



Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	21.00



Ant 1								
GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
Ant 0								
GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00



Ant 0								
GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	20.00
Ant 2								
GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	21.00



Ant 1								
GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
Ant 0								
GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00



Ant 0								
GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	20.00
Ant 2								
GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	21.00



		Ant 1							
GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251	128		189	251		
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8			
GSM 1 Tx slot	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20	
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20	
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20	
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94	
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20	
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50	
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00	
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74	
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00	
		Ant 0							
GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810	512		661	810		
Frequency (MHz)	1850.2	1880	1909.8	1850.2	1880	1909.8			
GSM 1 Tx slot	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20	
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20	
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70	
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44	
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70	
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50	
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00	
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74	
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00	



Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	21.00



		Ant 1							
GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251	128		189	251		
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8			
GSM 1 Tx slot	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20	
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20	
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20	
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94	
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20	
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50	
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00	
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74	
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00	
		Ant 0							
GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810	512		661	810		
Frequency (MHz)	1850.2	1880	1909.8	1850.2	1880	1909.8			
GSM 1 Tx slot	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20	
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20	
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70	
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44	
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70	
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50	
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00	
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74	
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00	





Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.06	32.48	32.22	33.50	23.06	23.48	23.22	24.50
GPRS 1 Tx slot	32.08	32.52	32.24	33.50	23.08	23.52	23.24	24.50
GPRS 2 Tx slots	31.36	31.37	30.98	32.50	25.36	25.37	24.98	26.50
GPRS 3 Tx slots	28.77	29.22	28.90	30.50	24.51	24.96	24.64	26.24
GPRS 4 Tx slots	28.98	28.97	28.40	29.50	25.98	25.97	25.40	26.50
EDGE 1 Tx slot	25.99	25.81	25.78	27.50	16.99	16.81	16.78	18.50
EDGE 2 Tx slots	25.89	25.82	25.60	27.00	19.89	19.82	19.60	21.00
EDGE 3 Tx slots	24.05	24.10	23.88	25.00	19.79	19.84	19.62	20.74
EDGE 4 Tx slots	22.06	22.16	21.82	23.00	19.06	19.16	18.82	20.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.09	29.25	29.28	30.50	20.09	20.25	20.28	21.50
GPRS 1 Tx slot	29.10	29.26	29.29	30.50	20.10	20.26	20.29	21.50
GPRS 2 Tx slots	28.19	28.70	28.70	29.70	22.19	22.70	22.70	23.70
GPRS 3 Tx slots	26.87	27.03	27.22	28.00	22.61	22.77	22.96	23.74
GPRS 4 Tx slots	25.56	25.72	25.48	27.00	22.56	22.72	22.48	24.00
EDGE 1 Tx slot	25.33	25.57	25.58	26.50	16.33	16.57	16.58	17.50
EDGE 2 Tx slots	24.89	25.24	25.15	26.00	18.89	19.24	19.15	20.00
EDGE 3 Tx slots	23.70	24.07	23.94	25.00	19.44	19.81	19.68	20.74
EDGE 4 Tx slots	22.90	23.10	23.08	24.00	19.90	20.10	20.08	21.00



Ant 1								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
TX Channel	824.2	836.4	848.8		824.2	836.4	848.8	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.13	31.44	31.22	32.20	22.13	22.44	22.22	23.20
GPRS 1 Tx slot	31.14	31.47	31.25	32.20	22.14	22.47	22.25	23.20
GPRS 2 Tx slots	30.36	30.64	30.30	31.20	24.36	24.64	24.30	25.20
GPRS 3 Tx slots	27.73	28.57	27.96	29.20	23.47	24.31	23.70	24.94
GPRS 4 Tx slots	27.58	28.20	27.72	28.20	24.58	25.20	24.72	25.20
EDGE 1 Tx slot	25.17	25.12	24.95	26.50	16.17	16.12	15.95	17.50
EDGE 2 Tx slots	24.98	24.88	24.77	26.00	18.98	18.88	18.77	20.00
EDGE 3 Tx slots	23.22	23.10	22.90	24.00	18.96	18.84	18.64	19.74
EDGE 4 Tx slots	21.32	21.35	20.89	22.00	18.32	18.35	17.89	19.00
Ant 0								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.75	28.83	28.80	30.20	19.75	19.83	19.80	21.20
GPRS 1 Tx slot	28.90	29.22	29.13	30.20	19.90	20.22	20.13	21.20
GPRS 2 Tx slots	28.30	28.37	28.32	29.70	22.30	22.37	22.32	23.70
GPRS 3 Tx slots	26.78	26.84	26.79	27.70	22.52	22.58	22.53	23.44
GPRS 4 Tx slots	25.51	25.59	25.54	26.70	22.51	22.59	22.54	23.70
EDGE 1 Tx slot	25.18	25.33	25.39	26.50	16.18	16.33	16.39	17.50
EDGE 2 Tx slots	24.55	24.97	24.81	26.00	18.55	18.97	18.81	20.00
EDGE 3 Tx slots	23.44	23.87	23.61	25.00	19.18	19.61	19.35	20.74
EDGE 4 Tx slots	22.35	22.65	22.65	24.00	19.35	19.65	19.65	21.00



Band		Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.33	24.49	24.70	25.70	24.56	24.66	24.61	25.70	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	24.35	24.51	24.71	25.70	24.60	24.67	24.66	25.70	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.59	23.76	24.70	23.60	23.73	23.70	24.70	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	23.35	23.59	23.48	24.70	23.62	23.70	23.69	24.70	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.86	23.09	23.27	24.20	23.09	23.18	23.19	24.20	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.88	23.09	23.26	24.20	23.09	23.19	22.81	24.20	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.28	23.58	23.68	24.70	23.58	23.68	23.69	24.70	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.30	23.59	23.43	24.70	23.58	23.68	23.68	24.70	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.86	23.09	23.17	24.20	23.02	23.14	23.10	24.20	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.80	23.05	23.23	24.20	23.05	23.10	22.77	24.20	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	23.38	23.59	23.77	24.70	23.62	23.72	23.72	24.70	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	21.40	21.64	21.79	22.70	21.57	21.69	21.59	22.70	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	22.40	22.64	22.77	23.70	22.60	22.68	22.69	23.70	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	21.39	21.59	21.74	22.70	21.59	21.69	21.70	22.70	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	23.40	23.60	23.80	24.70	23.60	23.70	23.70	24.70	22.80	22.80	22.70	24.00



Band		Ant 0			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00



Band		Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.33	24.49	24.70	25.70	24.56	24.66	24.61	25.70	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	24.35	24.51	24.71	25.70	24.60	24.67	24.66	25.70	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.59	23.76	24.70	23.60	23.73	23.70	24.70	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	23.35	23.59	23.48	24.70	23.62	23.70	23.69	24.70	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.86	23.09	23.27	24.20	23.09	23.18	23.19	24.20	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.88	23.09	23.26	24.20	23.09	23.19	22.81	24.20	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.28	23.58	23.68	24.70	23.58	23.68	23.69	24.70	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.30	23.59	23.43	24.70	23.58	23.68	23.68	24.70	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.86	23.09	23.17	24.20	23.02	23.14	23.10	24.20	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.80	23.05	23.23	24.20	23.05	23.10	22.77	24.20	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	23.38	23.59	23.77	24.70	23.62	23.72	23.72	24.70	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	21.40	21.64	21.79	22.70	21.57	21.69	21.59	22.70	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	22.40	22.64	22.77	23.70	22.60	22.68	22.69	23.70	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	21.39	21.59	21.74	22.70	21.59	21.69	21.70	22.70	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	23.40	23.60	23.80	24.70	23.60	23.70	23.70	24.70	22.80	22.80	22.70	24.00



Band	Ant 0				Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)
	WCDMA II			1312		WCDMA IV		4132		WCDMA V			
TX Channel	9262	9400	9538		1413	1513	1638		1738	4182	4233	4357	4407
Rx Channel	9662	9800	9938	1537	1638	1738	1738	4357	4407	4458	4458	4458	
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	1752.6	826.4	836.4	846.6	846.6	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00



Band		Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.75	23.99	23.97	25.70	23.54	23.57	23.57	25.20	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	23.83	24.03	24.02	25.70	23.56	23.62	23.59	25.20	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	22.86	23.05	23.21	24.70	22.66	22.56	22.58	24.20	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	22.88	22.80	23.21	24.70	22.58	22.64	22.58	24.20	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.35	22.23	22.71	24.20	22.14	22.06	22.15	23.70	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.37	22.55	22.71	24.20	22.15	22.06	22.07	23.70	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.81	23.00	23.14	24.70	22.64	22.54	22.52	24.20	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.79	22.75	23.17	24.70	22.51	22.54	22.55	24.20	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.32	22.20	22.66	24.20	22.06	22.01	22.06	23.70	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.30	22.47	22.65	24.20	22.06	22.01	22.06	23.70	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	22.90	23.06	23.23	24.70	22.64	22.64	22.56	24.20	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	21.10	21.23	22.70	20.63	20.65	20.57	22.20	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	21.94	22.05	22.22	23.70	21.61	21.63	21.64	23.20	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	21.08	21.24	22.70	20.60	20.63	20.63	22.20	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	23.10	23.20	24.70	22.65	22.60	22.56	24.20	22.80	22.80	22.70	24.00



Band		Ant 0			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538	1312	1413	1513	1712.4	1732.6	1752.6	4132	4182	4233
Rx Channel		9662	9800	9938							4357	4407	4458
Frequency (MHz)		1852.4	1880	1907.6							826.4	836.4	846.6
3GPP Rel 99	AMR 12.2Kbps	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00





Band	Ant 2				Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
	WCDMA II					WCDMA IV				WCDMA V			
	TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938	1537	1638	1738	4357	4407	4458				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	23.75	23.99	23.97	24.90	23.54	23.57	23.57	24.40	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	23.83	24.03	24.02	24.90	23.56	23.62	23.59	24.40	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	22.86	23.05	23.21	23.90	22.66	22.56	22.58	23.40	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	22.88	22.80	23.21	23.90	22.58	22.64	22.58	23.40	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.35	22.23	22.71	23.40	22.14	22.06	22.15	22.90	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.37	22.55	22.71	23.40	22.15	22.06	22.07	22.90	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.81	23.00	23.14	23.90	22.64	22.54	22.52	23.40	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.79	22.75	23.17	23.90	22.51	22.54	22.55	23.40	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.32	22.20	22.66	23.40	22.06	22.01	22.06	22.90	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.30	22.47	22.65	23.40	22.06	22.01	22.06	22.90	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	22.90	23.06	23.23	23.90	22.64	22.64	22.56	23.40	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	21.10	21.23	21.90	20.63	20.65	20.57	21.40	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	21.94	22.05	22.22	22.90	21.61	21.63	21.64	22.40	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	21.08	21.24	21.90	20.60	20.63	20.63	21.40	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	23.10	23.20	23.90	22.65	22.60	22.56	23.40	22.80	22.80	22.70	24.00



Band		Ant 0			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00



Band	Ant 2				Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
	WCDMA II					WCDMA IV				WCDMA V			
	TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938	1537	1638	1738	4357	4407	4458				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	23.75	23.99	23.97	24.90	23.54	23.57	23.57	24.60	23.70	23.70	23.70	25.00
3GPP Rel 99	RMC 12.2Kbps	23.83	24.03	24.02	24.90	23.56	23.62	23.59	24.60	23.76	23.80	23.73	25.00
3GPP Rel 6	HSDPA Subtest-1	22.86	23.05	23.21	23.90	22.66	22.56	22.58	23.60	22.75	22.79	22.69	24.00
3GPP Rel 6	HSDPA Subtest-2	22.88	22.80	23.21	23.90	22.58	22.64	22.58	23.60	22.79	22.80	22.71	24.00
3GPP Rel 6	HSDPA Subtest-3	22.35	22.23	22.71	23.40	22.14	22.06	22.15	23.10	22.28	22.29	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.37	22.55	22.71	23.40	22.15	22.06	22.07	23.10	22.22	22.27	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.81	23.00	23.14	23.90	22.64	22.54	22.52	23.60	22.70	22.74	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.79	22.75	23.17	23.90	22.51	22.54	22.55	23.60	22.74	22.78	22.66	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.32	22.20	22.66	23.40	22.06	22.01	22.06	23.10	22.24	22.28	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.30	22.47	22.65	23.40	22.06	22.01	22.06	23.10	22.18	22.21	22.18	23.50
3GPP Rel 6	HSUPA Subtest-1	22.90	23.06	23.23	23.90	22.64	22.64	22.56	23.60	22.77	22.77	22.69	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	21.10	21.23	21.90	20.63	20.65	20.57	21.60	20.76	20.80	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	21.94	22.05	22.22	22.90	21.61	21.63	21.64	22.60	21.73	21.79	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	21.08	21.24	21.90	20.60	20.63	20.63	21.60	20.76	20.78	20.70	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	23.10	23.20	23.90	22.65	22.60	22.56	23.60	22.80	22.80	22.70	24.00



		Ant 0			Ant 0			Ant 1					
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	AMR 12.2Kbps	23.70	23.90	23.97	25.50	23.98	23.96	23.97	25.50	23.08	23.10	23.09	25.00
3GPP Rel 99	RMC 12.2Kbps	23.73	23.94	24.03	25.50	24.01	24.02	24.03	25.50	23.11	23.12	23.10	25.00
3GPP Rel 6	HSDPA Subtest-1	22.73	22.94	23.03	24.50	23.00	23.03	23.06	24.50	22.09	22.11	22.10	24.00
3GPP Rel 6	HSDPA Subtest-2	22.74	22.98	23.05	24.50	22.99	23.06	23.01	24.50	22.12	22.12	22.08	24.00
3GPP Rel 6	HSDPA Subtest-3	22.27	22.48	22.56	24.00	22.49	22.54	22.53	24.00	21.63	21.69	21.57	23.50
3GPP Rel 6	HSDPA Subtest-4	22.24	22.44	22.54	24.00	22.46	22.57	22.51	24.00	21.60	21.67	21.59	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.91	23.01	24.50	22.96	22.98	23.00	24.50	22.03	22.07	22.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.67	22.94	22.97	24.50	22.90	23.00	22.98	24.50	22.07	22.07	22.06	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.19	22.46	22.56	24.00	22.41	22.51	22.43	24.00	21.59	21.65	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.42	22.45	24.00	22.41	22.47	22.44	24.00	21.55	21.67	21.49	23.50
3GPP Rel 6	HSUPA Subtest-1	22.80	22.96	23.07	24.50	23.00	23.01	23.01	24.50	22.10	22.08	22.08	24.00
3GPP Rel 6	HSUPA Subtest-2	20.78	20.94	21.10	22.50	21.01	21.02	21.01	22.50	20.15	20.09	20.07	22.00
3GPP Rel 6	HSUPA Subtest-3	21.75	21.95	22.03	23.50	22.00	22.04	22.03	23.50	21.09	21.09	21.08	23.00
3GPP Rel 6	HSUPA Subtest-4	20.77	20.98	21.03	22.50	21.01	21.08	21.00	22.50	20.10	20.14	20.09	22.00
3GPP Rel 6	HSUPA Subtest-5	22.80	22.90	23.10	24.50	23.00	23.10	23.00	24.50	22.10	22.10	22.00	24.00







Band 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	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	24.7
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	
10	QPSK	50	0	23.40	23.33	23.31	24.7
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	23.7
10	16QAM	25	0	22.30	22.32	22.32	
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	23.7
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	22.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	22.7
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	24.7
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	
5	QPSK	25	0	23.36	23.25	23.29	24.7
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	23.7
5	16QAM	12	0	22.25	22.30	22.25	
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.28	23.7
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	22.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	22.7
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	
Channel				20415	20565	20655	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	24.7
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	
3	QPSK	15	0	23.38	23.28	23.24	24.7
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.81	23.25	23.7
3	16QAM	8	0	22.20	22.29	22.27	
3	16QAM	8	4	22.35	22.36	22.23	
3	16QAM	8	7	22.38	22.29	22.29	23.7
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	22.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	22.7
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	24.7
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	
1.4	QPSK	6	0	23.26	23.28	23.25	24.7
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	24.7
1.4	16QAM	3	0	23.51	23.58	23.71	
1.4	16QAM	3	1	23.62	23.60	23.53	
1.4	16QAM	3	3	23.54	23.59	23.22	23.7
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.28	
1.4	64QAM	1	3	22.33	22.38	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	23.7
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.28	



Band 7 Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.59	24.67	24.65	25.7
20	QPSK	1	49	24.64	24.75	24.68	
20	QPSK	1	99	24.69	24.86	24.71	
20	QPSK	50	0	23.69	23.81	23.75	24.7
20	QPSK	50	24	23.82	23.86	23.87	
20	QPSK	50	50	23.83	23.95	23.85	
20	QPSK	100	0	23.77	23.83	23.87	24.7
20	16QAM	1	0	23.95	23.97	24.01	
20	16QAM	1	49	23.99	24.08	24.03	
20	16QAM	1	99	24.07	24.14	24.04	23.7
20	16QAM	50	0	22.70	22.82	22.77	
20	16QAM	50	24	22.83	22.85	22.87	
20	16QAM	50	50	22.83	22.98	22.88	23.7
20	16QAM	100	0	22.79	22.82	22.88	
20	64QAM	1	0	22.83	22.84	22.85	
20	64QAM	1	49	22.90	22.96	22.80	22.7
20	64QAM	1	99	22.99	23.03	22.16	
20	64QAM	50	0	21.74	21.84	21.80	
20	64QAM	50	24	21.87	21.89	21.85	22.7
20	64QAM	50	50	21.85	21.97	21.80	
20	64QAM	100	0	21.85	21.85	21.87	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.61	24.71	24.69	25.7
15	QPSK	1	37	24.68	24.75	24.68	
15	QPSK	1	74	24.74	24.85	24.73	
15	QPSK	36	0	23.68	23.81	23.76	24.7
15	QPSK	36	20	23.82	23.86	23.80	
15	QPSK	36	39	23.82	23.94	23.86	
15	QPSK	75	0	23.77	23.85	23.79	24.7
15	16QAM	1	0	23.93	24.04	24.01	
15	16QAM	1	37	23.97	24.05	24.02	
15	16QAM	1	74	24.08	24.14	24.04	23.7
15	16QAM	36	0	22.67	22.80	22.76	
15	16QAM	36	20	22.80	22.85	22.79	
15	16QAM	36	39	22.82	22.95	22.87	23.7
15	16QAM	75	0	22.80	22.84	22.77	
15	64QAM	1	0	22.80	22.89	22.85	
15	64QAM	1	37	22.93	23.01	22.75	22.7
15	64QAM	1	74	22.93	23.03	22.78	
15	64QAM	36	0	21.71	21.85	21.80	
15	64QAM	36	20	21.84	21.90	21.80	22.7
15	64QAM	36	39	21.84	21.99	21.84	
15	64QAM	75	0	21.83	21.83	21.79	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	24.51	24.67	24.61	25.7
10	QPSK	1	25	24.65	24.70	24.68	
10	QPSK	1	49	24.71	24.85	24.67	
10	QPSK	25	0	23.62	23.72	23.76	24.7
10	QPSK	25	12	23.76	23.76	23.75	
10	QPSK	25	25	23.77	23.92	23.79	
10	QPSK	50	0	23.77	23.82	23.74	24.7
10	16QAM	1	0	23.85	24.03	23.91	
10	16QAM	1	25	23.97	23.95	23.95	
10	16QAM	1	49	24.04	24.09	23.98	23.7
10	16QAM	25	0	22.58	22.71	22.67	
10	16QAM	25	12	22.73	22.85	22.69	
10	16QAM	25	25	22.76	22.88	22.82	22.7
10	16QAM	50	0	22.78	22.77	22.73	
10	64QAM	1	0	22.79	22.88	22.79	
10	64QAM	1	25	22.84	23.01	22.66	22.7
10	64QAM	1	49	22.83	22.98	22.73	
10	64QAM	25	0	21.67	21.77	21.79	
10	64QAM	25	12	21.77	21.84	21.70	22.7
10	64QAM	25	25	21.74	21.95	21.75	
10	64QAM	50	0	21.75	21.81	21.79	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.60	24.71	24.69	25.7
5	QPSK	1	12	24.63	24.66	24.68	
5	QPSK	1	24	24.72	24.80	24.73	
5	QPSK	12	0	23.60	23.75	23.70	24.7
5	QPSK	12	7	23.77	23.84	23.72	
5	QPSK	12	13	23.75	23.94	23.83	
5	QPSK	25	0	23.67	23.79	23.73	24.7
5	16QAM	1	0	23.88	23.99	24.01	
5	16QAM	1	12	23.93	24.01	23.97	
5	16QAM	1	24	24.02	24.05	24.01	23.7
5	16QAM	12	0	22.65	22.76	22.76	
5	16QAM	12	7	22.79	22.80	22.73	
5	16QAM	12	13	22.80	22.91	22.82	23.7
5	16QAM	25	0	22.75	22.84	22.73	
5	64QAM	1	0	22.79	22.83	22.79	
5	64QAM	1	12	22.92	22.91	22.71	22.7
5	64QAM	1	24	22.86	22.94	22.69	
5	64QAM	12	0	21.69	21.83	21.76	
5	64QAM	12	7	21.74	21.82	21.70	22.7
5	64QAM	12	13	21.80	21.93	21.84	
5	64QAM	25	0	21.71	21.89	21.70	





Band 12_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.35	24.28	24.30	
10	QPSK	1	25	24.27	24.31	24.28	25.7
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	
10	QPSK	25	12	23.49	23.43	23.46	24.7
10	QPSK	25	25	23.46	23.46	23.44	
10	QPSK	50	0	23.51	23.43	23.47	
10	16QAM	1	0	23.74	23.66	23.73	
10	16QAM	1	25	23.70	23.70	23.69	24.7
10	16QAM	1	49	23.74	23.66	23.67	
10	16QAM	25	0	22.41	22.42	22.42	
10	16QAM	25	12	22.50	22.44	22.48	23.7
10	16QAM	25	25	22.47	22.49	22.41	
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.29	21.22	22.7
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	
5	QPSK	1	12	24.20	24.29	24.23	25.7
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	
5	QPSK	12	7	23.39	23.42	23.44	24.7
5	QPSK	12	13	23.46	23.46	23.36	
5	QPSK	25	0	23.49	23.34	23.44	
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.69	24.7
5	16QAM	1	24	23.69	23.59	23.61	
5	16QAM	12	0	22.38	22.42	22.33	
5	16QAM	12	7	22.40	22.34	22.47	23.7
5	16QAM	12	13	22.39	22.49	22.35	
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.26	21.17	22.7
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				23035	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	
3	QPSK	1	8	24.18	24.23	24.21	25.7
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	
3	QPSK	8	4	23.39	23.34	23.37	24.7
3	QPSK	8	7	23.36	23.44	23.40	
3	QPSK	15	0	23.44	23.33	23.42	
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	24.7
3	16QAM	1	14	23.74	23.56	23.66	
3	16QAM	8	0	22.40	22.39	22.33	
3	16QAM	8	4	22.41	22.42	22.38	23.7
3	16QAM	8	7	22.39	22.41	22.39	
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	22.7
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	
1.4	QPSK	1	3	24.20	24.25	24.25	25.7
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	
1.4	QPSK	6	0	23.36	23.36	23.33	24.7
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	24.7
1.4	16QAM	1	5	23.41	23.42	23.41	
1.4	16QAM	3	0	23.67	23.65	23.71	
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	
1.4	16QAM	6	0	22.32	22.32	22.40	23.7
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	
1.4	64QAM	1	5	22.46	22.37	22.37	23.7
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	22.7



Band 13_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2320			
Frequency (MHz)				762			
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.82			
10	QPSK	50	0	22.55			24.2
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			
10	16QAM	1	49	23.12			23.2
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.89			
10	16QAM	25	25	21.50			22.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			23.2
10	64QAM	1	49	22.07			
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.53			22.2
10	64QAM	25	25	20.52			
10	64QAM	50	0	20.97			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	
5	QPSK	12	0	22.74	22.83	22.79	24.2
5	QPSK	12	7	22.83	22.78	22.77	
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	
5	16QAM	1	24	23.09	23.07	23.11	23.2
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.83	21.86	21.91	
5	64QAM	1	0	21.80	21.89	21.90	
5	64QAM	1	12	21.97	21.99	21.97	23.2
5	64QAM	1	24	22.04	22.04	22.04	
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.89	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	



Band 14_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			
10	16QAM	1	49	23.60			23.7
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			23.7
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.55			22.7
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.30			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



Band 17_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.46	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.66	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.48	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	





Band 26 Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)			
Channel				26765	26865	26965				
Frequency (MHz)				811.5	831.5	841.5				
15	QPSK	1	0	24.23	24.12	24.14	25.7			
15	QPSK	1	37	24.15	24.13	24.09				
15	QPSK	1	74	24.18	24.13	23.98				
15	QPSK	36	0	23.31	23.25	23.24				
15	QPSK	36	20	23.34	23.29	23.20	24.7			
15	QPSK	36	39	23.30	23.30	23.25				
15	QPSK	75	0	23.34	23.29	23.20				
15	16QAM	1	0	23.58	23.46	23.45				
15	16QAM	1	37	23.49	23.44	23.44	24.7			
15	16QAM	1	74	23.46	23.43	23.30				
15	16QAM	36	0	22.33	22.26	22.24				
15	16QAM	36	20	22.34	22.31	22.19				
15	16QAM	36	39	22.31	22.25	22.18	23.7			
15	16QAM	75	0	22.36	22.31	22.23				
15	64QAM	1	0	22.43	22.31	22.31				
15	64QAM	1	37	22.43	22.39	22.34				
15	64QAM	1	74	22.36	22.34	21.62	23.7			
15	64QAM	36	0	21.35	21.31	21.30				
15	64QAM	36	20	21.41	21.30	21.23				
15	64QAM	36	39	21.36	21.30	21.29				
15	64QAM	75	0	21.37	21.31	21.24	22.7			
Channel				26740	26865	26990				
Frequency (MHz)				819	831.5	844				
10	QPSK	1	0	24.18	24.06	24.14		25.7		
10	QPSK	1	25	24.15	24.06	23.99				
10	QPSK	1	49	24.13	24.13	23.98				
10	QPSK	25	0	23.24	23.17	23.17				
10	QPSK	25	12	23.31	23.29	23.11	24.7			
10	QPSK	25	25	23.20	23.26	23.25				
10	QPSK	50	0	23.26	23.28	23.14				
10	16QAM	1	0	23.52	23.39	23.40				
10	16QAM	1	25	23.48	23.37	23.35	24.7			
10	16QAM	1	49	23.46	23.41	23.27				
10	16QAM	25	0	22.28	22.24	22.24				
10	16QAM	25	12	22.27	22.21	22.09				
10	16QAM	25	25	22.30	22.16	22.08	23.7			
10	16QAM	50	0	22.26	22.24	22.15				
10	64QAM	1	0	22.37	22.25	22.22				
10	64QAM	1	25	22.33	22.35	22.24				
10	64QAM	1	49	22.34	22.26	21.54	23.7			
10	64QAM	25	0	21.31	21.26	21.28				
10	64QAM	25	12	21.37	21.29	21.22				
10	64QAM	25	25	21.28	21.29	21.22				
10	64QAM	50	0	21.27	21.27	21.21	22.7			
Channel				26716	26865	27015				
Frequency (MHz)				816.5	831.5	846.5				
5	QPSK	1	0	24.14	24.10	24.05		25.7		
5	QPSK	1	12	24.05	24.05	24.08				
5	QPSK	1	24	24.12	24.11	23.91				
5	QPSK	12	0	23.21	23.23	23.15				
5	QPSK	12	7	23.30	23.27	23.19	24.7			
5	QPSK	12	13	23.25	23.27	23.21				
5	QPSK	25	0	23.32	23.27	23.17				
5	16QAM	1	0	23.53	23.40	23.43				
5	16QAM	1	12	23.46	23.35	23.44	24.7			
5	16QAM	1	24	23.44	23.33	23.27				
5	16QAM	12	0	22.29	22.18	22.16				
5	16QAM	12	7	22.31	22.26	22.17				
5	16QAM	12	13	22.30	22.23	22.16	23.7			
5	16QAM	25	0	22.33	22.24	22.19				
5	64QAM	1	0	22.40	22.21	22.25				
5	64QAM	1	12	22.35	22.32	22.30				
5	64QAM	1	24	22.32	22.34	21.52	23.7			
5	64QAM	12	0	21.27	21.30	21.28				
5	64QAM	12	7	21.33	21.32	21.14				
5	64QAM	12	13	21.34	21.24	21.25				
5	64QAM	25	0	21.31	21.31	21.24	22.7			
Channel				26705	26865	27025				
Frequency (MHz)				815.5	831.5	847.5				
3	QPSK	1	0	24.19	24.10	24.14		25.7		
3	QPSK	1	8	24.05	24.08	24.08				
3	QPSK	1	14	24.15	24.05	23.97				
3	QPSK	8	0	23.21	23.23	23.17				
3	QPSK	8	4	23.26	23.19	23.15	24.7			
3	QPSK	8	7	23.24	23.23	23.22				
3	QPSK	15	0	23.31	23.22	23.20				
3	16QAM	1	0	23.56	23.45	23.39				
3	16QAM	1	8	23.43	23.39	23.43	24.7			
3	16QAM	1	14	23.37	23.36	23.28				
3	16QAM	8	0	22.29	22.16	22.15				
3	16QAM	8	4	22.25	22.22	22.09				
3	16QAM	8	7	22.21	22.22	22.14	23.7			
3	16QAM	15	0	22.28	22.29	22.23				
3	64QAM	1	0	22.35	22.21	22.31				
3	64QAM	1	8	22.35	22.37	22.24				
3	64QAM	1	14	22.32	22.31	21.61	23.7			
3	64QAM	8	0	21.31	21.31	21.22				
3	64QAM	8	4	21.38	21.25	21.21				
3	64QAM	8	7	21.35	21.24	21.19				
3	64QAM	15	0	21.33	21.21	21.24	22.7			
Channel				26897	26965	27033				
Frequency (MHz)				814.7	831.5	848.3				
1.4	QPSK	1	0	24.15	24.03	24.06		25.7		
1.4	QPSK	1	3	23.98	24.04	23.99				
1.4	QPSK	1	5	24.14	24.02	23.96				
1.4	QPSK	3	0	24.15	24.03	24.12				
1.4	QPSK	3	1	24.05	24.05	24.08	24.7			
1.4	QPSK	3	3	24.07	23.93	23.94				
1.4	QPSK	6	0	23.15	23.20	23.12				
1.4	16QAM	1	0	23.17	23.16	23.05				
1.4	16QAM	1	3	23.16	23.17	23.16	24.7			
1.4	16QAM	1	5	23.23	23.19	23.10				
1.4	16QAM	3	0	23.46	23.36	23.30				
1.4	16QAM	3	1	23.39	23.30	23.35				
1.4	16QAM	3	3	23.33	23.26	23.26	23.7			
1.4	16QAM	6	0	22.20	22.14	22.10				
1.4	64QAM	1	0	22.18	22.22	22.05				
1.4	64QAM	1	3	22.16	22.20	22.04				
1.4	64QAM	1	5	22.25	22.29	22.20	23.7			
1.4	64QAM	3	0	22.28	22.11	22.27				
1.4	64QAM	3	1	22.28	22.37	22.24				
1.4	64QAM	3	3	22.31	22.31	21.51				
1.4	64QAM	6	0	21.26	21.25	21.15	22.7			



Band 30_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.31			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.26			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			22.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.30			
10	16QAM	25	25	21.31			21.2
10	16QAM	50	0	21.26			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit [dBm]
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.48	22.36	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.36	21.47	
5	64QAM	1	12	21.42	21.46	21.47	21.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	







Band 71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	24.7
20	QPSK	50	24	23.40	23.32	23.31	
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	24.7
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	
20	16QAM	1	99	23.60	23.53	23.62	23.7
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.80	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	22.7
20	64QAM	1	99	22.47	22.50	22.44	
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.33	21.34	22.7
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.16	21.34	21.41	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	24.7
15	QPSK	36	20	23.39	23.35	23.28	
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	24.7
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	
15	16QAM	1	74	23.58	23.60	23.48	23.7
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.58	22.15	22.26	
15	64QAM	1	37	21.81	22.58	22.48	22.7
15	64QAM	1	74	22.45	22.55	22.42	
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	22.7
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	
Channel				133172	133272	133372	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	24.7
10	QPSK	25	12	23.33	23.30	23.26	
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	24.7
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	
10	16QAM	1	49	23.52	23.58	23.47	23.7
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	22.7
10	64QAM	1	49	22.43	22.49	22.32	
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.68	21.32	21.29	22.7
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	24.7
5	QPSK	12	7	23.39	23.28	23.26	
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	24.7
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	
5	16QAM	1	24	23.49	23.51	23.38	23.7
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	22.7
5	64QAM	1	24	22.42	22.49	22.33	
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	22.7
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	







Band 5_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	24
10	QPSK	25	12	22.18	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	24
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	23
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	22
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	24
5	QPSK	12	7	22.12	22.12	22.09	
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	24
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	
5	16QAM	1	24	22.40	22.41	22.16	23
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	22
5	64QAM	1	24	21.34	21.35	20.16	
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	22
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	
Channel				20415	20555	20655	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	24
3	QPSK	8	4	22.09	22.12	22.03	
3	QPSK	8	7	22.08	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	24
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	
3	16QAM	1	14	22.29	22.35	22.26	23
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.19	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	22
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	22
3	64QAM	1	14	21.24	21.32	20.28	
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	22
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	24
1.4	QPSK	3	1	23.26	23.25	23.23	
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	24
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	
1.4	16QAM	1	5	22.52	22.54	22.47	23
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.68	
1.4	64QAM	1	3	21.53	21.56	20.78	23
1.4	64QAM	1	5	21.45	21.49	20.77	
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	22
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	



Band 7 Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	24.5
20	QPSK	50	24	22.99	22.97	22.97	
20	QPSK	50	50	23.02	23.08	22.98	
20	QPSK	100	0	22.98	23.00	22.97	24.5
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	
20	16QAM	1	99	23.19	23.32	23.22	23.5
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.86	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	22.5
20	64QAM	1	99	22.11	22.23	22.12	
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	22.5
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	24.5
15	QPSK	36	20	23.04	23.01	22.92	
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	24.5
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	
15	16QAM	1	74	23.21	23.30	23.26	23.5
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	22.5
15	64QAM	1	74	22.12	22.25	22.13	
15	64QAM	36	0	20.83	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	22.5
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	24.5
10	QPSK	25	12	23.00	23.02	22.96	
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	24.5
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	
10	16QAM	1	49	23.25	23.34	23.19	23.5
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.88	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	22.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	22.5
10	64QAM	1	49	22.13	22.27	22.09	
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	22.5
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	24.5
5	QPSK	12	7	22.95	23.01	22.88	
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	24.5
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	
5	16QAM	1	24	23.19	23.25	23.14	23.5
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	22.5
5	64QAM	1	24	22.14	22.22	22.10	
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	22.5
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.00	20.97	



Band 12_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	24.7
10	QPSK	25	12	23.11	23.04	23.08	
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	24.7
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	
10	16QAM	1	49	23.37	23.36	23.33	23.7
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.08	23.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	23.7
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	22.7
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	24.7
5	QPSK	12	7	23.04	23.06	23.04	
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	24.7
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.26	23.25	
5	16QAM	1	24	23.28	23.35	23.26	23.7
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	23.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	
5	64QAM	1	12	21.70	22.17	22.01	23.7
5	64QAM	1	24	21.72	22.12	21.85	
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	22.7
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.96	20.96	
Channel				23035	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	24.7
3	QPSK	8	4	23.05	23.09	23.05	
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	24.7
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	
3	16QAM	1	14	23.21	23.30	23.22	23.7
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	23.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	23.7
3	64QAM	1	14	21.73	22.21	21.77	
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.18	20.90	22.7
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	24.7
1.4	QPSK	3	1	23.99	23.98	23.96	
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	24.7
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	
1.4	16QAM	1	5	23.44	23.52	23.45	24.7
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.36	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	23.7
1.4	64QAM	1	5	21.70	22.43	21.80	
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	23.7
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	



Band 13 Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)							
10	QPSK	1	0		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		24
10	QPSK	25	12		22.02		
10	QPSK	25	25		22.06		
10	QPSK	50	0		22.15		24
10	16QAM	1	0		22.28		
10	16QAM	1	25		22.27		
10	16QAM	1	49		22.33		23
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.08		23
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		
10	64QAM	1	25		21.22		23
10	64QAM	1	49		21.29		
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.06		22
10	64QAM	25	25		20.11		
10	64QAM	50	0		20.12		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.90	22.85	22.80	25
5	QPSK	1	12	22.94	22.95	22.88	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.96	23
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.08	21.13	20.86	
5	64QAM	1	12	21.13	21.18	20.90	23
5	64QAM	1	24	21.18	21.17	20.98	
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	22
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



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





Band 17_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	25
10	QPSK	1	49	23.10	23.12	23.19	25
10	QPSK	25	0	22.22	22.22	22.21	24
10	QPSK	25	12	22.25	22.26	22.28	24
10	QPSK	25	25	22.30	22.33	22.36	24
10	QPSK	50	0	22.25	22.26	22.30	24
10	16QAM	1	0	22.16	22.17	22.15	24
10	16QAM	1	25	22.21	22.28	22.29	24
10	16QAM	1	49	22.26	22.23	22.26	24
10	16QAM	25	0	20.91	20.87	20.88	23
10	16QAM	25	12	21.02	20.96	20.94	23
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	23
10	64QAM	1	0	21.03	21.03	21.05	23
10	64QAM	1	25	21.14	21.18	21.17	23
10	64QAM	1	49	21.16	21.18	21.13	23
10	64QAM	25	0	19.92	19.92	19.92	22
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	22
10	64QAM	50	0	19.98	19.97	19.97	22
Channel				23765	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	25
5	QPSK	1	24	23.18	23.11	23.19	25
5	QPSK	12	0	22.20	22.15	22.11	24
5	QPSK	12	7	22.29	22.22	22.23	24
5	QPSK	12	13	22.25	22.32	22.25	24
5	QPSK	25	0	22.17	22.14	22.25	24
5	16QAM	1	0	22.12	22.15	22.09	24
5	16QAM	1	12	22.15	22.23	22.14	24
5	16QAM	1	24	22.25	22.25	22.22	24
5	16QAM	12	0	20.90	20.90	20.87	23
5	16QAM	12	7	21.00	20.97	20.96	23
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	23
5	64QAM	1	0	21.05	21.05	21.03	23
5	64QAM	1	12	21.09	21.13	21.09	23
5	64QAM	1	24	21.19	21.16	21.10	23
5	64QAM	12	0	19.94	19.99	19.93	22
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	22
5	64QAM	25	0	19.95	19.91	19.96	22





Band 26_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	23.14	23.06	23.05	25
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.18	22.17	24
15	QPSK	36	20	22.22	22.20	22.18	
15	QPSK	36	39	22.21	22.16	22.15	
15	QPSK	36	0	22.25	22.23	22.12	24
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.39	
15	16QAM	1	74	22.38	22.39	22.23	23
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	23
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	
15	64QAM	1	37	21.28	21.32	21.32	22
15	64QAM	1	74	21.29	21.30	21.02	
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.28	20.27	20.21	22
15	64QAM	36	39	20.26	20.27	20.21	
15	64QAM	75	0	20.27	20.25	20.20	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	24
10	QPSK	25	12	22.13	22.03	22.05	
10	QPSK	25	25	22.06	22.06	22.03	
10	QPSK	50	0	22.15	22.08	22.02	24
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.38	22.38	22.34	
10	16QAM	1	49	22.33	22.37	22.21	23
10	16QAM	25	0	21.16	21.05	21.04	
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	23
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.28	21.21	
10	64QAM	1	25	21.15	21.27	21.25	22
10	64QAM	1	49	21.31	21.32	21.08	
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.98	20.10	20.08	22
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	
Channel				816.5	831.5	846.5	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	24
5	QPSK	12	7	22.18	22.10	22.02	
5	QPSK	12	13	22.08	22.03	22.00	
5	QPSK	25	0	22.09	22.08	22.02	24
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	
5	16QAM	1	24	22.33	22.38	22.19	23
5	16QAM	12	0	21.20	21.06	21.05	
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	23
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.00	22
5	64QAM	1	24	21.02	21.27	21.01	
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.15	19.45	22
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	24
3	QPSK	8	4	22.16	22.08	22.00	
3	QPSK	8	7	22.10	22.02	22.02	
3	QPSK	15	0	22.15	22.03	22.01	24
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	
3	16QAM	1	14	22.29	22.32	22.16	23
3	16QAM	8	0	21.23	21.11	21.03	
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	23
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	22
3	64QAM	1	14	21.18	21.28	20.45	
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	22
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.05	19.41	
Channel				26997	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	24
1.4	QPSK	3	1	23.09	23.07	23.11	
1.4	QPSK	3	3	23.12	23.06	23.05	
1.4	QPSK	6	0	22.16	22.21	22.13	24
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	
1.4	16QAM	1	5	22.36	22.48	22.32	24
1.4	16QAM	3	0	22.24	22.24	22.16	
1.4	16QAM	3	1	22.20	22.30	22.16	
1.4	16QAM	3	3	22.21	22.26	22.14	23
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.94	23
1.4	64QAM	1	5	21.31	21.36	20.91	
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	22
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.28	20.25	19.69	



