.05	19.26	19.01	20.5
20	256QAM	1	53	19.06	19.21	19.00	
20	256QAM	1	104	19.00	19.26	19.05	
20	256QAM	50	0	19.08	19.23	19.02	20.5
20	256QAM	50	28	19.08	19.13	19.07	
20	256QAM	50	56	19.02	19.25	19.06	
20	256QAM	100	0	19.10	19.27	18.99	20.5
Channel				166800	167800	168300	Turn-up limit (dBm)
Frequency (MHz)				837.5	837.5	841.5	
15	Pi2 BPSK	1	1	23.69	23.68	23.67	25.0
Channel				165800	167300	168800	Turn-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	Pi2 BPSK	1	1	23.67	23.67	23.60	25.0
Channel				165300	167300	169300	Turn-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	Pi2 BPSK	1	1	23.65	23.72	23.59	25.0



n25							
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				372000	376000	381000	Turn-up limit (dBm)
Frequency (MHz)				1700	1740	1805	
20	PI2 BPSK	1	1	24.61	24.59	24.05	25.7
20	PI2 BPSK	1	53	24.63	24.67	24.62	
20	PI2 BPSK	1	104	24.33	24.58	23.60	
20	PI2 BPSK	50	0	24.21	24.00	23.40	
20	PI2 BPSK	50	28	24.84	24.77	24.41	25.7
20	PI2 BPSK	50	56	23.68	24.22	23.75	
20	PI2 BPSK	100	0	24.20	24.21	23.55	
20	QPSK	1	1	23.98	23.89	23.40	
20	QPSK	1	53	23.94	24.05	23.96	24.7
20	QPSK	1	104	23.70	23.90	22.93	
20	QPSK	50	0	23.08	22.85	22.73	
20	QPSK	50	28	23.48	23.64	23.26	
20	QPSK	50	56	22.72	23.06	22.71	24.7
20	QPSK	100	0	23.07	23.06	22.23	
20	16QAM	1	1	22.84	22.89	22.21	
20	16QAM	1	53	22.71	22.75	22.70	
20	16QAM	1	104	22.41	22.68	22.31	23.7
20	16QAM	50	0	22.34	22.19	22.24	
20	16QAM	50	28	22.84	22.97	22.52	
20	16QAM	50	56	22.21	22.39	22.23	
20	16QAM	100	0	22.31	22.39	21.72	23.2
20	64QAM	1	1	21.97	21.99	21.38	
20	64QAM	1	53	22.02	22.03	21.92	
20	64QAM	1	104	21.68	21.88	21.22	
20	64QAM	50	0	21.98	21.75	21.21	23.2
20	64QAM	50	28	22.39	22.55	22.19	
20	64QAM	50	56	21.44	21.97	21.47	
20	64QAM	100	0	21.98	21.93	21.35	
20	256QAM	1	1	19.54	19.57	19.24	21.2
20	256QAM	1	53	19.56	19.58	19.52	
20	256QAM	1	104	19.31	19.58	19.25	
20	256QAM	50	0	19.60	19.36	19.24	
20	256QAM	50	28	20.00	20.12	19.79	21.2
20	256QAM	50	56	19.00	19.59	19.22	
20	256QAM	100	0	19.50	19.61	19.21	
Channel				371500	376000	381500	Turn-up limit (dBm)
Frequency (MHz)				1827.5	1760	1807.5	
15	PI2 BPSK	1	1	24.53	24.59	23.98	25.7
Channel				371000	375000	382000	Turn-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	PI2 BPSK	1	1	24.52	24.52	23.99	25.7
Channel				376200	378000	382500	Turn-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	PI2 BPSK	1	1	24.54	24.49	23.95	25.7



n66							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				344000	349000	354000	turn-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	PI2 BPSK	1	1	24.43	23.71	24.32	25.7
20	PI2 BPSK	1	53	24.34	24.21	24.23	
20	PI2 BPSK	1	104	24.45	24.33	24.33	
20	PI2 BPSK	50	0	24.16	23.72	23.82	
20	PI2 BPSK	50	28	24.45	24.42	24.33	25.7
20	PI2 BPSK	50	56	23.81	24.05	23.94	
20	PI2 BPSK	100	0	23.92	23.76	23.90	
20	QPSK	1	1	24.29	23.54	24.15	
20	QPSK	1	53	24.17	24.01	24.04	24.7
20	QPSK	1	104	24.34	24.22	24.14	
20	QPSK	50	0	23.48	22.80	23.21	
20	QPSK	50	28	23.76	23.77	23.72	
20	QPSK	50	56	23.19	23.41	23.28	24.7
20	QPSK	100	0	23.32	23.06	23.20	
20	16QAM	1	1	22.82	22.06	22.62	
20	16QAM	1	53	22.89	22.61	22.62	23.7
20	16QAM	1	104	22.77	22.73	22.67	
20	16QAM	50	0	22.55	21.77	22.16	
20	16QAM	50	28	22.84	22.79	22.64	23.7
20	16QAM	50	56	22.11	22.36	22.25	
20	16QAM	100	0	22.31	22.16	22.25	
20	64QAM	1	1	22.36	21.64	22.31	23.2
20	64QAM	1	53	22.29	22.19	22.22	
20	64QAM	1	104	22.45	22.31	22.30	
20	64QAM	50	0	22.07	21.32	21.62	
20	64QAM	50	28	22.36	22.41	22.32	23.2
20	64QAM	50	56	21.76	22.03	21.87	
20	64QAM	100	0	21.89	21.67	21.85	
20	256QAM	1	1	19.78	19.23	19.67	21.2
20	256QAM	1	53	19.73	19.59	19.58	
20	256QAM	1	104	19.76	19.67	19.63	
20	256QAM	50	0	20.05	19.21	19.63	
20	256QAM	50	28	20.27	20.30	20.14	21.2
20	256QAM	50	56	19.94	19.85	19.74	
20	256QAM	100	0	19.74	19.61	19.79	
Channel				343000	349000	354000	turn-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	PI2 BPSK	1	1	24.34	23.73	24.28	25.7
Channel				343000	349000	355000	turn-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	PI2 BPSK	1	1	24.37	23.71	24.28	25.7
Channel				342000	349000	355000	turn-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	PI2 BPSK	1	1	24.43	23.74	24.28	25.7



n71							
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				134600	136100	137600	Turn-up limit (dBm)
Frequency (MHz)				670.5	690.5	670.5	
20	PI2 BPSK	1	1	24.22	24.30	24.88	25.7
20	PI2 BPSK	1	53	24.81	24.84	24.89	
20	PI2 BPSK	1	104	24.80	24.83	24.89	
20	PI2 BPSK	50	0	23.86	24.29	24.15	
20	PI2 BPSK	50	28	24.75	24.85	24.81	25.7
20	PI2 BPSK	50	56	24.58	24.49	24.37	
20	PI2 BPSK	100	0	24.14	24.21	24.28	25.2
20	QPSK	1	1	23.56	23.60	24.18	
20	QPSK	1	53	24.19	24.24	24.24	25.2
20	QPSK	1	104	24.13	24.13	23.97	
20	QPSK	50	0	22.88	23.36	23.22	
20	QPSK	50	28	23.77	23.96	23.81	25.2
20	QPSK	50	56	23.59	23.97	23.87	
20	QPSK	100	0	23.17	23.24	23.33	24.7
20	16QAM	1	1	22.27	22.32	22.92	
20	16QAM	1	53	22.88	22.93	22.94	24.2
20	16QAM	1	104	22.80	22.88	22.88	
20	16QAM	50	0	22.21	22.39	22.24	
20	16QAM	50	28	22.79	23.01	22.92	24.2
20	16QAM	50	56	22.82	22.53	22.41	
20	16QAM	100	0	22.17	22.28	22.35	23.7
20	64QAM	1	1	22.06	22.12	22.78	
20	64QAM	1	53	22.88	22.85	22.73	23.2
20	64QAM	1	104	22.89	22.85	22.40	
20	64QAM	50	0	21.73	22.19	21.86	
20	64QAM	50	28	22.56	22.83	22.80	23.2
20	64QAM	50	56	22.47	22.36	22.27	
20	64QAM	100	0	22.03	22.04	22.15	23.2
20	256QAM	1	1	19.46	19.51	20.18	
20	256QAM	1	53	20.08	20.06	20.16	21.2
20	256QAM	1	104	20.08	20.12	19.83	
20	256QAM	50	0	19.95	20.36	20.17	
20	256QAM	50	28	20.79	21.02	20.91	21.2
20	256QAM	50	56	20.85	20.49	20.39	
20	256QAM	100	0	20.17	20.28	20.30	21.2
Channel				134100	136100	138100	Turn-up limit (dBm)
Frequency (MHz)				670.5	690.5	690.5	
15	PI2 BPSK	1	1	24.20	24.21	24.88	25.7
Channel				135000	136100	138000	Turn-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	PI2 BPSK	1	1	24.13	24.23	24.85	25.7
Channel				133100	135100	139100	Turn-up limit (dBm)
Frequency (MHz)				685.5	680.5	685.5	
5	PI2 BPSK	1	1	24.20	24.29	24.80	25.7

n12								
Act 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				141300	141500	141700		
Frequency (MHz)				705.5	707.5	709.5		
15	Pl/2 BPSK	1	1	23.74	23.76	23.73	24.7	
15	Pl/2 BPSK	1	40	23.58	23.65	23.63		
15	Pl/2 BPSK	1	77	23.57	23.49	23.49		
15	Pl/2 BPSK	36	0	23.31	23.31	23.28	24.7	
15	Pl/2 BPSK	36	22	23.61	23.62	23.60		
15	Pl/2 BPSK	36	43	23.28	23.24	23.23		
15	Pl/2 BPSK	75	0	23.33	23.38	23.31	24.2	
15	QPSK	1	1	23.28	23.31	23.32	24.2	
15	QPSK	1	40	23.14	23.19	23.13		
15	QPSK	1	77	23.14	22.98	23.06		
15	QPSK	36	0	22.30	22.31	22.31	24.2	
15	QPSK	36	22	22.12	22.18	22.14		
15	QPSK	36	43	22.10	22.07	22.09		
15	QPSK	75	0	22.31	22.32	22.24	23.7	
15	16QAM	1	1	22.29	22.32	22.33	23.2	
15	16QAM	1	40	22.15	22.23	22.21		
15	16QAM	1	77	22.13	22.06	22.09		
15	16QAM	36	0	21.31	21.38	21.38	23.2	
15	16QAM	36	22	21.24	21.25	21.31		
15	16QAM	36	43	21.19	21.10	21.09		
15	16QAM	75	0	21.22	21.08	21.12	22.2	
15	64QAM	1	1	21.08	21.10	21.08	22.2	
15	64QAM	1	40	20.95	20.94	20.95		
15	64QAM	1	77	20.86	20.80	20.85		
15	64QAM	36	0	20.50	20.54	20.62	22.2	
15	64QAM	36	22	20.36	20.46	20.45		
15	64QAM	36	43	20.34	20.29	20.31		
15	64QAM	75	0	20.49	20.52	20.61	22.2	
15	256QAM	1	1	18.80	18.84	18.87	20.2	
15	256QAM	1	40	18.75	18.78	18.90		
15	256QAM	1	77	18.78	18.80	18.82		
15	256QAM	36	0	18.77	18.83	18.86	20.2	
15	256QAM	36	22	18.78	18.78	18.91		
15	256QAM	36	43	18.74	18.78	18.91		
15	256QAM	75	0	18.72	18.78	18.84	20.2	
Channel				140800	141500	142200	Tune-up limit (dBm)	
Frequency (MHz)				704	707.5	711		
10	Pl/2 BPSK	1	1	23.73	23.76	23.71	24.7	
Channel				140300	141500	142700		
Frequency (MHz)				701.5	707.5	713.5		
5	Pl/2 BPSK	1	1	23.65	23.75	23.63	24.7	



n2							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	24.57	24.47	24.40	25.7
20	PI/2 BPSK	1	53	24.51	24.46	24.36	
20	PI/2 BPSK	1	104	24.42	24.42	24.28	
20	PI/2 BPSK	50	0	24.05	24.07	23.95	
20	PI/2 BPSK	50	28	24.54	24.53	24.43	25.7
20	PI/2 BPSK	50	56	24.04	24.02	23.98	
20	PI/2 BPSK	100	0	24.11	24.00	23.97	
20	PI/2 BPSK	100	56	24.11	24.00	23.97	
20	QPSK	1	1	23.70	23.60	23.58	24.7
20	QPSK	1	53	23.66	23.62	23.49	
20	QPSK	1	104	23.59	23.62	23.46	
20	QPSK	50	0	22.76	22.78	22.70	
20	QPSK	50	28	23.27	23.28	23.18	24.7
20	QPSK	50	56	22.84	22.78	22.75	
20	QPSK	100	0	22.83	22.71	22.76	
20	QPSK	100	56	22.83	22.71	22.76	
20	16QAM	1	1	22.92	22.81	22.72	23.7
20	16QAM	1	53	22.81	22.78	22.76	
20	16QAM	1	104	22.81	22.80	22.68	
20	16QAM	50	0	21.95	21.89	21.82	
20	16QAM	50	28	22.36	22.36	22.23	23.7
20	16QAM	50	56	21.93	21.86	21.87	
20	16QAM	100	0	21.96	21.85	21.80	
20	16QAM	100	56	21.96	21.85	21.80	
20	64QAM	1	1	21.80	21.75	21.62	23.2
20	64QAM	1	53	21.79	21.67	21.57	
20	64QAM	1	104	21.72	21.63	21.57	
20	64QAM	50	0	21.39	21.39	21.30	
20	64QAM	50	28	21.88	21.84	21.75	23.2
20	64QAM	50	56	21.44	21.36	21.37	
20	64QAM	100	0	21.44	21.35	21.30	
20	64QAM	100	56	21.44	21.35	21.30	
20	256QAM	1	1	19.44	19.35	19.20	21.2
20	256QAM	1	53	19.35	19.28	19.26	
20	256QAM	1	104	19.24	19.32	19.23	
20	256QAM	50	0	19.38	19.39	19.31	
20	256QAM	50	28	19.84	19.87	19.79	21.2
20	256QAM	50	56	19.35	19.38	19.36	
20	256QAM	100	0	19.42	19.35	19.35	
20	256QAM	100	56	19.42	19.35	19.35	
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1880	1907.5	
15	PI/2 BPSK	1	1	24.57	24.37	24.39	25.7
Channel				371000	376000	381000	
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	24.49	24.39	24.31	25.7
Channel				370500	376000	381500	
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	24.49	24.37	24.37	25.7

