



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



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



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



Ant 1								
GSM850 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	31.61	31.95	31.55	33.30	22.61	22.95	22.55	24.30
GPRS 1 Tx slot	31.63	31.96	31.55	33.30	22.63	22.96	22.55	24.30
GPRS 2 Tx slots	28.86	28.92	28.70	30.30	22.86	22.92	22.70	24.30
GPRS 3 Tx slots	27.06	27.02	26.83	28.50	22.80	22.76	22.57	24.24
GPRS 4 Tx slots	25.85	25.90	25.60	27.30	22.85	22.90	22.60	24.30
EDGE 1 Tx slot	25.62	25.80	25.60	27.50	16.62	16.80	16.60	18.50
EDGE 2 Tx slots	25.59	25.52	25.39	27.00	19.59	19.52	19.39	21.00
EDGE 3 Tx slots	23.72	23.94	23.72	25.00	19.46	19.68	19.46	20.74
EDGE 4 Tx slots	21.55	21.90	21.39	23.00	18.55	18.90	18.39	20.00
Ant 0								
GSM1900 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	29.39	29.75	29.46	30.00	20.39	20.75	20.46	21.00
GPRS 1 Tx slot	29.40	29.77	29.47	30.00	20.40	20.77	20.47	21.00
GPRS 2 Tx slots	28.79	29.00	28.76	29.20	22.79	23.00	22.76	23.20
GPRS 3 Tx slots	27.24	27.48	27.24	27.50	22.98	23.22	22.98	23.24
GPRS 4 Tx slots	26.14	26.20	25.61	26.50	23.14	23.20	22.61	23.50
EDGE 1 Tx slot	25.56	25.65	25.47	26.00	16.56	16.65	16.47	17.00
EDGE 2 Tx slots	25.25	25.11	24.91	25.50	19.25	19.11	18.91	19.50
EDGE 3 Tx slots	24.00	23.73	23.58	24.50	19.74	19.47	19.32	20.24
EDGE 4 Tx slots	22.87	23.11	22.03	23.50	19.87	20.11	19.03	20.50



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



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



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



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





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



Ant 1								
GSM850 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	31.61	31.95	31.55	32.50	22.61	22.95	22.55	23.50
GPRS 1 Tx slot	31.63	31.96	31.55	32.50	22.63	22.96	22.55	23.50
GPRS 2 Tx slots	28.86	28.92	28.70	29.50	22.86	22.92	22.70	23.50
GPRS 3 Tx slots	27.06	27.02	26.83	27.70	22.80	22.76	22.57	23.44
GPRS 4 Tx slots	25.85	25.90	25.60	26.50	22.85	22.90	22.60	23.50
EDGE 1 Tx slot	25.62	25.80	25.60	27.50	16.62	16.80	16.60	18.50
EDGE 2 Tx slots	25.59	25.52	25.39	27.00	19.59	19.52	19.39	21.00
EDGE 3 Tx slots	23.72	23.94	23.72	25.00	19.46	19.68	19.46	20.74
EDGE 4 Tx slots	21.55	21.90	21.39	23.00	18.55	18.90	18.39	20.00
Ant 0								
GSM1900 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	29.39	29.75	29.46	30.00	20.39	20.75	20.46	21.00
GPRS 1 Tx slot	29.40	29.77	29.47	30.00	20.40	20.77	20.47	21.00
GPRS 2 Tx slots	28.79	29.00	28.76	29.20	22.79	23.00	22.76	23.20
GPRS 3 Tx slots	27.24	27.48	27.24	27.50	22.98	23.22	22.98	23.24
GPRS 4 Tx slots	26.14	26.20	25.61	26.50	23.14	23.20	22.61	23.50
EDGE 1 Tx slot	25.56	25.65	25.47	26.00	16.56	16.65	16.47	17.00
EDGE 2 Tx slots	25.25	25.11	24.91	25.50	19.25	19.11	18.91	19.50
EDGE 3 Tx slots	24.00	23.73	23.58	24.50	19.74	19.47	19.32	20.24
EDGE 4 Tx slots	22.87	23.11	22.03	23.50	19.87	20.11	19.03	20.50



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



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



Transmit Antenna		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538	1312		1413	1513	4132		4182	4233		
Rx Channel	9662	9800	9938	1537		1638	1738	4357		4407	4458		
Frequency (MHz)		1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	AMR 12.2Kbps	24.75	24.95	25.07	25.70	24.77	24.92	24.95	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.76	24.95	25.08	25.70	24.80	24.93	24.96	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	24.19	23.99	24.03	24.70	23.85	23.91	23.95	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	24.16	24.00	24.06	24.70	23.85	23.91	23.93	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	23.64	23.48	23.55	24.20	23.38	23.38	23.46	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	23.70	23.52	23.54	24.20	23.35	23.39	23.46	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	24.14	23.95	23.94	24.70	23.79	23.89	23.92	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	24.14	23.94	23.96	24.70	23.80	23.82	23.92	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.58	23.44	23.50	24.20	23.28	23.33	23.38	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.67	23.45	23.47	24.20	23.29	23.29	23.37	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	23.80	23.98	24.01	24.70	23.97	23.95	24.03	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	21.81	21.61	21.69	22.70	21.45	21.48	21.61	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	22.76	22.58	22.64	23.70	22.50	22.58	22.63	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	21.82	21.59	21.66	22.70	21.52	21.50	21.60	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	23.80	23.55	23.65	24.70	23.50	24.00	23.60	24.70	23.30	23.40	23.22	24.00



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



Transmit Antenna		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538	1312		1413	1513	4132		4182	4233		
Rx Channel	9662	9800	9938	1537		1638	1738	4357		4407	4458		
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	24.75	24.95	25.07	25.70	24.77	24.92	24.95	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.76	24.95	25.08	25.70	24.80	24.93	24.96	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	24.19	23.99	24.03	24.70	23.85	23.91	23.95	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	24.16	24.00	24.06	24.70	23.85	23.91	23.93	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	23.64	23.48	23.55	24.20	23.38	23.38	23.46	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	23.70	23.52	23.54	24.20	23.35	23.39	23.46	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	24.14	23.95	23.94	24.70	23.79	23.89	23.92	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	24.14	23.94	23.96	24.70	23.80	23.82	23.92	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.58	23.44	23.50	24.20	23.28	23.33	23.38	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.67	23.45	23.47	24.20	23.29	23.29	23.37	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	23.80	23.98	24.01	24.70	23.97	23.95	24.03	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	21.81	21.61	21.69	22.70	21.45	21.48	21.61	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	22.76	22.58	22.64	23.70	22.50	22.58	22.63	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	21.82	21.59	21.66	22.70	21.52	21.50	21.60	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	23.80	23.55	23.65	24.70	23.50	24.00	23.60	24.70	23.30	23.40	23.22	24.00



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





Transmit Antenna		Ant 2			Ant 2			Ant 0					
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938	1537	1638	1738	4357	4407	4458			
Frequency (MHz)		1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	AMR 12.2Kbps	24.02	24.20	24.20	25.50	24.38	24.41	24.44	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.02	24.21	24.22	25.50	24.39	24.44	24.45	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.20	23.21	24.50	23.40	23.40	23.42	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	23.42	23.15	23.20	24.50	23.36	23.43	23.46	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.68	22.73	24.00	22.88	22.89	22.93	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	22.90	22.71	22.73	24.00	22.85	22.92	22.92	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.34	23.20	23.16	24.50	23.34	23.32	23.39	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.33	23.05	23.10	24.50	23.29	23.37	23.37	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.79	22.60	22.68	24.00	22.81	22.86	22.87	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.89	22.66	22.65	24.00	22.78	22.87	22.88	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	22.88	23.14	23.19	24.50	23.35	23.38	23.41	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	20.69	20.68	22.50	20.98	20.90	21.01	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	21.88	21.69	21.74	23.50	21.94	21.98	22.08	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	20.71	20.77	22.50	20.97	20.99	21.04	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	22.70	22.70	24.50	23.00	23.00	23.00	24.70	23.30	23.40	23.22	24.00



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



Transmit Antenna		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538	1312		1413	1513	4132		4182	4233		
Rx Channel	9662	9800	9938	1537	1638	1738	4357	4407	4458				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	24.02	24.20	24.20	24.70	24.38	24.41	24.44	25.20	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.02	24.21	24.22	24.70	24.39	24.44	24.45	25.20	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.20	23.21	23.70	23.40	23.40	23.42	24.20	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	23.42	23.15	23.20	23.70	23.36	23.43	23.46	24.20	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.68	22.73	23.20	22.88	22.89	22.93	23.70	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	22.90	22.71	22.73	23.20	22.85	22.92	22.92	23.70	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.34	23.20	23.16	23.70	23.34	23.32	23.39	24.20	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.33	23.05	23.10	23.70	23.29	23.37	23.37	24.20	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.79	22.60	22.68	23.20	22.81	22.86	22.87	23.70	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.89	22.66	22.65	23.20	22.78	22.87	22.88	23.70	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	22.88	23.14	23.19	23.70	23.35	23.38	23.41	24.20	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	20.69	20.68	21.70	20.98	20.90	21.01	22.20	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	21.88	21.69	21.74	22.70	21.94	21.98	22.08	23.20	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	20.71	20.77	21.70	20.97	20.99	21.04	22.20	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	22.70	22.70	23.70	23.00	23.00	23.00	24.20	23.30	23.40	23.22	24.00



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



Transmit Antenna		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538	1312		1413	1513	4132		4182	4233		
Rx Channel	9662	9800	9938	1537		1638	1738	4357		4407	4458		
Frequency (MHz)		1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	AMR 12.2Kbps	24.75	24.95	25.07	25.70	24.77	24.92	24.95	25.70	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.76	24.95	25.08	25.70	24.80	24.93	24.96	25.70	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	24.19	23.99	24.03	24.70	23.85	23.91	23.95	24.70	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	24.16	24.00	24.06	24.70	23.85	23.91	23.93	24.70	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	23.64	23.48	23.55	24.20	23.38	23.38	23.46	24.20	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	23.70	23.52	23.54	24.20	23.35	23.39	23.46	24.20	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	24.14	23.95	23.94	24.70	23.79	23.89	23.92	24.70	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	24.14	23.94	23.96	24.70	23.80	23.82	23.92	24.70	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.58	23.44	23.50	24.20	23.28	23.33	23.38	24.20	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.67	23.45	23.47	24.20	23.29	23.29	23.37	24.20	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	23.80	23.98	24.01	24.70	23.97	23.95	24.03	24.70	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	21.81	21.61	21.69	22.70	21.45	21.48	21.61	22.70	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	22.76	22.58	22.64	23.70	22.50	22.58	22.63	23.70	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	21.82	21.59	21.66	22.70	21.52	21.50	21.60	22.70	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	23.80	23.55	23.65	24.70	23.50	24.00	23.60	24.70	23.30	23.40	23.22	24.00



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



Transmit Antenna		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel	9262	9400	9538	1312		1413	1513	4132		4182	4233		
Rx Channel	9662	9800	9938	1537	1638	1738	4357	4407	4458				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	24.02	24.20	24.20	24.70	24.38	24.41	24.44	25.20	24.33	24.36	24.32	25.00
3GPP Rel 99	RMC 12.2Kbps	24.02	24.21	24.22	24.70	24.39	24.44	24.45	25.20	24.33	24.37	24.33	25.00
3GPP Rel 6	HSDPA Subtest-1	23.38	23.20	23.21	23.70	23.40	23.40	23.42	24.20	23.38	23.37	23.33	24.00
3GPP Rel 6	HSDPA Subtest-2	23.42	23.15	23.20	23.70	23.36	23.43	23.46	24.20	23.07	23.39	23.39	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.68	22.73	23.20	22.88	22.89	22.93	23.70	22.84	22.91	22.80	23.50
3GPP Rel 6	HSDPA Subtest-4	22.90	22.71	22.73	23.20	22.85	22.92	22.92	23.70	22.79	22.84	22.88	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.34	23.20	23.16	23.70	23.34	23.32	23.39	24.20	23.35	23.36	23.26	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.33	23.05	23.10	23.70	23.29	23.37	23.37	24.20	22.99	23.37	23.36	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.79	22.60	22.68	23.20	22.81	22.86	22.87	23.70	22.81	22.86	22.75	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.89	22.66	22.65	23.20	22.78	22.87	22.88	23.70	22.79	22.74	22.79	23.50
3GPP Rel 6	HSUPA Subtest-1	22.88	23.14	23.19	23.70	23.35	23.38	23.41	24.20	23.32	23.35	23.31	24.00
3GPP Rel 6	HSUPA Subtest-2	20.89	20.69	20.68	21.70	20.98	20.90	21.01	22.20	21.29	21.29	21.28	22.00
3GPP Rel 6	HSUPA Subtest-3	21.88	21.69	21.74	22.70	21.94	21.98	22.08	23.20	22.22	22.37	22.23	23.00
3GPP Rel 6	HSUPA Subtest-4	20.90	20.71	20.77	21.70	20.97	20.99	21.04	22.20	21.35	21.35	21.32	22.00
3GPP Rel 6	HSUPA Subtest-5	22.90	22.70	22.70	23.70	23.00	23.00	23.00	24.20	23.30	23.40	23.22	24.00



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





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



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



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



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



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



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



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



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





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



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



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



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



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. I	Power Middle Ch. J	Power High Ch. K	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.53	24.68	24.96	25.7
20	QPSK	1	49	24.53	24.72	24.75	
20	QPSK	1	99	24.52	24.71	24.80	
20	QPSK	50	0	23.61	23.75	23.86	24.7
20	QPSK	50	24	23.73	23.80	23.86	
20	QPSK	50	50	23.71	23.88	23.97	
20	QPSK	100	0	23.72	23.77	23.87	24.7
20	16QAM	1	0	23.88	24.03	24.14	
20	16QAM	1	49	23.87	24.06	24.07	
20	16QAM	1	99	23.83	24.02	24.16	23.7
20	16QAM	50	0	22.64	22.77	22.88	
20	16QAM	50	24	22.74	22.80	22.88	
20	16QAM	50	50	22.73	22.89	22.97	23.7
20	16QAM	100	0	22.72	22.75	22.89	
20	64QAM	1	0	22.72	22.88	23.02	
20	64QAM	1	49	22.78	22.81	22.11	22.7
20	64QAM	1	99	22.66	22.94	22.63	
20	64QAM	50	0	21.65	21.78	21.34	
20	64QAM	50	24	21.76	21.84	21.35	22.7
20	64QAM	50	50	21.60	21.81	21.61	
20	64QAM	100	0	21.70	21.81	21.42	
Channel				18675	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				1857.5	18800	1902.5	
15	QPSK	1	0	24.54	24.73	24.81	25.7
15	QPSK	1	37	24.56	24.72	24.81	
15	QPSK	1	74	24.59	24.72	24.85	
15	QPSK	36	0	23.64	23.75	23.85	24.7
15	QPSK	36	20	23.74	23.80	23.98	
15	QPSK	36	39	23.72	23.90	23.99	
15	QPSK	75	0	23.71	23.79	23.91	24.7
15	16QAM	1	0	23.80	24.04	24.13	
15	16QAM	1	37	23.88	24.02	24.12	
15	16QAM	1	74	23.88	24.05	24.19	23.7
15	16QAM	36	0	22.62	22.77	22.86	
15	16QAM	36	20	22.71	22.80	22.96	
15	16QAM	36	39	22.72	22.90	22.99	23.7
15	16QAM	75	0	22.72	22.81	22.91	
15	64QAM	1	0	22.74	22.87	22.37	
15	64QAM	1	37	22.78	22.92	22.37	23.7
15	64QAM	1	74	22.63	22.97	22.76	
15	64QAM	36	0	21.67	21.81	21.25	
15	64QAM	36	20	21.77	21.85	21.57	22.7
15	64QAM	36	39	21.68	21.94	21.75	
15	64QAM	75	0	21.73	21.83	21.44	
Channel				18650	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.53	24.68	24.83	25.7
10	QPSK	1	25	24.54	24.73	24.84	
10	QPSK	1	49	24.58	24.76	24.85	
10	QPSK	25	0	23.66	23.76	23.86	24.7
10	QPSK	25	12	23.72	23.81	23.91	
10	QPSK	25	25	23.71	23.90	24.02	
10	QPSK	50	0	23.69	23.80	23.93	24.7
10	16QAM	1	0	23.92	24.09	24.18	
10	16QAM	1	25	23.93	24.12	24.27	
10	16QAM	1	49	23.94	24.12	24.24	23.7
10	16QAM	25	0	22.64	22.75	22.85	
10	16QAM	25	12	22.71	22.82	22.91	
10	16QAM	25	25	22.72	22.87	23.02	23.7
10	16QAM	50	0	22.69	22.80	22.92	
10	64QAM	1	0	22.84	22.95	22.38	
10	64QAM	1	25	22.85	23.07	22.89	23.7
10	64QAM	1	49	22.84	23.07	22.84	
10	64QAM	25	0	21.69	21.78	21.47	
10	64QAM	25	12	21.76	21.85	21.75	22.7
10	64QAM	25	25	21.74	21.92	21.76	
10	64QAM	50	0	21.71	21.82	21.56	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				1852.5	18800	1902.5	
5	QPSK	1	0	24.55	24.66	24.86	25.7
5	QPSK	1	12	24.62	24.80	24.92	
5	QPSK	1	24	24.60	24.81	24.95	
5	QPSK	12	0	23.68	23.77	23.98	24.7
5	QPSK	12	7	23.70	23.90	24.00	
5	QPSK	12	13	23.68	23.90	24.03	
5	QPSK	25	0	23.67	23.80	23.98	24.7
5	16QAM	1	0	23.86	23.97	24.26	
5	16QAM	1	12	23.90	24.09	24.24	
5	16QAM	1	24	23.94	24.12	24.28	23.7
5	16QAM	12	0	22.68	22.82	23.00	
5	16QAM	12	7	22.71	22.94	23.02	
5	16QAM	12	13	22.72	22.88	23.03	23.7
5	16QAM	25	0	22.71	22.81	23.04	
5	64QAM	1	0	22.87	22.98	22.73	
5	64QAM	1	12	22.80	23.03	22.88	23.7
5	64QAM	1	24	22.87	23.06	22.75	
5	64QAM	12	0	21.73	21.85	21.81	
5	64QAM	12	7	21.79	21.95	21.84	22.7
5	64QAM	12	13	21.75	21.92	21.72	
5	64QAM	25	0	21.68	21.82	21.64	
Channel				18615	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				1851.5	18800	1908.5	
3	QPSK	1	0	24.55	24.69	24.88	25.7
3	QPSK	1	8	24.64	24.83	24.95	
3	QPSK	1	14	24.58	24.79	24.93	
3	QPSK	8	0	23.67	23.80	23.97	24.7
3	QPSK	8	4	23.70	23.90	24.01	
3	QPSK	8	7	23.64	23.87	23.99	
3	QPSK	15	0	23.64	23.80	23.99	24.7
3	16QAM	1	0	23.83	23.99	24.18	
3	16QAM	1	8	23.96	24.14	24.25	
3	16QAM	1	14	23.94	24.10	24.25	23.7
3	16QAM	8	0	22.72	22.86	23.05	
3	16QAM	8	4	22.77	22.96	23.06	
3	16QAM	8	7	22.71	22.95	23.06	23.7
3	16QAM	15	0	22.69	22.82	22.99	
3	64QAM	1	0	22.81	23.01	22.83	
3	64QAM	1	8	22.94	23.12	22.86	23.7
3	64QAM	1	14	22.84	23.06	22.70	
3	64QAM	8	0	21.73	21.83	21.74	
3	64QAM	8	4	21.75	21.95	21.76	22.7
3	64QAM	8	7	21.71	21.93	21.68	
3	64QAM	15	0	21.71	21.81	21.66	
Channel				18600	18900	1909.3	Tune-up limit (dbm)
Frequency (MHz)				1850.0	18800	1909.3	
1.4	QPSK	1	0	24.46	24.67	24.82	25.7
1.4	QPSK	1	3	24.54	24.74	24.90	
1.4	QPSK	1	5	24.47	24.69	24.84	
1.4	QPSK	3	0	24.54	24.71	24.84	24.7
1.4	QPSK	3	1	24.58	24.77	24.88	
1.4	QPSK	3	3	24.52	24.73	24.85	
1.4	QPSK	6	0	23.58	23.80	23.99	24.7
1.4	16QAM	1	0	23.82	23.99	24.18	
1.4	16QAM	1	3	23.87	24.13	24.23	
1.4	16QAM	1	5	23.82	24.01	24.17	24.7
1.4	16QAM	3	0	23.60	23.79	23.91	
1.4	16QAM	3	1	23.66	23.85	23.97	
1.4	16QAM	3	3	23.59	23.79	23.88	23.7
1.4	16QAM	6	0	22.65	22.84	22.97	
1.4	64QAM	1	0	22.80	22.92	22.63	
1.4	64QAM	1	3	22.84	23.05	22.68	23.7
1.4	64QAM	1	5	22.77	22.96	22.58	
1.4	64QAM	3	0	22.71	22.93	22.63	
1.4	64QAM	3	1	22.79	22.99	22.69	23.7
1.4	64QAM	3	3	22.74	22.94	22.56	
1.4	64QAM	6	0	21.61	21.82	21.53	



Band 4							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20050	Power Middle Ch / 20175	Power High Ch / 20300	Tune-up limit (dBm)
Channel				1720	1732.5	1745	
Frequency (MHz)							
20	QPSK	1	0	24.42	24.50	24.45	25.7
20	QPSK	1	49	24.32	24.32	24.33	
20	QPSK	1	99	24.31	24.35	24.31	24.7
20	QPSK	50	0	23.47	23.39	23.54	
20	QPSK	50	24	23.51	23.53	23.54	24.7
20	QPSK	50	50	23.46	23.43	23.48	
20	QPSK	100	0	23.50	23.60	23.41	24.7
20	16QAM	1	0	23.78	23.83	23.76	
20	16QAM	1	49	23.66	23.64	23.66	23.7
20	16QAM	1	99	23.69	23.66	23.60	
20	16QAM	50	0	22.49	22.54	22.55	23.7
20	16QAM	50	24	22.52	22.55	22.53	
20	16QAM	50	50	22.46	22.45	22.46	23.7
20	16QAM	100	0	22.49	22.56	22.42	
20	64QAM	1	0	22.24	22.68	22.19	23.7
20	64QAM	1	49	22.53	22.52	22.56	
20	64QAM	1	99	22.58	22.03	22.57	22.7
20	64QAM	50	0	21.50	21.54	21.24	
20	64QAM	50	24	21.54	21.45	21.56	22.7
20	64QAM	50	50	21.47	21.07	21.46	
20	64QAM	100	0	21.54	21.55	21.48	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1747.5	
15	QPSK	1	0	24.44	24.40	24.40	25.7
15	QPSK	1	37	24.29	24.32	24.34	
15	QPSK	1	74	24.31	24.31	24.30	24.7
15	QPSK	36	0	23.55	23.56	23.51	
15	QPSK	36	20	23.49	23.52	23.53	24.7
15	QPSK	36	39	23.44	23.46	23.45	
15	QPSK	75	0	23.49	23.54	23.45	24.7
15	16QAM	1	0	23.73	23.80	23.81	
15	16QAM	1	37	23.59	23.63	23.68	24.7
15	16QAM	1	74	23.63	23.62	23.61	
15	16QAM	36	0	22.53	22.50	22.51	23.7
15	16QAM	36	20	22.47	22.50	22.52	
15	16QAM	36	39	22.45	22.44	22.45	23.7
15	16QAM	75	0	22.49	22.54	22.45	
15	64QAM	1	0	22.25	22.67	22.48	23.7
15	64QAM	1	37	22.54	22.34	22.63	
15	64QAM	1	74	22.53	22.12	22.56	22.7
15	64QAM	36	0	21.55	21.58	21.52	
15	64QAM	36	20	21.48	21.41	21.53	22.7
15	64QAM	36	39	21.45	21.06	21.47	
15	64QAM	75	0	21.49	21.46	21.44	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.39	24.42	24.45	25.7
10	QPSK	1	25	24.35	24.42	24.42	
10	QPSK	1	49	24.36	24.38	24.40	24.7
10	QPSK	25	0	23.45	23.47	23.46	
10	QPSK	25	12	23.50	23.57	23.48	24.7
10	QPSK	25	25	23.52	23.57	23.56	
10	QPSK	50	0	23.53	23.56	23.50	24.7
10	16QAM	1	0	23.73	23.79	23.81	
10	16QAM	1	25	23.73	23.82	23.81	23.7
10	16QAM	1	49	23.75	23.76	23.81	
10	16QAM	25	0	22.47	22.45	22.46	23.7
10	16QAM	25	12	22.51	22.57	22.52	
10	16QAM	25	25	22.49	22.54	22.57	23.7
10	16QAM	50	0	22.50	22.56	22.48	
10	64QAM	1	0	22.08	22.64	22.69	23.7
10	64QAM	1	25	22.65	22.44	22.71	
10	64QAM	1	49	22.67	22.01	22.71	22.7
10	64QAM	25	0	21.44	21.50	21.52	
10	64QAM	25	12	21.51	21.35	21.52	22.7
10	64QAM	25	25	21.51	21.03	21.58	
10	64QAM	50	0	21.53	21.32	21.54	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.37	24.30	24.40	25.7
5	QPSK	1	12	24.46	24.48	24.48	
5	QPSK	1	24	24.43	24.48	24.46	24.7
5	QPSK	12	0	23.48	23.44	23.53	
5	QPSK	12	7	23.52	23.54	23.54	24.7
5	QPSK	12	13	23.51	23.52	23.50	
5	QPSK	25	0	23.46	23.53	23.50	24.7
5	16QAM	1	0	23.70	23.78	23.79	
5	16QAM	1	12	23.74	23.72	23.78	24.7
5	16QAM	1	24	23.77	23.78	23.82	
5	16QAM	12	0	22.50	22.46	22.57	23.7
5	16QAM	12	7	22.53	22.57	22.56	
5	16QAM	12	13	22.54	22.57	22.55	23.7
5	16QAM	25	0	22.51	22.53	22.55	
5	64QAM	1	0	22.06	22.62	22.67	23.7
5	64QAM	1	12	22.43	22.33	22.71	
5	64QAM	1	24	22.74	22.09	22.71	22.7
5	64QAM	12	0	21.11	21.51	21.57	
5	64QAM	12	7	21.40	21.31	21.64	22.7
5	64QAM	12	13	21.55	21.08	21.63	
5	64QAM	25	0	21.35	21.27	21.54	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.38	24.36	24.41	25.7
3	QPSK	1	8	24.46	24.48	24.48	
3	QPSK	1	14	24.40	24.43	24.43	24.7
3	QPSK	8	0	23.46	23.44	23.51	
3	QPSK	8	4	23.52	23.52	23.52	24.7
3	QPSK	8	7	23.46	23.51	23.51	
3	QPSK	15	0	23.46	23.56	23.50	24.7
3	16QAM	1	0	23.70	23.75	23.76	
3	16QAM	1	8	23.79	23.83	23.81	23.7
3	16QAM	1	14	23.74	23.75	23.78	
3	16QAM	8	0	22.52	22.49	22.56	23.7
3	16QAM	8	4	22.59	22.62	22.62	
3	16QAM	8	7	22.58	22.58	22.57	23.7
3	16QAM	15	0	22.50	22.56	22.57	
3	64QAM	1	0	22.01	22.49	22.69	23.7
3	64QAM	1	8	22.30	22.39	22.75	
3	64QAM	1	14	22.40	22.19	22.71	22.7
3	64QAM	8	0	20.99	21.39	21.60	
3	64QAM	8	4	21.16	21.32	21.61	22.7
3	64QAM	8	7	21.27	21.20	21.58	
3	64QAM	15	0	21.14	21.29	21.56	
Channel				19957	20175	20395	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.31	24.33	24.33	25.7
1.4	QPSK	1	3	24.37	24.39	24.42	
1.4	QPSK	1	5	24.30	24.35	24.37	24.7
1.4	QPSK	3	0	24.31	24.35	24.41	
1.4	QPSK	3	1	24.39	24.41	24.43	24.7
1.4	QPSK	3	5	24.35	24.37	24.38	
1.4	QPSK	6	0	23.39	23.42	23.44	24.7
1.4	16QAM	1	0	23.66	23.65	23.69	
1.4	16QAM	1	3	23.71	23.72	23.75	24.7
1.4	16QAM	1	5	23.64	23.66	23.66	
1.4	16QAM	3	0	23.43	23.44	23.47	23.7
1.4	16QAM	3	1	23.49	23.49	23.55	
1.4	16QAM	3	3	23.41	23.45	23.44	23.7
1.4	16QAM	6	0	22.44	22.50	22.52	
1.4	64QAM	1	0	21.95	22.35	22.83	23.7
1.4	64QAM	1	3	22.08	22.32	22.69	
1.4	64QAM	1	5	22.09	22.21	22.63	23.7
1.4	64QAM	3	0	21.99	22.35	22.57	
1.4	64QAM	3	1	22.17	22.46	22.64	22.7
1.4	64QAM	3	3	22.11	22.27	22.61	
1.4	64QAM	6	0	20.96	21.20	21.45	



Band 5							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / 20450	Power Middle Ch / 20525	Power High Ch / 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.88	23.73	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.78	23.73	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.60	23.7
10	16QAM	25	0	22.99	22.74	22.71	
10	16QAM	25	12	22.76	22.72	22.75	
10	16QAM	25	25	22.72	22.76	22.79	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.48	21.77	
10	64QAM	25	0	21.67	21.79	21.76	
10	64QAM	25	12	21.80	21.77	21.68	22.7
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	846.5	
5	QPSK	1	0	24.73	24.60	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.78	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.94	22.62	
5	64QAM	1	12	22.90	22.85	21.90	23.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.60	21.79	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.76	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.78	23.73	23.36	24.7
3	QPSK	8	4	23.88	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.85	22.97	21.74	23.7
3	64QAM	1	14	22.84	22.82	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20525	20633	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.59	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.89	23.86	23.28	
1.4	16QAM	1	3	23.93	23.95	23.38	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.28	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.76	21.72	
1.4	64QAM	3	1	22.68	22.79	21.77	22.7
1.4	64QAM	3	3	22.64	22.79	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	



Band 7							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / 20850	Power Middle Ch / 21100	Power High Ch / 21350	Tune-up limit (dBm)
Channel				2510	2535	2560	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.69	24.76	24.80	25.7
20	QPSK	1	49	24.74	24.81	24.78	
20	QPSK	1	99	24.84	24.83	24.83	
20	QPSK	50	0	23.80	23.87	23.88	24.7
20	QPSK	50	24	23.92	23.91	23.91	
20	QPSK	50	50	23.94	23.92	23.92	
20	QPSK	100	0	23.91	23.89	23.91	
20	16QAM	1	0	24.01	24.09	24.15	24.7
20	16QAM	1	49	24.12	24.17	24.15	
20	16QAM	1	99	24.15	24.21	24.14	
20	16QAM	50	0	22.91	22.87	22.91	23.7
20	16QAM	50	24	22.93	22.92	22.94	
20	16QAM	50	50	22.96	23.02	22.98	
20	16QAM	100	0	22.92	22.90	22.92	
20	64QAM	1	0	22.89	22.95	22.99	23.7
20	64QAM	1	49	22.98	23.07	22.88	
20	64QAM	1	99	23.07	23.13	22.92	
20	64QAM	50	0	21.84	21.92	21.92	22.7
20	64QAM	50	24	21.95	21.95	21.71	
20	64QAM	50	50	21.98	22.04	21.56	
20	64QAM	100	0	21.94	21.92	21.71	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				20825	21100	21375	
15	QPSK	1	0	24.67	24.77	24.82	25.7
15	QPSK	1	37	24.72	24.81	24.81	
15	QPSK	1	74	24.80	24.80	24.83	
15	QPSK	36	0	23.77	23.87	23.90	24.7
15	QPSK	36	20	23.93	23.91	23.91	
15	QPSK	36	39	23.94	24.00	23.95	
15	QPSK	75	0	23.88	23.91	23.88	24.7
15	16QAM	1	0	24.00	24.11	24.14	
15	16QAM	1	37	24.05	24.14	24.15	
15	16QAM	1	74	24.14	24.24	24.13	
15	16QAM	36	0	22.80	22.89	22.90	23.7
15	16QAM	36	20	22.92	22.92	22.90	
15	16QAM	36	39	22.95	23.02	22.95	
15	16QAM	75	0	22.91	22.92	22.89	23.7
15	64QAM	1	0	22.89	23.01	23.01	23.7
15	64QAM	1	37	22.99	23.08	22.38	
15	64QAM	1	74	23.01	23.14	22.69	
15	64QAM	36	0	21.85	21.94	21.72	22.7
15	64QAM	36	20	21.93	21.93	21.52	
15	64QAM	36	39	21.97	22.06	21.58	
15	64QAM	75	0	21.91	21.95	21.57	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				20900	21100	21400	
10	QPSK	1	0	24.68	24.75	24.75	25.7
10	QPSK	1	25	24.64	24.74	24.73	
10	QPSK	1	49	24.71	24.83	24.78	
10	QPSK	25	0	23.84	23.87	23.82	24.7
10	QPSK	25	12	23.88	23.89	23.84	
10	QPSK	25	25	23.85	23.96	23.92	
10	QPSK	50	0	23.88	23.91	23.83	24.7
10	16QAM	1	0	24.04	24.13	24.11	
10	16QAM	1	25	24.04	24.17	24.14	
10	16QAM	1	49	24.13	24.22	24.15	
10	16QAM	25	0	22.85	22.86	22.82	23.7
10	16QAM	25	12	22.86	22.91	22.87	
10	16QAM	25	25	22.89	22.97	22.92	
10	16QAM	50	0	22.87	22.89	22.84	23.7
10	64QAM	1	0	22.97	22.99	22.86	23.7
10	64QAM	1	25	23.00	23.06	22.74	
10	64QAM	1	49	23.01	23.14	22.89	
10	64QAM	25	0	21.88	21.89	21.50	22.7
10	64QAM	25	12	21.92	21.93	21.62	
10	64QAM	25	25	21.92	22.00	21.66	
10	64QAM	50	0	21.92	21.94	21.60	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				20775	21100	21425	
5	QPSK	1	0	24.69	24.75	24.74	25.7
5	QPSK	1	12	24.75	24.80	24.75	
5	QPSK	1	24	24.74	24.80	24.77	
5	QPSK	12	0	23.83	23.88	23.88	24.7
5	QPSK	12	7	23.87	23.86	23.90	
5	QPSK	12	13	23.84	23.98	23.88	
5	QPSK	25	0	23.84	23.85	23.85	24.7
5	16QAM	1	0	24.05	24.10	24.09	
5	16QAM	1	12	24.06	24.16	24.07	
5	16QAM	1	24	24.07	24.17	24.10	
5	16QAM	12	0	22.88	22.91	22.93	23.7
5	16QAM	12	7	22.88	22.93	22.89	
5	16QAM	12	13	22.90	22.97	22.89	
5	16QAM	25	0	22.88	22.89	22.87	23.7
5	64QAM	1	0	23.00	23.00	22.69	
5	64QAM	1	12	22.99	23.08	22.72	
5	64QAM	1	24	23.01	23.10	22.82	
5	64QAM	12	0	21.91	21.94	21.57	22.7
5	64QAM	12	7	21.87	21.95	21.72	
5	64QAM	12	13	21.91	22.03	21.75	
5	64QAM	25	0	21.87	21.90	21.63	





Band 12							
Airtel							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 23050	Power Middle Ch / 23095	Power High Ch / 23130	Tune-up limit (dBm)
Channel				704	707.5	711	
Frequency (MHz)							
10	QPSK	1	0	24.64	24.61	24.63	
10	QPSK	1	25	24.63	24.68	24.65	25.7
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	
10	QPSK	25	12	23.87	23.80	23.78	24.7
10	QPSK	25	25	23.88	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	24.7
10	16QAM	1	49	24.12	24.08	24.07	
10	16QAM	25	0	22.78	22.75	22.77	
10	16QAM	25	12	22.82	22.80	22.78	23.7
10	16QAM	25	25	22.81	22.85	22.79	
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	25	22.78	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.95	22.95	
10	64QAM	25	0	21.78	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	22.7
10	64QAM	25	25	21.82	21.90	21.84	
10	64QAM	50	0	21.83	21.81	21.80	
Channel				23035	23095	23135	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	
5	QPSK	1	12	24.72	24.73	24.71	25.7
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.79	23.78	
5	QPSK	12	7	23.78	23.75	23.81	24.7
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	24.7
5	16QAM	1	24	24.02	24.07	24.03	
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	23.7
5	16QAM	12	13	22.83	22.82	22.80	
5	16QAM	25	0	22.81	22.82	22.75	
5	64QAM	1	0	22.62	22.73	22.91	
5	64QAM	1	12	22.83	22.94	22.94	23.7
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	
5	64QAM	12	7	21.88	21.85	21.88	22.7
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	
3	QPSK	1	8	24.73	24.74	24.73	25.7
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.76	23.73	
3	QPSK	8	4	23.78	23.74	23.77	24.7
3	QPSK	8	7	23.73	23.78	23.75	
3	QPSK	15	0	23.77	23.75	23.73	
3	16QAM	1	0	24.08	24.01	24.02	24.7
3	16QAM	1	8	24.06	24.08	24.08	
3	16QAM	1	14	24.00	24.05	23.98	
3	16QAM	8	0	22.88	22.83	22.82	
3	16QAM	8	4	22.90	22.83	22.87	23.7
3	16QAM	8	7	22.84	22.94	22.83	
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.67	22.90	22.95	23.7
3	64QAM	1	8	22.81	23.01	22.98	
3	64QAM	1	14	22.92	22.95	22.88	
3	64QAM	8	0	21.82	21.81	21.81	
3	64QAM	8	4	21.87	21.84	21.87	22.7
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.65	21.78	21.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.50	24.50	
1.4	QPSK	1	3	24.68	24.67	24.64	25.7
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	
1.4	QPSK	3	1	24.70	24.64	24.68	24.7
1.4	QPSK	3	3	24.64	24.67	24.61	
1.4	QPSK	6	0	23.71	23.74	23.67	
1.4	16QAM	1	0	23.99	23.93	23.96	24.7
1.4	16QAM	1	3	24.02	24.02	23.98	
1.4	16QAM	1	5	23.92	23.94	23.91	24.7
1.4	16QAM	3	0	23.75	23.89	23.89	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.70	23.73	23.65	
1.4	16QAM	6	0	22.78	22.80	22.75	23.7
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.89	23.7
1.4	64QAM	1	5	22.82	22.85	22.81	
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	
1.4	64QAM	3	3	22.83	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	22.7