Band 30_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		24.12		25.7
10	QPSK	1	25		24.04		
10	QPSK	1	49		24.03		
10	QPSK	25	0		23.10		24.7
10	QPSK	25	12		23.16		
10	QPSK	25	25		23.16		
10	QPSK	50	0		23.14		24.7
10	16QAM	1	0		23.44		
10	16QAM	1	25		23.47		
10	16QAM	1	49		23.35		23.7
10	16QAM	25	0		22.11		
10	16QAM	25	12		22.15		
10	16QAM	25	25		22.11		23.7
10	16QAM	50	0		22.14		
10	64QAM	1	0		22.35		
10	64QAM	1	25		21.90		23.7
10	64QAM	1	49		21.70		
10	64QAM	25	0		21.07		
10	64QAM	25	12		20.86		22.7
10	64QAM	25	25		20.84		
10	64QAM	50	0		20.86		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.95	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.76	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	





Band 71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	24
20	QPSK	50	24	22.33	22.25	22.21	
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	24
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	23
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.14	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	22
20	64QAM	1	99	21.28	21.28	21.23	
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	22
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	24
15	QPSK	36	20	22.32	22.22	22.14	
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	24
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.52	22.45	
15	16QAM	1	74	22.39	22.47	22.33	23
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.58	21.40	21.09	
15	64QAM	1	37	20.95	21.41	21.35	22
15	64QAM	1	74	21.28	21.39	21.23	
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	18.86	20.11	20.20	22
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	
Channel				133172	133272	133322	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	24
10	QPSK	25	12	22.15	22.10	22.00	
10	QPSK	25	25	22.07	22.06	22.01	
10	QPSK	50	0	22.15	22.11	22.02	24
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	23
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	22
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	22
10	64QAM	1	49	20.69	21.18	21.10	
10	64QAM	25	0	19.03	20.95	19.96	
10	64QAM	25	12	19.15	20.15	19.96	22
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.96	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	24
5	QPSK	12	7	22.01	22.04	22.03	
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	24
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	23
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	22
5	64QAM	1	24	20.13	21.24	20.77	
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	22
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	



Band 2_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit [dBm]
Channel				1870	1890	1910	
Frequency [MHz]				1870	1890	1910	
20	QPSK	1	0	24.19	24.30	24.36	
20	QPSK	1	49	24.16	24.32	24.21	25.7
20	QPSK	1	99	24.17	24.44	24.28	
20	QPSK	50	0	23.23	23.38	23.45	
20	QPSK	50	24	23.33	23.41	23.58	24.7
20	QPSK	50	50	23.30	23.50	23.58	
20	QPSK	100	0	23.34	23.37	23.35	
20	16QAM	1	0	23.56	23.60	23.67	
20	16QAM	1	49	23.52	23.68	23.47	24.7
20	16QAM	1	99	23.50	23.74	23.63	
20	16QAM	50	0	22.25	22.40	22.46	
20	16QAM	50	24	22.33	22.42	22.59	23.7
20	16QAM	50	50	22.31	22.49	22.60	
20	16QAM	100	0	22.31	22.40	22.47	
20	64QAM	1	0	22.40	22.44	22.35	
20	64QAM	1	49	22.40	22.53	21.97	23.7
20	64QAM	1	99	22.11	22.62	21.73	
20	64QAM	50	0	21.27	21.40	20.84	
20	64QAM	50	24	21.35	21.45	20.77	22.7
20	64QAM	50	50	21.15	21.51	20.87	
20	64QAM	100	0	21.30	21.43	20.69	
Channel				1875	1890	1915	Tune-up limit [dBm]
Frequency [MHz]				1875	1890	1915	
15	QPSK	1	0	24.14	24.32	24.42	
15	QPSK	1	37	24.12	24.35	24.33	25.7
15	QPSK	1	74	24.14	24.36	24.35	
15	QPSK	36	0	23.21	23.34	23.45	
15	QPSK	36	20	23.32	23.41	23.58	24.7
15	QPSK	36	39	23.28	23.48	23.59	
15	QPSK	75	0	23.28	23.39	23.47	
15	16QAM	1	0	23.36	23.60	23.73	
15	16QAM	1	37	23.45	23.67	23.66	24.7
15	16QAM	1	74	23.45	23.64	23.75	
15	16QAM	36	0	22.20	22.35	22.46	
15	16QAM	36	20	22.28	22.40	22.59	23.7
15	16QAM	36	39	22.27	22.48	22.58	
15	16QAM	75	0	22.29	22.40	22.50	
15	64QAM	1	0	22.33	22.51	21.78	
15	64QAM	1	37	22.34	22.57	21.67	23.7
15	64QAM	1	74	22.18	22.56	21.79	
15	64QAM	36	0	21.26	21.40	20.71	
15	64QAM	36	20	21.36	21.40	20.89	22.7
15	64QAM	36	39	21.20	21.51	20.91	
15	64QAM	75	0	21.32	21.40	20.77	
Channel				1880	1890	1910	Tune-up limit [dBm]
Frequency [MHz]				1880	1890	1910	
10	QPSK	1	0	24.10	24.24	24.37	
10	QPSK	1	25	24.03	24.31	24.28	25.7
10	QPSK	1	49	24.09	24.35	24.35	
10	QPSK	25	0	23.20	23.35	23.44	
10	QPSK	25	12	23.23	23.35	23.58	24.7
10	QPSK	25	25	23.23	23.45	23.51	
10	QPSK	50	0	23.24	23.32	23.37	
10	16QAM	1	0	23.31	23.58	23.72	
10	16QAM	1	25	23.41	23.67	23.61	24.7
10	16QAM	1	49	23.39	23.67	23.70	
10	16QAM	25	0	22.15	22.35	22.42	
10	16QAM	25	12	22.20	22.34	22.51	23.7
10	16QAM	25	25	22.20	22.41	22.53	
10	16QAM	50	0	22.23	22.31	22.49	
10	64QAM	1	0	22.29	22.45	21.69	
10	64QAM	1	25	22.26	22.50	21.65	23.7
10	64QAM	1	49	22.17	22.55	21.72	
10	64QAM	25	0	21.25	21.39	20.71	
10	64QAM	25	12	21.28	21.31	20.79	22.7
10	64QAM	25	25	21.17	21.43	20.81	
10	64QAM	50	0	21.25	21.37	20.72	
Channel				1885	1890	1915	Tune-up limit [dBm]
Frequency [MHz]				1885	1890	1915	
5	QPSK	1	0	24.13	24.29	24.39	
5	QPSK	1	12	24.05	24.29	24.24	25.7
5	QPSK	1	24	24.08	24.27	24.30	
5	QPSK	12	0	23.18	23.31	23.40	
5	QPSK	12	7	23.27	23.32	23.48	24.7
5	QPSK	12	13	23.25	23.44	23.58	
5	QPSK	25	0	23.24	23.33	23.41	
5	16QAM	1	0	23.32	23.58	23.65	
5	16QAM	1	12	23.38	23.64	23.63	24.7
5	16QAM	1	24	23.37	23.61	23.66	
5	16QAM	12	0	22.12	22.33	22.45	
5	16QAM	12	7	22.27	22.37	22.50	23.7
5	16QAM	12	13	22.23	22.42	22.58	
5	16QAM	25	0	22.20	22.39	22.49	
5	64QAM	1	0	22.25	22.51	21.73	
5	64QAM	1	12	22.26	22.50	21.61	23.7
5	64QAM	1	24	22.17	22.53	21.72	
5	64QAM	12	0	21.16	21.33	20.69	
5	64QAM	12	7	21.26	21.36	20.87	22.7
5	64QAM	12	13	21.18	21.49	20.83	
5	64QAM	25	0	21.28	21.40	20.71	
Channel				1890	1890	1915	Tune-up limit [dBm]
Frequency [MHz]				1890	1890	1915	
1.4	QPSK	1	0	24.09	24.18	24.33	
1.4	QPSK	1	3	24.14	24.33	24.41	25.7
1.4	QPSK	1	5	24.10	24.28	24.32	
1.4	QPSK	3	0	24.12	24.24	24.38	
1.4	QPSK	3	1	24.16	24.34	24.40	24.7
1.4	QPSK	3	3	24.12	24.30	24.37	
1.4	QPSK	6	0	23.18	23.36	23.49	24.7
1.4	16QAM	1	0	23.41	23.63	23.69	
1.4	16QAM	1	3	23.47	23.65	23.75	24.7
1.4	16QAM	1	5	23.42	23.61	23.69	
1.4	16QAM	3	0	22.20	22.31	23.45	
1.4	16QAM	3	1	23.24	23.43	23.52	23.7
1.4	16QAM	3	3	23.19	23.36	23.44	
1.4	16QAM	6	0	22.24	22.43	22.61	23.7
1.4	64QAM	1	0	22.35	22.47	21.83	
1.4	64QAM	1	3	22.46	22.64	21.87	23.7
1.4	64QAM	1	5	22.32	22.54	21.78	
1.4	64QAM	3	0	22.30	22.43	21.82	
1.4	64QAM	3	1	22.36	22.54	21.86	22.7
1.4	64QAM	3	3	22.30	22.48	21.75	
1.4	64QAM	6	0	21.05	21.38	20.70	







Band 5_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				825	836.5	848	
Frequency (MHz)							
10	QPSK	1	0	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	24.7
10	QPSK	25	12	23.38	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	
10	QPSK	50	0	23.40	23.33	23.31	24.7
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	23.7
10	16QAM	25	0	22.30	22.32	22.32	
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	23.7
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	23.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	22.7
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	
Channel				834.5	835.5	836.5	
Frequency (MHz)				825.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	24.7
5	QPSK	12	7	23.38	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	
5	QPSK	25	0	23.36	23.25	23.29	24.7
5	16QAM	1	0	23.48	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	23.7
5	16QAM	12	0	22.25	22.30	22.25	
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.26	23.7
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.08	23.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.36	21.42	21.29	22.7
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	
Channel				834.5	835.5	836.5	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	24.7
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	
3	QPSK	15	0	23.36	23.28	23.24	24.7
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.61	23.25	23.7
3	16QAM	8	0	22.25	22.29	22.27	
3	16QAM	8	4	22.35	22.30	22.23	
3	16QAM	8	7	22.38	22.29	22.29	23.7
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	23.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.36	21.42	21.34	22.7
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	
Channel				834.5	835.5	836.5	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	24.7
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	
1.4	QPSK	6	0	23.26	23.28	23.25	24.7
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	24.7
1.4	16QAM	3	0	23.51	23.58	23.71	
1.4	16QAM	3	1	23.62	23.60	23.53	
1.4	16QAM	3	3	23.54	23.59	23.22	23.7
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.28	
1.4	64QAM	1	3	22.35	22.36	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	23.7
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.26	



Band 7_Ant 2						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	24.59	24.67	24.65
20	QPSK	1	49	24.64	24.75	24.68
20	QPSK	1	99	24.69	24.86	24.71
20	QPSK	50	0	23.69	23.81	23.75
20	QPSK	50	24	23.82	23.86	23.87
20	QPSK	50	50	23.83	23.95	23.85
20	QPSK	100	0	23.77	23.83	23.87
20	16QAM	1	0	23.95	23.97	24.01
20	16QAM	1	49	23.99	24.08	24.03
20	16QAM	1	99	24.07	24.14	24.04
20	16QAM	50	0	22.70	22.82	22.77
20	16QAM	50	24	22.83	22.85	22.87
20	16QAM	50	50	22.83	22.98	22.88
20	16QAM	100	0	22.79	22.82	22.88
20	64QAM	1	0	22.83	22.84	22.85
20	64QAM	1	49	22.85	22.96	22.86
20	64QAM	1	99	22.90	23.03	22.16
20	64QAM	50	0	21.74	21.84	21.80
20	64QAM	50	24	21.87	21.89	21.85
20	64QAM	50	50	21.85	21.97	21.80
20	64QAM	100	0	21.85	21.85	21.87
Channel				20955	21100	21350
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	24.61	24.71	24.69
15	QPSK	1	37	24.68	24.75	24.68
15	QPSK	1	74	24.74	24.85	24.73
15	QPSK	36	0	23.68	23.81	23.76
15	QPSK	36	20	23.82	23.86	23.85
15	QPSK	36	39	23.82	23.94	23.86
15	QPSK	75	0	23.77	23.85	23.79
15	16QAM	1	0	23.93	24.04	24.01
15	16QAM	1	37	23.97	24.05	24.02
15	16QAM	1	74	24.08	24.14	24.04
15	16QAM	36	0	22.67	22.80	22.76
15	16QAM	36	20	22.80	22.85	22.79
15	16QAM	36	39	22.82	22.95	22.87
15	16QAM	75	0	22.80	22.84	22.77
15	64QAM	1	0	22.80	22.89	22.85
15	64QAM	1	37	22.84	23.01	22.95
15	64QAM	1	74	22.93	23.03	22.78
15	64QAM	36	0	21.71	21.85	21.80
15	64QAM	36	20	21.84	21.90	21.80
15	64QAM	36	39	21.84	21.99	21.84
15	64QAM	75	0	21.83	21.88	21.79
Channel				20955	21100	21350
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	24.51	24.67	24.61
10	QPSK	1	25	24.65	24.70	24.68
10	QPSK	1	49	24.71	24.85	24.67
10	QPSK	25	0	23.62	23.72	23.76
10	QPSK	25	12	23.76	23.76	23.75
10	QPSK	25	25	23.77	23.92	23.78
10	QPSK	50	0	23.77	23.82	23.74
10	16QAM	1	0	23.85	24.03	23.91
10	16QAM	1	25	23.97	23.95	23.95
10	16QAM	1	49	24.04	24.09	23.98
10	16QAM	25	0	22.59	22.71	22.67
10	16QAM	25	12	22.73	22.82	22.69
10	16QAM	25	25	22.76	22.88	22.82
10	16QAM	50	0	22.78	22.77	22.73
10	64QAM	1	0	22.79	22.88	22.79
10	64QAM	1	25	22.84	23.01	22.96
10	64QAM	1	49	22.93	22.98	22.73
10	64QAM	25	0	21.67	21.77	21.79
10	64QAM	25	12	21.77	21.84	21.70
10	64QAM	25	25	21.74	21.95	21.75
10	64QAM	50	0	21.75	21.81	21.79
Channel				20955	21100	21350
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	24.60	24.71	24.69
5	QPSK	1	12	24.63	24.66	24.68
5	QPSK	1	24	24.72	24.80	24.73
5	QPSK	12	0	23.60	23.75	23.70
5	QPSK	12	7	23.77	23.84	23.72
5	QPSK	12	13	23.75	23.94	23.83
5	QPSK	25	0	23.67	23.79	23.73
5	16QAM	1	0	23.88	23.99	24.01
5	16QAM	1	12	23.93	24.01	23.97
5	16QAM	1	24	24.02	24.05	24.01
5	16QAM	12	0	22.65	22.76	22.76
5	16QAM	12	7	22.79	22.80	22.73
5	16QAM	12	13	22.80	22.91	22.82
5	16QAM	25	0	22.75	22.84	22.73
5	64QAM	1	0	22.79	22.83	22.79
5	64QAM	1	12	22.85	22.91	22.71
5	64QAM	1	24	22.96	22.94	22.69
5	64QAM	12	0	21.69	21.83	21.76
5	64QAM	12	7	21.74	21.82	21.70
5	64QAM	12	13	21.80	21.93	21.84
5	64QAM	25	0	21.71	21.89	21.70



Band 12_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				704	707.5	711	
Frequency (MHz)							
10	QPSK	1	0	24.35	24.28	24.30	25.7
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	24.7
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.46	23.48	23.44	
10	QPSK	50	0	23.51	23.43	23.47	24.7
10	16QAM	1	0	23.74	23.65	23.73	
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.66	23.67	23.7
10	16QAM	25	0	22.41	22.42	22.42	
10	16QAM	25	12	22.50	22.44	22.48	
10	16QAM	25	25	22.47	22.49	22.41	23.7
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.38	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.28	21.22	22.7
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.10	21.19	21.37	
Channel				833.5	835.5	837.5	
Frequency (MHz)				707.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	25.7
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	24.7
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.46	23.46	23.36	
5	QPSK	25	0	23.49	23.34	23.44	24.7
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.68	
5	16QAM	1	24	23.69	23.59	23.61	23.7
5	16QAM	12	0	22.38	22.42	22.33	
5	16QAM	12	7	22.40	22.34	22.47	
5	16QAM	12	13	22.39	22.49	22.35	23.7
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.56	22.38	22.38	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.25	21.17	22.7
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				830.5	835.5	837.5	
Frequency (MHz)				707.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.29	25.7
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	24.7
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.36	23.44	23.40	
3	QPSK	15	0	23.44	23.33	23.42	24.7
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	23.7
3	16QAM	8	0	22.40	22.39	22.33	
3	16QAM	8	4	22.41	22.42	22.38	
3	16QAM	8	7	22.38	22.41	22.39	23.7
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.38	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	22.7
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				830.7	835.5	837.3	
Frequency (MHz)				899.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	25.7
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	24.7
1.4	QPSK	3	1	24.16	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	
1.4	QPSK	6	0	23.36	23.36	23.33	24.7
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	24.7
1.4	16QAM	3	0	23.67	23.65	23.71	
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	23.7
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	23.7
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	



Band 13_Ant 0							
Band	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				2320	2320	2320	
Frequency (MHz)				23.20	23.20	23.20	
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.92			
10	QPSK	50	0	22.95			24.2
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			
10	16QAM	1	49	23.12			23.2
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.89			
10	16QAM	25	25	21.90			23.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			23.2
10	64QAM	1	49	22.07			
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.93			22.2
10	64QAM	25	25	20.92			
10	64QAM	50	0	20.97			
Channel				2330.5	2330.5	2330.5	
Frequency (MHz)				23.305	23.305	23.305	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	
5	QPSK	12	0	22.74	22.83	22.79	24.2
5	QPSK	12	7	22.83	22.78	22.77	
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.08	23.08	
5	16QAM	1	24	23.09	23.07	23.11	23.2
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.93	21.86	21.91	
5	64QAM	1	0	21.90	21.89	21.90	
5	64QAM	1	12	21.97	21.98	21.97	23.2
5	64QAM	1	24	22.04	22.04	22.04	
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.89	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	



Band 14_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			
10	16QAM	1	49	23.60			23.7
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			23.7
10	16QAM	25	12	22.29			
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			23.7
10	64QAM	1	25	22.55			
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			22.7
10	64QAM	25	12	21.33			
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.28			
Channel				23305			
Frequency (MHz)				790.5			
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.26	23.26	23.26	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.46	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



Band 17_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				705	710	715	
Frequency (MHz)							
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.48	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.40	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				705.5	710	715.5	
Frequency (MHz)							
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.38	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.66	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.46	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	









Band 30_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				27710	27710		
Frequency (MHz)				2310			
10	QPSK	1	0		23.10		24.2
10	QPSK	1	25		23.33		
10	QPSK	1	49		23.20		
10	QPSK	25	0		22.24		23.2
10	QPSK	25	12		22.31		
10	QPSK	25	25		22.32		
10	QPSK	50	0		22.26		23.2
10	16QAM	1	0		22.46		
10	16QAM	1	25		22.61		
10	16QAM	1	49		22.57		22.2
10	16QAM	25	0		21.22		
10	16QAM	25	12		21.30		
10	16QAM	25	25		21.31		22.2
10	16QAM	50	0		21.26		
10	64QAM	1	0		21.34		
10	64QAM	1	25		21.52		22.2
10	64QAM	1	49		21.41		
10	64QAM	25	0		20.28		
10	64QAM	25	12		20.37		21.2
10	64QAM	25	25		20.36		
10	64QAM	50	0		20.32		
Channel				27695	27710	27735	
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.24	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.49	22.56	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.38	21.47	
5	64QAM	1	12	21.42	21.48	21.47	22.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	





Band 71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel							
Frequency (MHz)				675	683	691	
20	QPSK	1	0	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	24.7
20	QPSK	50	24	23.40	23.32	23.31	
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	24.7
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	
20	16QAM	1	99	23.60	23.53	23.62	23.7
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.90	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	23.7
20	64QAM	1	99	22.47	22.90	22.44	
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.33	21.34	22.7
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.15	21.34	21.41	
Channel							
Frequency (MHz)				133197	133372	133547	Tune-up limit (dBm)
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.36	23.36	23.32	24.7
15	QPSK	36	20	23.39	23.35	23.28	
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	24.7
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	
15	16QAM	1	74	23.58	23.60	23.48	23.7
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.56	22.15	22.26	
15	64QAM	1	37	21.61	22.58	22.49	23.7
15	64QAM	1	74	22.45	22.95	22.42	
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	22.7
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	
Channel							
Frequency (MHz)				133192	133372	133552	Tune-up limit (dBm)
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	24.7
10	QPSK	25	12	23.33	23.30	23.26	
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	24.7
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	
10	16QAM	1	49	23.52	23.58	23.47	23.7
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.09	22.18	
10	64QAM	1	25	21.74	22.50	22.41	23.7
10	64QAM	1	49	22.43	22.49	22.32	
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.66	21.32	21.29	22.7
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	
Channel							
Frequency (MHz)				133187	133372	133557	Tune-up limit (dBm)
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	24.7
5	QPSK	12	7	23.29	23.28	23.26	
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	24.7
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	
5	16QAM	1	24	23.49	23.51	23.38	23.7
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	23.7
5	64QAM	1	24	22.42	22.49	22.33	
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	22.7
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	







Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				825	836.5	848	
Frequency (MHz)				825	836.5	848	
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	24
10	QPSK	25	12	22.18	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.18	22.11	24
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	23
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	23
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				825.5	836.5	848.5	
Frequency (MHz)				825.5	836.5	848.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	24
5	QPSK	12	7	22.12	22.12	22.09	
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	24
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.39	22.47	22.22	
5	16QAM	1	24	22.40	22.41	22.16	23
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.38	21.13	
5	64QAM	1	12	21.39	21.37	20.34	23
5	64QAM	1	24	21.34	21.35	20.16	
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	22
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	
Channel				826.5	836.5	847.5	
Frequency (MHz)				826.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	24
3	QPSK	8	4	22.09	22.12	22.03	
3	QPSK	8	7	22.06	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	24
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	
3	16QAM	1	14	22.29	22.35	22.28	23
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.19	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	23
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.39	21.41	20.29	23
3	64QAM	1	14	21.24	21.32	20.28	
3	64QAM	8	0	20.13	20.19	19.16	
3	64QAM	8	4	20.16	20.20	19.14	22
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	
Channel				826.7	836.5	848.3	
Frequency (MHz)				826.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	24
1.4	QPSK	3	1	23.26	23.25	23.23	
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	24
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	
1.4	16QAM	1	5	22.52	22.54	22.47	24
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.28	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.88	
1.4	64QAM	1	3	21.55	21.56	20.76	23
1.4	64QAM	1	5	21.45	21.49	20.77	
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	23
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	



Band 7_Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.
Channel				2510	2535	2560
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	23.74	23.85	23.82
20	QPSK	1	49	23.85	23.93	23.83
20	QPSK	1	99	23.89	23.96	23.87
20	QPSK	50	0	22.90	22.95	22.88
20	QPSK	50	24	22.98	23.07	22.97
20	QPSK	50	50	23.02	23.08	22.99
20	QPSK	100	0	22.96	23.00	22.97
20	16QAM	1	0	23.12	23.22	23.15
20	16QAM	1	49	23.17	23.29	23.17
20	16QAM	1	99	23.19	23.32	23.22
20	16QAM	50	0	21.87	21.97	21.87
20	16QAM	50	24	21.98	21.99	22.01
20	16QAM	50	50	22.01	22.09	21.99
20	16QAM	100	0	21.99	21.97	21.97
20	64QAM	1	0	21.96	22.08	21.99
20	64QAM	1	49	22.06	22.15	22.04
20	64QAM	1	99	22.11	22.23	22.12
20	64QAM	50	0	20.91	20.98	20.90
20	64QAM	50	24	21.04	21.02	21.02
20	64QAM	50	50	21.07	21.08	20.99
20	64QAM	100	0	21.02	20.98	20.98
Channel				2595	2110	2150
Frequency (MHz)				2597.5	2535	2592.5
15	QPSK	1	0	23.81	23.93	23.84
15	QPSK	1	37	23.84	23.90	23.84
15	QPSK	1	74	23.92	23.95	23.91
15	QPSK	36	0	22.90	22.98	22.88
15	QPSK	36	20	23.04	23.01	22.96
15	QPSK	36	39	23.03	23.10	22.99
15	QPSK	75	0	23.00	23.00	22.91
15	16QAM	1	0	23.15	23.28	23.19
15	16QAM	1	37	23.17	23.32	23.19
15	16QAM	1	74	23.21	23.30	23.26
15	16QAM	36	0	21.81	21.98	21.89
15	16QAM	36	20	22.02	22.02	21.91
15	16QAM	36	39	22.02	22.10	21.98
15	16QAM	75	0	22.01	21.99	21.91
15	64QAM	1	0	22.01	22.14	22.02
15	64QAM	1	37	22.06	22.21	22.12
15	64QAM	1	74	22.12	22.25	22.13
15	64QAM	36	0	20.93	21.03	20.95
15	64QAM	36	20	21.06	21.09	20.97
15	64QAM	36	39	21.07	21.14	21.05
15	64QAM	75	0	21.03	21.01	20.94
Channel				2690	2110	2160
Frequency (MHz)				2595	2535	2565
10	QPSK	1	0	23.83	23.83	23.73
10	QPSK	1	25	23.77	23.86	23.73
10	QPSK	1	49	23.85	23.92	23.83
10	QPSK	25	0	22.94	22.96	22.86
10	QPSK	25	12	23.07	23.02	22.96
10	QPSK	25	25	23.00	23.07	22.97
10	QPSK	50	0	22.99	22.96	22.87
10	16QAM	1	0	23.18	23.25	23.11
10	16QAM	1	25	23.17	23.31	23.15
10	16QAM	1	49	23.25	23.34	23.19
10	16QAM	25	0	21.94	21.94	21.84
10	16QAM	25	12	21.98	22.03	21.96
10	16QAM	25	25	22.00	22.03	21.96
10	16QAM	50	0	21.97	21.97	21.86
10	64QAM	1	0	22.11	22.05	22.02
10	64QAM	1	25	22.10	22.19	22.06
10	64QAM	1	49	22.13	22.27	22.09
10	64QAM	25	0	20.96	20.99	20.90
10	64QAM	25	12	21.04	21.03	21.01
10	64QAM	25	25	21.04	21.11	20.99
10	64QAM	50	0	21.00	21.01	20.88
Channel				2695	2110	2160
Frequency (MHz)				2592.5	2535	2597.5
5	QPSK	1	0	23.84	23.87	23.78
5	QPSK	1	12	23.84	23.95	23.84
5	QPSK	1	24	23.89	23.94	23.81
5	QPSK	12	0	22.95	22.97	22.93
5	QPSK	12	7	22.95	23.01	22.89
5	QPSK	12	13	22.97	23.02	22.92
5	QPSK	25	0	22.96	22.98	22.91
5	16QAM	1	0	23.15	23.17	23.10
5	16QAM	1	12	23.18	23.27	23.10
5	16QAM	1	24	23.19	23.25	23.14
5	16QAM	12	0	21.96	22.00	21.93
5	16QAM	12	7	21.99	22.00	21.91
5	16QAM	12	13	21.99	22.05	21.91
5	16QAM	25	0	21.99	22.00	21.96
5	64QAM	1	0	22.11	22.09	22.07
5	64QAM	1	12	22.06	22.16	22.01
5	64QAM	1	24	22.14	22.22	22.10
5	64QAM	12	0	21.05	21.08	20.98
5	64QAM	12	7	21.04	21.02	20.96
5	64QAM	12	13	21.00	21.12	20.97
5	64QAM	25	0	20.98	21.03	20.97



Band 12_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				704	707.5	711	
Frequency (MHz)				2300	2305	2310	
10	QPSK	1	0	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	24.7
10	QPSK	25	12	23.11	23.04	23.08	
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	24.7
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	
10	16QAM	1	49	23.37	23.36	23.33	23.7
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.06	23.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.82	22.16	22.31	23.7
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	22.7
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				705	707.5	710	
Frequency (MHz)				701.5	707.5	713.5	Tune-up limit (dBm)
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	24.7
5	QPSK	12	7	23.04	23.05	23.04	
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	24.7
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.28	23.25	
5	16QAM	1	24	23.28	23.35	23.28	23.7
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	23.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.73	22.16	
5	64QAM	1	12	21.70	22.17	22.31	23.7
5	64QAM	1	24	21.72	22.12	21.85	
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	22.7
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.98	20.96	
Channel				705	707.5	710	
Frequency (MHz)				701.5	707.5	714.5	Tune-up limit (dBm)
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.98	23.84	
3	QPSK	8	0	23.03	23.04	23.00	24.7
3	QPSK	8	4	23.09	23.09	23.05	
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	24.7
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	
3	16QAM	1	14	23.21	23.30	23.22	23.7
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	23.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	23.7
3	64QAM	1	14	21.75	22.21	21.77	
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.18	20.90	22.7
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	
Channel				897	903	910	
Frequency (MHz)				899.7	907.5	915.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.98	23.89	
1.4	QPSK	3	0	23.91	23.93	23.90	24.7
1.4	QPSK	3	1	23.99	23.96	23.96	
1.4	QPSK	3	3	23.92	23.98	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	24.7
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	
1.4	16QAM	1	5	23.44	23.52	23.45	24.7
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.38	22.02	
1.4	64QAM	1	3	21.75	22.44	22.00	23.7
1.4	64QAM	1	5	21.70	22.43	21.90	
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	22.7
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	





Band 13_Ant 1							
Band	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				2320	2320	2320	
Frequency (MHz)				782	782	782	
10	QPSK	1	0	23.02			25
10	QPSK	1	25	23.01			
10	QPSK	1	49	23.04			
10	QPSK	25	0	22.01			24
10	QPSK	25	12	22.02			
10	QPSK	25	25	22.08			
10	QPSK	50	0	22.15			24
10	16QAM	1	0	22.28			
10	16QAM	1	25	22.27			
10	16QAM	1	49	22.33			23
10	16QAM	25	0	21.03			
10	16QAM	25	12	21.05			
10	16QAM	25	25	21.08			23
10	16QAM	50	0	21.12			
10	64QAM	1	0	21.07			
10	64QAM	1	25	21.22			23
10	64QAM	1	49	21.29			
10	64QAM	25	0	20.04			
10	64QAM	25	12	20.08			22
10	64QAM	25	25	20.11			
10	64QAM	50	0	20.12			
Channel				23205	23205	23205	
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.90	22.85	22.80	25
5	QPSK	1	12	22.94	22.95	22.88	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.98	23
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.06	21.13	20.86	
5	64QAM	1	12	21.13	21.18	20.90	23
5	64QAM	1	24	21.18	21.17	20.98	
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	22
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



Band 14_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				2333			
Frequency (MHz)				793			
10	QPSK	1	0		23.07		25
10	QPSK	1	25		23.07		
10	QPSK	1	49		23.08		
10	QPSK	25	0		22.08		24
10	QPSK	25	12		22.10		
10	QPSK	25	25		22.19		
10	QPSK	50	0		22.12		24
10	16QAM	1	0		22.44		
10	16QAM	1	25		22.44		
10	16QAM	1	49		22.42		23
10	16QAM	25	0		21.10		
10	16QAM	25	12		21.12		
10	16QAM	25	25		21.20		23
10	16QAM	50	0		21.10		
10	64QAM	1	0		21.31		
10	64QAM	1	25		21.38		23
10	64QAM	1	49		21.35		
10	64QAM	25	0		20.12		
10	64QAM	25	12		20.15		22
10	64QAM	25	25		20.20		
10	64QAM	50	0		20.17		
Channel				2335			
Frequency (MHz)				790.5			
5	QPSK	1	0	23.02	23.01	23.01	25
5	QPSK	1	12	23.02	23.06	23.05	
5	QPSK	1	24	23.04	23.03	23.01	
5	QPSK	12	0	22.05	22.07	22.08	24
5	QPSK	12	7	22.16	22.11	22.13	
5	QPSK	12	13	22.10	22.12	22.07	
5	QPSK	25	0	22.08	22.06	22.04	24
5	16QAM	1	0	22.32	22.32	22.31	
5	16QAM	1	12	22.40	22.43	22.42	
5	16QAM	1	24	22.38	22.40	22.38	23
5	16QAM	12	0	21.12	21.11	21.10	
5	16QAM	12	7	21.21	21.16	21.19	
5	16QAM	12	13	21.14	21.16	21.12	23
5	16QAM	25	0	21.11	21.09	21.06	
5	64QAM	1	0	21.21	21.30	21.29	
5	64QAM	1	12	21.32	21.41	21.34	23
5	64QAM	1	24	21.38	21.36	21.33	
5	64QAM	12	0	20.16	20.18	20.14	
5	64QAM	12	7	20.25	20.18	20.21	22
5	64QAM	12	13	20.18	20.23	20.16	
5	64QAM	25	0	20.12	20.12	20.07	



Band 17_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.	
Channel				700	710	711	
Frequency (MHz)				23780	23790	23800	
10	QPSK	1	0	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	24
10	QPSK	25	12	22.25	22.26	22.26	
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.28	22.30	24
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	
10	16QAM	1	49	22.26	22.23	22.26	23
10	16QAM	25	0	20.91	20.87	20.88	
10	16QAM	25	12	21.02	20.96	20.94	
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	
10	64QAM	1	25	21.14	21.16	21.17	23
10	64QAM	1	49	21.16	21.18	21.13	
10	64QAM	25	0	19.92	19.92	19.92	
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.96	19.97	19.97	
Channel				706.5	710	713.5	
Frequency (MHz)				23785	23790	23800	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	24
5	QPSK	12	7	22.29	22.22	22.23	
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	24
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	
5	16QAM	1	24	22.25	22.25	22.22	23
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.09	21.13	21.09	23
5	64QAM	1	24	21.19	21.16	21.10	
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	







Band 30_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				27710			
10	QPSK	1	0		24.12		25.7
10	QPSK	1	25		24.04		
10	QPSK	1	49		24.03		
10	QPSK	25	0		23.10		24.7
10	QPSK	25	12		23.16		
10	QPSK	25	25		23.18		
10	QPSK	50	0		23.14		24.7
10	16QAM	1	0		23.44		
10	16QAM	1	25		23.47		
10	16QAM	1	49		23.35		23.7
10	16QAM	25	0		22.11		
10	16QAM	25	12		22.15		
10	16QAM	25	25		22.11		23.7
10	16QAM	50	0		22.14		
10	64QAM	1	0		22.35		
10	64QAM	1	25		21.90		23.7
10	64QAM	1	49		21.70		
10	64QAM	25	0		21.07		
10	64QAM	25	12		20.86		22.7
10	64QAM	25	25		20.84		
10	64QAM	50	0		20.86		
Channel				27695			
Frequency (MHz)				27695			
5	QPSK	1	0	23.95	23.90	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	24.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.15	21.93	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.92	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.75	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	





Band 71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel							
Frequency (MHz)				675	683	690	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	24
20	QPSK	50	24	22.33	22.25	22.21	
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	24
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	23
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.14	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	23
20	64QAM	1	99	21.28	21.28	21.23	
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	22
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	
Channel							
Frequency (MHz)				133197	133322	133372	Tune-up limit (dBm)
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	24
15	QPSK	36	20	22.33	22.22	22.14	
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	24
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.52	22.45	
15	16QAM	1	74	22.39	22.47	22.33	23
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.56	21.40	21.09	
15	64QAM	1	37	20.85	21.41	21.35	23
15	64QAM	1	74	21.28	21.30	21.23	
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	19.86	20.11	20.20	22
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	
Channel							
Frequency (MHz)				669	678	683	Tune-up limit (dBm)
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	24
10	QPSK	25	12	22.15	22.10	22.00	
10	QPSK	25	25	22.07	22.06	22.01	
10	QPSK	50	0	22.15	22.11	22.02	24
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	23
10	16QAM	25	0	21.09	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	23
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	23
10	64QAM	1	49	20.62	21.18	21.10	
10	64QAM	25	0	19.03	20.05	19.96	
10	64QAM	25	12	19.15	20.15	19.96	22
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.96	
Channel							
Frequency (MHz)				665.5	675.5	685.5	Tune-up limit (dBm)
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	24
5	QPSK	12	7	22.01	22.04	22.03	
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	24
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	23
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	23
5	64QAM	1	24	20.13	21.24	20.77	
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	22
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	









Band 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	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	24.7
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	
10	QPSK	50	0	23.40	23.33	23.31	24.7
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	23.7
10	16QAM	25	0	22.30	22.32	22.32	
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	23.7
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	22.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	22.7
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	24.7
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	
5	QPSK	25	0	23.36	23.25	23.29	24.7
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	23.7
5	16QAM	12	0	22.25	22.30	22.25	
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.28	23.7
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	22.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	22.7
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	
Channel				20415	20565	20655	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	24.7
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	
3	QPSK	15	0	23.38	23.28	23.24	24.7
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.81	23.25	23.7
3	16QAM	8	0	22.20	22.29	22.27	
3	16QAM	8	4	22.35	22.36	22.23	
3	16QAM	8	7	22.38	22.29	22.29	23.7
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	22.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	22.7
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	24.7
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	
1.4	QPSK	6	0	23.26	23.28	23.25	24.7
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	24.7
1.4	16QAM	3	0	23.51	23.58	23.71	
1.4	16QAM	3	1	23.62	23.60	23.53	
1.4	16QAM	3	3	23.54	23.59	23.22	23.7
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.28	
1.4	64QAM	1	3	22.33	22.38	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	23.7
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.28	



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	22.14	22.28	22.28	24.1
20	QPSK	1	49	22.25	22.35	22.32	
20	QPSK	1	99	22.32	22.48	22.41	
20	QPSK	50	0	22.27	22.39	22.39	
20	QPSK	50	24	22.43	22.46	22.51	24.1
20	QPSK	50	50	22.45	22.36	22.52	
20	QPSK	100	0	22.41	22.47	22.46	
20	16QAM	1	0	22.50	22.62	22.64	24.1
20	16QAM	1	49	22.61	22.69	22.67	
20	16QAM	1	99	22.64	22.78	22.68	
20	16QAM	50	0	22.28	22.41	22.39	
20	16QAM	50	24	22.43	22.48	22.49	23.7
20	16QAM	50	50	22.46	22.56	22.59	
20	16QAM	100	0	22.38	22.42	22.48	
20	64QAM	1	0	22.39	22.49	22.48	23.7
20	64QAM	1	49	22.47	22.59	22.58	
20	64QAM	1	99	22.57	22.70	22.24	
20	64QAM	50	0	22.28	21.85	21.81	
20	64QAM	50	24	22.41	21.90	21.84	22.7
20	64QAM	50	50	22.42	21.99	21.94	
20	64QAM	100	0	22.38	21.91	21.92	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.05	22.27	22.27	24.1
15	QPSK	1	37	22.18	22.35	22.22	
15	QPSK	1	74	22.28	22.43	22.33	
15	QPSK	36	0	22.23	22.37	22.39	
15	QPSK	36	20	22.35	22.43	22.49	24.1
15	QPSK	36	39	22.35	22.51	22.42	
15	QPSK	75	0	22.37	22.34	22.46	
15	16QAM	1	0	22.48	22.53	22.62	24.1
15	16QAM	1	37	22.58	22.61	22.65	
15	16QAM	1	74	22.64	22.69	22.64	
15	16QAM	36	0	22.28	22.37	22.38	
15	16QAM	36	20	22.41	22.39	22.41	23.7
15	16QAM	36	39	22.36	22.49	22.40	
15	16QAM	75	0	22.34	22.37	22.38	
15	64QAM	1	0	22.31	22.42	22.46	23.7
15	64QAM	1	37	22.43	22.52	22.55	
15	64QAM	1	74	22.53	22.66	22.14	
15	64QAM	36	0	22.16	21.79	21.74	
15	64QAM	36	20	22.32	21.87	21.84	22.7
15	64QAM	36	39	22.42	21.93	21.85	
15	64QAM	75	0	22.31	21.84	21.90	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	22.08	22.23	22.20	24.1
10	QPSK	1	25	22.23	22.30	22.28	
10	QPSK	1	49	22.24	22.40	22.34	
10	QPSK	25	0	22.20	22.30	22.32	
10	QPSK	25	12	22.42	22.37	22.51	24.1
10	QPSK	25	25	22.37	22.47	22.43	
10	QPSK	50	0	22.41	22.36	22.44	
10	16QAM	1	0	22.46	22.60	22.57	24.1
10	16QAM	1	25	22.51	22.61	22.64	
10	16QAM	1	49	22.58	22.73	22.58	
10	16QAM	25	0	22.28	22.34	22.35	
10	16QAM	25	12	22.43	22.40	22.38	23.7
10	16QAM	25	25	22.43	22.52	22.48	
10	16QAM	50	0	22.31	22.37	22.43	
10	64QAM	1	0	22.30	22.41	22.38	23.7
10	64QAM	1	25	22.39	22.57	22.48	
10	64QAM	1	49	22.54	22.68	22.21	
10	64QAM	25	0	22.28	21.84	21.79	
10	64QAM	25	12	22.32	21.85	21.84	22.7
10	64QAM	25	25	22.42	21.99	21.88	
10	64QAM	50	0	22.31	21.89	21.89	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.05	22.27	22.20	24.1
5	QPSK	1	12	22.16	22.31	22.28	
5	QPSK	1	24	22.22	22.46	22.38	
5	QPSK	12	0	22.17	22.39	22.39	
5	QPSK	12	7	22.40	22.38	22.44	24.1
5	QPSK	12	13	22.44	22.56	22.50	
5	QPSK	25	0	22.39	22.35	22.47	
5	16QAM	1	0	22.40	22.61	22.60	24.1
5	16QAM	1	12	22.58	22.69	22.67	
5	16QAM	1	24	22.60	22.71	22.58	
5	16QAM	12	0	22.23	22.31	22.37	
5	16QAM	12	7	22.42	22.44	22.45	23.7
5	16QAM	12	13	22.40	22.54	22.49	
5	16QAM	25	0	22.31	22.32	22.43	
5	64QAM	1	0	22.35	22.47	22.41	23.7
5	64QAM	1	12	22.38	22.52	22.52	
5	64QAM	1	24	22.57	22.67	22.17	
5	64QAM	12	0	22.20	21.80	21.71	
5	64QAM	12	7	22.37	21.80	21.78	22.7
5	64QAM	12	13	22.35	21.94	21.89	
5	64QAM	25	0	22.37	21.84	21.91	