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	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	PV2 BPSK	1	1	23.37	23.27	23.23	25.0
20	PV2 BPSK	1	53	23.35	23.36	23.37	
20	PV2 BPSK	1	104	23.28	23.22	23.19	
20	PV2 BPSK	50	0	23.30	23.32	23.36	25.0
20	PV2 BPSK	50	28	23.29	23.34	23.31	
20	PV2 BPSK	50	56	23.28	23.26	23.22	
20	PV2 BPSK	100	0	23.32	23.33	22.90	24.5
20	QPSK	1	1	23.30	23.30	23.21	24.5
20	QPSK	1	53	23.25	23.32	23.26	
20	QPSK	1	104	23.18	23.20	23.22	
20	QPSK	50	0	22.89	22.87	22.91	24.5
20	QPSK	50	28	23.22	23.31	23.30	
20	QPSK	50	56	22.74	22.78	22.75	
20	QPSK	100	0	22.87	22.88	22.90	24.0
20	16QAM	1	1	22.86	22.80	22.71	24.0
20	16QAM	1	53	22.77	22.88	22.85	
20	16QAM	1	104	22.77	22.70	22.74	
20	16QAM	50	0	22.39	22.47	22.41	24.0
20	16QAM	50	28	22.74	22.84	22.82	
20	16QAM	50	56	22.30	22.36	22.27	
20	16QAM	100	0	21.88	21.89	21.85	23.0
20	64QAM	1	1	21.41	21.32	21.32	22.5
20	64QAM	1	53	21.44	21.46	21.46	
20	64QAM	1	104	21.33	21.24	21.25	
20	64QAM	50	0	21.38	21.34	21.33	22.5
20	64QAM	50	28	21.43	21.47	21.45	
20	64QAM	50	56	21.34	21.27	21.26	
20	64QAM	100	0	21.37	21.29	21.24	22.5
20	256QAM	1	1	19.65	19.50	19.51	20.5
20	256QAM	1	53	19.59	19.64	19.58	
20	256QAM	1	104	19.55	19.46	19.43	
20	256QAM	50	0	19.36	19.17	19.23	20.5
20	256QAM	50	28	19.35	19.38	19.36	
20	256QAM	50	56	19.19	19.22	19.15	
20	256QAM	100	0	19.35	19.25	19.21	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PV2 BPSK	1	1	23.28	23.17	23.22	25.0
Channel				166800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PV2 BPSK	1	1	23.34	23.27	23.21	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PV2 BPSK	1	1	23.31	23.26	23.18	25.0

n25							
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				370000	370000	381000	limit
Frequency (MHz)				1860	1880	1905	limit
20	PV2 BPSK	1	1	24.51	24.48	24.33	25.7
20	PV2 BPSK	1	53	24.50	24.48	24.32	
20	PV2 BPSK	1	104	24.41	24.44	23.75	
20	PV2 BPSK	50	0	24.08	24.08	23.72	25.7
20	PV2 BPSK	50	28	24.48	24.47	24.28	
20	PV2 BPSK	50	56	24.07	24.05	23.71	
20	PV2 BPSK	100	0	24.05	24.03	23.52	25.2
20	QPSK	1	1	23.69	23.69	23.53	24.7
20	QPSK	1	53	23.66	23.66	23.50	
20	QPSK	1	104	23.55	23.54	22.72	
20	QPSK	50	0	22.75	22.76	22.74	24.7
20	QPSK	50	28	22.79	22.79	22.67	
20	QPSK	50	56	22.73	22.71	22.71	
20	QPSK	100	0	22.44	22.43	22.23	24.2
20	16QAM	1	1	22.69	22.65	22.45	23.2
20	16QAM	1	53	22.61	22.68	22.47	
20	16QAM	1	104	22.54	22.61	21.79	
20	16QAM	50	0	21.92	21.88	21.32	23.2
20	16QAM	50	28	22.37	22.31	22.11	
20	16QAM	50	56	21.91	21.89	21.41	
20	16QAM	100	0	21.93	21.89	21.37	23.2
20	64QAM	1	1	21.71	21.68	21.46	23.2
20	64QAM	1	53	21.62	21.65	21.48	
20	64QAM	1	104	21.61	21.56	21.21	
20	64QAM	50	0	21.38	21.43	20.83	23.2
20	64QAM	50	28	21.81	21.81	21.59	
20	64QAM	50	56	21.41	21.35	21.22	
20	64QAM	100	0	21.43	21.35	20.88	23.2
20	256QAM	1	1	19.41	19.30	19.22	21.2
20	256QAM	1	53	19.40	19.35	19.21	
20	256QAM	1	104	19.24	19.25	19.20	
20	256QAM	50	0	19.45	19.42	19.23	21.2
20	256QAM	50	28	19.86	19.87	19.61	
20	256QAM	50	56	19.41	19.45	19.21	
20	256QAM	100	0	19.36	19.43	19.22	21.2
Channel				371500	376000	381500	limit
Frequency (MHz)				1871.5	1880	1907.5	limit
15	PV2 BPSK	1	1	24.47	24.39	24.24	25.7
Channel				371000	376000	382000	limit
Frequency (MHz)				1855	1880	1910	limit
10	PV2 BPSK	1	1	24.45	24.45	24.25	25.7
Channel				370500	376000	376500	limit
Frequency (MHz)				1852.5	1880	1912.5	limit
5	PV2 BPSK	1	1	24.50	24.46	24.25	25.7

n66							
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				343000	349000	354000	limit (dBm)
Frequency (MHz)				1720	1745	1770	limit (dBm)
20	PV2 BPSK	1	1	24.52	23.76	24.40	25.7
20	PV2 BPSK	1	53	24.38	24.21	24.24	
20	PV2 BPSK	1	104	24.53	24.41	24.27	
20	PV2 BPSK	50	0	23.97	23.69	23.85	25.7
20	PV2 BPSK	50	28	24.43	24.43	24.37	
20	PV2 BPSK	50	56	23.80	24.08	23.93	
20	PV2 BPSK	100	0	23.94	23.85	23.91	25.2
20	QPSK	1	1	23.84	23.11	23.76	24.7
20	QPSK	1	53	23.72	23.36	23.37	
20	QPSK	1	104	23.90	23.74	23.84	
20	QPSK	50	0	22.87	22.51	22.70	24.7
20	QPSK	50	28	23.32	23.35	23.20	
20	QPSK	50	56	22.69	22.87	22.79	
20	QPSK	100	0	22.76	22.66	22.77	24.2
20	16QAM	1	1	22.69	21.87	22.59	23.7
20	16QAM	1	53	22.49	22.37	22.34	
20	16QAM	1	104	22.71	22.52	22.46	
20	16QAM	50	0	22.00	21.69	21.85	23.7
20	16QAM	50	28	22.43	22.59	22.37	
20	16QAM	50	56	21.88	22.14	21.93	
20	16QAM	100	0	22.04	21.85	21.91	23.7
20	64QAM	1	1	22.27	21.55	22.19	23.2
20	64QAM	1	53	22.14	22.00	22.03	
20	64QAM	1	104	22.27	22.18	21.99	
20	64QAM	50	0	21.43	21.09	21.30	23.2
20	64QAM	50	28	21.85	21.86	21.86	
20	64QAM	50	56	21.29	21.56	21.33	
20	64QAM	100	0	21.38	21.32	21.34	23.2
20	256QAM	1	1	19.74	19.21	19.64	21.2
20	256QAM	1	53	19.58	19.45	19.51	
20	256QAM	1	104	19.78	19.69	19.57	
20	256QAM	50	0	19.33	19.22	19.21	21.2
20	256QAM	50	28	19.74	19.75	19.68	
20	256QAM	50	56	19.20	19.44	19.24	
20	256QAM	100	0	19.29	19.22	19.29	21.2
Channel				343000	349000	354000	limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	limit (dBm)
15	PV2 BPSK	1	1	24.47	23.87	24.35	25.7
Channel				343000	349000	355000	limit (dBm)
Frequency (MHz)				1715	1745	1775	limit (dBm)
10	PV2 BPSK	1	1	24.46	23.76	24.33	25.7
Channel				342500	349000	355500	limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	limit (dBm)
5	PV2 BPSK	1	1	24.45	23.70	24.31	25.7

n71							
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) tune-up limit (dBm)
Channel				134500	136100	137600	
Frequency (MHz)				673	680.5	688	
20	PV2 BPSK	1	1	24.51	24.41	24.50	25.7
20	PV2 BPSK	1	53	24.32	24.40	24.41	
20	PV2 BPSK	1	104	24.31	24.40	24.22	
20	PV2 BPSK	50	0	23.93	24.35	24.16	25.7
20	PV2 BPSK	50	28	24.63	24.45	24.47	
20	PV2 BPSK	50	56	24.39	24.31	24.20	
20	PV2 BPSK	100	0	24.20	24.24	24.24	25.2
20	QPSK	1	1	23.89	23.89	23.87	24.7
20	QPSK	1	53	23.70	23.77	23.74	
20	QPSK	1	104	23.64	23.75	23.62	
20	QPSK	50	0	23.10	23.46	23.35	24.7
20	QPSK	50	28	23.74	23.65	23.60	
20	QPSK	50	56	23.52	23.45	23.35	
20	QPSK	100	0	23.32	23.34	23.41	24.2
20	16QAM	1	1	22.66	22.55	22.51	23.7
20	16QAM	1	53	22.46	22.59	22.61	
20	16QAM	1	104	22.41	22.54	22.35	
20	16QAM	50	0	22.12	22.54	22.32	23.7
20	16QAM	50	28	22.76	22.63	22.65	
20	16QAM	50	56	22.52	22.41	22.38	
20	16QAM	100	0	22.31	22.42	22.44	23.2
20	64QAM	1	1	22.22	22.16	22.22	23.2
20	64QAM	1	53	22.09	22.12	22.14	
20	64QAM	1	104	22.08	22.14	21.99	
20	64QAM	50	0	21.62	21.98	21.85	23.2
20	64QAM	50	28	22.28	22.14	22.10	
20	64QAM	50	56	22.09	21.99	21.80	
20	64QAM	100	0	21.81	21.89	21.87	23.2
20	256QAM	1	1	19.88	19.73	19.84	21.2
20	256QAM	1	53	19.66	19.79	19.78	
20	256QAM	1	104	19.64	19.70	19.55	
20	256QAM	50	0	19.67	20.06	19.87	21.2
20	256QAM	50	28	20.34	20.15	20.20	
20	256QAM	50	56	20.17	20.06	20.00	
20	256QAM	100	0	19.92	19.99	20.04	21.2
Channel				134100	136100	138100	
Frequency (MHz)				670.5	680.5	690.5	
15	PV2 BPSK	1	1	24.50	24.38	24.49	25.7
Channel				133600	136100	138600	
Frequency (MHz)				668	680.5	693	
10	PV2 BPSK	1	1	24.44	24.35	24.42	25.7
Channel				133100	136100	139100	
Frequency (MHz)				665.5	680.5	695.5	
5	PV2 BPSK	1	1	24.45	24.37	24.41	25.7

n12								
Act 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				141300	141500	141700		
Frequency (MHz)				705.5	707.5	709.5		
15	PI/2 BPSK	1	1	23.31	23.32	23.26	24.7	
15	PI/2 BPSK	1	40	23.20	23.26	23.17		
15	PI/2 BPSK	1	77	23.11	23.11	23.05		
15	PI/2 BPSK	36	0	23.24	23.21	23.19	24.7	
15	PI/2 BPSK	36	22	23.25	23.26	23.20		
15	PI/2 BPSK	36	43	23.16	23.16	23.07		
15	PI/2 BPSK	75	0	23.25	23.29	23.24	24.2	
15	QPSK	1	1	22.84	22.90	22.86	24.2	
15	QPSK	1	40	22.70	22.76	22.69		
15	QPSK	1	77	22.66	22.67	22.55		
15	QPSK	36	0	22.34	22.33	22.33	24.2	
15	QPSK	36	22	22.38	22.42	22.40		
15	QPSK	36	43	22.35	22.26	22.27		
15	QPSK	75	0	22.43	22.40	22.38	23.7	
15	16QAM	1	1	22.32	22.37	22.29	23.7	
15	16QAM	1	40	22.28	22.35	22.17		
15	16QAM	1	77	22.13	22.12	22.06		
15	16QAM	36	0	21.72	21.73	21.70	23.7	
15	16QAM	36	22	21.74	21.75	21.72		
15	16QAM	36	43	21.73	21.70	21.74		
15	16QAM	75	0	21.49	21.58	21.44	22.7	
15	64QAM	1	1	21.13	21.15	21.13	22.2	
15	64QAM	1	40	21.07	21.15	21.01		
15	64QAM	1	77	20.92	20.99	20.94		
15	64QAM	36	0	20.96	20.93	20.90	22.2	
15	64QAM	36	22	20.96	20.97	20.93		
15	64QAM	36	43	20.88	20.92	20.87		
15	64QAM	75	0	21.04	21.02	21.04	22.2	
15	256QAM	1	1	18.76	18.73	18.70	20.2	
15	256QAM	1	40	18.63	18.66	18.64		
15	256QAM	1	77	18.52	18.54	18.49		
15	256QAM	36	0	19.12	19.02	19.02	20.2	
15	256QAM	36	22	19.10	19.13	19.05		
15	256QAM	36	43	18.96	19.02	18.94		
15	256QAM	75	0	19.10	19.19	19.10	20.2	
Channel				140800	141500	142200	Tune-up limit (dBm)	
Frequency (MHz)				704	707.5	711		
10	PI/2 BPSK	1	1	23.30	23.23	23.24	24.7	
Channel				140300	141500	142700		
Frequency (MHz)				701.5	707.5	713.5		
5	PI/2 BPSK	1	1	23.29	23.24	23.19	24.7	