Band 13							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.23		
10	QPSK	1	25		24.22		25.2
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30		
10	QPSK	25	12		23.34		24.2
10	QPSK	25	25		23.33		
10	QPSK	50	0		23.35		
10	16QAM	1	0		23.56		
10	16QAM	1	25		23.57		24.2
10	16QAM	1	49		23.54		
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		23.2
10	16QAM	25	25		22.38		
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		23.2
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.38		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205			
Frequency (MHz)				779.5			Tune-up limit (dBm)
5	QPSK	1	0	24.23	24.20	24.19	
5	QPSK	1	12	24.28	24.27	24.23	25.2
5	QPSK	1	24	24.30	24.23	24.34	
5	QPSK	12	0	23.38	23.33	23.29	
5	QPSK	12	7	23.41	23.32	23.31	24.2
5	QPSK	12	13	23.38	23.35	23.29	
5	QPSK	25	0	23.37	23.33	23.32	
5	16QAM	1	0	23.51	23.48	23.52	
5	16QAM	1	12	23.50	23.47	23.47	24.2
5	16QAM	1	24	23.59	23.51	23.49	
5	16QAM	12	0	22.43	22.35	22.36	
5	16QAM	12	7	22.42	22.33	22.35	23.2
5	16QAM	12	13	22.40	22.37	22.37	
5	16QAM	25	0	22.43	22.34	22.33	
5	64QAM	1	0	22.14	22.47	22.39	23.2
5	64QAM	1	12	22.50	22.44	22.45	23.2
5	64QAM	1	24	22.47	22.47	22.39	
5	64QAM	12	0	21.47	21.41	21.37	
5	64QAM	12	7	21.47	21.37	21.42	22.2
5	64QAM	12	13	21.44	21.41	21.35	
5	64QAM	25	0	21.41	21.37	21.34	



Band 14							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit [dBm]
Channel				23330	23330		
Frequency (MHz)				753			
10	QPSK	1	0	24.75			25.7
10	QPSK	1	25	24.83			
10	QPSK	1	49	24.57			
10	QPSK	25	0	23.70			24.7
10	QPSK	25	12	23.70			
10	QPSK	25	25	23.71			
10	QPSK	50	0	23.67			24.7
10	16QAM	1	0	24.06			
10	16QAM	1	25	24.04			
10	16QAM	1	49	23.94			23.7
10	16QAM	25	0	22.67			
10	16QAM	25	12	22.68			
10	16QAM	25	25	22.70			23.7
10	16QAM	50	0	22.68			
10	64QAM	1	0	22.93			
10	64QAM	1	25	22.40			23.7
10	64QAM	1	49	22.88			
10	64QAM	25	0	21.60			
10	64QAM	25	12	21.16			22.7
10	64QAM	25	25	21.16			
10	64QAM	50	0	21.36			
Channel				23306	23330	23356	Tune-up limit [dBm]
Frequency (MHz)				700.5 703 705.5			
5	QPSK	1	0	24.62	24.61	24.59	25.7
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.7
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.7
5	16QAM	1	0	23.93	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.7
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.7
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.89	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.7
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.78	21.05	21.11	22.7
5	64QAM	12	13	21.44	20.88	21.83	
5	64QAM	25	0	21.56	21.03	21.17	



Band 17							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.66	24.65	24.61	
10	QPSK	1	25	24.69	24.70	24.71	25.7
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	24.7
10	QPSK	25	12	23.88	23.82	23.79	
10	QPSK	25	25	23.88	23.88	23.88	
10	QPSK	50	0	23.79	23.78	23.79	
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	24.7
10	16QAM	1	49	24.12	24.10	24.09	
10	16QAM	25	0	22.74	22.74	22.73	23.7
10	16QAM	25	12	22.90	22.79	22.81	
10	16QAM	25	25	22.89	22.90	22.82	
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.75	22.88	23.7
10	64QAM	1	25	22.71	22.71	22.85	
10	64QAM	1	49	22.87	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	22.7
10	64QAM	25	12	21.61	21.54	21.52	
10	64QAM	25	25	21.65	21.76	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				23755	23760	23825	Tune-up limit (dBm)
Frequency (MHz)				708.5	710	713.5	
5	QPSK	1	0	24.69	24.66	24.69	
5	QPSK	1	12	24.74	24.79	24.75	25.7
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	24.7
5	QPSK	12	7	23.85	23.81	23.82	
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	
5	16QAM	1	0	23.99	23.98	23.99	24.7
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	
5	16QAM	12	0	22.79	22.83	22.81	23.7
5	16QAM	12	7	22.89	22.86	22.89	
5	16QAM	12	13	22.84	22.86	22.84	
5	16QAM	25	0	22.85	22.83	22.87	
5	64QAM	1	0	22.40	22.44	22.79	23.7
5	64QAM	1	12	22.76	22.60	22.94	
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	22.7
5	64QAM	12	7	21.73	21.52	21.89	
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



Band 25							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 26140	Power Middle Ch / 26340	Power High Ch / 26590	Tune-up limit (dBm)
Channel				1860	1880	1905	
Frequency (MHz)							
20	QPSK	1	0	24.65	24.76	24.91	25.7
20	QPSK	1	49	24.64	24.72	24.82	
20	QPSK	1	99	24.61	24.75	24.23	24.7
20	QPSK	50	0	23.71	23.86	23.94	
20	QPSK	50	24	23.80	23.96	24.01	24.7
20	QPSK	50	50	23.73	23.92	24.00	
20	QPSK	100	0	23.81	23.94	23.97	24.7
20	16QAM	1	0	23.95	24.08	24.19	
20	16QAM	1	49	23.98	24.09	24.15	24.7
20	16QAM	1	99	23.89	24.06	23.60	
20	16QAM	50	0	22.72	22.85	22.96	23.7
20	16QAM	50	24	22.80	22.96	22.98	
20	16QAM	50	50	22.76	22.93	23.05	23.7
20	16QAM	100	0	22.78	22.93	22.94	
20	64QAM	1	0	22.86	22.94	22.43	23.7
20	64QAM	1	49	22.70	22.91	22.94	
20	64QAM	1	99	22.42	22.97	21.74	22.7
20	64QAM	50	0	21.75	21.89	21.33	
20	64QAM	50	24	21.66	22.01	21.58	22.7
20	64QAM	50	50	21.43	21.96	21.32	
20	64QAM	100	0	21.70	21.96	21.16	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
15	QPSK	1	0	24.65	24.77	24.86	25.7
15	QPSK	1	37	24.65	24.76	24.88	
15	QPSK	1	74	24.63	24.77	24.32	24.7
15	QPSK	36	0	23.72	23.86	23.96	
15	QPSK	36	20	23.79	23.95	24.07	24.7
15	QPSK	36	39	23.74	23.89	23.93	
15	QPSK	75	0	23.77	23.94	23.96	24.7
15	16QAM	1	0	23.93	24.07	24.15	
15	16QAM	1	37	23.97	24.09	24.18	24.7
15	16QAM	1	74	23.92	24.10	23.69	
15	16QAM	36	0	22.73	22.87	22.98	23.7
15	16QAM	36	20	22.78	22.96	23.06	
15	16QAM	36	39	22.72	22.80	23.02	23.7
15	16QAM	75	0	22.77	22.94	22.98	
15	64QAM	1	0	22.83	22.92	22.34	23.7
15	64QAM	1	37	22.88	22.97	22.77	
15	64QAM	1	74	22.42	22.97	21.81	22.7
15	64QAM	36	0	21.77	21.92	21.56	
15	64QAM	36	20	21.82	21.98	21.69	22.7
15	64QAM	36	39	21.58	21.93	21.28	
15	64QAM	75	0	21.79	21.95	21.27	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	24.65	24.70	24.89	25.7
10	QPSK	1	25	24.55	24.70	24.90	
10	QPSK	1	49	24.60	24.75	24.20	24.7
10	QPSK	25	0	23.74	23.81	23.94	
10	QPSK	25	12	23.79	23.93	24.00	24.7
10	QPSK	25	25	23.79	23.93	23.65	
10	QPSK	50	0	23.78	23.93	23.95	24.7
10	16QAM	1	0	23.98	24.12	24.22	
10	16QAM	1	25	23.98	24.13	24.27	24.7
10	16QAM	1	49	23.98	24.13	23.58	
10	16QAM	25	0	22.76	22.83	22.96	23.7
10	16QAM	25	12	22.80	22.95	22.97	
10	16QAM	25	25	22.76	22.90	22.84	23.7
10	16QAM	50	0	22.78	22.91	22.97	
10	64QAM	1	0	22.91	22.95	22.66	23.7
10	64QAM	1	25	22.82	23.05	22.53	
10	64QAM	1	49	22.81	23.07	21.74	22.7
10	64QAM	25	0	21.79	21.82	21.62	
10	64QAM	25	12	21.84	21.96	21.46	22.7
10	64QAM	25	25	21.82	21.93	21.00	
10	64QAM	50	0	21.76	21.94	21.20	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.60	24.72	24.90	25.7
5	QPSK	1	12	24.65	24.84	24.43	
5	QPSK	1	24	24.64	24.80	24.08	24.7
5	QPSK	12	0	23.72	23.83	23.86	
5	QPSK	12	7	23.79	23.91	23.61	24.7
5	QPSK	12	13	23.78	23.94	23.38	
5	QPSK	25	0	23.74	23.90	23.55	24.7
5	16QAM	1	0	24.03	24.05	24.22	
5	16QAM	1	12	23.94	24.12	23.81	24.7
5	16QAM	1	24	23.97	24.15	23.46	
5	16QAM	12	0	22.74	22.86	22.99	23.7
5	16QAM	12	7	22.81	22.95	22.77	
5	16QAM	12	13	22.82	22.96	22.55	23.7
5	16QAM	25	0	22.79	22.90	22.73	
5	64QAM	1	0	22.86	23.00	22.35	23.7
5	64QAM	1	12	22.84	23.00	21.93	
5	64QAM	1	24	22.86	23.03	21.55	22.7
5	64QAM	12	0	21.76	21.92	21.17	
5	64QAM	12	7	21.84	21.99	21.00	22.7
5	64QAM	12	13	21.88	22.00	20.74	
5	64QAM	25	0	21.81	21.93	20.87	
Channel				26065	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.54	24.63	24.53	25.7
3	QPSK	1	8	24.69	24.83	24.34	
3	QPSK	1	14	24.67	24.83	24.09	24.7
3	QPSK	8	0	23.69	23.80	23.60	
3	QPSK	8	4	23.78	23.90	23.48	24.7
3	QPSK	8	7	23.75	23.89	23.37	
3	QPSK	15	0	23.72	23.90	23.43	24.7
3	16QAM	1	0	23.90	23.95	23.83	
3	16QAM	1	8	24.00	24.20	23.68	24.7
3	16QAM	1	14	23.99	24.16	23.42	
3	16QAM	8	0	22.76	22.89	22.72	23.7
3	16QAM	8	4	22.82	22.96	22.61	
3	16QAM	8	7	22.81	22.99	22.48	23.7
3	16QAM	15	0	22.79	22.91	22.56	
3	64QAM	1	0	22.80	22.87	21.94	23.7
3	64QAM	1	8	22.93	23.11	21.80	
3	64QAM	1	14	22.90	23.08	21.57	22.7
3	64QAM	8	0	21.76	21.90	20.85	
3	64QAM	8	4	21.84	22.00	20.77	22.7
3	64QAM	8	7	21.83	21.99	20.64	
3	64QAM	15	0	21.79	21.92	20.73	
Channel				26047	26340	26658	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	24.51	24.66	24.19	25.7
1.4	QPSK	1	3	24.62	24.74	24.13	
1.4	QPSK	1	5	24.59	24.76	24.02	24.7
1.4	QPSK	3	0	24.56	24.71	24.13	
1.4	QPSK	3	1	24.63	24.77	24.17	24.7
1.4	QPSK	3	5	24.59	24.77	24.04	
1.4	QPSK	6	0	23.67	23.83	23.21	24.7
1.4	16QAM	1	0	23.80	23.98	23.48	
1.4	16QAM	1	3	23.99	24.12	23.47	24.7
1.4	16QAM	1	5	23.94	24.09	23.36	
1.4	16QAM	3	0	23.60	23.77	23.31	23.7
1.4	16QAM	3	1	23.70	23.85	23.31	
1.4	16QAM	3	3	23.65	23.82	23.22	23.7
1.4	16QAM	6	0	22.73	22.90	22.41	
1.4	64QAM	1	0	22.77	22.91	21.92	23.7
1.4	64QAM	1	3	22.85	23.04	21.85	
1.4	64QAM	1	5	22.79	22.99	22.00	23.7
1.4	64QAM	3	0	22.72	22.92	21.81	
1.4	64QAM	3	1	22.80	22.97	21.76	
1.4	64QAM	3	3	22.78	22.96	21.73	22.7
1.4	64QAM	6	0	21.67	21.85	20.79	



Band 26							
Airtel							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.76	24.52	24.57	25.7
15	QPSK	1	37	24.46	24.51	24.50	
15	QPSK	1	74	24.49	24.48	24.27	24.7
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	24.7
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	23.7
15	16QAM	1	74	23.81	23.85	23.82	
15	16QAM	36	0	22.63	22.66	22.67	23.7
15	16QAM	36	20	22.65	22.61	22.60	
15	16QAM	36	39	22.59	22.65	22.62	23.7
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	23.7
15	64QAM	1	37	22.70	22.80	22.76	
15	64QAM	1	74	22.69	22.72	22.70	22.7
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	22.7
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	
Channel				26740	26865	26990	
Frequency (MHz)				810	831.5	844	
10	QPSK	1	0	24.72	24.50	24.80	25.7
10	QPSK	1	25	24.57	24.55	24.59	
10	QPSK	1	49	24.60	24.64	24.38	24.7
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	24.7
10	16QAM	1	0	24.07	23.98	23.98	
10	16QAM	1	25	23.94	24.01	23.97	24.7
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.89	22.66	23.7
10	16QAM	25	12	22.76	22.71	22.67	
10	16QAM	25	25	22.64	22.63	22.63	23.7
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	23.7
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	22.7
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.78	21.69	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.68	21.50	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	25.7
5	QPSK	1	12	24.72	24.63	24.47	
5	QPSK	1	24	24.56	24.64	24.43	24.7
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.80	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	24.7
5	16QAM	1	0	24.09	23.94	23.99	
5	16QAM	1	12	24.00	23.97	23.85	23.7
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	23.7
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.66	22.44	23.7
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.50	22.83	23.7
5	64QAM	1	12	22.80	22.86	22.03	
5	64QAM	1	24	22.81	22.86	21.86	22.7
5	64QAM	12	0	21.83	21.78	21.45	
5	64QAM	12	7	21.84	21.81	21.00	22.7
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				26706	26865	27026	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.52	25.7
3	QPSK	1	8	24.75	24.69	24.16	
3	QPSK	1	14	24.63	24.66	24.26	24.7
3	QPSK	8	0	23.83	23.68	23.39	
3	QPSK	8	4	23.77	23.72	23.28	24.7
3	QPSK	8	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	24.7
3	16QAM	1	0	24.09	23.91	23.81	
3	16QAM	1	8	24.06	24.06	23.47	24.7
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	8	0	22.86	22.77	22.54	23.7
3	16QAM	8	4	22.88	22.77	22.42	
3	16QAM	8	7	22.78	22.76	22.45	23.7
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.83	22.00	23.7
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	22.7
3	64QAM	8	0	21.79	21.74	20.85	
3	64QAM	8	4	21.88	21.81	20.77	22.7
3	64QAM	8	7	21.81	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	25.7
1.4	QPSK	1	3	24.71	24.63	24.26	
1.4	QPSK	1	5	24.61	24.55	24.29	24.7
1.4	QPSK	3	0	24.69	24.55	24.17	
1.4	QPSK	3	1	24.74	24.58	24.22	24.7
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	24.7
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.96	23.59	24.7
1.4	16QAM	1	5	23.93	23.86	23.65	
1.4	16QAM	3	0	23.75	23.65	23.27	23.7
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	23.7
1.4	16QAM	6	0	22.82	22.75	22.46	
1.4	64QAM	1	0	22.74	22.76	21.86	23.7
1.4	64QAM	1	3	22.88	22.86	21.90	
1.4	64QAM	1	5	22.86	22.78	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	22.7
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	



Band 30							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	23.02			23.7
10	QPSK	1	25	23.01			
10	QPSK	1	49	22.92			
10	QPSK	25	0	21.96			22.7
10	QPSK	25	12	22.00			
10	QPSK	25	25	22.11			
10	QPSK	50	0	22.00			22.7
10	16QAM	1	0	22.30			
10	16QAM	1	25	22.28			
10	16QAM	1	49	22.31			21.7
10	16QAM	25	0	20.98			
10	16QAM	25	12	20.98			
10	16QAM	25	25	21.11			21.7
10	16QAM	50	0	20.98			
10	64QAM	1	0	21.18			
10	64QAM	1	25	21.21			21.7
10	64QAM	1	49	21.22			
10	64QAM	25	0	19.98			
10	64QAM	25	12	20.04			20.7
10	64QAM	25	25	20.13			
10	64QAM	50	0	20.02			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.85	22.85	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.98	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.14	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch1	Power Middle Ch1	Power High Ch1	Tune-up limit (dBm)
Channel				132972	132972	132972	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	24.35	24.39	24.57	25.7
20	QPSK	1	49	24.22	24.27	24.30	
20	QPSK	1	99	24.34	24.32	24.26	24.7
20	QPSK	50	0	23.40	23.47	23.49	
20	QPSK	50	24	23.46	23.43	23.47	24.7
20	QPSK	50	50	23.47	23.48	23.50	
20	QPSK	100	0	23.46	23.40	23.47	24.7
20	16QAM	1	0	23.67	23.74	23.76	
20	16QAM	1	49	23.56	23.64	23.63	24.7
20	16QAM	1	99	23.70	23.64	23.60	
20	16QAM	50	0	22.37	22.46	22.54	23.7
20	16QAM	50	24	22.46	22.43	22.47	
20	16QAM	50	50	22.44	22.47	22.51	23.7
20	16QAM	100	0	22.44	22.41	22.48	
20	64QAM	1	0	22.46	22.43	22.61	23.7
20	64QAM	1	49	22.44	22.57	22.12	
20	64QAM	1	99	22.58	22.59	22.49	22.7
20	64QAM	50	0	21.39	21.48	21.51	
20	64QAM	50	24	21.48	21.45	21.31	22.7
20	64QAM	50	50	21.45	21.49	21.54	
20	64QAM	100	0	21.49	21.46	21.48	
Channel				132947	132922	132972	
Frequency (MHz)				1772.5	1741	1772.5	
15	QPSK	1	0	24.30	24.41	24.38	25.7
15	QPSK	1	37	24.21	24.29	24.33	
15	QPSK	1	74	24.34	24.36	24.31	24.7
15	QPSK	36	0	23.37	23.44	23.49	
15	QPSK	36	20	23.43	23.43	23.47	24.7
15	QPSK	36	39	23.42	23.48	23.52	
15	QPSK	75	0	23.44	23.43	23.47	24.7
15	16QAM	1	0	23.60	23.74	23.73	
15	16QAM	1	37	23.56	23.63	23.68	24.7
15	16QAM	1	74	23.64	23.66	23.65	
15	16QAM	36	0	22.36	22.46	22.49	23.7
15	16QAM	36	20	22.42	22.40	22.45	
15	16QAM	36	39	22.42	22.46	22.50	23.7
15	16QAM	75	0	22.46	22.41	22.45	
15	64QAM	1	0	22.46	22.59	22.58	23.7
15	64QAM	1	37	22.47	22.56	22.44	
15	64QAM	1	74	22.55	22.58	22.57	22.7
15	64QAM	36	0	21.38	21.49	21.21	
15	64QAM	36	20	21.43	21.44	21.46	22.7
15	64QAM	36	39	21.45	21.50	21.52	
15	64QAM	75	0	21.44	21.42	21.47	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	24.37	24.44	24.45	25.7
10	QPSK	1	25	24.30	24.40	24.44	
10	QPSK	1	49	24.30	24.39	24.41	24.7
10	QPSK	25	0	23.41	23.46	23.49	
10	QPSK	25	12	23.45	23.49	23.49	24.7
10	QPSK	25	25	23.44	23.50	23.57	
10	QPSK	50	0	23.46	23.47	23.49	24.7
10	16QAM	1	0	23.72	23.82	23.84	
10	16QAM	1	25	23.70	23.79	23.81	24.7
10	16QAM	1	49	23.73	23.76	23.81	
10	16QAM	25	0	22.48	22.47	22.50	23.7
10	16QAM	25	12	22.48	22.47	22.52	
10	16QAM	25	25	22.41	22.50	22.55	23.7
10	16QAM	50	0	22.45	22.46	22.48	
10	64QAM	1	0	22.37	22.61	22.08	23.7
10	64QAM	1	25	22.61	22.7	22.76	
10	64QAM	1	49	22.61	22.67	22.73	22.7
10	64QAM	25	0	21.45	21.49	21.49	
10	64QAM	25	12	21.48	21.51	21.55	22.7
10	64QAM	25	25	21.45	21.53	21.60	
10	64QAM	50	0	21.47	21.49	21.52	
Channel				131667	132322	132627	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	24.35	24.40	24.40	25.7
5	QPSK	1	12	24.39	24.49	24.52	
5	QPSK	1	24	24.33	24.43	24.46	24.7
5	QPSK	12	0	23.44	23.46	23.59	
5	QPSK	12	7	23.47	23.56	23.59	24.7
5	QPSK	12	13	23.44	23.53	23.57	
5	QPSK	25	0	23.43	23.45	23.55	24.7
5	16QAM	1	0	23.75	23.73	23.80	
5	16QAM	1	12	23.73	23.81	23.84	24.7
5	16QAM	1	24	23.67	23.78	23.80	
5	16QAM	12	0	22.46	22.51	22.62	23.7
5	16QAM	12	7	22.50	22.61	22.64	
5	16QAM	12	13	22.47	22.57	22.58	23.7
5	16QAM	25	0	22.46	22.48	22.59	
5	64QAM	1	0	22.41	22.71	22.81	23.7
5	64QAM	1	12	22.64	22.73	22.77	
5	64QAM	1	24	22.65	22.75	22.73	22.7
5	64QAM	12	0	21.47	21.53	21.64	
5	64QAM	12	7	21.53	21.61	21.64	22.7
5	64QAM	12	13	21.49	21.55	21.60	
5	64QAM	25	0	21.44	21.49	21.59	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1776.5	
3	QPSK	1	0	24.38	24.42	24.50	25.7
3	QPSK	1	8	24.40	24.52	24.56	
3	QPSK	1	14	24.35	24.45	24.48	24.7
3	QPSK	8	0	23.45	23.49	23.55	
3	QPSK	8	4	23.47	23.53	23.57	24.7
3	QPSK	8	7	23.43	23.52	23.54	
3	QPSK	15	0	23.44	23.49	23.57	24.7
3	16QAM	1	0	23.70	23.70	23.82	
3	16QAM	1	8	23.78	23.83	23.87	24.7
3	16QAM	1	14	23.66	23.76	23.81	
3	16QAM	8	0	22.50	22.53	22.65	23.7
3	16QAM	8	4	22.55	22.61	22.63	
3	16QAM	8	7	22.51	22.58	22.59	23.7
3	16QAM	15	0	22.47	22.49	22.58	
3	64QAM	1	0	22.40	22.69	22.78	23.7
3	64QAM	1	8	22.70	22.80	22.81	
3	64QAM	1	14	22.67	22.73	22.75	22.7
3	64QAM	8	0	21.39	21.53	21.65	
3	64QAM	8	4	21.53	21.64	21.66	22.7
3	64QAM	8	7	21.50	21.58	21.58	
3	64QAM	15	0	21.48	21.49	21.62	
Channel				131019	132322	132655	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	24.27	24.39	24.43	25.7
1.4	QPSK	1	3	24.30	24.40	24.49	
1.4	QPSK	1	5	24.22	24.37	24.41	24.7
1.4	QPSK	3	0	24.33	24.43	24.44	
1.4	QPSK	3	1	24.35	24.47	24.48	24.7
1.4	QPSK	3	5	24.27	24.36	24.42	
1.4	QPSK	6	0	23.38	23.43	23.48	24.7
1.4	16QAM	1	0	23.59	23.73	23.75	
1.4	16QAM	1	3	23.65	23.80	23.83	24.7
1.4	16QAM	1	5	23.59	23.73	23.76	
1.4	16QAM	3	0	23.40	23.55	23.53	23.7
1.4	16QAM	3	1	23.46	23.57	23.55	
1.4	16QAM	3	1	23.36	23.50	23.50	23.7
1.4	16QAM	6	0	22.44	21.83	22.58	
1.4	64QAM	1	0	22.30	21.79	22.64	23.7
1.4	64QAM	1	3	22.41	21.72	22.74	
1.4	64QAM	1	5	22.41	21.82	22.67	23.7
1.4	64QAM	3	0	22.31	21.74	22.62	
1.4	64QAM	3	1	22.44	21.79	22.66	23.7
1.4	64QAM	3	3	22.43	21.73	22.61	
1.4	64QAM	6	0	21.21	20.71	21.51	22.7





Band 71							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch1	Power Middle Ch1	Power High Ch1	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.77	24.67	24.68	25.7
20	QPSK	1	49	24.65	24.85	24.85	
20	QPSK	1	99	24.68	24.66	24.61	
20	QPSK	50	0	23.78	23.76	23.72	24.7
20	QPSK	50	24	23.80	23.74	23.73	
20	QPSK	50	50	23.84	23.78	23.75	
20	QPSK	100	0	23.79	23.71	23.77	24.7
20	16QAM	1	0	24.06	23.96	24.00	
20	16QAM	1	49	24.01	24.03	24.04	
20	16QAM	1	99	24.03	24.61	23.95	23.7
20	16QAM	50	0	22.77	22.75	22.75	
20	16QAM	50	24	22.82	22.77	22.73	
20	16QAM	50	50	22.82	22.77	22.76	23.7
20	16QAM	100	0	22.79	22.73	22.78	
20	64QAM	1	0	22.04	22.83	22.82	
20	64QAM	1	49	22.63	22.90	22.29	23.7
20	64QAM	1	99	22.94	22.89	22.87	
20	64QAM	50	0	21.00	21.79	21.49	
20	64QAM	50	24	21.30	21.64	21.57	22.7
20	64QAM	50	50	21.84	21.60	21.74	
20	64QAM	100	0	21.53	21.76	21.80	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.74	24.65	24.63	25.7
15	QPSK	1	37	24.62	24.68	24.61	
15	QPSK	1	74	24.65	24.68	24.64	
15	QPSK	36	0	23.73	23.71	23.69	24.7
15	QPSK	36	20	23.80	23.73	23.78	
15	QPSK	36	39	23.73	23.76	23.74	
15	QPSK	75	0	23.81	23.74	23.68	24.7
15	16QAM	1	0	24.05	24.01	23.98	
15	16QAM	1	37	23.95	24.02	24.00	
15	16QAM	1	74	23.97	24.00	23.98	23.7
15	16QAM	36	0	22.76	22.75	22.71	
15	16QAM	36	20	22.79	22.74	22.79	
15	16QAM	36	39	22.71	22.76	22.75	23.7
15	16QAM	75	0	22.83	22.73	22.70	
15	64QAM	1	0	22.02	22.43	22.76	
15	64QAM	1	37	21.86	22.94	22.88	23.7
15	64QAM	1	74	22.88	22.60	22.84	
15	64QAM	36	0	20.97	21.77	21.44	
15	64QAM	36	20	20.94	21.76	21.81	22.7
15	64QAM	36	39	21.48	21.56	21.78	
15	64QAM	75	0	21.29	21.75	21.67	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.76	24.64	24.66	25.7
10	QPSK	1	25	24.61	24.62	24.63	
10	QPSK	1	49	24.66	24.71	24.62	
10	QPSK	25	0	23.73	23.71	23.69	24.7
10	QPSK	25	12	23.79	23.82	23.70	
10	QPSK	25	25	23.72	23.78	23.74	
10	QPSK	50	0	23.80	23.81	23.71	24.7
10	16QAM	1	0	24.10	24.02	24.04	
10	16QAM	1	25	23.98	24.06	24.00	
10	16QAM	1	49	23.98	24.07	23.96	23.7
10	16QAM	25	0	22.78	22.70	22.68	
10	16QAM	25	12	22.78	22.81	22.68	
10	16QAM	25	25	22.65	22.77	22.73	23.7
10	16QAM	50	0	22.79	22.80	22.69	
10	64QAM	1	0	21.80	22.30	22.77	
10	64QAM	1	25	22.01	22.95	22.95	23.7
10	64QAM	1	49	22.14	22.98	22.45	
10	64QAM	25	0	20.82	21.71	21.71	
10	64QAM	25	12	20.84	21.84	21.76	22.7
10	64QAM	25	25	20.71	21.81	21.64	
10	64QAM	50	0	20.83	21.77	21.69	
Channel				133147	133247	133497	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	685.5	
5	QPSK	1	0	24.57	24.60	24.72	25.7
5	QPSK	1	12	24.71	24.68	24.70	
5	QPSK	1	24	24.70	24.68	24.63	
5	QPSK	12	0	23.73	23.76	23.74	24.7
5	QPSK	12	7	23.84	23.79	23.76	
5	QPSK	12	13	23.76	23.76	23.70	
5	QPSK	25	0	23.76	23.76	23.68	24.7
5	16QAM	1	0	23.75	24.01	24.02	
5	16QAM	1	12	23.97	24.03	23.97	
5	16QAM	1	24	23.95	24.02	23.93	23.7
5	16QAM	12	0	22.64	22.80	22.78	
5	16QAM	12	7	22.86	22.80	22.78	
5	16QAM	12	13	22.77	22.77	22.70	23.7
5	16QAM	25	0	22.69	22.81	22.70	
5	64QAM	1	0	21.74	22.06	22.91	
5	64QAM	1	12	21.79	22.94	22.70	23.7
5	64QAM	1	24	21.96	22.96	22.25	
5	64QAM	12	0	20.82	21.49	21.88	
5	64QAM	12	7	21.00	21.86	21.73	22.7
5	64QAM	12	13	20.99	21.81	21.61	
5	64QAM	25	0	20.76	21.59	21.48	



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. I 18700	Power Middle Ch. J 18900	Power High Ch. K 19100	Tune-up limit (dbm)
Channel				1860	1880	1900	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.72	24.80	24.91	25.7
20	QPSK	1	49	24.67	24.74	24.77	
20	QPSK	1	99	24.64	24.71	24.79	
20	QPSK	50	0	23.78	23.84	23.88	24.7
20	QPSK	50	24	23.87	23.96	23.91	
20	QPSK	50	50	23.88	23.94	23.99	
20	QPSK	100	0	23.86	23.87	23.84	24.7
20	16QAM	1	0	24.10	24.10	24.20	
20	16QAM	1	49	24.03	24.08	24.18	
20	16QAM	1	99	23.93	24.12	24.12	23.7
20	16QAM	50	0	22.80	22.85	22.86	
20	16QAM	50	24	22.89	22.87	22.94	
20	16QAM	50	50	22.87	22.95	23.00	23.7
20	16QAM	100	0	22.86	22.86	22.89	
20	64QAM	1	0	22.94	22.88	23.03	
20	64QAM	1	49	22.91	22.97	22.38	23.7
20	64QAM	1	99	22.84	23.00	22.49	
20	64QAM	50	0	21.81	21.87	21.54	
20	64QAM	50	24	21.92	21.92	21.54	22.7
20	64QAM	50	50	21.86	21.97	21.58	
20	64QAM	100	0	21.87	21.90	21.49	
Channel				1867.5	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				1867.5	18900	19125	
15	QPSK	1	0	24.75	24.83	24.87	25.7
15	QPSK	1	37	24.70	24.80	24.88	
15	QPSK	1	74	24.73	24.80	24.90	
15	QPSK	36	0	23.84	23.87	23.91	24.7
15	QPSK	36	20	23.93	23.90	24.03	
15	QPSK	36	39	23.87	23.97	24.03	
15	QPSK	75	0	23.90	23.91	23.93	24.7
15	16QAM	1	0	24.02	24.13	24.19	
15	16QAM	1	37	24.06	24.14	24.20	
15	16QAM	1	74	24.03	24.13	24.18	23.7
15	16QAM	36	0	22.81	22.86	22.92	
15	16QAM	36	20	22.88	22.90	23.03	
15	16QAM	36	39	22.86	22.97	23.03	23.7
15	16QAM	75	0	22.91	22.91	22.93	
15	64QAM	1	0	22.88	23.01	22.51	
15	64QAM	1	37	22.96	23.01	22.46	23.7
15	64QAM	1	74	22.80	23.04	22.53	
15	64QAM	36	0	21.85	21.91	21.44	
15	64QAM	36	20	21.94	21.91	21.56	22.7
15	64QAM	36	39	21.84	22.04	21.61	
15	64QAM	75	0	21.89	21.91	21.47	
Channel				18650	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				18650	18900	19150	
10	QPSK	1	0	24.76	24.72	24.89	25.7
10	QPSK	1	25	24.69	24.82	24.87	
10	QPSK	1	49	24.72	24.83	24.87	
10	QPSK	25	0	23.86	23.85	23.90	24.7
10	QPSK	25	12	23.87	23.89	23.95	
10	QPSK	25	25	23.88	24.00	24.05	
10	QPSK	50	0	23.87	23.89	23.97	24.7
10	16QAM	1	0	24.12	24.15	24.23	
10	16QAM	1	25	24.13	24.18	24.27	
10	16QAM	1	49	24.08	24.18	24.25	23.7
10	16QAM	25	0	22.86	22.85	22.91	
10	16QAM	25	12	22.90	22.90	22.96	
10	16QAM	25	25	22.88	22.97	23.05	23.7
10	16QAM	50	0	22.88	22.88	22.95	
10	64QAM	1	0	23.02	23.03	22.50	
10	64QAM	1	25	23.05	23.16	22.73	23.7
10	64QAM	1	49	22.95	23.10	22.99	
10	64QAM	25	0	21.88	21.88	21.51	
10	64QAM	25	12	21.94	21.92	21.66	22.7
10	64QAM	25	25	21.90	22.00	21.58	
10	64QAM	50	0	21.90	21.92	21.48	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				18625	18900	19175	
5	QPSK	1	0	24.73	24.75	24.88	25.7
5	QPSK	1	12	24.78	24.80	24.89	
5	QPSK	1	24	24.79	24.88	24.90	
5	QPSK	12	0	23.83	23.85	24.00	24.7
5	QPSK	12	7	23.91	23.94	24.02	
5	QPSK	12	13	23.88	23.93	24.03	
5	QPSK	25	0	23.85	23.87	24.01	24.7
5	16QAM	1	0	24.07	24.08	24.20	
5	16QAM	1	12	24.05	24.15	24.20	
5	16QAM	1	24	24.08	24.24	24.21	23.7
5	16QAM	12	0	22.87	22.89	23.00	
5	16QAM	12	7	22.92	23.01	23.06	
5	16QAM	12	13	22.86	22.96	23.04	23.7
5	16QAM	25	0	22.86	22.90	23.04	
5	64QAM	1	0	23.04	23.07	22.61	
5	64QAM	1	12	23.00	23.13	22.65	23.7
5	64QAM	1	24	23.02	23.12	22.49	
5	64QAM	12	0	21.92	21.92	21.62	
5	64QAM	12	7	21.96	22.04	21.63	22.7
5	64QAM	12	13	21.93	22.00	21.53	
5	64QAM	25	0	21.90	21.90	21.49	
Channel				18615	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				18615	18900	19185	
3	QPSK	1	0	24.74	24.77	24.88	25.7
3	QPSK	1	8	24.84	24.91	24.96	
3	QPSK	1	14	24.77	24.86	24.95	
3	QPSK	8	0	23.85	23.88	23.98	24.7
3	QPSK	8	4	23.86	23.95	24.02	
3	QPSK	8	7	23.89	23.95	24.01	
3	QPSK	15	0	23.88	23.89	24.02	24.7
3	16QAM	1	0	24.05	24.07	24.19	
3	16QAM	1	8	24.10	24.22	24.26	
3	16QAM	1	14	24.04	24.22	24.25	23.7
3	16QAM	8	0	22.91	22.94	23.06	
3	16QAM	8	4	22.93	23.01	23.12	
3	16QAM	8	7	22.91	23.02	23.06	23.7
3	16QAM	15	0	22.86	22.92	23.05	
3	64QAM	1	0	23.01	22.99	22.62	
3	64QAM	1	8	23.11	23.20	22.62	23.7
3	64QAM	1	14	23.05	23.14	22.49	
3	64QAM	8	0	21.89	21.90	21.55	
3	64QAM	8	4	21.93	22.02	21.56	22.7
3	64QAM	8	7	21.94	21.99	21.50	
3	64QAM	15	0	21.90	21.89	21.50	
Channel				18600	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				18600	18900	19193	
1.4	QPSK	1	0	24.71	24.79	24.90	25.7
1.4	QPSK	1	3	24.80	24.85	24.88	
1.4	QPSK	1	5	24.73	24.80	24.84	
1.4	QPSK	3	0	24.74	24.83	24.86	24.7
1.4	QPSK	3	1	24.77	24.86	24.89	
1.4	QPSK	3	3	24.75	24.80	24.87	
1.4	QPSK	6	0	23.79	23.88	23.94	24.7
1.4	16QAM	1	0	24.02	24.14	24.17	
1.4	16QAM	1	3	24.10	24.19	24.21	
1.4	16QAM	1	5	24.02	24.10	24.13	24.7
1.4	16QAM	3	0	23.81	23.88	23.90	
1.4	16QAM	3	1	23.87	23.95	23.98	
1.4	16QAM	3	3	23.82	23.96	23.93	23.7
1.4	16QAM	6	0	22.84	22.93	23.02	
1.4	64QAM	1	0	22.95	23.01	22.45	
1.4	64QAM	1	3	23.02	23.08	22.49	23.7
1.4	64QAM	1	5	22.97	23.03	22.43	
1.4	64QAM	3	0	22.93	23.01	22.46	
1.4	64QAM	3	1	22.97	23.06	22.52	22.7
1.4	64QAM	3	3	22.93	23.02	22.40	
1.4	64QAM	6	0	21.80	21.90	21.36	