Band 12_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.35	24.28	24.30	
10	QPSK	1	25	24.27	24.31	24.28	25.7
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	
10	QPSK	25	12	23.49	23.43	23.46	24.7
10	QPSK	25	25	23.46	23.46	23.44	
10	QPSK	50	0	23.51	23.43	23.47	
10	16QAM	1	0	23.74	23.66	23.73	
10	16QAM	1	25	23.70	23.70	23.69	24.7
10	16QAM	1	49	23.74	23.66	23.67	
10	16QAM	25	0	22.41	22.42	22.42	
10	16QAM	25	12	22.50	22.44	22.48	23.7
10	16QAM	25	25	22.47	22.49	22.41	
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.29	21.22	22.7
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	
5	QPSK	1	12	24.20	24.29	24.23	25.7
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	
5	QPSK	12	7	23.39	23.42	23.44	24.7
5	QPSK	12	13	23.46	23.46	23.36	
5	QPSK	25	0	23.49	23.34	23.44	
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.69	24.7
5	16QAM	1	24	23.69	23.59	23.61	
5	16QAM	12	0	22.38	22.42	22.33	
5	16QAM	12	7	22.40	22.34	22.47	23.7
5	16QAM	12	13	22.39	22.49	22.35	
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.26	21.17	22.7
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				23005	23065	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	
3	QPSK	1	8	24.18	24.23	24.21	25.7
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	
3	QPSK	8	4	23.39	23.34	23.37	24.7
3	QPSK	8	7	23.36	23.44	23.40	
3	QPSK	15	0	23.44	23.33	23.42	
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	24.7
3	16QAM	1	14	23.74	23.56	23.66	
3	16QAM	8	0	22.40	22.39	22.33	
3	16QAM	8	4	22.41	22.42	22.38	23.7
3	16QAM	8	7	22.39	22.41	22.39	
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	22.7
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	
1.4	QPSK	1	3	24.20	24.25	24.25	25.7
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	
1.4	QPSK	6	0	23.36	23.36	23.33	24.7
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	24.7
1.4	16QAM	1	5	23.41	23.42	23.41	
1.4	16QAM	3	0	23.67	23.65	23.71	
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	
1.4	16QAM	6	0	22.32	22.32	22.40	23.7
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	
1.4	64QAM	1	5	22.46	22.37	22.37	23.7
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	22.7



Band 13_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.82			
10	QPSK	50	0	22.55			24.2
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			
10	16QAM	1	49	23.12			23.2
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.89			
10	16QAM	25	25	21.50			23.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			22.2
10	64QAM	1	49	22.07			
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.53			22.2
10	64QAM	25	25	20.52			
10	64QAM	50	0	20.97			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	
5	QPSK	12	0	22.74	22.83	22.79	24.2
5	QPSK	12	7	22.83	22.78	22.77	
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	
5	16QAM	1	24	23.09	23.07	23.11	23.2
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.83	21.86	21.91	
5	64QAM	1	0	21.80	21.89	21.90	
5	64QAM	1	12	21.97	21.99	21.97	23.2
5	64QAM	1	24	22.04	22.04	22.04	
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.89	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	



Band 14_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			
10	16QAM	1	49	23.60			23.7
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			23.7
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.55			22.7
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.30			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.15	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



Band 17_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.46	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.66	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.48	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	







Band 26 Ant 0								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)	
Channel				26765	26865	26965		
Frequency (MHz)				811.5	831.5	841.5		
15	QPSK	1	0	24.23	24.12	24.14	25.7	
15	QPSK	1	37	24.15	24.13	24.09		
15	QPSK	1	74	24.18	24.13	23.98		
15	QPSK	36	0	23.31	23.25	23.24		
15	QPSK	36	20	23.34	23.29	23.20	24.7	
15	QPSK	36	39	23.30	23.30	23.25		
15	QPSK	75	0	23.34	23.29	23.20		
15	16QAM	1	0	23.58	23.46	23.45		
15	16QAM	1	37	23.49	23.44	23.44	24.7	
15	16QAM	1	74	23.46	23.43	23.30		
15	16QAM	36	0	22.33	22.26	22.24		
15	16QAM	36	20	22.34	22.31	22.19		
15	16QAM	36	39	22.31	22.25	22.18	23.7	
15	16QAM	75	0	22.36	22.31	22.23		
15	64QAM	1	0	22.43	22.31	22.31		
15	64QAM	1	37	22.43	22.39	22.34		
15	64QAM	1	74	22.36	22.34	21.62	23.7	
15	64QAM	36	0	21.35	21.31	21.30		
15	64QAM	36	20	21.41	21.30	21.23		
15	64QAM	36	39	21.36	21.30	21.29		
15	64QAM	75	0	21.37	21.31	21.24	22.7	
Channel				26740	26865	26990		Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844		
10	QPSK	1	0	24.18	24.06	24.14		25.7
10	QPSK	1	25	24.15	24.06	23.99		
10	QPSK	1	49	24.13	24.13	23.98		
10	QPSK	25	0	23.24	23.17	23.17		
10	QPSK	25	12	23.31	23.29	23.11	24.7	
10	QPSK	25	25	23.20	23.26	23.25		
10	QPSK	50	0	23.26	23.28	23.14		
10	16QAM	1	0	23.52	23.39	23.40		
10	16QAM	1	25	23.48	23.37	23.35	24.7	
10	16QAM	1	49	23.46	23.41	23.27		
10	16QAM	25	0	22.28	22.24	22.24		
10	16QAM	25	12	22.27	22.21	22.09		
10	16QAM	25	25	22.30	22.16	22.08	23.7	
10	16QAM	50	0	22.26	22.24	22.15		
10	64QAM	1	0	22.37	22.25	22.22		
10	64QAM	1	25	22.33	22.35	22.24		
10	64QAM	1	49	22.34	22.26	21.54	23.7	
10	64QAM	25	0	21.31	21.26	21.28		
10	64QAM	25	12	21.37	21.29	21.22		
10	64QAM	25	25	21.28	21.29	21.22		
10	64QAM	50	0	21.27	21.27	21.21	22.7	
Channel				26716	26865	27015		Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	0	24.14	24.10	24.05		25.7
5	QPSK	1	12	24.05	24.05	24.08		
5	QPSK	1	24	24.12	24.11	23.91		
5	QPSK	12	0	23.21	23.23	23.15		
5	QPSK	12	7	23.30	23.27	23.19	24.7	
5	QPSK	12	13	23.25	23.27	23.21		
5	QPSK	25	0	23.32	23.27	23.17		
5	16QAM	1	0	23.53	23.40	23.43		
5	16QAM	1	12	23.46	23.35	23.44	24.7	
5	16QAM	1	24	23.44	23.33	23.27		
5	16QAM	12	0	22.29	22.18	22.16		
5	16QAM	12	7	22.31	22.26	22.17		
5	16QAM	12	13	22.30	22.23	22.16	23.7	
5	16QAM	25	0	22.33	22.24	22.19		
5	64QAM	1	0	22.40	22.21	22.25		
5	64QAM	1	12	22.35	22.32	22.30		
5	64QAM	1	24	22.32	22.34	21.52	23.7	
5	64QAM	12	0	21.27	21.30	21.28		
5	64QAM	12	7	21.33	21.32	21.14		
5	64QAM	12	13	21.34	21.24	21.25		
5	64QAM	25	0	21.31	21.31	21.24	22.7	
Channel				26705	26865	27025		Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5		
3	QPSK	1	0	24.19	24.10	24.14		25.7
3	QPSK	1	8	24.05	24.08	24.08		
3	QPSK	1	14	24.15	24.05	23.97		
3	QPSK	8	0	23.21	23.23	23.17		
3	QPSK	8	4	23.26	23.19	23.15	24.7	
3	QPSK	8	7	23.24	23.23	23.22		
3	QPSK	15	0	23.31	23.22	23.20		
3	16QAM	1	0	23.56	23.45	23.39		
3	16QAM	1	8	23.43	23.39	23.43	24.7	
3	16QAM	1	14	23.37	23.36	23.28		
3	16QAM	8	0	22.29	22.16	22.15		
3	16QAM	8	4	22.25	22.22	22.09		
3	16QAM	8	7	22.21	22.22	22.14	23.7	
3	16QAM	15	0	22.28	22.29	22.23		
3	64QAM	1	0	22.35	22.21	22.31		
3	64QAM	1	8	22.35	22.37	22.24		
3	64QAM	1	14	22.32	22.31	21.61	23.7	
3	64QAM	8	0	21.31	21.31	21.22		
3	64QAM	8	4	21.38	21.25	21.21		
3	64QAM	8	7	21.35	21.24	21.19		
3	64QAM	15	0	21.33	21.21	21.24	22.7	
Channel				26897	26965	27033		Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3		
1.4	QPSK	1	0	24.15	24.03	24.06		25.7
1.4	QPSK	1	3	23.98	24.04	23.99		
1.4	QPSK	1	5	24.14	24.02	23.96		
1.4	QPSK	3	0	24.15	24.03	24.12		
1.4	QPSK	3	1	24.05	24.05	24.08	24.7	
1.4	QPSK	3	3	24.07	23.93	23.94		
1.4	QPSK	6	0	23.15	23.20	23.12		
1.4	16QAM	1	0	23.17	23.16	23.05		
1.4	16QAM	1	3	23.16	23.17	23.16	24.7	
1.4	16QAM	1	5	23.23	23.19	23.10		
1.4	16QAM	3	0	23.46	23.36	23.30		
1.4	16QAM	3	1	23.39	23.30	23.35		
1.4	16QAM	3	3	23.33	23.26	23.26	23.7	
1.4	16QAM	6	0	22.20	22.14	22.10		
1.4	64QAM	1	0	22.18	22.22	22.05		
1.4	64QAM	1	3	22.16	22.20	22.04		
1.4	64QAM	1	5	22.25	22.29	22.20	23.7	
1.4	64QAM	3	0	22.28	22.11	22.27		
1.4	64QAM	3	1	22.28	22.37	22.24		
1.4	64QAM	3	3	22.31	22.31	21.51		
1.4	64QAM	6	0	21.26	21.25	21.15	22.7	



Band 30_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.31			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.26			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			22.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.30			
10	16QAM	25	25	21.31			21.2
10	16QAM	50	0	21.26			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit [dBm]
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.48	22.36	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.36	21.47	
5	64QAM	1	12	21.42	21.46	21.47	21.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	





Band 71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	24.7
20	QPSK	50	24	23.40	23.32	23.31	
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	24.7
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	
20	16QAM	1	99	23.60	23.53	23.62	23.7
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.80	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	22.7
20	64QAM	1	99	22.47	22.50	22.44	
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.33	21.34	22.7
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.16	21.34	21.41	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	24.7
15	QPSK	36	20	23.39	23.35	23.28	
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	24.7
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	
15	16QAM	1	74	23.58	23.60	23.48	23.7
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.58	22.15	22.26	
15	64QAM	1	37	21.81	22.58	22.48	22.7
15	64QAM	1	74	22.45	22.55	22.42	
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	22.7
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	
Channel				133172	133272	133372	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	24.7
10	QPSK	25	12	23.33	23.30	23.26	
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	24.7
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	
10	16QAM	1	49	23.52	23.58	23.47	23.7
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	22.7
10	64QAM	1	49	22.43	22.49	22.32	
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.68	21.32	21.29	22.7
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	24.7
5	QPSK	12	7	23.39	23.28	23.26	
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	24.7
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	
5	16QAM	1	24	23.49	23.51	23.38	23.7
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	22.7
5	64QAM	1	24	22.42	22.49	22.33	
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	22.7
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	







Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	24
10	QPSK	25	12	22.18	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	24
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	23
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	22
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	24
5	QPSK	12	7	22.12	22.12	22.09	
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	24
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	
5	16QAM	1	24	22.40	22.41	22.16	23
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	22
5	64QAM	1	24	21.34	21.35	20.16	
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	22
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	
Channel				20415	20555	20655	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	24
3	QPSK	8	4	22.09	22.12	22.03	
3	QPSK	8	7	22.08	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	24
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	
3	16QAM	1	14	22.29	22.35	22.26	23
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.19	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	22
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	22
3	64QAM	1	14	21.24	21.32	20.28	
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	22
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	24
1.4	QPSK	3	1	23.26	23.25	23.23	
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	24
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	
1.4	16QAM	1	5	22.52	22.54	22.47	23
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.68	
1.4	64QAM	1	3	21.53	21.56	20.78	23
1.4	64QAM	1	5	21.45	21.49	20.77	
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	22
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	





Band 7 Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	24.5
20	QPSK	50	24	22.99	22.97	22.97	
20	QPSK	50	50	23.02	23.08	22.98	
20	QPSK	100	0	22.98	23.00	22.97	24.5
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	
20	16QAM	1	99	23.19	23.32	23.22	23.5
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.86	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	22.5
20	64QAM	1	99	22.11	22.23	22.12	
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	22.5
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	24.5
15	QPSK	36	20	23.04	23.01	22.92	
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	24.5
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	
15	16QAM	1	74	23.21	23.30	23.26	23.5
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	22.5
15	64QAM	1	74	22.12	22.25	22.13	
15	64QAM	36	0	20.83	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	22.5
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	24.5
10	QPSK	25	12	23.00	23.02	22.96	
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	24.5
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	
10	16QAM	1	49	23.25	23.34	23.19	23.5
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.88	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	22.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	22.5
10	64QAM	1	49	22.13	22.27	22.09	
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	22.5
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	24.5
5	QPSK	12	7	22.95	23.01	22.88	
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	24.5
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	
5	16QAM	1	24	23.19	23.25	23.14	23.5
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	22.5
5	64QAM	1	24	22.14	22.22	22.10	
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	22.5
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.00	20.97	



Band 12_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	24.7
10	QPSK	25	12	23.11	23.04	23.08	
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	24.7
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	
10	16QAM	1	49	23.37	23.36	23.33	23.7
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.08	23.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	23.7
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	22.7
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	24.7
5	QPSK	12	7	23.04	23.06	23.04	
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	24.7
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.26	23.25	
5	16QAM	1	24	23.28	23.35	23.26	23.7
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	23.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	
5	64QAM	1	12	21.70	22.17	22.01	23.7
5	64QAM	1	24	21.72	22.12	21.85	
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	22.7
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.96	20.96	
Channel				23005	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	24.7
3	QPSK	8	4	23.05	23.09	23.05	
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	24.7
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	
3	16QAM	1	14	23.21	23.30	23.22	23.7
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	23.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	23.7
3	64QAM	1	14	21.73	22.21	21.77	
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.18	20.90	22.7
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	24.7
1.4	QPSK	3	1	23.99	23.98	23.96	
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	24.7
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	
1.4	16QAM	1	5	23.44	23.52	23.45	24.7
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.36	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	23.7
1.4	64QAM	1	5	21.70	22.43	21.80	
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	23.7
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	



Band 13_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		24
10	QPSK	25	12		22.02		
10	QPSK	25	25		22.06		
10	QPSK	50	0		22.15		24
10	16QAM	1	0		22.28		
10	16QAM	1	25		22.27		
10	16QAM	1	49		22.33		23
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.08		23
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		
10	64QAM	1	25		21.22		23
10	64QAM	1	49		21.29		
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.06		22
10	64QAM	25	25		20.11		
10	64QAM	50	0		20.12		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	22.90	22.85	22.80	25
5	QPSK	1	12	22.94	22.95	22.88	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.96	23
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.08	21.13	20.86	
5	64QAM	1	12	21.13	21.18	20.90	23
5	64QAM	1	24	21.18	21.17	20.98	
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	22
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



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



Band 17_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	
10	QPSK	25	12	22.25	22.26	22.28	24
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.26	22.30	
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	24
10	16QAM	1	49	22.26	22.23	22.26	
10	16QAM	25	0	20.91	20.87	20.88	
10	16QAM	25	12	21.02	20.96	20.94	23
10	16QAM	25	25	21.03	21.04	20.96	
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	
10	64QAM	1	25	21.14	21.18	21.17	23
10	64QAM	1	49	21.16	21.18	21.13	
10	64QAM	25	0	19.92	19.92	19.92	
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.98	19.97	19.97	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	
5	QPSK	12	7	22.29	22.22	22.23	24
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	24
5	16QAM	1	24	22.25	22.25	22.22	
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	23
5	16QAM	12	13	20.97	20.96	20.95	
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.09	21.13	21.09	23
5	64QAM	1	24	21.19	21.16	21.10	
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	





Band 26_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	23.14	23.06	23.05	25
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.18	22.17	24
15	QPSK	36	20	22.22	22.20	22.18	
15	QPSK	36	39	22.21	22.16	22.15	
15	QPSK	36	0	22.25	22.23	22.12	24
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.39	
15	16QAM	1	74	22.38	22.39	22.23	23
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	23
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	
15	64QAM	1	37	21.28	21.32	21.32	22
15	64QAM	1	74	21.29	21.30	21.02	
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.28	20.27	20.21	22
15	64QAM	36	39	20.26	20.27	20.21	
15	64QAM	75	0	20.27	20.25	20.20	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	24
10	QPSK	25	12	22.13	22.03	22.05	
10	QPSK	25	25	22.06	22.06	22.03	
10	QPSK	50	0	22.15	22.08	22.02	24
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.38	22.38	22.34	
10	16QAM	1	49	22.33	22.37	22.21	23
10	16QAM	25	0	21.16	21.05	21.04	
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	23
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.20	21.21	
10	64QAM	1	25	21.15	21.27	21.25	22
10	64QAM	1	49	21.31	21.32	21.08	
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.98	20.10	20.08	22
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	
Channel				815.5	831.5	846.5	
Frequency (MHz)				815.5	831.5	846.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	24
5	QPSK	12	7	22.18	22.10	22.02	
5	QPSK	12	13	22.08	22.03	22.00	
5	QPSK	25	0	22.09	22.08	22.02	24
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	
5	16QAM	1	24	22.33	22.38	22.19	23
5	16QAM	12	0	21.20	21.06	21.05	
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	23
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.00	23
5	64QAM	1	24	21.02	21.27	21.01	
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.15	19.45	22
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	24
3	QPSK	8	4	22.16	22.08	22.00	
3	QPSK	8	7	22.10	22.02	22.02	
3	QPSK	15	0	22.15	22.03	22.01	24
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	
3	16QAM	1	14	22.29	22.32	22.16	23
3	16QAM	8	0	21.23	21.11	21.03	
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	23
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	23
3	64QAM	1	14	21.18	21.28	20.45	
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	22
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.05	19.41	
Channel				26997	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	24
1.4	QPSK	3	1	23.09	23.07	23.11	
1.4	QPSK	3	3	23.12	23.06	23.05	
1.4	QPSK	6	0	22.16	22.21	22.13	24
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	
1.4	16QAM	1	5	22.36	22.48	22.32	24
1.4	16QAM	3	0	22.24	22.24	22.16	
1.4	16QAM	3	1	22.20	22.30	22.16	
1.4	16QAM	3	3	22.21	22.26	22.14	23
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.94	23
1.4	64QAM	1	5	21.31	21.36	20.91	
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	22
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.28	20.25	19.69	



Band 30_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	24.12			25.7
10	QPSK	1	25	24.04			
10	QPSK	1	49	24.03			
10	QPSK	25	0	23.10			24.7
10	QPSK	25	12	23.16			
10	QPSK	25	25	23.16			
10	QPSK	50	0	23.14			24.7
10	16QAM	1	0	23.44			
10	16QAM	1	25	23.47			
10	16QAM	1	49	23.35			23.7
10	16QAM	25	0	22.11			
10	16QAM	25	12	22.15			
10	16QAM	25	25	22.11			23.7
10	16QAM	50	0	22.14			
10	64QAM	1	0	22.35			
10	64QAM	1	25	21.90			23.7
10	64QAM	1	49	21.70			
10	64QAM	25	0	21.07			
10	64QAM	25	12	20.86			22.7
10	64QAM	25	25	20.84			
10	64QAM	50	0	20.86			
Channel				27685	27710	27735	Tune-up limit [dBm]
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.95	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.76	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	







Band 71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	24
20	QPSK	50	24	22.33	22.25	22.21	
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	24
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	23
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.14	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	22
20	64QAM	1	99	21.28	21.28	21.23	
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	22
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	24
15	QPSK	36	20	22.32	22.22	22.14	
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	24
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.52	22.45	
15	16QAM	1	74	22.39	22.47	22.33	23
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.58	21.40	21.09	
15	64QAM	1	37	20.95	21.41	21.35	22
15	64QAM	1	74	21.28	21.39	21.23	
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	18.86	20.11	20.20	22
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	
Channel				133172	133272	133322	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	24
10	QPSK	25	12	22.15	22.10	22.00	
10	QPSK	25	25	22.07	22.06	22.01	
10	QPSK	50	0	22.15	22.11	22.02	24
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	23
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	22
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	22
10	64QAM	1	49	20.69	21.18	21.10	
10	64QAM	25	0	19.03	20.05	19.96	
10	64QAM	25	12	19.15	20.15	19.95	22
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.95	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	24
5	QPSK	12	7	22.01	22.04	22.03	
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	24
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	23
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	22
5	64QAM	1	24	20.13	21.24	20.77	
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	22
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	







Band 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	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	24.7
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	
10	QPSK	50	0	23.40	23.33	23.31	24.7
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	23.7
10	16QAM	25	0	22.30	22.32	22.32	
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	23.7
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	22.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	22.7
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	24.7
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	
5	QPSK	25	0	23.36	23.25	23.29	24.7
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	23.7
5	16QAM	12	0	22.25	22.30	22.25	
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.26	23.7
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	22.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	22.7
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	
Channel				20415	20565	20655	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	24.7
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	
3	QPSK	15	0	23.38	23.28	23.24	24.7
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.81	23.25	23.7
3	16QAM	8	0	22.20	22.29	22.27	
3	16QAM	8	4	22.35	22.36	22.23	
3	16QAM	8	7	22.38	22.29	22.29	23.7
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	22.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	22.7
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	24.7
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	
1.4	QPSK	6	0	23.26	23.28	23.25	24.7
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	24.7
1.4	16QAM	3	0	23.51	23.58	23.71	
1.4	16QAM	3	1	23.62	23.60	23.53	
1.4	16QAM	3	3	23.54	23.59	23.22	23.7
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.28	
1.4	64QAM	1	3	22.33	22.38	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	23.7
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.28	



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	22.14	22.28	22.28	23.3
20	QPSK	1	49	22.25	22.35	22.32	
20	QPSK	1	99	22.32	22.48	22.41	
20	QPSK	50	0	22.27	22.39	22.39	
20	QPSK	50	24	22.43	22.46	22.51	23.3
20	QPSK	50	50	22.45	22.36	22.52	
20	QPSK	100	0	22.41	22.47	22.46	
20	16QAM	1	0	22.50	22.62	22.64	
20	16QAM	1	49	22.61	22.69	22.67	23.3
20	16QAM	1	99	22.64	22.78	22.68	
20	16QAM	50	0	22.28	22.41	22.39	
20	16QAM	50	24	22.43	22.48	22.49	23.3
20	16QAM	50	50	22.46	22.56	22.59	
20	16QAM	100	0	22.38	22.42	22.48	
20	64QAM	1	0	22.39	22.49	22.48	23.3
20	64QAM	1	49	22.47	22.59	22.58	
20	64QAM	1	99	22.57	22.70	22.24	
20	64QAM	50	0	22.28	21.85	21.81	
20	64QAM	50	24	22.41	21.90	21.84	22.7
20	64QAM	50	50	22.42	21.99	21.94	
20	64QAM	100	0	22.38	21.91	21.92	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.05	22.27	22.27	23.3
15	QPSK	1	37	22.18	22.35	22.22	
15	QPSK	1	74	22.28	22.43	22.33	
15	QPSK	36	0	22.23	22.37	22.39	
15	QPSK	36	20	22.35	22.43	22.49	23.3
15	QPSK	36	39	22.35	22.51	22.42	
15	QPSK	75	0	22.37	22.34	22.46	
15	16QAM	1	0	22.48	22.53	22.62	
15	16QAM	1	37	22.58	22.61	22.65	23.3
15	16QAM	1	74	22.64	22.69	22.64	
15	16QAM	36	0	22.28	22.37	22.38	
15	16QAM	36	20	22.41	22.39	22.41	23.3
15	16QAM	36	39	22.36	22.49	22.40	
15	16QAM	75	0	22.34	22.37	22.38	
15	64QAM	1	0	22.31	22.42	22.46	
15	64QAM	1	37	22.43	22.52	22.55	23.3
15	64QAM	1	74	22.53	22.66	22.14	
15	64QAM	36	0	22.16	21.79	21.74	
15	64QAM	36	20	22.32	21.87	21.84	22.7
15	64QAM	36	39	22.42	21.93	21.85	
15	64QAM	75	0	22.31	21.84	21.90	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	22.08	22.23	22.20	23.3
10	QPSK	1	25	22.23	22.30	22.28	
10	QPSK	1	49	22.24	22.40	22.34	
10	QPSK	25	0	22.20	22.30	22.32	
10	QPSK	25	12	22.42	22.37	22.51	23.3
10	QPSK	25	25	22.37	22.47	22.43	
10	QPSK	50	0	22.41	22.36	22.44	
10	16QAM	1	0	22.46	22.60	22.57	
10	16QAM	1	25	22.51	22.61	22.64	23.3
10	16QAM	1	49	22.58	22.73	22.58	
10	16QAM	25	0	22.28	22.34	22.35	
10	16QAM	25	12	22.43	22.40	22.38	23.3
10	16QAM	25	25	22.43	22.52	22.48	
10	16QAM	50	0	22.31	22.37	22.43	
10	64QAM	1	0	22.30	22.41	22.38	
10	64QAM	1	25	22.39	22.57	22.48	23.3
10	64QAM	1	49	22.54	22.68	22.21	
10	64QAM	25	0	22.28	21.94	21.79	
10	64QAM	25	12	22.32	21.85	21.84	22.7
10	64QAM	25	25	22.42	21.99	21.88	
10	64QAM	50	0	22.31	21.89	21.89	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.05	22.27	22.20	23.3
5	QPSK	1	12	22.16	22.31	22.28	
5	QPSK	1	24	22.22	22.40	22.38	
5	QPSK	12	0	22.17	22.39	22.39	
5	QPSK	12	7	22.40	22.38	22.44	23.3
5	QPSK	12	13	22.44	22.56	22.50	
5	QPSK	25	0	22.39	22.35	22.47	
5	16QAM	1	0	22.40	22.61	22.60	
5	16QAM	1	12	22.58	22.69	22.67	23.3
5	16QAM	1	24	22.60	22.71	22.58	
5	16QAM	12	0	22.23	22.31	22.37	
5	16QAM	12	7	22.42	22.44	22.45	23.3
5	16QAM	12	13	22.40	22.54	22.49	
5	16QAM	25	0	22.31	22.32	22.43	
5	64QAM	1	0	22.35	22.47	22.41	
5	64QAM	1	12	22.38	22.52	22.52	23.3
5	64QAM	1	24	22.57	22.67	22.17	
5	64QAM	12	0	22.20	21.80	21.71	
5	64QAM	12	7	22.37	21.80	21.78	22.7
5	64QAM	12	13	22.35	21.94	21.89	
5	64QAM	25	0	22.37	21.84	21.91	



Band 12_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.35	24.28	24.30	25.7
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	24.7
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.46	23.46	23.44	
10	QPSK	50	0	23.51	23.43	23.47	24.7
10	16QAM	1	0	23.74	23.66	23.73	
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.66	23.67	23.7
10	16QAM	25	0	22.41	22.42	22.42	
10	16QAM	25	12	22.50	22.44	22.48	
10	16QAM	25	25	22.47	22.49	22.41	23.7
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.29	21.22	22.7
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	25.7
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	24.7
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.46	23.46	23.36	
5	QPSK	25	0	23.49	23.34	23.44	24.7
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.68	
5	16QAM	1	24	23.69	23.59	23.61	23.7
5	16QAM	12	0	22.38	22.42	22.33	
5	16QAM	12	7	22.40	22.34	22.47	
5	16QAM	12	13	22.39	22.49	22.35	23.7
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	22.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.26	21.17	22.7
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				23035	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	25.7
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	24.7
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.38	23.44	23.40	
3	QPSK	15	0	23.44	23.33	23.42	24.7
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	23.7
3	16QAM	8	0	22.40	22.39	22.33	
3	16QAM	8	4	22.41	22.42	22.38	
3	16QAM	8	7	22.39	22.41	22.39	23.7
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	22.7
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	25.7
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	24.7
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	
1.4	QPSK	6	0	23.36	23.36	23.33	24.7
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	24.7
1.4	16QAM	3	0	23.67	23.65	23.71	
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	23.7
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	23.7
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	



Band 13_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2320			
Frequency (MHz)				762			
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.82			
10	QPSK	50	0	22.55			24.2
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			
10	16QAM	1	49	23.12			23.2
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.89			
10	16QAM	25	25	21.50			22.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			23.2
10	64QAM	1	49	22.07			
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.53			22.2
10	64QAM	25	25	20.52			
10	64QAM	50	0	20.97			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	
5	QPSK	12	0	22.74	22.83	22.79	24.2
5	QPSK	12	7	22.83	22.78	22.77	
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	
5	16QAM	1	24	23.09	23.07	23.11	23.2
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.83	21.86	21.91	
5	64QAM	1	0	21.80	21.89	21.90	
5	64QAM	1	12	21.97	21.99	21.97	23.2
5	64QAM	1	24	22.04	22.04	22.04	
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.89	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	





Band 14_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			
10	16QAM	1	49	23.60			23.7
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			23.7
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.56			22.7
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.30			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



Band 17_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.46	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.66	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.48	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	





Band 26 Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)			
Channel				26765	26865	26965				
Frequency (MHz)				811.5	831.5	841.5				
15	QPSK	1	0	24.23	24.12	24.14	25.7			
15	QPSK	1	37	24.15	24.13	24.09				
15	QPSK	1	74	24.18	24.13	23.98				
15	QPSK	36	0	23.31	23.25	23.24				
15	QPSK	36	20	23.34	23.29	23.20	24.7			
15	QPSK	36	39	23.30	23.30	23.25				
15	QPSK	75	0	23.34	23.29	23.20				
15	16QAM	1	0	23.58	23.46	23.45				
15	16QAM	1	37	23.49	23.44	23.44	24.7			
15	16QAM	1	74	23.46	23.43	23.30				
15	16QAM	36	0	22.33	22.26	22.24				
15	16QAM	36	20	22.34	22.31	22.19				
15	16QAM	36	39	22.31	22.25	22.18	23.7			
15	16QAM	75	0	22.36	22.31	22.23				
15	64QAM	1	0	22.43	22.31	22.31				
15	64QAM	1	37	22.43	22.39	22.34				
15	64QAM	1	74	22.36	22.34	21.62	23.7			
15	64QAM	36	0	21.35	21.31	21.30				
15	64QAM	36	20	21.41	21.30	21.23				
15	64QAM	36	39	21.36	21.30	21.29				
15	64QAM	75	0	21.37	21.31	21.24	22.7			
Channel				26740	26865	26990		Tune-up limit (dBm)		
Frequency (MHz)				819	831.5	844				
10	QPSK	1	0	24.18	24.06	24.14		25.7		
10	QPSK	1	25	24.15	24.06	23.99				
10	QPSK	1	49	24.13	24.13	23.98				
10	QPSK	25	0	23.24	23.17	23.17				
10	QPSK	25	12	23.31	23.29	23.11	24.7			
10	QPSK	25	25	23.20	23.26	23.25				
10	QPSK	50	0	23.26	23.28	23.14				
10	16QAM	1	0	23.52	23.39	23.40				
10	16QAM	1	25	23.48	23.37	23.35	24.7			
10	16QAM	1	49	23.46	23.41	23.27				
10	16QAM	25	0	22.28	22.24	22.24				
10	16QAM	25	12	22.27	22.21	22.09				
10	16QAM	25	25	22.30	22.16	22.08	23.7			
10	16QAM	50	0	22.26	22.24	22.15				
10	64QAM	1	0	22.37	22.25	22.22				
10	64QAM	1	25	22.33	22.35	22.24				
10	64QAM	1	49	22.34	22.26	21.54	23.7			
10	64QAM	25	0	21.31	21.26	21.28				
10	64QAM	25	12	21.37	21.29	21.22				
10	64QAM	25	25	21.28	21.29	21.22				
10	64QAM	50	0	21.27	21.27	21.21	22.7			
Channel				26716	26865	27015		Tune-up limit (dBm)		
Frequency (MHz)				816.5	831.5	846.5				
5	QPSK	1	0	24.14	24.10	24.05		25.7		
5	QPSK	1	12	24.05	24.05	24.08				
5	QPSK	1	24	24.12	24.11	23.91				
5	QPSK	12	0	23.21	23.23	23.15				
5	QPSK	12	7	23.30	23.27	23.19	24.7			
5	QPSK	12	13	23.25	23.27	23.21				
5	QPSK	25	0	23.32	23.27	23.17				
5	16QAM	1	0	23.53	23.40	23.43				
5	16QAM	1	12	23.46	23.35	23.44	24.7			
5	16QAM	1	24	23.44	23.33	23.27				
5	16QAM	12	0	22.29	22.18	22.16				
5	16QAM	12	7	22.31	22.26	22.17				
5	16QAM	12	13	22.30	22.23	22.16	23.7			
5	16QAM	25	0	22.33	22.24	22.19				
5	64QAM	1	0	22.40	22.21	22.25				
5	64QAM	1	12	22.35	22.32	22.30				
5	64QAM	1	24	22.32	22.34	21.52	23.7			
5	64QAM	12	0	21.27	21.30	21.28				
5	64QAM	12	7	21.33	21.32	21.14				
5	64QAM	12	13	21.34	21.24	21.25				
5	64QAM	25	0	21.31	21.31	21.24	22.7			
Channel				26705	26865	27025		Tune-up limit (dBm)		
Frequency (MHz)				815.5	831.5	847.5				
3	QPSK	1	0	24.19	24.10	24.14		25.7		
3	QPSK	1	8	24.05	24.08	24.08				
3	QPSK	1	14	24.15	24.05	23.97				
3	QPSK	8	0	23.21	23.23	23.17				
3	QPSK	8	4	23.26	23.19	23.15	24.7			
3	QPSK	8	7	23.24	23.23	23.22				
3	QPSK	15	0	23.31	23.22	23.20				
3	16QAM	1	0	23.56	23.45	23.39				
3	16QAM	1	8	23.43	23.39	23.43	24.7			
3	16QAM	1	14	23.37	23.36	23.28				
3	16QAM	8	0	22.29	22.16	22.15				
3	16QAM	8	4	22.25	22.22	22.09				
3	16QAM	8	7	22.21	22.22	22.14	23.7			
3	16QAM	15	0	22.28	22.29	22.23				
3	64QAM	1	0	22.35	22.21	22.31				
3	64QAM	1	8	22.35	22.37	22.24				
3	64QAM	1	14	22.32	22.31	21.61	23.7			
3	64QAM	8	0	21.31	21.31	21.22				
3	64QAM	8	4	21.38	21.25	21.21				
3	64QAM	8	7	21.35	21.24	21.19				
3	64QAM	15	0	21.33	21.21	21.24	22.7			
Channel				26897	26965	27033		Tune-up limit (dBm)		
Frequency (MHz)				814.7	831.5	848.3				
1.4	QPSK	1	0	24.15	24.03	24.06		25.7		
1.4	QPSK	1	3	23.98	24.04	23.99				
1.4	QPSK	1	5	24.14	24.02	23.96				
1.4	QPSK	3	0	24.15	24.03	24.12				
1.4	QPSK	3	1	24.05	24.05	24.08	24.7			
1.4	QPSK	3	3	24.07	23.93	23.94				
1.4	QPSK	6	0	23.15	23.20	23.12				
1.4	16QAM	1	0	23.17	23.16	23.05				
1.4	16QAM	1	3	23.16	23.17	23.16	24.7			
1.4	16QAM	1	5	23.23	23.19	23.10				
1.4	16QAM	3	0	23.46	23.36	23.30				
1.4	16QAM	3	1	23.39	23.30	23.35				
1.4	16QAM	3	3	23.33	23.26	23.26	23.7			
1.4	16QAM	6	0	22.20	22.14	22.10				
1.4	64QAM	1	0	22.18	22.22	22.05				
1.4	64QAM	1	3	22.16	22.20	22.04				
1.4	64QAM	1	5	22.25	22.29	22.20	23.7			
1.4	64QAM	3	0	22.28	22.11	22.27				
1.4	64QAM	3	1	22.28	22.37	22.24				
1.4	64QAM	3	3	22.31	22.31	21.51				
1.4	64QAM	6	0	21.26	21.25	21.15	22.7			



Band 30_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.31			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.26			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			22.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.30			
10	16QAM	25	25	21.31			21.2
10	16QAM	50	0	21.26			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit [dBm]
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.48	22.36	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.36	21.47	
5	64QAM	1	12	21.62	21.46	21.47	21.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	





Band 71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	24.7
20	QPSK	50	24	23.40	23.32	23.31	
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	24.7
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	
20	16QAM	1	99	23.60	23.53	23.62	23.7
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.80	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	22.7
20	64QAM	1	99	22.47	22.50	22.44	
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.35	21.34	22.7
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.16	21.34	21.41	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	24.7
15	QPSK	36	20	23.39	23.35	23.28	
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	24.7
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	
15	16QAM	1	74	23.58	23.60	23.48	23.7
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.58	22.15	22.26	
15	64QAM	1	37	21.81	22.58	22.48	22.7
15	64QAM	1	74	22.45	22.55	22.42	
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	22.7
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	
Channel				133172	133272	133372	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	24.7
10	QPSK	25	12	23.33	23.30	23.26	
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	24.7
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	
10	16QAM	1	49	23.52	23.58	23.47	23.7
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	22.7
10	64QAM	1	49	22.43	22.49	22.32	
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.68	21.32	21.29	22.7
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	24.7
5	QPSK	12	7	23.39	23.28	23.26	
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	24.7
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	
5	16QAM	1	24	23.49	23.51	23.38	23.7
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	22.7
5	64QAM	1	24	22.42	22.49	22.33	
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	22.7
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	









Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	24
10	QPSK	25	12	22.18	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	24
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	23
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	22
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	24
5	QPSK	12	7	22.12	22.12	22.09	
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	24
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	
5	16QAM	1	24	22.40	22.41	22.16	23
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	22
5	64QAM	1	24	21.34	21.35	20.16	
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	22
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	
Channel				824.5	836.5	848.5	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	24
3	QPSK	8	4	22.09	22.12	22.03	
3	QPSK	8	7	22.08	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	24
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	
3	16QAM	1	14	22.29	22.35	22.26	23
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.19	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	22
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	22
3	64QAM	1	14	21.24	21.32	20.28	
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	22
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	24
1.4	QPSK	3	1	23.26	23.25	23.23	
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	24
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	
1.4	16QAM	1	5	22.52	22.54	22.47	23
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.68	
1.4	64QAM	1	3	21.53	21.56	20.78	23
1.4	64QAM	1	5	21.45	21.49	20.77	
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	22
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	