n5							
Act 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (min./max.)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	22.63	22.49	22.47	24.0
20	PI/2 BPSK	1	53	22.55	22.78	22.65	
20	PI/2 BPSK	1	104	22.51	22.50	22.48	
20	PI/2 BPSK	50	0	22.55	22.59	22.51	24.0
20	PI/2 BPSK	50	28	22.58	22.60	22.59	
20	PI/2 BPSK	50	56	22.50	22.56	22.43	
20	PI/2 BPSK	100	0	22.54	22.55	22.14	24.0
20	QPSK	1	1	22.56	22.51	22.49	24.0
20	QPSK	1	53	22.52	22.52	22.57	
20	QPSK	1	104	22.43	22.47	22.45	
20	QPSK	50	0	22.51	22.49	22.58	24.0
20	QPSK	50	28	22.88	22.68	22.90	
20	QPSK	50	56	22.37	22.43	22.41	
20	QPSK	100	0	22.48	22.50	22.54	24.0
20	16QAM	1	1	22.81	22.71	22.61	24.0
20	16QAM	1	53	22.70	22.80	22.75	
20	16QAM	1	104	22.63	22.64	22.60	
20	16QAM	50	0	21.91	22.07	21.96	24.0
20	16QAM	50	28	22.30	22.43	22.41	
20	16QAM	50	56	21.88	21.96	21.84	
20	16QAM	100	0	21.88	21.89	21.85	23.0
20	64QAM	1	1	21.41	21.32	21.32	22.5
20	64QAM	1	53	21.44	21.48	21.46	
20	64QAM	1	104	21.33	21.24	21.25	
20	64QAM	50	0	21.38	21.34	21.33	22.5
20	64QAM	50	28	21.43	21.47	21.45	
20	64QAM	50	56	21.34	21.27	21.26	
20	64QAM	100	0	21.37	21.29	21.24	21.5
20	256QAM	1	1	19.65	19.50	19.51	20.5
20	256QAM	1	53	19.59	19.64	19.58	
20	256QAM	1	104	19.55	19.46	19.43	
20	256QAM	50	0	19.70	19.50	19.62	20.5
20	256QAM	50	28	19.69	19.75	19.69	
20	256QAM	50	56	19.55	19.59	19.54	
20	256QAM	100	0	19.66	19.59	19.51	20.5
Channel				168300	167300	168300	
Frequency (MHz)				831.5	835.5	841.5	
15	PI/2 BPSK	1	1	22.62	22.46	22.44	24.0
Channel				165800	167300	166800	
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	22.55	22.43	22.38	24.0
Channel				163300	167300	163300	
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.31	23.26	23.18	24.0



n2							
Act 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (min-max)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	23.08	23.10	23.10	24.5
20	PI/2 BPSK	1	53	23.12	23.13	23.11	
20	PI/2 BPSK	1	104	23.06	23.08	23.07	
20	PI/2 BPSK	50	0	23.06	23.08	22.97	24.5
20	PI/2 BPSK	50	28	23.13	23.18	23.08	
20	PI/2 BPSK	50	56	23.01	23.06	23.05	
20	PI/2 BPSK	100	0	23.10	23.06	23.01	24.0
20	QPSK	1	1	22.93	22.99	22.90	24.0
20	QPSK	1	53	23.01	23.01	22.98	
20	QPSK	1	104	22.94	22.91	22.97	
20	QPSK	50	0	22.90	22.85	22.81	24.0
20	QPSK	50	28	22.92	22.93	22.96	
20	QPSK	50	56	22.88	22.86	22.93	
20	QPSK	100	0	22.91	22.91	22.90	24.0
20	16QAM	1	1	22.62	22.53	22.52	23.5
20	16QAM	1	53	22.52	22.59	22.59	
20	16QAM	1	104	22.53	22.47	22.59	
20	16QAM	50	0	22.26	22.24	22.21	23.5
20	16QAM	50	28	22.25	22.20	22.27	
20	16QAM	50	56	22.16	22.24	22.28	
20	16QAM	100	0	22.29	22.22	22.18	23.0
20	64QAM	1	1	21.82	21.86	21.80	23.0
20	64QAM	1	53	21.85	21.90	21.87	
20	64QAM	1	104	21.79	21.84	21.84	
20	64QAM	50	0	21.75	21.79	21.73	23.0
20	64QAM	50	28	21.79	21.87	21.87	
20	64QAM	50	56	21.79	21.73	21.86	
20	64QAM	100	0	21.84	21.80	21.86	23.0
20	256QAM	1	1	19.45	19.40	19.35	20.5
20	256QAM	1	53	19.48	19.52	19.48	
20	256QAM	1	104	19.37	19.34	19.43	
20	256QAM	50	0	19.45	19.35	19.45	20.5
20	256QAM	50	28	19.50	19.52	19.46	
20	256QAM	50	56	19.42	19.40	19.41	
20	256QAM	100	0	19.43	19.46	19.39	20.5
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1880	1903.5	
15	PI/2 BPSK	1	1	23.05	23.12	23.03	24.5
Channel				371000	376000	381000	
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	23.13	23.10	23.06	24.5
Channel				370500	375000	379500	
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	23.08	23.07	23.08	24.5

n25							
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) / tune-up limit (dBm)
Channel				375000	376000	381000	
Frequency (MHz)				1860	1880	1905	
20	PI/2 BPSK	1	1	23.09	23.11	23.08	24.5
20	PI/2 BPSK	1	53	23.11	23.15	23.12	
20	PI/2 BPSK	1	104	23.07	23.04	23.06	
20	PI/2 BPSK	50	0	23.07	23.05	23.02	24.5
20	PI/2 BPSK	50	28	23.10	23.13	23.12	
20	PI/2 BPSK	50	56	23.05	23.08	23.06	
20	PI/2 BPSK	100	0	23.07	23.07	23.05	24.0
20	QPSK	1	1	22.90	22.95	22.91	24.0
20	QPSK	1	53	22.96	23.00	22.98	
20	QPSK	1	104	22.89	22.92	22.95	
20	QPSK	50	0	22.95	22.89	22.82	24.0
20	QPSK	50	28	22.95	22.96	22.93	
20	QPSK	50	56	22.87	22.91	22.94	
20	QPSK	100	0	22.95	22.94	22.89	24.0
20	16QAM	1	1	22.50	22.54	22.48	23.5
20	16QAM	1	53	22.51	22.60	22.62	
20	16QAM	1	104	22.52	22.52	22.54	
20	16QAM	50	0	22.23	22.20	22.16	23.5
20	16QAM	50	28	22.26	22.25	22.26	
20	16QAM	50	56	22.18	22.19	22.23	
20	16QAM	100	0	22.24	22.26	22.20	23.0
20	64QAM	1	1	21.85	21.91	21.81	23.0
20	64QAM	1	53	21.83	21.89	21.84	
20	64QAM	1	104	21.84	21.84	21.81	
20	64QAM	50	0	21.80	21.76	21.73	23.0
20	64QAM	50	28	21.84	21.91	21.86	
20	64QAM	50	56	21.75	21.78	21.82	
20	64QAM	100	0	21.87	21.83	21.81	23.0
20	256QAM	1	1	19.40	19.45	19.40	20.5
20	256QAM	1	53	19.49	19.54	19.47	
20	256QAM	1	104	19.39	19.34	19.42	
20	256QAM	50	0	19.42	19.37	19.40	20.5
20	256QAM	50	28	19.48	19.50	19.50	
20	256QAM	50	56	19.45	19.39	19.43	
20	256QAM	100	0	19.40	19.46	19.40	20.5
Channel				371500	376000	381500	
Frequency (MHz)				1871.5	1880	1907.5	
15	PI/2 BPSK	1	1	23.08	23.10	23.02	24.5
Channel				371000	376000	382000	
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	23.03	23.01	23.02	24.5
Channel				370500	376000	382500	
Frequency (MHz)				1852.5	1880	1917.5	
5	PI/2 BPSK	1	1	23.09	23.05	23.07	24.5

n2							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (min-max)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	17.77	17.69	17.71	19.2
20	PI/2 BPSK	1	53	17.79	17.67	17.78	
20	PI/2 BPSK	1	104	17.76	17.75	17.69	
20	PI/2 BPSK	50	0	17.73	17.84	17.74	
20	PI/2 BPSK	50	28	17.87	17.86	17.83	19.2
20	PI/2 BPSK	50	56	17.61	17.57	17.68	
20	PI/2 BPSK	100	0	17.70	17.71	17.73	
20	QPSK	1	1	17.78	17.73	17.76	
20	QPSK	1	53	17.79	17.67	17.83	19.2
20	QPSK	1	104	17.77	17.70	17.74	
20	QPSK	50	0	17.68	17.88	17.77	
20	QPSK	50	28	17.84	17.85	17.84	
20	QPSK	50	56	17.57	17.58	17.69	19.2
20	QPSK	100	0	17.71	17.73	17.72	
20	16QAM	1	1	17.74	17.72	17.75	
20	16QAM	1	53	17.82	17.72	17.76	
20	16QAM	1	104	17.81	17.77	17.74	19.2
20	16QAM	50	0	17.71	17.79	17.73	
20	16QAM	50	28	17.92	17.85	17.81	
20	16QAM	50	56	17.63	17.58	17.70	
20	16QAM	100	0	17.66	17.66	17.71	19.2
20	64QAM	1	1	17.72	17.69	17.71	
20	64QAM	1	53	17.81	17.71	17.73	
20	64QAM	1	104	17.72	17.78	17.70	
20	64QAM	50	0	17.68	17.83	17.78	19.2
20	64QAM	50	28	17.90	17.85	17.78	
20	64QAM	50	56	17.66	17.58	17.69	
20	64QAM	100	0	17.71	17.75	17.77	
20	256QAM	1	1	17.80	17.70	17.67	19.2
20	256QAM	1	53	17.83	17.70	17.73	
20	256QAM	1	104	17.71	17.72	17.71	
20	256QAM	50	0	17.74	17.85	17.72	
20	256QAM	50	28	17.86	17.82	17.86	19.2
20	256QAM	50	56	17.64	17.62	17.71	
20	256QAM	100	0	17.66	17.73	17.72	
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1880	1900.5	
15	PI/2 BPSK	1	1	17.80	17.71	17.69	19.2
Channel				371000	376000	381000	
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	17.82	17.69	17.72	19.2
Channel				370500	376000	381500	
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	17.79	17.66	17.74	19.2

n25							
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				375000	376000	381000	limit
Frequency (MHz)				1860	1880	1905	limit
20	PV2 BPSK	1	1	17.75	17.70	17.74	19.2
20	PV2 BPSK	1	53	17.76	17.71	17.75	
20	PV2 BPSK	1	104	17.74	17.70	17.72	
20	PV2 BPSK	50	0	17.76	17.70	17.78	19.2
20	PV2 BPSK	50	28	17.83	17.82	17.81	
20	PV2 BPSK	50	56	17.64	17.62	17.65	
20	PV2 BPSK	100	0	17.70	17.69	17.69	19.2
20	QPSK	1	1	17.75	17.67	17.77	19.2
20	QPSK	1	53	17.73	17.75	17.70	
20	QPSK	1	104	17.73	17.69	17.77	
20	QPSK	50	0	17.80	17.74	17.77	19.2
20	QPSK	50	28	17.78	17.87	17.85	
20	QPSK	50	56	17.68	17.64	17.61	
20	QPSK	100	0	17.69	17.69	17.64	19.2
20	16QAM	1	1	17.77	17.75	17.77	19.2
20	16QAM	1	53	17.79	17.70	17.76	
20	16QAM	1	104	17.77	17.75	17.74	
20	16QAM	50	0	17.76	17.84	17.81	19.2
20	16QAM	50	28	17.84	17.77	17.84	
20	16QAM	50	56	17.65	17.64	17.66	
20	16QAM	100	0	17.69	17.65	17.74	19.2
20	64QAM	1	1	17.79	17.70	17.69	19.2
20	64QAM	1	53	17.77	17.68	17.80	
20	64QAM	1	104	17.74	17.73	17.77	
20	64QAM	50	0	17.78	17.76	17.83	19.2
20	64QAM	50	28	17.81	17.87	17.78	
20	64QAM	50	56	17.62	17.66	17.63	
20	64QAM	100	0	17.69	17.73	17.74	19.2
20	256QAM	1	1	17.77	17.68	17.76	19.2
20	256QAM	1	53	17.76	17.75	17.80	
20	256QAM	1	104	17.74	17.72	17.72	
20	256QAM	50	0	17.79	17.78	17.81	19.2
20	256QAM	50	28	17.82	17.85	17.86	
20	256QAM	50	56	17.62	17.60	17.70	
20	256QAM	100	0	17.75	17.68	17.74	19.2
Channel				371500	376000	381500	limit
Frequency (MHz)				1857.5	1880	1927.5	limit
15	PV2 BPSK	1	1	17.75	17.71	17.70	19.2
Channel				371000	376000	382000	limit
Frequency (MHz)				1855	1880	1910	limit
10	PV2 BPSK	1	1	17.73	17.72	17.71	19.2
Channel				370500	376000	382500	limit
Frequency (MHz)				1852.5	1880	1912.5	limit
5	PV2 BPSK	1	1	17.80	17.68	17.75	19.2

n66							
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				344000	349000	354000	limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	PV2 BPSK	1	1	19.20	19.13	19.18	20.9
20	PV2 BPSK	1	53	19.02	19.06	19.03	
20	PV2 BPSK	1	104	19.09	19.10	19.07	
20	PV2 BPSK	50	0	19.14	19.01	19.00	20.9
20	PV2 BPSK	50	28	19.16	19.14	19.12	
20	PV2 BPSK	50	56	19.01	19.04	19.02	
20	PV2 BPSK	100	0	19.04	19.01	19.00	20.9
20	QPSK	1	1	19.13	19.05	19.09	20.9
20	QPSK	1	53	19.06	19.06	19.02	
20	QPSK	1	104	19.04	19.06	19.04	
20	QPSK	50	0	19.02	19.00	18.80	20.9
20	QPSK	50	28	18.97	18.96	18.95	
20	QPSK	50	56	18.92	18.91	18.91	
20	QPSK	100	0	18.90	18.91	18.90	20.9
20	16QAM	1	1	19.09	18.93	19.05	20.9
20	16QAM	1	53	18.91	18.90	18.88	
20	16QAM	1	104	18.99	18.94	18.92	
20	16QAM	50	0	19.13	18.92	19.00	20.9
20	16QAM	50	28	19.12	19.09	19.10	
20	16QAM	50	56	18.96	18.95	18.96	
20	16QAM	100	0	18.97	18.93	18.99	20.9
20	64QAM	1	1	19.31	19.28	19.35	20.9
20	64QAM	1	53	19.18	19.23	19.20	
20	64QAM	1	104	19.28	19.22	19.25	
20	64QAM	50	0	19.00	18.90	18.91	20.9
20	64QAM	50	28	19.04	18.95	19.02	
20	64QAM	50	56	18.91	18.93	18.92	
20	64QAM	100	0	18.93	18.91	18.90	20.9
20	256QAM	1	1	18.93	18.93	18.91	20.9
20	256QAM	1	53	18.90	18.91	18.90	
20	256QAM	1	104	18.90	18.90	18.90	
20	256QAM	50	0	19.10	19.00	18.94	20.9
20	256QAM	50	28	19.13	19.12	19.02	
20	256QAM	50	56	18.97	19.00	18.96	
20	256QAM	100	0	19.00	18.98	18.97	20.9
Channel				343000	349000	355000	limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	PV2 BPSK	1	1	19.19	19.11	19.14	20.9
Channel				343000	349000	355000	limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	PV2 BPSK	1	1	19.15	19.15	19.19	20.9
Channel				342500	349000	355500	limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	PV2 BPSK	1	1	19.22	19.13	19.16	20.9