Band 4									
All 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20950	Power Middle Ch / 20175	Power High Ch / 20350	Tune-up limit (dBm)		
Channel				1720	1732.5	1745			
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	24.64	24.72	24.65	25.7		
20	QPSK	1	49	24.52	24.51	24.51			
20	QPSK	1	99	24.53	24.54	24.53	24.7		
20	QPSK	50	0	23.70	23.72	23.73			
20	QPSK	50	24	23.72	23.70	23.74			
20	QPSK	50	50	23.64	23.70	23.69			
20	QPSK	100	0	23.69	23.75	23.61			
20	16QAM	1	0	23.98	24.04	23.99	24.7		
20	16QAM	1	49	23.85	23.87	23.88			
20	16QAM	1	99	23.87	23.86	23.84			
20	16QAM	50	0	22.69	22.71	22.74			
20	16QAM	50	24	22.73	22.73	22.77			
20	16QAM	50	50	22.65	22.64	22.68	23.7		
20	16QAM	100	0	22.71	22.73	22.65			
20	64QAM	1	0	22.84	22.90	22.89			
20	64QAM	1	49	22.73	22.72	22.77			
20	64QAM	1	99	22.73	22.64	22.80			
20	64QAM	50	0	21.70	21.76	21.77	22.7		
20	64QAM	50	24	21.74	21.75	21.77			
20	64QAM	50	50	21.68	21.64	21.69			
20	64QAM	100	0	21.76	21.76	21.70			
Channel				20025	20175	20325			
Frequency (MHz)				1712.5	1732.5	1742.5			
15	QPSK	1	0	24.67	24.71	24.70	25.7		
15	QPSK	1	37	24.52	24.51	24.57			
15	QPSK	1	74	24.56	24.55	24.57	24.7		
15	QPSK	36	0	23.78	23.72	23.72			
15	QPSK	36	20	23.73	23.73	23.76			
15	QPSK	36	39	23.66	23.67	23.71			
15	QPSK	75	0	23.70	23.75	23.68			
15	16QAM	1	0	23.99	24.02	24.04	24.7		
15	16QAM	1	37	23.88	23.87	23.92			
15	16QAM	1	74	23.87	23.85	23.89			
15	16QAM	36	0	22.78	22.72	22.76			
15	16QAM	36	20	22.71	22.73	22.76			
15	16QAM	36	39	22.67	22.66	22.71	23.7		
15	16QAM	75	0	22.72	22.75	22.69			
15	64QAM	1	0	22.84	22.92	22.93			
15	64QAM	1	37	22.80	22.66	22.81			
15	64QAM	1	74	22.76	22.74	22.80			
15	64QAM	36	0	21.79	21.81	21.78	22.7		
15	64QAM	36	20	21.73	21.74	21.75			
15	64QAM	36	39	21.71	21.62	21.76			
15	64QAM	75	0	21.71	21.75	21.67			
Channel				20000	20175	20350			
Frequency (MHz)				1715	1732.5	1750			
10	QPSK	1	0	24.59	24.65	24.66	25.7		
10	QPSK	1	25	24.57	24.57	24.71			
10	QPSK	1	49	24.60	24.62	24.66	24.7		
10	QPSK	25	0	23.72	23.69	23.70			
10	QPSK	25	12	23.72	23.78	23.75			
10	QPSK	25	25	23.75	23.77	23.81			
10	QPSK	50	0	23.75	23.75	23.76			
10	16QAM	1	0	23.98	24.02	24.06	24.7		
10	16QAM	1	25	23.97	24.02	24.03			
10	16QAM	1	49	24.00	23.98	24.05			
10	16QAM	25	0	22.72	22.67	22.73			
10	16QAM	25	12	22.76	22.79	22.77			
10	16QAM	25	25	22.74	22.72	22.78	23.7		
10	16QAM	50	0	22.75	22.77	22.74			
10	64QAM	1	0	22.70	22.83	22.90			
10	64QAM	1	25	22.68	22.80	22.98			
10	64QAM	1	49	22.91	22.65	22.95			
10	64QAM	25	0	21.70	21.70	21.74	22.7		
10	64QAM	25	12	21.77	21.74	21.79			
10	64QAM	25	25	21.76	21.57	21.83			
10	64QAM	50	0	21.78	21.74	21.79			
Channel				16976	20175	20375			
Frequency (MHz)				1712.5	1732.5	1752.5			
5	QPSK	1	0	24.63	24.62	24.67	25.7		
5	QPSK	1	12	24.69	24.67	24.71			
5	QPSK	1	24	24.66	24.69	24.71	24.7		
5	QPSK	12	0	23.71	23.69	23.75			
5	QPSK	12	7	23.76	23.77	23.80			
5	QPSK	12	13	23.72	23.76	23.77			
5	QPSK	25	0	23.70	23.75	23.77			
5	16QAM	1	0	23.97	23.92	24.05	24.7		
5	16QAM	1	12	23.88	24.00	24.04			
5	16QAM	1	24	24.01	23.99	24.03			
5	16QAM	12	0	22.75	22.89	22.82			
5	16QAM	12	7	22.79	22.80	22.85			
5	16QAM	12	13	22.78	22.80	22.80	23.7		
5	16QAM	25	0	22.74	22.76	22.79			
5	64QAM	1	0	22.72	22.87	22.99			
5	64QAM	1	12	22.92	22.74	22.96			
5	64QAM	1	24	22.98	22.81	22.95			
5	64QAM	12	0	21.77	21.72	21.85	22.7		
5	64QAM	12	7	21.84	21.77	21.90			
5	64QAM	12	13	21.78	21.62	21.84			
5	64QAM	25	0	21.74	21.65	21.82			
Channel				19965	20175	20386			
Frequency (MHz)				1711.5	1732.5	1753.5			
3	QPSK	1	0	24.64	24.60	24.69	25.7		
3	QPSK	1	8	24.71	24.71	24.71			
3	QPSK	1	14	24.65	24.69	24.67	24.7		
3	QPSK	8	0	23.71	23.65	23.70			
3	QPSK	8	4	23.75	23.75	23.77			
3	QPSK	8	7	23.74	23.76	23.74			
3	QPSK	15	0	23.74	23.73	23.78			
3	16QAM	1	0	23.99	23.92	23.98	24.7		
3	16QAM	1	8	24.05	24.07	24.10			
3	16QAM	1	14	23.98	23.97	24.05			
3	16QAM	8	0	22.79	22.75	22.82			
3	16QAM	8	4	22.84	22.84	22.90			
3	16QAM	8	7	22.81	22.79	22.83	23.7		
3	16QAM	15	0	22.80	22.74	22.78			
3	64QAM	1	0	22.75	22.84	22.95			
3	64QAM	1	8	23.00	22.81	23.01			
3	64QAM	1	14	22.97	22.69	22.98			
3	64QAM	8	0	21.73	21.73	21.85	22.7		
3	64QAM	8	4	21.84	21.72	21.86			
3	64QAM	8	7	21.83	21.84	21.83			
3	64QAM	15	0	21.74	21.70	21.78			
Channel				16957	20175	20395			
Frequency (MHz)				1710.7	1732.5	1754.3			
1.4	QPSK	1	0	24.54	24.59	24.58	25.7		
1.4	QPSK	1	3	24.63	24.63	24.66			
1.4	QPSK	1	5	24.54	24.61	24.60	24.7		
1.4	QPSK	3	0	24.59	24.60	24.67			
1.4	QPSK	3	1	24.65	24.64	24.71			
1.4	QPSK	3	5	24.63	24.59	24.63			
1.4	QPSK	6	0	23.68	23.67	23.72			
1.4	16QAM	1	0	23.89	23.90	23.94	24.7		
1.4	16QAM	1	3	23.85	23.97	24.00			
1.4	16QAM	1	5	23.89	23.93	23.94			
1.4	16QAM	3	0	23.69	23.69	23.75			
1.4	16QAM	3	1	23.76	23.73	23.80			
1.4	16QAM	3	5	23.67	23.65	23.71	23.7		
1.4	16QAM	6	0	22.73	22.75	22.78			
1.4	64QAM	1	0	22.68	22.71	22.88			
1.4	64QAM	1	3	22.81	22.75	22.94			
1.4	64QAM	1	5	22.79	22.65	22.85			
1.4	64QAM	3	0	22.69	22.75	22.82	23.7		
1.4	64QAM	3	1	22.83	22.84	22.91			
1.4	64QAM	3	3	22.79	22.70	22.86			
1.4	64QAM	6	0	21.63	21.62	21.71			
1.4	64QAM	6	0	21.63	21.62	21.71			



Band 5							
Ari 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20450	Power Middle Ch / 20525	Power High Ch / 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	24.43	24.46	24.43	
10	QPSK	1	25	24.39	24.46	24.45	25.7
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	
10	QPSK	25	12	23.56	23.57	23.57	24.7
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.55	
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	24.7
10	16QAM	1	49	23.83	23.86	23.76	
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.55	23.7
10	16QAM	25	25	22.54	22.60	22.57	
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	
10	64QAM	1	25	22.73	22.49	22.51	23.7
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.54	21.60	21.58	
10	64QAM	25	12	21.63	21.53	21.47	22.7
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	846.5	
5	QPSK	1	0	24.46	24.40	24.45	
5	QPSK	1	12	24.44	24.46	24.19	25.7
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	
5	QPSK	12	7	23.54	23.81	23.25	24.7
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.64	23.52	23.37	
5	16QAM	1	0	23.91	23.90	23.87	
5	16QAM	1	12	23.78	23.86	23.43	24.7
5	16QAM	1	24	23.79	23.83	23.43	
5	16QAM	12	0	22.65	22.62	22.60	
5	16QAM	12	7	22.57	22.54	22.38	23.7
5	16QAM	12	13	22.52	22.59	22.35	
5	16QAM	25	0	22.57	22.59	22.51	
5	64QAM	1	0	22.87	22.79	22.18	
5	64QAM	1	12	22.72	22.71	21.72	23.7
5	64QAM	1	24	22.72	22.73	21.73	
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.56	21.85	
5	64QAM	12	13	21.60	21.61	20.71	22.7
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	
3	QPSK	1	8	24.43	24.45	24.13	25.7
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	
3	QPSK	8	4	23.55	23.62	23.16	24.7
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.56	23.17	
3	16QAM	1	0	23.87	23.84	23.44	
3	16QAM	1	8	23.89	23.89	23.38	24.7
3	16QAM	1	14	23.74	23.82	23.44	
3	16QAM	8	0	22.66	22.61	22.25	
3	16QAM	8	4	22.66	22.71	22.30	23.7
3	16QAM	8	7	22.60	22.65	22.40	
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	
3	64QAM	1	8	22.83	22.74	21.72	23.7
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	
3	64QAM	8	4	21.66	21.56	20.73	22.7
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.42	24.41	24.09	
1.4	QPSK	1	3	24.46	24.45	24.26	25.7
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	
1.4	QPSK	3	1	24.46	24.46	24.30	
1.4	QPSK	3	3	24.41	24.45	24.42	24.7
1.4	QPSK	6	0	23.50	23.51	23.36	
1.4	16QAM	1	0	23.75	23.73	23.46	
1.4	16QAM	1	3	23.79	23.84	23.67	24.7
1.4	16QAM	1	5	23.68	23.74	23.60	
1.4	16QAM	3	0	23.56	23.51	23.29	
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	
1.4	16QAM	6	0	22.58	22.61	22.49	23.7
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	23.7
1.4	64QAM	1	5	22.64	22.61	21.72	
1.4	64QAM	3	0	22.66	22.60	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	
1.4	64QAM	3	3	22.63	22.60	21.75	22.7
1.4	64QAM	6	0	21.54	21.47	20.72	



Band 7							
A11 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 20850	Power Middle Ch / 21100	Power High Ch / 21350	Tune-up limit (dBm)
Channel				2510	2535	2560	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.06	24.10	24.04	25.7
20	QPSK	1	49	24.12	24.13	24.01	
20	QPSK	1	99	24.25	24.24	24.05	
20	QPSK	50	0	23.18	23.16	23.17	24.7
20	QPSK	50	24	23.32	23.19	23.21	
20	QPSK	50	50	23.33	23.31	23.22	
20	QPSK	100	0	23.28	23.17	23.18	24.7
20	16QAM	1	0	23.42	23.44	23.38	
20	16QAM	1	49	23.49	23.48	23.36	
20	16QAM	1	99	23.53	23.52	23.39	23.7
20	16QAM	50	0	22.17	22.16	22.20	
20	16QAM	50	24	22.31	22.21	22.20	
20	16QAM	50	50	22.31	22.32	22.18	23.7
20	16QAM	100	0	22.26	22.20	22.18	
20	64QAM	1	0	22.25	22.25	22.30	
20	64QAM	1	49	22.37	22.40	22.27	23.7
20	64QAM	1	99	22.39	22.42	22.33	
20	64QAM	50	0	21.20	21.21	21.22	
20	64QAM	50	24	21.31	21.24	21.24	22.7
20	64QAM	50	50	21.32	21.32	21.20	
20	64QAM	100	0	21.30	21.21	21.18	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				20825	21100	21375	
15	QPSK	1	0	24.14	24.13	24.09	25.7
15	QPSK	1	37	24.16	24.15	24.05	
15	QPSK	1	74	24.21	24.23	24.09	
15	QPSK	36	0	23.24	23.21	23.19	24.7
15	QPSK	36	20	23.34	23.26	23.23	
15	QPSK	36	39	23.32	23.33	23.20	
15	QPSK	75	0	23.28	23.24	23.20	24.7
15	16QAM	1	0	23.44	23.47	23.39	
15	16QAM	1	37	23.51	23.53	23.37	
15	16QAM	1	74	23.55	23.56	23.41	23.7
15	16QAM	36	0	22.27	22.21	22.19	
15	16QAM	36	20	22.31	22.23	22.20	
15	16QAM	36	39	22.29	22.33	22.17	23.7
15	16QAM	75	0	22.30	22.22	22.18	
15	64QAM	1	0	22.26	22.30	22.35	
15	64QAM	1	37	22.41	22.43	22.29	23.7
15	64QAM	1	74	22.45	22.41	22.30	
15	64QAM	36	0	21.30	21.25	21.23	
15	64QAM	36	20	21.33	21.27	21.23	22.7
15	64QAM	36	39	21.39	21.36	21.24	
15	64QAM	75	0	21.30	21.22	21.21	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.13	24.09	24.00	25.7
10	QPSK	1	25	24.11	24.11	23.99	
10	QPSK	1	49	24.16	24.19	24.02	
10	QPSK	25	0	23.25	23.23	23.16	24.7
10	QPSK	25	12	23.31	23.24	23.20	
10	QPSK	25	25	23.31	23.31	23.16	
10	QPSK	50	0	23.30	23.24	23.17	24.7
10	16QAM	1	0	23.50	23.46	23.39	
10	16QAM	1	25	23.50	23.52	23.37	
10	16QAM	1	49	23.53	23.56	23.41	23.7
10	16QAM	25	0	22.27	22.18	22.14	
10	16QAM	25	12	22.30	22.24	22.17	
10	16QAM	25	25	22.28	22.30	22.15	23.7
10	16QAM	50	0	22.28	22.23	22.18	
10	64QAM	1	0	22.40	22.33	22.33	
10	64QAM	1	25	22.43	22.43	22.30	23.7
10	64QAM	1	49	22.43	22.45	22.29	
10	64QAM	25	0	21.29	21.25	21.18	
10	64QAM	25	12	21.34	21.29	21.23	22.7
10	64QAM	25	25	21.33	21.33	21.20	
10	64QAM	50	0	21.34	21.28	21.23	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				20775	21100	21425	
5	QPSK	1	0	24.14	24.10	24.03	25.7
5	QPSK	1	12	24.18	24.18	24.03	
5	QPSK	1	24	24.17	24.17	24.02	
5	QPSK	12	0	23.27	23.25	23.12	24.7
5	QPSK	12	7	23.29	23.21	23.10	
5	QPSK	12	13	23.27	23.31	23.15	
5	QPSK	25	0	23.29	23.23	23.13	24.7
5	16QAM	1	0	23.48	23.45	23.34	
5	16QAM	1	12	23.47	23.51	23.35	
5	16QAM	1	24	23.54	23.50	23.40	23.7
5	16QAM	12	0	22.29	22.25	22.17	
5	16QAM	12	7	22.28	22.28	22.16	
5	16QAM	12	13	22.31	22.30	22.13	23.7
5	16QAM	25	0	22.27	22.23	22.15	
5	64QAM	1	0	22.42	22.38	22.29	
5	64QAM	1	12	22.40	22.44	22.26	23.7
5	64QAM	1	24	22.44	22.43	22.28	
5	64QAM	12	0	21.35	21.30	21.20	
5	64QAM	12	7	21.38	21.28	21.16	22.7
5	64QAM	12	13	21.36	21.36	21.23	
5	64QAM	25	0	21.31	21.25	21.18	



Band 12							
Airtel							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 23050	Power Middle Ch / 23095	Power High Ch / 23130	Tune-up limit (dBm)
Channel				704	707.5	711	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	25.7
10	QPSK	1	25	24.58	24.57	24.54	
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.84	23.88	23.88	24.7
10	QPSK	25	12	23.74	23.70	23.69	
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	24.7
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	
10	16QAM	1	49	24.00	24.00	23.96	23.7
10	16QAM	25	0	22.99	22.71	22.68	
10	16QAM	25	12	22.75	22.69	22.68	
10	16QAM	25	25	22.70	22.76	22.71	23.7
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	23.7
10	64QAM	1	49	22.88	22.85	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23035	23095	23135	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.50	24.50	25.7
5	QPSK	1	12	24.60	24.62	24.60	
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	24.7
5	QPSK	12	7	23.69	23.89	23.74	
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	24.7
5	16QAM	1	0	23.95	23.92	23.87	
5	16QAM	1	12	23.88	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	23.7
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	
5	16QAM	12	13	22.68	22.75	22.68	23.7
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.49	22.84	
5	64QAM	1	12	22.63	22.87	22.86	23.7
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	
5	64QAM	12	7	21.65	21.76	21.81	22.7
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	25.7
3	QPSK	1	8	24.62	24.62	24.60	
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	24.7
3	QPSK	8	4	23.69	23.64	22.71	
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	24.7
3	16QAM	1	0	24.00	24.02	23.95	
3	16QAM	1	8	23.96	23.98	23.98	
3	16QAM	1	14	23.91	23.96	23.91	23.7
3	16QAM	8	0	22.75	22.71	22.71	
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	23.7
3	16QAM	15	0	22.73	22.89	22.88	
3	64QAM	1	0	22.46	22.70	22.87	
3	64QAM	1	8	22.67	22.86	22.90	23.7
3	64QAM	1	14	22.96	22.84	22.81	
3	64QAM	8	0	21.50	21.75	21.71	
3	64QAM	8	4	21.58	21.74	21.78	22.7
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	25.7
1.4	QPSK	1	3	24.60	24.61	24.57	
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	24.7
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	
1.4	QPSK	6	0	23.62	23.64	23.59	24.7
1.4	16QAM	1	0	23.87	23.83	23.87	
1.4	16QAM	1	3	23.89	23.96	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	24.7
1.4	16QAM	3	0	23.64	23.58	23.62	
1.4	16QAM	3	1	23.73	23.66	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	23.7
1.4	16QAM	6	0	22.71	22.71	22.67	
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	23.7
1.4	64QAM	1	5	22.74	22.78	22.88	
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	22.7
1.4	64QAM	3	3	22.60	22.77	22.77	
1.4	64QAM	6	0	21.44	21.65	21.61	



Band 13							
Airt 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				782			
Frequency (MHz)							
10	QPSK	1	0	24.17			25.2
10	QPSK	1	25	24.10			
10	QPSK	1	49	24.14			
10	QPSK	25	0	23.17			24.2
10	QPSK	25	12	23.21			
10	QPSK	25	25	23.21			
10	QPSK	50	0	23.20			24.2
10	16QAM	1	0	23.42			
10	16QAM	1	25	23.45			
10	16QAM	1	49	23.42			23.2
10	16QAM	25	0	22.20			
10	16QAM	25	12	22.23			
10	16QAM	25	25	22.20			23.2
10	16QAM	50	0	22.23			
10	64QAM	1	0	22.30			
10	64QAM	1	25	22.40			23.2
10	64QAM	1	49	22.34			
10	64QAM	25	0	21.24			
10	64QAM	25	12	21.23			22.2
10	64QAM	25	25	21.26			
10	64QAM	50	0	21.26			
Channel				23305			
Frequency (MHz)				773.5			
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.16	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.23	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.26	21.25	
5	64QAM	25	0	20.96	21.26	21.23	



Band 14							
Airt 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit [dBm]
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.59	24.59	24.59	25.7
10	QPSK	1	25	24.53	24.43	24.43	
10	QPSK	25	0	23.56	23.56	23.56	
10	QPSK	25	12	23.56	23.56	23.56	24.7
10	QPSK	25	25	23.59	23.59	23.59	
10	QPSK	50	0	23.53	23.53	23.53	
10	16QAM	1	0	23.94	23.94	23.94	24.7
10	16QAM	1	25	23.92	23.92	23.92	
10	16QAM	1	49	23.93	23.93	23.93	
10	16QAM	25	0	22.55	22.55	22.55	23.7
10	16QAM	25	12	22.53	22.53	22.53	
10	16QAM	25	25	22.58	22.58	22.58	
10	16QAM	50	0	22.53	22.53	22.53	23.7
10	64QAM	1	0	22.62	22.62	22.62	
10	64QAM	1	25	22.64	22.64	22.64	
10	64QAM	1	49	22.72	22.72	22.72	22.7
10	64QAM	25	0	21.39	21.39	21.39	
10	64QAM	25	12	21.38	21.38	21.38	
10	64QAM	25	25	21.58	21.58	21.58	22.7
10	64QAM	50	0	21.44	21.44	21.44	
Channel				23305			
Frequency (MHz)				793			
Channel				793			
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.58	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	24.7
5	QPSK	12	7	23.66	23.57	23.53	
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.88	23.83	23.80	24.7
5	16QAM	1	0	23.83	23.80	23.82	
5	16QAM	1	12	23.88	23.88	23.87	
5	16QAM	1	24	23.87	23.80	23.78	23.7
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.56	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.49	
5	64QAM	1	12	22.57	22.35	22.58	23.7
5	64QAM	1	24	22.32	22.41	22.77	
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.26	21.63	22.7
5	64QAM	12	13	21.31	21.27	21.61	
5	64QAM	25	0	21.34	21.28	21.51	





Band 17							
Alt 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch /	Power Middle Ch /	Power High Ch /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.60	24.56	24.55	
10	QPSK	1	25	24.61	24.62	24.59	25.7
10	QPSK	1	49	24.64	24.67	24.63	
10	QPSK	25	0	23.65	23.68	23.66	
10	QPSK	25	12	23.79	23.76	23.70	24.7
10	QPSK	25	25	23.81	23.82	23.80	
10	QPSK	50	0	23.69	23.72	23.69	
10	16QAM	1	0	23.93	23.95	23.94	
10	16QAM	1	25	24.03	24.06	24.01	24.7
10	16QAM	1	49	24.01	24.02	23.98	
10	16QAM	25	0	22.66	22.65	22.65	
10	16QAM	25	12	22.79	22.75	22.73	23.7
10	16QAM	25	25	22.78	22.77	22.76	
10	16QAM	50	0	22.69	22.69	22.67	
10	64QAM	1	0	22.64	22.70	22.79	
10	64QAM	1	25	22.72	22.67	22.83	23.7
10	64QAM	1	49	22.84	22.76	22.99	
10	64QAM	25	0	21.42	21.42	21.41	
10	64QAM	25	12	21.51	21.48	21.48	22.7
10	64QAM	25	25	21.61	21.67	21.66	
10	64QAM	50	0	21.53	21.64	21.57	
Channel				23785	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				709.5	710	713.5	
5	QPSK	1	0	24.57	24.59	24.59	
5	QPSK	1	12	24.66	24.65	24.63	25.7
5	QPSK	1	24	24.65	24.66	24.64	
5	QPSK	12	0	23.66	23.69	23.67	
5	QPSK	12	7	23.76	23.76	23.78	24.7
5	QPSK	12	13	23.74	23.77	23.73	
5	QPSK	25	0	23.74	23.71	23.75	
5	16QAM	1	0	23.91	23.93	23.91	
5	16QAM	1	12	23.95	23.97	23.96	24.7
5	16QAM	1	24	24.00	24.05	23.99	
5	16QAM	12	0	22.73	22.71	22.74	
5	16QAM	12	7	22.79	22.77	22.79	23.7
5	16QAM	12	13	22.77	22.80	22.77	
5	16QAM	25	0	22.74	22.76	22.77	
5	64QAM	1	0	22.26	22.42	22.71	
5	64QAM	1	12	22.62	22.61	22.81	23.7
5	64QAM	1	24	22.53	22.52	22.48	
5	64QAM	12	0	21.55	21.47	21.65	
5	64QAM	12	7	21.69	21.47	21.76	22.7
5	64QAM	12	13	21.66	21.50	21.70	
5	64QAM	25	0	21.52	21.44	21.59	



Band 25						
Ann 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 26140	Power Middle Ch / 26340	Power High Ch / 26590
Channel				1860	1880	1905
Frequency (MHz)				1860	1880	1905
20	QPSK	1	0	24.79	24.78	24.93
20	QPSK	1	49	24.72	24.74	24.80
20	QPSK	1	99	24.65	24.74	24.93
20	QPSK	50	0	23.83	23.88	23.94
20	QPSK	50	24	23.88	23.98	24.01
20	QPSK	50	50	23.82	23.93	24.00
20	QPSK	100	0	23.89	23.97	23.98
20	16QAM	1	0	24.14	24.15	24.16
20	16QAM	1	49	24.07	24.11	24.17
20	16QAM	1	99	23.98	24.10	23.73
20	16QAM	50	0	22.84	22.92	22.95
20	16QAM	50	24	22.89	22.99	22.95
20	16QAM	50	50	22.85	22.94	23.02
20	16QAM	100	0	22.87	22.95	22.93
20	64QAM	1	0	23.00	22.99	22.68
20	64QAM	1	49	22.97	22.98	22.98
20	64QAM	1	99	22.84	22.99	21.87
20	64QAM	50	0	21.87	21.93	21.49
20	64QAM	50	24	21.81	22.00	21.57
20	64QAM	50	50	21.79	21.97	21.23
20	64QAM	100	0	21.89	22.01	21.26
Channel				26115	26340	26615
Frequency (MHz)				1852.5	1880	1907.5
15	QPSK	1	0	24.62	24.67	24.85
15	QPSK	1	37	24.75	24.80	24.87
15	QPSK	1	74	24.72	24.82	24.39
15	QPSK	36	0	23.86	23.93	23.99
15	QPSK	36	20	23.89	24.02	24.06
15	QPSK	36	39	23.83	23.96	23.88
15	QPSK	75	0	23.89	23.90	23.95
15	16QAM	1	0	24.07	24.15	24.19
15	16QAM	1	37	24.12	24.14	24.22
15	16QAM	1	74	24.05	24.12	23.75
15	16QAM	36	0	22.86	22.95	22.97
15	16QAM	36	20	22.83	23.01	23.05
15	16QAM	36	39	22.84	22.96	23.00
15	16QAM	75	0	22.90	22.93	22.98
15	64QAM	1	0	23.03	23.00	22.46
15	64QAM	1	37	22.99	23.06	22.62
15	64QAM	1	74	22.74	23.02	21.89
15	64QAM	36	0	21.92	21.98	21.61
15	64QAM	36	20	21.84	22.03	21.57
15	64QAM	36	39	21.77	22.00	21.24
15	64QAM	75	0	21.91	21.92	21.31
Channel				26090	26340	26640
Frequency (MHz)				1855	1880	1910
10	QPSK	1	0	24.77	24.76	24.87
10	QPSK	1	25	24.70	24.79	24.86
10	QPSK	1	49	24.74	24.79	24.33
10	QPSK	25	0	23.90	23.86	23.93
10	QPSK	25	12	23.95	23.97	23.98
10	QPSK	25	25	23.92	23.97	23.73
10	QPSK	50	0	23.93	23.97	23.87
10	16QAM	1	0	24.14	24.15	24.22
10	16QAM	1	25	24.13	24.18	24.23
10	16QAM	1	49	24.11	24.17	23.69
10	16QAM	25	0	22.93	22.96	22.93
10	16QAM	25	12	22.92	23.00	22.98
10	16QAM	25	25	22.89	22.93	22.91
10	16QAM	50	0	22.92	22.97	22.96
10	64QAM	1	0	23.01	22.97	22.67
10	64QAM	1	25	23.08	23.10	22.41
10	64QAM	1	49	22.98	23.08	21.84
10	64QAM	25	0	21.94	21.89	21.52
10	64QAM	25	12	21.98	22.00	21.37
10	64QAM	25	25	21.94	22.00	21.06
10	64QAM	50	0	21.96	22.02	21.17
Channel				26065	26340	26595
Frequency (MHz)				1852.5	1880	1912.5
5	QPSK	1	0	24.80	24.75	24.92
5	QPSK	1	12	24.84	24.89	24.56
5	QPSK	1	24	24.81	24.88	24.29
5	QPSK	12	0	23.88	23.91	23.89
5	QPSK	12	7	23.96	23.99	23.76
5	QPSK	12	13	23.98	23.99	23.60
5	QPSK	25	0	23.93	23.97	23.64
5	16QAM	1	0	24.22	24.11	24.18
5	16QAM	1	12	24.13	24.19	23.93
5	16QAM	1	24	24.15	24.18	23.70
5	16QAM	12	0	22.88	22.95	23.01
5	16QAM	12	7	22.93	23.02	22.88
5	16QAM	12	13	22.98	23.02	22.75
5	16QAM	25	0	22.96	22.97	22.80
5	64QAM	1	0	23.07	23.01	22.33
5	64QAM	1	12	23.05	23.07	21.98
5	64QAM	1	24	23.06	23.11	21.75
5	64QAM	12	0	21.95	21.98	21.17
5	64QAM	12	7	22.01	22.06	21.93
5	64QAM	12	13	22.03	22.08	20.88
5	64QAM	25	0	21.93	22.00	20.98
Channel				26065	26340	26675
Frequency (MHz)				1851.5	1880	1913.5
3	QPSK	1	0	24.72	24.71	24.65
3	QPSK	1	8	24.88	24.91	24.53
3	QPSK	1	14	24.85	24.90	24.29
3	QPSK	8	0	23.87	23.89	23.71
3	QPSK	8	4	23.92	23.96	23.66
3	QPSK	8	7	23.96	23.97	23.54
3	QPSK	15	0	23.93	23.96	23.58
3	16QAM	1	0	24.09	24.01	23.89
3	16QAM	1	8	24.20	24.26	23.84
3	16QAM	1	14	24.21	24.24	23.63
3	16QAM	8	0	22.92	22.95	22.83
3	16QAM	8	4	23.03	23.04	22.76
3	16QAM	8	7	23.01	23.02	22.67
3	16QAM	15	0	22.97	22.97	22.70
3	64QAM	1	0	22.95	22.96	22.01
3	64QAM	1	8	23.12	23.20	21.98
3	64QAM	1	14	23.11	23.18	21.75
3	64QAM	8	0	21.93	22.00	20.95
3	64QAM	8	4	21.99	22.07	20.94
3	64QAM	8	7	22.00	22.06	20.84
3	64QAM	15	0	21.94	21.96	20.88
Channel				26047	26340	26595
Frequency (MHz)				1850.7	1880	1914.3
1.4	QPSK	1	0	24.71	24.73	24.37
1.4	QPSK	1	3	24.80	24.83	24.31
1.4	QPSK	1	5	24.79	24.84	24.20
1.4	QPSK	3	0	24.78	24.81	24.32
1.4	QPSK	3	1	24.82	24.83	24.33
1.4	QPSK	3	5	24.77	24.85	24.24
1.4	QPSK	6	0	23.85	23.91	23.41
1.4	16QAM	1	0	24.05	24.05	23.64
1.4	16QAM	1	3	24.12	24.17	23.64
1.4	16QAM	1	5	24.07	24.12	23.54
1.4	16QAM	3	0	23.81	23.87	23.49
1.4	16QAM	3	1	23.88	23.93	23.48
1.4	16QAM	3	5	23.84	23.95	23.42
1.4	16QAM	6	0	22.93	22.94	22.59
1.4	64QAM	1	0	22.97	22.97	21.78
1.4	64QAM	1	3	23.08	23.12	21.71
1.4	64QAM	1	5	23.03	23.06	21.72
1.4	64QAM	3	0	22.92	22.98	21.80
1.4	64QAM	3	1	23.00	23.05	21.85
1.4	64QAM	3	3	22.98	23.01	21.71
1.4	64QAM	6	0	21.90	21.93	20.71



Band 26							
Airtel							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / 26765	Power Middle Ch / 26865	Power High Ch / 26965	Tune-up limit (dBm)
Channel				821.5	831.5	841.5	
Frequency (MHz)							
15	QPSK	1	0	24.45	24.40	24.62	25.7
15	QPSK	1	37	24.34	24.39	24.41	
15	QPSK	1	74	24.35	24.39	24.31	24.7
15	QPSK	36	0	23.81	23.51	23.54	
15	QPSK	36	20	23.52	23.49	23.50	24.7
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	24.7
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	24.7
15	16QAM	1	74	23.64	23.66	23.59	
15	16QAM	36	0	22.51	22.54	22.56	23.7
15	16QAM	36	20	22.53	22.51	22.50	
15	16QAM	36	39	22.50	22.53	22.54	23.7
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	23.7
15	64QAM	1	37	22.43	22.66	22.68	
15	64QAM	1	74	22.57	22.61	21.80	22.7
15	64QAM	36	0	21.21	21.58	21.60	
15	64QAM	36	20	21.40	21.53	21.54	22.7
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				810	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	25.7
10	QPSK	1	25	24.44	24.47	24.45	
10	QPSK	1	49	24.46	24.49	24.37	24.7
10	QPSK	25	0	23.64	23.56	23.57	
10	QPSK	25	12	23.58	23.54	23.57	24.7
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.67	23.53	23.49	24.7
10	16QAM	1	0	23.92	23.87	23.87	
10	16QAM	1	25	23.85	23.87	23.86	24.7
10	16QAM	1	49	23.86	23.90	23.75	
10	16QAM	25	0	22.62	22.57	22.57	23.7
10	16QAM	25	12	22.60	22.55	22.57	
10	16QAM	25	25	22.63	22.56	22.53	23.7
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.76	23.7
10	64QAM	1	25	22.33	22.80	22.64	
10	64QAM	1	49	22.74	22.81	21.99	22.7
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.18	21.61	21.57	22.7
10	64QAM	25	25	21.31	21.58	20.86	
10	64QAM	50	0	21.26	21.57	21.38	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	25.7
5	QPSK	1	12	24.56	24.55	24.17	
5	QPSK	1	24	24.46	24.53	24.41	24.7
5	QPSK	12	0	23.64	23.59	23.60	
5	QPSK	12	7	23.63	23.63	23.33	24.7
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	24.7
5	16QAM	1	0	23.95	23.85	23.86	
5	16QAM	1	12	23.84	23.87	23.49	23.7
5	16QAM	1	24	23.77	23.86	23.69	
5	16QAM	12	0	22.71	22.63	22.61	23.7
5	16QAM	12	7	22.67	22.64	22.48	
5	16QAM	12	13	22.55	22.59	22.45	23.7
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	23.7
5	64QAM	1	12	22.31	22.76	21.70	
5	64QAM	1	24	22.14	22.79	21.71	22.7
5	64QAM	12	0	21.36	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.68	20.73	
Channel				26706	26865	27026	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	25.7
3	QPSK	1	8	24.60	24.57	24.26	
3	QPSK	1	14	24.46	24.50	24.37	24.7
3	QPSK	8	0	23.69	23.57	23.20	
3	QPSK	8	4	23.68	23.63	23.32	24.7
3	QPSK	8	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.56	23.28	24.7
3	16QAM	1	0	23.93	23.83	23.53	
3	16QAM	1	8	23.92	23.91	23.53	24.7
3	16QAM	1	14	23.81	23.90	23.67	
3	16QAM	8	0	22.74	22.63	22.36	23.7
3	16QAM	8	4	22.75	22.67	22.45	
3	16QAM	8	7	22.65	22.66	22.54	23.7
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	23.7
3	64QAM	1	8	22.49	22.84	21.84	
3	64QAM	1	14	22.30	22.80	21.76	22.7
3	64QAM	8	0	21.40	21.65	20.75	
3	64QAM	8	4	21.44	21.72	20.79	22.7
3	64QAM	8	7	21.37	21.63	20.72	
3	64QAM	15	0	21.36	21.60	20.82	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	25.7
1.4	QPSK	1	3	24.56	24.54	24.39	
1.4	QPSK	1	5	24.45	24.41	24.28	24.7
1.4	QPSK	3	0	24.58	24.43	24.39	
1.4	QPSK	3	1	24.58	24.46	24.40	24.7
1.4	QPSK	3	3	24.53	24.46	24.36	
1.4	16QAM	6	0	23.60	23.53	23.42	24.7
1.4	16QAM	1	0	23.86	23.73	23.57	
1.4	16QAM	1	3	23.90	23.90	23.76	24.7
1.4	16QAM	1	5	23.79	23.75	23.66	
1.4	16QAM	3	0	23.62	23.52	23.44	23.7
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	23.7
1.4	16QAM	6	0	22.66	22.58	22.52	
1.4	64QAM	1	0	22.39	22.67	21.78	23.7
1.4	64QAM	1	3	22.45	22.75	21.75	
1.4	64QAM	1	5	22.41	22.65	21.74	23.7
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	22.7
1.4	64QAM	3	3	22.43	22.64	21.82	
1.4	64QAM	6	0	21.34	21.56	20.84	



Band 30							
A11 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	22.92			23.7
10	QPSK	1	25	22.76			
10	QPSK	1	49	22.77			
10	QPSK	25	0	21.83			22.7
10	QPSK	25	12	21.88			
10	QPSK	25	25	21.97			
10	QPSK	50	0	21.86			22.7
10	16QAM	1	0	22.20			
10	16QAM	1	25	22.17			
10	16QAM	1	49	22.20			21.7
10	16QAM	25	0	20.84			
10	16QAM	25	12	20.88			
10	16QAM	25	25	20.99			21.7
10	16QAM	50	0	20.87			
10	64QAM	1	0	21.04			
10	64QAM	1	25	21.09			21.7
10	64QAM	1	49	21.04			
10	64QAM	25	0	19.87			
10	64QAM	25	12	19.92			20.7
10	64QAM	25	25	20.00			
10	64QAM	50	0	19.89			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.75	22.76	22.76	23.7
5	QPSK	1	12	22.89	22.90	22.87	
5	QPSK	1	24	22.91	22.88	22.88	
5	QPSK	12	0	21.90	21.85	21.87	22.7
5	QPSK	12	7	21.95	21.97	21.93	
5	QPSK	12	13	21.96	21.96	21.93	
5	QPSK	25	0	21.93	21.87	21.90	22.7
5	16QAM	1	0	22.08	22.07	22.10	
5	16QAM	1	12	22.14	22.14	22.12	
5	16QAM	1	24	22.19	22.21	22.15	21.7
5	16QAM	12	0	20.92	20.87	20.90	
5	16QAM	12	7	20.96	20.99	20.95	
5	16QAM	12	13	20.97	20.97	20.94	21.7
5	16QAM	25	0	20.98	20.90	20.93	
5	64QAM	1	0	20.98	21.06	21.06	
5	64QAM	1	12	21.04	21.09	21.07	21.7
5	64QAM	1	24	21.12	21.13	21.12	
5	64QAM	12	0	19.99	19.91	19.96	
5	64QAM	12	7	20.03	20.03	20.00	20.7
5	64QAM	12	13	20.02	20.02	20.00	
5	64QAM	25	0	19.98	19.94	19.94	