Band 7 Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	24.5
20	QPSK	50	24	22.99	22.97	22.97	
20	QPSK	50	50	23.02	23.08	22.98	
20	QPSK	100	0	22.98	23.00	22.97	24.5
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	
20	16QAM	1	99	23.19	23.32	23.22	23.5
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.86	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	22.5
20	64QAM	1	99	22.11	22.23	22.12	
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	22.5
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	24.5
15	QPSK	36	20	23.04	23.01	22.92	
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	24.5
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	
15	16QAM	1	74	23.21	23.30	23.26	23.5
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	22.5
15	64QAM	1	74	22.12	22.25	22.13	
15	64QAM	36	0	20.83	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	22.5
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	24.5
10	QPSK	25	12	23.00	23.02	22.96	
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	24.5
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	
10	16QAM	1	49	23.25	23.34	23.19	23.5
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.88	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	22.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	22.5
10	64QAM	1	49	22.13	22.27	22.09	
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	22.5
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	24.5
5	QPSK	12	7	22.95	23.01	22.88	
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	24.5
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	
5	16QAM	1	24	23.19	23.25	23.14	23.5
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	23.5
5	64QAM	1	24	22.14	22.22	22.10	
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	22.5
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.00	20.97	



Band 12_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	24.7
10	QPSK	25	12	23.11	23.04	23.08	
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	24.7
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	
10	16QAM	1	49	23.37	23.36	23.33	23.7
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.08	22.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	23.7
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	22.7
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	24.7
5	QPSK	12	7	23.04	23.05	23.04	
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	24.7
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.26	23.25	
5	16QAM	1	24	23.28	23.35	23.26	23.7
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	22.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	
5	64QAM	1	12	21.70	22.17	22.01	23.7
5	64QAM	1	24	21.72	22.12	21.85	
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	22.7
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.96	20.96	
Channel				23005	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	24.7
3	QPSK	8	4	23.05	23.09	23.05	
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	24.7
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	
3	16QAM	1	14	23.21	23.30	23.22	23.7
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	22.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	23.7
3	64QAM	1	14	21.73	22.21	21.77	
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.18	20.90	22.7
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	24.7
1.4	QPSK	3	1	23.99	23.98	23.96	
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	24.7
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	
1.4	16QAM	1	5	23.44	23.52	23.45	23.7
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.36	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	23.7
1.4	64QAM	1	5	21.70	22.43	21.80	
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	22.7
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	



Band 13_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2320	2320		
Frequency (MHz)				762			
10	QPSK	1	0	23.02			25
10	QPSK	1	25	23.01			
10	QPSK	1	49	23.04			
10	QPSK	25	0	22.01			24
10	QPSK	25	12	22.02			
10	QPSK	25	25	22.06			
10	QPSK	50	0	22.15			24
10	16QAM	1	0	22.28			
10	16QAM	1	25	22.27			
10	16QAM	1	49	22.33			23
10	16QAM	25	0	21.03			
10	16QAM	25	12	21.05			
10	16QAM	25	25	21.08			23
10	16QAM	50	0	21.12			
10	64QAM	1	0	21.07			
10	64QAM	1	25	21.22			23
10	64QAM	1	49	21.29			
10	64QAM	25	0	20.04			
10	64QAM	25	12	20.06			22
10	64QAM	25	25	20.11			
10	64QAM	50	0	20.12			
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	22.90	22.85	22.80	25
5	QPSK	1	12	22.94	22.95	22.88	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.96	23
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.08	21.13	20.86	
5	64QAM	1	12	21.13	21.18	20.90	23
5	64QAM	1	24	21.18	21.17	20.98	
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	22
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



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



Band 17_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	25
10	QPSK	1	49	23.10	23.12	23.19	25
10	QPSK	25	0	22.22	22.22	22.21	24
10	QPSK	25	12	22.25	22.26	22.28	24
10	QPSK	25	25	22.30	22.33	22.36	24
10	QPSK	50	0	22.25	22.26	22.30	24
10	16QAM	1	0	22.16	22.17	22.15	24
10	16QAM	1	25	22.21	22.28	22.29	24
10	16QAM	1	49	22.26	22.23	22.26	24
10	16QAM	25	0	20.91	20.87	20.88	23
10	16QAM	25	12	21.02	20.96	20.94	23
10	16QAM	25	25	21.03	21.04	20.96	23
10	16QAM	50	0	20.92	20.95	20.93	23
10	64QAM	1	0	21.03	21.03	21.05	23
10	64QAM	1	25	21.14	21.18	21.17	23
10	64QAM	1	49	21.16	21.18	21.13	23
10	64QAM	25	0	19.92	19.92	19.92	22
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	22
10	64QAM	50	0	19.98	19.97	19.97	22
Channel				23765	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	25
5	QPSK	1	24	23.18	23.11	23.19	25
5	QPSK	12	0	22.20	22.15	22.11	24
5	QPSK	12	7	22.29	22.22	22.23	24
5	QPSK	12	13	22.25	22.32	22.25	24
5	QPSK	25	0	22.17	22.14	22.25	24
5	16QAM	1	0	22.12	22.15	22.09	24
5	16QAM	1	12	22.15	22.23	22.14	24
5	16QAM	1	24	22.25	22.25	22.22	24
5	16QAM	12	0	20.90	20.90	20.87	23
5	16QAM	12	7	21.00	20.97	20.96	23
5	16QAM	12	13	20.97	20.96	20.95	23
5	16QAM	25	0	20.95	20.94	20.95	23
5	64QAM	1	0	21.05	21.05	21.03	23
5	64QAM	1	12	21.09	21.13	21.09	23
5	64QAM	1	24	21.19	21.16	21.10	23
5	64QAM	12	0	19.94	19.99	19.93	22
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	22
5	64QAM	25	0	19.95	19.91	19.96	22







Band 26_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	23.14	23.06	23.05	25
15	QPSK	1	37	23.05	23.04	23.00	
15	QPSK	1	74	23.09	23.05	23.00	
15	QPSK	36	0	22.21	22.18	22.17	24
15	QPSK	36	20	22.22	22.20	22.18	
15	QPSK	36	39	22.21	22.16	22.15	
15	QPSK	36	0	22.25	22.23	22.12	24
15	16QAM	1	0	22.49	22.37	22.39	
15	16QAM	1	37	22.34	22.39	22.39	
15	16QAM	1	74	22.38	22.39	22.23	23
15	16QAM	36	0	21.22	21.20	21.19	
15	16QAM	36	20	21.24	21.24	21.12	
15	16QAM	36	39	21.22	21.17	21.16	23
15	16QAM	75	0	21.28	21.22	21.17	
15	64QAM	1	0	21.33	21.22	21.22	
15	64QAM	1	37	21.28	21.32	21.32	22
15	64QAM	1	74	21.29	21.30	21.02	
15	64QAM	36	0	20.14	20.21	20.21	
15	64QAM	36	20	20.28	20.27	20.21	22
15	64QAM	36	39	20.26	20.27	20.21	
15	64QAM	75	0	20.27	20.25	20.20	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.05	23.03	23.02	25
10	QPSK	1	25	23.04	23.00	23.00	
10	QPSK	1	49	23.00	23.01	23.03	
10	QPSK	25	0	22.17	22.05	22.06	24
10	QPSK	25	12	22.13	22.03	22.05	
10	QPSK	25	25	22.06	22.06	22.03	
10	QPSK	50	0	22.15	22.08	22.02	24
10	16QAM	1	0	22.47	22.38	22.32	
10	16QAM	1	25	22.38	22.38	22.34	
10	16QAM	1	49	22.33	22.37	22.21	23
10	16QAM	25	0	21.16	21.05	21.04	
10	16QAM	25	12	21.15	21.05	21.05	
10	16QAM	25	25	21.07	21.07	21.02	23
10	16QAM	50	0	21.11	21.11	21.01	
10	64QAM	1	0	21.30	21.26	21.21	
10	64QAM	1	25	21.15	21.27	21.25	22
10	64QAM	1	49	21.31	21.32	21.08	
10	64QAM	25	0	20.03	20.09	20.08	
10	64QAM	25	12	19.98	20.10	20.08	22
10	64QAM	25	25	20.02	20.08	19.76	
10	64QAM	50	0	19.97	20.11	20.04	
Channel				26715	26865	27015	
Frequency (MHz)				815.5	831.5	846.5	
5	QPSK	1	0	23.12	23.05	23.00	25
5	QPSK	1	12	23.08	23.03	23.01	
5	QPSK	1	24	23.01	23.00	23.02	
5	QPSK	12	0	22.20	22.05	22.06	24
5	QPSK	12	7	22.18	22.10	22.02	
5	QPSK	12	13	22.08	22.03	22.00	
5	QPSK	25	0	22.09	22.08	22.02	24
5	16QAM	1	0	22.43	22.29	22.32	
5	16QAM	1	12	22.34	22.32	22.21	
5	16QAM	1	24	22.33	22.38	22.19	23
5	16QAM	12	0	21.20	21.06	21.05	
5	16QAM	12	7	21.17	21.14	21.04	
5	16QAM	12	13	21.10	21.07	21.03	23
5	16QAM	25	0	21.13	21.06	21.04	
5	64QAM	1	0	21.13	21.22	21.13	
5	64QAM	1	12	21.12	21.26	21.00	22
5	64QAM	1	24	21.02	21.27	21.01	
5	64QAM	12	0	20.12	20.16	20.05	
5	64QAM	12	7	20.10	20.15	19.45	22
5	64QAM	12	13	19.92	20.11	19.32	
5	64QAM	25	0	19.94	20.12	19.57	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.11	23.01	23.02	25
3	QPSK	1	8	23.13	23.05	23.06	
3	QPSK	1	14	23.03	23.00	23.05	
3	QPSK	8	0	22.17	22.05	22.00	24
3	QPSK	8	4	22.16	22.08	22.00	
3	QPSK	8	7	22.10	22.02	22.02	
3	QPSK	15	0	22.15	22.03	22.01	24
3	16QAM	1	0	22.43	22.25	22.24	
3	16QAM	1	8	22.42	22.41	22.22	
3	16QAM	1	14	22.29	22.32	22.16	23
3	16QAM	8	0	21.23	21.11	21.03	
3	16QAM	8	4	21.25	21.14	21.03	
3	16QAM	8	7	21.16	21.09	21.03	23
3	16QAM	15	0	21.16	21.11	21.02	
3	64QAM	1	0	21.21	21.24	20.58	
3	64QAM	1	8	21.34	21.33	20.43	22
3	64QAM	1	14	21.18	21.28	20.45	
3	64QAM	8	0	20.25	20.11	19.35	
3	64QAM	8	4	20.24	20.15	19.37	22
3	64QAM	8	7	20.17	20.12	19.41	
3	64QAM	15	0	20.20	20.05	19.41	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.09	23.13	23.07	25
1.4	QPSK	1	3	23.07	23.11	23.09	
1.4	QPSK	1	5	23.06	23.06	23.04	
1.4	QPSK	3	0	23.07	23.04	23.10	24
1.4	QPSK	3	1	23.09	23.07	23.11	
1.4	QPSK	3	3	23.12	23.06	23.05	
1.4	QPSK	6	0	22.16	22.21	22.13	24
1.4	16QAM	1	0	22.44	22.50	22.40	
1.4	16QAM	1	3	22.41	22.56	22.43	
1.4	16QAM	1	5	22.36	22.48	22.32	24
1.4	16QAM	3	0	22.24	22.24	22.16	
1.4	16QAM	3	1	22.20	22.30	22.18	
1.4	16QAM	3	3	22.21	22.26	22.14	23
1.4	16QAM	6	0	21.31	21.32	21.22	
1.4	64QAM	1	0	21.36	21.40	20.84	
1.4	64QAM	1	3	21.42	21.49	20.94	23
1.4	64QAM	1	5	21.31	21.36	20.91	
1.4	64QAM	3	0	21.31	21.31	20.80	
1.4	64QAM	3	1	21.42	21.39	20.82	22
1.4	64QAM	3	3	21.32	21.38	20.85	
1.4	64QAM	6	0	20.28	20.25	19.69	



Band 30_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	24.12			25.7
10	QPSK	1	25	24.04			
10	QPSK	1	49	24.03			
10	QPSK	25	0	23.10			24.7
10	QPSK	25	12	23.16			
10	QPSK	25	25	23.16			
10	QPSK	50	0	23.14			24.7
10	16QAM	1	0	23.44			
10	16QAM	1	25	23.47			
10	16QAM	1	49	23.35			23.7
10	16QAM	25	0	22.11			
10	16QAM	25	12	22.15			
10	16QAM	25	25	22.11			23.7
10	16QAM	50	0	22.14			
10	64QAM	1	0	22.35			
10	64QAM	1	25	21.90			23.7
10	64QAM	1	49	21.70			
10	64QAM	25	0	21.07			
10	64QAM	25	12	20.86			22.7
10	64QAM	25	25	20.84			
10	64QAM	50	0	20.86			
Channel				27685	27710	27735	Tune-up limit [dBm]
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.95	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.76	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	





Band 71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	24
20	QPSK	50	24	22.33	22.25	22.21	
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	24
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	23
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.14	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	22
20	64QAM	1	99	21.28	21.28	21.23	
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	22
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	24
15	QPSK	36	20	22.32	22.22	22.14	
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	24
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.52	22.45	
15	16QAM	1	74	22.39	22.47	22.33	23
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.56	21.40	21.09	
15	64QAM	1	37	20.95	21.41	21.35	22
15	64QAM	1	74	21.28	21.39	21.23	
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	18.86	20.11	20.20	22
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	
Channel				133172	133272	133322	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	24
10	QPSK	25	12	22.15	22.10	22.00	
10	QPSK	25	25	22.07	22.06	22.01	
10	QPSK	50	0	22.15	22.11	22.02	24
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	23
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	22
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	22
10	64QAM	1	49	20.69	21.18	21.10	
10	64QAM	25	0	19.03	20.95	19.96	
10	64QAM	25	12	19.15	20.15	19.96	22
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.96	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	24
5	QPSK	12	7	22.01	22.04	22.03	
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	24
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	23
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	23
5	64QAM	1	24	20.13	21.24	20.77	
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	22
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	







Band 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	24.20	24.24	24.27	25.7
10	QPSK	1	25	24.22	24.22	24.24	
10	QPSK	1	49	24.27	24.23	23.88	
10	QPSK	25	0	23.31	23.35	23.31	24.7
10	QPSK	25	12	23.39	23.35	23.33	
10	QPSK	25	25	23.37	23.40	23.37	
10	QPSK	50	0	23.40	23.33	23.31	24.7
10	16QAM	1	0	23.55	23.60	23.71	
10	16QAM	1	25	23.62	23.64	23.60	
10	16QAM	1	49	23.64	23.61	23.25	23.7
10	16QAM	25	0	22.30	22.32	22.32	
10	16QAM	25	12	22.38	22.34	22.28	
10	16QAM	25	25	22.38	22.38	22.30	23.7
10	16QAM	50	0	22.38	22.34	22.29	
10	64QAM	1	0	22.44	22.45	22.53	
10	64QAM	1	25	22.51	22.57	22.16	22.7
10	64QAM	1	49	22.52	22.38	21.12	
10	64QAM	25	0	21.33	21.37	21.36	
10	64QAM	25	12	21.44	21.42	21.34	22.7
10	64QAM	25	25	21.39	21.41	20.87	
10	64QAM	50	0	21.42	21.41	21.10	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.14	24.14	24.18	25.7
5	QPSK	1	12	24.17	24.13	24.19	
5	QPSK	1	24	24.26	24.16	23.88	
5	QPSK	12	0	23.24	23.29	23.21	24.7
5	QPSK	12	7	23.36	23.26	23.27	
5	QPSK	12	13	23.37	23.36	23.31	
5	QPSK	25	0	23.36	23.25	23.29	24.7
5	16QAM	1	0	23.49	23.52	23.67	
5	16QAM	1	12	23.55	23.63	23.59	
5	16QAM	1	24	23.64	23.60	23.23	23.7
5	16QAM	12	0	22.25	22.30	22.25	
5	16QAM	12	7	22.29	22.24	22.24	
5	16QAM	12	13	22.35	22.35	22.28	23.7
5	16QAM	25	0	22.28	22.34	22.23	
5	64QAM	1	0	22.44	22.41	22.43	
5	64QAM	1	12	22.43	22.52	22.06	22.7
5	64QAM	1	24	22.50	22.29	21.04	
5	64QAM	12	0	21.23	21.31	21.33	
5	64QAM	12	7	21.38	21.42	21.29	22.7
5	64QAM	12	13	21.30	21.34	20.84	
5	64QAM	25	0	21.40	21.32	21.02	
Channel				20415	20565	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.17	24.21	24.24	25.7
3	QPSK	1	8	24.17	24.22	24.21	
3	QPSK	1	14	24.24	24.22	23.85	
3	QPSK	8	0	23.22	23.33	23.31	24.7
3	QPSK	8	4	23.37	23.25	23.29	
3	QPSK	8	7	23.28	23.36	23.35	
3	QPSK	15	0	23.38	23.28	23.24	24.7
3	16QAM	1	0	23.46	23.55	23.62	
3	16QAM	1	8	23.55	23.60	23.58	
3	16QAM	1	14	23.60	23.81	23.25	23.7
3	16QAM	8	0	22.20	22.29	22.27	
3	16QAM	8	4	22.35	22.36	22.23	
3	16QAM	8	7	22.38	22.29	22.29	23.7
3	16QAM	15	0	22.31	22.25	22.22	
3	64QAM	1	0	22.40	22.38	22.43	
3	64QAM	1	8	22.42	22.48	22.16	22.7
3	64QAM	1	14	22.52	22.36	21.08	
3	64QAM	8	0	21.24	21.35	21.30	
3	64QAM	8	4	21.38	21.42	21.34	22.7
3	64QAM	8	7	21.31	21.34	20.78	
3	64QAM	15	0	21.35	21.40	21.02	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.16	24.22	24.26	25.7
1.4	QPSK	1	3	24.14	24.18	24.23	
1.4	QPSK	1	5	24.25	24.20	23.84	
1.4	QPSK	3	0	24.14	24.15	24.18	24.7
1.4	QPSK	3	1	24.12	24.12	24.19	
1.4	QPSK	3	3	24.25	24.23	23.84	
1.4	QPSK	6	0	23.26	23.28	23.25	24.7
1.4	16QAM	1	0	23.38	23.26	23.30	
1.4	16QAM	1	3	23.32	23.30	23.27	
1.4	16QAM	1	5	23.33	23.31	23.22	24.7
1.4	16QAM	3	0	23.51	23.58	23.71	
1.4	16QAM	3	1	23.62	23.60	23.53	
1.4	16QAM	3	3	23.54	23.59	23.22	23.7
1.4	16QAM	6	0	22.20	22.27	22.30	
1.4	64QAM	1	0	22.35	22.24	22.28	
1.4	64QAM	1	3	22.33	22.38	22.30	23.7
1.4	64QAM	1	5	22.35	22.29	22.23	
1.4	64QAM	3	0	22.39	22.38	22.50	
1.4	64QAM	3	1	22.44	22.52	22.08	23.7
1.4	64QAM	3	3	22.44	22.29	21.10	
1.4	64QAM	6	0	21.28	21.29	21.28	



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	22.14	22.28	22.28	23.3
20	QPSK	1	49	22.25	22.35	22.32	
20	QPSK	1	99	22.32	22.48	22.41	
20	QPSK	50	0	22.27	22.39	22.39	
20	QPSK	50	24	22.43	22.46	22.51	23.3
20	QPSK	50	50	22.45	22.36	22.52	
20	QPSK	100	0	22.41	22.47	22.46	
20	16QAM	1	0	22.50	22.62	22.64	
20	16QAM	1	49	22.61	22.69	22.67	23.3
20	16QAM	1	99	22.64	22.78	22.68	
20	16QAM	50	0	22.28	22.41	22.39	
20	16QAM	50	24	22.43	22.48	22.49	
20	16QAM	50	50	22.46	22.56	22.59	23.3
20	16QAM	100	0	22.38	22.42	22.48	
20	64QAM	1	0	22.39	22.49	22.48	
20	64QAM	1	49	22.47	22.59	22.58	
20	64QAM	1	99	22.57	22.70	22.24	22.7
20	64QAM	50	0	22.28	21.85	21.81	
20	64QAM	50	24	22.41	21.90	21.94	
20	64QAM	50	50	22.42	21.99	21.94	
20	64QAM	100	0	22.38	21.91	21.92	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.05	22.27	22.27	23.3
15	QPSK	1	37	22.18	22.35	22.22	
15	QPSK	1	74	22.28	22.43	22.33	
15	QPSK	36	0	22.23	22.37	22.39	
15	QPSK	36	20	22.35	22.43	22.49	23.3
15	QPSK	36	39	22.35	22.51	22.42	
15	QPSK	75	0	22.37	22.34	22.46	
15	16QAM	1	0	22.48	22.53	22.62	
15	16QAM	1	37	22.58	22.61	22.65	23.3
15	16QAM	1	74	22.64	22.69	22.64	
15	16QAM	36	0	22.28	22.37	22.38	
15	16QAM	36	20	22.41	22.39	22.41	
15	16QAM	36	39	22.36	22.49	22.40	23.3
15	16QAM	75	0	22.34	22.37	22.38	
15	64QAM	1	0	22.31	22.42	22.46	
15	64QAM	1	37	22.43	22.52	22.55	
15	64QAM	1	74	22.53	22.66	22.14	22.7
15	64QAM	36	0	22.16	21.79	21.74	
15	64QAM	36	20	22.32	21.87	21.84	
15	64QAM	36	39	22.42	21.93	21.85	
15	64QAM	75	0	22.31	21.84	21.90	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	22.08	22.23	22.20	23.3
10	QPSK	1	25	22.23	22.30	22.28	
10	QPSK	1	49	22.24	22.40	22.34	
10	QPSK	25	0	22.20	22.30	22.32	
10	QPSK	25	12	22.42	22.37	22.51	23.3
10	QPSK	25	25	22.37	22.47	22.43	
10	QPSK	50	0	22.41	22.36	22.44	
10	16QAM	1	0	22.46	22.60	22.57	
10	16QAM	1	25	22.51	22.61	22.64	23.3
10	16QAM	1	49	22.58	22.73	22.58	
10	16QAM	25	0	22.28	22.34	22.35	
10	16QAM	25	12	22.43	22.40	22.38	
10	16QAM	25	25	22.43	22.52	22.48	23.3
10	16QAM	50	0	22.31	22.37	22.43	
10	64QAM	1	0	22.30	22.41	22.38	
10	64QAM	1	25	22.39	22.57	22.48	
10	64QAM	1	49	22.54	22.68	22.21	22.7
10	64QAM	25	0	22.28	21.94	21.79	
10	64QAM	25	12	22.32	21.85	21.84	
10	64QAM	25	25	22.42	21.99	21.88	
10	64QAM	50	0	22.31	21.89	21.89	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.05	22.27	22.20	23.3
5	QPSK	1	12	22.16	22.31	22.28	
5	QPSK	1	24	22.22	22.46	22.38	
5	QPSK	12	0	22.17	22.39	22.39	
5	QPSK	12	7	22.40	22.38	22.44	23.3
5	QPSK	12	13	22.44	22.56	22.50	
5	QPSK	25	0	22.39	22.35	22.47	
5	16QAM	1	0	22.40	22.61	22.60	
5	16QAM	1	12	22.58	22.69	22.67	23.3
5	16QAM	1	24	22.60	22.71	22.58	
5	16QAM	12	0	22.23	22.31	22.37	
5	16QAM	12	7	22.42	22.44	22.45	
5	16QAM	12	13	22.40	22.54	22.49	23.3
5	16QAM	25	0	22.31	22.32	22.43	
5	64QAM	1	0	22.35	22.47	22.41	
5	64QAM	1	12	22.38	22.52	22.52	
5	64QAM	1	24	22.57	22.67	22.17	22.7
5	64QAM	12	0	22.20	21.80	21.71	
5	64QAM	12	7	22.37	21.80	21.78	
5	64QAM	12	13	22.35	21.94	21.89	
5	64QAM	25	0	22.37	21.94	21.91	





Band 12_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.35	24.28	24.30	25.7
10	QPSK	1	25	24.27	24.31	24.28	
10	QPSK	1	49	24.39	24.33	24.30	
10	QPSK	25	0	23.45	23.42	23.40	24.7
10	QPSK	25	12	23.49	23.43	23.46	
10	QPSK	25	25	23.46	23.46	23.44	
10	QPSK	50	0	23.51	23.43	23.47	24.7
10	16QAM	1	0	23.74	23.66	23.73	
10	16QAM	1	25	23.70	23.70	23.69	
10	16QAM	1	49	23.74	23.66	23.67	23.7
10	16QAM	25	0	22.41	22.42	22.42	
10	16QAM	25	12	22.50	22.44	22.48	
10	16QAM	25	25	22.47	22.49	22.41	23.7
10	16QAM	50	0	22.50	22.43	22.47	
10	64QAM	1	0	22.23	22.49	22.60	
10	64QAM	1	25	22.60	22.47	22.39	23.7
10	64QAM	1	49	22.62	22.32	22.24	
10	64QAM	25	0	21.26	21.27	21.14	
10	64QAM	25	12	21.40	21.29	21.22	22.7
10	64QAM	25	25	21.41	21.30	21.48	
10	64QAM	50	0	21.19	21.19	21.37	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.30	24.22	24.29	25.7
5	QPSK	1	12	24.20	24.29	24.23	
5	QPSK	1	24	24.32	24.31	24.27	
5	QPSK	12	0	23.38	23.42	23.32	24.7
5	QPSK	12	7	23.39	23.42	23.44	
5	QPSK	12	13	23.46	23.46	23.36	
5	QPSK	25	0	23.49	23.34	23.44	24.7
5	16QAM	1	0	23.72	23.55	23.71	
5	16QAM	1	12	23.62	23.62	23.68	
5	16QAM	1	24	23.69	23.59	23.61	23.7
5	16QAM	12	0	22.38	22.42	22.33	
5	16QAM	12	7	22.40	22.34	22.47	
5	16QAM	12	13	22.39	22.49	22.35	23.7
5	16QAM	25	0	22.45	22.40	22.38	
5	64QAM	1	0	22.19	22.47	22.53	
5	64QAM	1	12	22.58	22.39	22.39	23.7
5	64QAM	1	24	22.61	22.25	22.20	
5	64QAM	12	0	21.22	21.26	21.08	
5	64QAM	12	7	21.35	21.26	21.17	22.7
5	64QAM	12	13	21.35	21.30	21.41	
5	64QAM	25	0	21.13	21.13	21.27	
Channel				23035	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.25	24.20	24.25	25.7
3	QPSK	1	8	24.18	24.23	24.21	
3	QPSK	1	14	24.33	24.30	24.27	
3	QPSK	8	0	23.43	23.35	23.33	24.7
3	QPSK	8	4	23.39	23.34	23.37	
3	QPSK	8	7	23.36	23.44	23.40	
3	QPSK	15	0	23.44	23.33	23.42	24.7
3	16QAM	1	0	23.73	23.56	23.72	
3	16QAM	1	8	23.70	23.61	23.65	
3	16QAM	1	14	23.74	23.56	23.66	23.7
3	16QAM	8	0	22.40	22.39	22.33	
3	16QAM	8	4	22.41	22.42	22.38	
3	16QAM	8	7	22.39	22.41	22.39	23.7
3	16QAM	15	0	22.47	22.35	22.38	
3	64QAM	1	0	22.20	22.45	22.57	
3	64QAM	1	8	22.60	22.39	22.31	23.7
3	64QAM	1	14	22.57	22.23	22.16	
3	64QAM	8	0	21.17	21.24	21.11	
3	64QAM	8	4	21.30	21.22	21.18	22.7
3	64QAM	8	7	21.37	21.25	21.38	
3	64QAM	15	0	21.11	21.09	21.31	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.27	24.25	24.21	25.7
1.4	QPSK	1	3	24.20	24.25	24.25	
1.4	QPSK	1	5	24.38	24.33	24.22	
1.4	QPSK	3	0	24.30	24.26	24.23	24.7
1.4	QPSK	3	1	24.18	24.26	24.20	
1.4	QPSK	3	3	24.37	24.31	24.23	
1.4	QPSK	6	0	23.36	23.36	23.33	24.7
1.4	16QAM	1	0	23.42	23.39	23.44	
1.4	16QAM	1	3	23.46	23.41	23.35	
1.4	16QAM	1	5	23.41	23.42	23.41	24.7
1.4	16QAM	3	0	23.67	23.65	23.71	
1.4	16QAM	3	1	23.60	23.63	23.62	
1.4	16QAM	3	3	23.68	23.57	23.59	23.7
1.4	16QAM	6	0	22.32	22.32	22.40	
1.4	64QAM	1	0	22.48	22.35	22.43	
1.4	64QAM	1	3	22.46	22.42	22.35	23.7
1.4	64QAM	1	5	22.46	22.37	22.37	
1.4	64QAM	3	0	22.17	22.47	22.60	
1.4	64QAM	3	1	22.56	22.42	22.33	23.7
1.4	64QAM	3	3	22.55	22.27	22.21	
1.4	64QAM	6	0	21.18	21.26	21.13	



Band 13_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				762			
10	QPSK	1	0	23.71			25.2
10	QPSK	1	25	23.71			
10	QPSK	1	49	23.87			
10	QPSK	50	0	22.83			24.2
10	QPSK	25	12	22.85			
10	QPSK	25	25	22.82			
10	QPSK	50	0	22.55			24.2
10	16QAM	1	0	23.07			
10	16QAM	1	25	23.12			
10	16QAM	1	49	23.12			23.2
10	16QAM	25	0	21.86			
10	16QAM	25	12	21.89			
10	16QAM	25	25	21.50			23.2
10	16QAM	50	0	21.94			
10	64QAM	1	0	21.97			
10	64QAM	1	25	21.99			22.2
10	64QAM	1	49	22.07			
10	64QAM	25	0	20.86			
10	64QAM	25	12	20.53			22.2
10	64QAM	25	25	20.52			
10	64QAM	50	0	20.97			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	23.71	23.70	23.64	25.2
5	QPSK	1	12	23.67	23.68	23.66	
5	QPSK	1	24	23.77	23.80	23.86	
5	QPSK	12	0	22.74	22.83	22.79	24.2
5	QPSK	12	7	22.83	22.78	22.77	
5	QPSK	12	13	22.82	22.84	22.82	
5	QPSK	25	0	22.87	22.94	22.87	24.2
5	16QAM	1	0	23.05	23.04	23.04	
5	16QAM	1	12	23.03	23.06	23.06	
5	16QAM	1	24	23.09	23.07	23.11	23.2
5	16QAM	12	0	21.84	21.83	21.86	
5	16QAM	12	7	21.83	21.84	21.88	
5	16QAM	12	13	21.88	21.83	21.89	23.2
5	16QAM	25	0	21.83	21.86	21.91	
5	64QAM	1	0	21.80	21.89	21.90	
5	64QAM	1	12	21.97	21.99	21.97	23.2
5	64QAM	1	24	22.04	22.04	22.04	
5	64QAM	12	0	20.77	20.85	20.82	
5	64QAM	12	7	20.93	20.89	20.92	22.2
5	64QAM	12	13	20.91	20.88	20.88	
5	64QAM	25	0	20.88	20.87	20.96	



Band 14_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.23			25.7
10	QPSK	1	25	24.27			
10	QPSK	1	49	24.24			
10	QPSK	25	0	23.28			24.7
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.30			24.7
10	16QAM	1	0	23.61			
10	16QAM	1	25	23.62			
10	16QAM	1	49	23.60			23.7
10	16QAM	25	0	22.30			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.32			23.7
10	16QAM	50	0	22.29			
10	64QAM	1	0	22.50			
10	64QAM	1	25	22.55			23.7
10	64QAM	1	49	22.53			
10	64QAM	25	0	21.32			
10	64QAM	25	12	21.30			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.29			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.23	24.20	24.17	25.7
5	QPSK	1	12	24.18	24.18	24.23	
5	QPSK	1	24	24.24	24.22	24.20	
5	QPSK	12	0	23.28	23.26	23.28	24.7
5	QPSK	12	7	23.27	23.32	23.31	
5	QPSK	12	13	23.34	23.34	23.35	
5	QPSK	25	0	23.24	23.24	23.20	24.7
5	16QAM	1	0	23.59	23.55	23.54	
5	16QAM	1	12	23.55	23.53	23.62	
5	16QAM	1	24	23.59	23.57	23.51	23.7
5	16QAM	12	0	22.21	22.29	22.23	
5	16QAM	12	7	22.23	22.25	22.24	
5	16QAM	12	13	22.24	22.28	22.22	23.7
5	16QAM	25	0	22.24	22.21	22.19	
5	64QAM	1	0	22.49	22.42	22.43	
5	64QAM	1	12	22.49	22.47	22.52	23.7
5	64QAM	1	24	22.44	22.52	22.51	
5	64QAM	12	0	21.28	21.25	21.27	
5	64QAM	12	7	21.29	21.29	21.25	22.7
5	64QAM	12	13	21.38	21.36	21.28	
5	64QAM	25	0	21.23	21.22	21.22	



Band 17_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.19	24.26	24.24	25.7
10	QPSK	1	25	24.31	24.32	24.31	
10	QPSK	1	49	24.30	24.32	24.28	
10	QPSK	25	0	23.33	23.32	23.32	24.7
10	QPSK	25	12	23.47	23.40	23.38	
10	QPSK	25	25	23.47	23.46	23.46	
10	QPSK	50	0	23.36	23.40	23.36	24.7
10	16QAM	1	0	23.63	23.61	23.61	
10	16QAM	1	25	23.67	23.66	23.69	
10	16QAM	1	49	23.74	23.71	23.66	23.7
10	16QAM	25	0	22.31	22.31	22.32	
10	16QAM	25	12	22.45	22.40	22.40	
10	16QAM	25	25	22.47	22.50	22.48	23.7
10	16QAM	50	0	22.38	22.38	22.37	
10	64QAM	1	0	22.50	22.52	22.49	
10	64QAM	1	25	22.60	22.60	22.56	23.7
10	64QAM	1	49	22.49	22.59	22.63	
10	64QAM	25	0	21.35	21.37	21.37	
10	64QAM	25	12	21.54	21.45	21.41	22.7
10	64QAM	25	25	21.50	21.52	21.51	
10	64QAM	50	0	21.41	21.40	21.39	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.14	24.16	24.20	25.7
5	QPSK	1	12	24.30	24.29	24.29	
5	QPSK	1	24	24.29	24.29	24.24	
5	QPSK	12	0	23.25	23.26	23.32	24.7
5	QPSK	12	7	23.37	23.39	23.28	
5	QPSK	12	13	23.38	23.44	23.42	
5	QPSK	25	0	23.27	23.32	23.36	24.7
5	16QAM	1	0	23.53	23.57	23.59	
5	16QAM	1	12	23.63	23.65	23.65	
5	16QAM	1	24	23.66	23.66	23.60	23.7
5	16QAM	12	0	22.27	22.31	22.25	
5	16QAM	12	7	22.35	22.31	22.36	
5	16QAM	12	13	22.45	22.50	22.44	23.7
5	16QAM	25	0	22.30	22.38	22.36	
5	64QAM	1	0	22.48	22.44	22.42	
5	64QAM	1	12	22.59	22.57	22.56	23.7
5	64QAM	1	24	22.42	22.52	22.58	
5	64QAM	12	0	21.35	21.29	21.31	
5	64QAM	12	7	21.52	21.42	21.40	22.7
5	64QAM	12	13	21.48	21.49	21.48	
5	64QAM	25	0	21.40	21.35	21.39	





Band 26 Ant 0								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. / Freq	Power High Ch. /	Tune-up limit (dBm)	
Channel				26765	26865	26965		
Frequency (MHz)				831.5	831.5	844.5		
15	QPSK	1	0	24.23	24.12	24.14	25.7	
15	QPSK	1	37	24.15	24.13	24.09		
15	QPSK	1	74	24.18	24.13	23.98		
15	QPSK	36	0	23.31	23.25	23.24		
15	QPSK	36	20	23.34	23.29	23.20	24.7	
15	QPSK	36	39	23.30	23.30	23.25		
15	QPSK	75	0	23.34	23.29	23.20		
15	16QAM	1	0	23.58	23.46	23.45		
15	16QAM	1	37	23.49	23.44	23.44	24.7	
15	16QAM	1	74	23.46	23.43	23.30		
15	16QAM	36	0	22.33	22.26	22.24		
15	16QAM	36	20	22.34	22.31	22.19		
15	16QAM	36	39	22.31	22.25	22.18	23.7	
15	16QAM	75	0	22.36	22.31	22.23		
15	64QAM	1	0	22.43	22.31	22.31		
15	64QAM	1	37	22.43	22.39	22.34		
15	64QAM	1	74	22.36	22.34	21.62	23.7	
15	64QAM	36	0	21.35	21.31	21.30		
15	64QAM	36	20	21.41	21.30	21.23		
15	64QAM	36	39	21.36	21.30	21.29		
15	64QAM	75	0	21.37	21.31	21.24	22.7	
Channel				26740	26865	26990		Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844		
10	QPSK	1	0	24.18	24.06	24.14		25.7
10	QPSK	1	25	24.15	24.06	23.99		
10	QPSK	1	49	24.13	24.13	23.98		
10	QPSK	25	0	23.24	23.17	23.17		
10	QPSK	25	12	23.31	23.29	23.11	24.7	
10	QPSK	25	25	23.20	23.26	23.25		
10	QPSK	50	0	23.26	23.28	23.14		
10	16QAM	1	0	23.52	23.39	23.40		
10	16QAM	1	25	23.48	23.37	23.35	24.7	
10	16QAM	1	49	23.46	23.41	23.27		
10	16QAM	25	0	22.28	22.24	22.24		
10	16QAM	25	12	22.27	22.21	22.09		
10	16QAM	25	25	22.30	22.16	22.08	23.7	
10	16QAM	50	0	22.26	22.24	22.15		
10	64QAM	1	0	22.37	22.25	22.22		
10	64QAM	1	25	22.33	22.35	22.24		
10	64QAM	1	49	22.34	22.26	21.54	23.7	
10	64QAM	25	0	21.31	21.26	21.28		
10	64QAM	25	12	21.37	21.29	21.22		
10	64QAM	25	25	21.28	21.29	21.22		
10	64QAM	50	0	21.27	21.27	21.21	22.7	
Channel				26716	26865	27015		Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	0	24.14	24.10	24.05		25.7
5	QPSK	1	12	24.05	24.05	24.08		
5	QPSK	1	24	24.12	24.11	23.91		
5	QPSK	12	0	23.21	23.23	23.15		
5	QPSK	12	7	23.30	23.27	23.19	24.7	
5	QPSK	12	13	23.25	23.27	23.21		
5	QPSK	25	0	23.32	23.27	23.17		
5	16QAM	1	0	23.53	23.40	23.43		
5	16QAM	1	12	23.46	23.35	23.44	24.7	
5	16QAM	1	24	23.44	23.33	23.27		
5	16QAM	12	0	22.29	22.18	22.16		
5	16QAM	12	7	22.31	22.26	22.17		
5	16QAM	12	13	22.30	22.23	22.16	23.7	
5	16QAM	25	0	22.33	22.24	22.19		
5	64QAM	1	0	22.40	22.21	22.25		
5	64QAM	1	12	22.35	22.32	22.30		
5	64QAM	1	24	22.32	22.34	21.52	23.7	
5	64QAM	12	0	21.27	21.30	21.28		
5	64QAM	12	7	21.33	21.32	21.14		
5	64QAM	12	13	21.34	21.24	21.25		
5	64QAM	25	0	21.31	21.31	21.24	22.7	
Channel				26705	26865	27025		Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5		
3	QPSK	1	0	24.19	24.10	24.14		25.7
3	QPSK	1	8	24.05	24.08	24.08		
3	QPSK	1	14	24.15	24.05	23.97		
3	QPSK	8	0	23.21	23.23	23.17		
3	QPSK	8	4	23.26	23.19	23.15	24.7	
3	QPSK	8	7	23.24	23.23	23.22		
3	QPSK	15	0	23.31	23.22	23.20		
3	16QAM	1	0	23.56	23.45	23.39		
3	16QAM	1	8	23.43	23.39	23.43	24.7	
3	16QAM	1	14	23.37	23.36	23.28		
3	16QAM	8	0	22.29	22.16	22.15		
3	16QAM	8	4	22.25	22.22	22.09		
3	16QAM	8	7	22.21	22.22	22.14	23.7	
3	16QAM	15	0	22.28	22.29	22.23		
3	64QAM	1	0	22.35	22.21	22.31		
3	64QAM	1	8	22.35	22.37	22.24		
3	64QAM	1	14	22.32	22.31	21.61	23.7	
3	64QAM	8	0	21.31	21.31	21.22		
3	64QAM	8	4	21.38	21.25	21.21		
3	64QAM	8	7	21.35	21.24	21.19		
3	64QAM	15	0	21.33	21.21	21.24	22.7	
Channel				26897	26965	27033		Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3		
1.4	QPSK	1	0	24.15	24.03	24.06		25.7
1.4	QPSK	1	3	23.98	24.04	23.99		
1.4	QPSK	1	5	24.14	24.02	23.96		
1.4	QPSK	3	0	24.15	24.03	24.12		
1.4	QPSK	3	1	24.05	24.05	24.08	24.7	
1.4	QPSK	3	3	24.07	23.93	23.94		
1.4	QPSK	6	0	23.15	23.20	23.12		
1.4	16QAM	1	0	23.17	23.16	23.05		
1.4	16QAM	1	3	23.16	23.17	23.16	24.7	
1.4	16QAM	1	5	23.23	23.19	23.10		
1.4	16QAM	3	0	23.46	23.36	23.30		
1.4	16QAM	3	1	23.39	23.30	23.35		
1.4	16QAM	3	3	23.33	23.26	23.26	23.7	
1.4	16QAM	6	0	22.20	22.14	22.10		
1.4	64QAM	1	0	22.18	22.22	22.05		
1.4	64QAM	1	3	22.16	22.20	22.04		
1.4	64QAM	1	5	22.25	22.29	22.20	23.7	
1.4	64QAM	3	0	22.28	22.11	22.27		
1.4	64QAM	3	1	22.28	22.37	22.24		
1.4	64QAM	3	3	22.31	22.31	21.51		
1.4	64QAM	6	0	21.26	21.25	21.15	22.7	