n2							
Act 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (min-max)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	23.08	23.10	23.10	23.7
20	PI/2 BPSK	1	53	23.12	23.13	23.11	
20	PI/2 BPSK	1	104	23.06	23.08	23.07	
20	PI/2 BPSK	50	0	23.06	23.08	22.97	
20	PI/2 BPSK	50	28	23.13	23.18	23.08	23.7
20	PI/2 BPSK	50	56	23.01	23.06	23.05	
20	PI/2 BPSK	100	0	23.10	23.06	23.01	
20	QPSK	1	1	22.93	22.99	22.90	
20	QPSK	1	53	23.01	23.01	22.98	23.7
20	QPSK	1	104	22.94	22.91	22.97	
20	QPSK	50	0	22.90	22.85	22.81	
20	QPSK	50	28	22.92	22.93	22.96	
20	QPSK	50	56	22.88	22.86	22.93	23.7
20	QPSK	100	0	22.91	22.91	22.90	
20	16QAM	1	1	22.62	22.53	22.52	
20	16QAM	1	53	22.52	22.59	22.59	
20	16QAM	1	104	22.53	22.47	22.59	23.2
20	16QAM	50	0	22.26	22.24	22.21	
20	16QAM	50	28	22.25	22.20	22.27	
20	16QAM	50	56	22.16	22.24	22.26	
20	16QAM	100	0	22.29	22.22	22.18	23.2
20	64QAM	1	1	21.82	21.86	21.80	
20	64QAM	1	53	21.85	21.90	21.87	
20	64QAM	1	104	21.79	21.84	21.84	
20	64QAM	50	0	21.75	21.79	21.73	22.7
20	64QAM	50	28	21.79	21.87	21.87	
20	64QAM	50	56	21.79	21.73	21.86	
20	64QAM	100	0	21.84	21.80	21.86	
20	256QAM	1	1	19.45	19.40	19.35	20.2
20	256QAM	1	53	19.48	19.52	19.48	
20	256QAM	1	104	19.37	19.34	19.43	
20	256QAM	50	0	19.45	19.35	19.45	
20	256QAM	50	28	19.50	19.52	19.46	20.2
20	256QAM	50	56	19.42	19.40	19.41	
20	256QAM	100	0	19.43	19.46	19.39	
20	256QAM	100	0	19.43	19.46	19.39	
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1880	1903.5	
15	PI/2 BPSK	1	1	23.05	23.12	23.03	23.7
Channel				371000	376000	381000	
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	23.13	23.10	23.06	23.7
Channel				370500	375000	379500	
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	23.08	23.07	23.08	23.7



n25							
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) / tune-up limit (dBm)
Channel				375000	376000	381000	
Frequency (MHz)				1860	1880	1905	
20	PV2 BPSK	1	1	23.09	23.11	23.08	23.7
20	PV2 BPSK	1	53	23.11	23.15	23.12	
20	PV2 BPSK	1	104	23.07	23.04	23.06	
20	PV2 BPSK	50	0	23.07	23.05	23.02	23.7
20	PV2 BPSK	50	28	23.10	23.13	23.12	
20	PV2 BPSK	50	56	23.05	23.08	23.06	
20	PV2 BPSK	100	0	23.07	23.07	23.05	23.7
20	QPSK	1	1	22.90	22.95	22.91	23.7
20	QPSK	1	53	22.96	23.00	22.96	
20	QPSK	1	104	22.89	22.92	22.95	
20	QPSK	50	0	22.95	22.89	22.82	23.7
20	QPSK	50	28	22.95	22.96	22.93	
20	QPSK	50	56	22.87	22.91	22.94	
20	QPSK	100	0	22.95	22.94	22.89	23.7
20	16QAM	1	1	22.50	22.54	22.48	23.2
20	16QAM	1	53	22.51	22.60	22.62	
20	16QAM	1	104	22.52	22.52	22.54	
20	16QAM	50	0	22.23	22.20	22.16	23.2
20	16QAM	50	28	22.26	22.25	22.26	
20	16QAM	50	56	22.18	22.19	22.23	
20	16QAM	100	0	22.24	22.26	22.20	23.2
20	64QAM	1	1	21.85	21.91	21.81	22.7
20	64QAM	1	53	21.83	21.89	21.84	
20	64QAM	1	104	21.84	21.84	21.81	
20	64QAM	50	0	21.80	21.76	21.73	22.7
20	64QAM	50	28	21.84	21.91	21.86	
20	64QAM	50	56	21.75	21.78	21.82	
20	64QAM	100	0	21.87	21.83	21.81	22.7
20	256QAM	1	1	19.40	19.45	19.40	20.2
20	256QAM	1	53	19.49	19.54	19.47	
20	256QAM	1	104	19.39	19.34	19.42	
20	256QAM	50	0	19.42	19.37	19.40	20.2
20	256QAM	50	28	19.48	19.50	19.50	
20	256QAM	50	56	19.45	19.39	19.43	
20	256QAM	100	0	19.40	19.46	19.40	20.2
Channel				371500	376000	381500	
Frequency (MHz)				1871.5	1880	1907.5	
15	PV2 BPSK	1	1	23.08	23.10	23.02	23.7
Channel				371000	376000	382000	
Frequency (MHz)				1855	1880	1910	
10	PV2 BPSK	1	1	23.03	23.01	23.02	23.7
Channel				370500	376000	382500	
Frequency (MHz)				1852.5	1880	1917.5	
5	PV2 BPSK	1	1	23.09	23.05	23.07	23.7

n66							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (dBm)
Channel				344000	349000	354000	
Frequency (MHz)				1720	1745	1770	
20	PV2 BPSK	1	1	24.73	23.96	24.62	25.3
20	PV2 BPSK	1	53	24.64	24.51	24.63	
20	PV2 BPSK	1	104	24.75	24.63	24.63	
20	PV2 BPSK	50	0	24.46	23.70	24.12	25.3
20	PV2 BPSK	50	28	24.75	24.72	24.63	
20	PV2 BPSK	50	56	24.11	24.35	24.24	
20	PV2 BPSK	100	0	24.22	24.06	24.20	24.8
20	QPSK	1	1	24.29	23.54	24.15	24.3
20	QPSK	1	53	24.17	24.01	24.04	
20	QPSK	1	104	24.34	24.22	24.14	
20	QPSK	50	0	23.48	22.80	23.21	24.3
20	QPSK	50	28	23.76	23.77	23.72	
20	QPSK	50	56	23.19	23.41	23.28	
20	QPSK	100	0	23.32	23.06	23.20	23.8
20	16QAM	1	1	22.82	22.05	22.62	23.3
20	16QAM	1	53	22.69	22.61	22.62	
20	16QAM	1	104	22.77	22.73	22.67	
20	16QAM	50	0	22.55	21.77	22.16	23.3
20	16QAM	50	28	22.84	22.79	22.64	
20	16QAM	50	56	22.11	22.36	22.25	
20	16QAM	100	0	22.31	22.16	22.25	22.8
20	64QAM	1	1	22.38	21.64	22.31	22.8
20	64QAM	1	53	22.29	22.19	22.22	
20	64QAM	1	104	22.45	22.31	22.30	
20	64QAM	50	0	22.07	21.32	21.82	22.8
20	64QAM	50	28	22.39	22.41	22.32	
20	64QAM	50	56	21.76	22.03	21.87	
20	64QAM	100	0	21.89	21.67	21.85	22.8
20	256QAM	1	1	19.78	19.01	19.67	20.8
20	256QAM	1	53	19.73	19.59	19.58	
20	256QAM	1	104	19.76	19.67	19.63	
20	256QAM	50	0	20.05	19.21	19.63	20.8
20	256QAM	50	28	20.27	20.30	20.14	
20	256QAM	50	56	19.64	19.85	19.74	
20	256QAM	100	0	19.74	19.61	19.79	20.8
Channel				343000	349000	355000	
Frequency (MHz)				1712.5	1745	1777.5	
15	PV2 BPSK	1	1	24.69	23.90	24.55	25.3
Channel				343000	349000	355000	
Frequency (MHz)				1715	1745	1775	
10	PV2 BPSK	1	1	24.72	23.95	24.55	25.3
Channel				342500	349000	355500	
Frequency (MHz)				1712.5	1745	1777.5	
5	PV2 BPSK	1	1	24.72	23.87	24.57	25.3



n2								
Act 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				372000	376000	380000	18.4	
Frequency (MHz)				1860	1880	1900		
20	PI/2 BPSK	1	1	17.77	17.69	17.71		
20	PI/2 BPSK	1	53	17.79	17.67	17.78		
20	PI/2 BPSK	1	104	17.76	17.75	17.69		
20	PI/2 BPSK	50	0	17.73	17.84	17.74		
20	PI/2 BPSK	50	28	17.87	17.86	17.83		
20	PI/2 BPSK	50	56	17.61	17.57	17.68		
20	PI/2 BPSK	100	0	17.70	17.71	17.73		
20	QPSK	1	1	17.78	17.73	17.76		
20	QPSK	1	53	17.79	17.67	17.83		
20	QPSK	1	104	17.77	17.70	17.74		
20	QPSK	50	0	17.68	17.88	17.77		
20	QPSK	50	28	17.84	17.85	17.84		
20	QPSK	50	56	17.57	17.58	17.69		
20	QPSK	100	0	17.71	17.73	17.72		
20	16QAM	1	1	17.74	17.72	17.75		
20	16QAM	1	53	17.82	17.72	17.76		
20	16QAM	1	104	17.81	17.77	17.74		
20	16QAM	50	0	17.71	17.79	17.73		
20	16QAM	50	28	17.92	17.85	17.81		
20	16QAM	50	56	17.63	17.58	17.70		
20	16QAM	100	0	17.66	17.66	17.71		
20	64QAM	1	1	17.72	17.69	17.71		
20	64QAM	1	53	17.81	17.71	17.73		
20	64QAM	1	104	17.72	17.78	17.70		
20	64QAM	50	0	17.68	17.83	17.78		
20	64QAM	50	28	17.90	17.85	17.78		
20	64QAM	50	56	17.66	17.58	17.69		
20	64QAM	100	0	17.71	17.75	17.77		
20	256QAM	1	1	17.80	17.70	17.67		
20	256QAM	1	53	17.83	17.70	17.73		
20	256QAM	1	104	17.71	17.72	17.71		
20	256QAM	50	0	17.74	17.85	17.72		
20	256QAM	50	28	17.86	17.82	17.86		
20	256QAM	50	56	17.64	17.62	17.71		
20	256QAM	100	0	17.66	17.73	17.72		
Channel				371500	376000	380500	18.4	
Frequency (MHz)				1851.5	1880	1901.5		
15	PI/2 BPSK	1	1	17.80	17.71	17.69		
Channel				371000	376000	381000	18.4	
Frequency (MHz)				1855	1880	1905		
10	PI/2 BPSK	1	1	17.82	17.69	17.72		
Channel				370500	376000	381500	18.4	
Frequency (MHz)				1852.5	1880	1907.5		
5	PI/2 BPSK	1	1	17.79	17.66	17.74		

n25							
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				375000	376000	381000	limit
Frequency (MHz)				1860	1880	1905	limit
20	PV2 BPSK	1	1	17.75	17.70	17.74	18.4
20	PV2 BPSK	1	53	17.76	17.71	17.75	
20	PV2 BPSK	1	104	17.74	17.70	17.72	
20	PV2 BPSK	50	0	17.76	17.70	17.78	18.4
20	PV2 BPSK	50	28	17.83	17.82	17.81	
20	PV2 BPSK	50	56	17.64	17.62	17.65	
20	PV2 BPSK	100	0	17.70	17.69	17.69	18.4
20	QPSK	1	1	17.75	17.67	17.77	18.4
20	QPSK	1	53	17.73	17.75	17.70	
20	QPSK	1	104	17.73	17.69	17.77	
20	QPSK	50	0	17.80	17.74	17.77	18.4
20	QPSK	50	28	17.78	17.87	17.85	
20	QPSK	50	56	17.68	17.64	17.61	
20	QPSK	100	0	17.69	17.69	17.64	18.4
20	16QAM	1	1	17.77	17.75	17.77	18.4
20	16QAM	1	53	17.79	17.70	17.76	
20	16QAM	1	104	17.77	17.75	17.74	
20	16QAM	50	0	17.76	17.84	17.81	18.4
20	16QAM	50	28	17.84	17.77	17.84	
20	16QAM	50	56	17.65	17.64	17.66	
20	16QAM	100	0	17.69	17.65	17.74	18.4
20	64QAM	1	1	17.79	17.70	17.69	18.4
20	64QAM	1	53	17.77	17.68	17.80	
20	64QAM	1	104	17.74	17.73	17.77	
20	64QAM	50	0	17.78	17.76	17.83	18.4
20	64QAM	50	28	17.81	17.87	17.78	
20	64QAM	50	56	17.62	17.66	17.63	
20	64QAM	100	0	17.69	17.73	17.74	18.4
20	256QAM	1	1	17.77	17.68	17.76	18.4
20	256QAM	1	53	17.76	17.75	17.80	
20	256QAM	1	104	17.74	17.72	17.72	
20	256QAM	50	0	17.79	17.78	17.81	18.4
20	256QAM	50	28	17.82	17.85	17.86	
20	256QAM	50	56	17.62	17.60	17.70	
20	256QAM	100	0	17.75	17.68	17.74	18.4
Channel				371500	376000	381500	limit
Frequency (MHz)				1857.5	1880	1927.5	limit
15	PV2 BPSK	1	1	17.75	17.71	17.70	18.4
Channel				371000	376000	382000	limit
Frequency (MHz)				1855	1880	1910	limit
10	PV2 BPSK	1	1	17.73	17.72	17.71	18.4
Channel				370500	376000	382500	limit
Frequency (MHz)				1852.5	1880	1912.5	limit
5	PV2 BPSK	1	1	17.80	17.68	17.75	18.4