Band 71							
Arit 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch1	Power Middle Ch1	Power High Ch1	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.67	24.60	24.58	25.7
20	QPSK	1	49	24.58	24.59	24.56	
20	QPSK	1	99	24.61	24.56	24.53	24.7
20	QPSK	50	0	23.69	23.68	23.64	
20	QPSK	50	24	23.74	23.67	23.63	24.7
20	QPSK	50	50	23.75	23.69	23.68	
20	QPSK	100	0	23.72	23.66	23.71	24.7
20	16QAM	1	0	23.99	23.90	23.92	
20	16QAM	1	49	23.94	23.93	23.91	23.7
20	16QAM	1	99	23.97	23.91	23.93	
20	16QAM	50	0	22.69	22.68	22.67	23.7
20	16QAM	50	24	22.75	22.68	22.66	
20	16QAM	50	50	22.75	22.73	22.68	23.7
20	16QAM	100	0	22.72	22.65	22.70	
20	64QAM	1	0	21.88	22.69	22.77	23.7
20	64QAM	1	49	22.51	22.82	22.02	
20	64QAM	1	99	22.87	22.68	22.65	22.7
20	64QAM	50	0	20.78	21.69	21.35	
20	64QAM	50	24	21.19	21.42	21.50	22.7
20	64QAM	50	50	21.70	21.49	21.63	
20	64QAM	100	0	21.39	21.66	21.66	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.65	24.60	24.56	25.7
15	QPSK	1	37	24.55	24.58	24.52	
15	QPSK	1	74	24.58	24.62	24.55	24.7
15	QPSK	36	0	23.67	23.69	23.61	
15	QPSK	36	20	23.75	23.67	23.71	24.7
15	QPSK	36	39	23.65	23.71	23.65	
15	QPSK	75	0	23.73	23.65	23.60	24.7
15	16QAM	1	0	24.04	23.93	23.89	
15	16QAM	1	37	23.69	23.98	23.91	24.7
15	16QAM	1	74	23.91	23.91	23.90	
15	16QAM	36	0	22.63	22.67	22.63	23.7
15	16QAM	36	20	22.72	22.69	22.71	
15	16QAM	36	39	22.68	22.71	22.68	23.7
15	16QAM	75	0	22.75	22.67	22.62	
15	64QAM	1	0	21.76	22.28	22.61	23.7
15	64QAM	1	37	21.70	22.87	22.80	
15	64QAM	1	74	22.85	22.43	22.62	22.7
15	64QAM	36	0	20.76	21.71	21.42	
15	64QAM	36	20	20.88	21.68	21.75	22.7
15	64QAM	36	39	21.38	21.40	21.71	
15	64QAM	75	0	21.18	21.65	21.52	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.67	24.56	24.57	25.7
10	QPSK	1	25	24.53	24.56	24.57	
10	QPSK	1	49	24.62	24.64	24.53	24.7
10	QPSK	25	0	23.73	23.62	23.60	
10	QPSK	25	12	23.69	23.75	23.62	24.7
10	QPSK	25	25	23.63	23.70	23.65	
10	QPSK	50	0	23.73	23.74	23.61	24.7
10	16QAM	1	0	24.03	23.97	23.96	
10	16QAM	1	25	23.89	23.97	23.94	23.7
10	16QAM	1	49	23.98	24.00	23.88	
10	16QAM	25	0	22.59	22.65	22.60	23.7
10	16QAM	25	12	22.62	22.74	22.63	
10	16QAM	25	25	22.54	22.71	22.65	23.7
10	16QAM	50	0	22.73	22.73	22.59	
10	64QAM	1	0	21.71	22.19	22.73	23.7
10	64QAM	1	25	21.61	22.36	22.80	
10	64QAM	1	49	22.02	22.82	22.25	22.7
10	64QAM	25	0	20.70	21.54	21.63	
10	64QAM	25	12	20.65	21.76	21.61	22.7
10	64QAM	25	25	20.65	21.66	21.37	
10	64QAM	50	0	20.70	21.56	21.58	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	685.5	
5	QPSK	1	0	24.33	24.63	24.62	25.7
5	QPSK	1	12	24.52	24.59	24.59	
5	QPSK	1	24	24.57	24.62	24.51	24.7
5	QPSK	12	0	23.49	23.69	23.64	
5	QPSK	12	7	23.63	23.70	23.68	24.7
5	QPSK	12	13	23.60	23.68	23.61	
5	QPSK	25	0	23.60	23.69	23.59	24.7
5	16QAM	1	0	23.66	23.99	23.92	
5	16QAM	1	12	23.86	23.94	23.87	24.7
5	16QAM	1	24	23.80	23.94	23.83	
5	16QAM	12	0	22.42	22.74	22.69	23.7
5	16QAM	12	7	22.60	22.75	22.70	
5	16QAM	12	13	22.61	22.70	22.63	23.7
5	16QAM	25	0	22.52	22.72	22.63	
5	64QAM	1	0	21.83	21.95	22.65	23.7
5	64QAM	1	12	21.71	22.83	22.44	
5	64QAM	1	24	21.72	22.88	21.98	22.7
5	64QAM	12	0	20.70	21.46	21.42	
5	64QAM	12	7	20.79	21.76	21.57	22.7
5	64QAM	12	13	20.80	21.72	21.38	
5	64QAM	25	0	20.77	21.50	21.21	



Band 2									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./1800	Power Middle Ch./1800	Power High Ch./1900	Tune-up limit (dbm)		
Channel				1800	1800	1900			
Frequency (MHz)				1800	1800	1900			
20	QPSK	1	0	24.53	24.68	24.96	25.7		
20	QPSK	1	49	24.53	24.72	24.75			
20	QPSK	1	99	24.52	24.71	24.80			
20	QPSK	50	0	23.61	23.75	23.86	24.7		
20	QPSK	50	24	23.73	23.80	23.89			
20	QPSK	50	50	23.71	23.88	23.97			
20	QPSK	100	0	23.72	23.77	23.87	24.7		
20	16QAM	1	0	23.88	24.03	24.14			
20	16QAM	1	49	23.87	24.06	24.07			
20	16QAM	1	99	23.83	24.02	24.16	23.7		
20	16QAM	50	0	22.94	22.77	22.89			
20	16QAM	50	24	22.74	22.80	22.88			
20	16QAM	50	50	22.73	22.89	22.97	23.7		
20	16QAM	100	0	22.72	22.75	22.89			
20	64QAM	1	0	22.72	22.88	23.02			
20	64QAM	1	49	22.78	22.91	22.11	22.7		
20	64QAM	1	99	22.86	22.94	22.83			
20	64QAM	50	0	21.65	21.76	21.34			
20	64QAM	50	24	21.76	21.84	21.35	22.7		
20	64QAM	50	50	21.60	21.91	21.81			
20	64QAM	100	0	21.70	21.81	21.42			
Channel				1867.5	1890	1912.5	Tune-up limit (dbm)		
Frequency (MHz)				1867.5	1890	1902.5			
15	QPSK	1	0	24.54	24.73	24.81	25.7		
15	QPSK	1	37	24.56	24.72	24.81			
15	QPSK	1	74	24.59	24.72	24.85			
15	QPSK	36	0	23.64	23.75	23.85	24.7		
15	QPSK	36	20	23.74	23.80	23.98			
15	QPSK	36	39	23.72	23.90	23.99			
15	QPSK	75	0	23.71	23.79	23.91	24.7		
15	16QAM	1	0	23.80	24.04	24.13			
15	16QAM	1	37	23.88	24.02	24.12			
15	16QAM	1	74	23.88	24.05	24.19	23.7		
15	16QAM	36	0	22.62	22.77	22.86			
15	16QAM	36	20	22.71	22.80	22.96			
15	16QAM	36	39	22.72	22.90	22.99	23.7		
15	16QAM	75	0	22.72	22.81	22.91			
15	64QAM	1	0	22.74	22.87	22.37			
15	64QAM	1	37	22.78	22.92	22.37	23.7		
15	64QAM	1	74	22.63	22.97	22.76			
15	64QAM	36	0	21.67	21.81	21.25			
15	64QAM	36	20	21.77	21.85	21.57	22.7		
15	64QAM	36	39	21.68	21.94	21.75			
15	64QAM	75	0	21.63	21.83	21.44			
Channel				1895.0	1900	1915.0	Tune-up limit (dbm)		
Frequency (MHz)				1895.0	1900	1905.0			
10	QPSK	1	0	24.53	24.68	24.83	25.7		
10	QPSK	1	25	24.54	24.73	24.84			
10	QPSK	1	49	24.58	24.76	24.85			
10	QPSK	25	0	23.66	23.76	23.86	24.7		
10	QPSK	25	12	23.72	23.81	23.91			
10	QPSK	25	25	23.71	23.90	24.02			
10	QPSK	50	0	23.69	23.80	23.93	24.7		
10	16QAM	1	0	23.92	24.09	24.18			
10	16QAM	1	25	23.93	24.12	24.27			
10	16QAM	1	49	23.94	24.12	24.24	23.7		
10	16QAM	25	0	22.94	22.75	22.85			
10	16QAM	25	12	22.71	22.82	22.94			
10	16QAM	25	25	22.72	22.87	23.02	23.7		
10	16QAM	50	0	22.69	22.80	22.92			
10	64QAM	1	0	22.84	22.95	22.38			
10	64QAM	1	25	22.85	23.07	22.86	23.7		
10	64QAM	1	49	22.84	23.07	22.84			
10	64QAM	25	0	21.69	21.78	21.47			
10	64QAM	25	12	21.76	21.85	21.75	22.7		
10	64QAM	25	25	21.74	21.92	21.76			
10	64QAM	50	0	21.71	21.82	21.56			
Channel				1862.5	1890	1917.5	Tune-up limit (dbm)		
Frequency (MHz)				1862.5	1890	1907.5			
5	QPSK	1	0	24.55	24.66	24.86	25.7		
5	QPSK	1	12	24.62	24.80	24.92			
5	QPSK	1	24	24.60	24.81	24.85			
5	QPSK	12	0	23.68	23.77	23.98	24.7		
5	QPSK	12	7	23.70	23.90	24.00			
5	QPSK	12	13	23.68	23.90	24.03			
5	QPSK	25	0	23.67	23.80	23.98	24.7		
5	16QAM	1	0	23.86	23.97	24.28			
5	16QAM	1	12	23.90	24.09	24.24			
5	16QAM	1	24	23.94	24.12	24.28	23.7		
5	16QAM	12	0	22.68	22.82	23.00			
5	16QAM	12	7	22.71	22.94	23.02			
5	16QAM	12	13	22.72	22.88	23.03	23.7		
5	16QAM	25	0	22.71	22.81	23.04			
5	64QAM	1	0	22.87	22.98	22.73			
5	64QAM	1	12	22.80	23.03	22.88	23.7		
5	64QAM	1	24	22.87	23.06	22.75			
5	64QAM	12	0	21.73	21.85	21.81			
5	64QAM	12	7	21.79	21.95	21.84	22.7		
5	64QAM	12	13	21.75	21.92	21.72			
5	64QAM	25	0	21.68	21.82	21.84			
Channel				1891.5	1890	1918.5	Tune-up limit (dbm)		
Frequency (MHz)				1891.5	1890	1908.5			
3	QPSK	1	0	24.55	24.69	24.88	25.7		
3	QPSK	1	8	24.64	24.83	24.95			
3	QPSK	1	14	24.58	24.79	24.93			
3	QPSK	8	0	23.67	23.80	23.97	24.7		
3	QPSK	8	4	23.70	23.90	24.01			
3	QPSK	8	7	23.64	23.87	23.99			
3	QPSK	15	0	23.64	23.80	23.99	24.7		
3	16QAM	1	0	23.83	23.99	24.18			
3	16QAM	1	8	23.96	24.14	24.25			
3	16QAM	1	14	23.94	24.10	24.25	23.7		
3	16QAM	8	0	22.72	22.86	23.05			
3	16QAM	8	4	22.77	22.96	23.06			
3	16QAM	8	7	22.71	22.95	23.06	23.7		
3	16QAM	15	0	22.69	22.82	22.99			
3	64QAM	1	0	22.81	23.01	22.83			
3	64QAM	1	8	22.94	23.12	22.86	23.7		
3	64QAM	1	14	22.84	23.06	22.70			
3	64QAM	8	0	21.73	21.83	21.74			
3	64QAM	8	4	21.75	21.95	21.76	22.7		
3	64QAM	8	7	21.71	21.93	21.68			
3	64QAM	15	0	21.71	21.81	21.66			
Channel				1850.7	1890	1913.3	Tune-up limit (dbm)		
Frequency (MHz)				1850.7	1890	1903.3			
1.4	QPSK	1	0	24.46	24.67	24.82	25.7		
1.4	QPSK	1	3	24.54	24.74	24.90			
1.4	QPSK	1	5	24.47	24.69	24.84			
1.4	QPSK	3	0	24.54	24.71	24.84	24.7		
1.4	QPSK	3	1	24.58	24.77	24.88			
1.4	QPSK	3	3	24.52	24.73	24.85			
1.4	QPSK	6	0	23.58	23.80	23.99	24.7		
1.4	16QAM	1	0	23.82	23.99	24.18			
1.4	16QAM	1	3	23.87	24.13	24.23			
1.4	16QAM	1	5	23.82	24.01	24.17	24.7		
1.4	16QAM	3	0	23.60	23.79	23.91			
1.4	16QAM	3	1	23.66	23.85	23.97			
1.4	16QAM	3	3	23.59	23.79	23.88	23.7		
1.4	16QAM	6	0	22.65	22.84	22.97			
1.4	64QAM	1	0	22.80	22.92	22.63			
1.4	64QAM	1	3	22.84	23.05	22.68	23.7		
1.4	64QAM	1	5	22.77	22.96	22.58			
1.4	64QAM	3	0	22.71	22.93	22.63			
1.4	64QAM	3	1	22.79	22.99	22.69	23.7		
1.4	64QAM	3	3	22.74	22.94	22.56			
1.4	64QAM	6	0	21.61	21.82	21.53			



Band 4							
Part 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	24.42	24.50	24.45	25.7
20	QPSK	1	49	24.32	24.32	24.33	
20	QPSK	1	99	24.31	24.35	24.31	
20	QPSK	50	0	23.47	23.50	23.54	24.7
20	QPSK	50	24	23.51	23.55	23.54	
20	QPSK	50	50	23.46	23.43	23.48	
20	QPSK	100	0	23.50	23.60	23.41	24.7
20	16QAM	1	0	23.78	23.83	23.76	
20	16QAM	1	49	23.66	23.64	23.66	
20	16QAM	1	99	23.69	23.66	23.60	23.7
20	16QAM	50	0	22.49	22.54	22.55	
20	16QAM	50	24	22.52	22.55	22.53	
20	16QAM	50	50	22.46	22.45	22.46	23.7
20	16QAM	100	0	22.49	22.56	22.42	
20	64QAM	1	0	22.24	22.68	22.19	
20	64QAM	1	49	22.53	22.52	22.56	23.7
20	64QAM	1	99	22.58	22.03	22.57	
20	64QAM	50	0	21.50	21.54	21.24	
20	64QAM	50	24	21.54	21.45	21.56	22.7
20	64QAM	50	50	21.47	21.07	21.46	
20	64QAM	100	0	21.54	21.56	21.46	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	24.44	24.48	24.49	25.7
15	QPSK	1	37	24.29	24.32	24.34	
15	QPSK	1	74	24.31	24.31	24.30	
15	QPSK	36	0	23.55	23.55	23.51	24.7
15	QPSK	36	20	23.49	23.52	23.53	
15	QPSK	36	39	23.44	23.46	23.45	
15	QPSK	75	0	23.49	23.54	23.45	24.7
15	16QAM	1	0	23.73	23.80	23.81	
15	16QAM	1	37	23.59	23.63	23.68	
15	16QAM	1	74	23.63	23.62	23.61	23.7
15	16QAM	36	0	22.53	22.50	22.51	
15	16QAM	36	20	22.47	22.50	22.52	
15	16QAM	36	39	22.46	22.44	22.45	23.7
15	16QAM	75	0	22.49	22.54	22.45	
15	64QAM	1	0	22.25	22.67	22.48	
15	64QAM	1	37	22.54	22.34	22.63	23.7
15	64QAM	1	74	22.53	22.12	22.56	
15	64QAM	36	0	21.55	21.58	21.52	
15	64QAM	36	20	21.46	21.41	21.53	22.7
15	64QAM	36	39	21.45	21.06	21.47	
15	64QAM	75	0	21.49	21.46	21.44	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.39	24.42	24.45	25.7
10	QPSK	1	25	24.35	24.42	24.42	
10	QPSK	1	49	24.36	24.38	24.40	
10	QPSK	25	0	23.45	23.47	23.46	24.7
10	QPSK	25	12	23.50	23.57	23.48	
10	QPSK	25	25	23.52	23.57	23.56	
10	QPSK	50	0	23.53	23.56	23.50	24.7
10	16QAM	1	0	23.73	23.79	23.81	
10	16QAM	1	25	23.73	23.82	23.81	
10	16QAM	1	49	23.75	23.75	23.81	23.7
10	16QAM	25	0	22.47	22.46	22.46	
10	16QAM	25	12	22.51	22.57	22.52	
10	16QAM	25	25	22.49	22.54	22.57	23.7
10	16QAM	50	0	22.50	22.56	22.48	
10	64QAM	1	0	22.08	22.84	22.89	
10	64QAM	1	25	22.65	22.44	22.71	23.7
10	64QAM	1	49	22.67	22.61	22.71	
10	64QAM	25	0	21.44	21.50	21.52	
10	64QAM	25	12	21.51	21.35	21.52	22.7
10	64QAM	25	25	21.51	21.03	21.58	
10	64QAM	50	0	21.53	21.32	21.54	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.37	24.38	24.40	25.7
5	QPSK	1	12	24.46	24.46	24.48	
5	QPSK	1	24	24.43	24.48	24.46	
5	QPSK	12	0	23.48	23.44	23.53	24.7
5	QPSK	12	7	23.52	23.54	23.54	
5	QPSK	12	13	23.51	23.52	23.50	
5	QPSK	25	0	23.46	23.53	23.50	24.7
5	16QAM	1	0	23.70	23.76	23.79	
5	16QAM	1	12	23.74	23.72	23.79	
5	16QAM	1	24	23.77	23.78	23.82	23.7
5	16QAM	12	0	22.50	22.46	22.57	
5	16QAM	12	7	22.53	22.57	22.56	
5	16QAM	12	13	22.54	22.57	22.55	23.7
5	16QAM	25	0	22.51	22.53	22.55	
5	64QAM	1	0	22.06	22.62	22.67	
5	64QAM	1	12	22.43	22.33	22.71	23.7
5	64QAM	1	24	22.74	22.09	22.71	
5	64QAM	12	0	21.11	21.51	21.57	
5	64QAM	12	7	21.40	21.31	21.64	22.7
5	64QAM	12	13	21.55	21.06	21.63	
5	64QAM	25	0	21.35	21.27	21.54	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.38	24.36	24.41	25.7
3	QPSK	1	8	24.46	24.48	24.48	
3	QPSK	1	14	24.40	24.43	24.43	
3	QPSK	8	0	23.46	23.44	23.51	24.7
3	QPSK	8	4	23.52	23.52	23.52	
3	QPSK	8	7	23.46	23.51	23.51	
3	QPSK	15	0	23.46	23.55	23.50	24.7
3	16QAM	1	0	23.70	23.75	23.76	
3	16QAM	1	8	23.79	23.83	23.81	
3	16QAM	1	14	23.74	23.75	23.78	23.7
3	16QAM	8	0	22.52	22.49	22.56	
3	16QAM	8	4	22.59	22.62	22.62	
3	16QAM	8	7	22.58	22.58	22.57	23.7
3	16QAM	15	0	22.50	22.56	22.57	
3	64QAM	1	0	22.01	22.49	22.89	
3	64QAM	1	8	22.30	22.39	22.75	23.7
3	64QAM	1	14	22.40	22.19	22.71	
3	64QAM	8	0	20.99	21.39	21.60	
3	64QAM	8	4	21.16	21.32	21.61	22.7
3	64QAM	8	7	21.27	21.20	21.58	
3	64QAM	15	0	21.14	21.29	21.56	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.31	24.33	24.33	25.7
1.4	QPSK	1	3	24.37	24.39	24.42	
1.4	QPSK	1	5	24.30	24.35	24.37	
1.4	QPSK	3	0	24.31	24.35	24.41	24.7
1.4	QPSK	3	1	24.39	24.41	24.43	
1.4	QPSK	3	3	24.35	24.37	24.38	
1.4	QPSK	6	0	23.39	23.42	23.44	24.7
1.4	16QAM	1	0	23.66	23.65	23.69	
1.4	16QAM	1	3	23.71	23.72	23.75	
1.4	16QAM	1	5	23.64	23.65	23.66	24.7
1.4	16QAM	3	0	23.43	23.44	23.47	
1.4	16QAM	3	1	23.49	23.49	23.55	
1.4	16QAM	3	3	23.41	23.45	23.44	23.7
1.4	16QAM	6	0	22.44	22.50	22.52	
1.4	64QAM	1	0	21.95	22.35	22.63	
1.4	64QAM	1	3	22.08	22.32	22.89	23.7
1.4	64QAM	1	5	22.09	22.21	22.63	
1.4	64QAM	3	0	21.99	22.35	22.57	
1.4	64QAM	3	1	22.17	22.46	22.64	23.7
1.4	64QAM	3	3	22.11	22.27	22.61	
1.4	64QAM	6	0	20.96	21.20	21.45	





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	20505	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.76	23.75	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.60	23.7
10	16QAM	25	0	22.96	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.76	22.73	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.48	21.77	
10	64QAM	25	0	21.67	21.76	21.76	
10	64QAM	25	12	21.80	21.77	21.68	22.7
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.76	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.94	22.62	
5	64QAM	1	12	22.90	22.85	21.90	23.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.76	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	24.7
3	QPSK	8	4	23.68	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	23.7
3	64QAM	1	14	22.64	22.62	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.56	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.86	23.26	
1.4	16QAM	1	3	23.93	23.95	23.39	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.86	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.26	
1.4	64QAM	1	0	22.64	22.60	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	22.7
1.4	64QAM	3	3	22.64	22.76	21.77	
1.4	64QAM	6	0	21.60	21.69	20.74	



Band 7							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.69	24.76	24.80	
20	QPSK	1	49	24.74	24.81	24.78	25.7
20	QPSK	1	99	24.84	24.83	24.83	
20	QPSK	50	0	23.80	23.87	23.89	
20	QPSK	50	24	23.92	23.91	23.91	24.7
20	QPSK	50	50	23.94	23.92	23.92	
20	QPSK	100	0	23.91	23.89	23.91	
20	16QAM	1	0	24.01	24.09	24.15	
20	16QAM	1	49	24.12	24.17	24.15	24.7
20	16QAM	1	99	24.15	24.21	24.14	
20	16QAM	50	0	22.81	22.87	22.91	
20	16QAM	50	24	22.93	22.92	22.94	23.7
20	16QAM	50	50	22.96	23.02	22.98	
20	16QAM	100	0	22.92	22.90	22.92	
20	64QAM	1	0	22.89	22.96	22.99	
20	64QAM	1	49	22.98	23.07	22.88	23.7
20	64QAM	1	99	23.07	23.13	22.92	
20	64QAM	50	0	21.84	21.92	21.92	
20	64QAM	50	24	21.95	21.95	21.71	22.7
20	64QAM	50	50	21.98	22.04	21.58	
20	64QAM	100	0	21.94	21.92	21.71	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.67	24.77	24.82	
15	QPSK	1	37	24.72	24.81	24.81	25.7
15	QPSK	1	74	24.80	24.80	24.83	
15	QPSK	36	0	23.77	23.87	23.90	
15	QPSK	36	20	23.93	23.91	23.91	24.7
15	QPSK	36	39	23.94	24.00	23.95	
15	QPSK	75	0	23.88	23.91	23.88	
15	16QAM	1	0	24.00	24.11	24.14	
15	16QAM	1	37	24.05	24.14	24.15	24.7
15	16QAM	1	74	24.14	24.24	24.13	
15	16QAM	36	0	22.80	22.89	22.90	
15	16QAM	36	20	22.92	22.92	22.90	23.7
15	16QAM	36	39	22.95	23.02	22.95	
15	16QAM	75	0	22.91	22.92	22.89	
15	64QAM	1	0	22.89	23.01	23.01	23.7
15	64QAM	1	37	22.99	23.08	22.38	
15	64QAM	1	74	23.01	23.14	22.69	
15	64QAM	36	0	21.85	21.94	21.72	
15	64QAM	36	20	21.93	21.93	21.52	22.7
15	64QAM	36	39	21.97	22.06	21.58	
15	64QAM	75	0	21.91	21.95	21.57	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.68	24.75	24.75	
10	QPSK	1	25	24.64	24.74	24.73	25.7
10	QPSK	1	49	24.71	24.83	24.78	
10	QPSK	25	0	23.84	23.87	23.82	
10	QPSK	25	12	23.88	23.89	23.84	24.7
10	QPSK	25	25	23.85	23.96	23.92	
10	QPSK	50	0	23.88	23.91	23.83	
10	16QAM	1	0	24.04	24.13	24.11	
10	16QAM	1	25	24.04	24.17	24.14	24.7
10	16QAM	1	49	24.13	24.22	24.15	
10	16QAM	25	0	22.85	22.86	22.82	
10	16QAM	25	12	22.86	22.91	22.87	23.7
10	16QAM	25	25	22.89	22.97	22.92	
10	16QAM	50	0	22.87	22.89	22.84	
10	64QAM	1	0	22.97	22.99	22.86	
10	64QAM	1	25	23.00	23.09	22.74	23.7
10	64QAM	1	49	23.01	23.14	22.89	
10	64QAM	25	0	21.88	21.89	21.50	
10	64QAM	25	12	21.92	21.93	21.62	22.7
10	64QAM	25	25	21.92	22.00	21.66	
10	64QAM	50	0	21.92	21.94	21.50	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.69	24.76	24.74	
5	QPSK	1	12	24.75	24.80	24.75	25.7
5	QPSK	1	24	24.74	24.80	24.77	
5	QPSK	12	0	23.83	23.88	23.88	
5	QPSK	12	7	23.87	23.86	23.90	24.7
5	QPSK	12	13	23.84	23.98	23.88	
5	QPSK	25	0	23.84	23.88	23.85	
5	16QAM	1	0	24.05	24.10	24.09	
5	16QAM	1	12	24.08	24.16	24.07	24.7
5	16QAM	1	24	24.07	24.17	24.10	
5	16QAM	12	0	22.88	22.91	22.93	
5	16QAM	12	7	22.88	22.93	22.89	23.7
5	16QAM	12	13	22.90	22.97	22.89	
5	16QAM	25	0	22.88	22.89	22.87	
5	64QAM	1	0	23.00	23.00	22.69	
5	64QAM	1	12	22.99	23.08	22.72	23.7
5	64QAM	1	24	23.01	23.10	22.82	
5	64QAM	12	0	21.91	21.94	21.57	
5	64QAM	12	7	21.87	21.95	21.72	22.7
5	64QAM	12	13	21.91	22.05	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



Band 12							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.64	24.61	24.63	
10	QPSK	1	25	24.63	24.68	24.65	25.7
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	
10	QPSK	25	12	23.87	23.80	23.76	24.7
10	QPSK	25	25	23.98	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	24.7
10	16QAM	1	49	24.12	24.08	24.07	
10	16QAM	25	0	22.76	22.79	22.77	
10	16QAM	25	12	22.62	22.80	22.78	23.7
10	16QAM	25	25	22.81	22.85	22.79	
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	25	22.76	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.78	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	22.7
10	64QAM	25	25	21.82	21.90	21.84	
10	64QAM	50	0	21.83	21.81	21.80	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	
5	QPSK	1	12	24.72	24.73	24.71	25.7
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.79	23.78	
5	QPSK	12	7	23.79	23.75	23.81	24.7
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	24.7
5	16QAM	1	24	24.02	24.07	24.03	
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	23.7
5	16QAM	12	13	22.83	22.82	22.80	
5	16QAM	25	0	22.81	22.85	22.75	
5	64QAM	1	0	22.62	22.73	22.91	23.7
5	64QAM	1	12	22.83	22.94	22.94	
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	
5	64QAM	12	7	21.88	21.85	21.88	22.7
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23025	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	
3	QPSK	1	8	24.73	24.74	24.73	25.7
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.78	23.73	
3	QPSK	8	4	23.78	23.74	23.77	24.7
3	QPSK	8	7	23.73	23.76	23.75	
3	QPSK	15	0	23.77	23.75	23.73	
3	16QAM	1	0	24.08	24.01	24.02	
3	16QAM	1	8	24.06	24.08	24.08	24.7
3	16QAM	1	14	24.00	24.05	23.98	
3	16QAM	8	0	22.88	22.83	22.82	
3	16QAM	8	4	22.90	22.83	22.87	23.7
3	16QAM	8	7	22.84	22.84	22.83	
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.67	22.90	22.95	23.7
3	64QAM	1	8	22.91	23.01	22.98	
3	64QAM	1	14	22.92	22.95	22.88	
3	64QAM	8	0	21.82	21.81	21.81	22.7
3	64QAM	8	4	21.87	21.84	21.87	
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.65	21.78	21.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.59	24.59	
1.4	QPSK	1	3	24.68	24.67	24.64	25.7
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	
1.4	QPSK	3	1	24.70	24.64	24.68	
1.4	QPSK	3	3	24.64	24.67	24.61	24.7
1.4	QPSK	6	0	23.71	23.74	23.67	
1.4	16QAM	1	0	23.99	23.93	23.96	
1.4	16QAM	1	3	24.02	24.02	23.98	24.7
1.4	16QAM	1	5	23.92	23.94	23.91	
1.4	16QAM	3	0	23.75	23.69	23.69	24.7
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.70	23.73	23.65	
1.4	16QAM	6	0	22.78	22.80	22.76	23.7
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.89	
1.4	64QAM	1	5	22.82	22.85	22.81	23.7
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	
1.4	64QAM	3	3	22.83	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	22.7



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0	24.23	24.23		25.2
10	QPSK	1	25	24.22			
10	QPSK	1	49	24.35			
10	QPSK	25	0	23.30			24.2
10	QPSK	25	12	23.33			
10	QPSK	25	25	23.34			
10	QPSK	50	0	23.35			24.2
10	16QAM	1	0	23.58			
10	16QAM	1	25	23.57			
10	16QAM	1	49	23.54			23.2
10	16QAM	25	0	22.31			
10	16QAM	25	12	22.34			
10	16QAM	25	25	22.38			23.2
10	16QAM	50	0	22.35			
10	64QAM	1	0	22.30			
10	64QAM	1	25	22.52			23.2
10	64QAM	1	49	22.46			
10	64QAM	25	0	21.36			
10	64QAM	25	12	21.38			22.2
10	64QAM	25	25	21.37			
10	64QAM	50	0	21.39			
Channel				23205 23230 23255			Tune-up limit (dBm)
Frequency (MHz)				779.5 782 784.5			
5	QPSK	1	0	24.23	24.20	24.18	25.2
5	QPSK	1	12	24.28	24.27	24.23	
5	QPSK	1	24	24.30	24.23	24.34	
5	QPSK	12	0	23.38	23.33	23.29	24.2
5	QPSK	12	7	23.41	23.32	23.31	
5	QPSK	12	13	23.38	23.35	23.29	
5	QPSK	25	0	23.37	23.33	23.32	24.2
5	16QAM	1	0	23.51	23.48	23.52	
5	16QAM	1	12	23.50	23.47	23.47	
5	16QAM	1	24	23.59	23.51	23.49	23.2
5	16QAM	12	0	22.43	22.35	22.38	
5	16QAM	12	7	22.42	22.33	22.35	
5	16QAM	12	13	22.40	22.37	22.37	23.2
5	16QAM	25	0	22.43	22.34	22.33	
5	64QAM	1	0	22.14	22.47	22.39	
5	64QAM	1	12	22.50	22.44	22.45	23.2
5	64QAM	1	24	22.47	22.47	22.38	
5	64QAM	12	0	21.47	21.41	21.37	
5	64QAM	12	7	21.47	21.37	21.42	22.2
5	64QAM	12	13	21.44	21.41	21.38	
5	64QAM	25	0	21.41	21.37	21.34	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.66			25.7
10	QPSK	1	25	24.65			
10	QPSK	1	49	24.67			
10	QPSK	25	0	23.71			24.7
10	QPSK	25	12	23.70			
10	QPSK	25	25	23.73			
10	QPSK	50	0	23.68			24.7
10	16QAM	1	0	24.08			
10	16QAM	1	25	24.08			
10	16QAM	1	49	23.96			23.7
10	16QAM	25	0	22.95			
10	16QAM	25	12	22.70			
10	16QAM	25	25	22.71			23.7
10	16QAM	50	0	22.70			
10	64QAM	1	0	22.92			
10	64QAM	1	25	22.66			23.7
10	64QAM	1	49	22.90			
10	64QAM	25	0	21.71			
10	64QAM	25	12	21.37			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.44			
Channel				23305 23330 23355			Tune-up limit (dBm)
Frequency (MHz)				790.5 793 795.5			
5	QPSK	1	0	24.62	24.61	24.59	25.7
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.7
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.7
5	16QAM	1	0	23.83	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.7
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.7
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.69	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.7
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.7
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.03	21.17	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				706	710	711	
10	QPSK	1	0	24.66	24.65	24.61	
10	QPSK	1	25	24.69	24.70	24.71	25.7
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	
10	QPSK	25	12	23.88	23.82	23.79	24.7
10	QPSK	25	25	23.88	23.88	23.88	
10	QPSK	50	0	23.79	23.78	23.79	
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	24.7
10	16QAM	1	49	24.12	24.10	24.09	
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	23.7
10	16QAM	25	25	22.89	22.90	22.82	
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.76	22.88	
10	64QAM	1	25	22.71	22.71	22.65	23.7
10	64QAM	1	49	22.87	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	22.7
10	64QAM	25	25	21.65	21.78	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.65	24.68	
5	QPSK	1	12	24.74	24.79	24.75	25.7
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	
5	QPSK	12	7	23.85	23.81	23.82	24.7
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	
5	16QAM	1	0	23.99	23.98	23.99	24.7
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	23.7
5	16QAM	12	13	22.84	22.88	22.84	
5	16QAM	25	0	22.65	22.65	22.67	
5	64QAM	1	0	22.40	22.44	22.76	23.7
5	64QAM	1	12	22.76	22.60	22.94	
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



Band 25							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1880	1880	1905	
20	QPSK	1	0	24.65	24.76	24.91	25.7
20	QPSK	1	49	24.64	24.72	24.82	
20	QPSK	1	99	24.61	24.75	24.23	
20	QPSK	50	0	23.71	23.86	23.94	24.7
20	QPSK	50	24	23.80	23.95	24.01	
20	QPSK	50	50	23.73	23.92	24.00	
20	QPSK	100	0	23.81	23.94	23.97	24.7
20	16QAM	1	0	23.95	24.08	24.19	
20	16QAM	1	49	23.98	24.09	24.15	
20	16QAM	1	99	23.89	24.08	23.60	23.7
20	16QAM	50	0	22.72	22.85	22.96	
20	16QAM	50	24	22.80	22.95	22.98	
20	16QAM	50	50	22.76	22.93	23.05	23.7
20	16QAM	100	0	22.78	22.93	22.94	
20	64QAM	1	0	22.86	22.94	22.43	
20	64QAM	1	49	22.70	22.91	22.54	23.7
20	64QAM	1	99	22.42	22.97	21.74	
20	64QAM	50	0	21.75	21.89	21.33	
20	64QAM	50	24	21.66	22.01	21.58	22.7
20	64QAM	50	50	21.43	21.95	21.32	
20	64QAM	100	0	21.70	21.95	21.16	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	24.65	24.77	24.86	25.7
15	QPSK	1	37	24.65	24.76	24.88	
15	QPSK	1	74	24.63	24.77	24.32	
15	QPSK	36	0	23.72	23.86	23.96	24.7
15	QPSK	36	20	23.79	23.95	24.07	
15	QPSK	36	39	23.74	23.89	23.93	
15	QPSK	75	0	23.77	23.94	23.96	24.7
15	16QAM	1	0	23.83	24.07	24.15	
15	16QAM	1	37	23.97	24.09	24.18	
15	16QAM	1	74	23.92	24.10	23.69	23.7
15	16QAM	36	0	22.73	22.87	22.98	
15	16QAM	36	20	22.78	22.96	23.06	
15	16QAM	36	39	22.72	22.90	23.02	23.7
15	16QAM	75	0	22.77	22.94	22.96	
15	64QAM	1	0	22.63	22.92	22.34	
15	64QAM	1	37	22.88	22.97	22.77	23.7
15	64QAM	1	74	22.42	22.97	21.81	
15	64QAM	36	0	21.77	21.92	21.56	
15	64QAM	36	20	21.82	21.98	21.69	22.7
15	64QAM	36	39	21.58	21.93	21.28	
15	64QAM	75	0	21.79	21.95	21.27	
Channel				26050	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1885	1880	1910	
10	QPSK	1	0	24.65	24.70	24.88	25.7
10	QPSK	1	25	24.55	24.70	24.90	
10	QPSK	1	49	24.60	24.75	24.20	
10	QPSK	25	0	23.74	23.81	23.94	24.7
10	QPSK	25	12	23.79	23.93	24.00	
10	QPSK	25	25	23.79	23.93	23.65	
10	QPSK	50	0	23.78	23.93	23.95	24.7
10	16QAM	1	0	23.98	24.12	24.22	
10	16QAM	1	25	23.98	24.13	24.27	
10	16QAM	1	49	23.98	24.13	23.58	23.7
10	16QAM	25	0	22.76	22.85	22.96	
10	16QAM	25	12	22.80	22.95	22.97	
10	16QAM	25	25	22.76	22.90	22.84	23.7
10	16QAM	50	0	22.78	22.91	22.97	
10	64QAM	1	0	22.91	22.95	22.66	
10	64QAM	1	25	22.92	23.05	22.53	23.7
10	64QAM	1	49	22.81	23.07	21.74	
10	64QAM	25	0	21.78	21.82	21.82	
10	64QAM	25	12	21.84	21.98	21.46	22.7
10	64QAM	25	25	21.82	21.93	21.00	
10	64QAM	50	0	21.76	21.94	21.20	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.60	24.72	24.90	25.7
5	QPSK	1	12	24.65	24.84	24.43	
5	QPSK	1	24	24.64	24.80	24.08	
5	QPSK	12	0	23.72	23.83	23.86	24.7
5	QPSK	12	7	23.79	23.91	23.61	
5	QPSK	12	13	23.78	23.94	23.38	
5	QPSK	25	0	23.74	23.90	23.55	24.7
5	16QAM	1	0	24.03	24.05	24.22	
5	16QAM	1	12	23.94	24.12	23.81	
5	16QAM	1	24	23.97	24.15	23.46	23.7
5	16QAM	12	0	22.74	22.86	22.99	
5	16QAM	12	7	22.81	22.95	22.77	
5	16QAM	12	13	22.82	22.98	22.55	23.7
5	16QAM	25	0	22.79	22.90	22.73	
5	64QAM	1	0	22.86	23.00	22.35	
5	64QAM	1	12	22.84	23.00	21.93	23.7
5	64QAM	1	24	22.86	23.03	21.55	
5	64QAM	12	0	21.76	21.92	21.17	
5	64QAM	12	7	21.84	21.99	21.00	22.7
5	64QAM	12	13	21.68	22.00	20.74	
5	64QAM	25	0	21.81	21.93	20.87	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.54	24.63	24.53	25.7
3	QPSK	1	8	24.69	24.83	24.34	
3	QPSK	1	14	24.67	24.83	24.09	
3	QPSK	8	0	23.69	23.80	23.60	24.7
3	QPSK	8	4	23.78	23.90	23.40	
3	QPSK	8	7	23.75	23.89	23.37	
3	QPSK	15	0	23.72	23.90	23.43	24.7
3	16QAM	1	0	23.90	23.95	23.83	
3	16QAM	1	8	24.00	24.20	23.68	
3	16QAM	1	14	23.99	24.16	23.42	23.7
3	16QAM	8	0	22.76	22.89	22.72	
3	16QAM	8	4	22.82	22.96	22.61	
3	16QAM	8	7	22.81	22.99	22.48	23.7
3	16QAM	15	0	22.79	22.91	22.56	
3	64QAM	1	0	22.80	22.87	21.94	
3	64QAM	1	8	22.93	23.11	21.80	23.7
3	64QAM	1	14	22.90	23.08	21.57	
3	64QAM	8	0	21.76	21.90	20.85	
3	64QAM	8	4	21.84	22.00	20.77	22.7
3	64QAM	8	7	21.83	21.99	20.64	
3	64QAM	15	0	21.79	21.92	20.73	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	24.51	24.65	24.19	25.7
1.4	QPSK	1	3	24.62	24.74	24.13	
1.4	QPSK	1	5	24.59	24.76	24.02	
1.4	QPSK	3	0	24.56	24.71	24.13	24.7
1.4	QPSK	3	1	24.63	24.77	24.17	
1.4	QPSK	3	3	24.59	24.77	24.04	
1.4	QPSK	6	0	23.67	23.83	23.21	24.7
1.4	16QAM	1	0	23.80	23.95	23.48	
1.4	16QAM	1	3	23.99	24.12	23.47	
1.4	16QAM	1	5	23.94	24.09	23.36	24.7
1.4	16QAM	3	0	23.60	23.77	23.31	
1.4	16QAM	3	1	23.70	23.85	23.31	
1.4	16QAM	3	3	23.65	23.82	23.22	23.7
1.4	16QAM	6	0	22.73	22.90	22.41	
1.4	64QAM	1	0	22.77	22.91	21.92	
1.4	64QAM	1	3	22.85	23.04	21.85	23.7
1.4	64QAM	1	5	22.79	22.99	22.00	
1.4	64QAM	3	0	22.72	22.92	21.81	
1.4	64QAM	3	1	22.80	22.97	21.78	23.7
1.4	64QAM	3	3	22.78	22.96	21.73	
1.4	64QAM	6	0	21.67	21.85	20.79	