Band 30_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit [dBm]
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	23.10			24.2
10	QPSK	1	25	23.33			
10	QPSK	1	49	23.20			
10	QPSK	25	0	22.24			23.2
10	QPSK	25	12	22.31			
10	QPSK	25	25	22.32			
10	QPSK	50	0	22.26			23.2
10	16QAM	1	0	22.46			
10	16QAM	1	25	22.61			
10	16QAM	1	49	22.57			22.2
10	16QAM	25	0	21.22			
10	16QAM	25	12	21.30			
10	16QAM	25	25	21.31			21.2
10	16QAM	50	0	21.28			
10	64QAM	1	0	21.34			
10	64QAM	1	25	21.52			22.2
10	64QAM	1	49	21.41			
10	64QAM	25	0	20.28			
10	64QAM	25	12	20.37			21.2
10	64QAM	25	25	20.36			
10	64QAM	50	0	20.32			
Channel				27685	27710	27735	Tune-up limit [dBm]
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.00	23.10	23.18	24.2
5	QPSK	1	12	23.22	23.32	23.26	
5	QPSK	1	24	23.29	23.34	23.20	
5	QPSK	12	0	22.15	22.31	22.30	23.2
5	QPSK	12	7	22.31	22.35	22.31	
5	QPSK	12	13	22.32	22.36	22.25	
5	QPSK	25	0	22.29	22.33	22.29	23.2
5	16QAM	1	0	22.35	22.44	22.55	
5	16QAM	1	12	22.48	22.36	22.52	
5	16QAM	1	24	22.62	22.57	22.54	22.2
5	16QAM	12	0	21.15	21.31	21.32	
5	16QAM	12	7	21.32	21.39	21.38	
5	16QAM	12	13	21.34	21.39	21.29	22.2
5	16QAM	25	0	21.29	21.35	21.33	
5	64QAM	1	0	21.27	21.38	21.47	
5	64QAM	1	12	21.62	21.46	21.47	21.2
5	64QAM	1	24	21.56	21.49	21.44	
5	64QAM	12	0	20.22	20.35	20.35	
5	64QAM	12	7	20.36	20.42	20.40	21.2
5	64QAM	12	13	20.37	20.40	20.35	
5	64QAM	25	0	20.33	20.34	20.36	







Band 71_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	24.38	24.29	24.30	25.7
20	QPSK	1	49	24.25	24.26	24.25	
20	QPSK	1	99	24.24	24.20	24.23	
20	QPSK	50	0	23.40	23.38	23.34	24.7
20	QPSK	50	24	23.40	23.32	23.31	
20	QPSK	50	50	23.42	23.35	23.34	
20	QPSK	100	0	23.40	23.32	23.37	24.7
20	16QAM	1	0	23.76	23.65	23.64	
20	16QAM	1	49	23.60	23.65	23.57	
20	16QAM	1	99	23.60	23.53	23.62	23.7
20	16QAM	50	0	22.41	22.36	22.36	
20	16QAM	50	24	22.46	22.36	22.34	
20	16QAM	50	50	22.42	22.34	22.33	23.7
20	16QAM	100	0	22.42	22.32	22.39	
20	64QAM	1	0	21.80	22.31	22.45	
20	64QAM	1	49	22.07	22.46	22.46	22.7
20	64QAM	1	99	22.47	22.50	22.44	
20	64QAM	50	0	20.76	21.40	21.19	
20	64QAM	50	24	21.02	21.33	21.34	22.7
20	64QAM	50	50	21.43	21.35	21.36	
20	64QAM	100	0	21.16	21.34	21.41	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.37	24.31	24.25	25.7
15	QPSK	1	37	24.23	24.29	24.23	
15	QPSK	1	74	24.22	24.30	24.17	
15	QPSK	36	0	23.38	23.36	23.32	24.7
15	QPSK	36	20	23.39	23.35	23.28	
15	QPSK	36	39	23.30	23.35	23.29	
15	QPSK	75	0	23.42	23.32	23.26	24.7
15	16QAM	1	0	23.66	23.63	23.61	
15	16QAM	1	37	23.60	23.60	23.59	
15	16QAM	1	74	23.58	23.60	23.48	23.7
15	16QAM	36	0	22.40	22.38	22.34	
15	16QAM	36	20	22.42	22.35	22.29	
15	16QAM	36	39	22.34	22.34	22.32	23.7
15	16QAM	75	0	22.41	22.34	22.26	
15	64QAM	1	0	21.58	22.15	22.26	
15	64QAM	1	37	21.81	22.58	22.48	22.7
15	64QAM	1	74	22.45	22.55	22.42	
15	64QAM	36	0	20.68	21.42	21.16	
15	64QAM	36	20	20.75	21.41	21.33	22.7
15	64QAM	36	39	21.15	21.21	21.38	
15	64QAM	75	0	21.04	21.35	21.30	
Channel				133172	133272	133372	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.34	24.22	24.15	25.7
10	QPSK	1	25	24.23	24.26	24.22	
10	QPSK	1	49	24.14	24.22	24.07	
10	QPSK	25	0	23.33	23.28	23.26	24.7
10	QPSK	25	12	23.33	23.30	23.26	
10	QPSK	25	25	23.30	23.28	23.19	
10	QPSK	50	0	23.32	23.25	23.24	24.7
10	16QAM	1	0	23.64	23.61	23.60	
10	16QAM	1	25	23.58	23.57	23.52	
10	16QAM	1	49	23.52	23.58	23.47	23.7
10	16QAM	25	0	22.40	22.29	22.25	
10	16QAM	25	12	22.33	22.34	22.25	
10	16QAM	25	25	22.33	22.31	22.32	23.7
10	16QAM	50	0	22.31	22.27	22.22	
10	64QAM	1	0	21.52	22.06	22.18	
10	64QAM	1	25	21.74	22.50	22.41	22.7
10	64QAM	1	49	22.43	22.49	22.32	
10	64QAM	25	0	20.64	21.36	21.16	
10	64QAM	25	12	20.68	21.32	21.29	22.7
10	64QAM	25	25	21.07	21.11	21.31	
10	64QAM	50	0	21.02	21.25	21.20	
Channel				133147	133247	133347	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.33	24.27	24.24	25.7
5	QPSK	1	12	24.13	24.27	24.14	
5	QPSK	1	24	24.12	24.27	24.17	
5	QPSK	12	0	23.29	23.36	23.28	24.7
5	QPSK	12	7	23.39	23.28	23.26	
5	QPSK	12	13	23.22	23.26	23.22	
5	QPSK	25	0	23.38	23.28	23.23	24.7
5	16QAM	1	0	23.64	23.56	23.57	
5	16QAM	1	12	23.55	23.51	23.52	
5	16QAM	1	24	23.49	23.51	23.38	23.7
5	16QAM	12	0	22.31	22.29	22.31	
5	16QAM	12	7	22.41	22.32	22.19	
5	16QAM	12	13	22.24	22.27	22.30	23.7
5	16QAM	25	0	22.39	22.29	22.17	
5	64QAM	1	0	21.54	22.09	22.26	
5	64QAM	1	12	21.80	22.58	22.46	22.7
5	64QAM	1	24	22.42	22.49	22.33	
5	64QAM	12	0	20.66	21.33	21.13	
5	64QAM	12	7	20.73	21.41	21.33	22.7
5	64QAM	12	13	21.15	21.12	21.34	
5	64QAM	25	0	21.02	21.28	21.29	







Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.24	23.25	23.22	25
10	QPSK	1	25	23.22	23.27	23.26	
10	QPSK	1	49	23.26	23.26	23.21	
10	QPSK	25	0	22.08	22.16	22.12	24
10	QPSK	25	12	22.18	22.14	22.17	
10	QPSK	25	25	22.16	22.17	22.16	
10	QPSK	50	0	22.14	22.16	22.11	24
10	16QAM	1	0	22.37	22.42	22.46	
10	16QAM	1	25	22.40	22.48	22.42	
10	16QAM	1	49	22.47	22.39	22.31	23
10	16QAM	25	0	21.09	21.12	21.08	
10	16QAM	25	12	21.18	21.13	21.10	
10	16QAM	25	25	21.16	21.16	21.17	23
10	16QAM	50	0	21.18	21.16	21.08	
10	64QAM	1	0	21.23	21.23	21.33	
10	64QAM	1	25	21.33	21.36	21.11	23
10	64QAM	1	49	21.33	21.35	20.48	
10	64QAM	25	0	20.12	20.21	20.16	
10	64QAM	25	12	20.25	20.21	20.12	22
10	64QAM	25	25	20.19	20.21	19.58	
10	64QAM	50	0	20.23	20.15	20.04	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.10	25
5	QPSK	1	12	23.05	23.14	23.05	
5	QPSK	1	24	23.04	23.09	23.02	
5	QPSK	12	0	22.11	22.16	22.13	24
5	QPSK	12	7	22.12	22.12	22.09	
5	QPSK	12	13	22.07	22.16	22.05	
5	QPSK	25	0	22.10	22.12	22.08	24
5	16QAM	1	0	22.37	22.46	22.43	
5	16QAM	1	12	22.38	22.47	22.22	
5	16QAM	1	24	22.40	22.41	22.16	23
5	16QAM	12	0	21.15	21.18	21.14	
5	16QAM	12	7	21.17	21.17	21.10	
5	16QAM	12	13	21.12	21.16	21.10	23
5	16QAM	25	0	21.15	21.14	21.10	
5	64QAM	1	0	21.30	21.36	21.13	
5	64QAM	1	12	21.30	21.37	20.34	23
5	64QAM	1	24	21.34	21.35	20.16	
5	64QAM	12	0	20.21	20.27	19.71	
5	64QAM	12	7	20.20	20.20	19.31	22
5	64QAM	12	13	20.21	20.23	19.24	
5	64QAM	25	0	20.15	20.14	19.42	
Channel				20415	20555	20655	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.02	23.06	23.03	25
3	QPSK	1	8	23.04	23.12	23.06	
3	QPSK	1	14	23.00	23.01	23.01	
3	QPSK	8	0	22.07	22.10	22.03	24
3	QPSK	8	4	22.09	22.12	22.03	
3	QPSK	8	7	22.08	22.11	22.06	
3	QPSK	15	0	22.12	22.09	22.02	24
3	16QAM	1	0	22.32	22.41	22.32	
3	16QAM	1	8	22.39	22.50	22.28	
3	16QAM	1	14	22.29	22.35	22.26	23
3	16QAM	8	0	21.12	21.15	21.12	
3	16QAM	8	4	21.19	21.20	21.15	
3	16QAM	8	7	21.10	21.16	21.13	23
3	16QAM	15	0	21.13	21.12	21.08	
3	64QAM	1	0	21.28	21.30	20.39	
3	64QAM	1	8	21.36	21.41	20.29	23
3	64QAM	1	14	21.24	21.32	20.28	
3	64QAM	8	0	20.13	20.16	19.16	
3	64QAM	8	4	20.18	20.20	19.14	22
3	64QAM	8	7	20.12	20.19	19.29	
3	64QAM	15	0	20.15	20.16	19.27	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.22	23.20	25
1.4	QPSK	1	3	23.20	23.20	23.21	
1.4	QPSK	1	5	23.19	23.20	23.12	
1.4	QPSK	3	0	23.18	23.25	23.19	24
1.4	QPSK	3	1	23.26	23.25	23.23	
1.4	QPSK	3	3	23.20	23.15	23.19	
1.4	QPSK	6	0	22.31	22.28	22.24	24
1.4	16QAM	1	0	22.47	22.55	22.51	
1.4	16QAM	1	3	22.59	22.63	22.52	
1.4	16QAM	1	5	22.52	22.54	22.47	24
1.4	16QAM	3	0	22.34	22.33	22.27	
1.4	16QAM	3	1	22.36	22.36	22.31	
1.4	16QAM	3	3	22.26	22.35	22.24	23
1.4	16QAM	6	0	21.35	21.32	21.33	
1.4	64QAM	1	0	21.40	21.48	20.68	
1.4	64QAM	1	3	21.53	21.56	20.78	23
1.4	64QAM	1	5	21.45	21.49	20.77	
1.4	64QAM	3	0	21.43	21.48	20.63	
1.4	64QAM	3	1	21.50	21.49	20.69	23
1.4	64QAM	3	3	21.43	21.47	20.73	
1.4	64QAM	6	0	20.29	20.30	19.53	



Band 7 Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.74	23.85	23.82	25.5
20	QPSK	1	49	23.85	23.93	23.83	
20	QPSK	1	99	23.89	23.96	23.87	
20	QPSK	50	0	22.90	22.95	22.88	24.5
20	QPSK	50	24	22.99	22.97	22.97	
20	QPSK	50	50	23.02	23.08	22.98	
20	QPSK	100	0	22.98	23.00	22.97	24.5
20	16QAM	1	0	23.12	23.22	23.15	
20	16QAM	1	49	23.17	23.29	23.17	
20	16QAM	1	99	23.19	23.32	23.22	23.5
20	16QAM	50	0	21.87	21.87	21.87	
20	16QAM	50	24	21.88	21.99	22.01	
20	16QAM	50	50	22.01	22.09	21.99	23.5
20	16QAM	100	0	21.99	21.97	21.97	
20	64QAM	1	0	21.86	22.08	21.99	
20	64QAM	1	49	22.06	22.15	22.04	22.5
20	64QAM	1	99	22.11	22.23	22.12	
20	64QAM	50	0	20.91	20.98	20.90	
20	64QAM	50	24	21.04	21.02	21.02	22.5
20	64QAM	50	50	21.07	21.08	20.99	
20	64QAM	100	0	21.02	20.98	20.98	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.81	23.93	23.84	25.5
15	QPSK	1	37	23.84	23.90	23.84	
15	QPSK	1	74	23.92	23.95	23.91	
15	QPSK	36	0	22.90	22.98	22.88	24.5
15	QPSK	36	20	23.04	23.01	22.92	
15	QPSK	36	39	23.03	23.10	22.99	
15	QPSK	75	0	23.00	23.00	22.91	24.5
15	16QAM	1	0	23.15	23.28	23.19	
15	16QAM	1	37	23.17	23.32	23.19	
15	16QAM	1	74	23.21	23.30	23.26	23.5
15	16QAM	36	0	21.91	21.98	21.89	
15	16QAM	36	20	22.02	22.02	21.91	
15	16QAM	36	39	22.02	22.10	21.98	23.5
15	16QAM	75	0	22.01	21.99	21.91	
15	64QAM	1	0	22.01	22.14	22.02	
15	64QAM	1	37	22.08	22.21	22.12	22.5
15	64QAM	1	74	22.12	22.25	22.13	
15	64QAM	36	0	20.83	21.03	20.95	
15	64QAM	36	20	21.06	21.09	20.97	22.5
15	64QAM	36	39	21.07	21.14	21.05	
15	64QAM	75	0	21.00	21.01	20.94	
Channel				20800	21100	21400	
Frequency (MHz)				2595	2535	2565	
10	QPSK	1	0	23.83	23.83	23.73	25.5
10	QPSK	1	25	23.77	23.86	23.73	
10	QPSK	1	49	23.85	23.92	23.83	
10	QPSK	25	0	22.94	22.96	22.86	24.5
10	QPSK	25	12	23.00	23.02	22.96	
10	QPSK	25	25	23.00	23.07	22.97	
10	QPSK	50	0	22.99	22.96	22.87	24.5
10	16QAM	1	0	23.18	23.25	23.11	
10	16QAM	1	25	23.17	23.31	23.15	
10	16QAM	1	49	23.25	23.34	23.19	23.5
10	16QAM	25	0	21.94	21.94	21.84	
10	16QAM	25	12	21.88	22.03	21.96	
10	16QAM	25	25	22.00	22.03	21.96	22.5
10	16QAM	50	0	21.97	21.97	21.86	
10	64QAM	1	0	22.11	22.05	22.02	
10	64QAM	1	25	22.13	22.19	22.08	22.5
10	64QAM	1	49	22.13	22.27	22.09	
10	64QAM	25	0	20.98	20.99	20.90	
10	64QAM	25	12	21.04	21.03	21.01	22.5
10	64QAM	25	25	21.04	21.11	20.99	
10	64QAM	50	0	21.00	21.01	20.88	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.84	23.87	23.78	25.5
5	QPSK	1	12	23.84	23.95	23.84	
5	QPSK	1	24	23.89	23.94	23.81	
5	QPSK	12	0	22.95	22.97	22.93	24.5
5	QPSK	12	7	22.95	23.01	22.88	
5	QPSK	12	13	22.97	23.02	22.92	
5	QPSK	25	0	22.96	22.98	22.91	24.5
5	16QAM	1	0	23.15	23.17	23.10	
5	16QAM	1	12	23.18	23.27	23.10	
5	16QAM	1	24	23.19	23.25	23.14	23.5
5	16QAM	12	0	21.98	22.00	21.93	
5	16QAM	12	7	21.99	22.00	21.91	
5	16QAM	12	13	21.99	22.05	21.91	23.5
5	16QAM	25	0	21.99	22.00	21.96	
5	64QAM	1	0	22.11	22.09	22.07	
5	64QAM	1	12	22.08	22.16	22.01	23.5
5	64QAM	1	24	22.14	22.22	22.10	
5	64QAM	12	0	21.05	21.08	20.98	
5	64QAM	12	7	21.04	21.02	20.96	22.5
5	64QAM	12	13	21.00	21.12	20.97	
5	64QAM	25	0	20.98	21.00	20.97	



Band 12_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.94	23.92	24.00	25.7
10	QPSK	1	25	23.94	23.95	24.00	
10	QPSK	1	49	24.05	24.06	24.01	
10	QPSK	25	0	23.05	23.06	23.08	24.7
10	QPSK	25	12	23.11	23.04	23.08	
10	QPSK	25	25	23.11	23.14	23.12	
10	QPSK	50	0	23.08	23.13	23.11	24.7
10	16QAM	1	0	23.26	23.28	23.32	
10	16QAM	1	25	23.32	23.41	23.37	
10	16QAM	1	49	23.37	23.36	23.33	23.7
10	16QAM	25	0	22.05	22.08	22.10	
10	16QAM	25	12	22.16	22.09	22.12	
10	16QAM	25	25	22.09	22.15	22.08	23.7
10	16QAM	50	0	22.13	22.09	22.10	
10	64QAM	1	0	21.72	21.88	22.19	
10	64QAM	1	25	21.92	22.16	22.31	23.7
10	64QAM	1	49	22.09	22.03	21.83	
10	64QAM	25	0	20.71	20.70	21.15	
10	64QAM	25	12	20.71	21.01	21.14	22.7
10	64QAM	25	25	20.86	21.17	21.06	
10	64QAM	50	0	20.70	20.98	21.09	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.98	23.97	23.95	25.7
5	QPSK	1	12	23.99	24.02	24.03	
5	QPSK	1	24	23.98	24.03	24.01	
5	QPSK	12	0	22.99	23.05	23.06	24.7
5	QPSK	12	7	23.04	23.05	23.04	
5	QPSK	12	13	23.02	23.07	23.03	
5	QPSK	25	0	23.03	23.03	23.03	24.7
5	16QAM	1	0	23.28	23.27	23.26	
5	16QAM	1	12	23.17	23.26	23.25	
5	16QAM	1	24	23.28	23.35	23.26	23.7
5	16QAM	12	0	22.04	22.10	22.11	
5	16QAM	12	7	22.07	22.13	22.08	
5	16QAM	12	13	22.07	22.14	22.06	23.7
5	16QAM	25	0	22.10	22.09	22.07	
5	64QAM	1	0	21.71	21.75	22.16	
5	64QAM	1	12	21.70	22.17	22.01	23.7
5	64QAM	1	24	21.72	22.12	21.85	
5	64QAM	12	0	20.72	20.91	21.16	
5	64QAM	12	7	20.70	21.17	21.06	22.7
5	64QAM	12	13	20.76	21.14	20.88	
5	64QAM	25	0	20.75	20.96	20.96	
Channel				23005	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.97	23.97	23.97	25.7
3	QPSK	1	8	23.97	24.04	24.02	
3	QPSK	1	14	23.90	23.96	23.94	
3	QPSK	8	0	23.03	23.04	23.00	24.7
3	QPSK	8	4	23.05	23.09	23.05	
3	QPSK	8	7	22.95	23.06	22.99	
3	QPSK	15	0	23.00	23.00	22.96	24.7
3	16QAM	1	0	23.30	23.27	23.28	
3	16QAM	1	8	23.20	23.33	23.27	
3	16QAM	1	14	23.21	23.30	23.22	23.7
3	16QAM	8	0	22.09	22.10	22.04	
3	16QAM	8	4	22.09	22.16	22.09	
3	16QAM	8	7	21.98	22.09	21.92	23.7
3	16QAM	15	0	22.01	22.04	22.00	
3	64QAM	1	0	21.72	22.00	22.01	
3	64QAM	1	8	21.70	22.27	22.00	23.7
3	64QAM	1	14	21.73	22.21	21.77	
3	64QAM	8	0	20.72	21.05	20.91	
3	64QAM	8	4	20.74	21.18	20.90	22.7
3	64QAM	8	7	20.70	21.09	20.80	
3	64QAM	15	0	20.73	21.07	20.77	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.92	23.92	23.91	25.7
1.4	QPSK	1	3	23.95	23.93	23.97	
1.4	QPSK	1	5	23.91	23.96	23.99	
1.4	QPSK	3	0	23.91	23.93	23.90	24.7
1.4	QPSK	3	1	23.99	23.98	23.96	
1.4	QPSK	3	3	23.92	23.96	23.96	
1.4	QPSK	6	0	23.21	23.07	23.21	24.7
1.4	16QAM	1	0	23.47	23.44	23.52	
1.4	16QAM	1	3	23.51	23.57	23.50	
1.4	16QAM	1	5	23.44	23.52	23.45	24.7
1.4	16QAM	3	0	23.23	23.24	23.23	
1.4	16QAM	3	1	23.26	23.26	23.29	
1.4	16QAM	3	3	23.19	23.26	23.19	23.7
1.4	16QAM	6	0	22.28	22.30	22.31	
1.4	64QAM	1	0	21.72	22.36	22.02	
1.4	64QAM	1	3	21.73	22.44	22.00	23.7
1.4	64QAM	1	5	21.70	22.43	21.80	
1.4	64QAM	3	0	21.71	22.35	21.96	
1.4	64QAM	3	1	21.77	22.37	22.01	23.7
1.4	64QAM	3	3	21.75	22.38	21.93	
1.4	64QAM	6	0	20.73	21.23	20.85	



Band 13_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)							
10	QPSK	1	0		23.02		25
10	QPSK	1	25		23.01		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.01		24
10	QPSK	25	12		22.02		
10	QPSK	25	25		22.06		
10	QPSK	50	0		22.15		24
10	16QAM	1	0		22.28		
10	16QAM	1	25		22.27		
10	16QAM	1	49		22.33		23
10	16QAM	25	0		21.03		
10	16QAM	25	12		21.05		
10	16QAM	25	25		21.08		23
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.07		
10	64QAM	1	25		21.22		23
10	64QAM	1	49		21.29		
10	64QAM	25	0		20.04		
10	64QAM	25	12		20.06		22
10	64QAM	25	25		20.11		
10	64QAM	50	0		20.12		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.90	22.85	22.80	25
5	QPSK	1	12	22.94	22.95	22.88	
5	QPSK	1	24	22.95	22.96	22.71	
5	QPSK	12	0	22.05	22.05	21.74	24
5	QPSK	12	7	22.06	22.09	21.82	
5	QPSK	12	13	22.06	22.09	21.80	
5	QPSK	25	0	22.06	22.05	21.77	24
5	16QAM	1	0	22.14	22.19	21.89	
5	16QAM	1	12	22.17	22.21	21.94	
5	16QAM	1	24	22.25	22.24	21.96	23
5	16QAM	12	0	21.09	21.06	20.80	
5	16QAM	12	7	21.10	21.13	20.84	
5	16QAM	12	13	21.09	21.09	20.84	23
5	16QAM	25	0	21.11	21.07	20.81	
5	64QAM	1	0	21.08	21.13	20.86	
5	64QAM	1	12	21.13	21.18	20.90	23
5	64QAM	1	24	21.18	21.17	20.98	
5	64QAM	12	0	20.09	20.10	19.83	
5	64QAM	12	7	20.12	20.13	19.86	22
5	64QAM	12	13	20.09	20.13	19.86	
5	64QAM	25	0	20.12	20.10	19.83	



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





Band 17_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.06	23.04	23.16	25
10	QPSK	1	25	23.15	23.11	23.18	
10	QPSK	1	49	23.10	23.12	23.19	
10	QPSK	25	0	22.22	22.22	22.21	
10	QPSK	25	12	22.25	22.26	22.28	24
10	QPSK	25	25	22.30	22.33	22.36	
10	QPSK	50	0	22.25	22.26	22.30	
10	16QAM	1	0	22.16	22.17	22.15	
10	16QAM	1	25	22.21	22.28	22.29	24
10	16QAM	1	49	22.26	22.23	22.26	
10	16QAM	25	0	20.91	20.87	20.88	
10	16QAM	25	12	21.02	20.96	20.94	23
10	16QAM	25	25	21.03	21.04	20.96	
10	16QAM	50	0	20.92	20.95	20.93	
10	64QAM	1	0	21.03	21.03	21.05	
10	64QAM	1	25	21.14	21.18	21.17	23
10	64QAM	1	49	21.16	21.18	21.13	
10	64QAM	25	0	19.92	19.92	19.92	
10	64QAM	25	12	20.08	19.96	19.96	22
10	64QAM	25	25	20.04	20.05	20.03	
10	64QAM	50	0	19.98	19.97	19.97	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.01	23.05	23.09	25
5	QPSK	1	12	23.14	23.12	23.15	
5	QPSK	1	24	23.18	23.11	23.19	
5	QPSK	12	0	22.20	22.15	22.11	
5	QPSK	12	7	22.29	22.22	22.23	24
5	QPSK	12	13	22.25	22.32	22.25	
5	QPSK	25	0	22.17	22.14	22.25	
5	16QAM	1	0	22.12	22.15	22.09	
5	16QAM	1	12	22.15	22.23	22.14	24
5	16QAM	1	24	22.25	22.25	22.22	
5	16QAM	12	0	20.90	20.90	20.87	
5	16QAM	12	7	21.00	20.97	20.96	23
5	16QAM	12	13	20.97	20.96	20.95	
5	16QAM	25	0	20.95	20.94	20.95	
5	64QAM	1	0	21.05	21.05	21.03	
5	64QAM	1	12	21.09	21.13	21.09	23
5	64QAM	1	24	21.19	21.16	21.10	
5	64QAM	12	0	19.94	19.99	19.93	
5	64QAM	12	7	20.04	19.96	19.99	22
5	64QAM	12	13	20.02	20.01	19.99	
5	64QAM	25	0	19.95	19.91	19.96	







Band 30_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	24.12			25.7
10	QPSK	1	25	24.04			
10	QPSK	1	49	24.03			
10	QPSK	25	0	23.10			24.7
10	QPSK	25	12	23.16			
10	QPSK	25	25	23.16			
10	QPSK	50	0	23.14			24.7
10	16QAM	1	0	23.44			
10	16QAM	1	25	23.47			
10	16QAM	1	49	23.35			23.7
10	16QAM	25	0	22.11			
10	16QAM	25	12	22.15			
10	16QAM	25	25	22.11			23.7
10	16QAM	50	0	22.14			
10	64QAM	1	0	22.35			
10	64QAM	1	25	21.90			23.7
10	64QAM	1	49	21.70			
10	64QAM	25	0	21.07			
10	64QAM	25	12	20.86			22.7
10	64QAM	25	25	20.84			
10	64QAM	50	0	20.86			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.95	23.99	24.02	25.7
5	QPSK	1	12	24.11	24.11	24.09	
5	QPSK	1	24	24.10	24.08	24.03	
5	QPSK	12	0	23.12	23.11	23.12	24.7
5	QPSK	12	7	23.20	23.14	23.17	
5	QPSK	12	13	23.21	23.13	23.09	
5	QPSK	25	0	23.18	23.13	23.13	24.7
5	16QAM	1	0	23.31	23.27	23.31	
5	16QAM	1	12	23.37	23.39	23.35	
5	16QAM	1	24	23.44	23.38	23.33	23.7
5	16QAM	12	0	22.12	22.13	22.16	
5	16QAM	12	7	22.22	22.17	22.20	
5	16QAM	12	13	22.21	22.14	22.14	23.7
5	16QAM	25	0	22.22	22.14	22.15	
5	64QAM	1	0	22.18	21.92	21.80	
5	64QAM	1	12	22.13	21.95	21.72	23.7
5	64QAM	1	24	22.03	21.84	21.82	
5	64QAM	12	0	21.15	20.81	20.71	
5	64QAM	12	7	21.04	20.76	20.71	22.7
5	64QAM	12	13	20.83	20.68	20.84	
5	64QAM	25	0	21.05	20.77	20.76	





Band 71_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				678	683	688	
20	QPSK	1	0	23.27	23.17	23.14	25
20	QPSK	1	49	23.12	23.14	23.11	
20	QPSK	1	99	23.08	23.05	23.04	
20	QPSK	50	0	22.30	22.17	22.16	24
20	QPSK	50	24	22.33	22.25	22.21	
20	QPSK	50	50	22.28	22.17	22.17	
20	QPSK	100	0	22.29	22.14	22.21	24
20	16QAM	1	0	22.57	22.46	22.49	
20	16QAM	1	49	22.48	22.48	22.43	
20	16QAM	1	99	22.45	22.43	22.40	23
20	16QAM	50	0	21.32	21.25	21.22	
20	16QAM	50	24	21.34	21.20	21.14	
20	16QAM	50	50	21.31	21.22	21.17	23
20	16QAM	100	0	21.29	21.16	21.22	
20	64QAM	1	0	21.27	21.34	21.34	
20	64QAM	1	49	21.25	21.34	21.36	22
20	64QAM	1	99	21.28	21.28	21.23	
20	64QAM	50	0	20.01	20.25	20.00	
20	64QAM	50	24	20.24	20.09	20.19	22
20	64QAM	50	50	20.32	20.20	20.20	
20	64QAM	100	0	20.04	20.20	20.24	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.25	23.19	23.14	25
15	QPSK	1	37	23.09	23.13	23.09	
15	QPSK	1	74	23.12	23.13	23.00	
15	QPSK	36	0	22.28	22.25	22.16	24
15	QPSK	36	20	22.32	22.22	22.14	
15	QPSK	36	39	22.23	22.23	22.16	
15	QPSK	75	0	22.30	22.22	22.13	24
15	16QAM	1	0	22.57	22.52	22.46	
15	16QAM	1	37	22.44	22.52	22.45	
15	16QAM	1	74	22.39	22.47	22.33	23
15	16QAM	36	0	21.31	21.26	21.19	
15	16QAM	36	20	21.31	21.21	21.14	
15	16QAM	36	39	21.23	21.23	21.14	23
15	16QAM	75	0	21.31	21.21	21.13	
15	64QAM	1	0	20.58	21.40	21.09	
15	64QAM	1	37	20.95	21.41	21.35	22
15	64QAM	1	74	21.28	21.39	21.23	
15	64QAM	36	0	19.47	20.29	20.21	
15	64QAM	36	20	18.86	20.11	20.20	22
15	64QAM	36	39	20.23	20.03	20.23	
15	64QAM	75	0	20.05	20.22	20.14	
Channel				133172	133272	133322	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.13	23.04	23.05	25
10	QPSK	1	25	23.04	23.03	23.04	
10	QPSK	1	49	23.01	23.00	23.01	
10	QPSK	25	0	22.14	22.02	22.04	24
10	QPSK	25	12	22.15	22.10	22.00	
10	QPSK	25	25	22.07	22.06	22.01	
10	QPSK	50	0	22.15	22.11	22.02	24
10	16QAM	1	0	22.50	22.31	22.27	
10	16QAM	1	25	22.37	22.35	22.26	
10	16QAM	1	49	22.36	22.30	22.21	23
10	16QAM	25	0	21.08	21.01	21.03	
10	16QAM	25	12	21.15	21.09	21.40	
10	16QAM	25	25	21.10	21.03	21.05	22
10	16QAM	50	0	21.15	21.10	21.00	
10	64QAM	1	0	20.44	21.09	21.14	
10	64QAM	1	25	20.30	21.25	21.12	22
10	64QAM	1	49	20.69	21.18	21.10	
10	64QAM	25	0	19.03	20.95	19.96	
10	64QAM	25	12	19.15	20.15	19.96	22
10	64QAM	25	25	19.47	19.86	19.90	
10	64QAM	50	0	19.35	19.91	19.96	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.00	23.00	23.01	25
5	QPSK	1	12	23.03	23.06	23.04	
5	QPSK	1	24	23.02	23.01	23.05	
5	QPSK	12	0	22.02	22.02	22.05	24
5	QPSK	12	7	22.01	22.04	22.03	
5	QPSK	12	13	22.03	22.02	22.02	
5	QPSK	25	0	22.04	22.03	22.00	24
5	16QAM	1	0	22.24	22.33	22.28	
5	16QAM	1	12	22.09	22.30	22.20	
5	16QAM	1	24	22.24	22.27	22.13	23
5	16QAM	12	0	21.04	21.05	21.01	
5	16QAM	12	7	21.01	21.09	21.01	
5	16QAM	12	13	21.01	21.03	21.03	23
5	16QAM	25	0	21.02	21.06	21.00	
5	64QAM	1	0	20.08	21.24	21.16	
5	64QAM	1	12	20.07	21.25	21.11	23
5	64QAM	1	24	20.13	21.24	20.77	
5	64QAM	12	0	19.23	20.12	20.03	
5	64QAM	12	7	19.20	20.14	19.95	22
5	64QAM	12	13	19.15	20.06	19.77	
5	64QAM	25	0	19.09	20.08	19.72	



Band 38_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	
20	QPSK	1	49	24.62	24.55	24.47	25.7
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	23.7
20	16QAM	50	50	22.76	22.71	22.62	
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	23.7
20	64QAM	1	99	22.43	22.40	22.31	
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	22.7
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	
Channel				37625	38000	38175	1000000
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	
15	QPSK	1	37	24.55	24.51	24.43	25.7
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	23.7
15	16QAM	36	39	22.66	22.65	22.54	
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	23.7
15	64QAM	1	74	22.46	22.39	22.31	
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	22.7
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	
Channel				37800	38000	38200	1000000
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	
10	QPSK	1	25	24.59	24.60	24.46	25.7
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	24.7
10	16QAM	1	25	23.73	23.69	23.59	
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	23.7
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	23.7
10	64QAM	1	49	22.51	22.42	22.32	
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.66	22.7
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	
Channel				37775	38000	38225	1000000
Frequency (MHz)				23245	2595	2617.5	
5	QPSK	1	0	24.59	24.51	24.46	
5	QPSK	1	12	24.57	24.55	24.39	25.7
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	24.7
5	16QAM	1	12	23.78	23.76	23.58	
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	23.7
5	16QAM	12	7	22.73	22.70	22.56	
5	16QAM	12	13	22.68	22.67	22.55	
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	23.7
5	64QAM	1	24	22.55	22.51	22.37	
5	64QAM	12	0	21.77	21.65	21.66	
5	64QAM	12	7	21.76	21.74	21.63	22.7
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



Band 38_HPUE_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2880	2956	2610	
20	QPSK	1	0	26.15	26.16	26.14	27.5
20	QPSK	1	49	26.13	26.16	26.09	
20	QPSK	99	99	26.26	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	26.5
20	QPSK	50	24	25.37	25.43	25.44	
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	26.5
20	16QAM	1	0	25.46	25.56	25.54	
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	26.5
20	16QAM	50	0	24.37	24.45	24.45	
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	25.5
20	16QAM	100	0	24.39	24.44	24.46	
20	64QAM	1	0	24.47	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	25.5
20	64QAM	1	99	24.42	24.44	24.33	
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	24.5
20	64QAM	50	50	23.53	23.54	23.42	
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	27.5
15	QPSK	1	37	26.27	26.11	26.17	
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.90	25.43	25.41	26.5
15	QPSK	36	20	25.50	25.42	25.39	
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	26.5
15	16QAM	1	0	25.63	25.57	25.50	
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	26.5
15	16QAM	36	0	24.52	24.41	24.37	
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	25.5
15	16QAM	75	0	24.53	24.41	24.41	
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	25.5
15	64QAM	1	74	24.48	24.43	24.32	
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	24.5
15	64QAM	36	39	23.53	23.49	23.39	
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	27.5
10	QPSK	1	25	26.20	26.08	26.08	
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	26.5
10	QPSK	25	12	25.43	25.40	25.37	
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.38	26.5
10	16QAM	1	0	25.54	25.51	25.49	
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	26.5
10	16QAM	25	0	24.42	24.40	24.28	
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	25.5
10	16QAM	50	0	24.43	24.40	24.37	
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	25.5
10	64QAM	1	49	24.48	24.38	24.27	
10	64QAM	25	0	23.56	23.38	23.41	
10	64QAM	25	12	23.49	23.35	23.33	24.5
10	64QAM	25	25	23.43	23.39	23.29	
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2395	2317.5	
5	QPSK	1	0	26.20	26.22	26.07	27.5
5	QPSK	1	12	26.22	26.02	26.17	
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	26.5
5	QPSK	12	7	25.44	25.33	25.29	
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	26.5
5	16QAM	1	0	25.59	25.47	25.48	
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	26.5
5	16QAM	12	0	24.50	24.34	24.36	
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	25.5
5	16QAM	25	0	24.50	24.32	24.34	
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	25.5
5	64QAM	1	24	24.36	24.41	24.23	
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	24.5
5	64QAM	12	13	23.49	23.41	23.36	
5	64QAM	25	0	23.52	23.32	23.34	