n66							
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				344000	349000	354000	limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	PV2 BPSK	1	1	19.20	19.13	19.18	20.1
20	PV2 BPSK	1	53	19.02	19.06	19.03	
20	PV2 BPSK	1	104	19.09	19.10	19.07	
20	PV2 BPSK	50	0	19.14	19.01	19.00	20.1
20	PV2 BPSK	50	28	19.16	19.14	19.12	
20	PV2 BPSK	50	56	19.01	19.04	19.02	
20	PV2 BPSK	100	0	19.04	19.01	19.00	20.1
20	QPSK	1	1	19.13	19.05	19.09	20.1
20	QPSK	1	53	19.06	19.06	19.02	
20	QPSK	1	104	19.04	19.06	19.04	
20	QPSK	50	0	19.02	19.00	18.80	20.1
20	QPSK	50	28	18.97	18.96	18.95	
20	QPSK	50	56	18.92	18.91	18.91	
20	QPSK	100	0	18.90	18.91	18.90	20.1
20	16QAM	1	1	19.09	18.93	19.05	20.1
20	16QAM	1	53	18.91	18.90	18.88	
20	16QAM	1	104	18.99	18.94	18.92	
20	16QAM	50	0	19.13	18.92	19.00	20.1
20	16QAM	50	28	19.12	19.09	19.10	
20	16QAM	50	56	18.96	18.95	18.96	
20	16QAM	100	0	18.97	18.93	18.99	20.1
20	64QAM	1	1	19.31	19.28	19.35	20.1
20	64QAM	1	53	19.18	19.23	19.20	
20	64QAM	1	104	19.28	19.22	19.25	
20	64QAM	50	0	19.00	18.90	18.91	20.1
20	64QAM	50	28	19.04	18.95	19.02	
20	64QAM	50	56	18.91	18.93	18.92	
20	64QAM	100	0	18.93	18.91	18.90	20.1
20	256QAM	1	1	18.93	18.93	18.91	20.1
20	256QAM	1	53	18.90	18.91	18.90	
20	256QAM	1	104	18.90	18.90	18.90	
20	256QAM	50	0	19.10	19.00	18.94	20.1
20	256QAM	50	28	19.13	19.12	19.02	
20	256QAM	50	56	18.97	19.00	18.96	
20	256QAM	100	0	19.00	18.98	18.97	20.1
Channel				343000	349000	355000	limit
Frequency (MHz)				1717.5	1745	1772.5	
15	PV2 BPSK	1	1	19.19	19.11	19.14	20.1
Channel				343000	349000	355000	limit
Frequency (MHz)				1715	1745	1775	
10	PV2 BPSK	1	1	19.15	19.15	19.19	20.1
Channel				342500	349000	355500	limit
Frequency (MHz)				1712.5	1745	1777.5	
5	PV2 BPSK	1	1	19.22	19.13	19.16	20.1

n5							
Act 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (min-max)
Channel				166800	167300	167800	
Frequency (MHz)				834	838.5	839	
20	PI/2 BPSK	1	1	22.63	22.49	22.47	23.2
20	PI/2 BPSK	1	53	22.55	22.78	22.65	
20	PI/2 BPSK	1	104	22.51	22.50	22.48	
20	PI/2 BPSK	50	0	22.55	22.59	22.51	23.2
20	PI/2 BPSK	50	28	22.58	22.60	22.59	
20	PI/2 BPSK	50	56	22.50	22.56	22.43	
20	PI/2 BPSK	100	0	22.54	22.55	22.14	23.2
20	QPSK	1	1	22.56	22.51	22.49	23.2
20	QPSK	1	53	22.52	22.52	22.57	
20	QPSK	1	104	22.43	22.47	22.45	
20	QPSK	50	0	22.51	22.49	22.58	23.2
20	QPSK	50	28	22.88	22.68	22.90	
20	QPSK	50	56	22.37	22.43	22.41	
20	QPSK	100	0	22.48	22.50	22.54	23.2
20	16QAM	1	1	22.81	22.71	22.61	23.2
20	16QAM	1	53	22.70	22.80	22.75	
20	16QAM	1	104	22.63	22.64	22.60	
20	16QAM	50	0	21.91	22.07	21.96	23.2
20	16QAM	50	28	22.30	22.43	22.41	
20	16QAM	50	56	21.88	21.96	21.84	
20	16QAM	100	0	21.88	21.89	21.85	23.0
20	64QAM	1	1	21.41	21.32	21.32	22.5
20	64QAM	1	53	21.44	21.48	21.46	
20	64QAM	1	104	21.33	21.24	21.25	
20	64QAM	50	0	21.38	21.34	21.33	22.5
20	64QAM	50	28	21.43	21.47	21.45	
20	64QAM	50	56	21.34	21.27	21.26	
20	64QAM	100	0	21.37	21.29	21.24	22.5
20	256QAM	1	1	19.65	19.50	19.51	20.5
20	256QAM	1	53	19.59	19.64	19.58	
20	256QAM	1	104	19.55	19.46	19.43	
20	256QAM	50	0	19.70	19.50	19.62	20.5
20	256QAM	50	28	19.69	19.75	19.69	
20	256QAM	50	56	19.55	19.59	19.54	
20	256QAM	100	0	19.66	19.59	19.51	20.5
Channel				168300	167300	168300	
Frequency (MHz)				831.5	835.5	841.5	
15	PI/2 BPSK	1	1	22.62	22.46	22.44	23.2
Channel				165800	167300	166800	
Frequency (MHz)				829	835.5	844	
10	PI/2 BPSK	1	1	22.55	22.43	22.38	23.2
Channel				163300	167300	163300	
Frequency (MHz)				826.5	838.5	846.5	
5	PI/2 BPSK	1	1	22.61	22.41	22.42	23.2



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	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	19.10	19.50	100.00	19.20	19.50	100.00	19.50	19.50	100.00	19.50	19.50	19.40	19.50	22.46	22.5	100.00
		6	2437	19.00	19.50		18.70	19.50		19.00	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	18.80	19.50		17.90	19.50		19.00	19.50		19.00	19.50	18.40	19.50	21.72	22.5	
	802.11g 6Mbps	1	2412	15.20	16.00	98.08	15.20	16.00	97.60	15.50	16.00	97.60	15.50	16.00	15.60	16.00	18.56	18.0	97.84
		6	2437	19.00	19.50		18.60	19.50		19.40	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	16.20	16.50		15.80	16.50		16.30	16.50		16.30	16.50	15.90	16.50	19.11	19.5	
	802.11n-HT20 MCS0	1	2412	14.20	15.00	97.94	14.00	15.00	97.93	14.60	15.00	97.93	14.60	15.00	14.50	15.00	17.56	18.0	97.94
		6	2437	18.90	19.50		18.50	19.50		19.30	19.50		19.30	19.50	18.90	19.50	22.11	22.5	
		11	2462	15.50	15.50		15.10	15.50		15.50	15.50		15.50	15.50	15.20	15.50	18.36	18.5	
	802.11ac-VHT20 MCS0	1	2412	14.10	14.50	97.69	13.90	14.50	97.95	14.50	14.50	97.95	14.50	14.50	14.40	14.50	17.46	17.5	97.95
		6	2437	18.80	19.50		18.40	19.50		19.20	19.50		19.20	19.50	18.80	19.50	22.01	22.5	
		11	2462	15.40	15.50		15.00	15.50		15.40	15.50		15.40	15.50	15.10	15.50	18.26	18.5	

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	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	17.00	17.50	97.84	17.00	17.50	97.83	17.40	17.50	97.83	17.40	17.50	17.10	17.50	20.26	20.5	98.08
		40	5200	17.60	18.00		17.90	18.00		18.00	18.00		18.00	18.00	17.60	18.00	20.81	21.0	
		44	5220	17.70	18.00		17.80	18.00		17.90	18.00		17.90	18.00	17.80	18.00	20.86	21.0	
		48	5240	17.10	17.50		16.90	17.50		17.20	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
	802.11n-HT20 MCS0	36	5180	16.80	17.50	97.42	16.90	17.50	97.94	17.20	17.50	97.94	17.20	17.50	17.00	17.50	20.11	20.5	97.42
		40	5200	17.70	18.00		17.00	18.00		17.90	18.00		17.90	18.00	17.60	18.00	20.76	21.0	
		44	5220	17.50	18.00		17.30	18.00		17.60	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		48	5240	17.30	17.50		17.20	17.50		17.30	17.50		17.30	17.50	17.40	17.50	20.36	20.5	
	802.11n-VHT40 MCS0	38	5190	15.70	16.00	95.67	15.40	16.00	95.03	15.80	16.00	95.03	15.80	16.00	15.50	16.00	18.66	19.0	95.66
		46	5230	17.10	17.50		17.20	17.50		17.20	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
	802.11ac-VHT20 MCS0	36	5180	16.70	17.50	97.69	16.80	17.50	97.95	17.10	17.50	97.95	17.10	17.50	16.90	17.50	20.01	20.5	97.69
		40	5200	17.60	18.00		16.90	18.00		17.80	18.00		17.80	18.00	17.50	18.00	20.66	21.0	
		44	5220	17.40	18.00		17.20	18.00		17.50	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
		48	5240	17.20	17.50		17.10	17.50		17.20	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
	802.11ac-VHT40 MCS0	38	5190	15.60	16.00	96.08	15.30	16.00	95.69	15.70	16.00	95.69	15.70	16.00	15.40	16.00	18.56	19.0	95.69
		46	5230	17.00	17.50		17.10	17.50		17.10	17.50		17.10	17.50	17.20	17.50	20.16	20.5	
	802.11ac-VHT80 MCS0	42	5210	14.60	15.00	92.68	14.90	15.00	91.94	14.70	15.00	91.94	14.70	15.00	15.00	15.00	17.88	18.0	91.87

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	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
	802.11a 6Mbps	52	5260	17.40	18.00	97.84	17.20	18.00	97.83	17.10	17.50	97.83	17.60	18.00	17.50	18.00	20.56	21.0	98.08
		56	5280	17.50	17.50		17.10	17.50		17.50	17.50		17.50	17.50	17.20	17.50	20.42	20.5	
		60	5300	17.50	17.50		16.80	17.50		17.50	17.50		17.50	17.50	16.90	17.50	20.22	20.5	
		64	5320	17.30	17.50		16.70	17.50		17.40	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
	802.11n-HT20 MCS0	52	5260	17.60	18.00	97.42	17.60	18.00	97.94	17.70	18.00	97.94	17.70	18.00	17.80	18.00	20.76	21.0	97.42
		56	5280	17.50	17.50		16.80	17.50		17.40	17.50		17.40	17.50	17.50	17.50	20.50	20.5	
		60	5300	17.50	17.50		17.00	17.50		17.50	17.50		17.50	17.50	17.40	17.50	20.46	20.5	
		64	5320	17.00	17.00		16.60	17.00		17.00	17.00		17.00	17.00	16.90	17.00	19.96	20.0	
	802.11n-VHT40 MCS0	54	5270	17.20	17.50	95.67	17.10	17.50	95.03	17.30	17.50	95.03	17.30	17.50	17.20	17.50	20.26	20.5	95.66
		62	5310	16.50	16.50		16.40	16.50		16.50	16.50		16.50	16.50	15.80	16.50	19.17	19.5	
	802.11ac-VHT20 MCS0	52	5260	17.50	18.00	97.69	17.50	18.00	97.95	17.60	18.00	97.95	17.60	18.00	17.70	18.00	20.66	21.0	97.69
		56	5280	17.40	17.50		16.70	17.50		17.30	17.50		17.30	17.50	17.40	17.50	20.41	20.5	
		60	5300	17.40	17.50		16.90	17.50		17.40	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		64	5320	16.90	17.00		16.50	17.00		16.90	17.00		16.90	17.00	16.80	17.00	19.86	20.0	
	802.11ac-VHT40 MCS0	54	5270	17.10	17.50	96.08	17.00	17.50	95.69	17.20	17.50	95.69	17.20	17.50	17.10	17.50	20.16	20.5	95.69
		62	5310	16.40	16.50		16.40	16.50		16.40	16.50		16.40	16.50	15.60	16.50	19.03	19.5	
	802.11ac-VHT80 MCS0	58	5290	15.90	16.00	92.68	14.90	16.00	91.94	16.00	16.00	91.94	16.00	16.00	15.10	16.00	18.58	19.0	91.87