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26785	26885	26985	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.76	24.52	24.57	
15	QPSK	1	37	24.46	24.51	24.50	25.7
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	24.7
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.96	22.87	
15	16QAM	36	20	22.65	22.61	22.60	23.7
15	16QAM	36	39	22.59	22.65	22.62	
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	23.7
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	22.7
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	
10	QPSK	1	25	24.97	24.55	24.59	25.7
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	24.07	23.96	23.96	24.7
10	16QAM	1	25	23.94	24.01	23.97	
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	23.7
10	16QAM	25	25	22.64	22.63	22.63	
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	23.7
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	
5	QPSK	1	12	24.72	24.63	24.47	25.7
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.80	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	24.7
5	16QAM	1	12	24.00	23.97	23.85	
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	23.7
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	23.7
5	64QAM	1	12	22.90	22.88	22.03	
5	64QAM	1	24	22.81	22.86	21.86	
5	64QAM	12	0	21.83	21.78	21.45	22.7
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	
3	QPSK	1	8	24.75	24.60	24.16	25.7
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	6	0	23.83	23.68	23.38	
3	QPSK	6	4	23.77	23.72	23.28	24.7
3	QPSK	6	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	24.7
3	16QAM	1	8	24.06	24.06	23.47	
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	6	0	22.86	22.77	22.54	23.7
3	16QAM	6	4	22.88	22.77	22.42	
3	16QAM	6	7	22.78	22.76	22.45	
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.63	22.00	23.7
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	
3	64QAM	6	0	21.79	21.74	20.85	22.7
3	64QAM	6	4	21.88	21.81	20.77	
3	64QAM	6	7	21.81	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	
1.4	QPSK	1	3	24.71	24.63	24.26	25.7
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.69	24.55	24.17	
1.4	QPSK	3	1	24.74	24.56	24.22	
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	24.7
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	
1.4	16QAM	1	5	23.93	23.86	23.65	24.7
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	
1.4	16QAM	6	0	22.82	22.75	22.46	23.7
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.88	21.90	
1.4	64QAM	1	5	22.88	22.78	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	22.7





Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2774.0			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		20.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.86	22.86	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.14	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	24.35	24.39	24.57	25.7
20	QPSK	1	49	24.22	24.27	24.30	
20	QPSK	1	99	24.34	24.32	24.26	
20	QPSK	50	0	23.40	23.47	23.49	24.7
20	QPSK	50	24	23.46	23.43	23.47	
20	QPSK	50	50	23.47	23.48	23.50	
20	QPSK	100	0	23.46	23.40	23.47	24.7
20	16QAM	1	0	23.67	23.74	23.76	
20	16QAM	1	49	23.56	23.64	23.63	
20	16QAM	1	99	23.70	23.64	23.60	23.7
20	16QAM	50	0	22.37	22.46	22.54	
20	16QAM	50	24	22.46	22.43	22.47	
20	16QAM	50	50	22.44	22.47	22.51	23.7
20	16QAM	100	0	22.44	22.41	22.48	
20	64QAM	1	0	22.46	22.43	22.61	
20	64QAM	1	49	22.44	22.57	22.12	23.7
20	64QAM	1	99	22.58	22.59	22.49	
20	64QAM	50	0	21.39	21.46	21.51	
20	64QAM	50	24	21.48	21.45	21.31	22.7
20	64QAM	50	50	21.45	21.49	21.54	
20	64QAM	100	0	21.49	21.46	21.48	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	24.30	24.41	24.38	25.7
15	QPSK	1	37	24.21	24.29	24.33	
15	QPSK	1	74	24.34	24.36	24.31	
15	QPSK	36	0	23.37	23.44	23.49	24.7
15	QPSK	36	20	23.43	23.43	23.47	
15	QPSK	36	39	23.42	23.48	23.52	
15	QPSK	75	0	23.44	23.43	23.47	24.7
15	16QAM	1	0	23.60	23.74	23.73	
15	16QAM	1	37	23.56	23.63	23.68	
15	16QAM	1	74	23.64	23.66	23.65	23.7
15	16QAM	36	0	22.36	22.46	22.49	
15	16QAM	36	20	22.42	22.40	22.45	
15	16QAM	36	39	22.42	22.46	22.50	23.7
15	16QAM	75	0	22.46	22.41	22.45	
15	64QAM	1	0	22.46	22.59	22.58	
15	64QAM	1	37	22.47	22.56	22.44	23.7
15	64QAM	1	74	22.55	22.58	22.57	
15	64QAM	36	0	21.38	21.49	21.21	
15	64QAM	36	20	21.43	21.44	21.46	22.7
15	64QAM	36	39	21.45	21.50	21.52	
15	64QAM	75	0	21.44	21.42	21.47	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	24.37	24.44	24.45	25.7
10	QPSK	1	25	24.30	24.40	24.44	
10	QPSK	1	49	24.30	24.39	24.41	
10	QPSK	25	0	23.41	23.46	23.49	24.7
10	QPSK	25	12	23.45	23.49	23.49	
10	QPSK	25	25	23.44	23.50	23.57	
10	QPSK	50	0	23.46	23.47	23.49	24.7
10	16QAM	1	0	23.72	23.82	23.84	
10	16QAM	1	25	23.70	23.79	23.81	
10	16QAM	1	49	23.73	23.76	23.81	23.7
10	16QAM	25	0	22.48	22.47	22.50	
10	16QAM	25	12	22.48	22.47	22.52	
10	16QAM	25	25	22.41	22.50	22.55	23.7
10	16QAM	50	0	22.45	22.46	22.48	
10	64QAM	1	0	22.37	22.81	22.08	
10	64QAM	1	25	22.61	22.71	22.78	23.7
10	64QAM	1	49	22.61	22.67	22.72	
10	64QAM	25	0	21.45	21.49	21.49	
10	64QAM	25	12	21.48	21.51	21.55	22.7
10	64QAM	25	25	21.45	21.53	21.60	
10	64QAM	50	0	21.47	21.49	21.52	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	24.35	24.40	24.49	25.7
5	QPSK	1	12	24.39	24.40	24.52	
5	QPSK	1	24	24.33	24.43	24.46	
5	QPSK	12	0	23.44	23.46	23.58	24.7
5	QPSK	12	7	23.47	23.56	23.59	
5	QPSK	12	13	23.44	23.53	23.57	
5	QPSK	25	0	23.43	23.45	23.55	24.7
5	16QAM	1	0	23.75	23.79	23.80	
5	16QAM	1	12	23.73	23.81	23.84	
5	16QAM	1	24	23.67	23.78	23.80	23.7
5	16QAM	12	0	22.46	22.51	22.62	
5	16QAM	12	7	22.50	22.81	22.64	
5	16QAM	12	13	22.47	22.57	22.58	23.7
5	16QAM	25	0	22.46	22.46	22.59	
5	64QAM	1	0	22.41	22.71	22.81	
5	64QAM	1	12	22.64	22.73	22.77	23.7
5	64QAM	1	24	22.65	22.75	22.73	
5	64QAM	12	0	21.47	21.53	21.64	
5	64QAM	12	7	21.53	21.61	21.64	22.7
5	64QAM	12	13	21.49	21.55	21.60	
5	64QAM	25	0	21.44	21.49	21.59	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	24.38	24.42	24.50	25.7
3	QPSK	1	8	24.40	24.52	24.56	
3	QPSK	1	14	24.35	24.45	24.48	
3	QPSK	8	0	23.45	23.49	23.55	24.7
3	QPSK	8	4	23.47	23.55	23.57	
3	QPSK	8	7	23.43	23.52	23.54	
3	QPSK	15	0	23.44	23.49	23.57	24.7
3	16QAM	1	0	23.70	23.70	23.82	
3	16QAM	1	8	23.76	23.83	23.87	
3	16QAM	1	14	23.66	23.78	23.81	23.7
3	16QAM	8	0	22.50	22.55	22.65	
3	16QAM	8	4	22.55	22.61	22.63	
3	16QAM	8	7	22.51	22.58	22.59	23.7
3	16QAM	15	0	22.47	22.49	22.58	
3	64QAM	1	0	22.40	22.89	22.78	
3	64QAM	1	8	22.70	22.85	22.81	23.7
3	64QAM	1	14	22.67	22.73	22.75	
3	64QAM	8	0	21.39	21.53	21.65	
3	64QAM	8	4	21.53	21.64	21.66	22.7
3	64QAM	8	7	21.50	21.58	21.58	
3	64QAM	15	0	21.48	21.49	21.62	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	24.27	24.36	24.43	25.7
1.4	QPSK	1	3	24.30	24.40	24.40	
1.4	QPSK	1	5	24.22	24.37	24.41	
1.4	QPSK	3	0	24.33	24.43	24.44	24.7
1.4	QPSK	3	1	24.35	24.47	24.48	
1.4	QPSK	3	3	24.27	24.38	24.42	
1.4	QPSK	6	0	23.38	23.43	23.48	24.7
1.4	16QAM	1	0	23.59	23.73	23.75	
1.4	16QAM	1	3	23.65	23.80	23.83	
1.4	16QAM	1	5	23.59	23.73	23.76	24.7
1.4	16QAM	3	0	23.40	23.55	23.53	
1.4	16QAM	3	1	23.46	23.57	23.55	
1.4	16QAM	3	3	23.36	23.50	23.50	23.7
1.4	16QAM	6	0	22.44	21.83	22.58	
1.4	64QAM	1	0	22.30	21.79	22.64	
1.4	64QAM	1	3	22.41	21.72	22.74	23.7
1.4	64QAM	1	5	22.41	21.82	22.67	
1.4	64QAM	3	0	22.31	21.74	22.82	
1.4	64QAM	3	1	22.44	21.79	22.68	23.7
1.4	64QAM	3	3	22.43	21.75	22.61	
1.4	64QAM	6	0	21.21	20.71	21.51	



Band 71						
Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	24.77	24.67	24.68
20	QPSK	1	49	24.65	24.65	24.65
20	QPSK	1	99	24.68	24.66	24.61
20	QPSK	50	0	23.76	23.76	23.72
20	QPSK	50	24	23.80	23.74	23.75
20	QPSK	50	50	23.84	23.78	23.75
20	QPSK	100	0	23.79	23.71	23.77
20	16QAM	1	0	24.06	23.96	24.00
20	16QAM	1	49	24.01	24.03	24.04
20	16QAM	1	99	24.03	24.01	23.95
20	16QAM	50	0	22.77	22.75	22.75
20	16QAM	50	24	22.82	22.77	22.73
20	16QAM	50	50	22.82	22.77	22.78
20	16QAM	100	0	22.79	22.73	22.78
20	64QAM	1	0	22.04	22.83	22.82
20	64QAM	1	49	22.63	22.90	22.29
20	64QAM	1	99	22.94	22.89	22.87
20	64QAM	50	0	21.00	21.79	21.49
20	64QAM	50	24	21.30	21.64	21.57
20	64QAM	50	50	21.84	21.60	21.74
20	64QAM	100	0	21.53	21.76	21.80
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	24.74	24.65	24.63
15	QPSK	1	37	24.62	24.66	24.61
15	QPSK	1	74	24.65	24.68	24.64
15	QPSK	36	0	23.73	23.71	23.69
15	QPSK	36	20	23.80	23.73	23.78
15	QPSK	36	39	23.73	23.76	23.74
15	QPSK	75	0	23.81	23.74	23.68
15	16QAM	1	0	24.05	24.01	23.98
15	16QAM	1	37	23.95	24.02	24.00
15	16QAM	1	74	23.97	24.00	23.98
15	16QAM	36	0	22.76	22.75	22.71
15	16QAM	36	20	22.79	22.74	22.79
15	16QAM	36	39	22.77	22.79	22.75
15	16QAM	75	0	22.63	22.73	22.70
15	64QAM	1	0	22.02	22.43	22.76
15	64QAM	1	37	21.86	22.94	22.88
15	64QAM	1	74	22.88	22.60	22.84
15	64QAM	36	0	20.97	21.77	21.44
15	64QAM	36	20	20.94	21.78	21.81
15	64QAM	36	39	21.48	21.56	21.78
15	64QAM	75	0	21.29	21.75	21.67
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	24.76	24.64	24.66
10	QPSK	1	25	24.61	24.62	24.63
10	QPSK	1	49	24.66	24.71	24.62
10	QPSK	25	0	23.78	23.71	23.69
10	QPSK	25	12	23.79	23.82	23.70
10	QPSK	25	25	23.72	23.78	23.74
10	QPSK	50	0	23.80	23.81	23.71
10	16QAM	1	0	24.10	24.02	24.04
10	16QAM	1	25	23.98	24.06	24.00
10	16QAM	1	49	23.98	24.07	23.96
10	16QAM	25	0	22.76	22.70	22.68
10	16QAM	25	12	22.78	22.81	22.68
10	16QAM	25	25	22.65	22.77	22.73
10	16QAM	50	0	22.79	22.80	22.69
10	64QAM	1	0	21.80	22.30	22.77
10	64QAM	1	25	22.01	22.95	22.95
10	64QAM	1	49	22.14	22.96	22.45
10	64QAM	25	0	20.82	21.71	21.71
10	64QAM	25	12	20.84	21.84	21.76
10	64QAM	25	25	20.71	21.81	21.64
10	64QAM	50	0	20.83	21.77	21.69
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	24.57	24.69	24.72
5	QPSK	1	12	24.71	24.66	24.70
5	QPSK	1	24	24.70	24.68	24.63
5	QPSK	12	0	23.73	23.76	23.74
5	QPSK	12	7	23.84	23.79	23.76
5	QPSK	12	13	23.76	23.76	23.70
5	QPSK	25	0	23.76	23.76	23.68
5	16QAM	1	0	23.75	24.01	24.02
5	16QAM	1	12	23.97	24.03	23.97
5	16QAM	1	24	23.95	24.02	23.93
5	16QAM	12	0	22.64	22.80	22.78
5	16QAM	12	7	22.86	22.80	22.78
5	16QAM	12	13	22.77	22.77	22.70
5	16QAM	25	0	22.69	22.81	22.70
5	64QAM	1	0	21.74	22.06	22.91
5	64QAM	1	12	21.79	22.94	22.70
5	64QAM	1	24	21.96	22.96	22.25
5	64QAM	12	0	20.82	21.49	21.68
5	64QAM	12	7	21.00	21.86	21.73
5	64QAM	12	13	20.99	21.81	21.61
5	64QAM	25	0	20.76	21.69	21.48



Band 2									
Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq.	Power Middle Ch. F.Freq.	Power High Ch. F.Freq.	Tune-up limit (dBm)		
Channel				1800	1860	1900			
Frequency (MHz)				1800	1860	1900			
20	QPSK	1	0	24.72	24.80	24.91		25.7	
20	QPSK	1	49	24.67	24.74	24.77			
20	QPSK	1	99	24.64	24.71	24.79			
20	QPSK	50	0	23.78	23.84	23.88		24.7	
20	QPSK	50	24	23.87	23.88	23.91			
20	QPSK	50	50	23.88	23.94	23.99			
20	QPSK	100	0	23.86	23.87	23.94			
20	16QAM	1	0	24.10	24.10	24.20		24.7	
20	16QAM	1	49	24.03	24.08	24.16			
20	16QAM	1	99	23.93	24.12	24.12			
20	16QAM	50	0	22.80	22.85	22.89		23.7	
20	16QAM	50	24	22.89	22.87	22.94			
20	16QAM	50	50	22.87	22.95	23.00			
20	16QAM	100	0	22.86	22.88	22.89			
20	64QAM	1	0	22.94	22.96	23.01		23.7	
20	64QAM	1	49	22.91	22.97	22.98			
20	64QAM	1	99	22.84	23.00	22.49			
20	64QAM	50	0	21.81	21.87	21.54		22.7	
20	64QAM	50	24	21.92	21.92	21.54			
20	64QAM	50	50	21.86	21.97	21.58			
20	64QAM	100	0	21.87	21.90	21.49			
Channel				1875	1890	19125		Tune-up limit (dBm)	
Frequency (MHz)				1875.5	1880	1902.5			
15	QPSK	1	0	24.75	24.83	24.87		25.7	
15	QPSK	1	37	24.70	24.80	24.88			
15	QPSK	1	74	24.73	24.80	24.90			
15	QPSK	36	0	23.94	23.87	23.91		24.7	
15	QPSK	36	20	23.93	23.90	24.03			
15	QPSK	36	39	23.87	23.97	24.03			
15	QPSK	75	0	23.90	23.91	23.93			
15	16QAM	1	0	24.02	24.13	24.19		24.7	
15	16QAM	1	37	24.06	24.14	24.20			
15	16QAM	1	74	24.03	24.13	24.25			
15	16QAM	36	0	22.81	22.86	22.92		23.7	
15	16QAM	36	20	22.88	22.90	23.03			
15	16QAM	36	39	22.88	22.97	23.03			
15	16QAM	75	0	22.91	22.91	22.93			
15	64QAM	1	0	22.88	23.01	22.51		23.7	
15	64QAM	1	37	22.96	23.01	22.46			
15	64QAM	1	74	22.80	23.04	22.53			
15	64QAM	36	0	21.85	21.91	21.44		22.7	
15	64QAM	36	20	21.94	21.91	21.56			
15	64QAM	36	39	21.84	22.04	21.61			
15	64QAM	75	0	21.89	21.91	21.49			
Channel				1890	1890	19150		Tune-up limit (dBm)	
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	24.76	24.72	24.89		25.7	
10	QPSK	1	25	24.69	24.82	24.87			
10	QPSK	1	49	24.72	24.83	24.87			
10	QPSK	25	0	23.86	23.85	23.90		24.7	
10	QPSK	25	12	23.87	23.89	23.95			
10	QPSK	25	25	23.88	24.00	24.06			
10	QPSK	50	0	23.87	23.89	23.97			
10	16QAM	1	0	24.12	24.15	24.23		24.7	
10	16QAM	1	25	24.13	24.18	24.27			
10	16QAM	1	49	24.08	24.18	24.25			
10	16QAM	25	0	22.86	22.85	22.91		23.7	
10	16QAM	25	12	22.90	22.90	22.98			
10	16QAM	25	25	22.88	22.97	23.05			
10	16QAM	50	0	22.88	22.88	22.95			
10	64QAM	1	0	23.02	23.03	22.95		23.7	
10	64QAM	1	25	23.05	23.16	22.73			
10	64QAM	1	49	22.95	23.10	22.59			
10	64QAM	25	0	21.88	21.88	21.51		22.7	
10	64QAM	25	12	21.94	21.92	21.66			
10	64QAM	25	25	21.90	22.00	21.58			
10	64QAM	50	0	21.90	21.92	21.49			
Channel				1890	1890	19175		Tune-up limit (dBm)	
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	24.73	24.75	24.88		25.7	
5	QPSK	1	12	24.78	24.89	24.89			
5	QPSK	1	24	24.79	24.88	24.90			
5	QPSK	12	0	23.83	23.85	24.00		24.7	
5	QPSK	12	7	23.91	23.94	24.02			
5	QPSK	12	13	23.88	23.93	24.03			
5	QPSK	25	0	23.85	23.87	24.01			
5	16QAM	1	0	24.07	24.08	24.20		24.7	
5	16QAM	1	12	24.05	24.15	24.20			
5	16QAM	1	24	24.08	24.24	24.21			
5	16QAM	12	0	22.87	22.89	23.00		23.7	
5	16QAM	12	7	22.92	23.01	23.08			
5	16QAM	12	13	22.86	22.86	23.04			
5	16QAM	25	0	22.86	22.90	23.04			
5	64QAM	1	0	23.04	23.07	22.61		23.7	
5	64QAM	1	12	23.00	23.13	22.65			
5	64QAM	1	24	23.02	23.12	22.49			
5	64QAM	12	0	21.92	21.92	21.62		22.7	
5	64QAM	12	7	21.95	22.04	21.63			
5	64QAM	12	13	21.93	22.00	21.53			
5	64QAM	25	0	21.90	21.90	21.50			
Channel				1890	1890	19190		Tune-up limit (dBm)	
Frequency (MHz)				1850.7	1880	1909.3			
1.4	QPSK	1	0	24.71	24.77	24.80		25.7	
1.4	QPSK	1	3	24.80	24.85	24.88			
1.4	QPSK	1	5	24.73	24.80	24.84			
1.4	QPSK	3	0	24.74	24.83	24.86		24.7	
1.4	QPSK	3	1	24.77	24.86	24.89			
1.4	QPSK	3	3	24.75	24.80	24.87			
1.4	QPSK	6	0	23.79	23.88	23.94		24.7	
1.4	16QAM	1	0	24.02	24.14	24.17			
1.4	16QAM	1	3	24.10	24.19	24.21			
1.4	16QAM	1	5	24.02	24.10	24.13		24.7	
1.4	16QAM	3	0	23.81	23.88	23.90			
1.4	16QAM	3	1	23.87	23.95	23.98			
1.4	16QAM	3	3	23.82	23.86	23.93		23.7	
1.4	16QAM	6	0	22.84	22.93	23.02			
1.4	64QAM	1	0	22.95	23.01	22.45		23.7	
1.4	64QAM	1	3	23.02	23.08	22.49			
1.4	64QAM	1	5	22.97	23.03	22.43			
1.4	64QAM	3	0	22.93	23.01	22.46		23.7	
1.4	64QAM	3	1	22.97	23.06	22.52			
1.4	64QAM	3	3	22.93	23.02	22.46			
1.4	64QAM	6	0	21.80	21.90	21.36		22.7	



Band 4								
Ara 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				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	24.64	24.72	24.85		25.7
20	QPSK	1	49	24.52	24.51	24.51		
20	QPSK	60	0	23.70	23.72	23.73		24.7
20	QPSK	60	24	23.72	23.70	23.74		
20	QPSK	60	50	23.64	23.70	23.69		24.7
20	QPSK	100	0	23.69	23.75	23.61		
20	16QAM	1	0	23.98	24.04	23.99		24.7
20	16QAM	1	49	23.85	23.87	23.88		
20	16QAM	1	99	23.87	23.86	23.84		23.7
20	16QAM	60	0	22.89	22.71	22.74		
20	16QAM	60	24	22.73	22.73	22.77		23.7
20	16QAM	60	50	22.85	22.84	22.88		
20	16QAM	100	0	22.71	22.73	22.85		23.7
20	64QAM	1	49	22.84	22.92	22.89		
20	64QAM	1	99	22.73	22.72	22.77		23.7
20	64QAM	1	99	22.73	22.64	22.80		
20	64QAM	60	0	21.70	21.76	21.77		22.7
20	64QAM	60	24	21.74	21.75	21.77		
20	64QAM	60	50	21.68	21.84	21.69		22.7
20	64QAM	100	0	21.78	21.76	21.79		
Channel				30025	30175	30325		Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	24.67	24.71	24.70		25.7
15	QPSK	1	37	24.52	24.51	24.57		
15	QPSK	1	74	24.56	24.55	24.67		24.7
15	QPSK	36	0	23.78	23.72	23.72		
15	QPSK	36	20	23.73	23.73	23.76		24.7
15	QPSK	36	39	23.66	23.67	23.71		
15	QPSK	75	0	23.70	23.75	23.68		24.7
15	16QAM	1	0	23.99	24.02	24.04		
15	16QAM	1	37	23.88	23.87	23.92		23.7
15	16QAM	1	74	23.87	23.85	23.89		
15	16QAM	36	0	22.78	22.72	22.76		23.7
15	16QAM	36	20	22.71	22.73	22.76		
15	16QAM	36	39	22.67	22.68	22.71		23.7
15	16QAM	75	0	22.72	22.75	22.69		
15	64QAM	1	0	22.84	22.92	22.83		23.7
15	64QAM	1	37	22.80	22.86	22.81		
15	64QAM	1	74	22.76	22.74	22.80		22.7
15	64QAM	36	0	21.70	21.81	21.78		
15	64QAM	36	20	21.73	21.74	21.75		22.7
15	64QAM	36	39	21.71	21.82	21.76		
15	64QAM	75	0	21.78	21.75	21.87		Tune-up limit (dBm)
Channel				30000	30175	30350		
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	24.59	24.65	24.66		25.7
10	QPSK	1	25	24.57	24.57	24.71		
10	QPSK	1	49	24.60	24.62	24.66		24.7
10	QPSK	25	0	23.72	23.68	23.70		
10	QPSK	25	12	23.72	23.78	23.75		24.7
10	QPSK	25	25	23.75	23.77	23.81		
10	QPSK	60	0	23.75	23.75	23.76		24.7
10	16QAM	1	0	23.98	24.02	24.06		
10	16QAM	1	25	23.97	24.02	24.03		23.7
10	16QAM	1	49	23.90	23.99	24.05		
10	16QAM	25	0	22.72	22.67	22.73		23.7
10	16QAM	25	12	22.76	22.79	22.77		
10	16QAM	25	25	22.74	22.72	22.78		23.7
10	16QAM	60	0	22.75	22.77	22.74		
10	64QAM	1	0	22.70	22.83	22.80		23.7
10	64QAM	1	25	22.88	22.80	22.88		
10	64QAM	1	49	22.91	22.65	22.95		22.7
10	64QAM	25	0	21.70	21.70	21.74		
10	64QAM	25	12	21.77	21.74	21.79		22.7
10	64QAM	25	25	21.76	21.57	21.83		
10	64QAM	60	0	21.78	21.74	21.79		Tune-up limit (dBm)
Channel				19975	20175	20375		
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	24.63	24.62	24.67		25.7
5	QPSK	1	12	24.69	24.67	24.71		
5	QPSK	1	24	24.66	24.69	24.71		24.7
5	QPSK	12	0	23.71	23.69	23.75		
5	QPSK	12	7	23.76	23.77	23.80		24.7
5	QPSK	12	13	23.72	23.76	23.77		
5	QPSK	25	0	23.70	23.73	23.77		24.7
5	16QAM	1	0	23.97	23.92	24.05		
5	16QAM	1	12	23.98	24.00	24.04		23.7
5	16QAM	1	24	23.91	23.99	24.05		
5	16QAM	12	0	22.75	22.69	22.82		23.7
5	16QAM	12	7	22.79	22.80	22.85		
5	16QAM	12	13	22.78	22.80	22.80		23.7
5	16QAM	25	0	22.74	22.76	22.79		
5	64QAM	1	0	22.72	22.67	22.69		23.7
5	64QAM	1	12	22.92	22.74	22.98		
5	64QAM	1	24	22.98	22.61	22.95		22.7
5	64QAM	12	0	21.77	21.72	21.85		
5	64QAM	12	7	21.84	21.77	21.80		22.7
5	64QAM	12	13	21.78	21.82	21.84		
5	64QAM	25	0	21.74	21.85	21.82		Tune-up limit (dBm)
Channel				19965	20175	20365		
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	24.64	24.60	24.69		25.7
3	QPSK	1	8	24.71	24.71	24.71		
3	QPSK	1	14	24.65	24.69	24.67		24.7
3	QPSK	8	0	23.71	23.66	23.79		
3	QPSK	8	4	23.75	23.75	23.77		24.7
3	QPSK	8	7	23.74	23.76	23.74		
3	QPSK	15	0	23.74	23.73	23.76		24.7
3	16QAM	1	0	23.99	23.92	23.98		
3	16QAM	1	8	24.05	24.07	24.10		23.7
3	16QAM	1	14	23.98	23.97	24.05		
3	16QAM	8	0	22.79	22.75	22.82		23.7
3	16QAM	8	4	22.84	22.84	22.90		
3	16QAM	8	7	22.81	22.79	22.83		23.7
3	16QAM	15	0	22.80	22.74	22.78		
3	64QAM	1	0	22.75	22.84	22.85		23.7
3	64QAM	1	8	23.00	22.81	23.01		
3	64QAM	1	14	22.97	22.69	22.98		22.7
3	64QAM	8	0	21.73	21.73	21.85		
3	64QAM	8	4	21.84	21.72	21.86		22.7
3	64QAM	8	7	21.83	21.84	21.83		
3	64QAM	15	0	21.74	21.70	21.78		Tune-up limit (dBm)
Channel				19957	20175	20393		
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	24.54	24.59	24.58		25.7
1.4	QPSK	1	3	24.63	24.63	24.66		
1.4	QPSK	1	5	24.54	24.61	24.60		24.7
1.4	QPSK	3	0	24.59	24.60	24.67		
1.4	QPSK	3	1	24.65	24.64	24.71		24.7
1.4	QPSK	3	3	24.63	24.59	24.63		
1.4	QPSK	6	0	23.68	23.67	23.72		24.7
1.4	16QAM	1	0	23.89	23.90	23.94		
1.4	16QAM	1	3	23.95	23.97	24.00		24.7
1.4	16QAM	1	5	23.86	23.93	23.94		
1.4	16QAM	3	0	23.69	23.69	23.75		23.7
1.4	16QAM	3	1	23.76	23.73	23.80		
1.4	16QAM	3	3	23.67	23.68	23.71		23.7
1.4	16QAM	6	0	22.73	22.75	22.78		
1.4	64QAM	1	0	22.86	22.71	22.86		23.7
1.4	64QAM	1	3	22.81	22.75	22.94		
1.4	64QAM	1	5	22.79	22.85	22.85		23.7
1.4	64QAM	3	0	22.69	22.75	22.82		
1.4	64QAM	3	1	22.83	22.84	22.81		22.7
1.4	64QAM	3	3	22.79	22.70	22.86		
1.4	64QAM	6	0	21.63	21.62	21.71		



Band 5							
Ann 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2040	2052	2060	
Frequency (MHz)				825	836.5	844	
10	QPSK	1	0	23.31	23.29	23.32	25
10	QPSK	1	25	23.24	23.28	23.20	
10	QPSK	1	49	23.30	23.23	23.18	
10	QPSK	25	0	23.31	23.38	23.33	24.7
10	QPSK	25	12	23.42	23.37	23.43	
10	QPSK	25	25	23.38	23.40	23.37	
10	QPSK	50	0	23.42	23.36	23.29	24.7
10	16QAM	1	0	23.71	23.66	23.70	
10	16QAM	1	25	23.61	23.66	23.63	
10	16QAM	1	49	23.65	23.61	23.49	23.7
10	16QAM	25	0	22.86	22.87	22.84	
10	16QAM	25	12	22.96	22.88	22.97	
10	16QAM	25	25	22.89	22.92	22.82	23.7
10	16QAM	50	0	22.95	22.89	22.84	
10	64QAM	1	0	23.02	23.01	23.00	
10	64QAM	1	25	23.03	22.88	22.71	23.7
10	64QAM	1	49	23.01	22.73	21.99	
10	64QAM	25	0	21.90	21.94	21.88	
10	64QAM	25	12	22.00	21.90	21.70	22.7
10	64QAM	25	25	21.94	21.93	21.02	
10	64QAM	50	0	21.99	21.90	21.55	
Channel				20425	20525	20625	
Frequency (MHz)				825.5	836.5	846.5	
5	QPSK	1	0	23.24	23.23	23.32	25
5	QPSK	1	12	23.15	23.25	23.13	
5	QPSK	1	24	23.27	23.13	23.18	
5	QPSK	12	0	23.27	23.33	23.29	24.7
5	QPSK	12	7	23.34	23.31	23.43	
5	QPSK	12	13	23.37	23.36	23.29	
5	QPSK	25	0	23.32	23.36	23.29	24.7
5	16QAM	1	0	23.62	23.57	23.69	
5	16QAM	1	12	23.58	23.61	23.60	
5	16QAM	1	24	23.65	23.54	23.44	23.7
5	16QAM	12	0	22.76	22.77	22.83	
5	16QAM	12	7	22.88	22.83	22.87	
5	16QAM	12	13	22.82	22.90	22.81	23.7
5	16QAM	25	0	22.90	22.87	22.81	
5	64QAM	1	0	22.96	22.96	22.88	
5	64QAM	1	12	23.03	22.82	22.70	23.7
5	64QAM	1	24	22.91	22.68	21.95	
5	64QAM	12	0	21.86	21.92	21.79	
5	64QAM	12	7	21.95	21.82	21.67	22.7
5	64QAM	12	13	21.92	21.93	21.02	
5	64QAM	25	0	21.99	21.89	21.54	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.28	23.21	23.28	25
3	QPSK	1	8	23.24	23.21	23.11	
3	QPSK	1	14	23.30	23.13	23.11	
3	QPSK	8	0	23.24	23.37	23.25	24.7
3	QPSK	8	4	23.39	23.37	23.39	
3	QPSK	8	7	23.29	23.34	23.34	
3	QPSK	15	0	23.41	23.33	23.24	24.7
3	16QAM	1	0	23.65	23.57	23.68	
3	16QAM	1	8	23.51	23.59	23.53	
3	16QAM	1	14	23.62	23.55	23.39	23.7
3	16QAM	8	0	22.83	22.79	22.77	
3	16QAM	8	4	22.86	22.79	22.85	
3	16QAM	8	7	22.80	22.87	22.73	23.7
3	16QAM	15	0	22.91	22.89	22.80	
3	64QAM	1	0	22.90	22.91	22.89	
3	64QAM	1	8	22.94	22.78	22.64	23.7
3	64QAM	1	14	23.01	22.71	21.93	
3	64QAM	8	0	21.82	21.91	21.86	
3	64QAM	8	4	22.00	21.82	21.70	22.7
3	64QAM	8	7	21.89	21.88	21.01	
3	64QAM	15	0	21.95	21.82	21.54	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.31	23.25	23.22	25
1.4	QPSK	1	3	23.19	23.24	23.16	
1.4	QPSK	1	5	23.29	23.20	23.16	
1.4	QPSK	3	0	23.27	23.32	23.28	24.7
1.4	QPSK	3	1	23.35	23.31	23.36	
1.4	QPSK	3	3	23.30	23.32	23.30	
1.4	QPSK	6	0	23.41	23.33	23.19	24.7
1.4	16QAM	1	0	23.66	23.61	23.63	
1.4	16QAM	1	3	23.58	23.60	23.57	
1.4	16QAM	1	5	23.57	23.61	23.47	24.7
1.4	16QAM	3	0	22.86	22.86	22.78	
1.4	16QAM	3	1	22.95	22.85	22.97	
1.4	16QAM	3	3	22.84	22.86	22.74	23.7
1.4	16QAM	6	0	22.92	22.89	22.81	
1.4	64QAM	1	0	22.96	22.94	22.82	
1.4	64QAM	1	3	22.95	22.81	22.67	23.7
1.4	64QAM	1	5	22.94	22.72	21.95	
1.4	64QAM	3	0	21.85	21.84	21.76	
1.4	64QAM	3	1	21.97	21.84	21.77	22.7
1.4	64QAM	3	3	21.85	21.84	21.72	
1.4	64QAM	6	0	21.94	21.87	21.45	