Band 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	55630	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	24.09	24.44	24.59	24.46		
20	QPSK	1	49	23.95	24.29	24.38	24.23		25.7
20	QPSK	1	99	24.03	24.26	24.31	24.17		
20	QPSK	50	0	23.08	23.44	23.51	23.48		
20	QPSK	50	24	23.16	23.46	23.55	23.42		24.7
20	QPSK	50	50	23.12	23.42	23.47	23.33		
20	QPSK	100	0	23.15	23.47	23.54	23.42		
20	16QAM	1	0	23.20	23.59	23.71	23.59		
20	16QAM	1	49	23.06	23.35	23.45	23.31		24.7
20	16QAM	1	99	23.11	23.38	23.42	23.23		
20	16QAM	50	0	22.11	22.47	22.64	22.50		
20	16QAM	50	24	22.17	22.49	22.59	22.45		23.7
20	16QAM	50	50	22.14	22.46	22.50	22.37		
20	16QAM	100	0	22.16	22.46	22.57	22.41		
20	64QAM	1	0	21.85	22.23	22.44	22.33		
20	64QAM	1	49	21.78	22.09	22.20	22.03		23.7
20	64QAM	1	99	21.89	22.12	22.13	21.94		
20	64QAM	50	0	21.13	21.47	21.63	21.53		
20	64QAM	50	24	21.18	21.49	21.61	21.44		22.7
20	64QAM	50	50	21.16	21.45	21.51	21.36		
20	64QAM	100	0	21.19	21.47	21.58	21.42		
Channel				56315	56620	56160	56665		
Frequency (MHz)				3657.5	3608	3642	3692.5		
15	QPSK	1	0	24.03	24.36	24.54	24.36		
15	QPSK	1	37	23.95	24.28	24.36	24.24		25.7
15	QPSK	1	74	24.02	24.33	24.36	24.20		
15	QPSK	36	0	23.19	23.42	23.63	23.46		
15	QPSK	36	20	23.14	23.46	23.55	23.41		24.7
15	QPSK	36	39	23.09	23.43	23.52	23.34		
15	QPSK	75	0	23.17	23.47	23.57	23.43		
15	16QAM	1	0	23.16	23.52	23.67	23.51		
15	16QAM	1	37	22.98	23.34	23.43	23.23		24.7
15	16QAM	1	74	23.16	23.47	23.51	23.35		
15	16QAM	36	0	22.12	22.41	22.60	22.44		
15	16QAM	36	20	22.10	22.42	22.53	22.37		23.7
15	16QAM	36	39	22.08	22.39	22.46	22.32		
15	16QAM	75	0	22.17	22.48	22.58	22.44		
15	64QAM	1	0	21.84	22.18	22.38	22.25		
15	64QAM	1	37	21.78	22.12	22.24	22.06		23.7
15	64QAM	1	74	21.88	22.20	22.19	22.03		
15	64QAM	36	0	21.17	21.44	21.62	21.51		
15	64QAM	36	20	21.14	21.47	21.57	21.40		22.7
15	64QAM	36	39	21.12	21.42	21.52	21.37		
15	64QAM	75	0	21.17	21.50	21.59	21.43		
Channel				56290	56815	56165	56690		
Frequency (MHz)				3655	3607.5	3642.5	3695		
10	QPSK	1	0	24.04	24.35	24.47	24.33		
10	QPSK	1	25	23.93	24.28	24.37	24.22		25.7
10	QPSK	1	49	23.96	24.29	24.35	24.22		
10	QPSK	25	0	23.12	23.46	23.55	23.41		
10	QPSK	25	12	23.12	23.44	23.55	23.40		24.7
10	QPSK	25	25	23.08	23.42	23.52	23.34		
10	QPSK	50	0	23.10	23.43	23.52	23.39		
10	16QAM	1	0	23.13	23.48	23.65	23.48		
10	16QAM	1	25	23.04	23.41	23.49	23.33		24.7
10	16QAM	1	49	23.03	23.39	23.47	23.30		
10	16QAM	25	0	22.10	22.43	22.56	22.41		
10	16QAM	25	12	22.12	22.45	22.58	22.41		23.7
10	16QAM	25	25	22.07	22.41	22.50	22.33		
10	16QAM	50	0	22.11	22.49	22.55	22.42		
10	64QAM	1	0	21.85	22.14	22.35	22.22		
10	64QAM	1	25	21.77	22.14	22.22	22.09		23.7
10	64QAM	1	49	21.83	22.15	22.16	22.05		
10	64QAM	25	0	21.16	21.52	21.60	21.46		
10	64QAM	25	12	21.19	21.54	21.62	21.48		22.7
10	64QAM	25	25	21.14	21.47	21.57	21.41		
10	64QAM	50	0	21.11	21.46	21.56	21.43		
Channel				56265	56810	56170	56715		
Frequency (MHz)				3624.5	3607	3643	3674.5		
5	QPSK	1	0	23.90	24.25	24.49	24.34		
5	QPSK	1	12	23.90	24.25	24.33	24.20		25.7
5	QPSK	1	24	23.95	24.29	24.33	24.25		
5	QPSK	12	0	23.08	23.43	23.53	23.41		
5	QPSK	12	7	23.08	23.43	23.53	23.37		24.7
5	QPSK	12	13	23.09	23.42	23.54	23.39		
5	QPSK	25	0	23.06	23.41	23.53	23.37		
5	16QAM	1	0	23.11	23.43	23.62	23.45		
5	16QAM	1	12	23.10	23.45	23.53	23.39		24.7
5	16QAM	1	24	23.11	23.47	23.49	23.43		
5	16QAM	12	0	22.05	22.43	22.55	22.35		
5	16QAM	12	7	22.07	22.39	22.51	22.36		23.7
5	16QAM	12	13	22.07	22.39	22.47	22.35		
5	16QAM	25	0	22.11	22.46	22.55	22.39		
5	64QAM	1	0	21.87	22.17	22.33	22.20		
5	64QAM	1	12	21.79	22.16	22.26	22.10		23.7
5	64QAM	1	24	21.86	22.25	22.26	22.16		
5	64QAM	12	0	21.13	21.44	21.56	21.44		
5	64QAM	12	7	21.08	21.43	21.56	21.38		22.7
5	64QAM	12	13	21.08	21.42	21.55	21.35		
5	64QAM	25	0	21.11	21.46	21.57	21.44		



Band 38_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.06	22.91	22.83	24.2
20	QPSK	50	24	23.06	22.88	22.82	
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	24.2
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	
20	16QAM	1	99	22.97	22.90	22.76	23.2
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.68	21.51	23.2
20	64QAM	1	99	21.75	21.68	21.54	
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	22.2
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37625	38000	38175	1000-ep limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	24.2
15	QPSK	36	20	23.05	22.87	22.82	
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	24.2
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	
15	16QAM	1	74	23.01	22.92	22.79	23.2
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	23.2
15	64QAM	1	74	21.81	21.67	21.49	
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	22.2
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	1000-ep limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.87	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	24.2
10	QPSK	25	12	22.98	22.83	22.73	
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.06	22.83	22.79	24.2
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	
10	16QAM	1	49	22.97	22.87	22.73	23.2
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	23.2
10	64QAM	1	49	21.74	21.63	21.47	
10	64QAM	25	0	21.05	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	22.2
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	1000-ep limit (dBm)
Frequency (MHz)				2372.5	2595	2617.5	
5	QPSK	1	0	23.75	23.78	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	24.2
5	QPSK	12	7	22.97	22.81	22.82	
5	QPSK	12	13	22.98	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	24.2
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	
5	16QAM	1	24	22.96	22.83	22.74	23.2
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	
5	16QAM	12	13	22.04	21.95	21.78	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	23.2
5	64QAM	1	24	21.66	21.59	21.49	
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	22.2
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



Band 38_HPUE_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	26.7
20	QPSK	1	49	25.53	25.47	25.33	
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	25.7
20	QPSK	50	24	24.87	24.72	24.65	
20	QPSK	50	50	24.84	24.76	24.63	
20	QPSK	100	0	24.86	24.71	24.67	25.7
20	16QAM	1	0	24.96	24.85	24.77	
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	24.7
20	16QAM	50	0	23.91	23.77	23.71	
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	24.7
20	16QAM	100	0	23.92	23.73	23.70	
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	24.7
20	64QAM	1	99	23.77	23.70	23.56	
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.81	22.77	22.69	23.7
20	64QAM	50	50	22.90	22.81	22.69	
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	Intercep limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	26.7
15	QPSK	1	37	25.43	25.41	25.33	
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.66	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.66	23.62	
15	64QAM	1	37	23.72	23.68	23.47	24.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.66	23.7
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	Intercep limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	26.7
10	QPSK	1	25	25.44	25.37	25.29	
10	QPSK	1	49	25.46	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.76	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	24.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.77	22.63	23.7
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	Intercep limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	24.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.86	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	





Band 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	55630	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	24.05	24.36	24.53	24.56	25.7	
20	QPSK	1	49	23.90	24.19	24.30	24.36		
20	QPSK	1	99	23.91	24.17	24.30	24.29		
20	QPSK	50	0	23.10	23.40	23.50	23.51	24.7	
20	QPSK	50	24	23.04	23.34	23.47	23.41		
20	QPSK	50	50	23.05	23.31	23.42	23.43		
20	QPSK	100	0	23.05	23.36	23.49	23.50	24.7	
20	16QAM	1	0	23.15	23.47	23.64	23.68		
20	16QAM	1	49	22.98	23.26	23.40	23.40		
20	16QAM	1	99	23.02	23.29	23.41	23.40	23.7	
20	16QAM	50	0	22.05	22.34	22.58	22.50		
20	16QAM	50	24	22.11	22.38	22.53	22.46		
20	16QAM	50	50	22.07	22.33	22.46	22.44	23.7	
20	16QAM	100	0	22.10	22.37	22.52	22.43		
20	64QAM	1	0	21.85	22.13	22.37	22.34		
20	64QAM	1	49	21.73	22.01	22.16	22.14	23.7	
20	64QAM	1	99	21.78	22.03	22.12	22.14		
20	64QAM	50	0	21.06	21.35	21.56	21.52		
20	64QAM	50	24	21.14	21.38	21.53	21.46	22.7	
20	64QAM	50	50	21.08	21.33	21.46	21.45		
20	64QAM	100	0	21.10	21.39	21.49	21.43		
Channel				56315	56620	56160	56655	Tune-up limit (dBm)	
Frequency (MHz)				3657.5	3608	3642	3692.5		
15	QPSK	1	0	23.92	24.24	24.44	24.44	25.7	
15	QPSK	1	37	23.86	24.17	24.34	24.34		
15	QPSK	1	74	23.86	24.16	24.30	24.29		
15	QPSK	36	0	23.08	23.29	23.52	23.46	24.7	
15	QPSK	36	20	23.01	23.32	23.48	23.48		
15	QPSK	36	39	22.97	23.28	23.43	23.40		
15	QPSK	75	0	23.04	23.33	23.48	23.41	24.7	
15	16QAM	1	0	23.04	23.36	23.59	23.57		
15	16QAM	1	37	22.89	23.14	23.31	23.31		
15	16QAM	1	74	23.03	23.36	23.48	23.45	23.7	
15	16QAM	36	0	22.03	22.24	22.50	22.46		
15	16QAM	36	20	21.98	22.28	22.45	22.45		
15	16QAM	36	39	21.95	22.24	22.38	22.39	23.7	
15	16QAM	75	0	22.04	22.33	22.48	22.41		
15	64QAM	1	0	21.75	22.01	22.30	22.22		
15	64QAM	1	37	21.70	22.00	22.16	22.18	23.7	
15	64QAM	1	74	21.79	22.08	22.22	22.22		
15	64QAM	36	0	21.09	21.32	21.55	21.47		
15	64QAM	36	20	21.04	21.33	21.49	21.49	22.7	
15	64QAM	36	39	21.01	21.29	21.42	21.44		
15	64QAM	75	0	21.05	21.36	21.52	21.44		
Channel				56290	56815	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3655	3607.5	3642.5	3695		
10	QPSK	1	0	23.94	24.23	24.39	24.44	25.7	
10	QPSK	1	25	23.85	24.18	24.34	24.36		
10	QPSK	1	49	23.89	24.22	24.35	24.36		
10	QPSK	25	0	23.02	23.33	23.43	23.52	24.7	
10	QPSK	25	12	23.02	23.34	23.42	23.52		
10	QPSK	25	25	22.99	23.29	23.46	23.46		
10	QPSK	50	0	23.00	23.29	23.41	23.51	24.7	
10	16QAM	1	0	23.10	23.37	23.56	23.62		
10	16QAM	1	25	22.97	23.27	23.46	23.46		
10	16QAM	1	49	23.00	23.27	23.43	23.45	23.7	
10	16QAM	25	0	22.04	22.34	22.43	22.55		
10	16QAM	25	12	22.05	22.34	22.43	22.54		
10	16QAM	25	25	21.99	22.30	22.47	22.48	23.7	
10	64QAM	1	0	22.07	22.35	22.43	22.51		
10	64QAM	1	0	21.82	22.02	22.26	22.36		
10	64QAM	1	25	21.70	22.00	22.20	22.19	23.7	
10	64QAM	1	49	21.70	22.02	22.17	22.17		
10	64QAM	25	0	21.08	21.41	21.51	21.60		
10	64QAM	25	12	21.10	21.41	21.52	21.59	22.7	
10	64QAM	25	25	21.07	21.37	21.53	21.53		
10	64QAM	50	0	21.06	21.34	21.43	21.53		
Channel				56265	56810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				36245	3607	3643	36745		
5	QPSK	1	0	23.93	24.20	24.37	24.41	25.7	
5	QPSK	1	12	23.88	24.17	24.33	24.31		
5	QPSK	1	24	23.90	24.23	24.38	24.34		
5	QPSK	12	0	22.98	23.34	23.42	23.54	24.7	
5	QPSK	12	7	23.01	23.34	23.45	23.51		
5	QPSK	12	13	23.01	23.33	23.46	23.51		
5	QPSK	25	0	23.00	23.33	23.44	23.50	24.7	
5	16QAM	1	0	23.08	23.33	23.52	23.59		
5	16QAM	1	12	23.01	23.35	23.54	23.54		
5	16QAM	1	24	23.06	23.36	23.57	23.58	24.7	
5	16QAM	12	0	21.97	22.31	22.43	22.53		
5	16QAM	12	7	21.99	22.31	22.41	22.47		
5	16QAM	12	13	21.98	22.31	22.48	22.45	23.7	
5	16QAM	25	0	22.01	22.36	22.45	22.51		
5	64QAM	1	0	21.81	22.07	22.26	22.30		
5	64QAM	1	12	21.73	22.04	22.22	22.19	23.7	
5	64QAM	1	24	21.81	22.10	22.25	22.29		
5	64QAM	12	0	21.05	21.39	21.48	21.52		
5	64QAM	12	7	21.06	21.36	21.47	21.54	22.7	
5	64QAM	12	13	21.06	21.34	21.49	21.53		
5	64QAM	25	0	21.08	21.39	21.49	21.56		



Band 38_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	
20	QPSK	1	49	24.62	24.55	24.47	25.7
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	23.7
20	16QAM	50	50	22.76	22.71	22.62	
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	23.7
20	64QAM	1	99	22.43	22.40	22.31	
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	22.7
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	
Channel				37625	38000	38175	1000000
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	
15	QPSK	1	37	24.55	24.51	24.43	25.7
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	23.7
15	16QAM	36	39	22.66	22.65	22.54	
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	23.7
15	64QAM	1	74	22.46	22.39	22.31	
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	22.7
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	
Channel				37800	38000	38200	1000000
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	
10	QPSK	1	25	24.59	24.60	24.46	25.7
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	24.7
10	16QAM	1	25	23.73	23.69	23.59	
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	23.7
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	23.7
10	64QAM	1	49	22.51	22.42	22.32	
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.66	22.7
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	
Channel				37775	38000	38225	1000000
Frequency (MHz)				23245	2355	2377.5	
5	QPSK	1	0	24.59	24.51	24.46	
5	QPSK	1	12	24.57	24.55	24.39	25.7
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	
5	16QAM	1	12	23.78	23.76	23.58	24.7
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	
5	16QAM	12	7	22.73	22.70	22.56	23.7
5	16QAM	12	13	22.68	22.67	22.55	
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	23.7
5	64QAM	1	24	22.55	22.51	22.37	
5	64QAM	12	0	21.77	21.65	21.66	
5	64QAM	12	7	21.76	21.74	21.63	22.7
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



Band 38_HPUE_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	26.15	26.16	26.14	27.5
20	QPSK	1	49	26.13	26.16	26.09	
20	QPSK	99	99	26.26	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	26.5
20	QPSK	50	24	25.37	25.43	25.44	
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	26.5
20	16QAM	1	0	25.46	25.56	25.54	
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	26.5
20	16QAM	50	0	24.37	24.45	24.45	
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	25.5
20	16QAM	100	0	24.39	24.44	24.46	
20	64QAM	1	0	24.47	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	25.5
20	64QAM	1	99	24.42	24.44	24.33	
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	24.5
20	64QAM	50	50	23.53	23.54	23.42	
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	27.5
15	QPSK	1	37	26.27	26.11	26.17	
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.90	25.43	25.41	26.5
15	QPSK	36	20	25.50	25.42	25.39	
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	26.5
15	16QAM	1	0	25.63	25.57	25.50	
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	26.5
15	16QAM	36	0	24.52	24.41	24.37	
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	25.5
15	16QAM	75	0	24.53	24.41	24.41	
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	25.5
15	64QAM	1	74	24.48	24.43	24.32	
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	24.5
15	64QAM	36	39	23.53	23.49	23.39	
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	27.5
10	QPSK	1	25	26.20	26.08	26.08	
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	26.5
10	QPSK	25	12	25.43	25.40	25.37	
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.38	26.5
10	16QAM	1	0	25.54	25.51	25.49	
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	26.5
10	16QAM	25	0	24.42	24.40	24.28	
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	25.5
10	16QAM	50	0	24.43	24.40	24.37	
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	25.5
10	64QAM	1	49	24.48	24.38	24.27	
10	64QAM	25	0	23.56	23.38	23.41	
10	64QAM	25	12	23.49	23.35	23.33	24.5
10	64QAM	25	25	23.43	23.39	23.29	
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.20	26.22	26.07	27.5
5	QPSK	1	12	26.22	26.02	26.17	
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	26.5
5	QPSK	12	7	25.44	25.33	25.29	
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	26.5
5	16QAM	1	0	25.59	25.47	25.48	
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	26.5
5	16QAM	12	0	24.50	24.34	24.36	
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	25.5
5	16QAM	25	0	24.50	24.32	24.34	
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	25.5
5	64QAM	1	24	24.36	24.41	24.23	
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	24.5
5	64QAM	12	13	23.49	23.41	23.36	
5	64QAM	25	0	23.52	23.32	23.34	









Band 38_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.06	22.91	22.83	24.2
20	QPSK	50	24	23.06	22.88	22.82	
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	24.2
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	
20	16QAM	1	99	22.87	22.90	22.76	23.2
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.68	21.51	23.2
20	64QAM	1	99	21.75	21.68	21.54	
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	22.2
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37625	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	24.2
15	QPSK	36	20	23.05	22.87	22.82	
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	24.2
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	
15	16QAM	1	74	23.01	22.92	22.79	23.2
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	23.2
15	64QAM	1	74	21.81	21.67	21.49	
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	22.2
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.87	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	24.2
10	QPSK	25	12	22.98	22.83	22.73	
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.06	22.83	22.79	24.2
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	
10	16QAM	1	49	22.97	22.87	22.73	23.2
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	23.2
10	64QAM	1	49	21.74	21.63	21.47	
10	64QAM	25	0	21.05	20.92	20.79	
10	64QAM	25	12	21.04	20.86	20.76	22.2
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				23725	2395	2377.5	
5	QPSK	1	0	23.70	23.78	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	24.2
5	QPSK	12	7	22.97	22.81	22.82	
5	QPSK	12	13	22.98	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	24.2
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	
5	16QAM	1	24	22.96	22.83	22.74	23.2
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	
5	16QAM	12	13	22.04	21.95	21.78	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	23.2
5	64QAM	1	24	21.66	21.59	21.49	
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	22.2
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



Band 38_HPUE_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	26.7
20	QPSK	1	49	25.53	25.47	25.33	
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	25.7
20	QPSK	50	24	24.87	24.72	24.65	
20	QPSK	50	50	24.84	24.76	24.63	
20	QPSK	100	0	24.86	24.71	24.67	25.7
20	16QAM	1	0	24.96	24.85	24.77	
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	24.7
20	16QAM	50	0	23.91	23.77	23.71	
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	24.7
20	16QAM	100	0	23.92	23.73	23.70	
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	24.7
20	64QAM	1	99	23.77	23.70	23.56	
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.81	22.77	22.69	23.7
20	64QAM	50	50	22.90	22.81	22.69	
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	Power up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	26.7
15	QPSK	1	37	25.43	25.41	25.33	
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.66	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.66	23.62	
15	64QAM	1	37	23.72	23.68	23.47	24.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.66	23.7
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	Power up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	26.7
10	QPSK	1	25	25.44	25.37	25.29	
10	QPSK	1	49	25.46	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.76	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	24.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.75	22.63	23.7
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	Power up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	24.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.86	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	







Band 38_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	
20	QPSK	1	49	24.62	24.55	24.47	25.7
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	23.7
20	16QAM	50	50	22.76	22.71	22.62	
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	23.7
20	64QAM	1	99	22.43	22.40	22.31	
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	22.7
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	
Channel				37625	38000	38175	1000-ep limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	
15	QPSK	1	37	24.55	24.51	24.43	25.7
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	23.7
15	16QAM	36	39	22.66	22.65	22.54	
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	23.7
15	64QAM	1	74	22.46	22.39	22.31	
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	22.7
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	
Channel				37800	38000	38200	1000-ep limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	
10	QPSK	1	25	24.59	24.60	24.46	25.7
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	24.7
10	16QAM	1	25	23.73	23.69	23.59	
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	
10	16QAM	25	12	22.76	22.66	22.63	23.7
10	16QAM	25	25	22.71	22.69	22.59	
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	23.7
10	64QAM	1	49	22.51	22.42	22.32	
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.66	22.7
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	
Channel				37775	38000	38225	1000-ep limit (dBm)
Frequency (MHz)				2372.5	2595	2617.5	
5	QPSK	1	0	24.59	24.51	24.46	
5	QPSK	1	12	24.57	24.55	24.39	25.7
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	
5	16QAM	1	12	23.78	23.76	23.58	24.7
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	
5	16QAM	12	7	22.73	22.70	22.56	23.7
5	16QAM	12	13	22.68	22.67	22.55	
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	23.7
5	64QAM	1	24	22.55	22.51	22.37	
5	64QAM	12	0	21.77	21.65	21.66	
5	64QAM	12	7	21.76	21.74	21.63	22.7
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



Band 38_HPUE_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2880	2956	2610	
20	QPSK	1	0	26.15	26.16	26.14	27.5
20	QPSK	1	49	26.13	26.16	26.09	
20	QPSK	99	99	26.26	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	26.5
20	QPSK	50	24	25.37	25.43	25.44	
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	26.5
20	16QAM	1	0	25.46	25.56	25.54	
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	26.5
20	16QAM	50	0	24.37	24.45	24.45	
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	25.5
20	16QAM	100	0	24.39	24.44	24.46	
20	64QAM	1	0	24.47	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	25.5
20	64QAM	1	99	24.42	24.44	24.33	
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	24.5
20	64QAM	50	50	23.53	23.54	23.42	
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	27.5
15	QPSK	1	37	26.27	26.11	26.17	
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.90	25.43	25.41	26.5
15	QPSK	36	20	25.50	25.42	25.39	
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	26.5
15	16QAM	1	0	25.63	25.57	25.50	
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	26.5
15	16QAM	36	0	24.52	24.41	24.37	
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	25.5
15	16QAM	75	0	24.53	24.41	24.41	
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	25.5
15	64QAM	1	74	24.48	24.43	24.32	
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	24.5
15	64QAM	36	39	23.53	23.49	23.39	
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	27.5
10	QPSK	1	25	26.20	26.08	26.08	
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	26.5
10	QPSK	25	12	25.43	25.40	25.37	
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.38	26.5
10	16QAM	1	0	25.54	25.51	25.49	
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	26.5
10	16QAM	25	0	24.42	24.40	24.28	
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	25.5
10	16QAM	50	0	24.43	24.40	24.37	
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	25.5
10	64QAM	1	49	24.48	24.38	24.27	
10	64QAM	25	0	23.56	23.38	23.41	
10	64QAM	25	12	23.49	23.35	23.33	24.5
10	64QAM	25	25	23.43	23.39	23.29	
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2395	2317.5	
5	QPSK	1	0	26.20	26.22	26.07	27.5
5	QPSK	1	12	26.22	26.02	26.17	
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	26.5
5	QPSK	12	7	25.44	25.33	25.29	
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	26.5
5	16QAM	1	0	25.59	25.47	25.48	
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	26.5
5	16QAM	12	0	24.50	24.34	24.36	
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	25.5
5	16QAM	25	0	24.50	24.32	24.34	
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	25.5
5	64QAM	1	24	24.36	24.41	24.23	
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	24.5
5	64QAM	12	13	23.49	23.41	23.36	
5	64QAM	25	0	23.52	23.32	23.34	





Band 41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Power Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.		Tune-up limit (dBm)
Channel										
39750 40185 40620 41065 41490										
Frequency (MHz)										
2506 2549.5 2593 2638.5 2680										
20	QPSK	1	0	24.38	24.49	24.54	24.41	24.26		
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64		25.7
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78		24.7
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37		24.7
20	16QAM	1	49	23.46	23.59	23.57	23.62	23.71		
20	16QAM	1	99	23.54	23.66	23.63	23.38	23.60		
20	16QAM	50	0	22.59	22.66	22.67	22.70	22.65		
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79		23.7
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76		
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.16	22.32	22.30	22.27	22.09		23.7
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.46		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29		
20	64QAM	50	0	21.69	21.67	21.68	21.71	21.64		
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79		22.7
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70		
Channel										
39725 40173 40620 41068 41515										
Frequency (MHz)										
2503.5 2548.3 2593 2637.8 2682.5										
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40		25.7
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66		
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78		24.7
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71		
15	16QAM	1	0	23.46	23.65	23.64	23.69	23.51		24.7
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.66		
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60		
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72		23.7
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70		
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69		
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22		23.7
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45		
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40		
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68		22.7
15	64QAM	36	20	21.67	21.70	21.67	21.62	21.79		
15	64QAM	36	39	21.56	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71		
Channel										
39700 40160 40620 41060 41540										
Frequency (MHz)										
2501 2547 2593 2639 2685										
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44		25.7
10	QPSK	1	25	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72		
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77		24.7
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70		
10	16QAM	1	0	23.60	23.66	23.70	23.64	23.55		24.7
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78		
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51		
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		23.7
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81		
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.65		
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26		23.7
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47		
10	64QAM	1	49	22.33	22.49	22.39	22.57	22.16		
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.76		22.7
10	64QAM	25	12	21.66	21.79	21.79	21.90	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75		
Channel										
39675 40148 40620 41093 41565										
Frequency (MHz)										
2498.5 2543.5 2593 2640.5 2687.5										
5	QPSK	1	0	24.48	24.53	24.55	24.69	24.66		25.7
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77		
5	QPSK	12	7	23.58	23.74	23.70	23.68	23.79		24.7
5	QPSK	12	15	23.60	23.70	23.68	23.68	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74		
5	16QAM	1	0	23.60	23.65	23.66	23.80	23.76		24.7
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88		
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75		
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.76		23.7
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77		
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74		
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79		
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		23.7
5	64QAM	1	12	22.55	22.48	22.48	22.66	22.52		
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45		
5	64QAM	12	0	21.66	21.72	21.71	21.81	21.80		22.7
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83		
5	64QAM	12	13	21.69	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80		





Band 38_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.06	22.91	22.83	24.2
20	QPSK	50	24	23.06	22.88	22.82	
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	24.2
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	
20	16QAM	1	99	22.97	22.90	22.76	23.2
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.68	21.51	23.2
20	64QAM	1	99	21.75	21.68	21.54	
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	22.2
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37625	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	24.2
15	QPSK	36	20	23.05	22.87	22.82	
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	24.2
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	
15	16QAM	1	74	23.01	22.92	22.79	23.2
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	23.2
15	64QAM	1	74	21.81	21.67	21.49	
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.09	20.92	20.85	22.2
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.87	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	24.2
10	QPSK	25	12	22.98	22.83	22.73	
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.06	22.83	22.79	24.2
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	
10	16QAM	1	49	22.97	22.87	22.73	23.2
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	23.2
10	64QAM	1	49	21.74	21.63	21.47	
10	64QAM	25	0	21.05	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	22.2
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				23725	2595	2617.5	
5	QPSK	1	0	23.70	23.78	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	24.2
5	QPSK	12	7	22.97	22.81	22.82	
5	QPSK	12	13	22.98	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	24.2
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	
5	16QAM	1	24	22.96	22.83	22.74	23.2
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	
5	16QAM	12	13	22.04	21.95	21.78	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	23.2
5	64QAM	1	24	21.66	21.59	21.49	
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	22.2
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



Band 38_HPUE_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	26.7
20	QPSK	1	49	25.53	25.47	25.33	
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	25.7
20	QPSK	50	24	24.87	24.72	24.65	
20	QPSK	50	50	24.84	24.76	24.63	
20	QPSK	100	0	24.86	24.71	24.67	25.7
20	16QAM	1	0	24.96	24.85	24.77	
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	24.7
20	16QAM	50	0	23.91	23.77	23.71	
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	24.7
20	16QAM	100	0	23.92	23.73	23.70	
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	24.7
20	64QAM	1	99	23.77	23.70	23.56	
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.81	22.77	22.69	23.7
20	64QAM	50	50	22.90	22.81	22.69	
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	Turn-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	26.7
15	QPSK	1	37	25.43	25.41	25.33	
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.66	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.66	23.62	
15	64QAM	1	37	23.72	23.68	23.47	24.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.66	23.7
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	Turn-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	26.7
10	QPSK	1	25	25.44	25.37	25.29	
10	QPSK	1	49	25.46	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.76	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	24.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.75	22.63	23.7
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	Turn-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	24.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.86	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	







Band 38_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	
20	QPSK	1	49	24.62	24.55	24.47	25.7
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	23.7
20	16QAM	50	50	22.76	22.71	22.62	
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	23.7
20	64QAM	1	99	22.43	22.40	22.31	
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	22.7
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	
Channel				37625	38000	38175	1000000
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	
15	QPSK	1	37	24.55	24.51	24.43	25.7
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	23.7
15	16QAM	36	39	22.66	22.65	22.54	
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	23.7
15	64QAM	1	74	22.46	22.39	22.31	
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	22.7
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	
Channel				37800	38000	38200	1000000
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	
10	QPSK	1	25	24.59	24.60	24.46	25.7
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	24.7
10	16QAM	1	25	23.73	23.69	23.59	
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	23.7
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	23.7
10	64QAM	1	49	22.51	22.42	22.32	
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.66	22.7
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	
Channel				37775	38000	38225	1000000
Frequency (MHz)				2372.5	2595	2617.5	
5	QPSK	1	0	24.59	24.51	24.46	
5	QPSK	1	12	24.57	24.55	24.39	25.7
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	24.7
5	16QAM	1	12	23.78	23.76	23.58	
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	23.7
5	16QAM	12	7	22.73	22.70	22.56	
5	16QAM	12	13	22.68	22.67	22.55	
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	23.7
5	64QAM	1	24	22.55	22.51	22.37	
5	64QAM	12	0	21.77	21.65	21.66	
5	64QAM	12	7	21.76	21.74	21.63	22.7
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



Band 38_HPUE_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2880	2956	2610	
20	QPSK	1	0	26.15	26.16	26.14	27.5
20	QPSK	1	49	26.13	26.16	26.09	
20	QPSK	99	99	26.26	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	26.5
20	QPSK	50	24	25.37	25.43	25.44	
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	26.5
20	16QAM	1	0	25.46	25.56	25.54	
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	26.5
20	16QAM	50	0	24.37	24.45	24.45	
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	25.5
20	16QAM	100	0	24.39	24.44	24.46	
20	64QAM	1	0	24.47	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	25.5
20	64QAM	1	99	24.42	24.44	24.33	
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	24.5
20	64QAM	50	50	23.53	23.54	23.42	
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	27.5
15	QPSK	1	37	26.27	26.11	26.17	
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.90	25.43	25.41	26.5
15	QPSK	36	20	25.50	25.42	25.39	
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	26.5
15	16QAM	1	0	25.63	25.57	25.50	
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	26.5
15	16QAM	36	0	24.52	24.41	24.37	
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	25.5
15	16QAM	75	0	24.53	24.41	24.41	
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	25.5
15	64QAM	1	74	24.48	24.43	24.32	
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	24.5
15	64QAM	36	39	23.53	23.49	23.39	
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	27.5
10	QPSK	1	25	26.20	26.08	26.08	
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	26.5
10	QPSK	25	12	25.43	25.40	25.37	
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.38	26.5
10	16QAM	1	0	25.54	25.51	25.49	
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	26.5
10	16QAM	25	0	24.42	24.40	24.28	
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	25.5
10	16QAM	50	0	24.43	24.40	24.37	
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	25.5
10	64QAM	1	49	24.48	24.38	24.27	
10	64QAM	25	0	23.56	23.38	23.41	
10	64QAM	25	12	23.49	23.35	23.33	24.5
10	64QAM	25	25	23.43	23.39	23.29	
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2372.5	2395	2317.5	
5	QPSK	1	0	26.20	26.22	26.07	27.5
5	QPSK	1	12	26.22	26.02	26.17	
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	26.5
5	QPSK	12	7	25.44	25.33	25.29	
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	26.5
5	16QAM	1	0	25.59	25.47	25.48	
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	26.5
5	16QAM	12	0	24.50	24.34	24.36	
5	16QAM	12	7	24.41	24.36	24.29	
5	16QAM	12	13	24.38	24.45	24.27	25.5
5	16QAM	25	0	24.50	24.32	24.34	
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	25.5
5	64QAM	1	24	24.36	24.41	24.23	
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	24.5
5	64QAM	12	13	23.49	23.41	23.36	
5	64QAM	25	0	23.52	23.32	23.34	





Band 41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.38	24.49	24.54	24.41	24.26		
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64	25.7	
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78	24.7	
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37	24.7	
20	16QAM	1	49	23.49	23.59	23.57	23.62	23.71		
20	16QAM	1	99	23.54	23.69	23.63	23.38	23.60		
20	16QAM	50	0	22.99	22.66	22.67	22.70	22.65		
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79	23.7	
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76		
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.15	22.32	22.30	22.27	22.09	23.7	
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.46		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29		
20	64QAM	50	0	21.89	21.67	21.68	21.71	21.64		
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79	22.7	
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40	25.7	
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66		
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78	24.7	
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71		
15	16QAM	1	0	23.46	23.65	23.64	23.69	23.51	24.7	
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.68		
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60		
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72	23.7	
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70		
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69		
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22		
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45	23.7	
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40		
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68		
15	64QAM	36	20	21.57	21.70	21.67	21.62	21.79	22.7	
15	64QAM	36	39	21.59	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71		
Channel				39700	40160	40620	41060	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44	25.7	
10	QPSK	1	25	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72		
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77	24.7	
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70		
10	16QAM	1	0	23.60	23.69	23.70	23.64	23.55	24.7	
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78		
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51		
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81	23.7	
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.65		
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26		
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47	23.7	
10	64QAM	1	49	22.33	22.49	22.39	22.37	22.16		
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.78	22.7	
10	64QAM	25	12	21.69	21.79	21.79	21.50	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2543.2	2593	2640.0	2687.2		
5	QPSK	1	0	24.49	24.53	24.55	24.69	24.56	25.7	
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77		
5	QPSK	12	7	23.58	23.74	23.70	23.88	23.79	24.7	
5	QPSK	12	15	23.60	23.70	23.68	23.88	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74		
5	16QAM	1	0	23.60	23.65	23.66	23.80	23.76	24.7	
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88		
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75		
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.78		
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77	23.7	
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74		
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79		
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		
5	64QAM	1	12	22.55	22.48	22.48	22.66	22.52	23.7	
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45		
5	64QAM	12	0	21.69	21.72	21.71	21.81	21.80		
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83	22.7	
5	64QAM	12	13	21.59	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80		

Band 48_Ant 7										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Ch / Freq	Power High Middle Ch / Freq	Tune-up limit (dBm)		
Channel				55340	55630	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	21.69	22.07	22.19	22.09	23.3		
20	QPSK	1	49	21.56	21.90	22.00	21.85			
20	QPSK	1	99	21.60	21.93	21.90	21.77	23.3		
20	QPSK	50	0	21.71	22.05	22.22	22.07			
20	QPSK	50	24	21.69	22.04	22.17	22.04	23.3		
20	QPSK	50	50	21.70	22.02	22.08	21.92			
20	QPSK	100	0	21.72	22.06	22.14	22.01	23.3		
20	16QAM	1	0	21.83	22.20	22.37	22.23			
20	16QAM	1	49	21.67	21.98	22.07	21.96	23.3		
20	16QAM	1	99	21.74	22.01	22.07	21.88			
20	16QAM	50	0	21.74	22.07	22.26	22.13	23.3		
20	16QAM	50	24	21.79	22.12	22.21	22.04			
20	16QAM	50	50	21.75	22.05	22.12	21.97	23.3		
20	16QAM	100	0	21.75	22.09	22.21	22.05			
20	64QAM	1	0	21.46	21.62	22.05	21.92	23.3		
20	64QAM	1	49	21.37	21.69	21.79	21.65			
20	64QAM	1	99	21.47	21.73	21.72	21.54	23.3		
20	64QAM	50	0	21.02	21.36	21.54	21.41			
20	64QAM	50	24	21.09	21.39	21.47	21.37	22.7		
20	64QAM	50	50	21.04	21.35	21.43	21.25			
20	64QAM	100	0	21.04	21.38	21.49	21.33	Tune-up limit (dBm)		
Channel				55315	55620	56160	56640			
Frequency (MHz)				3657.5	3608	3642	3692.5			
15	QPSK	1	0	21.89	21.99	22.19	22.05	23.3		
15	QPSK	1	37	21.47	21.90	21.96	21.77			
15	QPSK	1	74	21.57	21.83	21.88	21.69	23.3		
15	QPSK	36	0	21.66	22.01	22.22	22.03			
15	QPSK	36	20	21.70	22.05	22.09	22.03	23.3		
15	QPSK	36	39	21.65	21.92	22.05	21.86			
15	QPSK	75	0	21.62	21.67	22.14	21.96	23.3		
15	16QAM	1	0	21.77	22.10	22.32	22.13			
15	16QAM	1	37	21.59	21.99	22.01	21.92	23.3		
15	16QAM	1	74	21.64	21.92	21.97	21.79			
15	16QAM	36	0	21.65	22.07	22.16	22.04	23.3		
15	16QAM	36	20	21.78	22.12	22.13	21.96			
15	16QAM	36	39	21.70	22.00	22.09	21.95	23.3		
15	16QAM	75	0	21.65	22.00	22.00	22.04			
15	64QAM	1	0	21.36	21.74	21.96	21.90	23.3		
15	64QAM	1	37	21.27	21.62	21.74	21.63			
15	64QAM	1	74	21.41	21.65	21.72	21.49	22.7		
15	64QAM	36	0	20.94	21.34	21.47	21.37			
15	64QAM	36	20	21.04	21.35	21.41	21.32	23.3		
15	64QAM	36	39	21.03	21.32	21.36	21.23			
15	64QAM	75	0	20.99	21.30	21.47	21.32	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	21.64	22.07	22.10	22.02	23.3		
10	QPSK	1	25	21.46	21.85	21.94	21.76			
10	QPSK	1	49	21.58	21.83	21.87	21.75	23.3		
10	QPSK	25	0	21.56	21.95	22.20	22.07			
10	QPSK	25	12	21.66	22.05	22.14	21.99	23.3		
10	QPSK	25	25	21.62	21.96	21.98	21.82			
10	QPSK	50	0	21.66	22.01	22.13	21.92	23.3		
10	16QAM	1	0	21.82	22.12	22.32	22.18			
10	16QAM	1	25	21.64	21.90	22.03	21.90	23.3		
10	16QAM	1	49	21.69	21.94	22.02	21.87			
10	16QAM	25	0	21.74	22.01	22.22	22.05	23.3		
10	16QAM	25	12	21.77	22.09	22.14	21.96			
10	16QAM	25	25	21.67	21.97	22.03	21.91	23.3		
10	16QAM	50	0	21.73	22.01	22.11	22.00			
10	64QAM	1	0	21.37	21.75	22.05	21.86	23.3		
10	64QAM	1	25	21.29	21.64	21.77	21.64			
10	64QAM	1	49	21.37	21.70	21.72	21.52	22.7		
10	64QAM	25	0	20.97	21.33	21.50	21.46			
10	64QAM	25	12	21.00	21.36	21.46	21.34	23.3		
10	64QAM	25	25	20.96	21.29	21.35	21.18			
10	64QAM	50	0	20.97	21.36	21.46	21.25	Tune-up limit (dBm)		
Channel				55265	55810	56170	56715			
Frequency (MHz)				35215	3607	3643	36715			
5	QPSK	1	0	21.59	22.06	22.15	22.01	23.3		
5	QPSK	1	12	21.52	21.82	21.93	21.79			
5	QPSK	1	24	21.51	21.89	21.88	21.72	23.3		
5	QPSK	12	0	21.65	22.00	22.16	22.03			
5	QPSK	12	7	21.69	22.00	22.15	21.98	23.3		
5	QPSK	12	13	21.63	22.02	21.99	21.82			
5	QPSK	25	0	21.71	22.02	22.09	21.99	23.3		
5	16QAM	1	0	21.76	22.15	22.36	22.15			
5	16QAM	1	12	21.58	21.98	22.00	21.95	23.3		
5	16QAM	1	24	21.74	22.00	21.97	21.86			
5	16QAM	12	0	21.74	22.04	22.17	22.08	23.3		
5	16QAM	12	7	21.70	22.04	22.21	21.96			
5	16QAM	12	13	21.74	22.02	22.09	21.95	23.3		
5	16QAM	25	0	21.73	22.06	22.12	21.99			
5	64QAM	1	0	21.41	21.81	21.96	21.82	23.3		
5	64QAM	1	12	21.28	21.60	21.73	21.58			
5	64QAM	1	24	21.41	21.65	21.63	21.49	22.7		
5	64QAM	12	0	21.01	21.34	21.47	21.33			
5	64QAM	12	7	21.05	21.30	21.37	21.29	23.3		
5	64QAM	12	13	20.97	21.27	21.39	21.15			
5	64QAM	25	0	21.00	21.30	21.48	21.26	Tune-up limit (dBm)		



Band 38_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.06	22.91	22.83	24.2
20	QPSK	50	24	23.06	22.88	22.82	
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	24.2
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	
20	16QAM	1	99	22.97	22.90	22.76	23.2
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.68	21.51	23.2
20	64QAM	1	99	21.75	21.68	21.54	
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	22.2
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37625	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	24.2
15	QPSK	36	20	23.05	22.87	22.82	
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	24.2
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.81	22.72	
15	16QAM	1	74	23.01	22.92	22.79	23.2
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.90	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	23.2
15	64QAM	1	74	21.81	21.67	21.49	
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	22.2
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.87	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	24.2
10	QPSK	25	12	22.98	22.83	22.73	
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.06	22.83	22.79	24.2
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	
10	16QAM	1	49	22.97	22.87	22.73	23.2
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	23.2
10	64QAM	1	49	21.74	21.63	21.47	
10	64QAM	25	0	21.05	20.92	20.79	
10	64QAM	25	12	21.04	20.86	20.76	22.2
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				23725	2595	2617.5	
5	QPSK	1	0	23.75	23.78	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	24.2
5	QPSK	12	7	22.97	22.81	22.82	
5	QPSK	12	13	22.98	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	24.2
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	
5	16QAM	1	24	22.96	22.83	22.74	23.2
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	
5	16QAM	12	13	22.04	21.95	21.78	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	23.2
5	64QAM	1	24	21.66	21.59	21.49	
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	22.2
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