5.5GHz WLAN	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 %
	802.11a 6Mbps	100	5500	17.60	18.50	97.84	17.50	18.50	97.83	18.10	18.50	18.00	18.50	21.06	21.5	98.08
		116	5580	18.40	18.50		17.30	18.50		18.50	18.50	17.70	18.50	21.13	21.5	
		124	5620	18.10	18.50		17.40	18.50		18.40	18.50	17.60	18.50	21.03	21.5	
		132	5660	18.20	18.50		17.10	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
		144	5720	18.10	18.50		17.80	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
	802.11n-HT20 MCS0	100	5500	18.00	18.50	97.42	17.90	18.50	97.94	18.20	18.50	18.10	18.50	21.16	21.5	97.42
		116	5580	18.20	18.50		17.50	18.50		18.40	18.50	17.60	18.50	21.03	21.5	
		124	5620	18.10	18.50		17.20	18.50		18.10	18.50	17.30	18.50	20.73	21.5	
		132	5660	17.80	18.50		18.10	18.50		18.00	18.50	17.90	18.50	20.96	21.5	
		144	5720	18.20	18.50		18.10	18.50		18.30	18.50	18.20	18.50	21.26	21.5	
	802.11n-HT40 MCS0	102	5510	16.70	17.00	95.67	16.50	17.00	95.03	16.80	17.00	16.60	17.00	19.71	20.0	95.66
		110	5550	17.40	17.50		16.60	17.50		17.50	17.50	16.70	17.50	20.13	20.5	
		126	5630	17.40	17.50		16.70	17.50		17.50	17.50	16.80	17.50	20.17	20.5	
		134	5670	17.30	17.50		17.20	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		142	5710	17.40	17.50		17.30	17.50		17.50	17.50	17.40	17.50	20.46	20.5	
	802.11ac-VHT20 MCS0	100	5500	17.90	18.50	97.69	17.80	18.50	97.95	18.10	18.50	18.00	18.50	21.06	21.5	97.69
		116	5580	18.10	18.50		17.40	18.50		18.30	18.50	17.50	18.50	20.93	21.5	
		124	5620	17.70	18.50		17.10	18.50		18.00	18.50	17.20	18.50	20.63	21.5	
		132	5660	17.60	18.50		17.90	18.50		17.90	18.50	17.80	18.50	20.86	21.5	
		144	5720	18.10	18.50		18.00	18.50		18.20	18.50	18.10	18.50	21.16	21.5	
	802.11ac-VHT40 MCS0	102	5510	16.60	17.00	96.08	16.40	17.00	95.69	16.70	17.00	16.50	17.00	19.61	20.0	95.69
		110	5550	17.30	17.50		16.50	17.50		17.40	17.50	16.60	17.50	20.03	20.5	
126		5630	17.30	17.50	16.60		17.50	17.50		17.50	16.70	17.50	20.13	20.5		
134		5670	17.20	17.50	17.10		17.50	17.30		17.50	17.20	17.50	20.26	20.5		
142		5710	17.30	17.50	17.20		17.50	17.40		17.50	17.30	17.50	20.36	20.5		
802.11ac-VHT80 MCS0	106	5530	15.40	16.00	92.68	15.30	16.00	91.94	15.60	16.00	15.50	16.00	18.56	19.0	91.87	
	122	5610	17.40	17.50		16.80	17.50		17.50	17.50	16.90	17.50	20.22	20.5		
	138	5690	17.10	17.50		17.00	17.50		17.20	17.50	17.10	17.50	20.16	20.5		
Transmit Antenna					Ant 4		Ant 3		Ant 4+3(4)		Ant 4+3(3)		Ant 4+3			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.40	18.50	97.84	18.20	18.50	97.83	18.50	18.50	18.30	18.50	21.41	21.5	98.08
		157	5785	18.20	18.50		18.00	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
		165	5825	16.90	17.00		16.30	17.00		17.00	17.00	16.40	17.00	19.72	20.0	
	802.11n-HT20 MCS0	149	5745	18.30	18.50	97.42	18.10	18.50	97.94	18.40	18.50	18.20	18.50	21.31	21.5	97.42
		157	5785	18.20	18.50		18.00	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
		165	5825	18.20	18.50		17.80	18.50		18.30	18.50	17.90	18.50	21.11	21.5	
	802.11n-HT40 MCS0	151	5755	17.30	17.50	95.67	17.10	17.50	95.03	17.40	17.50	17.20	17.50	20.31	20.5	95.66
		159	5795	17.30	17.50		17.00	17.50		17.40	17.50	17.10	17.50	20.26	20.5	
	802.11ac-VHT20 MCS0	149	5745	18.20	18.50	97.69	18.00	18.50	97.95	18.30	18.50	18.10	18.50	21.21	21.5	97.69
		157	5785	18.10	18.50		17.90	18.50		18.20	18.50	18.00	18.50	21.11	21.5	
		165	5825	18.10	18.50		17.70	18.50		18.20	18.50	17.80	18.50	21.01	21.5	
802.11ac-VHT40 MCS0	151	5755	17.20	17.50	96.08	17.00	17.50	95.69	17.30	17.50	17.10	17.50	20.21	20.5	95.69	
	159	5795	17.20	17.50		16.90	17.50		17.30	17.50	17.00	17.50	20.16	20.5		
802.11ac-VHT80 MCS0	155	5775	17.30	17.50	92.68	17.20	17.50	91.94	17.40	17.50	17.30	17.50	20.36	20.5	91.87	



Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	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	19.10	19.50		19.20	19.50		19.50	19.50		19.50	19.50	19.40	19.50	22.46	22.5	
		6	2437	19.00	19.50	100.00	18.70	19.50	100.00	19.40	19.50		19.40	19.50	19.00	19.50	22.21	22.5	100.00
		11	2462	18.80	19.50		17.90	19.50		19.00	19.50		19.00	19.50	18.40	19.50	21.72	22.5	
	802.11g 6Mbps	1	2412	15.20	16.00		15.20	16.00		15.50	16.00		15.50	16.00	15.60	16.00	18.56	18.0	
		6	2437	19.00	19.50	98.08	18.60	19.50	97.60	19.40	19.50		19.40	19.50	19.00	19.50	22.21	22.5	97.84
		11	2462	16.20	16.50		15.80	16.50		16.30	16.50		16.30	16.50	15.90	16.50	19.11	19.5	
	802.11n-HT20 MCS0	1	2412	14.20	15.00		14.00	15.00		14.60	15.00		14.60	15.00	14.50	15.00	17.56	18.0	
		6	2437	18.90	19.50	97.94	18.50	19.50	97.93	19.30	19.50		19.30	19.50	18.90	19.50	22.11	22.5	97.94
		11	2462	15.50	15.50		15.10	15.50		15.50	15.50		15.50	15.50	15.20	15.50	18.36	18.5	
	802.11ac-VHT20 MCS0	1	2412	14.10	14.50		13.90	14.50		14.50	14.50		14.50	14.50	14.40	14.50	17.46	17.5	
		6	2437	18.80	19.50	97.69	18.40	19.50	97.95	19.20	19.50		19.20	19.50	18.80	19.50	22.01	22.5	97.95
		11	2462	15.40	15.50		15.00	15.50		15.40	15.50		15.40	15.50	15.10	15.50	18.26	18.5	

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.00	17.50		17.00	17.50		17.40	17.50		17.40	17.50	17.10	17.50	20.26	20.5	
		40	5200	17.60	18.00	97.84	17.90	18.00	97.83	18.00	18.00		18.00	18.00	17.60	18.00	20.81	21.0	98.08
		44	5220	17.70	18.00		17.80	18.00		17.90	18.00		17.90	18.00	17.80	18.00	20.86	21.0	
		48	5240	17.10	17.50		16.90	17.50		17.20	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
	802.11n-HT20 MCS0	36	5180	16.80	17.50		16.90	17.50		17.20	17.50		17.20	17.50	17.00	17.50	20.11	20.5	
		40	5200	17.70	18.00	97.42	17.00	18.00	97.94	17.90	18.00		17.90	18.00	17.60	18.00	20.76	21.0	97.42
		44	5220	17.50	18.00		17.30	18.00		17.60	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		48	5240	17.30	17.50		17.20	17.50		17.30	17.50		17.30	17.50	17.40	17.50	20.36	20.5	
	802.11n-VHT40 MCS0	36	5190	15.70	16.00		15.40	16.00		15.80	16.00		15.80	16.00	15.50	16.00	18.66	19.0	
		46	5230	17.10	17.50	95.67	17.20	17.50	95.03	17.20	17.50		17.20	17.50	17.30	17.50	20.26	20.5	95.66
		36	5180	16.70	17.50		16.80	17.50		17.10	17.50		17.10	17.50	16.90	17.50	20.01	20.5	
	802.11ac-VHT20 MCS0	40	5200	17.60	18.00		16.90	18.00		17.80	18.00		17.80	18.00	17.50	18.00	20.66	21.0	
		44	5220	17.40	18.00	97.69	17.20	18.00	97.95	17.50	18.00		17.50	18.00	17.60	18.00	20.56	21.0	97.69
		48	5240	17.20	17.50		17.10	17.50		17.20	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
	802.11ac-VHT40 MCS0	36	5190	15.60	16.00		15.30	16.00	95.69	15.70	16.00		15.70	16.00	15.40	16.00	18.56	19.0	95.69
		46	5230	17.00	17.50	96.08	17.10	17.50		17.10	17.50		17.10	17.50	17.20	17.50	20.16	20.5	
	802.11ac-VHT80 MCS0	42	5210	14.60	15.00	92.68	14.90	15.00	91.94	14.70	15.00		14.70	15.00	15.00	15.00	17.88	18.0	91.87

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.40	18.00		17.20	18.00		17.10	17.50		17.60	18.00	17.50	18.00	20.56	21.0	
		56	5280	17.50	17.50	97.84	17.10	17.50	97.83	17.50	17.50		17.50	17.50	17.20	17.50	20.42	20.5	98.08
		60	5300	17.50	17.50		16.80	17.50		17.50	17.50		17.50	17.50	16.90	17.50	20.22	20.5	
		64	5320	17.30	17.50		16.70	17.50		17.40	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
	802.11n-HT20 MCS0	52	5260	17.60	18.00		17.60	18.00		17.70	18.00		17.70	18.00	17.80	18.00	20.76	21.0	
		56	5280	17.50	17.50	97.42	16.80	17.50	97.94	17.40	17.50		17.40	17.50	17.50	17.50	20.50	20.5	97.42
		60	5300	17.50	17.50		17.00	17.50		17.50	17.50		17.50	17.50	17.40	17.50	20.46	20.5	
		64	5320	17.00	17.00		16.60	17.00		17.00	17.00		17.00	17.00	16.90	17.00	19.96	20.0	
	802.11n-HT40 MCS0	54	5270	17.20	17.50		17.10	17.50	95.03	17.30	17.50		17.30	17.50	17.20	17.50	20.26	20.5	95.66
		62	5310	16.50	16.50		16.40	16.50		16.50	16.50		16.50	16.50	15.80	16.50	19.17	19.5	
	802.11ac-VHT20 MCS0	52	5260	17.50	18.00		17.50	18.00		17.60	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		56	5280	17.40	17.50	97.69	16.70	17.50	97.95	17.30	17.50		17.30	17.50	17.40	17.50	20.41	20.5	97.69
		60	5300	17.40	17.50		16.90	17.50		17.40	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		64	5320	16.90	17.00		16.50	17.00		16.90	17.00		16.90	17.00	16.80	17.00	19.86	20.0	
	802.11ac-VHT40 MCS0	54	5270	17.10	17.50	96.08	17.00	17.50	95.69	17.20	17.50		17.20	17.50	17.10	17.50	20.16	20.5	95.69
		62	5310	16.40	16.50		16.40	16.50		16.40	16.50		16.40	16.50	15.60	16.50	19.03	19.5	
	802.11ac-VHT80 MCS0	58	5290	15.90	16.00	92.68	14.90	16.00	91.94	16.00	16.00		16.00	16.00	15.10	16.00	18.58	19.0	91.87



	Transmit Antenna					Ant 4		Ant 3		Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.60	18.50	97.84	17.50	18.50	97.83	18.10	18.50	18.00	18.50	21.06	21.5	98.08
		116	5580	18.40	18.50		17.30	18.50		18.50	18.50	18.50	18.50	21.13	21.5	
		124	5620	18.10	18.50		17.40	18.50		18.40	18.50	17.60	18.50	21.03	21.5	
		132	5660	18.20	18.50		17.10	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
	802.11n-HT20 MCS0	144	5720	18.10	18.50	97.42	17.80	18.50	97.94	18.30	18.50	18.10	18.50	21.21	21.5	97.42
		100	5500	18.00	18.50		17.90	18.50		18.20	18.50	18.10	18.50	21.16	21.5	
		116	5580	18.20	18.50		17.50	18.50		18.40	18.50	17.60	18.50	21.03	21.5	
		124	5620	18.10	18.50		17.20	18.50		18.10	18.50	17.30	18.50	20.73	21.5	
	802.11n-HT40 MCS0	132	5660	17.80	18.50	95.67	18.10	18.50	95.03	18.00	18.50	17.90	18.50	20.96	21.5	95.66
		144	5720	18.20	18.50		18.10	18.50		18.30	18.50	18.20	18.50	21.26	21.5	
		102	5510	16.70	17.00		16.50	17.00		16.80	17.00	16.60	17.00	19.71	20.0	
		110	5550	17.40	17.50		16.60	17.50		17.50	17.50	16.70	17.50	20.13	20.5	
	802.11ac-VHT20 MCS0	126	5630	17.40	17.50	97.69	16.70	17.50	97.95	17.50	17.50	16.80	17.50	20.17	20.5	97.69
		134	5670	17.30	17.50		17.20	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		142	5710	17.40	17.50		17.30	17.50		17.50	17.50	17.40	17.50	20.46	20.5	
		100	5500	17.90	18.50		17.80	18.50		18.10	18.50	18.00	18.50	21.06	21.5	
	802.11ac-VHT40 MCS0	116	5580	18.10	18.50	96.08	17.40	18.50	95.69	18.30	18.50	17.50	18.50	20.93	21.5	95.69
		124	5620	17.70	18.50		17.10	18.50		18.00	18.50	17.20	18.50	20.63	21.5	
		132	5660	17.60	18.50		17.90	18.50		17.90	18.50	17.80	18.50	20.86	21.5	
		144	5720	18.10	18.50		18.00	18.50		18.20	18.50	18.10	18.50	21.16	21.5	
	802.11ac-VHT80 MCS0	102	5510	16.60	17.00	92.68	16.40	17.00	91.94	16.70	17.00	16.50	17.00	19.61	20.0	91.87
		110	5550	17.30	17.50		16.50	17.50		17.40	17.50	16.60	17.50	20.03	20.5	
		126	5630	17.30	17.50		16.60	17.50		17.50	17.50	16.70	17.50	20.13	20.5	
		134	5670	17.20	17.50		17.10	17.50		17.30	17.50	17.20	17.50	20.26	20.5	
802.11ac-VHT80 MCS0	142	5710	17.30	17.50	92.68	17.20	17.50	91.94	17.40	17.50	17.30	17.50	20.36	20.5	91.87	
	106	5530	15.40	16.00		15.30	16.00		15.60	16.00	15.50	16.00	18.56	19.0		
	122	5610	17.40	17.50		16.80	17.50		17.50	17.50	16.90	17.50	20.22	20.5		
	138	5690	17.10	17.50		17.00	17.50		17.20	17.50	17.10	17.50	20.16	20.5		