Band 7							
AR 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F Freq.	Power Middle Ch. F Freq.	Power High Ch. F Freq.	Tune-up limit (dBm)
Channel				2050	2100	2150	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.06	24.10	24.04	25.7
20	QPSK	1	49	24.12	24.13	24.01	
20	QPSK	1	99	24.25	24.24	24.05	
20	QPSK	50	0	23.18	23.18	23.17	24.7
20	QPSK	50	24	23.32	23.19	23.21	
20	QPSK	50	50	23.33	23.31	23.22	
20	QPSK	100	0	23.28	23.17	23.18	
20	16QAM	1	0	23.42	23.44	23.38	24.7
20	16QAM	1	49	23.49	23.48	23.36	
20	16QAM	1	99	23.53	23.52	23.39	
20	16QAM	50	0	22.17	22.18	22.20	23.7
20	16QAM	50	24	22.31	22.21	22.20	
20	16QAM	50	50	22.31	22.32	22.18	
20	16QAM	100	0	22.26	22.20	22.18	
20	64QAM	1	0	22.25	22.25	22.30	23.7
20	64QAM	1	49	22.37	22.40	22.27	
20	64QAM	1	99	22.39	22.42	22.33	
20	64QAM	50	0	21.20	21.21	21.22	22.7
20	64QAM	50	24	21.31	21.24	21.24	
20	64QAM	50	50	21.32	21.32	21.20	
20	64QAM	100	0	21.30	21.21	21.18	
Channel				2025	2100	2137.5	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.14	24.13	24.09	25.7
15	QPSK	1	37	24.16	24.15	24.05	
15	QPSK	1	74	24.21	24.23	24.09	
15	QPSK	36	0	23.24	23.21	23.19	24.7
15	QPSK	36	20	23.34	23.26	23.23	
15	QPSK	36	39	23.32	23.33	23.20	
15	QPSK	75	0	23.28	23.24	23.20	
15	16QAM	1	0	23.44	23.47	23.39	24.7
15	16QAM	1	37	23.51	23.53	23.37	
15	16QAM	1	74	23.55	23.56	23.41	
15	16QAM	36	0	22.27	22.21	22.19	23.7
15	16QAM	36	20	22.31	22.23	22.20	
15	16QAM	36	39	22.29	22.33	22.17	
15	16QAM	75	0	22.30	22.22	22.18	
15	64QAM	1	0	22.46	22.30	22.35	23.7
15	64QAM	1	37	22.41	22.43	22.29	
15	64QAM	1	74	22.45	22.41	22.30	
15	64QAM	36	0	21.30	21.25	21.23	22.7
15	64QAM	36	20	21.33	21.27	21.23	
15	64QAM	36	39	21.39	21.36	21.24	
15	64QAM	75	0	21.30	21.22	21.18	
Channel				2090	2100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.13	24.09	24.00	25.7
10	QPSK	1	25	24.11	24.11	23.99	
10	QPSK	1	49	24.16	24.19	24.02	
10	QPSK	25	0	23.26	23.23	23.16	24.7
10	QPSK	25	12	23.31	23.24	23.20	
10	QPSK	25	25	23.31	23.31	23.16	
10	QPSK	50	0	23.30	23.24	23.17	
10	16QAM	1	0	23.50	23.46	23.39	24.7
10	16QAM	1	25	23.50	23.52	23.37	
10	16QAM	1	49	23.53	23.56	23.41	
10	16QAM	25	0	22.27	22.18	22.14	23.7
10	16QAM	25	12	22.30	22.24	22.17	
10	16QAM	25	25	22.28	22.30	22.15	
10	16QAM	50	0	22.28	22.23	22.18	
10	64QAM	1	0	22.46	22.33	22.33	23.7
10	64QAM	1	25	22.43	22.43	22.30	
10	64QAM	1	49	22.43	22.45	22.28	
10	64QAM	25	0	21.26	21.25	21.18	22.7
10	64QAM	25	12	21.34	21.29	21.23	
10	64QAM	25	25	21.33	21.33	21.20	
10	64QAM	50	0	21.34	21.26	21.23	
Channel				2075	2100	2142.5	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.14	24.10	24.03	25.7
5	QPSK	1	12	24.18	24.18	24.03	
5	QPSK	1	24	24.17	24.17	24.02	
5	QPSK	12	0	23.27	23.25	23.12	24.7
5	QPSK	12	7	23.29	23.21	23.10	
5	QPSK	12	13	23.27	23.31	23.15	
5	QPSK	25	0	23.28	23.23	23.13	
5	16QAM	1	0	23.48	23.45	23.34	24.7
5	16QAM	1	12	23.47	23.51	23.35	
5	16QAM	1	24	23.54	23.50	23.40	
5	16QAM	12	0	22.29	22.25	22.17	23.7
5	16QAM	12	7	22.28	22.28	22.16	
5	16QAM	12	13	22.31	22.30	22.13	
5	16QAM	25	0	22.27	22.23	22.15	
5	64QAM	1	0	22.45	22.38	22.29	23.7
5	64QAM	1	12	22.40	22.44	22.26	
5	64QAM	1	24	22.44	22.43	22.28	
5	64QAM	12	0	21.35	21.30	21.20	22.7
5	64QAM	12	7	21.38	21.28	21.18	
5	64QAM	12	13	21.36	21.36	21.23	
5	64QAM	25	0	21.31	21.25	21.18	



Band 12							
Ann 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. (dBm)	Power Middle Ch. / Freq. (dBm)	Power High Ch. / Freq. (dBm)	Tune-up limit (dBm)
Channel				704	707.5	711	2330
Frequency (MHz)				704	707.5	711	2330
10	QPSK	1	0	23.51	23.46	23.46	25.4
10	QPSK	1	25	23.43	23.49	23.49	
10	QPSK	1	49	23.54	23.58	23.50	
10	QPSK	25	0	23.59	23.80	23.81	24.4
10	QPSK	25	12	23.67	23.81	23.80	
10	QPSK	25	25	23.68	23.66	23.65	
10	QPSK	50	0	23.66	23.59	23.60	24.4
10	16QAM	1	0	23.87	23.80	23.80	
10	16QAM	1	25	23.86	23.86	23.87	
10	16QAM	1	49	23.95	23.89	23.87	23.4
10	16QAM	25	0	22.67	22.72	22.71	
10	16QAM	25	12	22.78	22.72	22.70	
10	16QAM	25	25	22.71	22.77	22.76	23.4
10	16QAM	50	0	22.75	22.69	22.69	
10	64QAM	1	25	22.67	22.82	22.73	
10	64QAM	1	49	22.99	22.93	22.87	22.4
10	64QAM	25	0	21.68	21.73	21.74	
10	64QAM	25	12	21.71	21.76	21.73	
10	64QAM	25	25	21.77	21.78	21.78	22.4
10	64QAM	50	0	21.74	21.72	21.72	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	Tune-up limit (dBm)
5	QPSK	1	0	23.51	23.47	23.47	25.4
5	QPSK	1	12	23.46	23.58	23.57	
5	QPSK	1	24	23.48	23.54	23.50	
5	QPSK	12	0	23.62	23.59	23.60	24.4
5	QPSK	12	7	23.60	23.56	23.65	
5	QPSK	12	13	23.58	23.61	23.58	
5	QPSK	25	0	23.61	23.58	23.57	24.4
5	16QAM	1	0	23.84	23.83	23.80	
5	16QAM	1	12	23.82	23.83	23.83	
5	16QAM	1	24	23.85	23.86	23.85	23.4
5	16QAM	12	0	22.77	22.77	22.73	
5	16QAM	12	7	22.72	22.72	22.78	
5	16QAM	12	13	22.71	22.71	22.73	23.4
5	16QAM	25	0	22.74	22.70	22.67	
5	64QAM	1	0	22.67	22.75	22.80	
5	64QAM	1	12	22.78	22.90	22.90	23.4
5	64QAM	1	24	22.77	22.88	22.85	
5	64QAM	12	0	21.60	21.80	21.81	
5	64QAM	12	7	21.75	21.74	21.80	22.4
5	64QAM	12	13	21.74	21.80	21.77	
5	64QAM	25	0	21.75	21.70	21.70	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	Tune-up limit (dBm)
3	QPSK	1	0	23.59	23.52	23.52	25.4
3	QPSK	1	8	23.57	23.59	23.54	
3	QPSK	1	14	23.48	23.54	23.50	
3	QPSK	8	0	23.61	23.59	23.58	24.4
3	QPSK	8	4	23.60	23.58	23.67	
3	QPSK	8	7	23.53	23.63	23.59	
3	QPSK	15	0	23.60	23.58	23.59	24.4
3	16QAM	1	0	23.92	23.85	23.89	
3	16QAM	1	8	23.89	23.90	23.92	
3	16QAM	1	14	23.79	23.87	23.81	23.4
3	16QAM	8	0	22.78	22.77	22.74	
3	16QAM	8	4	22.75	22.76	22.81	
3	16QAM	8	7	22.70	22.78	22.76	23.4
3	16QAM	15	0	22.75	22.70	22.71	
3	64QAM	1	0	22.62	22.67	22.85	
3	64QAM	1	8	22.96	22.92	22.94	23.4
3	64QAM	1	14	22.75	22.90	22.82	
3	64QAM	8	0	21.62	21.75	21.77	
3	64QAM	8	4	21.70	21.74	21.81	22.4
3	64QAM	8	7	21.74	21.75	21.72	
3	64QAM	15	0	21.65	21.70	21.70	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.46	23.42	23.44	25.4
1.4	QPSK	1	3	23.49	23.50	23.49	
1.4	QPSK	1	5	23.40	23.41	23.40	
1.4	QPSK	3	0	23.47	23.45	23.44	24.4
1.4	QPSK	3	1	23.51	23.47	23.45	
1.4	QPSK	3	3	23.45	23.45	23.44	
1.4	QPSK	6	0	23.50	23.57	23.49	24.4
1.4	16QAM	1	0	23.78	23.73	23.75	
1.4	16QAM	1	3	23.82	23.86	23.81	
1.4	16QAM	1	5	23.71	23.78	23.73	24.4
1.4	16QAM	3	0	23.57	23.53	23.50	
1.4	16QAM	3	1	23.61	23.57	23.57	
1.4	16QAM	3	3	23.51	23.54	23.48	23.4
1.4	16QAM	6	0	22.68	22.70	22.65	
1.4	64QAM	1	0	22.59	22.73	22.77	
1.4	64QAM	1	3	22.71	22.85	22.81	23.4
1.4	64QAM	1	5	22.70	22.79	22.75	
1.4	64QAM	3	0	22.58	22.73	22.73	
1.4	64QAM	3	1	22.84	22.78	22.80	23.4
1.4	64QAM	3	3	22.63	22.75	22.74	
1.4	64QAM	6	0	21.48	21.67	21.63	





Band 13							
Ari 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				2320			
Frequency (MHz)				782			
10	QPSK	1	0		23.24		25.2
10	QPSK	1	25		23.22		
10	QPSK	1	49		23.30		
10	QPSK	25	0		23.11		24.2
10	QPSK	25	12		23.20		
10	QPSK	25	25		23.15		
10	QPSK	50	0		23.52		24.2
10	16QAM	1	0		23.89		
10	16QAM	1	25		23.86		
10	16QAM	1	49		23.68		23.2
10	16QAM	25	0		22.43		
10	16QAM	25	12		22.50		
10	16QAM	25	25		22.46		23.2
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.50		
10	64QAM	1	25		22.59		22.2
10	64QAM	1	49		22.63		
10	64QAM	25	0		21.46		
10	64QAM	25	12		21.56		22.2
10	64QAM	25	25		21.46		
10	64QAM	50	0		21.57		
Channel				2325			
Frequency (MHz)				779.5			
5	QPSK	1	0	23.52	23.51	23.52	25.2
5	QPSK	1	12	23.57	23.53	23.53	
5	QPSK	1	24	23.57	23.52	23.60	
5	QPSK	12	0	23.43	23.42	23.40	24.2
5	QPSK	12	7	23.50	23.48	23.49	
5	QPSK	12	13	23.48	23.46	23.47	
5	QPSK	25	0	23.50	23.44	23.43	24.2
5	16QAM	1	0	23.59	23.61	23.58	
5	16QAM	1	12	23.57	23.55	23.54	
5	16QAM	1	24	23.65	23.54	23.65	23.2
5	16QAM	12	0	22.50	22.45	22.47	
5	16QAM	12	7	22.52	22.47	22.52	
5	16QAM	12	13	22.49	22.49	22.51	23.2
5	16QAM	25	0	22.55	22.49	22.49	
5	64QAM	1	0	22.49	22.48	22.44	
5	64QAM	1	12	22.50	22.48	22.53	23.2
5	64QAM	1	24	22.50	22.58	22.54	
5	64QAM	12	0	21.59	21.50	21.50	
5	64QAM	12	7	21.57	21.55	21.53	22.2
5	64QAM	12	13	21.57	21.52	21.53	
5	64QAM	25	0	21.55	21.52	21.50	



Band 14							
Ari 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	23.64			25.4
10	QPSK	1	25	23.83			
10	QPSK	1	49	23.80			
10	QPSK	25	0	23.88			24.7
10	QPSK	25	12	23.68			
10	QPSK	25	25	23.73			
10	QPSK	50	0	23.68			24.7
10	16QAM	1	0	24.12			
10	16QAM	1	25	24.04			
10	16QAM	1	49	23.99			23.7
10	16QAM	25	0	22.79			
10	16QAM	25	12	22.80			
10	16QAM	25	25	22.83			23.7
10	16QAM	50	0	22.80			
10	64QAM	1	0	22.51			
10	64QAM	1	25	22.49			23.7
10	64QAM	1	49	22.99			
10	64QAM	25	0	21.25			
10	64QAM	25	12	21.23			22.7
10	64QAM	25	25	21.86			
10	64QAM	50	0	21.34			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.66	23.57	23.69	25.4
5	QPSK	1	12	23.73	23.72	23.67	
5	QPSK	1	24	23.69	23.63	23.61	
5	QPSK	12	0	23.77	23.71	23.70	24.7
5	QPSK	12	7	23.76	23.70	23.76	
5	QPSK	12	13	23.74	23.73	23.70	
5	QPSK	25	0	23.75	23.65	23.63	24.7
5	16QAM	1	0	23.96	23.88	23.90	
5	16QAM	1	12	23.99	23.96	23.99	
5	16QAM	1	24	23.95	23.96	23.93	23.7
5	16QAM	12	0	22.88	22.79	22.85	
5	16QAM	12	7	22.92	22.84	22.90	
5	16QAM	12	13	22.88	22.80	22.85	23.7
5	16QAM	25	0	22.88	22.79	22.81	
5	64QAM	1	0	22.47	22.26	22.37	
5	64QAM	1	12	22.31	22.15	22.60	23.7
5	64QAM	1	24	22.06	22.37	23.00	
5	64QAM	12	0	21.39	21.08	21.32	
5	64QAM	12	7	21.26	21.11	21.67	22.7
5	64QAM	12	13	21.10	21.23	21.87	
5	64QAM	25	0	21.15	21.06	21.63	



Band 17							
Ari 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				2370	2370	2380	
Frequency (MHz)				708	710	711	
10	QPSK	1	0	23.48	23.45	23.46	25.4
10	QPSK	1	25	23.48	23.52	23.51	
10	QPSK	1	49	23.53	23.55	23.53	
10	QPSK	25	0	23.55	23.54	23.55	24.4
10	QPSK	25	12	23.72	23.64	23.82	
10	QPSK	25	25	23.71	23.71	23.70	
10	QPSK	50	0	23.62	23.62	23.61	24.4
10	16QAM	1	0	23.86	23.83	23.81	
10	16QAM	1	25	23.53	23.96	23.94	
10	16QAM	1	49	23.94	23.93	23.99	23.4
10	16QAM	25	0	22.85	22.64	22.65	
10	16QAM	25	12	22.78	22.72	22.72	
10	16QAM	25	25	22.77	22.79	22.79	23.4
10	16QAM	50	0	22.71	22.70	22.88	
10	64QAM	1	0	22.59	22.61	22.83	
10	64QAM	1	25	22.76	22.73	22.67	22.4
10	64QAM	1	49	22.85	22.89	22.74	
10	64QAM	25	0	21.51	21.45	21.50	
10	64QAM	25	12	21.65	21.57	21.63	22.4
10	64QAM	25	25	21.67	21.77	21.74	
10	64QAM	50	0	21.63	21.70	21.63	
Channel				2375	2370	2385	
Frequency (MHz)				705.5	710	713.5	
5	QPSK	1	0	23.48	23.47	23.50	25.4
5	QPSK	1	12	23.56	23.63	23.59	
5	QPSK	1	24	23.63	23.60	23.59	
5	QPSK	12	0	23.59	23.63	23.57	24.4
5	QPSK	12	7	23.69	23.63	23.68	
5	QPSK	12	13	23.66	23.65	23.65	
5	QPSK	25	0	23.61	23.59	23.66	24.4
5	16QAM	1	0	23.82	23.83	23.82	
5	16QAM	1	12	23.50	23.87	23.87	
5	16QAM	1	24	23.94	23.92	23.92	23.4
5	16QAM	12	0	22.72	22.75	22.69	
5	16QAM	12	7	22.78	22.73	22.78	
5	16QAM	12	13	22.77	22.79	22.77	23.4
5	16QAM	25	0	22.76	22.74	22.80	
5	64QAM	1	0	22.57	22.57	22.85	
5	64QAM	1	12	22.76	22.71	22.90	23.4
5	64QAM	1	24	22.65	22.64	22.63	
5	64QAM	12	0	21.60	21.59	21.79	
5	64QAM	12	7	21.82	21.88	21.85	22.4
5	64QAM	12	13	21.72	21.62	21.79	
5	64QAM	25	0	21.57	21.50	21.73	



Band 25									
Ann 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				2814.0	2834.0	2859.0	25.7		
Frequency (MHz)				1890	1890	1905			
20	QPSK	1	0	24.79	24.78	24.83	25.7		
20	QPSK	1	49	24.72	24.74	24.80			
20	QPSK	1	99	24.65	24.74	24.39			
20	QPSK	50	0	23.89	23.89	23.94	24.7		
20	QPSK	50	24	23.88	23.96	24.01			
20	QPSK	50	50	23.82	23.93	24.00			
20	QPSK	100	0	23.89	23.97	23.98	24.7		
20	16QAM	1	0	24.14	24.15	24.16			
20	16QAM	1	49	24.07	24.11	24.17			
20	16QAM	1	99	23.99	24.10	23.73	23.7		
20	16QAM	50	0	22.84	22.92	22.95			
20	16QAM	50	24	22.89	22.99	22.95			
20	16QAM	50	50	22.85	22.94	23.02	23.7		
20	16QAM	100	0	22.87	22.95	22.93			
20	64QAM	1	0	23.00	22.99	22.88			
20	64QAM	1	49	22.97	22.88	22.88	23.7		
20	64QAM	1	99	22.84	22.99	21.87			
20	64QAM	50	0	21.87	21.93	21.49			
20	64QAM	50	24	21.91	22.00	21.57	22.7		
20	64QAM	50	50	21.79	21.97	21.23			
20	64QAM	100	0	21.89	22.01	21.28			
Channel				2911.5	2934.0	2951.5	25.7		
Frequency (MHz)				1857.5	1880	1907.5			
15	QPSK	1	0	24.82	24.87	24.89	25.7		
15	QPSK	1	37	24.75	24.80	24.87			
15	QPSK	1	74	24.72	24.82	24.39			
15	QPSK	36	0	23.89	23.93	23.99	24.7		
15	QPSK	36	20	23.89	24.02	24.06			
15	QPSK	36	39	23.83	23.96	23.88			
15	QPSK	75	0	23.89	23.90	23.95	24.7		
15	16QAM	1	0	24.07	24.15	24.19			
15	16QAM	1	37	24.12	24.14	24.22			
15	16QAM	1	74	24.05	24.12	23.75	23.7		
15	16QAM	36	0	22.86	22.95	22.97			
15	16QAM	36	20	22.93	23.01	23.05			
15	16QAM	36	39	22.84	22.96	23.00	23.7		
15	16QAM	75	0	22.90	22.93	22.98			
15	64QAM	1	0	23.00	23.00	22.86			
15	64QAM	1	37	22.96	23.06	22.82	23.7		
15	64QAM	1	74	22.74	23.02	21.89			
15	64QAM	36	0	21.92	21.98	21.61			
15	64QAM	36	20	21.94	22.03	21.57	22.7		
15	64QAM	36	39	21.77	22.00	21.24			
15	64QAM	75	0	21.91	22.02	21.17			
Channel				3090.0	3134.0	3254.0	25.7		
Frequency (MHz)				1855	1880	1910			
10	QPSK	1	0	24.77	24.76	24.87	25.7		
10	QPSK	1	25	24.70	24.79	24.86			
10	QPSK	1	49	24.74	24.79	24.33			
10	QPSK	25	0	23.96	23.96	23.99	24.7		
10	QPSK	25	12	23.96	23.97	23.98			
10	QPSK	25	25	23.92	23.97	23.73			
10	QPSK	50	0	23.93	23.97	23.87	24.7		
10	16QAM	1	0	24.14	24.15	24.22			
10	16QAM	1	25	24.13	24.18	24.23			
10	16QAM	1	49	24.11	24.17	23.69	23.7		
10	16QAM	25	0	22.93	22.86	22.93			
10	16QAM	25	12	22.92	23.00	22.88			
10	16QAM	25	25	22.89	22.93	22.91	23.7		
10	16QAM	50	0	22.92	22.97	22.96			
10	64QAM	1	25	23.08	23.13	22.41			
10	64QAM	1	49	22.88	23.09	21.84	23.7		
10	64QAM	25	0	21.94	21.89	21.52			
10	64QAM	25	12	21.98	22.00	21.37			
10	64QAM	25	25	21.94	22.00	21.06	22.7		
10	64QAM	50	0	21.98	22.02	21.17			
Channel				3095.0	3134.0	3255.0		25.7	
Frequency (MHz)				1852.5	1880	1912.5			
5	QPSK	1	0	24.80	24.75	24.92	25.7		
5	QPSK	1	12	24.84	24.89	24.56			
5	QPSK	1	24	24.81	24.88	24.29			
5	QPSK	12	0	23.88	23.91	23.89	24.7		
5	QPSK	12	7	23.96	23.99	23.76			
5	QPSK	12	13	23.96	23.99	23.60			
5	QPSK	25	0	23.93	23.93	23.84	24.7		
5	16QAM	1	0	24.22	24.11	24.18			
5	16QAM	1	12	24.13	24.19	23.93			
5	16QAM	1	24	24.15	24.18	23.70	23.7		
5	16QAM	12	0	22.88	22.95	23.01			
5	16QAM	12	7	22.93	23.02	22.88			
5	16QAM	12	13	22.98	23.02	22.75	23.7		
5	16QAM	25	0	22.96	22.97	22.80			
5	64QAM	1	0	23.07	23.01	22.33			
5	64QAM	1	12	23.05	23.07	21.98	23.7		
5	64QAM	1	24	23.06	23.11	21.75			
5	64QAM	12	0	21.95	21.98	21.17			
5	64QAM	12	7	22.01	22.06	21.03	22.7		
5	64QAM	12	13	22.03	22.06	20.88			
5	64QAM	25	0	21.98	22.00	20.88			
Channel				3095.0	3134.0	3257.0	25.7		
Frequency (MHz)				1851.5	1880	1913.5			
3	QPSK	1	0	24.72	24.71	24.65	25.7		
3	QPSK	1	8	24.88	24.91	24.53			
3	QPSK	1	14	24.85	24.90	24.29			
3	QPSK	8	0	23.87	23.89	23.71	24.7		
3	QPSK	8	4	23.92	23.96	23.66			
3	QPSK	8	7	23.96	23.97	23.54			
3	QPSK	15	0	23.93	23.95	23.58	24.7		
3	16QAM	1	0	24.09	24.01	23.89			
3	16QAM	1	8	24.20	24.26	23.84			
3	16QAM	1	14	24.21	24.24	23.63	23.7		
3	16QAM	8	0	22.92	22.85	22.83			
3	16QAM	8	4	23.03	23.04	22.76			
3	16QAM	8	7	23.01	23.02	22.67	23.7		
3	16QAM	15	0	22.97	22.97	22.70			
3	64QAM	1	0	22.95	22.96	22.01			
3	64QAM	1	8	23.12	23.20	21.98	23.7		
3	64QAM	1	14	23.11	23.16	21.75			
3	64QAM	8	0	21.93	22.00	20.95			
3	64QAM	8	4	21.99	22.07	20.94	22.7		
3	64QAM	8	7	22.00	22.06	20.84			
3	64QAM	15	0	21.94	21.96	20.88			
Channel				3097.0	3134.0	3263.0	25.7		
Frequency (MHz)				1850.7	1880	1914.3			
1.4	QPSK	1	0	24.71	24.73	24.37	25.7		
1.4	QPSK	1	3	24.80	24.83	24.31			
1.4	QPSK	1	5	24.79	24.84	24.20			
1.4	QPSK	3	0	24.76	24.81	24.32	24.7		
1.4	QPSK	3	4	24.82	24.83	24.33			
1.4	QPSK	3	3	24.77	24.83	24.24			
1.4	QPSK	6	0	23.85	23.91	23.41	24.7		
1.4	16QAM	1	0	24.05	24.05	23.64			
1.4	16QAM	1	3	24.12	24.17	23.64			
1.4	16QAM	1	5	24.07	24.12	23.54	24.7		
1.4	16QAM	3	0	23.81	23.87	23.49			
1.4	16QAM	3	1	23.88	23.93	23.48			
1.4	16QAM	3	3	23.84	23.93	23.42	23.7		
1.4	16QAM	6	0	22.93	22.94	22.59			
1.4	64QAM	1	0	22.97	22.97	21.78			
1.4	64QAM	1	3	23.08	23.12	21.71	23.7		
1.4	64QAM	1	5	23.03	23.06	21.72			
1.4	64QAM	3	0	22.92	22.98	21.80			
1.4	64QAM	3	1	23.00	23.05	21.85	22.7		
1.4	64QAM	3	3	22.98	23.01	21.71			
1.4	64QAM	6	0	21.90	21.93	20.71			



Band 26							
Ann 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				807.5	831.5	855.5	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.31	23.22	23.23	25
15	QPSK	1	37	23.18	23.23	23.22	
15	QPSK	1	74	23.23	23.22	23.10	
15	QPSK	36	0	23.36	23.35	23.36	24.7
15	QPSK	36	20	23.39	23.40	23.31	
15	QPSK	36	39	23.33	23.36	23.30	
15	QPSK	75	0	23.40	23.33	23.32	24.7
15	16QAM	1	0	23.59	23.53	23.56	
15	16QAM	1	37	23.46	23.54	23.53	
15	16QAM	1	74	23.45	23.50	23.40	23.7
15	16QAM	36	0	22.84	22.84	22.87	
15	16QAM	36	20	22.86	22.88	22.81	
15	16QAM	36	39	22.82	22.83	22.82	23.7
15	16QAM	75	0	22.86	22.80	22.83	
15	64QAM	1	0	22.62	22.89	22.89	
15	64QAM	1	37	22.51	22.94	22.85	22.7
15	64QAM	1	74	22.91	22.92	21.70	
15	64QAM	36	0	21.22	21.89	21.89	
15	64QAM	36	20	21.47	21.95	21.86	22.7
15	64QAM	36	39	21.86	21.92	21.33	
15	64QAM	75	0	21.63	21.84	21.63	
Channel				807.0	831.5	855.0	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.22	23.17	23.19	25
10	QPSK	1	25	23.16	23.20	23.13	
10	QPSK	1	49	23.19	23.19	23.02	
10	QPSK	25	12	23.28	23.35	23.36	24.7
10	QPSK	25	12	23.37	23.35	23.31	
10	QPSK	25	25	23.24	23.26	23.21	
10	QPSK	50	0	23.34	23.32	23.27	24.7
10	16QAM	1	0	23.55	23.52	23.49	
10	16QAM	1	25	23.45	23.46	23.51	
10	16QAM	1	49	23.43	23.43	23.33	23.7
10	16QAM	25	0	22.77	22.80	22.78	
10	16QAM	25	12	22.81	22.80	22.80	
10	16QAM	25	25	22.81	22.73	22.82	23.7
10	16QAM	50	0	22.81	22.75	22.77	
10	64QAM	1	0	22.62	22.82	22.79	
10	64QAM	1	25	22.50	22.92	22.87	23.7
10	64QAM	1	49	22.85	22.91	21.89	
10	64QAM	25	0	21.14	21.89	21.84	
10	64QAM	25	12	21.42	21.86	21.80	22.7
10	64QAM	25	25	21.80	21.89	21.26	
10	64QAM	50	0	21.63	21.84	21.63	
Channel				807.05	831.5	855.05	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.30	23.13	23.16	25
5	QPSK	1	12	23.10	23.21	23.20	
5	QPSK	1	24	23.23	23.20	23.01	
5	QPSK	12	0	23.27	23.26	23.30	24.7
5	QPSK	12	7	23.39	23.34	23.31	
5	QPSK	12	13	23.24	23.31	23.29	
5	QPSK	25	0	23.33	23.31	23.31	24.7
5	16QAM	1	0	23.54	23.48	23.55	
5	16QAM	1	12	23.46	23.45	23.44	
5	16QAM	1	24	23.43	23.43	23.33	23.7
5	16QAM	12	0	22.75	22.79	22.86	
5	16QAM	12	7	22.82	22.81	22.72	
5	16QAM	12	13	22.78	22.80	22.72	23.7
5	16QAM	25	0	22.81	22.76	22.78	
5	64QAM	1	0	22.62	22.79	22.85	
5	64QAM	1	12	22.46	22.85	22.94	23.7
5	64QAM	1	24	22.91	22.90	21.80	
5	64QAM	12	0	21.22	21.82	21.83	
5	64QAM	12	7	21.45	21.93	21.83	22.7
5	64QAM	12	13	21.77	21.86	21.33	
5	64QAM	25	0	21.63	21.84	21.46	
Channel				807.05	831.5	855.05	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.22	23.14	23.17	25
3	QPSK	1	8	23.11	23.13	23.20	
3	QPSK	1	14	23.23	23.18	23.00	
3	QPSK	8	0	23.30	23.35	23.31	24.7
3	QPSK	8	4	23.35	23.32	23.28	
3	QPSK	8	7	23.27	23.30	23.21	
3	QPSK	15	0	23.35	23.33	23.29	24.7
3	16QAM	1	0	23.55	23.46	23.55	
3	16QAM	1	8	23.46	23.46	23.53	
3	16QAM	1	14	23.45	23.43	23.36	23.7
3	16QAM	8	0	22.83	22.83	22.80	
3	16QAM	8	4	22.83	22.87	22.81	
3	16QAM	8	7	22.77	22.73	22.81	23.7
3	16QAM	15	0	22.83	22.78	22.77	
3	64QAM	1	0	22.62	22.84	22.84	
3	64QAM	1	8	22.47	22.91	22.88	23.7
3	64QAM	1	14	22.87	22.92	21.81	
3	64QAM	8	0	21.20	21.80	21.86	
3	64QAM	8	4	21.47	21.95	21.83	22.7
3	64QAM	8	7	21.76	21.85	21.23	
3	64QAM	15	0	21.61	21.75	21.44	
Channel				809.7	831.5	853.3	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.29	23.19	23.14	25
1.4	QPSK	1	3	23.18	23.21	23.19	
1.4	QPSK	1	5	23.23	23.17	23.09	
1.4	QPSK	3	0	23.26	23.35	23.31	24.7
1.4	QPSK	3	1	23.34	23.36	23.27	
1.4	QPSK	3	3	23.23	23.36	23.21	
1.4	QPSK	6	0	23.33	23.26	23.32	24.7
1.4	16QAM	1	0	23.53	23.53	23.50	
1.4	16QAM	1	3	23.45	23.46	23.53	
1.4	16QAM	1	5	23.46	23.44	23.36	24.7
1.4	16QAM	3	0	22.77	22.81	22.83	
1.4	16QAM	3	1	22.79	22.80	22.71	
1.4	16QAM	3	3	22.76	22.78	22.80	23.7
1.4	16QAM	6	0	22.85	22.73	22.74	
1.4	64QAM	1	0	22.62	22.85	22.79	
1.4	64QAM	1	3	22.47	22.92	22.88	23.7
1.4	64QAM	1	5	22.86	22.91	21.99	
1.4	64QAM	3	0	21.73	21.80	21.79	
1.4	64QAM	3	1	21.72	21.86	21.84	23.7
1.4	64QAM	3	3	21.83	21.82	21.70	
1.4	64QAM	6	0	21.56	21.79	21.61	



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



Band 66									
Ann 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)		
Channel				13202	13232	13292			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	24.56	24.59	24.79	25.7		
20	QPSK	1	49	24.39	24.48	24.82			
20	QPSK	1	99	24.25	24.35	24.44			
20	QPSK	50	0	23.57	23.67	23.71	24.7		
20	QPSK	50	24	23.64	23.64	23.69			
20	QPSK	50	50	23.65	23.68	23.72			
20	QPSK	100	0	23.63	23.61	23.68	24.7		
20	16QAM	1	0	23.91	23.92	24.01			
20	16QAM	1	49	23.77	23.83	23.88			
20	16QAM	1	99	23.87	23.88	23.91	23.7		
20	16QAM	50	0	22.58	22.68	22.74			
20	16QAM	50	24	22.64	22.64	22.68			
20	16QAM	50	50	22.64	22.70	22.72	23.7		
20	16QAM	100	0	22.63	22.59	22.71			
20	64QAM	1	49	22.74	22.85	22.81			
20	64QAM	1	99	22.76	22.76	22.71	22.7		
20	64QAM	50	0	21.59	21.68	21.76			
20	64QAM	50	24	21.67	21.67	21.71			
20	64QAM	50	50	21.63	21.72	21.75	22.7		
20	64QAM	100	0	21.69	21.64	21.71			
Channel				132047	132322	132927			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	24.52	24.62	24.65	25.7		
15	QPSK	1	37	24.41	24.54	24.56			
15	QPSK	1	74	24.54	24.58	24.65			
15	QPSK	36	0	23.66	23.67	23.72	24.7		
15	QPSK	36	20	23.66	23.65	23.70			
15	QPSK	36	39	23.62	23.70	23.74			
15	QPSK	75	0	23.64	23.64	23.71	24.7		
15	16QAM	1	0	23.81	23.96	23.98			
15	16QAM	1	37	23.78	23.88	23.92			
15	16QAM	1	74	23.84	23.92	23.94	23.7		
15	16QAM	36	0	22.58	22.68	22.70			
15	16QAM	36	20	22.62	22.65	22.67			
15	16QAM	36	39	22.62	22.71	22.72	23.7		
15	16QAM	75	0	22.65	22.67	22.71			
15	64QAM	1	0	22.85	22.87	22.83			
15	64QAM	1	37	22.67	22.74	22.80	23.7		
15	64QAM	1	74	22.76	22.81	22.72			
15	64QAM	36	0	21.60	21.71	21.76			
15	64QAM	36	20	21.64	21.64	21.69	22.7		
15	64QAM	36	39	21.68	21.72	21.75			
15	64QAM	75	0	21.65	21.64	21.71			
Channel				132052	132322	132922			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	24.57	24.58	24.70	25.7		
10	QPSK	1	25	24.55	24.64	24.65			
10	QPSK	1	49	24.55	24.61	24.66			
10	QPSK	25	0	23.64	23.69	23.72	24.7		
10	QPSK	25	12	23.65	23.71	23.72			
10	QPSK	25	25	23.65	23.75	23.78			
10	QPSK	50	0	23.68	23.69	23.74	24.7		
10	16QAM	1	0	23.97	24.04	24.05			
10	16QAM	1	25	23.91	24.02	24.03			
10	16QAM	1	49	23.92	23.99	24.04	23.7		
10	16QAM	25	0	22.66	22.68	22.73			
10	16QAM	25	12	22.67	22.71	22.74			
10	16QAM	25	25	22.65	22.74	22.77	23.7		
10	16QAM	50	0	22.67	22.69	22.73			
10	64QAM	1	25	22.85	22.87	22.77			
10	64QAM	1	49	22.81	22.84	22.88	23.7		
10	64QAM	1	99	22.83	22.92	22.95			
10	64QAM	25	0	21.66	21.72	21.75			
10	64QAM	25	12	21.72	21.73	21.76	22.7		
10	64QAM	25	25	21.70	21.77	21.78			
10	64QAM	50	0	21.72	21.72	21.78			
Channel				131987	132322	132987			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	24.57	24.61	24.73	25.7		
5	QPSK	1	12	24.59	24.69	24.71			
5	QPSK	1	24	24.54	24.66	24.71			
5	QPSK	12	0	23.66	23.71	23.81	24.7		
5	QPSK	12	7	23.65	23.79	23.81			
5	QPSK	12	13	23.63	23.78	23.81			
5	QPSK	25	0	23.65	23.70	23.79	24.7		
5	16QAM	1	0	23.93	23.95	24.04			
5	16QAM	1	12	23.95	24.02	24.03			
5	16QAM	1	24	23.91	23.99	24.04	23.7		
5	16QAM	12	0	22.70	22.75	22.85			
5	16QAM	12	7	22.73	22.81	22.86			
5	16QAM	12	13	22.70	22.77	22.81	23.7		
5	16QAM	25	0	22.67	22.70	22.79			
5	64QAM	1	0	22.84	22.84	23.03			
5	64QAM	1	12	22.90	22.98	22.98	23.7		
5	64QAM	1	24	22.87	22.94	22.91			
5	64QAM	12	0	21.73	21.76	21.87			
5	64QAM	12	7	21.78	21.84	21.87	22.7		
5	64QAM	12	13	21.69	21.82	21.82			
5	64QAM	25	0	21.69	21.73	21.83			
Channel				131992	132322	132992			
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	24.59	24.64	24.72	25.7		
3	QPSK	1	8	24.64	24.74	24.78			
3	QPSK	1	14	24.58	24.68	24.67			
3	QPSK	8	0	23.68	23.70	23.76	24.7		
3	QPSK	8	4	23.69	23.80	23.79			
3	QPSK	8	7	23.67	23.72	23.76			
3	QPSK	15	0	23.68	23.67	23.76	24.7		
3	16QAM	1	0	23.92	23.98	24.05			
3	16QAM	1	8	24.00	24.10	24.14			
3	16QAM	1	14	23.89	24.00	24.00	23.7		
3	16QAM	8	0	22.72	22.78	22.88			
3	16QAM	8	4	22.77	22.83	22.89			
3	16QAM	8	7	22.72	22.84	22.81	23.7		
3	16QAM	15	0	22.70	22.75	22.79			
3	64QAM	1	0	22.82	22.93	23.04			
3	64QAM	1	8	22.93	22.95	23.03	23.7		
3	64QAM	1	14	22.85	22.99	22.97			
3	64QAM	8	0	21.76	21.73	21.81			
3	64QAM	8	4	21.78	21.82	21.87	22.7		
3	64QAM	8	7	21.75	21.81	21.84			
3	64QAM	15	0	21.69	21.74	21.81			
Channel				131979	132322	132979			
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	24.47	24.62	24.61	25.7		
1.4	QPSK	1	3	24.56	24.66	24.71			
1.4	QPSK	1	5	24.51	24.56	24.65			
1.4	QPSK	3	0	24.52	24.63	24.65	24.7		
1.4	QPSK	3	1	24.55	24.68	24.71			
1.4	QPSK	3	3	24.53	24.64	24.66			
1.4	QPSK	6	0	23.60	23.70	23.71	24.7		
1.4	16QAM	1	0	23.83	23.94	23.95			
1.4	16QAM	1	3	23.92	24.01	24.03			
1.4	16QAM	1	5	23.84	23.93	23.94	24.7		
1.4	16QAM	3	0	23.62	23.75	23.76			
1.4	16QAM	3	1	23.68	23.79	23.80			
1.4	16QAM	3	3	23.61	23.71	23.72	23.7		
1.4	16QAM	6	0	22.67	22.76	22.77			
1.4	64QAM	1	0	22.76	22.88	22.91			
1.4	64QAM	1	3	22.84	22.94	22.95	23.7		
1.4	64QAM	1	5	22.80	22.87	22.89			
1.4	64QAM	3	0	22.76	22.82	22.89			
1.4	64QAM	3	1	22.79	22.88	22.92	23.7		
1.4	64QAM	3	3	22.75	22.85	22.87			
1.4	64QAM	6	0	21.62	21.73	21.75			