Band 38_HPUE_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	26.7
20	QPSK	1	49	25.53	25.47	25.33	
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	25.7
20	QPSK	50	24	24.87	24.72	24.65	
20	QPSK	50	50	24.84	24.76	24.63	
20	QPSK	100	0	24.86	24.71	24.67	25.7
20	16QAM	1	0	24.96	24.85	24.77	
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	24.7
20	16QAM	50	0	23.91	23.77	23.71	
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	24.7
20	16QAM	100	0	23.92	23.73	23.70	
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	24.7
20	64QAM	1	99	23.77	23.70	23.56	
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.81	22.77	22.69	23.7
20	64QAM	50	50	22.90	22.81	22.69	
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	Turn-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	26.7
15	QPSK	1	37	25.43	25.41	25.33	
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.66	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.66	23.62	
15	64QAM	1	37	23.72	23.68	23.47	24.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.66	23.7
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	Turn-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	26.7
10	QPSK	1	25	25.44	25.37	25.29	
10	QPSK	1	49	25.46	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.76	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	24.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.77	22.63	23.7
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	Turn-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	24.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.86	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	



Band 41_Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power 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	2638.5	2680		
20	QPSK	1	0	24.11	24.19	24.06	23.93	23.84		
20	QPSK	1	49	24.14	24.25	24.07	24.21	24.26	25.5	
20	QPSK	1	99	24.10	24.19	24.04	23.83	24.20		
20	QPSK	50	0	23.28	23.30	23.15	23.18	23.26		
20	QPSK	50	24	23.27	23.36	23.13	23.21	23.40		
20	QPSK	50	50	23.30	23.38	23.21	23.26	23.41		
20	QPSK	100	0	23.28	23.33	23.16	23.17	23.38		
20	16QAM	1	0	23.23	23.30	23.22	23.06	22.96		
20	16QAM	1	49	23.21	23.30	23.15	23.32	23.36	24.5	
20	16QAM	1	99	23.26	23.38	23.05	22.80	23.31		
20	16QAM	50	0	22.31	22.30	22.23	22.23	22.29		
20	16QAM	50	24	22.32	22.42	22.23	22.29	22.43		
20	16QAM	50	50	22.29	22.43	22.17	22.25	22.44		
20	16QAM	100	0	22.31	22.40	22.18	22.19	22.35		
20	64QAM	1	0	21.94	21.99	21.91	21.79	21.85		
20	64QAM	1	49	21.96	21.99	21.86	22.08	22.16	23.5	
20	64QAM	1	99	21.99	22.16	21.89	21.80	22.07		
20	64QAM	50	0	21.31	21.34	21.25	21.22	21.30		
20	64QAM	50	24	21.33	21.40	21.22	21.30	21.46		
20	64QAM	50	50	21.30	21.41	21.21	21.25	21.44	22.5	
20	64QAM	100	0	21.31	21.40	21.22	21.18	21.35		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.11	24.17	24.06	24.01	23.97		
15	QPSK	1	37	24.08	24.17	23.97	24.17	24.23	25.5	
15	QPSK	1	74	24.12	24.25	24.05	23.69	24.23		
15	QPSK	36	0	23.29	23.34	23.18	23.19	23.30		
15	QPSK	36	20	23.27	23.36	23.16	23.31	23.37		
15	QPSK	36	39	23.26	23.35	23.13	23.23	23.40	24.5	
15	QPSK	75	0	23.28	23.34	23.14	23.25	23.33		
15	16QAM	1	0	23.23	23.32	23.20	23.19	23.09		
15	16QAM	1	37	23.11	23.21	23.02	23.27	23.34	24.5	
15	16QAM	1	74	23.26	23.48	23.21	23.08	23.38		
15	16QAM	36	0	22.24	22.32	22.13	22.18	22.25		
15	16QAM	36	20	22.24	22.31	22.13	22.29	22.36	23.5	
15	16QAM	36	39	22.23	22.33	22.11	22.22	22.37		
15	16QAM	75	0	22.34	22.38	22.15	22.31	22.36		
15	64QAM	1	0	21.94	22.00	21.89	21.91	21.79		
15	64QAM	1	37	22.01	22.05	21.87	22.06	22.10	23.5	
15	64QAM	1	74	22.02	22.19	21.94	21.80	22.15		
15	64QAM	36	0	21.29	21.33	21.20	21.21	21.29		
15	64QAM	36	20	21.32	21.33	21.17	21.36	21.42	22.5	
15	64QAM	36	39	21.26	21.38	21.15	21.26	21.41		
15	64QAM	75	0	21.30	21.39	21.17	21.30	21.36		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.21	24.23	24.10	23.93	24.08		
10	QPSK	1	25	24.23	24.17	24.08	24.23	24.18	25.5	
10	QPSK	1	49	24.24	24.20	24.08	24.01	24.08		
10	QPSK	25	0	23.30	23.37	23.21	23.20	23.39		
10	QPSK	25	12	23.33	23.43	23.23	23.31	23.42	24.5	
10	QPSK	25	25	23.31	23.40	23.18	23.28	23.34		
10	QPSK	50	0	23.31	23.39	23.20	23.21	23.37		
10	16QAM	1	0	23.37	23.38	23.23	23.12	23.18	24.5	
10	16QAM	1	25	23.32	23.41	23.21	23.38	23.43		
10	16QAM	1	49	23.30	23.37	23.17	23.12	23.18		
10	16QAM	25	0	22.34	22.40	22.15	22.25	22.40	23.5	
10	16QAM	25	12	22.36	22.44	22.24	22.30	22.52		
10	16QAM	25	25	22.34	22.40	22.15	22.32	22.36		
10	16QAM	50	0	22.37	22.42	22.25	22.27	22.41		
10	64QAM	1	0	22.11	22.06	21.98	21.83	21.87		
10	64QAM	1	25	22.10	22.13	21.98	22.14	22.18	23.5	
10	64QAM	1	49	22.13	22.20	21.93	21.83	21.91		
10	64QAM	25	0	21.38	21.45	21.26	21.27	21.43		
10	64QAM	25	12	21.44	21.48	21.30	21.40	21.51	22.5	
10	64QAM	25	25	21.39	21.48	21.26	21.37	21.41		
10	64QAM	50	0	21.35	21.42	21.23	21.25	21.41		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2486.5	2543.5	2593	2640.5	2697.5		
5	QPSK	1	0	24.22	24.22	24.10	24.19	24.21		
5	QPSK	1	12	24.19	24.17	24.08	24.22	24.22	25.5	
5	QPSK	1	24	24.17	24.25	24.02	24.22	24.23		
5	QPSK	12	0	23.30	23.36	23.19	23.28	23.43		
5	QPSK	12	7	23.35	23.43	23.23	23.40	23.47	24.5	
5	QPSK	12	15	23.31	23.40	23.16	23.35	23.39		
5	QPSK	25	0	23.30	23.36	23.18	23.32	23.43		
5	16QAM	1	0	23.37	23.33	23.25	23.27	23.42	24.5	
5	16QAM	1	12	23.37	23.45	23.26	23.47	23.54		
5	16QAM	1	24	23.40	23.44	23.26	23.38	23.44		
5	16QAM	12	0	22.30	22.37	22.19	22.24	22.41	23.5	
5	16QAM	12	7	22.34	22.39	22.23	22.37	22.41		
5	16QAM	12	13	22.32	22.38	22.17	22.33	22.41		
5	16QAM	25	0	22.34	22.45	22.21	22.38	22.46		
5	64QAM	1	0	22.12	22.11	21.97	22.05	22.14		
5	64QAM	1	12	22.12	22.18	21.99	22.14	22.15	23.5	
5	64QAM	1	24	22.17	22.19	22.01	22.15	22.19		
5	64QAM	12	0	21.36	21.44	21.27	21.33	21.48	22.5	
5	64QAM	12	7	21.36	21.47	21.30	21.43	21.49		
5	64QAM	12	13	21.38	21.43	21.25	21.39	21.44		
5	64QAM	25	0	21.35	21.43	21.26	21.44	21.49		



Band 48\_Ant 2

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
<b>Channel</b>								
<b>Frequency (MHz)</b>				55340	55530	56150	56540	
<b>Frequency (MHz)</b>				3550	3609	3641	3690	
20	QPSK	1	0	23.03	23.32	23.56	23.51	24.1
20	QPSK	1	49	22.89	23.18	23.28	23.31	
20	QPSK	1	99	22.88	23.17	23.27	23.25	
20	QPSK	50	0	23.05	23.30	23.50	23.46	24.1
20	QPSK	50	24	23.05	23.29	23.48	23.40	
20	QPSK	50	50	23.02	23.26	23.38	23.41	
20	QPSK	100	0	23.04	23.29	23.46	23.38	24.1
20	16QAM	1	0	23.15	23.41	23.54	23.53	
20	16QAM	1	49	22.96	23.22	23.37	23.36	
20	16QAM	1	99	23.00	23.25	23.33	23.34	24.1
20	16QAM	50	0	22.54	22.82	23.03	22.97	
20	16QAM	50	24	22.56	22.84	22.98	22.91	
20	16QAM	50	50	22.52	22.79	22.92	22.91	23.7
20	16QAM	100	0	22.58	22.81	22.95	22.89	
20	64QAM	1	0	22.31	22.58	22.84	22.79	
20	64QAM	1	49	22.19	22.45	22.61	22.62	23.7
20	64QAM	1	99	22.26	22.48	22.60	22.60	
20	64QAM	50	0	21.53	21.81	22.05	21.98	
20	64QAM	50	24	21.58	21.86	21.99	21.94	22.7
20	64QAM	50	50	21.51	21.79	21.83	21.91	
20	64QAM	100	0	21.56	21.84	21.96	21.92	
<b>Channel</b>								
<b>Frequency (MHz)</b>				55315	55520	56160	56545	
<b>Frequency (MHz)</b>				3557.5	3608	3642	3692.5	
15	QPSK	1	0	22.92	23.17	23.40	23.38	24.1
15	QPSK	1	37	22.83	23.10	23.28	23.29	
15	QPSK	1	74	22.86	23.12	23.25	23.27	
15	QPSK	36	0	23.03	23.22	23.49	23.41	24.1
15	QPSK	36	20	23.00	23.25	23.40	23.42	
15	QPSK	36	39	22.96	23.22	23.36	23.38	
15	QPSK	75	0	23.01	23.26	23.41	23.37	24.1
15	16QAM	1	0	22.96	23.35	23.53	23.52	
15	16QAM	1	37	22.85	23.12	23.28	23.28	
15	16QAM	1	74	22.99	23.25	23.40	23.39	23.7
15	16QAM	36	0	22.49	22.67	22.94	22.87	
15	16QAM	36	20	22.43	22.72	22.87	22.90	
15	16QAM	36	39	22.40	22.68	22.84	22.84	23.7
15	16QAM	75	0	22.50	22.77	22.93	22.87	
15	64QAM	1	0	22.22	22.51	22.76	22.69	
15	64QAM	1	37	22.16	22.43	22.59	22.62	23.7
15	64QAM	1	74	22.24	22.50	22.63	22.65	
15	64QAM	36	0	21.53	21.74	21.99	21.93	
15	64QAM	36	20	21.48	21.75	21.83	21.83	22.7
15	64QAM	36	39	21.46	21.74	21.80	21.87	
15	64QAM	75	0	21.50	21.76	21.95	21.88	
<b>Channel</b>								
<b>Frequency (MHz)</b>				55290	55815	56165	56690	
<b>Frequency (MHz)</b>				3555	3607.5	3642.5	3695	
10	QPSK	1	0	22.95	23.24	23.48	23.45	24.1
10	QPSK	1	25	22.82	23.14	23.24	23.31	
10	QPSK	1	49	22.78	23.16	23.23	23.18	
10	QPSK	25	0	23.00	23.30	23.48	23.38	24.1
10	QPSK	25	12	23.01	23.24	23.41	23.31	
10	QPSK	25	25	22.99	23.24	23.34	23.37	
10	QPSK	50	0	22.99	23.26	23.44	23.37	24.1
10	16QAM	1	0	23.09	23.34	23.49	23.51	
10	16QAM	1	25	22.98	23.12	23.30	23.29	
10	16QAM	1	49	22.95	23.22	23.25	23.24	23.7
10	16QAM	25	0	22.53	22.75	22.98	22.94	
10	16QAM	25	12	22.50	22.81	22.98	22.85	
10	16QAM	25	25	22.50	22.75	22.82	22.89	23.7
10	16QAM	50	0	22.55	22.72	22.95	22.81	
10	64QAM	1	0	22.22	22.54	22.75	22.69	
10	64QAM	1	25	22.11	22.39	22.58	22.60	23.7
10	64QAM	1	49	22.16	22.44	22.54	22.52	
10	64QAM	25	0	21.53	21.77	21.95	21.83	
10	64QAM	25	12	21.52	21.82	21.98	21.93	22.7
10	64QAM	25	25	21.42	21.79	21.92	21.84	
10	64QAM	50	0	21.48	21.80	21.88	21.88	
<b>Channel</b>								
<b>Frequency (MHz)</b>				55265	55810	56170	56715	
<b>Frequency (MHz)</b>				3524.5	3607	3643	3697.5	
5	QPSK	1	0	22.96	23.23	23.52	23.46	24.1
5	QPSK	1	12	22.81	23.10	23.20	23.27	
5	QPSK	1	24	22.87	23.13	23.20	23.15	
5	QPSK	12	0	23.00	23.23	23.43	23.44	24.1
5	QPSK	12	7	23.00	23.21	23.40	23.33	
5	QPSK	12	13	22.92	23.18	23.31	23.38	
5	QPSK	25	0	23.04	23.22	23.40	23.37	24.1
5	16QAM	1	0	23.13	23.39	23.46	23.49	
5	16QAM	1	12	22.91	23.16	23.30	23.31	
5	16QAM	1	24	22.91	23.23	23.24	23.31	23.7
5	16QAM	12	0	22.51	22.78	23.01	22.88	
5	16QAM	12	7	22.56	22.82	22.95	22.91	
5	16QAM	12	13	22.49	22.74	22.83	22.88	23.7
5	16QAM	25	0	22.51	22.75	22.95	22.88	
5	64QAM	1	0	22.23	22.51	22.84	22.70	
5	64QAM	1	12	22.14	22.45	22.51	22.59	23.7
5	64QAM	1	24	22.23	22.47	22.50	22.56	
5	64QAM	12	0	21.50	21.73	21.95	21.83	
5	64QAM	12	7	21.52	21.82	21.94	21.85	22.7
5	64QAM	12	13	21.47	21.74	21.86	21.88	
5	64QAM	25	0	21.49	21.78	21.94	21.90	



Band 38_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37800	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.55	24.52	24.46	
20	QPSK	1	49	24.62	24.55	24.47	25.7
20	QPSK	1	99	24.58	24.53	24.45	
20	QPSK	50	0	23.71	23.63	23.60	
20	QPSK	50	24	23.71	23.62	23.61	24.7
20	QPSK	50	50	23.71	23.67	23.59	
20	QPSK	100	0	23.72	23.60	23.61	
20	16QAM	1	0	23.65	23.65	23.59	
20	16QAM	1	49	23.64	23.66	23.57	24.7
20	16QAM	1	99	23.69	23.66	23.61	
20	16QAM	50	0	22.75	22.66	22.66	
20	16QAM	50	24	22.76	22.64	22.63	23.7
20	16QAM	50	50	22.76	22.71	22.62	
20	16QAM	100	0	22.75	22.62	22.62	
20	64QAM	1	0	22.35	22.31	22.35	
20	64QAM	1	49	22.37	22.37	22.31	23.7
20	64QAM	1	99	22.43	22.40	22.31	
20	64QAM	50	0	21.75	21.65	21.66	
20	64QAM	50	24	21.75	21.65	21.68	22.7
20	64QAM	50	50	21.76	21.71	21.62	
20	64QAM	100	0	21.75	21.66	21.63	
Channel				37625	38000	38175	1000000
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.52	24.51	24.43	
15	QPSK	1	37	24.55	24.51	24.43	25.7
15	QPSK	1	74	24.59	24.54	24.44	
15	QPSK	36	0	23.73	23.62	23.60	
15	QPSK	36	20	23.71	23.60	23.58	24.7
15	QPSK	36	39	23.69	23.66	23.58	
15	QPSK	75	0	23.70	23.59	23.60	
15	16QAM	1	0	23.66	23.66	23.59	
15	16QAM	1	37	23.58	23.57	23.46	24.7
15	16QAM	1	74	23.72	23.67	23.59	
15	16QAM	36	0	22.66	22.61	22.56	
15	16QAM	36	20	22.67	22.56	22.56	23.7
15	16QAM	36	39	22.66	22.65	22.54	
15	16QAM	75	0	22.72	22.64	22.59	
15	64QAM	1	0	22.37	22.35	22.28	
15	64QAM	1	37	22.41	22.41	22.29	23.7
15	64QAM	1	74	22.46	22.39	22.31	
15	64QAM	36	0	21.76	21.65	21.62	
15	64QAM	36	20	21.75	21.61	21.59	22.7
15	64QAM	36	39	21.72	21.70	21.58	
15	64QAM	75	0	21.74	21.64	21.59	
Channel				37800	38000	38200	1000000
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.60	24.56	24.46	
10	QPSK	1	25	24.59	24.60	24.46	25.7
10	QPSK	1	49	24.60	24.60	24.52	
10	QPSK	25	0	23.72	23.62	23.58	
10	QPSK	25	12	23.72	23.65	23.61	24.7
10	QPSK	25	25	23.73	23.71	23.61	
10	QPSK	50	0	23.73	23.61	23.59	
10	16QAM	1	0	23.75	23.68	23.59	24.7
10	16QAM	1	25	23.73	23.69	23.59	
10	16QAM	1	49	23.76	23.70	23.56	
10	16QAM	25	0	22.73	22.62	22.57	23.7
10	16QAM	25	12	22.76	22.66	22.63	
10	16QAM	25	25	22.71	22.69	22.59	
10	16QAM	50	0	22.74	22.64	22.61	
10	64QAM	1	0	22.54	22.39	22.36	
10	64QAM	1	25	22.51	22.45	22.36	23.7
10	64QAM	1	49	22.51	22.42	22.32	
10	64QAM	25	0	21.80	21.70	21.66	
10	64QAM	25	12	21.80	21.73	21.66	22.7
10	64QAM	25	25	21.80	21.79	21.66	
10	64QAM	50	0	21.76	21.67	21.62	
Channel				37775	38000	38225	1000000
Frequency (MHz)				2372.5	2595	2617.5	
5	QPSK	1	0	24.59	24.51	24.46	
5	QPSK	1	12	24.57	24.55	24.39	25.7
5	QPSK	1	24	24.55	24.52	24.43	
5	QPSK	12	0	23.70	23.62	23.58	
5	QPSK	12	7	23.74	23.72	23.55	24.7
5	QPSK	12	13	23.69	23.70	23.56	
5	QPSK	25	0	23.70	23.60	23.53	
5	16QAM	1	0	23.71	23.65	23.59	24.7
5	16QAM	1	12	23.78	23.76	23.58	
5	16QAM	1	24	23.75	23.74	23.60	
5	16QAM	12	0	22.67	22.62	22.54	23.7
5	16QAM	12	7	22.73	22.70	22.56	
5	16QAM	12	13	22.68	22.67	22.55	
5	16QAM	25	0	22.74	22.63	22.57	
5	64QAM	1	0	22.50	22.41	22.34	
5	64QAM	1	12	22.51	22.49	22.36	23.7
5	64QAM	1	24	22.55	22.51	22.37	
5	64QAM	12	0	21.77	21.65	21.66	
5	64QAM	12	7	21.76	21.74	21.63	22.7
5	64QAM	12	13	21.74	21.74	21.58	
5	64QAM	25	0	21.77	21.71	21.64	



Band 38_HPUE_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	26.15	26.16	26.14	27.5
20	QPSK	1	49	26.13	26.16	26.09	
20	QPSK	99	99	26.26	26.32	26.24	
20	QPSK	50	0	25.38	25.43	25.42	26.5
20	QPSK	50	24	25.37	25.43	25.44	
20	QPSK	50	50	25.44	25.48	25.39	
20	QPSK	100	0	25.42	25.43	25.42	26.5
20	16QAM	1	0	25.46	25.56	25.54	
20	16QAM	1	49	25.52	25.56	25.50	
20	16QAM	1	99	25.45	25.53	25.52	26.5
20	16QAM	50	0	24.37	24.45	24.45	
20	16QAM	50	24	24.47	24.48	24.45	
20	16QAM	50	50	24.48	24.52	24.43	25.5
20	16QAM	100	0	24.39	24.44	24.46	
20	64QAM	1	0	24.47	24.36	24.37	
20	64QAM	1	49	24.44	24.44	24.34	25.5
20	64QAM	1	99	24.42	24.44	24.33	
20	64QAM	50	0	23.43	23.46	23.45	
20	64QAM	50	24	23.43	23.45	23.47	24.5
20	64QAM	50	50	23.53	23.54	23.42	
20	64QAM	100	0	23.41	23.46	23.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.28	26.27	26.17	27.5
15	QPSK	1	37	26.27	26.11	26.17	
15	QPSK	1	74	26.30	26.27	26.15	
15	QPSK	36	0	25.90	25.43	25.41	26.5
15	QPSK	36	20	25.50	25.42	25.39	
15	QPSK	36	39	25.48	25.48	25.37	
15	QPSK	75	0	25.50	25.43	25.40	26.5
15	16QAM	1	0	25.63	25.57	25.50	
15	16QAM	1	37	25.57	25.56	25.44	
15	16QAM	1	74	25.63	25.56	25.50	26.5
15	16QAM	36	0	24.52	24.41	24.37	
15	16QAM	36	20	24.51	24.38	24.36	
15	16QAM	36	39	24.47	24.46	24.32	25.5
15	16QAM	75	0	24.53	24.41	24.41	
15	64QAM	1	0	24.39	24.30	24.34	
15	64QAM	1	37	24.46	24.41	24.36	25.5
15	64QAM	1	74	24.48	24.43	24.32	
15	64QAM	36	0	23.58	23.45	23.41	
15	64QAM	36	20	23.54	23.45	23.41	24.5
15	64QAM	36	39	23.53	23.49	23.39	
15	64QAM	75	0	23.54	23.42	23.42	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.18	26.27	26.14	27.5
10	QPSK	1	25	26.20	26.08	26.08	
10	QPSK	1	49	26.26	26.26	26.14	
10	QPSK	25	0	25.41	25.33	25.40	26.5
10	QPSK	25	12	25.43	25.40	25.37	
10	QPSK	25	25	25.48	25.44	25.28	
10	QPSK	50	0	25.42	25.40	25.38	26.5
10	16QAM	1	0	25.54	25.51	25.49	
10	16QAM	1	25	25.52	25.49	25.35	
10	16QAM	1	49	25.60	25.55	25.44	26.5
10	16QAM	25	0	24.42	24.40	24.28	
10	16QAM	25	12	24.49	24.36	24.30	
10	16QAM	25	25	24.37	24.36	24.24	25.5
10	16QAM	50	0	24.43	24.40	24.37	
10	64QAM	1	0	24.39	24.21	24.27	
10	64QAM	1	25	24.42	24.35	24.36	25.5
10	64QAM	1	49	24.48	24.38	24.27	
10	64QAM	25	0	23.56	23.38	23.41	
10	64QAM	25	12	23.49	23.35	23.33	24.5
10	64QAM	25	25	23.43	23.39	23.29	
10	64QAM	50	0	23.53	23.37	23.35	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.20	26.22	26.07	27.5
5	QPSK	1	12	26.22	26.02	26.17	
5	QPSK	1	24	26.28	26.20	26.06	
5	QPSK	12	0	25.46	25.34	25.37	26.5
5	QPSK	12	7	25.44	25.33	25.29	
5	QPSK	12	13	25.40	25.43	25.32	
5	QPSK	25	0	25.50	25.43	25.32	26.5
5	16QAM	1	0	25.59	25.47	25.48	
5	16QAM	1	12	25.56	25.52	25.40	
5	16QAM	1	24	25.62	25.53	25.43	26.5
5	16QAM	12	0	24.50	24.34	24.36	
5	16QAM	12	7	24.41	24.36	24.28	
5	16QAM	12	13	24.38	24.45	24.27	25.5
5	16QAM	25	0	24.50	24.32	24.34	
5	64QAM	1	0	24.30	24.27	24.26	
5	64QAM	1	12	24.42	24.40	24.35	25.5
5	64QAM	1	24	24.36	24.41	24.23	
5	64QAM	12	0	23.54	23.42	23.33	
5	64QAM	12	7	23.49	23.38	23.31	24.5
5	64QAM	12	13	23.49	23.41	23.36	
5	64QAM	25	0	23.52	23.32	23.34	





Band 41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2638.5	2680		
20	QPSK	1	0	24.38	24.49	24.54	24.41	24.26		
20	QPSK	1	49	24.40	24.54	24.47	24.72	24.64	25.7	
20	QPSK	1	99	24.41	24.56	24.54	24.30	24.53		
20	QPSK	50	0	23.54	23.61	23.64	23.68	23.62		
20	QPSK	50	24	23.56	23.72	23.63	23.73	23.78	24.7	
20	QPSK	50	50	23.57	23.70	23.61	23.67	23.74		
20	QPSK	100	0	23.56	23.70	23.64	23.63	23.68		
20	16QAM	1	0	23.49	23.60	23.67	23.55	23.37	24.7	
20	16QAM	1	49	23.48	23.59	23.57	23.82	23.71		
20	16QAM	1	99	23.54	23.66	23.63	23.38	23.60		
20	16QAM	50	0	22.59	22.66	22.67	22.70	22.65	23.7	
20	16QAM	50	24	22.62	22.74	22.66	22.76	22.79		
20	16QAM	50	50	22.64	22.74	22.66	22.70	22.76		
20	16QAM	100	0	22.58	22.72	22.66	22.64	22.69		
20	64QAM	1	0	22.15	22.32	22.30	22.27	22.09	23.7	
20	64QAM	1	49	22.22	22.30	22.33	22.58	22.46		
20	64QAM	1	99	22.27	22.43	22.39	22.13	22.29		
20	64QAM	50	0	21.89	21.67	21.68	21.71	21.64	22.7	
20	64QAM	50	24	21.62	21.75	21.67	21.77	21.79		
20	64QAM	50	50	21.61	21.75	21.66	21.72	21.76		
20	64QAM	100	0	21.60	21.74	21.67	21.66	21.70		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.35	24.52	24.52	24.55	24.40	25.7	
15	QPSK	1	37	24.36	24.50	24.48	24.68	24.65		
15	QPSK	1	74	24.40	24.63	24.57	24.50	24.58		
15	QPSK	36	0	23.55	23.68	23.65	23.71	23.66	24.7	
15	QPSK	36	20	23.54	23.70	23.65	23.83	23.78		
15	QPSK	36	39	23.55	23.69	23.63	23.72	23.71		
15	QPSK	75	0	23.57	23.68	23.63	23.75	23.71	24.7	
15	16QAM	1	0	23.48	23.65	23.64	23.69	23.51		
15	16QAM	1	37	23.43	23.57	23.52	23.80	23.68		
15	16QAM	1	74	23.55	23.80	23.71	23.63	23.71		
15	16QAM	36	0	22.51	22.66	22.61	22.69	22.60	23.7	
15	16QAM	36	20	22.51	22.66	22.59	22.79	22.72		
15	16QAM	36	39	22.53	22.67	22.60	22.71	22.70		
15	16QAM	75	0	22.57	22.72	22.67	22.79	22.69	23.7	
15	64QAM	1	0	22.18	22.32	22.35	22.44	22.22	23.7	
15	64QAM	1	37	22.25	22.38	22.32	22.57	22.45		
15	64QAM	1	74	22.25	22.54	22.40	22.34	22.40		
15	64QAM	36	0	21.56	21.69	21.69	21.70	21.68	22.7	
15	64QAM	36	20	21.67	21.70	21.67	21.62	21.79		
15	64QAM	36	39	21.59	21.73	21.66	21.74	21.74		
15	64QAM	75	0	21.58	21.72	21.66	21.77	21.71		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.44	24.53	24.52	24.46	24.44	25.7	
10	QPSK	1	25	24.44	24.59	24.55	24.70	24.67		
10	QPSK	1	49	24.49	24.62	24.56	24.53	24.41		
10	QPSK	25	0	23.57	23.70	23.66	23.72	23.72	24.7	
10	QPSK	25	12	23.59	23.74	23.70	23.81	23.77		
10	QPSK	25	25	23.58	23.73	23.70	23.78	23.68		
10	QPSK	50	0	23.58	23.72	23.67	23.72	23.70	24.7	
10	16QAM	1	0	23.80	23.66	23.70	23.64	23.55		
10	16QAM	1	25	23.57	23.71	23.65	23.89	23.78		
10	16QAM	1	49	23.57	23.72	23.63	23.64	23.51	23.7	
10	16QAM	25	0	22.58	22.74	22.66	22.73	22.73		
10	16QAM	25	12	22.61	22.76	22.70	22.82	22.81		
10	16QAM	25	25	22.59	22.74	22.69	22.80	22.65	23.7	
10	16QAM	50	0	22.61	22.74	22.71	22.73	22.73		
10	64QAM	1	0	22.33	22.37	22.39	22.33	22.26	23.7	
10	64QAM	1	25	22.36	22.47	22.42	22.68	22.47		
10	64QAM	1	49	22.33	22.49	22.39	22.57	22.16		
10	64QAM	25	0	21.64	21.79	21.74	21.77	21.76	22.7	
10	64QAM	25	12	21.66	21.79	21.79	21.50	21.87		
10	64QAM	25	25	21.65	21.79	21.77	21.84	21.74		
10	64QAM	50	0	21.63	21.76	21.72	21.74	21.75		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2484.5	2543.5	2593	2643.0	2697.5		
5	QPSK	1	0	24.49	24.53	24.55	24.69	24.66	25.7	
5	QPSK	1	12	24.45	24.62	24.53	24.70	24.64		
5	QPSK	1	24	24.42	24.61	24.52	24.69	24.56		
5	QPSK	12	0	23.57	23.68	23.66	23.77	23.77	24.7	
5	QPSK	12	7	23.58	23.74	23.70	23.88	23.79		
5	QPSK	12	15	23.60	23.70	23.68	23.88	23.73		
5	QPSK	25	0	23.54	23.71	23.68	23.84	23.74	24.7	
5	16QAM	1	0	23.60	23.65	23.68	23.80	23.76		
5	16QAM	1	12	23.63	23.77	23.79	23.92	23.88		
5	16QAM	1	24	23.64	23.74	23.69	23.90	23.75	23.7	
5	16QAM	12	0	22.55	22.66	22.65	22.80	22.76		
5	16QAM	12	7	22.58	22.72	22.67	22.84	22.77		
5	16QAM	12	13	22.53	22.68	22.64	22.84	22.74		
5	16QAM	25	0	22.61	22.71	22.72	22.87	22.79	23.7	
5	64QAM	1	0	22.55	22.42	22.41	22.60	22.51		
5	64QAM	1	12	22.55	22.48	22.46	22.66	22.52		
5	64QAM	1	24	22.58	22.50	22.45	22.65	22.45	22.7	
5	64QAM	12	0	21.69	21.72	21.71	21.81	21.80		
5	64QAM	12	7	21.62	21.78	21.77	21.92	21.83		
5	64QAM	12	13	21.59	21.74	21.73	21.89	21.78		
5	64QAM	25	0	21.57	21.79	21.74	21.91	21.80		

Band 48_Ant 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Ch / Freq	Power High Middle Ch / Freq	Tune-up limit [dBm]	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	21.69	22.07	22.19	22.09	23.3	
20	QPSK	1	49	21.56	21.90	22.00	21.85		
20	QPSK	1	99	21.60	21.93	21.90	21.77		
20	QPSK	50	0	21.71	22.05	22.22	22.07	23.3	
20	QPSK	50	24	21.69	22.04	22.17	22.04		
20	QPSK	50	50	21.70	22.02	22.08	21.92		
20	QPSK	100	0	21.72	22.06	22.14	22.01	23.3	
20	16QAM	1	0	21.83	22.20	22.37	22.23		
20	16QAM	1	49	21.67	21.98	22.07	21.96		
20	16QAM	1	99	21.74	22.01	22.07	21.88	23.3	
20	16QAM	50	0	21.74	22.07	22.26	22.13		
20	16QAM	50	24	21.79	22.12	22.21	22.04		
20	16QAM	50	50	21.75	22.05	22.12	21.97	23.3	
20	16QAM	100	0	21.75	22.09	22.21	22.05		
20	64QAM	1	0	21.46	21.62	22.05	21.92		
20	64QAM	1	49	21.37	21.69	21.79	21.65	23.3	
20	64QAM	1	99	21.47	21.73	21.72	21.54		
20	64QAM	50	0	21.02	21.36	21.54	21.41		
20	64QAM	50	24	21.09	21.39	21.47	21.37	22.7	
20	64QAM	50	50	21.04	21.35	21.43	21.25		
20	64QAM	100	0	21.04	21.38	21.49	21.33		
Channel				55315	55820	56160	56640	Tune-up limit [dBm]	
Frequency (MHz)				3657.5	3608	3642	3692.5		
15	QPSK	1	0	21.89	21.99	22.19	22.05	23.3	
15	QPSK	1	37	21.47	21.90	21.96	21.77		
15	QPSK	1	74	21.57	21.83	21.88	21.69		
15	QPSK	36	0	21.66	22.01	22.22	22.03	23.3	
15	QPSK	36	20	21.70	22.05	22.09	22.03		
15	QPSK	36	39	21.65	21.92	22.05	21.86		
15	QPSK	75	0	21.62	21.97	22.14	21.98	23.3	
15	16QAM	1	0	21.77	22.10	22.32	22.13		
15	16QAM	1	37	21.59	21.99	22.01	21.92		
15	16QAM	1	74	21.64	21.92	21.97	21.79	23.3	
15	16QAM	36	0	21.65	22.07	22.16	22.04		
15	16QAM	36	20	21.78	22.12	22.13	21.96		
15	16QAM	36	39	21.70	22.00	22.09	21.95	23.3	
15	16QAM	75	0	21.65	22.00	22.00	22.04		
15	64QAM	1	0	21.38	21.74	21.96	21.90		
15	64QAM	1	37	21.27	21.62	21.74	21.63	23.3	
15	64QAM	1	74	21.41	21.65	21.72	21.49		
15	64QAM	36	0	20.94	21.34	21.47	21.37		
15	64QAM	36	20	21.04	21.35	21.41	21.32	22.7	
15	64QAM	36	39	21.03	21.32	21.36	21.23		
15	64QAM	75	0	20.99	21.30	21.47	21.32		
Channel				55290	55815	56165	56690	Tune-up limit [dBm]	
Frequency (MHz)				3655	3607.5	3642.5	3695		
10	QPSK	1	0	21.64	22.07	22.10	22.02	23.3	
10	QPSK	1	25	21.46	21.85	21.94	21.76		
10	QPSK	1	49	21.58	21.83	21.87	21.75		
10	QPSK	25	0	21.56	21.95	22.20	22.07	23.3	
10	QPSK	25	12	21.66	22.05	22.14	21.99		
10	QPSK	25	25	21.62	21.96	21.98	21.82		
10	QPSK	50	0	21.66	22.01	22.13	21.92	23.3	
10	16QAM	1	0	21.82	22.12	22.32	22.18		
10	16QAM	1	25	21.64	21.90	22.03	21.90		
10	16QAM	1	49	21.69	21.94	22.02	21.87	23.3	
10	16QAM	25	0	21.74	22.01	22.22	22.05		
10	16QAM	25	12	21.77	22.09	22.14	21.96		
10	16QAM	25	25	21.67	21.97	22.03	21.91	23.3	
10	16QAM	50	0	21.73	22.01	22.11	22.00		
10	64QAM	1	0	21.37	21.75	22.05	21.86		
10	64QAM	1	25	21.29	21.64	21.77	21.64	23.3	
10	64QAM	1	49	21.37	21.70	21.72	21.52		
10	64QAM	25	0	20.97	21.33	21.50	21.46		
10	64QAM	25	12	21.00	21.36	21.46	21.34	22.7	
10	64QAM	25	25	20.96	21.29	21.35	21.18		
10	64QAM	50	0	20.97	21.36	21.46	21.25		
Channel				55265	55810	56170	56715	Tune-up limit [dBm]	
Frequency (MHz)				3624.5	3607	3643	3674.5		
5	QPSK	1	0	21.59	22.06	22.15	22.01	23.3	
5	QPSK	1	12	21.52	21.82	21.93	21.79		
5	QPSK	1	24	21.51	21.89	21.88	21.72		
5	QPSK	12	0	21.65	22.00	22.16	22.03	23.3	
5	QPSK	12	7	21.69	22.00	22.15	21.98		
5	QPSK	12	13	21.63	22.02	21.99	21.82		
5	QPSK	25	0	21.71	22.02	22.09	21.90	23.3	
5	16QAM	1	0	21.76	22.15	22.36	22.15		
5	16QAM	1	12	21.58	21.98	22.00	21.95		
5	16QAM	1	24	21.74	22.00	21.97	21.86	23.3	
5	16QAM	12	0	21.74	22.04	22.17	22.08		
5	16QAM	12	7	21.70	22.04	22.21	21.96		
5	16QAM	12	13	21.74	22.02	22.09	21.95	23.3	
5	16QAM	25	0	21.73	22.06	22.12	21.99		
5	64QAM	1	0	21.41	21.81	21.96	21.82		
5	64QAM	1	12	21.28	21.60	21.73	21.58	23.3	
5	64QAM	1	24	21.41	21.65	21.63	21.49		
5	64QAM	12	0	21.01	21.34	21.47	21.33		
5	64QAM	12	7	21.05	21.30	21.37	21.29	22.7	
5	64QAM	12	13	20.97	21.27	21.39	21.15		
5	64QAM	25	0	21.00	21.30	21.48	21.26		



Band 38_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.83	23.70	23.75	25.2
20	QPSK	1	49	23.89	23.82	23.74	
20	QPSK	1	99	23.86	23.77	23.73	
20	QPSK	50	0	23.06	22.91	22.83	24.2
20	QPSK	50	24	23.06	22.88	22.82	
20	QPSK	50	50	23.03	22.92	22.81	
20	QPSK	100	0	23.05	22.86	22.82	24.2
20	16QAM	1	0	23.02	22.83	22.83	
20	16QAM	1	49	22.97	22.94	22.77	
20	16QAM	1	99	22.87	22.90	22.76	23.2
20	16QAM	50	0	22.12	21.94	21.88	
20	16QAM	50	24	22.10	21.93	21.87	
20	16QAM	50	50	22.06	21.96	21.83	23.2
20	16QAM	100	0	22.08	21.91	21.85	
20	64QAM	1	0	21.70	21.65	21.59	
20	64QAM	1	49	21.74	21.68	21.51	23.2
20	64QAM	1	99	21.75	21.68	21.54	
20	64QAM	50	0	21.12	20.97	20.87	
20	64QAM	50	24	21.11	20.94	20.86	22.2
20	64QAM	50	50	21.09	20.95	20.86	
20	64QAM	100	0	21.09	20.91	20.86	
Channel				37625	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.88	23.79	23.72	25.2
15	QPSK	1	37	23.88	23.76	23.70	
15	QPSK	1	74	23.85	23.75	23.72	
15	QPSK	36	0	23.09	22.89	22.83	24.2
15	QPSK	36	20	23.05	22.87	22.82	
15	QPSK	36	39	23.03	22.95	22.80	
15	QPSK	75	0	23.08	22.88	22.81	24.2
15	16QAM	1	0	23.05	22.95	22.80	
15	16QAM	1	37	22.92	22.91	22.72	
15	16QAM	1	74	23.01	22.92	22.79	23.2
15	16QAM	36	0	22.07	21.87	21.80	
15	16QAM	36	20	22.03	21.84	21.79	
15	16QAM	36	39	22.01	21.90	21.77	23.2
15	16QAM	75	0	22.05	21.93	21.83	
15	64QAM	1	0	21.74	21.67	21.55	
15	64QAM	1	37	21.78	21.67	21.52	23.2
15	64QAM	1	74	21.81	21.67	21.49	
15	64QAM	36	0	21.12	20.94	20.87	
15	64QAM	36	20	21.06	20.92	20.85	22.2
15	64QAM	36	39	21.10	20.97	20.83	
15	64QAM	75	0	21.09	20.89	20.86	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.79	23.74	23.70	25.2
10	QPSK	1	25	23.87	23.76	23.71	
10	QPSK	1	49	23.79	23.74	23.72	
10	QPSK	25	0	23.02	22.88	22.77	24.2
10	QPSK	25	12	22.98	22.83	22.73	
10	QPSK	25	25	23.03	22.89	22.81	
10	QPSK	50	0	23.06	22.83	22.79	24.2
10	16QAM	1	0	23.01	22.90	22.82	
10	16QAM	1	25	22.90	22.92	22.68	
10	16QAM	1	49	22.97	22.87	22.73	23.2
10	16QAM	25	0	22.05	21.90	21.88	
10	16QAM	25	12	22.06	21.83	21.86	
10	16QAM	25	25	21.95	21.93	21.83	23.2
10	16QAM	50	0	22.02	21.85	21.77	
10	64QAM	1	0	21.69	21.65	21.55	
10	64QAM	1	25	21.67	21.57	21.44	23.2
10	64QAM	1	49	21.74	21.63	21.47	
10	64QAM	25	0	21.05	20.92	20.79	
10	64QAM	25	12	21.04	20.96	20.76	22.2
10	64QAM	25	25	21.05	20.86	20.82	
10	64QAM	50	0	21.05	20.89	20.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				23725	2595	2617.5	
5	QPSK	1	0	23.75	23.78	23.73	25.2
5	QPSK	1	12	23.83	23.77	23.72	
5	QPSK	1	24	23.78	23.70	23.71	
5	QPSK	12	0	23.06	22.91	22.83	24.2
5	QPSK	12	7	22.97	22.81	22.82	
5	QPSK	12	13	22.98	22.90	22.76	
5	QPSK	25	0	23.03	22.83	22.74	24.2
5	16QAM	1	0	22.97	22.89	22.75	
5	16QAM	1	12	22.97	22.89	22.70	
5	16QAM	1	24	22.96	22.83	22.74	23.2
5	16QAM	12	0	22.07	21.90	21.81	
5	16QAM	12	7	22.00	21.89	21.86	
5	16QAM	12	13	22.04	21.95	21.78	23.2
5	16QAM	25	0	22.04	21.84	21.83	
5	64QAM	1	0	21.62	21.58	21.50	
5	64QAM	1	12	21.69	21.61	21.42	23.2
5	64QAM	1	24	21.66	21.59	21.49	
5	64QAM	12	0	21.11	20.97	20.84	
5	64QAM	12	7	21.05	20.90	20.76	22.2
5	64QAM	12	13	21.02	20.95	20.80	
5	64QAM	25	0	21.06	20.89	20.77	