Transmit Antenna					Ant 4		Ant 3		Ant 4+3(4)		Ant 4+3(3)		Ant 4+3			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.40	18.50	97.84	18.20	18.50	97.83	18.50	18.50	18.30	18.50	21.41	21.5	98.08
		157	5785	18.20	18.50		18.00	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
		165	5825	16.90	17.00		16.30	17.00		17.00	17.00	16.40	17.00	19.72	20.0	
	802.11n-HT20 MCS0	149	5745	18.30	18.50	97.42	18.10	18.50	97.94	18.40	18.50	18.20	18.50	21.31	21.5	97.42
		157	5785	18.20	18.50		18.00	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
		165	5825	18.20	18.50		17.80	18.50		18.30	18.50	17.90	18.50	21.11	21.5	
	802.11n-HT40 MCS0	151	5755	17.30	17.50	95.67	17.10	17.50	95.03	17.40	17.50	17.20	17.50	20.31	20.5	95.66
		159	5795	17.30	17.50		17.00	17.50		17.40	17.50	17.10	17.50	20.26	20.5	
		149	5745	18.20	18.50		18.00	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
	802.11ac-VHT20 MCS0	157	5785	18.10	18.50	97.69	17.90	18.50	97.95	18.20	18.50	18.00	18.50	21.11	21.5	97.69
		165	5825	18.10	18.50		17.70	18.50		18.20	18.50	17.80	18.50	21.01	21.5	
		151	5755	17.20	17.50		17.00	17.50		17.30	17.50	17.10	17.50	20.21	20.5	
802.11ac-VHT40 MCS0	159	5795	17.20	17.50	96.08	16.90	17.50	95.69	17.30	17.50	17.00	17.50	20.16	20.5	95.69	
	155	5775	17.30	17.50		17.20	17.50		17.40	17.50	17.30	17.50	20.36	20.5		
802.11ac-VHT80 MCS0	155	5775	17.30	17.50	92.68	17.20	17.50	91.94	17.40	17.50	17.30	17.50	20.36	20.5	91.87	



Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %				Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	12.50	13.00	100.00				15.00	16.50	100.00	12.80	13.00	16.10	16.50	17.91	18.1	100.00
		6	2437	12.50	13.00					15.00	16.50		12.80	13.00	16.10	16.50	17.77	18.1	
		11	2462	12.90	13.00					15.00	16.50		12.50	13.00	16.10	16.50	17.81	18.1	
	802.11g 6Mbps	1	2412	12.70	13.00	98.08				15.20	16.00	97.60	12.80	13.00	15.90	16.00	17.63	17.8	97.84
		6	2437	12.70	13.00					15.40	16.50		12.70	13.00	15.40	16.50	17.94	18.1	
		11	2462	12.80	13.00					15.80	16.50		12.90	13.00	15.40	16.50	17.34	18.1	
	802.11n-HT20 MCS0	1	2412	12.90	13.00	97.94				14.00	15.00	97.93	12.70	13.00	14.80	15.00	16.89	17.1	97.94
		6	2437	12.80	13.00					16.40	16.50		12.80	13.00	16.20	16.50	17.83	18.1	
		11	2462	12.90	13.00					15.10	15.50		12.60	13.00	15.30	15.50	17.17	17.4	
	802.11ac-VHT20 MCS0	1	2412	12.70	13.00	97.69				13.90	14.50	97.95	12.80	13.00	14.30	14.50	16.62	16.8	97.95
		6	2437	12.80	13.00					16.40	16.50		12.90	13.00	16.40	16.50	18.00	18.1	
		11	2462	12.80	13.00					15.00	15.50		13.00	13.00	15.49	16.50	17.43	17.4	

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	14.60	15.00	97.84				17.00	17.50	97.83	14.70	15.00	17.10	17.50	19.07	19.4	98.08
		40	5200	14.60	15.00					17.90	18.00		14.70	15.00	17.70	18.00	19.46	19.8	
		44	5220	14.80	15.00					17.80	18.00		14.70	15.00	17.70	18.00	19.46	19.8	
		48	5240	14.90	15.00					16.90	17.50		14.80	15.00	17.40	17.50	19.30	19.4	
	802.11n-HT20 MCS0	36	5180	14.90	15.00	97.42				16.90	17.50	97.94	14.90	15.00	17.30	17.50	19.27	19.4	97.42
		40	5200	14.90	15.00					17.00	18.00		14.60	15.00	17.70	18.00	19.43	19.8	
		44	5220	14.70	15.00					17.30	18.00		14.60	15.00	17.70	18.00	19.43	19.8	
		48	5240	14.70	15.00					17.20	17.50		14.60	15.00	17.40	17.50	19.23	19.4	
	802.11n-VHT40 MCS0	36	5190	14.70	15.00	95.67				15.40	16.00	95.03	14.60	15.00	15.90	16.00	18.31	18.5	95.66
		46	5230	14.70	15.00					17.20	17.50		14.60	15.00	17.20	17.50	19.10	19.4	
		36	5180	14.80	15.00					16.80	17.50		14.80	15.00	17.20	17.50	19.17	19.4	
		40	5200	14.80	15.00					16.90	18.00		14.50	15.00	17.60	18.00	19.33	19.8	
	802.11ac-VHT40 MCS0	44	5220	14.60	15.00	97.69				17.20	18.00	97.95	14.50	15.00	17.60	18.00	19.33	19.8	97.69
		48	5240	14.60	15.00					17.10	17.50		14.50	15.00	17.30	17.50	19.13	19.4	
	802.11ac-VHT40 MCS0	38	5190	14.60	15.00	96.08				15.30	16.00	95.69	14.50	15.00	15.80	16.00	18.21	18.5	95.69
		46	5230	14.60	15.00					17.10	17.50		14.50	15.00	17.10	17.50	19.00	19.4	
	802.11ac-VHT80 MCS0	42	5210	14.60	15.00	92.68				14.90	15.00	91.94	14.70	15.00	15.00	15.00	17.86	18.0	91.87

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %				Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	14.90	15.00	97.84				17.20	18.00	97.83	14.60	15.00	17.90	18.00	19.57	19.8	98.08
		56	5280	14.80	15.00					17.10	17.50		14.80	15.00	17.10	17.50	19.11	19.4	
		60	5300	14.90	15.00					16.80	17.50		14.90	15.00	17.20	17.50	19.21	19.4	
		64	5320	14.60	15.00					16.70	17.50		14.90	15.00	17.30	17.50	19.27	19.4	
	802.11n-HT20 MCS0	52	5260	14.70	15.00	97.42				17.60	18.00	97.94	14.80	15.00	17.80	18.00	19.56	19.8	97.42
		56	5280	14.70	15.00					16.80	17.50		14.90	15.00	17.10	17.50	19.15	19.4	
		60	5300	14.70	15.00					17.00	17.50		14.90	15.00	17.10	17.50	19.15	19.4	
		64	5320	14.90	15.00					16.60	17.00		14.70	15.00	16.80	17.00	18.89	19.1	
	802.11n-HT40 MCS0	54	5270	14.70	15.00	95.67				17.10	17.50	95.03	14.90	15.00	17.10	17.50	19.15	19.4	95.66
		62	5310	14.70	15.00					16.40	16.50		14.60	15.00	16.50	16.50	18.70	18.8	
	802.11ac-VHT20 MCS0	52	5260	14.60	15.00	97.69				17.50	18.00	97.95	14.70	15.00	17.70	18.00	19.46	19.8	97.69
		56	5280	14.60	15.00					16.70	17.50		14.80	15.00	17.00	17.50	19.05	19.4	
		60	5300	14.60	15.00					16.90	17.50		14.80	15.00	17.00	17.50	19.05	19.4	
		64	5320	14.80	15.00					15.50	17.00		14.60	15.00	16.70	17.00	18.79	19.1	
	802.11ac-VHT40 MCS0	54	5270	14.60	15.00	96.08				17.00	17.50	95.69	14.80	15.00	17.00	17.50	19.05	19.4	95.69
		62	5310	14.60	15.00					16.40	16.50		14.50	15.00	16.50	16.50	18.60	18.8	
	802.11ac-VHT80 MCS0	58	5290	14.60	15.00	92.68				14.90	16.00	91.94	14.80	15.00	15.50	16.00	18.17	18.5	91.87



Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
	802.11a 6Mbps	100	5500	12.40	12.50	97.84	17.50	18.50	97.83	12.40	12.50	18.40	18.50	19.37	19.5	98.08	19.37	19.5
		116	5580	12.20	12.50		17.30	18.50		12.50	12.50	18.10	18.50	19.16	19.5		19.16	19.5
		124	5620	12.30	12.50		17.40	18.50		12.40	12.50	18.40	18.50	19.37	19.5		19.37	19.5
		132	5680	12.30	12.50		17.10	18.50		12.10	12.50	18.40	18.50	19.31	19.5		19.31	19.5
	802.11n-HT20 MCS0	144	5720	12.10	12.50	97.42	17.80	18.50	97.94	12.50	12.50	18.50	18.50	19.47	19.5	97.42	19.47	19.5
		100	5500	12.30	12.50		17.90	18.50		12.40	12.50	18.40	18.50	19.37	19.5		19.37	19.5
		116	5580	12.20	12.50		17.50	18.50		12.40	12.50	18.10	18.50	19.14	19.5		19.14	19.5
		124	5620	12.30	12.50		17.20	18.50		12.40	12.50	18.10	18.50	19.14	19.5		19.14	19.5
	802.11n-HT40 MCS0	132	5660	12.20	12.50	95.67	18.10	18.50	95.03	12.40	12.50	18.10	18.50	19.14	19.5	95.66	19.14	19.5
		144	5720	12.40	12.50		18.10	18.50		12.30	12.50	18.30	18.50	19.27	19.5		19.27	19.5
		102	5510	12.40	12.50		16.50	17.00		12.30	12.50	16.60	17.00	17.97	18.3		17.97	18.3
		110	5550	12.40	12.50		16.60	17.50		12.30	12.50	17.40	17.50	18.57	18.7		18.57	18.7
	802.11ac-VHT20 MCS0	126	5630	12.20	12.50	97.69	16.70	17.50	97.95	12.20	12.50	17.30	17.50	18.47	18.7	97.69	18.47	18.7
		134	5670	12.20	12.50		17.20	17.50		12.10	12.50	17.10	17.50	18.29	18.7		18.29	18.7
		142	5710	12.40	12.50		17.30	17.50		12.20	12.50	17.30	17.50	18.47	18.7		18.47	18.7
		100	5500	12.20	12.50		17.80	18.50		12.30	12.50	18.30	18.50	19.27	19.5		19.27	19.5
	802.11ac-VHT40 MCS0	116	5580	12.10	12.50	96.08	17.40	18.50	95.69	12.30	12.50	18.00	18.50	19.04	19.5	96.08	19.04	19.5
		124	5620	12.20	12.50		17.10	18.50		12.30	12.50	18.00	18.50	19.04	19.5		19.04	19.5
		132	5660	12.10	12.50		17.90	18.50		12.30	12.50	18.00	18.50	19.04	19.5		19.04	19.5
		144	5720	12.30	12.50		18.00	18.50		12.20	12.50	18.20	18.50	19.17	19.5		19.17	19.5
	802.11ac-VHT80 MCS0	102	5510	12.30	12.50	92.68	16.40	17.00	91.94	12.20	12.50	16.50	17.00	17.87	18.3	92.68	17.87	18.3
		110	5550	12.30	12.50		16.50	17.50		12.20	12.50	17.30	17.50	18.47	18.7		18.47	18.7
		126	5630	12.10	12.50		16.60	17.50		12.10	12.50	17.20	17.50	18.37	18.7		18.37	18.7
		134	5670	12.10	12.50		17.10	17.50		12.00	12.50	17.00	17.50	18.19	18.7		18.19	18.7
	802.11ac-VHT80 MCS0	142	5710	12.30	12.50	91.87	17.20	17.50	91.94	12.10	12.50	17.20	17.50	18.37	18.7	91.87	18.37	18.7
		106	5530	12.40	12.50		15.30	16.00		12.10	12.50	15.50	16.00	17.13	17.6		17.13	17.6
		122	5610	12.50	12.50		16.80	17.50		12.20	12.50	17.10	17.50	18.32	18.7		18.32	18.7
		138	5690	12.10	12.50		17.00	17.50		12.20	12.50	17.00	17.50	18.24	18.7		18.24	18.7

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
	802.11a 6Mbps	149	5745	13.40	13.50	97.84	18.20	18.50	97.83	13.30	13.50	18.30	18.50	19.49	19.7	98.08	19.49	19.7
		157	5785	13.40	13.50		18.00	18.50		13.30	13.50	18.30	18.50	19.49	19.7		19.49	19.7
		165	5825	13.30	13.50		16.30	17.00		13.30	13.50	16.90	17.00	18.47	18.6		18.47	18.6
	802.11n-HT20 MCS0	149	5745	13.40	13.50	97.42	18.10	18.50	97.94	13.40	13.50	18.40	18.50	19.59	19.7	97.42	19.59	19.7
		157	5785	13.30	13.50		18.00	18.50		13.00	13.50	18.10	18.50	19.27	19.7		19.27	19.7
		165	5825	13.20	13.50		17.80	18.50		13.30	13.50	18.40	18.50	19.57	19.7		19.57	19.7
	802.11n-HT40 MCS0	151	5755	13.30	13.50	95.67	17.10	17.50	95.03	13.50	13.50	17.40	17.50	18.88	19.0	95.66	18.88	19.0
		159	5795	13.30	13.50		17.00	17.50		13.40	13.50	17.30	17.50	18.78	19.0		18.78	19.0
		149	5745	13.30	13.50		18.00	18.50		13.20	13.50	18.30	18.50	19.47	19.7		19.47	19.7
	802.11ac-VHT20 MCS0	157	5785	13.20	13.50	97.69	17.90	18.50	97.95	13.40	13.50	18.50	18.50	19.67	19.7	97.69	19.67	19.7
		165	5825	13.10	13.50		17.70	18.50		13.30	13.50	18.40	18.50	19.57	19.7		19.57	19.7
		151	5755	13.20	13.50		17.00	17.50		13.40	13.50	17.40	17.50	18.86	19.0		18.86	19.0
	802.11ac-VHT40 MCS0	159	5795	13.20	13.50	92.68	16.90	17.50	95.69	13.30	13.50	17.30	17.50	18.76	19.0	92.68	18.76	19.0
		155	5775	13.40	13.50		17.20	17.50		13.30	13.50	17.40	17.50	18.83	19.0		18.83	19.0