Band 71							
Ari 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				13322	13322	13322	
Frequency (MHz)				675	683	688	
20	QPSK	1	0	23.51	23.41	23.36	25.2
20	QPSK	1	49	23.40	23.39	23.36	
20	QPSK	1	99	23.42	23.37	23.31	
20	QPSK	50	0	23.54	23.48	23.43	24.2
20	QPSK	50	24	23.57	23.47	23.44	
20	QPSK	50	50	23.57	23.49	23.46	
20	QPSK	100	0	23.55	23.45	23.43	24.2
20	16QAM	1	0	23.85	23.73	23.69	
20	16QAM	1	49	23.72	23.76	23.70	
20	16QAM	1	99	23.80	23.68	23.64	23.2
20	16QAM	50	0	22.85	22.80	22.76	
20	16QAM	50	24	22.89	22.80	22.74	
20	16QAM	50	50	22.86	22.79	22.77	23.2
20	16QAM	100	0	22.87	22.76	22.71	
20	64QAM	1	49	22.84	22.91	22.85	
20	64QAM	1	99	22.97	22.74	22.48	23.2
20	64QAM	50	0	21.26	21.83	21.78	
20	64QAM	50	24	21.73	21.83	21.77	
20	64QAM	50	50	21.90	21.83	21.79	22.2
20	64QAM	100	0	21.74	21.77	21.74	
Channel				133197	133207	133307	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.54	23.45	23.39	25.2
15	QPSK	1	37	23.41	23.39	23.35	
15	QPSK	1	74	23.43	23.40	23.35	
15	QPSK	36	0	23.52	23.48	23.42	24.2
15	QPSK	36	20	23.58	23.48	23.42	
15	QPSK	36	39	23.47	23.52	23.46	
15	QPSK	75	0	23.58	23.47	23.41	24.2
15	16QAM	1	0	23.84	23.73	23.69	
15	16QAM	1	37	23.76	23.74	23.69	
15	16QAM	1	74	23.74	23.71	23.66	23.2
15	16QAM	36	0	22.85	22.79	22.75	
15	16QAM	36	20	22.86	22.77	22.74	
15	16QAM	36	39	22.82	22.80	22.78	23.2
15	16QAM	75	0	22.90	22.76	22.72	
15	64QAM	1	0	22.10	22.86	22.86	
15	64QAM	1	37	22.04	22.92	22.93	23.2
15	64QAM	1	74	22.94	22.85	22.87	
15	64QAM	36	0	21.06	21.81	21.77	
15	64QAM	36	20	21.25	21.81	21.79	22.2
15	64QAM	36	39	21.83	21.76	21.81	
15	64QAM	75	0	21.63	21.78	21.74	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	683	
10	QPSK	1	0	23.53	23.40	23.40	25.2
10	QPSK	1	25	23.40	23.34	23.36	
10	QPSK	1	49	23.42	23.40	23.31	
10	QPSK	25	0	23.58	23.47	23.44	24.2
10	QPSK	25	12	23.59	23.56	23.45	
10	QPSK	25	25	23.55	23.52	23.46	
10	QPSK	50	0	23.59	23.56	23.43	24.2
10	16QAM	1	0	23.83	23.73	23.77	
10	16QAM	1	25	23.80	23.80	23.78	
10	16QAM	1	49	23.80	23.79	23.71	23.2
10	16QAM	25	0	22.85	22.78	22.72	
10	16QAM	25	12	22.89	22.86	22.71	
10	16QAM	25	25	22.83	22.80	22.76	23.2
10	16QAM	50	0	22.90	22.84	22.72	
10	64QAM	1	0	22.06	22.70	22.86	
10	64QAM	1	25	22.21	23.01	22.94	23.2
10	64QAM	1	49	22.55	22.99	22.85	
10	64QAM	25	0	20.98	21.81	21.76	
10	64QAM	25	12	21.03	21.88	21.78	22.2
10	64QAM	25	25	21.12	21.84	21.81	
10	64QAM	50	0	21.11	21.86	21.73	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	685.5	
5	QPSK	1	0	23.56	23.46	23.40	25.2
5	QPSK	1	12	23.54	23.43	23.35	
5	QPSK	1	24	23.47	23.41	23.34	
5	QPSK	12	0	23.86	23.52	23.45	24.2
5	QPSK	12	7	23.61	23.55	23.45	
5	QPSK	12	13	23.54	23.49	23.40	
5	QPSK	25	0	23.58	23.54	23.39	24.2
5	16QAM	1	0	23.84	23.79	23.71	
5	16QAM	1	12	23.76	23.77	23.69	
5	16QAM	1	24	23.76	23.72	23.63	23.2
5	16QAM	12	0	22.74	22.87	22.78	
5	16QAM	12	7	22.83	22.88	22.80	
5	16QAM	12	13	22.85	22.83	22.72	23.2
5	16QAM	25	0	22.78	22.84	22.71	
5	64QAM	1	0	21.70	22.53	22.71	
5	64QAM	1	12	21.79	23.04	22.86	23.2
5	64QAM	1	24	22.03	23.04	22.65	
5	64QAM	12	0	20.85	21.90	21.65	
5	64QAM	12	7	20.96	21.91	21.68	22.2
5	64QAM	12	13	20.91	21.88	21.52	
5	64QAM	25	0	20.83	21.87	21.45	





Band 2									
Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./18700	Power Middle Ch./18900	Power High Ch./19100	Tune-up limit (dbm)		
Channel				18700	18900	19100			
Frequency (MHz)				1870	1890	1900			
20	QPSK	1	0	23.08	23.12	23.11			
20	QPSK	1	49	23.06	23.06	23.06	25		
20	QPSK	1	99	23.01	23.05	23.07			
20	QPSK	50	0	23.15	23.17	23.09			24
20	QPSK	50	24	23.22	23.21	23.20			
20	QPSK	50	50	23.20	23.25	23.21			
20	QPSK	100	0	23.23	23.15	22.99			
20	16QAM	1	0	23.39	23.46	23.41			24
20	16QAM	1	49	23.39	23.45	22.85			
20	16QAM	1	99	23.31	23.41	23.33			
20	16QAM	50	0	22.83	22.87	22.33			23
20	16QAM	50	24	22.74	22.71	22.35			
20	16QAM	50	50	22.71	22.75	22.69			
20	16QAM	100	0	22.72	22.64	22.52			
20	64QAM	1	0	22.67	22.33	22.32			23
20	64QAM	1	49	22.24	22.76	21.22			
20	64QAM	1	99	21.79	22.77	21.85			
20	64QAM	50	0	20.33	20.32	20.32			22
20	64QAM	50	24	20.31	20.30	20.35			
20	64QAM	50	50	20.79	20.33	20.85			
20	64QAM	100	0	21.17	20.35	20.60			
Channel				18675	18900	19125	Tune-up limit (dbm)		
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	23.06	23.07	23.06			25
15	QPSK	1	37	23.06	23.03	23.06			
15	QPSK	1	74	23.01	23.03	23.00			
15	QPSK	36	0	23.10	23.11	22.99			24
15	QPSK	36	20	23.13	23.14	23.14			
15	QPSK	36	39	23.13	23.19	23.16			
15	QPSK	75	0	23.20	23.10	22.93			
15	16QAM	1	0	23.33	23.39	23.35			24
15	16QAM	1	37	23.30	23.43	22.94			
15	16QAM	1	74	23.29	23.39	23.25			
15	16QAM	36	0	22.53	22.64	22.33			23
15	16QAM	36	20	22.69	22.69	22.27			
15	16QAM	36	39	22.69	22.67	22.85			
15	16QAM	75	0	22.72	22.54	22.47			
15	64QAM	1	0	22.58	22.25	22.23			23
15	64QAM	1	37	22.24	22.73	21.21			
15	64QAM	1	74	21.73	22.76	21.93			
15	64QAM	36	0	21.61	21.57	20.29			22
15	64QAM	36	20	21.23	21.63	20.34			
15	64QAM	36	39	20.73	21.70	20.85			
15	64QAM	75	0	21.14	21.30	20.51			
Channel				18950	19000	19150	Tune-up limit (dbm)		
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	23.08	23.04	23.01			25
10	QPSK	1	25	23.06	23.02	23.01			
10	QPSK	1	49	23.00	23.04	23.01			
10	QPSK	25	0	23.08	23.14	23.04			24
10	QPSK	25	12	23.19	23.17	23.18			
10	QPSK	25	25	23.18	23.20	23.14			
10	QPSK	50	0	23.19	23.14	22.92			
10	16QAM	1	0	23.37	23.42	23.33			24
10	16QAM	1	25	23.37	23.45	22.80			
10	16QAM	1	49	23.28	23.41	23.32			
10	16QAM	25	0	22.99	22.83	22.25			23
10	16QAM	25	12	22.73	22.68	22.28			
10	16QAM	25	25	22.62	22.65	22.63			
10	16QAM	50	0	22.62	22.55	22.50			
10	64QAM	1	0	22.60	22.32	22.32			23
10	64QAM	1	25	22.18	22.66	21.21			
10	64QAM	1	49	21.72	22.72	21.80			
10	64QAM	25	0	21.60	21.58	20.23			22
10	64QAM	25	12	21.20	21.64	20.27			
10	64QAM	25	25	20.72	21.68	20.81			
10	64QAM	50	0	21.16	21.36	20.50			
Channel				18625	18900	19175	Tune-up limit (dbm)		
Frequency (MHz)				1822.5	1880	1907.5			
5	QPSK	1	0	23.05	23.07	23.09			25
5	QPSK	1	12	23.03	23.00	23.02			
5	QPSK	1	24	23.01	23.00	23.03			
5	QPSK	12	0	23.13	23.07	23.07			24
5	QPSK	12	7	23.18	23.12	23.14			
5	QPSK	12	13	23.14	23.19	23.15			
5	QPSK	25	0	23.17	23.13	22.92			
5	16QAM	1	0	23.29	23.38	23.35			24
5	16QAM	1	12	23.33	23.38	22.85			
5	16QAM	1	24	23.30	23.32	23.26			
5	16QAM	12	0	22.62	22.60	22.32			23
5	16QAM	12	7	22.73	22.82	22.25			
5	16QAM	12	13	22.64	22.73	22.68			
5	16QAM	25	0	22.70	22.59	22.49			
5	64QAM	1	0	22.57	22.24	22.29			23
5	64QAM	1	12	22.24	22.68	21.20			
5	64QAM	1	24	21.72	22.67	21.91			
5	64QAM	12	0	21.53	21.54	20.30			22
5	64QAM	12	7	21.16	21.89	20.35			
5	64QAM	12	13	20.70	21.67	20.76			
5	64QAM	25	0	21.17	21.36	20.55			
Channel				18615	18900	19185	Tune-up limit (dbm)		
Frequency (MHz)				1851.5	1880	1908.5			
3	QPSK	1	0	23.07	23.07	23.09			25
3	QPSK	1	8	23.05	23.06	23.00			
3	QPSK	1	14	23.02	23.00	23.02			
3	QPSK	8	0	23.09	23.11	22.99			24
3	QPSK	8	4	23.16	23.12	23.10			
3	QPSK	8	7	23.15	23.15	23.12			
3	QPSK	15	0	23.13	23.09	22.98			
3	16QAM	1	0	23.29	23.45	23.33			24
3	16QAM	1	8	23.30	23.35	22.76			
3	16QAM	1	14	23.31	23.34	23.26			
3	16QAM	8	0	22.58	22.67	22.31			23
3	16QAM	8	4	22.67	22.69	22.27			
3	16QAM	8	7	22.70	22.73	22.85			
3	16QAM	15	0	22.62	22.59	22.47			
3	64QAM	1	0	22.66	22.31	22.30			23
3	64QAM	1	8	22.22	22.68	21.22			
3	64QAM	1	14	21.70	22.75	21.89			
3	64QAM	8	0	21.54	21.56	20.25			22
3	64QAM	8	4	21.16	21.70	20.30			
3	64QAM	8	7	20.69	21.67	20.81			
3	64QAM	15	0	21.12	21.37	20.55			
Channel				18507	18900	19193	Tune-up limit (dbm)		
Frequency (MHz)				18097	18900	19093			
1.4	QPSK	1	0	23.06	23.09	23.05			25
1.4	QPSK	1	3	23.00	23.01	23.05			
1.4	QPSK	1	5	23.00	23.04	23.02			
1.4	QPSK	3	0	23.06	23.10	23.07			24
1.4	QPSK	3	1	23.20	23.13	23.17			
1.4	QPSK	3	3	23.12	23.23	23.11			
1.4	QPSK	6	0	23.17	23.11	22.91			
1.4	16QAM	1	0	23.35	23.44	23.39			24
1.4	16QAM	1	3	23.35	23.41	22.82			
1.4	16QAM	1	5	23.22	23.34	23.24			
1.4	16QAM	3	0	22.63	22.62	22.26			23
1.4	16QAM	3	1	22.72	22.67	22.30			
1.4	16QAM	3	3	22.61	22.69	22.62			
1.4	16QAM	6	0	22.66	22.55	22.51			
1.4	64QAM	1	0	22.67	22.28	22.30			23
1.4	64QAM	1	3	22.20	22.72	21.23			
1.4	64QAM	1	5	21.71	22.67	21.82			23
1.4	64QAM	3	0	21.56	21.61	21.62			
1.4	64QAM	3	1	21.62	21.69	21.68			
1.4	64QAM	3	3	21.66	21.68	21.65			
1.4	64QAM	6	0	21.14	21.32	20.58			22



Band 4							
Part 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	23.76	23.80	23.73	24.9
20	QPSK	1	49	23.59	23.58	23.54	
20	QPSK	1	99	23.60	23.55	23.45	
20	QPSK	50	0	23.63	23.60	23.53	24.7
20	QPSK	50	24	23.64	23.34	23.45	
20	QPSK	50	50	23.55	23.40	23.42	
20	QPSK	100	0	23.63	23.58	23.41	24.7
20	16QAM	1	0	23.92	23.96	23.89	
20	16QAM	1	49	23.80	23.77	23.67	
20	16QAM	1	99	23.77	23.65	23.55	23.7
20	16QAM	50	0	22.61	22.94	22.56	
20	16QAM	50	24	22.64	22.55	22.47	
20	16QAM	50	50	22.57	22.50	22.44	23.7
20	16QAM	100	0	22.60	22.61	22.41	
20	64QAM	1	0	22.79	22.82	22.11	
20	64QAM	1	49	22.66	22.32	22.53	23.7
20	64QAM	1	99	22.64	21.87	22.50	
20	64QAM	50	0	21.65	21.64	21.19	
20	64QAM	50	24	21.66	21.34	21.47	22.7
20	64QAM	50	50	21.57	21.04	21.43	
20	64QAM	100	0	21.66	21.54	21.45	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.78	23.53	23.74	24.9
15	QPSK	1	37	23.59	23.59	23.52	
15	QPSK	1	74	23.65	23.54	23.51	
15	QPSK	36	0	23.64	23.59	23.52	24.7
15	QPSK	36	20	23.64	23.61	23.48	
15	QPSK	36	39	23.57	23.53	23.41	
15	QPSK	75	0	23.61	23.55	23.42	24.7
15	16QAM	1	0	23.91	23.92	23.85	
15	16QAM	1	37	23.75	23.74	23.63	
15	16QAM	1	74	23.78	23.68	23.56	23.7
15	16QAM	36	0	22.67	22.61	22.54	
15	16QAM	36	20	22.62	22.60	22.49	
15	16QAM	36	39	22.57	22.53	22.44	23.7
15	16QAM	75	0	22.64	22.56	22.42	
15	64QAM	1	0	22.77	22.76	22.35	
15	64QAM	1	37	22.71	22.13	22.52	23.7
15	64QAM	1	74	22.67	21.86	22.49	
15	64QAM	36	0	21.68	21.66	21.52	
15	64QAM	36	20	21.62	21.22	21.51	22.7
15	64QAM	36	39	21.61	20.97	21.45	
15	64QAM	75	0	21.62	21.43	21.43	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.77	23.81	23.73	24.9
10	QPSK	1	25	23.57	23.49	23.52	
10	QPSK	1	49	23.60	23.54	23.42	
10	QPSK	25	0	23.64	23.56	23.48	24.7
10	QPSK	25	12	23.61	23.32	23.47	
10	QPSK	25	25	23.49	23.50	23.37	
10	QPSK	50	0	23.64	23.45	23.39	24.7
10	16QAM	1	0	23.91	23.90	23.75	
10	16QAM	1	25	23.71	23.66	23.55	
10	16QAM	1	49	23.76	23.64	23.49	23.7
10	16QAM	25	0	22.62	22.35	22.52	
10	16QAM	25	12	22.56	22.50	22.41	
10	16QAM	25	25	22.57	22.53	22.42	23.7
10	16QAM	50	0	22.54	22.51	22.34	
10	64QAM	1	0	22.67	22.72	22.34	
10	64QAM	1	25	22.68	22.09	22.45	23.7
10	64QAM	1	49	22.61	21.94	22.45	
10	64QAM	25	0	21.58	21.57	21.47	
10	64QAM	25	12	21.61	21.13	21.42	22.7
10	64QAM	25	25	21.53	20.88	21.41	
10	64QAM	50	0	21.62	21.39	21.41	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.70	23.79	23.72	24.9
5	QPSK	1	12	23.49	23.59	23.45	
5	QPSK	1	24	23.60	23.54	23.48	
5	QPSK	12	0	23.64	23.52	23.44	24.7
5	QPSK	12	7	23.63	23.53	23.41	
5	QPSK	12	13	23.53	23.48	23.39	
5	QPSK	25	0	23.56	23.50	23.36	24.7
5	16QAM	1	0	23.91	23.92	23.82	
5	16QAM	1	12	23.71	23.68	23.57	
5	16QAM	1	24	23.77	23.59	23.56	23.7
5	16QAM	12	0	22.61	22.58	22.47	
5	16QAM	12	7	22.60	22.51	22.39	
5	16QAM	12	13	22.53	22.48	22.35	23.7
5	16QAM	25	0	22.57	22.46	22.33	
5	64QAM	1	0	22.76	22.68	22.28	
5	64QAM	1	12	22.70	22.10	22.49	23.7
5	64QAM	1	24	22.60	21.86	22.49	
5	64QAM	12	0	21.59	21.56	21.45	
5	64QAM	12	7	21.61	21.21	21.42	22.7
5	64QAM	12	13	21.61	20.87	21.43	
5	64QAM	25	0	21.55	21.42	21.36	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.68	23.75	23.68	24.9
3	QPSK	1	8	23.58	23.58	23.51	
3	QPSK	1	14	23.63	23.51	23.46	
3	QPSK	8	0	23.55	23.53	23.50	24.7
3	QPSK	8	4	23.64	23.54	23.38	
3	QPSK	8	7	23.51	23.46	23.41	
3	QPSK	15	0	23.60	23.45	23.39	24.7
3	16QAM	1	0	23.85	23.84	23.81	
3	16QAM	1	8	23.73	23.69	23.59	
3	16QAM	1	14	23.76	23.66	23.61	23.7
3	16QAM	8	0	22.63	22.59	22.52	
3	16QAM	8	4	22.61	22.55	22.43	
3	16QAM	8	7	22.48	22.46	22.35	23.7
3	16QAM	15	0	22.62	22.56	22.33	
3	64QAM	1	0	22.68	22.74	22.35	
3	64QAM	1	8	22.63	22.12	22.42	23.7
3	64QAM	1	14	22.68	21.77	22.45	
3	64QAM	8	0	21.60	21.54	21.43	
3	64QAM	8	4	21.62	21.20	21.46	22.7
3	64QAM	8	7	21.59	20.97	21.45	
3	64QAM	15	0	21.60	21.38	21.34	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.62	23.60	23.47	24.9
1.4	QPSK	1	3	23.69	23.66	23.52	
1.4	QPSK	1	5	23.67	23.64	23.49	
1.4	QPSK	3	0	23.67	23.65	23.52	24.7
1.4	QPSK	3	1	23.74	23.69	23.56	
1.4	QPSK	3	3	23.67	23.65	23.52	
1.4	QPSK	6	0	23.55	23.50	23.39	24.7
1.4	16QAM	1	0	23.77	23.75	23.60	
1.4	16QAM	1	3	23.83	23.80	23.65	
1.4	16QAM	1	5	23.80	23.77	23.62	24.7
1.4	16QAM	3	0	23.56	23.53	23.41	
1.4	16QAM	3	1	23.63	23.56	23.44	
1.4	16QAM	3	3	23.57	23.52	23.39	23.7
1.4	16QAM	6	0	22.60	22.55	22.43	
1.4	64QAM	1	0	22.71	22.20	22.56	
1.4	64QAM	1	3	22.79	22.17	22.62	23.7
1.4	64QAM	1	5	22.73	22.06	22.53	
1.4	64QAM	3	0	22.70	22.18	22.50	
1.4	64QAM	3	1	22.74	22.26	22.57	23.7
1.4	64QAM	3	3	22.69	22.11	22.50	
1.4	64QAM	6	0	21.58	21.05	21.38	



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20505	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.76	23.75	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.60	23.7
10	16QAM	25	0	22.96	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.76	22.73	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.48	21.77	
10	64QAM	25	0	21.67	21.76	21.76	
10	64QAM	25	12	21.80	21.77	21.68	22.7
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.76	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.94	22.62	
5	64QAM	1	12	22.90	22.85	21.90	23.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.76	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	24.7
3	QPSK	8	4	23.68	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	23.7
3	64QAM	1	14	22.64	22.62	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.56	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.86	23.28	
1.4	16QAM	1	3	23.93	23.95	23.39	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.86	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.28	
1.4	64QAM	1	0	22.64	22.60	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	22.7
1.4	64QAM	3	3	22.64	22.76	21.77	
1.4	64QAM	6	0	21.60	21.69	20.74	



Band 7							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.88	23.95	23.99	
20	QPSK	1	49	23.94	23.99	23.98	25.7
20	QPSK	1	99	23.99	24.08	24.04	
20	QPSK	50	0	23.50	23.86	23.88	
20	QPSK	50	24	23.95	23.91	23.90	24.7
20	QPSK	50	50	23.96	24.03	24.02	
20	QPSK	100	0	23.90	23.91	23.90	
20	16QAM	1	0	24.02	24.08	24.14	
20	16QAM	1	49	24.10	24.16	24.15	24.7
20	16QAM	1	99	24.15	24.26	24.16	
20	16QAM	50	0	22.83	22.86	22.91	
20	16QAM	50	24	22.93	22.91	22.92	23.7
20	16QAM	50	50	22.94	23.03	22.98	
20	16QAM	100	0	22.90	22.89	22.92	
20	64QAM	1	0	22.87	22.96	22.99	
20	64QAM	1	49	22.92	23.04	22.70	23.7
20	64QAM	1	99	23.04	23.13	22.55	
20	64QAM	50	0	21.82	21.89	21.91	
20	64QAM	50	24	21.95	21.94	21.75	22.7
20	64QAM	50	50	21.95	22.02	21.58	
20	64QAM	100	0	21.92	21.90	21.79	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.91	24.01	23.99	
15	QPSK	1	37	23.95	24.02	24.02	25.7
15	QPSK	1	74	24.01	24.10	24.04	
15	QPSK	36	0	23.79	23.86	23.86	
15	QPSK	36	20	23.93	23.92	23.89	24.7
15	QPSK	36	39	23.92	23.97	23.95	
15	QPSK	75	0	23.86	23.87	23.88	
15	16QAM	1	0	23.99	24.11	24.13	24.7
15	16QAM	1	37	24.05	24.14	24.11	
15	16QAM	1	74	24.13	24.19	24.11	
15	16QAM	36	0	22.82	22.87	22.88	23.7
15	16QAM	36	20	22.90	22.90	22.88	
15	16QAM	36	39	22.93	23.00	22.95	
15	16QAM	75	0	22.90	22.90	22.90	
15	64QAM	1	0	22.86	22.95	22.96	23.7
15	64QAM	1	37	22.99	23.07	22.41	
15	64QAM	1	74	23.04	23.12	22.69	
15	64QAM	36	0	21.81	21.91	21.76	22.7
15	64QAM	36	20	21.93	21.93	21.55	
15	64QAM	36	39	21.97	22.02	21.61	
15	64QAM	75	0	21.90	21.90	21.60	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.87	23.94	23.91	
10	QPSK	1	25	23.85	23.93	23.92	25.7
10	QPSK	1	49	23.92	24.02	23.92	
10	QPSK	25	0	23.85	23.86	23.80	
10	QPSK	25	12	23.87	23.90	23.86	24.7
10	QPSK	25	25	23.86	23.96	23.89	
10	QPSK	50	0	23.87	23.89	23.84	
10	16QAM	1	0	24.05	24.11	24.09	24.7
10	16QAM	1	25	24.03	24.15	24.14	
10	16QAM	1	49	24.13	24.21	24.12	
10	16QAM	25	0	22.86	22.85	22.82	23.7
10	16QAM	25	12	22.89	22.96	22.85	
10	16QAM	25	25	22.87	22.95	22.89	
10	16QAM	50	0	22.85	22.88	22.84	
10	64QAM	1	0	22.96	22.98	22.70	23.7
10	64QAM	1	25	22.97	23.07	22.76	
10	64QAM	1	49	23.01	23.12	22.69	
10	64QAM	25	0	21.85	21.88	21.53	22.7
10	64QAM	25	12	21.92	21.92	21.64	
10	64QAM	25	25	21.91	21.97	21.69	
10	64QAM	50	0	21.88	21.92	21.52	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.91	23.93	23.94	
5	QPSK	1	12	23.94	24.06	23.97	25.7
5	QPSK	1	24	23.95	24.04	23.95	
5	QPSK	12	0	23.83	23.90	23.86	
5	QPSK	12	7	23.87	23.91	23.87	24.7
5	QPSK	12	13	23.83	23.93	23.89	
5	QPSK	25	0	23.83	23.86	23.84	
5	16QAM	1	0	24.05	24.12	24.09	24.7
5	16QAM	1	12	24.08	24.15	24.06	
5	16QAM	1	24	24.10	24.17	24.07	
5	16QAM	12	0	22.87	22.90	22.90	23.7
5	16QAM	12	7	22.89	22.94	22.87	
5	16QAM	12	13	22.90	22.96	22.89	
5	16QAM	25	0	22.87	22.89	22.86	
5	64QAM	1	0	22.96	23.02	22.70	23.7
5	64QAM	1	12	22.96	23.08	22.72	
5	64QAM	1	24	23.00	23.10	22.82	
5	64QAM	12	0	21.95	21.93	21.59	
5	64QAM	12	7	21.89	21.95	21.69	22.7
5	64QAM	12	13	21.92	22.02	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



Band 12							
Ant 0							
Band	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.64	24.61	24.63	25.7
10	QPSK	1	25	24.63	24.68	24.65	
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	24.7
10	QPSK	25	12	23.87	23.80	23.76	
10	QPSK	25	25	23.98	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	24.7
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	
10	16QAM	1	49	24.12	24.08	24.07	23.7
10	16QAM	25	0	22.76	22.79	22.77	
10	16QAM	25	12	22.82	22.80	22.78	
10	16QAM	25	25	22.81	22.85	22.79	23.7
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	25	22.76	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.78	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	22.7
10	64QAM	25	25	21.82	21.90	21.84	
10	64QAM	50	0	21.83	21.81	21.80	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	25.7
5	QPSK	1	12	24.72	24.73	24.71	
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.79	23.78	24.7
5	QPSK	12	7	23.79	23.75	23.81	
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	24.7
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	
5	16QAM	1	24	24.02	24.07	24.03	23.7
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	
5	16QAM	12	13	22.83	22.82	22.80	23.7
5	16QAM	25	0	22.81	22.85	22.75	
5	64QAM	1	0	22.82	22.73	22.91	
5	64QAM	1	12	22.83	22.94	22.94	23.7
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	
5	64QAM	12	7	21.88	21.85	21.88	22.7
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23025	23095	23155	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	25.7
3	QPSK	1	8	24.73	24.74	24.73	
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.78	23.73	24.7
3	QPSK	8	4	23.78	23.74	23.77	
3	QPSK	8	7	23.73	23.76	23.75	
3	QPSK	15	0	23.77	23.75	23.73	24.7
3	16QAM	1	0	24.08	24.01	24.02	
3	16QAM	1	8	24.06	24.08	24.08	
3	16QAM	1	14	24.00	24.05	23.98	23.7
3	16QAM	8	0	22.88	22.85	22.82	
3	16QAM	8	4	22.90	22.83	22.87	
3	16QAM	8	7	22.84	22.84	22.83	23.7
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.87	22.90	22.95	
3	64QAM	1	8	22.91	23.01	22.98	23.7
3	64QAM	1	14	22.92	22.95	22.88	
3	64QAM	8	0	21.82	21.81	21.81	
3	64QAM	8	4	21.87	21.84	21.87	22.7
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.85	21.78	21.77	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.59	24.59	25.7
1.4	QPSK	1	3	24.68	24.67	24.64	
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	24.7
1.4	QPSK	3	1	24.70	24.64	24.68	
1.4	QPSK	3	3	24.64	24.67	24.61	
1.4	QPSK	6	0	23.71	23.74	23.67	24.7
1.4	16QAM	1	0	23.99	23.93	23.96	
1.4	16QAM	1	3	24.02	24.02	23.98	
1.4	16QAM	1	5	23.92	23.94	23.91	24.7
1.4	16QAM	3	0	23.75	23.69	23.69	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.70	23.73	23.65	23.7
1.4	16QAM	6	0	22.78	22.80	22.76	
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.89	23.7
1.4	64QAM	1	5	22.82	22.85	22.81	
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	23.7
1.4	64QAM	3	3	22.83	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.23		25.2
10	QPSK	1	25		24.22		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30		24.2
10	QPSK	25	12		23.33		
10	QPSK	25	25		23.34		
10	QPSK	50	0		23.35		24.2
10	16QAM	1	0		23.58		
10	16QAM	1	25		23.57		
10	16QAM	1	49		23.54		23.2
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		
10	16QAM	25	25		22.38		22.2
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		23.2
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.36		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205 23230 23255			Tune-up limit (dBm)
Frequency (MHz)				779.5 782 784.5			
5	QPSK	1	0	24.62	24.61	24.59	25.2
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.2
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.2
5	16QAM	1	0	23.83	23.86	23.80	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.2
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.2
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.69	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.2
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.2
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.03	21.17	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.75			25.7
10	QPSK	1	25	24.69			
10	QPSK	1	49	24.60			
10	QPSK	25	0	23.71			24.7
10	QPSK	25	12	23.70			
10	QPSK	25	25	23.73			
10	QPSK	50	0	23.68			24.7
10	16QAM	1	0	24.08			
10	16QAM	1	25	24.08			
10	16QAM	1	49	23.96			23.7
10	16QAM	25	0	22.98			
10	16QAM	25	12	22.70			
10	16QAM	25	25	22.71			22.7
10	16QAM	50	0	22.70			
10	64QAM	1	0	22.92			
10	64QAM	1	25	22.66			23.7
10	64QAM	1	49	22.90			
10	64QAM	25	0	21.71			
10	64QAM	25	12	21.37			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.44			
Channel				23305 23330 23355			Tune-up limit (dBm)
Frequency (MHz)				790.5 793 795.5			
5	QPSK	1	0	24.64	24.61	24.62	25.7
5	QPSK	1	12	24.72	24.70	24.69	
5	QPSK	1	24	24.70	24.63	24.56	
5	QPSK	12	0	23.74	23.69	23.64	24.7
5	QPSK	12	7	23.77	23.72	23.68	
5	QPSK	12	13	23.74	23.72	23.68	
5	QPSK	25	0	23.74	23.68	23.64	24.7
5	16QAM	1	0	23.97	23.92	23.91	
5	16QAM	1	12	24.03	23.99	23.96	
5	16QAM	1	24	23.99	23.93	23.89	23.7
5	16QAM	12	0	22.79	22.70	22.69	
5	16QAM	12	7	22.81	22.74	22.71	
5	16QAM	12	13	22.75	22.72	22.72	23.7
5	16QAM	25	0	22.75	22.72	22.66	
5	64QAM	1	0	22.66	22.72	22.34	
5	64QAM	1	12	22.94	22.37	22.32	23.7
5	64QAM	1	24	22.49	22.18	22.72	
5	64QAM	12	0	21.82	21.48	21.13	
5	64QAM	12	7	21.85	21.29	21.25	22.7
5	64QAM	12	13	21.60	21.11	21.55	
5	64QAM	25	0	21.69	21.22	21.29	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				706	710	714	
10	QPSK	1	0	24.66	24.65	24.61	
10	QPSK	1	25	24.69	24.70	24.71	25.7
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	
10	QPSK	25	12	23.88	23.82	23.79	24.7
10	QPSK	25	25	23.88	23.88	23.88	
10	QPSK	50	0	23.79	23.78	23.79	
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	24.7
10	16QAM	1	49	24.12	24.10	24.09	
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	23.7
10	16QAM	25	25	22.89	22.90	22.82	
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.76	22.88	
10	64QAM	1	25	22.71	22.71	22.65	23.7
10	64QAM	1	49	22.87	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	22.7
10	64QAM	25	25	21.65	21.78	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.65	24.68	
5	QPSK	1	12	24.74	24.79	24.75	25.7
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	
5	QPSK	12	7	23.85	23.81	23.82	24.7
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	
5	16QAM	1	0	23.99	23.98	23.99	24.7
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	23.7
5	16QAM	12	13	22.84	22.88	22.84	
5	16QAM	25	0	22.65	22.65	22.67	
5	64QAM	1	0	22.40	22.44	22.76	23.7
5	64QAM	1	12	22.76	22.60	22.94	
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	





Band 25							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1880	1880	1905	
20	QPSK	1	0	23.09	23.12	23.02	25
20	QPSK	1	49	23.06	23.06	23.05	
20	QPSK	1	99	23.00	23.04	23.01	
20	QPSK	50	0	23.01	23.16	22.56	24
20	QPSK	50	24	23.02	23.26	23.04	
20	QPSK	50	50	22.98	23.24	23.26	
20	QPSK	100	0	22.43	23.24	22.31	24
20	16QAM	1	0	23.09	23.43	22.58	
20	16QAM	1	49	23.09	23.42	22.49	
20	16QAM	1	99	22.40	23.41	22.22	23
20	16QAM	50	0	22.51	22.72	21.77	
20	16QAM	50	24	22.07	22.79	22.07	
20	16QAM	50	50	21.65	22.75	21.92	23
20	16QAM	100	0	21.45	21.98	21.45	
20	64QAM	1	0	21.20	21.21	21.22	
20	64QAM	1	49	21.22	21.74	21.24	23
20	64QAM	1	99	21.20	22.09	21.23	
20	64QAM	50	0	20.89	21.06	21.07	
20	64QAM	50	24	20.17	21.08	20.38	22
20	64QAM	50	50	20.02	21.11	20.24	
20	64QAM	100	0	20.00	20.03	20.04	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	23.04	23.11	23.02	25
15	QPSK	1	37	23.02	23.10	23.05	
15	QPSK	1	74	23.00	23.04	23.06	
15	QPSK	36	0	22.93	23.08	22.60	24
15	QPSK	36	20	22.99	23.22	23.00	
15	QPSK	36	39	22.81	23.15	23.18	
15	QPSK	75	0	22.42	23.24	22.22	24
15	16QAM	1	0	23.08	23.42	22.52	
15	16QAM	1	37	23.06	23.35	22.42	
15	16QAM	1	74	22.36	23.40	22.21	23
15	16QAM	36	0	22.47	22.67	21.74	
15	16QAM	36	20	22.07	22.76	21.97	
15	16QAM	36	39	21.64	22.69	21.85	23
15	16QAM	75	0	21.45	21.98	21.38	
15	64QAM	1	0	21.17	21.14	21.18	
15	64QAM	1	37	21.21	21.64	21.24	23
15	64QAM	1	74	21.16	22.01	21.15	
15	64QAM	36	0	20.79	20.98	21.03	
15	64QAM	36	20	20.07	21.06	20.38	22
15	64QAM	36	39	20.11	21.04	20.15	
15	64QAM	75	0	20.15	20.30	20.12	
Channel				26050	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	23.07	23.07	23.02	25
10	QPSK	1	25	23.03	23.02	23.01	
10	QPSK	1	49	23.01	23.00	23.03	
10	QPSK	25	0	22.99	23.10	22.56	24
10	QPSK	25	12	22.99	23.21	23.00	
10	QPSK	25	25	22.88	23.24	23.21	
10	QPSK	50	0	22.36	23.15	22.30	24
10	16QAM	1	0	23.01	23.35	22.50	
10	16QAM	1	25	23.08	23.34	22.42	
10	16QAM	1	49	22.36	23.32	22.13	23
10	16QAM	25	0	22.49	22.71	21.76	
10	16QAM	25	12	22.02	22.79	22.06	
10	16QAM	25	25	21.57	22.70	21.83	23
10	16QAM	50	0	21.37	21.90	21.43	
10	64QAM	1	0	21.14	21.11	21.18	
10	64QAM	1	25	21.17	21.72	21.17	23
10	64QAM	1	49	21.19	21.98	21.17	
10	64QAM	25	0	20.88	21.02	20.98	
10	64QAM	25	12	20.08	20.98	20.29	22
10	64QAM	25	25	20.03	21.11	20.21	
10	64QAM	50	0	20.05	20.10	20.02	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	23.06	23.02	23.01	25
5	QPSK	1	12	23.04	23.04	23.00	
5	QPSK	1	24	23.05	23.03	23.02	
5	QPSK	12	0	22.95	23.15	22.51	24
5	QPSK	12	7	22.93	23.23	23.01	
5	QPSK	12	13	22.78	23.17	23.26	
5	QPSK	25	0	22.34	23.20	22.27	24
5	16QAM	1	0	23.02	23.35	22.54	
5	16QAM	1	12	23.07	23.32	22.43	
5	16QAM	1	24	22.34	23.37	22.19	23
5	16QAM	12	0	22.47	22.64	21.75	
5	16QAM	12	7	22.04	22.76	22.00	
5	16QAM	12	13	21.59	22.68	21.92	23
5	16QAM	25	0	21.41	21.91	21.42	
5	64QAM	1	0	21.13	21.16	21.14	
5	64QAM	1	12	21.13	21.73	21.24	23
5	64QAM	1	24	21.12	22.09	21.14	
5	64QAM	12	0	20.84	20.99	21.07	
5	64QAM	12	7	20.17	21.06	20.36	22
5	64QAM	12	13	20.00	21.10	20.16	
5	64QAM	25	0	20.02	20.01	20.00	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	23.03	23.09	23.04	25
3	QPSK	1	8	23.01	23.07	23.02	
3	QPSK	1	14	23.05	23.04	23.00	
3	QPSK	8	0	22.94	23.06	22.47	24
3	QPSK	8	4	22.95	23.20	22.98	
3	QPSK	8	7	22.85	23.23	23.22	
3	QPSK	15	0	22.36	23.21	22.24	24
3	16QAM	1	0	23.01	23.40	22.52	
3	16QAM	1	8	23.04	23.36	22.46	
3	16QAM	1	14	22.30	23.32	22.14	23
3	16QAM	8	0	22.51	22.64	21.71	
3	16QAM	8	4	21.98	22.79	22.05	
3	16QAM	8	7	21.62	22.72	21.91	23
3	16QAM	15	0	21.35	21.94	21.37	
3	64QAM	1	0	21.11	21.19	21.18	
3	64QAM	1	8	21.12	21.68	21.17	23
3	64QAM	1	14	21.17	22.02	21.15	
3	64QAM	8	0	20.89	21.03	21.00	
3	64QAM	8	4	20.13	21.02	20.31	22
3	64QAM	8	7	20.03	21.02	20.15	
3	64QAM	15	0	20.05	20.00	20.05	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	23.02	23.05	23.02	25
1.4	QPSK	1	3	23.05	23.01	23.00	
1.4	QPSK	1	5	23.04	23.00	23.06	
1.4	QPSK	3	0	23.02	23.16	23.00	24
1.4	QPSK	3	1	23.01	23.19	23.03	
1.4	QPSK	3	3	23.05	23.15	23.24	
1.4	QPSK	6	0	22.34	23.18	22.26	24
1.4	16QAM	1	0	23.02	23.35	22.57	
1.4	16QAM	1	3	23.08	23.34	22.44	
1.4	16QAM	1	5	22.38	23.33	22.13	24
1.4	16QAM	3	0	22.44	22.70	22.01	
1.4	16QAM	3	1	22.06	22.70	22.02	
1.4	16QAM	3	3	22.00	22.69	22.03	23
1.4	16QAM	6	0	21.45	21.95	21.41	
1.4	64QAM	1	0	21.10	21.15	21.19	
1.4	64QAM	1	3	21.22	21.68	21.19	23
1.4	64QAM	1	5	21.20	22.02	21.18	
1.4	64QAM	3	0	21.12	21.01	21.07	
1.4	64QAM	3	1	21.08	21.05	21.03	23
1.4	64QAM	3	3	21.10	21.11	21.10	
1.4	64QAM	6	0	20.20	20.20	20.22	