Band 38_HPUE_Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq.	Midle Ch. / Freq.	High Ch. / Freq.	
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.58	25.48	25.40	26.7
20	QPSK	1	49	25.53	25.47	25.33	
20	QPSK	1	99	25.52	25.43	25.38	
20	QPSK	50	0	24.88	24.74	24.67	25.7
20	QPSK	50	24	24.87	24.72	24.65	
20	QPSK	50	50	24.84	24.76	24.63	
20	QPSK	100	0	24.86	24.71	24.67	25.7
20	16QAM	1	0	24.96	24.85	24.77	
20	16QAM	1	49	24.91	24.87	24.66	
20	16QAM	1	99	24.88	24.77	24.71	24.7
20	16QAM	50	0	23.91	23.77	23.71	
20	16QAM	50	24	23.93	23.75	23.68	
20	16QAM	50	50	23.88	23.82	23.66	24.7
20	16QAM	100	0	23.92	23.73	23.70	
20	64QAM	1	0	23.75	23.66	23.63	
20	64QAM	1	49	23.76	23.69	23.55	24.7
20	64QAM	1	99	23.77	23.70	23.56	
20	64QAM	50	0	22.95	22.78	22.71	
20	64QAM	50	24	22.81	22.77	22.69	23.7
20	64QAM	50	50	22.90	22.81	22.69	
20	64QAM	100	0	22.90	22.77	22.68	
Channel				37825	38000	38175	Power up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.53	25.48	25.40	26.7
15	QPSK	1	37	25.43	25.41	25.33	
15	QPSK	1	74	25.42	25.38	25.38	
15	QPSK	36	0	24.82	24.66	24.63	25.7
15	QPSK	36	20	24.84	24.70	24.59	
15	QPSK	36	39	24.74	24.66	24.60	
15	QPSK	75	0	24.77	24.65	24.67	25.7
15	16QAM	1	0	24.89	24.75	24.77	
15	16QAM	1	37	24.87	24.81	24.56	
15	16QAM	1	74	24.84	24.72	24.63	24.7
15	16QAM	36	0	23.84	23.72	23.65	
15	16QAM	36	20	23.90	23.71	23.68	
15	16QAM	36	39	23.78	23.72	23.57	24.7
15	16QAM	75	0	23.85	23.64	23.70	
15	64QAM	1	0	23.73	23.66	23.62	
15	64QAM	1	37	23.72	23.68	23.47	24.7
15	64QAM	1	74	23.76	23.67	23.47	
15	64QAM	36	0	22.90	22.77	22.67	
15	64QAM	36	20	22.83	22.76	22.66	23.7
15	64QAM	36	39	22.86	22.81	22.63	
15	64QAM	75	0	22.81	22.74	22.64	
Channel				37800	38000	38200	Power up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.57	25.47	25.35	26.7
10	QPSK	1	25	25.44	25.37	25.29	
10	QPSK	1	49	25.46	25.41	25.35	
10	QPSK	25	0	24.85	24.70	24.64	25.7
10	QPSK	25	12	24.84	24.65	24.62	
10	QPSK	25	25	24.78	24.67	24.58	
10	QPSK	50	0	24.83	24.66	24.58	25.7
10	16QAM	1	0	24.90	24.77	24.73	
10	16QAM	1	25	24.83	24.76	24.66	
10	16QAM	1	49	24.84	24.70	24.63	24.7
10	16QAM	25	0	23.86	23.68	23.70	
10	16QAM	25	12	23.88	23.71	23.58	
10	16QAM	25	25	23.86	23.77	23.58	24.7
10	16QAM	50	0	23.87	23.71	23.62	
10	64QAM	1	0	23.65	23.65	23.61	
10	64QAM	1	25	23.66	23.59	23.51	24.7
10	64QAM	1	49	23.71	23.61	23.48	
10	64QAM	25	0	22.94	22.77	22.64	
10	64QAM	25	12	22.81	22.77	22.63	23.7
10	64QAM	25	25	22.90	22.76	22.65	
10	64QAM	50	0	22.83	22.73	22.63	
Channel				37775	38000	38225	Power up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.55	25.40	25.37	26.7
5	QPSK	1	12	25.43	25.44	25.26	
5	QPSK	1	24	25.51	25.39	25.29	
5	QPSK	12	0	24.82	24.71	24.57	25.7
5	QPSK	12	7	24.81	24.65	24.62	
5	QPSK	12	13	24.80	24.73	24.53	
5	QPSK	25	0	24.81	24.63	24.59	25.7
5	16QAM	1	0	24.92	24.84	24.69	
5	16QAM	1	12	24.81	24.83	24.59	
5	16QAM	1	24	24.81	24.72	24.62	24.7
5	16QAM	12	0	23.85	23.69	23.61	
5	16QAM	12	7	23.91	23.71	23.65	
5	16QAM	12	13	23.85	23.72	23.61	24.7
5	16QAM	25	0	23.85	23.67	23.65	
5	64QAM	1	0	23.70	23.62	23.57	
5	64QAM	1	12	23.75	23.65	23.46	24.7
5	64QAM	1	24	23.77	23.66	23.55	
5	64QAM	12	0	22.86	22.74	22.66	
5	64QAM	12	7	22.88	22.67	22.63	23.7
5	64QAM	12	13	22.86	22.74	22.67	
5	64QAM	25	0	22.87	22.69	22.67	

Band 41_Ant 0											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./ Freq.	Power Low Middle Ch./ Freq.	Power Middle Ch./ Freq.	Power High Middle Ch./ Freq.	Power High Ch./ Freq.		Tune-up limit [dBm]	
Channel 39750											
Frequency (MHz)											
20	QPSK	1	0	24.11	24.19	24.06	23.93	23.84		25.5	
20	QPSK	1	49	24.14	24.25	24.07	24.21	24.26			
20	QPSK	1	99	24.10	24.19	24.04	23.83	24.20			
20	QPSK	50	0	23.28	23.30	23.15	23.18	23.26			
20	QPSK	50	24	23.27	23.36	23.13	23.21	23.40			
Channel 40185											
Frequency (MHz)											
20	QPSK	50	50	23.30	23.38	23.21	23.26	23.41		24.5	
20	QPSK	100	0	23.28	23.33	23.16	23.17	23.38			
20	16QAM	1	0	23.23	23.30	23.22	23.06	22.96			24.5
20	16QAM	1	49	23.21	23.30	23.15	23.32	23.36			
20	16QAM	1	99	23.26	23.38	23.05	22.90	23.31			
20	16QAM	50	0	22.31	22.30	22.23	22.23	22.29		23.5	
20	16QAM	50	24	22.32	22.42	22.23	22.29	22.43			
20	16QAM	50	50	22.29	22.43	22.17	22.25	22.44			
20	16QAM	100	0	22.31	22.40	22.15	22.19	22.35			23.5
20	64QAM	1	0	21.94	21.99	21.91	21.79	21.65			
20	64QAM	1	49	21.96	21.99	21.86	22.08	22.16		22.5	
20	64QAM	1	99	21.99	22.16	21.89	21.60	22.07			
20	64QAM	50	0	21.31	21.34	21.25	21.22	21.30			
20	64QAM	50	24	21.33	21.40	21.22	21.30	21.46			
20	64QAM	50	50	21.30	21.41	21.21	21.25	21.44			
20	64QAM	100	0	21.31	21.40	21.22	21.18	21.35			
Channel 40620											
Frequency (MHz)											
15	QPSK	1	0	24.11	24.17	24.06	24.01	23.97		25.5	
15	QPSK	1	37	24.08	24.17	23.97	24.17	24.23			
15	QPSK	1	74	24.12	24.25	24.05	23.69	24.23			
15	QPSK	36	0	23.29	23.34	23.18	23.19	23.30			
15	QPSK	36	20	23.27	23.36	23.16	23.31	23.37			
Channel 41065											
Frequency (MHz)											
15	QPSK	36	39	23.26	23.35	23.13	23.23	23.40		24.5	
15	QPSK	75	0	23.28	23.34	23.14	23.25	23.33			
15	16QAM	1	0	23.23	23.32	23.20	23.19	23.09			24.5
15	16QAM	1	37	23.11	23.21	23.02	23.27	23.34			
15	16QAM	1	74	23.26	23.48	23.21	23.08	23.38			
15	16QAM	36	0	22.24	22.32	22.13	22.18	22.25		23.5	
15	16QAM	36	20	22.24	22.31	22.13	22.29	22.36			
15	16QAM	36	39	22.23	22.33	22.11	22.22	22.37			
15	16QAM	75	0	22.34	22.38	22.15	22.31	22.36			
15	64QAM	1	0	21.94	22.00	21.89	21.91	21.79			23.5
15	64QAM	1	37	22.01	22.05	21.87	22.06	22.10			
15	64QAM	1	74	22.02	22.19	21.94	21.80	22.15			
15	64QAM	36	0	21.29	21.33	21.20	21.21	21.29		22.5	
15	64QAM	36	20	21.32	21.33	21.17	21.36	21.42			
15	64QAM	36	39	21.28	21.38	21.15	21.28	21.41			
15	64QAM	75	0	21.30	21.39	21.17	21.30	21.36			
Channel 41515											
Frequency (MHz)											
10	QPSK	1	0	24.21	24.23	24.10	23.93	24.08		25.5	
10	QPSK	1	25	24.23	24.17	24.08	24.23	24.18			
10	QPSK	1	49	24.24	24.20	24.08	24.01	24.08			
10	QPSK	25	0	23.30	23.37	23.21	23.20	23.39			
10	QPSK	25	12	23.33	23.43	23.23	23.31	23.42			
Channel 41960											
Frequency (MHz)											
10	QPSK	25	25	23.31	23.40	23.18	23.28	23.34		24.5	
10	QPSK	50	0	23.31	23.39	23.20	23.21	23.37			
10	16QAM	1	0	23.37	23.38	23.23	23.12	23.18			24.5
10	16QAM	1	25	23.32	23.41	23.21	23.38	23.43			
10	16QAM	1	49	23.30	23.37	23.17	23.12	23.18			
10	16QAM	25	0	22.34	22.40	22.15	22.25	22.40		23.5	
10	16QAM	25	12	22.36	22.44	22.24	22.30	22.52			
10	16QAM	25	25	22.34	22.40	22.15	22.32	22.36			
10	16QAM	50	0	22.37	22.42	22.25	22.27	22.41			
10	64QAM	1	0	22.11	22.06	21.96	21.83	21.87			23.5
10	64QAM	1	25	22.10	22.13	21.98	22.14	22.18			
10	64QAM	1	49	22.13	22.20	21.93	21.83	21.91			
10	64QAM	25	0	21.38	21.45	21.26	21.27	21.43		22.5	
10	64QAM	25	12	21.44	21.48	21.30	21.40	21.51			
10	64QAM	25	25	21.39	21.48	21.26	21.37	21.41			
10	64QAM	50	0	21.35	21.42	21.23	21.25	21.41			
Channel 42405											
Frequency (MHz)											
5	QPSK	1	0	24.22	24.22	24.10	24.19	24.21		25.5	
5	QPSK	1	12	24.19	24.17	24.08	24.22	24.22			
5	QPSK	1	24	24.17	24.25	24.02	24.22	24.23			
5	QPSK	12	0	23.30	23.36	23.19	23.28	23.43			
5	QPSK	12	7	23.35	23.43	23.23	23.40	23.47			
Channel 42850											
Frequency (MHz)											
5	QPSK	12	15	23.31	23.40	23.16	23.38	23.39		24.5	
5	QPSK	25	0	23.30	23.36	23.18	23.32	23.43			
5	16QAM	1	0	23.37	23.33	23.25	23.27	23.42			24.5
5	16QAM	1	12	23.37	23.45	23.26	23.47	23.54			
5	16QAM	1	24	23.40	23.44	23.26	23.38	23.44			
5	16QAM	12	0	22.30	22.37	22.19	22.24	22.41		23.5	
5	16QAM	12	7	22.34	22.39	22.23	22.37	22.41			
5	16QAM	12	13	22.32	22.38	22.17	22.33	22.41			
5	16QAM	25	0	22.34	22.45	22.21	22.38	22.46			23.5
5	64QAM	1	0	22.12	22.11	21.97	22.05	22.14			
5	64QAM	1	12	22.12	22.18	21.99	22.14	22.15			
5	64QAM	1	24	22.17	22.19	22.01	22.15	22.19		22.5	
5	64QAM	12	0	21.36	21.44	21.27	21.33	21.48			
5	64QAM	12	7	21.36	21.47	21.30	21.43	21.49			
5	64QAM	12	13	21.38	21.43	21.25	21.39	21.44			
5	64QAM	25	0	21.35	21.43	21.26	21.44	21.49			



Band 48_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55630	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	23.03	23.32	23.56	23.51	24.1	
20	QPSK	1	49	22.89	23.18	23.28	23.31		
20	QPSK	1	99	22.88	23.17	23.27	23.25		
20	QPSK	50	0	23.05	23.30	23.50	23.46	24.1	
20	QPSK	50	24	23.05	23.29	23.48	23.40		
20	QPSK	50	50	23.02	23.26	23.38	23.41		
20	QPSK	100	0	23.04	23.29	23.46	23.38	24.1	
20	16QAM	1	0	23.15	23.41	23.54	23.53		
20	16QAM	1	49	22.86	23.22	23.37	23.36		
20	16QAM	1	99	23.00	23.25	23.33	23.34	24.1	
20	16QAM	50	0	22.54	22.82	23.03	22.97		
20	16QAM	50	24	22.56	22.84	22.98	22.91		
20	16QAM	50	50	22.52	22.79	22.92	22.91	23.7	
20	16QAM	100	0	22.58	22.81	22.95	22.89		
20	64QAM	1	0	22.31	22.58	22.84	22.79		
20	64QAM	1	49	22.19	22.45	22.61	22.62	23.7	
20	64QAM	1	99	22.26	22.48	22.60	22.60		
20	64QAM	50	0	21.53	21.81	22.05	21.98		
20	64QAM	50	24	21.58	21.86	21.99	21.94	22.7	
20	64QAM	50	50	21.51	21.79	21.83	21.91		
20	64QAM	100	0	21.56	21.84	21.96	21.92		
Channel				56315	56620	56160	56650	Tune-up limit (dBm)	
Frequency (MHz)				3657.5	3608	3642	3692.5		
15	QPSK	1	0	22.92	23.17	23.40	23.38	24.1	
15	QPSK	1	37	22.83	23.10	23.28	23.29		
15	QPSK	1	74	22.86	23.12	23.25	23.27		
15	QPSK	36	0	23.03	23.22	23.49	23.41	24.1	
15	QPSK	36	20	23.00	23.25	23.40	23.42		
15	QPSK	36	39	22.96	23.22	23.36	23.38		
15	QPSK	75	0	23.01	23.26	23.41	23.37	24.1	
15	16QAM	1	0	22.86	23.35	23.53	23.52		
15	16QAM	1	37	22.85	23.12	23.28	23.28		
15	16QAM	1	74	22.99	23.25	23.40	23.39	23.7	
15	16QAM	36	0	22.49	22.67	22.94	22.87		
15	16QAM	36	20	22.43	22.72	22.87	22.90		
15	16QAM	36	39	22.40	22.68	22.84	22.84	23.7	
15	16QAM	75	0	22.50	22.77	22.93	22.87		
15	64QAM	1	0	22.22	22.51	22.76	22.69		
15	64QAM	1	37	22.16	22.43	22.59	22.62	23.7	
15	64QAM	1	74	22.24	22.50	22.63	22.65		
15	64QAM	36	0	21.53	21.74	21.99	21.93		
15	64QAM	36	20	21.46	21.75	21.83	21.83	22.7	
15	64QAM	36	39	21.46	21.74	21.86	21.87		
15	64QAM	75	0	21.50	21.76	21.95	21.88		
Channel				56290	56815	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3655	3607.5	3642.5	3695		
10	QPSK	1	0	22.95	23.24	23.48	23.45	24.1	
10	QPSK	1	25	22.82	23.14	23.24	23.31		
10	QPSK	1	49	22.78	23.16	23.23	23.18		
10	QPSK	25	0	23.00	23.30	23.48	23.38	24.1	
10	QPSK	25	12	23.01	23.24	23.41	23.31		
10	QPSK	25	25	22.99	23.24	23.34	23.37		
10	QPSK	50	0	22.99	23.26	23.44	23.37	24.1	
10	16QAM	1	0	23.09	23.34	23.49	23.51		
10	16QAM	1	25	22.98	23.12	23.30	23.29		
10	16QAM	1	49	22.95	23.22	23.25	23.24	23.7	
10	16QAM	25	0	22.53	22.75	22.98	22.94		
10	16QAM	25	12	22.50	22.81	22.98	22.85		
10	16QAM	25	25	22.50	22.75	22.82	22.89	23.7	
10	16QAM	50	0	22.55	22.72	22.95	22.81		
10	64QAM	1	0	22.22	22.54	22.75	22.69		
10	64QAM	1	25	22.11	22.39	22.58	22.60	23.7	
10	64QAM	1	49	22.16	22.44	22.54	22.52		
10	64QAM	25	0	21.53	21.77	21.86	21.83		
10	64QAM	25	12	21.52	21.82	21.96	21.93	22.7	
10	64QAM	25	25	21.42	21.79	21.92	21.84		
10	64QAM	50	0	21.48	21.80	21.86	21.88		
Channel				56265	56810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3621.5	3607	3643	3677.5		
5	QPSK	1	0	22.99	23.23	23.52	23.46	24.1	
5	QPSK	1	12	22.81	23.10	23.20	23.27		
5	QPSK	1	24	22.87	23.13	23.20	23.15		
5	QPSK	12	0	23.00	23.23	23.43	23.44	24.1	
5	QPSK	12	7	23.00	23.21	23.40	23.33		
5	QPSK	12	13	22.92	23.18	23.31	23.36		
5	QPSK	25	0	23.04	23.22	23.40	23.37	24.1	
5	16QAM	1	0	23.13	23.39	23.46	23.49		
5	16QAM	1	12	22.91	23.16	23.30	23.31		
5	16QAM	1	24	22.91	23.23	23.24	23.31	24.1	
5	16QAM	12	0	22.51	22.78	23.01	22.88		
5	16QAM	12	7	22.56	22.82	22.95	22.91		
5	16QAM	12	13	22.49	22.74	22.83	22.86	23.7	
5	16QAM	25	0	22.51	22.75	22.95	22.88		
5	64QAM	1	0	22.23	22.51	22.84	22.70		
5	64QAM	1	12	22.14	22.45	22.51	22.59	23.7	
5	64QAM	1	24	22.23	22.47	22.50	22.56		
5	64QAM	12	0	21.50	21.73	21.96	21.83		
5	64QAM	12	7	21.52	21.82	21.94	21.85	22.7	
5	64QAM	12	13	21.47	21.74	21.86	21.88		
5	64QAM	25	0	21.49	21.78	21.94	21.90		



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



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





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



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



n5_Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	23.28	23.10	23.09	25.0
20	PI/2 BPSK	1	53	23.13	23.10	23.05	
20	PI/2 BPSK	1	104	22.66	21.93	21.89	
20	PI/2 BPSK	50	0	22.72	22.70	22.65	24.5
20	PI/2 BPSK	50	28	23.17	23.14	23.06	25.0
20	PI/2 BPSK	50	56	22.54	22.51	22.42	24.5
20	PI/2 BPSK	100	0	22.68	22.61	22.58	
20	QPSK	1	1	23.31	23.19	23.17	25.0
20	QPSK	1	53	23.25	23.18	23.13	
20	QPSK	1	104	23.04	22.35	22.04	
20	QPSK	50	0	22.22	22.20	22.18	24.0
20	QPSK	50	28	23.21	23.12	23.09	25.0
20	QPSK	50	56	22.11	22.07	22.01	24.0
20	QPSK	100	0	22.17	22.13	22.09	
20	16QAM	1	1	22.51	22.37	22.37	24.0
20	64QAM	1	1	21.08	20.95	20.90	22.5
20	256QAM	1	1	18.91	18.84	18.78	20.5
Channel				166300	167300	168300	
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	23.21	23.04	23.06	25.0
Channel				165800	167300	168800	
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	23.10	23.05	23.09	25.0
Channel				165300	167300	169300	
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.10	23.00	23.07	25.0



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



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



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



n77_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.63	23.36	23.40	25.5
100	PI/2 BPSK	1	137	23.46	23.35	23.44	
100	PI/2 BPSK	1	271	23.43	23.50	23.37	
100	PI/2 BPSK	135	0	22.98	22.86	22.80	25.0
100	PI/2 BPSK	135	69	23.42	23.50	23.31	25.5
100	PI/2 BPSK	135	138	22.89	22.82	22.88	25.0
100	PI/2 BPSK	270	0	22.90	22.83	22.86	
100	QPSK	1	1	23.64	23.36	23.36	25.5
100	QPSK	1	137	23.47	23.34	23.41	
100	QPSK	1	271	23.43	23.51	23.29	
100	QPSK	135	0	22.47	22.34	22.31	24.5
100	QPSK	135	69	23.47	23.32	23.33	25.5
100	QPSK	135	138	22.45	22.38	22.26	24.5
100	QPSK	270	0	22.46	22.33	22.28	
100	16QAM	1	1	22.69	22.36	22.43	24.5
100	64QAM	1	1	21.51	21.23	20.95	23.0
100	256QAM	1	1	19.14	18.80	18.59	21.0
Channel				648000	656000	664000	
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	24.00	23.73	23.52	25.5
Channel				647334	656000	664668	
Frequency (MHz)				3710.01	3840	3970.02	
20	PI/2 BPSK	1	1	23.85	23.55	23.35	25.5



n78_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		23.14		25.5
100	PI/2 BPSK	1	137		22.96		
100	PI/2 BPSK	1	271		22.92		
100	PI/2 BPSK	135	0		22.52		25.0
100	PI/2 BPSK	135	69		22.99		25.5
100	PI/2 BPSK	135	138		22.48		25.0
100	PI/2 BPSK	270	0		22.49		
100	QPSK	1	1		23.16		25.5
100	QPSK	1	137		22.95		
100	QPSK	1	271		22.81		
100	QPSK	135	0		22.03		24.5
100	QPSK	135	69		22.92		25.5
100	QPSK	135	138		21.86		24.5
100	QPSK	270	0		21.94		
100	16QAM	1	1		22.16		24.5
100	64QAM	1	1		20.88		23.0
100	256QAM	1	1		18.69		21.0
Channel				649668	650000	650334	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3755.01	
90	PI/2 BPSK	1	1	23.15	23.11	23.11	25.5
Channel				649334	650000	650668	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3760.02	
80	PI/2 BPSK	1	1	23.06	23.05	23.05	25.5
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.02	22.98	23.01	25.5
Channel				648668	650000	651334	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3770.01	
60	PI/2 BPSK	1	1	23.09	23.04	23.01	25.5
Channel				648334	650000	651668	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3775.02	
50	PI/2 BPSK	1	1	23.14	23.13	23.11	25.5
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	23.38	23.38	23.30	25.5
Channel				647334	650000	652668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3790.02	
20	PI/2 BPSK	1	1	23.24	23.11	23.07	25.5





n78_HPUE_Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000			26.0
Frequency (MHz)				3750			
100	PI/2 BPSK	1	1	24.44			26.0
100	PI/2 BPSK	1	137	24.29			
100	PI/2 BPSK	1	271	24.10			
100	PI/2 BPSK	135	0	23.80			25.5
100	PI/2 BPSK	135	69	24.21			26.0
100	PI/2 BPSK	135	138	23.69			25.5
100	PI/2 BPSK	270	0	23.77			
100	QPSK	1	1	24.48			26.0
100	QPSK	1	137	24.25			
100	QPSK	1	271	24.21			
100	QPSK	135	0	23.25			25.0
100	QPSK	135	69	24.24			26.0
100	QPSK	135	138	23.25			25.0
100	QPSK	270	0	23.24			
100	16QAM	1	1	23.84			25.0
100	64QAM	1	1	22.23			23.5
100	256QAM	1	1	19.81			21.5
Channel				649668	650000	650334	26.0
Frequency (MHz)				3745.02	3750	3755.01	
90	PI/2 BPSK	1	1	24.42			26.0
Channel				649334	650000	650668	26.0
Frequency (MHz)				3740.01	3750	3760.02	
80	PI/2 BPSK	1	1	24.37			26.0
Channel				649000	650000	651000	26.0
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	24.35			26.0
Channel				648668	650000	651334	26.0
Frequency (MHz)				3730.02	3750	3770.01	
60	PI/2 BPSK	1	1	24.36			26.0
Channel				648334	650000	651668	26.0
Frequency (MHz)				3725.01	3750	3775.02	
50	PI/2 BPSK	1	1	24.51			26.0
Channel				648000	650000	652000	26.0
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	24.68			26.0
Channel				647334	650000	652668	26.0
Frequency (MHz)				3710.01	3750	3790.02	
20	PI/2 BPSK	1	1	24.49			26.0



Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3								
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %							
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.60	20.00	19.60	20.00	100.00	19.80	20.00	19.20	20.00	22.52	23.0	100.00							
		6	2437	19.50	20.00											19.60	20.00	19.90	20.00	20.00	22.67	23.0
		11	2462	19.50	20.00											19.60	20.00	19.90	20.00	19.20	20.00	22.57
	802.11g 6Mbps	1	2412	Not required	17.50	Not required	17.50	17.50	Not required	17.50	17.50	Not required	17.50	17.50	Not required	20.5						
		6	2437		20.00											20.00	20.00	23.0				
		11	2462		18.00											18.00	18.00	21.0				
	802.11n-HT20 MCS0	1	2412	Not required	17.50	Not required	17.50	17.50	Not required	17.50	17.50	Not required	17.50	17.50	Not required	20.5						
		6	2437		19.50											19.50	19.50	22.5				
		11	2462		16.00											16.00	16.00	19.0				
	802.11ac-VHT20 MCS0	1	2412	Not required	17.50	Not required	17.50	17.50	Not required	17.50	17.50	Not required	17.50	17.50	Not required	20.5						
		6	2437		19.50											19.50	19.50	22.5				
		11	2462		16.00											16.00	16.00	19.0				

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

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



Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(C)		Ant 4+3							
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %						
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not required	Not required	Not required	17.50	Not required	Not required	Not required	17.50	Not required	17.50	Not required	20.5						
		116	5580													17.50	17.50				
		124	5620													17.50	17.50				
		132	5660													17.50	17.50				
		144	5720													17.50	17.50				
	802.11n-HT20 MCS0	100	5500	Not required	Not required	Not required	17.50	Not required	Not required	Not required	17.50	Not required	17.50	Not required	20.5						
		116	5580													17.50	17.50				
		124	5620													17.50	17.50				
		132	5660													17.50	17.50				
		144	5720													17.50	17.50				
	802.11n-HT40 MCS0	102	5510	15.40	16.00	94.90	15.30	16.00	95.96	15.90	16.00	15.60	16.00	18.76	19.0						
		110	5550	17.10	17.50		16.40	17.50		17.50	17.50	16.70	17.50	20.13	20.5						
		126	5630	17.10	17.50		16.40	17.50		17.40	17.50	16.80	17.50	20.12	20.5						
		134	5670	17.20	17.50		16.80	17.50		17.50	17.50	16.70	17.50	20.13	20.5						
		142	5710	16.70	17.50		16.60	17.50		17.30	17.50	16.50	17.50	19.93	20.5						
	802.11ac-VHT20 MCS0	100	5500	Not required	Not required	Not required	17.50	Not required	Not required	Not required	17.50	Not required	17.50	Not required	20.5						
		116	5580													17.50	17.50				
		124	5620													17.50	17.50				
		132	5660													17.50	17.50				
		144	5720													17.50	17.50				
802.11ac-VHT40 MCS0	102	5510	Not required	Not required	Not required	16.00	Not required	Not required	Not required	16.00	Not required	16.00	Not required	19.0							
	110	5550													17.50	17.50	17.50	17.50	17.50	17.50	20.5
	126	5630													17.50	17.50	17.50	17.50	17.50	17.50	20.5
	134	5670													17.50	17.50	17.50	17.50	17.50	17.50	20.5
	142	5710													17.50	17.50	17.50	17.50	17.50	17.50	20.5
802.11ac-VHT80 MCS0	106	5530	Not required	Not required	Not required	14.50	14.50	Not required	Not required	14.50	14.50	14.50	14.50	17.5							
	122	5610				17.00	17.00			17.00	17.00	17.00	17.00	20.0							
	138	5690				17.00	17.00			17.00	17.00	17.00	17.00	20.0							

Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(C)		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	Not required	Not required	Not required	19.50	Not required	Not required	19.50	Not required	19.50	Not required	22.04	22.5										
		157	5785													19.20	19.50	19.30	19.50	19.40	19.50	19.00	19.50	22.21	22.5
		165	5825													19.20	19.50	19.10	19.50	18.90	19.50	18.90	19.50	21.91	22.5
	802.11n-HT20 MCS0	149	5745	Not required	Not required	Not required	19.50	Not required	Not required	Not required	19.50	Not required	19.50	Not required	22.5										
		157	5785													19.50	19.50	19.50	19.50	19.50	19.50	22.5			
		165	5825													19.50	19.50	19.50	19.50	19.50	19.50	22.5			
	802.11n-HT40 MCS0	151	5755	Not required	Not required	Not required	17.50	Not required	Not required	Not required	17.50	Not required	17.50	Not required	20.5										
		159	5795													17.50	17.50	17.50	17.50	17.50	17.50	20.5			
	802.11ac-VHT20 MCS0	149	5745	Not required	Not required	Not required	19.50	Not required	Not required	Not required	19.50	Not required	19.50	Not required	22.5										
		157	5785													19.50	19.50	19.50	19.50	19.50	19.50	22.5			
		165	5825													19.50	19.50	19.50	19.50	19.50	19.50	22.5			
	802.11ac-VHT40 MCS0	151	5755	Not required	Not required	Not required	17.50	Not required	Not required	Not required	17.50	Not required	17.50	Not required	20.5										
		159	5795													17.50	17.50	17.50	17.50	17.50	17.50	20.5			
	802.11ac-VHT80 MCS0	155	5775	Not required	Not required	Not required	17.00	17.00	Not required	Not required	17.00	17.00	17.00	17.00	20.0										



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

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

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5280	Not required	15.50	Not required	17.00	Not required	17.00	Not required	15.50	Not required	17.50	Not required	19.6	
		56	5280		15.50		17.00		15.50		17.50		19.6			
		60	5300		15.50		17.00		15.50		17.50		19.6			
		64	5320		15.50		17.00		15.50		17.50		19.6			
	802.11n-HT20 MCS0	52	5280	Not required	15.50	Not required	17.00	Not required	17.00	Not required	15.50	Not required	17.50	Not required	19.6	
		56	5280		15.50		17.00		15.50		17.50		19.6			
		60	5300		15.50		17.00		15.50		17.50		19.6			
		64	5320		15.50		17.00		15.50		17.50		19.6			
	802.11n-HT40 MCS0	54	5270	Not required	15.50	Not required	16.60	Not required	17.00	95.96	15.30	Not required	17.20	Not required	19.36	
		62	5310		15.50		16.10		17.00		15.50		15.50		16.80	17.00
	802.11ac-VHT20 MCS0	52	5280	Not required	15.50	Not required	17.00	Not required	17.00	Not required	15.50	Not required	17.50	Not required	19.6	
		56	5280		15.50		17.00		15.50		17.50		19.6			
		60	5300		15.50		17.00		15.50		17.50		19.6			
		64	5320		15.50		17.00		15.50		17.50		19.6			
	802.11ac-VHT40 MCS0	54	5270	Not required	15.50	Not required	17.00	Not required	17.00	Not required	15.50	Not required	17.50	Not required	19.6	
		62	5310		15.50		17.00		15.50		17.00		17.00		17.00	19.3
	802.11ac-VHT20 MCS0	58	5290	15.10	15.50	86.00	16.00	16.00	15.50	15.50	16.00	16.00	18.8			



Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3										
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %									
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not required	14.50	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required									
		116	5580		14.50											15.00	14.50	15.50	18.0					
		124	5620		14.50											15.00	14.50	15.50	18.0					
		132	5660		14.50											15.00	14.50	15.50	18.0					
		144	5720		14.50											15.00	14.50	15.50	18.0					
	802.11n-HT20 MCS0	100	5500		14.50											15.00	14.50	15.50	18.0					
		116	5580		14.50											15.00	14.50	15.50	18.0					
		124	5620		14.50											15.00	14.50	15.50	18.0					
		132	5660		14.50											15.00	14.50	15.50	18.0					
		144	5720		14.50											15.00	14.50	15.50	18.0					
	802.11n-HT40 MCS0	102	5510		14.50											15.00	14.50	15.50	18.0					
		110	5550		14.50											15.00	14.50	15.50	18.0					
		126	5630		14.50											15.00	14.50	15.50	18.0					
		134	5670		14.50											15.00	14.50	15.50	18.0					
		142	5710		14.50											15.00	14.50	15.50	18.0					
	802.11ac-VHT20 MCS0	100	5500		14.50											15.00	14.50	15.50	18.0					
		116	5580		14.50											15.00	14.50	15.50	18.0					
		124	5620		14.50											15.00	14.50	15.50	18.0					
		132	5660		14.50											15.00	14.50	15.50	18.0					
		144	5720		14.50											15.00	14.50	15.50	18.0					
	802.11ac-VHT40 MCS0	102	5510		14.50											15.00	14.50	15.50	18.0					
		110	5550		14.50											15.00	14.50	15.50	18.0					
		126	5630		14.50											15.00	14.50	15.50	18.0					
		134	5670		14.50											15.00	14.50	15.50	18.0					
	802.11ac-VHT80 MCS0	106	5530		14.00											14.50	13.70	14.50	14.30	14.50	14.40	14.50	17.31	17.5
		122	5610		14.50											14.50	14.50	15.00	14.30	14.50	15.10	15.50	17.73	18.0
		138	5690		14.10											14.50	14.60	15.00	14.30	14.50	15.50	15.50	17.95	18.0

5GHz WLAN		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3											
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %										
5.8GHz WLAN	802.11a 6Mbps	149	5745	Not required	15.00	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required										
		157	5785		15.00											15.00	14.50	17.00	18.9						
		165	5825		15.00											15.00	14.50	17.00	18.9						
	802.11n-HT20 MCS0	149	5745		15.00											15.00	14.50	17.00	18.9						
		157	5785		15.00											15.00	14.50	17.00	18.9						
		165	5825		15.00											15.00	14.50	17.00	18.9						
	802.11n-HT40 MCS0	151	5755		15.00											15.00	14.50	17.00	18.9						
		159	5795		15.00											15.00	14.50	17.00	18.9						
	802.11ac-VHT20 MCS0	149	5745		15.00											15.00	14.50	17.00	18.9						
		157	5785		15.00											15.00	14.50	17.00	18.9						
		165	5825		15.00											15.00	14.50	17.00	18.9						
	802.11ac-VHT40 MCS0	151	5755		15.00											15.00	14.50	17.00	18.9						
		159	5795		15.00											15.00	14.50	17.00	18.9						
	802.11ac-VHT80 MCS0	155	5775		14.70											15.00	14.50	15.00	14.30	14.50	16.90	17.00	18.80	18.9	86.00



Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.60	20.00	100.00	19.60	20.00	100.00	19.80	20.00	19.20	20.00	22.52	23.0	
		6	2437	19.50	20.00		19.60	20.00		19.90	20.00	19.40	20.00	22.67	23.0	
		11	2462	19.50	20.00		19.60	20.00		19.90	20.00	19.20	20.00	22.57	23.0	
	802.11g 6Mbps	1	2412	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		20.00		20.00		20.00		23.0					
		11	2462		18.00		18.00		18.00		21.0					
	802.11n-HT20 MCS0	1	2412	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		19.50		19.50		19.50		22.5					
		11	2462		16.00		16.00		16.00		19.0					
	802.11ac-VHT20 MCS0	1	2412	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		6	2437		19.50		19.50		19.50		22.5					
		11	2462		16.00		16.00		16.00		19.0					

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

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



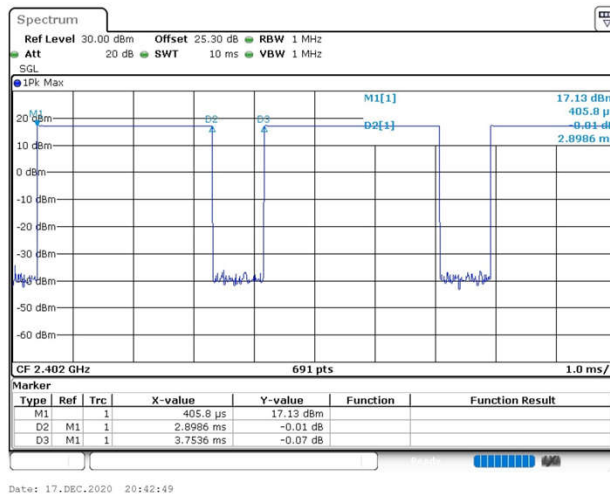
Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty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

Transmit Antenna	Ant 4						Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11e 6Mbps	149	5745	19.30	19.50	98.54	Not required	17.50	Not required	Not required	19.50	19.50	18.50	19.50	22.04	22.5
		157	5785	19.20	19.50			17.50			19.40	19.50	19.00	19.50	22.21	22.5
		165	5825	19.20	19.50			17.50			18.90	19.50	18.90	19.50	21.91	22.5
	802.11n-HT20 MCS0	149	5745	Not required	19.50	Not required	Not required	17.50	Not required	Not required	19.50	Not required	19.50	Not required	22.5	Not required
		157	5785		19.50			17.50			19.50		22.5			
		165	5825		19.50			17.50			19.50		22.5			
	802.11n-HT40 MCS0	151	5755	Not required	17.50	Not required	Not required	17.20	17.50	95.96	17.50	Not required	17.50	Not required	20.5	Not required
		159	5795		17.50			17.30	17.50	17.50	20.5					
	802.11ac- VHT20 MCS0	149	5745	Not required	19.50	Not required	Not required	17.50	Not required	Not required	19.50	Not required	19.50	Not required	22.5	Not required
		157	5785		19.50			17.50			19.50		22.5			
		165	5825		19.50			17.50			19.50		22.5			
	802.11ac- VHT40 MCS0	151	5755	Not required	17.50	Not required	Not required	17.50	Not required	Not required	17.50	Not required	17.50	Not required	20.5	Not required
		159	5795		17.50			17.50			17.50		20.5			
	802.11ac- VHT80 MCS0	155	5775	Not required	17.00	Not required	Not required	17.00	Not required	Not required	17.00	Not required	17.00	Not required	20.0	Not required
		155	5775		17.00			17.00			17.00		20.0			

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

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

BT Duty cycle



Date: 17.DEC.2020 20:42:49





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

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



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

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