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	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	19.20	19.50	100.00	19.50	19.50	100.00	19.50	19.50	19.40	19.50	22.46	22.5	100.00
		6	2437	15.70	16.00		18.70	19.50		19.00	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	15.70	16.00		17.90	19.50		19.00	19.50		19.00	19.50	19.40	19.50	21.72	22.5	
	802.11g 6Mbps	1	2412	15.20	16.00	98.08	15.20	16.00	97.60	15.50	16.00	97.60	15.50	16.00	15.60	16.00	18.56	18.0	97.84
		6	2437	15.70	16.00		16.60	19.50		19.40	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	16.20	16.50		15.80	16.50		16.30	16.50		16.30	16.50	15.90	16.50	19.11	19.5	
	802.11n-HT20 MCS0	1	2412	14.20	15.00	97.94	14.00	15.00	97.93	14.60	15.00	97.93	14.60	15.00	14.50	15.00	17.56	18.0	97.94
		6	2437	15.70	16.00		15.50	19.50		19.30	19.50		19.30	19.50	18.90	19.50	22.11	22.5	
		11	2462	15.50	15.50		15.10	15.50		15.50	15.50		15.50	15.50	15.20	15.50	18.36	18.5	
	802.11ac-VHT20 MCS0	1	2412	14.10	14.50	97.69	13.90	14.50	97.95	14.50	14.50	97.95	14.50	14.50	14.40	14.50	17.46	17.5	97.95
		6	2437	15.60	16.00		18.40	19.50		19.20	19.50		19.20	19.50	18.80	19.50	22.01	22.5	
		11	2462	15.40	15.50		15.00	15.50		15.40	15.50		15.40	15.50	15.10	15.50	18.26	18.5	

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	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	17.40	17.50	97.84	15.10	15.50	97.83	17.40	17.50	97.83	17.40	17.50	15.10	15.50	19.41	19.6	98.08
		40	5200	17.40	17.50		15.10	15.50		17.30	17.50		17.30	17.50	15.10	15.50	19.35	19.6	
		44	5220	17.10	17.50		15.40	15.50		17.10	17.50		17.10	17.50	15.10	15.50	19.22	19.6	
		48	5240	17.20	17.50		15.40	15.50		17.20	17.50		17.20	17.50	15.00	15.50	19.25	19.6	
	802.11n-HT20 MCS0	36	5180	17.10	17.50	97.42	15.20	15.50	97.94	17.20	17.50	97.94	17.20	17.50	15.40	15.50	19.40	19.6	97.42
		40	5200	17.20	17.50		15.40	15.50		17.30	17.50		17.30	17.50	15.30	15.50	19.42	19.6	
		44	5220	17.40	17.50		15.20	15.50		17.30	17.50		17.30	17.50	15.40	15.50	19.46	19.6	
		48	5240	17.40	17.50		15.30	15.50		17.10	17.50		17.10	17.50	15.40	15.50	19.34	19.6	
	802.11n-VHT40 MCS0	36	5190	15.70	16.00	95.67	15.10	15.50	95.03	15.80	16.00	95.03	15.80	16.00	15.50	15.50	18.66	18.6	95.66
		46	5230	17.30	17.50		15.20	15.50		17.40	17.50		17.40	17.50	15.40	15.50	19.52	19.6	
		36	5180	17.00	17.50		15.10	15.50		17.30	17.50		17.30	17.50	15.00	15.50	19.31	19.6	
		40	5200	17.10	17.50		15.30	15.50		17.40	17.50		17.40	17.50	15.10	15.50	19.41	19.6	
	802.11ac-VHT20 MCS0	44	5220	17.30	17.50	97.69	15.10	15.50	97.95	17.10	17.50	97.95	17.10	17.50	15.20	15.50	19.26	19.6	97.69
		48	5240	17.30	17.50		15.20	15.50		17.20	17.50		17.20	17.50	15.30	15.50	19.36	19.6	
		36	5190	15.60	16.00		15.30	15.50		15.70	16.00		15.70	16.00	15.40	15.50	18.56	18.6	
		46	5230	17.20	17.50		15.10	15.50		17.00	17.50		17.00	17.50	15.30	15.50	19.24	19.6	
	802.11ac-VHT80 MCS0	42	5210	14.60	15.00	92.68	14.90	15.00	91.94	14.70	15.00	91.94	14.70	15.00	15.00	15.00	17.86	18.0	91.87

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	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %
	802.11a 6Mbps	52	5260	17.20	17.50	97.84	15.30	15.50	97.83	17.30	17.50	97.83	17.30	17.50	15.40	15.50	19.46	19.6	98.08
		56	5280	17.30	17.50		15.20	15.50		17.40	17.50		17.40	17.50	15.30	15.50	19.46	19.6	
		60	5300	17.30	17.50		15.30	15.50		17.40	17.50		17.40	17.50	15.40	15.50	19.52	19.6	
		64	5320	17.20	17.50		15.30	15.50		17.30	17.50		17.30	17.50	15.40	15.50	19.46	19.6	
	802.11n-HT20 MCS0	52	5260	17.20	17.50	97.42	15.10	15.50	97.94	17.30	17.50	97.94	17.30	17.50	15.20	15.50	19.39	19.6	97.42
		56	5280	17.40	17.50		15.10	15.50		17.40	17.50		17.40	17.50	15.20	15.50	19.45	19.6	
		60	5300	17.40	17.50		15.10	15.50		17.40	17.50		17.40	17.50	15.20	15.50	19.45	19.6	
		64	5320	16.90	17.00		15.20	15.50		16.90	17.00		16.90	17.00	15.30	15.50	19.18	19.3	
	802.11n-VHT40 MCS0	54	5270	17.40	17.50	95.67	15.10	15.50	95.03	17.40	17.50	95.03	17.40	17.50	15.20	15.50	19.45	19.6	95.66
		62	5310	16.40	16.50		15.40	15.50		16.40	16.50		16.40	16.50	15.40	15.50	18.94	19.0	
		52	5260	17.10	17.50		15.00	15.50		17.20	17.50		17.20	17.50	15.10	15.50	19.29	19.6	
		56	5280	17.30	17.50		15.00	15.50		17.30	17.50		17.30	17.50	15.10	15.50	19.35	19.6	
	802.11ac-VHT20 MCS0	60	5300	17.30	17.50	97.69	15.00	15.50	97.95	17.30	17.50	97.95	17.30	17.50	15.10	15.50	19.35	19.6	97.69
		64	5320	16.80	17.00		15.10	15.50		16.80	17.00		16.80	17.00	15.20	15.50	19.08	19.3	
		54	5270	17.30	17.50		15.00	15.50		17.30	17.50		17.30	17.50	15.10	15.50	19.35	19.6	
		62	5310	16.30	16.50		15.30	15.50		16.30	16.50		16.30	16.50	15.30	15.50	18.84	19.0	
	802.11ac-VHT80 MCS0	58	5290	15.90	16.00	92.68	15.10	15.50	91.94	15.90	16.00	91.94	15.90	16.00	15.20	15.50	18.57	18.8	91.87



Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
	802.11a 6Mbps	100	5500	15.90	16.00	97.84	17.50	18.50	97.83	15.80	16.00	18.20	18.50	20.17	20.4	98.08	20.17	20.4
		116	5580	15.70	16.00		17.30	18.50		15.80	16.00	18.20	18.50	20.10	20.4		20.10	20.4
		124	5620	15.80	16.00		17.40	18.50		15.80	16.00	18.20	18.50	20.17	20.4		20.17	20.4
		132	5680	15.80	16.00		17.10	18.50		15.70	16.00	18.10	18.50	20.07	20.4		20.07	20.4
	802.11n-HT20 MCS0	144	5720	15.60	16.00	97.42	17.80	18.50	97.94	15.80	16.00	18.40	18.50	20.30	20.4	97.42	20.30	20.4
		100	5500	15.80	16.00		17.90	18.50		15.90	16.00	18.40	18.50	20.34	20.4		20.34	20.4
		116	5580	15.70	16.00		17.50	18.50		15.90	16.00	18.10	18.50	20.15	20.4		20.15	20.4
		124	5620	15.80	16.00		17.20	18.50		15.90	16.00	18.10	18.50	20.15	20.4		20.15	20.4
	802.11n-HT40 MCS0	132	5660	15.70	16.00	95.67	18.10	18.50	95.03	15.90	16.00	18.10	18.50	20.15	20.4	95.66	20.15	20.4
		144	5720	15.90	16.00		18.10	18.50		15.80	16.00	18.30	18.50	20.24	20.4		20.24	20.4
		102	5510	15.90	16.00		16.50	17.00		15.80	16.00	16.60	17.00	19.23	19.5		19.23	19.5
		110	5550	15.90	16.00		16.60	17.50		15.80	16.00	17.40	17.50	19.68	19.8		19.68	19.8
	802.11ac-VHT20 MCS0	126	5630	15.70	16.00	97.69	16.70	17.50	97.95	15.70	16.00	17.30	17.50	19.58	19.8	97.69	19.58	19.8
		134	5670	15.70	16.00		17.20	17.50		15.60	16.00	17.10	17.50	19.42	19.8		19.42	19.8
		142	5710	15.90	16.00		17.30	17.50		15.70	16.00	17.30	17.50	19.58	19.8		19.58	19.8
		100	5500	15.70	16.00		17.80	18.50		15.80	16.00	18.30	18.50	20.24	20.4		20.24	20.4
	802.11ac-VHT40 MCS0	116	5580	15.60	16.00	96.08	17.40	18.50	95.69	15.80	16.00	18.00	18.50	20.05	20.4	96.08	20.05	20.4
		124	5620	15.70	16.00		17.10	18.50		15.80	16.00	18.00	18.50	20.05	20.4		20.05	20.4
		132	5660	15.60	16.00		17.90	18.50		15.80	16.00	18.00	18.50	20.05	20.4		20.05	20.4
		144	5720	15.80	16.00		18.00	18.50		15.70	16.00	18.20	18.50	20.14	20.4		20.14	20.4
	802.11ac-VHT80 MCS0	102	5510	15.80	16.00	92.68	16.40	17.00	91.94	15.70	16.00	16.50	17.00	19.13	19.5	92.68	19.13	19.5
		110	5550	15.80	16.00		16.50	17.50		15.70	16.00	17.30	17.50	19.58	19.8		19.58	19.8
		126	5630	15.60	16.00		16.60	17.50		15.60	16.00	17.20	17.50	19.48	19.8		19.48	19.8
		134	5670	15.60	16.00		17.10	17.50		15.50	16.00	17.00	17.50	19.32	19.8		19.32	19.8
	802.11ac-VHT80 MCS0	142	5710	15.80	16.00	92.68	17.20	17.50	91.94	15.60	16.00	17.20	17.50	19.48	19.8	92.68	19.48	19.8
		106	5530	15.40	16.00		15.30	16.00		15.60	16.00	15.50	16.00	18.56	19.0		18.56	19.0
		122	5610	15.90	16.00		16.80	17.50		15.70	16.00	17.10	17.50	19.47	19.8		19.47	19.8
		138	5690	15.80	16.00		17.00	17.50		15.70	16.00	17.00	17.50	19.41	19.8		19.41	19.8

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
	802.11a 6Mbps	149	5745	16.30	16.50	97.84	18.20	18.50	97.83	16.40	16.50	18.10	18.50	20.34	20.6	98.08	20.34	20.6
		157	5785	16.40	16.50		18.00	18.50		16.20	16.50	18.30	18.50	20.39	20.6		20.39	20.6
		165	5825	16.30	16.50		16.30	17.00		16.30	16.50	16.90	17.00	19.62	19.8		19.62	19.8
	802.11n-HT20 MCS0	149	5745	16.30	16.50	97.42	18.10	18.50	97.94	16.40	16.50	18.40	18.50	20.52	20.6	97.42	20.52	20.6
		157	5785	16.30	16.50		18.00	18.50		16.10	16.50	18.10	18.50	20.22	20.6		20.22	20.6
		165	5825	16.20	16.50		17.80	18.50		16.30	16.50	18.40	18.50	20.49	20.6		20.49	20.6
	802.11n-HT40 MCS0	151	5755	16.20	16.50	95.67	17.10	17.50	95.03	16.40	16.50	17.40	17.50	19.94	20.0	95.66	19.94	20.0
		159	5795	16.20	16.50		17.00	17.50		16.40	16.50	17.30	17.50	19.88	20.0		19.88	20.0
		149	5745	16.20	16.50		18.00	18.50		16.30	16.50	18.30	18.50	20.42	20.6		20.42	20.6
	802.11ac-VHT20 MCS0	157	5785	16.20	16.50	97.69	17.90	18.50	97.95	16.00	16.50	18.50	18.50	20.44	20.6	97.69	20.44	20.6
		165	5825	16.10	16.50		17.70	18.50		16.20	16.50	18.40	18.50	20.45	20.6		20.45	20.6
		151	5755	16.10	16.50		17.00	17.50		16.30	16.50	17.40	17.50	19.90	20.0		19.90	20.0
	802.11ac-VHT40 MCS0	159	5795	16.10	16.50	96.08	16.90	17.50	95.69	16.30	16.50	17.30	17.50	19.84	20.0	96.08	19.84	20.0
		155	5775	16.10	16.50		17.20	17.50		16.30	16.50	17.40	17.50	19.90	20.0		19.90	20.0

General Note:

1.For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 77.13% considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation.

Bluetooth Default Power Table

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	16.99	17.32	17.60
	CH 39	2441	17.83	17.91	17.93
	CH 78	2480	17.89	17.96	17.98
Tune-up Limit			18	18	18

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	10.90	10.90
	CH 19	2440	11.00	11.00
	CH 39	2480	10.70	10.80
Tune-up Limit			11.5	11.5

Bluetooth Power Table 1

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	16.99	17.32	17.60
	CH 39	2441	17.83	17.91	17.93
	CH 78	2480	17.89	17.96	17.98
Tune-up Limit			18	18	18

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	10.90	10.90
	CH 19	2440	11.00	11.00
	CH 39	2480	10.70	10.80
Tune-up Limit			11.5	11.5

Bluetooth Power Table 2

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	10.28	9.52	9.55
	CH 39	2441	10.61	9.51	9.56
	CH 78	2480	9.53	9.52	9.51
Tune-up Limit			11.5	11.5	11.5

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	10.90	10.90
	CH 19	2440	11.00	11.00
	CH 39	2480	10.70	10.80
Tune-up Limit			11.5	11.5

Bluetooth Power Table 3

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	16.55	16.27	16.25
	CH 39	2441	16.52	16.43	16.98
	CH 78	2480	15.10	15.00	15.57
Tune-up Limit			17	17	17

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	10.90	10.90
	CH 19	2440	11.00	11.00
	CH 39	2480	10.70	10.80
Tune-up Limit			11.5	11.5