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26785	26885	26985	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.76	24.52	24.57	
15	QPSK	1	37	24.46	24.51	24.50	25.7
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	24.7
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.96	22.87	
15	16QAM	36	20	22.65	22.61	22.60	23.7
15	16QAM	36	39	22.59	22.65	22.62	
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	23.7
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	22.7
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	
10	QPSK	1	25	24.97	24.55	24.59	25.7
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	24.07	23.96	23.96	24.7
10	16QAM	1	25	23.94	24.01	23.97	
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	23.7
10	16QAM	25	25	22.64	22.63	22.63	
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.64	22.76	22.88	23.7
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	
5	QPSK	1	12	24.72	24.63	24.47	25.7
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.60	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	24.7
5	16QAM	1	12	24.00	23.97	23.85	
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	23.7
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	23.7
5	64QAM	1	12	22.90	22.88	22.03	
5	64QAM	1	24	22.81	22.86	21.86	
5	64QAM	12	0	21.83	21.78	21.45	22.7
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	
3	QPSK	1	8	24.75	24.60	24.16	25.7
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	6	0	23.83	23.68	23.38	
3	QPSK	6	4	23.77	23.72	23.28	24.7
3	QPSK	6	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	24.7
3	16QAM	1	8	24.06	24.06	23.47	
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	6	0	22.86	22.77	22.54	23.7
3	16QAM	6	4	22.88	22.77	22.42	
3	16QAM	6	7	22.78	22.76	22.45	
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.63	22.00	23.7
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	
3	64QAM	6	0	21.79	21.74	20.85	22.7
3	64QAM	6	4	21.88	21.81	20.77	
3	64QAM	6	7	21.61	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	
1.4	QPSK	1	3	24.71	24.63	24.26	25.7
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.69	24.55	24.17	
1.4	QPSK	3	1	24.74	24.56	24.22	
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	24.7
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	
1.4	16QAM	1	5	23.93	23.86	23.65	24.7
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	
1.4	16QAM	6	0	22.82	22.75	22.46	23.7
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.88	21.90	
1.4	64QAM	1	5	22.88	22.76	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	22.7



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2774.0			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		20.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.86	22.86	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.14	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132332	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.72	23.65	23.50	24.9
20	QPSK	1	49	23.60	23.46	23.35	
20	QPSK	1	99	23.63	23.41	23.28	
20	QPSK	50	0	23.68	23.47	23.37	24.7
20	QPSK	50	24	23.64	23.46	23.36	
20	QPSK	50	50	23.59	23.39	23.35	
20	QPSK	100	0	23.64	23.42	23.34	24.7
20	16QAM	1	0	23.90	23.75	23.69	
20	16QAM	1	49	23.75	23.58	23.50	
20	16QAM	1	99	23.80	23.52	23.44	23.7
20	16QAM	50	0	22.86	22.44	22.42	
20	16QAM	50	24	22.63	22.44	22.36	
20	16QAM	50	50	22.60	22.40	22.37	23.7
20	16QAM	100	0	22.62	22.46	22.38	
20	64QAM	1	0	22.74	22.18	22.51	
20	64QAM	1	49	22.61	22.47	22.38	23.7
20	64QAM	1	99	22.86	22.46	22.35	
20	64QAM	50	0	21.69	21.29	21.42	
20	64QAM	50	24	21.67	21.47	21.37	22.7
20	64QAM	50	50	21.62	21.42	21.38	
20	64QAM	100	0	21.66	21.47	21.34	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.71	23.61	23.48	24.9
15	QPSK	1	37	23.64	23.41	23.38	
15	QPSK	1	74	23.69	23.49	23.38	
15	QPSK	36	0	23.58	23.43	23.38	24.7
15	QPSK	36	20	23.65	23.40	23.39	
15	QPSK	36	39	23.60	23.38	23.36	
15	QPSK	75	0	23.62	23.43	23.34	24.7
15	16QAM	1	0	23.81	23.69	23.63	
15	16QAM	1	37	23.77	23.59	23.53	
15	16QAM	1	74	23.86	23.58	23.47	23.7
15	16QAM	36	0	22.57	22.42	22.36	
15	16QAM	36	20	22.64	22.45	22.39	
15	16QAM	36	39	22.62	22.42	22.37	23.7
15	16QAM	75	0	22.64	22.46	22.32	
15	64QAM	1	0	22.72	22.26	22.59	
15	64QAM	1	37	22.64	22.45	22.47	23.7
15	64QAM	1	74	22.72	22.48	22.41	
15	64QAM	36	0	21.60	21.32	21.41	
15	64QAM	36	20	21.63	21.46	21.40	22.7
15	64QAM	36	39	21.64	21.42	21.38	
15	64QAM	75	0	21.63	21.46	21.33	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.61	23.51	23.44	24.9
10	QPSK	1	25	23.63	23.31	23.32	
10	QPSK	1	49	23.66	23.46	23.30	
10	QPSK	25	0	23.52	23.34	23.28	24.7
10	QPSK	25	12	23.62	23.39	23.31	
10	QPSK	25	25	23.53	23.33	23.36	
10	QPSK	50	0	23.58	23.41	23.26	24.7
10	16QAM	1	0	23.75	23.59	23.63	
10	16QAM	1	25	23.71	23.52	23.49	
10	16QAM	1	49	23.79	23.56	23.47	23.7
10	16QAM	25	0	22.47	22.36	22.33	
10	16QAM	25	12	22.54	22.41	22.35	
10	16QAM	25	25	22.57	22.42	22.33	23.7
10	16QAM	50	0	22.54	22.46	22.25	
10	64QAM	1	0	22.63	22.18	22.50	
10	64QAM	1	25	22.58	22.41	22.42	23.7
10	64QAM	1	49	22.68	22.41	22.36	
10	64QAM	25	0	21.53	21.30	21.33	
10	64QAM	25	12	21.57	21.39	21.34	22.7
10	64QAM	25	25	21.56	21.37	21.36	
10	64QAM	50	0	21.58	21.40	21.29	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.70	23.60	23.46	24.9
5	QPSK	1	12	23.65	23.40	23.38	
5	QPSK	1	24	23.62	23.43	23.30	
5	QPSK	12	0	23.53	23.34	23.35	24.7
5	QPSK	12	7	23.58	23.40	23.30	
5	QPSK	12	13	23.57	23.28	23.35	
5	QPSK	25	0	23.55	23.35	23.28	24.7
5	16QAM	1	0	23.78	23.66	23.56	
5	16QAM	1	12	23.69	23.59	23.45	
5	16QAM	1	24	23.80	23.57	23.43	23.7
5	16QAM	12	0	22.54	22.38	22.31	
5	16QAM	12	7	22.62	22.41	22.34	
5	16QAM	12	13	22.61	22.37	22.33	23.7
5	16QAM	25	0	22.63	22.44	22.30	
5	64QAM	1	0	22.63	22.25	22.46	
5	64QAM	1	12	22.63	22.38	22.38	23.7
5	64QAM	1	24	22.65	22.44	22.41	
5	64QAM	12	0	21.55	21.26	21.34	
5	64QAM	12	7	21.53	21.46	21.38	22.7
5	64QAM	12	13	21.61	21.37	21.28	
5	64QAM	25	0	21.62	21.42	21.26	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.62	23.54	23.44	24.9
3	QPSK	1	8	23.62	23.32	23.37	
3	QPSK	1	14	23.69	23.47	23.29	
3	QPSK	8	0	23.51	23.37	23.34	24.7
3	QPSK	8	4	23.63	23.39	23.30	
3	QPSK	8	7	23.60	23.30	23.36	
3	QPSK	15	0	23.62	23.41	23.33	24.7
3	16QAM	1	0	23.77	23.65	23.60	
3	16QAM	1	8	23.67	23.59	23.52	
3	16QAM	1	14	23.86	23.54	23.47	23.7
3	16QAM	8	0	22.60	22.34	22.29	
3	16QAM	8	4	22.56	22.40	22.29	
3	16QAM	8	7	22.60	22.38	22.33	23.7
3	16QAM	15	0	22.63	22.37	22.22	
3	64QAM	1	0	22.66	22.24	22.43	
3	64QAM	1	8	22.61	22.37	22.46	23.7
3	64QAM	1	14	22.69	22.40	22.31	
3	64QAM	8	0	21.50	21.32	21.34	
3	64QAM	8	4	21.63	21.44	21.33	22.7
3	64QAM	8	7	21.54	21.34	21.32	
3	64QAM	15	0	21.53	21.42	21.24	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.62	23.59	23.46	24.9
1.4	QPSK	1	3	23.69	23.51	23.53	
1.4	QPSK	1	5	23.61	23.49	23.46	
1.4	QPSK	3	0	23.71	23.52	23.49	24.7
1.4	QPSK	3	1	23.71	23.57	23.52	
1.4	QPSK	3	3	23.66	23.49	23.46	
1.4	QPSK	6	0	23.58	23.35	23.34	24.7
1.4	16QAM	1	0	23.82	23.65	23.60	
1.4	16QAM	1	3	23.86	23.69	23.65	
1.4	16QAM	1	5	23.79	23.59	23.56	24.7
1.4	16QAM	3	0	23.59	23.41	23.38	
1.4	16QAM	3	1	23.66	23.47	23.44	
1.4	16QAM	3	3	23.58	23.40	23.38	23.7
1.4	16QAM	6	0	22.64	22.45	22.40	
1.4	64QAM	1	0	22.75	22.57	22.55	
1.4	64QAM	1	3	22.82	22.62	22.58	23.7
1.4	64QAM	1	5	22.72	22.55	22.51	
1.4	64QAM	3	0	22.70	22.52	22.48	
1.4	64QAM	3	1	22.74	22.59	22.52	23.7
1.4	64QAM	3	3	22.72	22.49	22.46	
1.4	64QAM	6	0	21.57	21.36	21.35	



Band 71						
Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	24.77	24.67	24.68
20	QPSK	1	49	24.65	24.65	24.65
20	QPSK	1	99	24.68	24.66	24.61
20	QPSK	50	0	23.76	23.76	23.72
20	QPSK	50	24	23.80	23.74	23.75
20	QPSK	50	50	23.84	23.78	23.75
20	QPSK	100	0	23.79	23.71	23.77
20	16QAM	1	0	24.06	23.96	24.00
20	16QAM	1	49	24.01	24.03	24.04
20	16QAM	1	99	24.03	24.01	23.95
20	16QAM	50	0	22.77	22.75	22.75
20	16QAM	50	24	22.82	22.77	22.73
20	16QAM	50	50	22.82	22.77	22.78
20	16QAM	100	0	22.79	22.73	22.78
20	64QAM	1	0	22.04	22.83	22.82
20	64QAM	1	49	22.63	22.90	22.29
20	64QAM	1	99	22.94	22.89	22.87
20	64QAM	50	0	21.00	21.79	21.49
20	64QAM	50	24	21.30	21.64	21.57
20	64QAM	50	50	21.84	21.60	21.74
20	64QAM	100	0	21.53	21.76	21.80
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	24.74	24.65	24.63
15	QPSK	1	37	24.62	24.66	24.61
15	QPSK	1	74	24.65	24.68	24.64
15	QPSK	36	0	23.73	23.71	23.69
15	QPSK	36	20	23.80	23.73	23.78
15	QPSK	36	39	23.73	23.76	23.74
15	QPSK	75	0	23.81	23.74	23.68
15	16QAM	1	0	24.05	24.01	23.98
15	16QAM	1	37	23.95	24.02	24.00
15	16QAM	1	74	23.97	24.00	23.98
15	16QAM	36	0	22.76	22.75	22.71
15	16QAM	36	20	22.79	22.74	22.79
15	16QAM	36	39	22.77	22.79	22.75
15	16QAM	75	0	22.63	22.73	22.70
15	64QAM	1	0	22.02	22.43	22.76
15	64QAM	1	37	21.86	22.94	22.88
15	64QAM	1	74	22.88	22.60	22.84
15	64QAM	36	0	20.97	21.77	21.44
15	64QAM	36	20	20.94	21.78	21.81
15	64QAM	36	39	21.48	21.56	21.78
15	64QAM	75	0	21.29	21.75	21.67
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	24.76	24.64	24.66
10	QPSK	1	25	24.61	24.62	24.63
10	QPSK	1	49	24.66	24.71	24.62
10	QPSK	25	0	23.78	23.71	23.69
10	QPSK	25	12	23.79	23.82	23.70
10	QPSK	25	25	23.72	23.78	23.74
10	QPSK	50	0	23.80	23.81	23.71
10	16QAM	1	0	24.10	24.02	24.04
10	16QAM	1	25	23.98	24.06	24.00
10	16QAM	1	49	23.98	24.07	23.96
10	16QAM	25	0	22.76	22.70	22.68
10	16QAM	25	12	22.78	22.81	22.68
10	16QAM	25	25	22.65	22.77	22.73
10	16QAM	50	0	22.79	22.80	22.69
10	64QAM	1	0	21.80	22.30	22.77
10	64QAM	1	25	22.01	22.95	22.95
10	64QAM	1	49	22.14	22.96	22.45
10	64QAM	25	0	20.82	21.71	21.71
10	64QAM	25	12	20.84	21.84	21.76
10	64QAM	25	25	20.71	21.81	21.64
10	64QAM	50	0	20.83	21.77	21.69
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	24.57	24.69	24.72
5	QPSK	1	12	24.71	24.66	24.70
5	QPSK	1	24	24.70	24.68	24.63
5	QPSK	12	0	23.73	23.76	23.74
5	QPSK	12	7	23.84	23.79	23.76
5	QPSK	12	13	23.76	23.76	23.70
5	QPSK	25	0	23.76	23.76	23.68
5	16QAM	1	0	23.75	24.01	24.02
5	16QAM	1	12	23.97	24.03	23.97
5	16QAM	1	24	23.95	24.02	23.93
5	16QAM	12	0	22.64	22.80	22.78
5	16QAM	12	7	22.86	22.80	22.78
5	16QAM	12	13	22.77	22.77	22.70
5	16QAM	25	0	22.69	22.81	22.70
5	64QAM	1	0	21.74	22.06	22.91
5	64QAM	1	12	21.79	22.94	22.70
5	64QAM	1	24	21.96	22.96	22.25
5	64QAM	12	0	20.82	21.49	21.68
5	64QAM	12	7	21.00	21.86	21.73
5	64QAM	12	13	20.99	21.81	21.61
5	64QAM	25	0	20.76	21.69	21.48



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./18700	Power Middle Ch./18900	Power High Ch./19100	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				18700	18900	19100	
20	QPSK	1	0	18.28	18.29	18.28	
20	QPSK	1	49	18.22	18.24	18.20	20.2
20	QPSK	1	99	18.20	18.23	18.22	
20	QPSK	50	0	18.33	18.31	18.26	
20	QPSK	50	24	18.40	18.33	18.34	20.2
20	QPSK	50	50	18.35	18.40	18.35	
20	QPSK	100	0	18.41	18.32	18.37	
20	16QAM	1	0	18.58	18.62	18.55	
20	16QAM	1	49	18.55	18.53	18.47	20.2
20	16QAM	1	99	18.45	18.50	18.46	
20	16QAM	50	0	18.32	18.30	18.28	
20	16QAM	50	24	18.39	18.33	18.38	20.2
20	16QAM	50	50	18.38	18.37	18.35	
20	16QAM	100	0	18.38	18.29	18.35	
20	64QAM	1	0	18.51	18.48	18.46	
20	64QAM	1	49	18.46	18.45	18.44	20.2
20	64QAM	1	99	18.39	18.46	18.42	
20	64QAM	50	0	18.35	18.35	18.30	
20	64QAM	50	24	18.43	18.37	18.40	20.2
20	64QAM	50	50	18.39	18.41	18.38	
20	64QAM	100	0	18.40	18.32	18.38	
Channel				18675	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				18675	18800	1902.5	
15	QPSK	1	0	18.21	18.22	18.21	
15	QPSK	1	37	18.20	18.24	18.24	20.2
15	QPSK	1	74	18.23	18.22	18.22	
15	QPSK	36	0	18.28	18.25	18.20	
15	QPSK	36	20	18.36	18.24	18.30	20.2
15	QPSK	36	39	18.33	18.40	18.34	
15	QPSK	75	0	18.36	18.28	18.37	
15	16QAM	1	0	18.50	18.60	18.49	
15	16QAM	1	37	18.52	18.49	18.43	20.2
15	16QAM	1	74	18.38	18.40	18.42	
15	16QAM	36	0	18.28	18.29	18.22	
15	16QAM	36	20	18.29	18.24	18.27	20.2
15	16QAM	36	39	18.35	18.34	18.28	
15	16QAM	75	0	18.31	18.32	18.34	
15	64QAM	1	0	18.43	18.38	18.41	
15	64QAM	1	37	18.44	18.38	18.36	20.2
15	64QAM	1	74	18.30	18.42	18.38	
15	64QAM	36	0	18.31	18.32	18.25	
15	64QAM	36	20	18.33	18.29	18.39	20.2
15	64QAM	36	39	18.31	18.36	18.32	
15	64QAM	75	0	18.39	18.28	18.34	
Channel				18950	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				18950	18800	19005	
10	QPSK	1	0	18.20	18.20	18.24	
10	QPSK	1	25	18.20	18.22	18.22	20.2
10	QPSK	1	49	18.21	18.22	18.24	
10	QPSK	25	0	18.31	18.24	18.20	
10	QPSK	25	12	18.33	18.32	18.34	20.2
10	QPSK	25	25	18.29	18.36	18.34	
10	QPSK	50	0	18.38	18.31	18.33	
10	16QAM	1	0	18.55	18.56	18.49	
10	16QAM	1	25	18.48	18.43	18.45	20.2
10	16QAM	1	49	18.42	18.47	18.43	
10	16QAM	25	0	18.32	18.25	18.20	
10	16QAM	25	12	18.38	18.23	18.32	20.2
10	16QAM	25	25	18.38	18.30	18.28	
10	16QAM	50	0	18.33	18.25	18.25	
10	64QAM	1	0	18.42	18.43	18.43	
10	64QAM	1	25	18.40	18.43	18.38	20.2
10	64QAM	1	49	18.30	18.40	18.36	
10	64QAM	25	0	18.32	18.28	18.21	
10	64QAM	25	12	18.43	18.37	18.34	20.2
10	64QAM	25	25	18.38	18.38	18.36	
10	64QAM	50	0	18.39	18.23	18.34	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				18625	18800	1907.5	
5	QPSK	1	0	18.27	18.22	18.23	
5	QPSK	1	12	18.21	18.22	18.22	20.2
5	QPSK	1	24	18.21	18.23	18.21	
5	QPSK	12	0	18.28	18.22	18.20	
5	QPSK	12	7	18.32	18.26	18.25	20.2
5	QPSK	12	13	18.28	18.37	18.30	
5	QPSK	25	0	18.40	18.28	18.29	
5	16QAM	1	0	18.48	18.51	18.53	
5	16QAM	1	12	18.55	18.52	18.37	20.2
5	16QAM	1	24	18.44	18.48	18.46	
5	16QAM	12	0	18.25	18.21	18.24	
5	16QAM	12	7	18.33	18.31	18.32	20.2
5	16QAM	12	13	18.33	18.32	18.28	
5	16QAM	25	0	18.30	18.27	18.33	
5	64QAM	1	0	18.43	18.45	18.40	
5	64QAM	1	12	18.41	18.45	18.40	20.2
5	64QAM	1	24	18.29	18.44	18.32	
5	64QAM	12	0	18.34	18.27	18.28	
5	64QAM	12	7	18.40	18.36	18.33	20.2
5	64QAM	12	13	18.35	18.34	18.34	
5	64QAM	25	0	18.35	18.28	18.37	
Channel				18915	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				18915	18800	1908.5	
3	QPSK	1	0	18.23	18.23	18.22	
3	QPSK	1	8	18.20	18.21	18.23	20.2
3	QPSK	1	14	18.21	18.22	18.22	
3	QPSK	8	0	18.31	18.28	18.24	
3	QPSK	8	4	18.39	18.32	18.27	20.2
3	QPSK	8	7	18.30	18.37	18.28	
3	QPSK	15	0	18.39	18.28	18.27	
3	16QAM	1	0	18.55	18.53	18.50	
3	16QAM	1	8	18.50	18.48	18.41	20.2
3	16QAM	1	14	18.40	18.46	18.38	
3	16QAM	8	0	18.28	18.21	18.22	
3	16QAM	8	4	18.39	18.25	18.28	20.2
3	16QAM	8	7	18.28	18.37	18.34	
3	16QAM	15	0	18.35	18.20	18.32	
3	64QAM	1	0	18.50	18.42	18.44	
3	64QAM	1	8	18.44	18.38	18.38	20.2
3	64QAM	1	14	18.39	18.45	18.33	
3	64QAM	8	0	18.31	18.35	18.23	
3	64QAM	8	4	18.38	18.33	18.32	20.2
3	64QAM	8	7	18.35	18.31	18.31	
3	64QAM	15	0	18.33	18.26	18.32	
Channel				18507	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				18507	18900	19193	
1.4	QPSK	1	0	18.21	18.20	18.21	
1.4	QPSK	1	3	18.21	18.22	18.21	20.2
1.4	QPSK	1	5	18.23	18.20	18.22	
1.4	QPSK	3	0	18.24	18.25	18.24	
1.4	QPSK	3	1	18.33	18.29	18.31	
1.4	QPSK	3	3	18.31	18.35	18.30	20.2
1.4	QPSK	6	0	18.35	18.30	18.37	
1.4	16QAM	1	0	18.48	18.44	18.45	
1.4	16QAM	1	3	18.54	18.46	18.44	20.2
1.4	16QAM	1	5	18.42	18.49	18.45	
1.4	16QAM	3	0	18.31	18.23	18.23	
1.4	16QAM	3	1	18.34	18.26	18.26	
1.4	16QAM	3	3	18.31	18.34	18.26	20.2
1.4	16QAM	6	0	18.31	18.30	18.31	
1.4	64QAM	1	0	18.51	18.42	18.45	
1.4	64QAM	1	3	18.40	18.44	18.40	20.2
1.4	64QAM	1	5	18.39	18.40	18.32	
1.4	64QAM	3	0	18.29	18.27	18.23	
1.4	64QAM	3	1	18.33	18.36	18.38	
1.4	64QAM	3	3	18.37	18.40	18.36	20.2
1.4	64QAM	6	0	18.30	18.27	18.29	



Band 4							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	18.94	18.90	18.88	20.8
20	QPSK	1	49	18.88	18.84	18.86	
20	QPSK	1	99	18.89	18.89	18.90	
20	QPSK	50	0	19.01	18.96	18.88	20.8
20	QPSK	50	24	19.02	18.93	19.02	
20	QPSK	50	50	18.95	18.89	18.92	
20	QPSK	100	0	18.99	18.99	18.88	20.8
20	16QAM	1	0	19.31	19.23	19.21	
20	16QAM	1	49	19.13	19.10	19.13	
20	16QAM	1	99	19.19	19.12	19.07	20.8
20	16QAM	50	0	18.99	18.97	19.00	
20	16QAM	50	24	19.02	19.00	19.02	
20	16QAM	50	50	18.95	18.91	18.95	20.8
20	16QAM	100	0	18.97	18.99	18.90	
20	64QAM	1	0	19.11	19.09	19.10	
20	64QAM	1	49	19.00	18.93	18.95	20.8
20	64QAM	1	99	19.02	19.04	19.03	
20	64QAM	50	0	19.00	18.96	18.97	
20	64QAM	50	24	19.02	18.99	19.00	20.8
20	64QAM	50	50	18.96	18.92	18.93	
20	64QAM	100	0	19.01	18.96	18.93	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	18.94	18.92	18.94	20.8
15	QPSK	1	37	18.80	18.80	18.80	
15	QPSK	1	74	18.81	18.80	18.80	
15	QPSK	36	0	19.01	18.96	18.97	20.8
15	QPSK	36	20	18.93	18.93	18.95	
15	QPSK	36	39	18.91	18.90	18.93	
15	QPSK	75	0	18.97	18.97	18.88	20.8
15	16QAM	1	0	19.26	19.24	19.27	
15	16QAM	1	37	19.10	19.07	19.12	
15	16QAM	1	74	19.13	19.06	19.10	20.8
15	16QAM	36	0	19.05	18.94	18.97	
15	16QAM	36	20	18.98	18.93	18.99	
15	16QAM	36	39	18.96	18.88	18.96	20.8
15	16QAM	75	0	18.99	18.96	18.91	
15	64QAM	1	0	19.08	19.07	19.06	
15	64QAM	1	37	19.04	19.00	19.06	20.8
15	64QAM	1	74	19.00	18.97	19.00	
15	64QAM	36	0	19.06	18.99	18.97	
15	64QAM	36	20	18.99	18.96	18.97	20.8
15	64QAM	36	39	18.96	18.92	18.97	
15	64QAM	75	0	18.99	18.97	18.91	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	18.85	18.82	18.85	20.8
10	QPSK	1	25	18.80	18.80	18.85	
10	QPSK	1	49	18.80	18.81	18.86	
10	QPSK	25	0	18.95	18.88	18.88	20.8
10	QPSK	25	12	18.99	18.96	18.92	
10	QPSK	25	25	18.98	18.97	19.00	
10	QPSK	50	0	18.99	18.97	18.95	20.8
10	16QAM	1	0	19.24	19.20	19.23	
10	16QAM	1	25	19.19	19.17	19.24	
10	16QAM	1	49	19.20	19.16	19.23	20.8
10	16QAM	25	0	18.96	18.85	18.92	
10	16QAM	25	12	18.99	18.97	18.94	
10	16QAM	25	25	18.98	18.93	18.99	20.8
10	16QAM	50	0	18.99	18.95	18.93	
10	64QAM	1	0	19.17	19.03	19.09	
10	64QAM	1	25	19.15	19.13	19.15	20.8
10	64QAM	1	49	19.12	19.11	19.11	
10	64QAM	25	0	18.99	18.92	18.93	
10	64QAM	25	12	19.03	19.00	18.98	20.8
10	64QAM	25	25	19.02	19.00	19.06	
10	64QAM	50	0	19.02	18.99	18.97	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	18.88	18.80	18.89	20.8
5	QPSK	1	12	18.91	18.84	18.92	
5	QPSK	1	24	18.90	18.85	18.91	
5	QPSK	12	0	18.99	18.88	18.94	20.8
5	QPSK	12	7	19.02	18.96	19.02	
5	QPSK	12	13	19.01	18.95	18.99	
5	QPSK	25	0	18.98	18.94	18.94	20.8
5	16QAM	1	0	19.22	19.10	19.18	
5	16QAM	1	12	19.26	19.16	19.08	
5	16QAM	1	24	19.26	19.21	19.20	20.8
5	16QAM	12	0	19.00	18.87	18.98	
5	16QAM	12	7	19.02	18.97	19.02	
5	16QAM	12	13	19.02	18.93	18.99	20.8
5	16QAM	25	0	18.98	18.97	18.96	
5	64QAM	1	0	19.19	19.06	19.14	
5	64QAM	1	12	19.18	19.10	19.04	20.8
5	64QAM	1	24	19.22	19.14	19.07	
5	64QAM	12	0	19.06	18.91	19.06	
5	64QAM	12	7	19.09	19.00	19.09	20.8
5	64QAM	12	13	19.07	19.01	19.05	
5	64QAM	25	0	19.06	18.96	18.99	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	18.92	18.80	18.92	20.8
3	QPSK	1	8	18.95	18.91	18.94	
3	QPSK	1	14	18.90	18.87	18.93	
3	QPSK	8	0	19.06	18.99	18.96	20.8
3	QPSK	8	4	19.03	18.96	19.03	
3	QPSK	8	7	19.01	18.93	18.99	
3	QPSK	15	0	18.98	18.95	19.00	20.8
3	16QAM	1	0	19.19	19.09	19.20	
3	16QAM	1	8	19.30	19.23	19.22	
3	16QAM	1	14	19.24	19.17	19.23	20.8
3	16QAM	8	0	19.03	18.94	18.99	
3	16QAM	8	4	19.08	19.02	19.04	
3	16QAM	8	7	19.05	19.01	18.99	20.8
3	16QAM	15	0	18.99	18.96	19.00	
3	64QAM	1	0	19.18	19.07	19.10	
3	64QAM	1	8	19.26	19.19	19.15	20.8
3	64QAM	1	14	19.21	19.13	19.08	
3	64QAM	8	0	19.05	18.91	19.05	
3	64QAM	8	4	19.12	19.01	19.08	20.8
3	64QAM	8	7	19.07	18.99	19.07	
3	64QAM	15	0	19.03	19.00	19.03	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	18.80	18.80	18.80	20.8
1.4	QPSK	1	3	18.87	18.84	18.87	
1.4	QPSK	1	5	18.82	18.80	18.80	
1.4	QPSK	3	0	18.86	18.80	18.81	20.8
1.4	QPSK	3	1	18.89	18.83	18.85	
1.4	QPSK	3	3	18.82	18.80	18.84	
1.4	QPSK	6	0	19.31	18.86	18.86	20.8
1.4	16QAM	1	0	19.15	19.10	19.13	
1.4	16QAM	1	3	19.22	19.15	19.18	
1.4	16QAM	1	5	19.15	19.11	19.12	20.8
1.4	16QAM	3	0	18.94	18.88	18.88	
1.4	16QAM	3	1	19.00	18.91	18.90	
1.4	16QAM	3	3	18.93	18.87	18.85	20.8
1.4	16QAM	6	0	19.07	18.91	18.99	
1.4	64QAM	1	0	19.13	19.07	18.98	
1.4	64QAM	1	3	19.16	19.07	19.07	20.8
1.4	64QAM	1	5	19.11	19.04	19.04	
1.4	64QAM	3	0	19.05	19.01	19.02	
1.4	64QAM	3	1	19.13	19.03	19.07	20.8
1.4	64QAM	3	3	19.07	19.00	19.03	
1.4	64QAM	6	0	18.98	18.90	18.93	



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.43	24.46	24.43	25.7
10	QPSK	1	25	24.39	24.46	24.45	
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	24.7
10	QPSK	25	12	23.56	23.57	23.57	
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.56	24.7
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	
10	16QAM	1	49	23.83	23.86	23.78	23.7
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.65	
10	16QAM	25	25	22.54	22.60	22.57	23.7
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	
10	64QAM	1	25	22.73	22.49	22.51	23.7
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.64	21.60	21.58	
10	64QAM	25	12	21.63	21.53	21.47	22.7
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.46	24.46	24.45	25.7
5	QPSK	1	12	24.44	24.46	24.19	
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	24.7
5	QPSK	12	7	23.54	23.61	23.25	
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.54	23.52	23.37	24.7
5	16QAM	1	0	23.81	23.80	23.87	
5	16QAM	1	12	23.78	23.86	23.43	
5	16QAM	1	24	23.79	23.83	23.43	23.7
5	16QAM	12	0	22.65	22.62	22.60	
5	16QAM	12	7	22.57	22.64	22.38	
5	16QAM	12	13	22.52	22.59	22.35	23.7
5	16QAM	25	0	22.57	22.59	22.51	
5	64QAM	1	0	22.87	22.79	22.18	
5	64QAM	1	12	22.72	22.71	21.72	23.7
5	64QAM	1	24	22.72	22.73	21.73	
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.56	21.85	22.7
5	64QAM	12	13	21.60	21.61	20.71	
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	25.7
3	QPSK	1	8	24.43	24.45	24.13	
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	24.7
3	QPSK	8	4	23.55	23.62	23.16	
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.56	23.17	24.7
3	16QAM	1	0	23.87	23.84	23.44	
3	16QAM	1	8	23.89	23.89	23.38	
3	16QAM	1	14	23.74	23.82	23.44	23.7
3	16QAM	8	0	22.66	22.61	22.26	
3	16QAM	8	4	22.66	22.71	22.30	
3	16QAM	8	7	22.60	22.65	22.40	23.7
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	
3	64QAM	1	8	22.83	22.74	21.72	23.7
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	
3	64QAM	8	4	21.66	21.56	20.73	22.7
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.42	24.41	24.09	25.7
1.4	QPSK	1	3	24.45	24.45	24.26	
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	24.7
1.4	QPSK	3	1	24.46	24.46	24.30	
1.4	QPSK	3	3	24.41	24.45	24.42	
1.4	QPSK	6	0	23.50	23.51	23.36	24.7
1.4	16QAM	1	0	23.75	23.73	23.46	
1.4	16QAM	1	3	23.79	23.84	23.67	
1.4	16QAM	1	5	23.68	23.74	23.60	24.7
1.4	16QAM	3	0	23.56	23.51	23.29	
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	23.7
1.4	16QAM	6	0	22.58	22.61	22.49	
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	23.7
1.4	64QAM	1	5	22.64	22.61	21.72	
1.4	64QAM	3	0	22.66	22.80	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	22.7
1.4	64QAM	3	3	22.63	22.60	21.75	
1.4	64QAM	6	0	21.64	21.47	20.72	





Band 7							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.81	20.82	20.83	22.8
20	QPSK	1	49	20.80	20.86	20.81	
20	QPSK	1	99	20.83	20.92	20.89	
20	QPSK	50	0	20.82	20.91	20.93	22.8
20	QPSK	50	24	20.84	20.82	20.95	
20	QPSK	50	50	20.95	21.03	21.02	
20	QPSK	100	0	20.92	20.94	20.93	22.8
20	16QAM	1	0	21.06	21.11	21.16	
20	16QAM	1	49	21.13	21.18	21.17	
20	16QAM	1	99	21.14	21.27	21.23	22.8
20	16QAM	50	0	20.81	20.90	20.94	
20	16QAM	50	24	20.83	20.87	20.96	
20	16QAM	50	50	20.95	21.05	21.03	22.8
20	16QAM	100	0	20.92	20.90	20.93	
20	64QAM	1	0	20.87	20.98	20.99	
20	64QAM	1	49	20.96	21.06	20.98	22.8
20	64QAM	1	99	21.02	21.14	21.12	
20	64QAM	50	0	20.83	20.91	20.93	
20	64QAM	50	24	20.94	20.96	20.96	22.8
20	64QAM	50	50	20.95	21.03	21.05	
20	64QAM	100	0	20.92	20.94	20.94	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.81	20.82	20.81	22.8
15	QPSK	1	37	20.81	20.83	20.81	
15	QPSK	1	74	20.80	20.83	20.85	
15	QPSK	36	0	20.82	20.86	20.91	22.8
15	QPSK	36	20	20.92	20.82	20.89	
15	QPSK	36	39	20.95	20.95	21.00	
15	QPSK	75	0	20.85	20.90	20.91	22.8
15	16QAM	1	0	20.89	21.11	21.14	
15	16QAM	1	37	21.07	21.14	21.11	
15	16QAM	1	74	21.05	21.21	21.18	22.8
15	16QAM	36	0	20.81	20.86	20.92	
15	16QAM	36	20	20.86	20.91	20.94	
15	16QAM	36	39	20.95	21.04	20.93	22.8
15	16QAM	75	0	20.83	20.87	20.93	
15	64QAM	1	0	20.80	20.95	20.89	
15	64QAM	1	37	20.91	20.98	20.95	22.8
15	64QAM	1	74	21.00	21.07	21.12	
15	64QAM	36	0	20.80	20.89	20.85	
15	64QAM	36	20	20.93	20.96	20.95	22.8
15	64QAM	36	39	20.88	21.02	20.96	
15	64QAM	75	0	20.85	20.94	20.86	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.80	20.82	20.80	22.8
10	QPSK	1	25	20.83	20.83	20.81	
10	QPSK	1	49	20.81	20.83	20.84	
10	QPSK	25	0	20.82	20.85	20.93	22.8
10	QPSK	25	12	20.84	20.83	20.85	
10	QPSK	25	25	20.85	21.00	20.98	
10	QPSK	50	0	20.83	20.94	20.87	22.8
10	16QAM	1	0	21.04	21.10	21.13	
10	16QAM	1	25	21.13	21.11	21.12	
10	16QAM	1	49	21.06	21.26	21.16	22.8
10	16QAM	25	0	20.81	20.82	20.91	
10	16QAM	25	12	20.93	20.93	20.86	
10	16QAM	25	25	20.95	21.02	20.98	22.8
10	16QAM	50	0	20.90	20.85	20.91	
10	64QAM	1	0	20.83	20.92	20.98	
10	64QAM	1	25	20.96	20.96	20.88	22.8
10	64QAM	1	49	20.95	21.06	21.03	
10	64QAM	25	0	20.88	20.89	20.93	
10	64QAM	25	12	20.87	20.95	20.96	22.8
10	64QAM	25	25	20.95	20.94	20.99	
10	64QAM	50	0	20.87	20.89	20.92	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.83	20.80	20.82	22.8
5	QPSK	1	12	20.82	20.84	20.85	
5	QPSK	1	24	20.83	20.83	20.86	
5	QPSK	12	0	20.85	20.86	20.91	22.8
5	QPSK	12	7	20.88	20.87	20.89	
5	QPSK	12	13	20.88	20.94	20.95	
5	QPSK	25	0	20.87	20.87	20.93	22.8
5	16QAM	1	0	20.96	21.06	21.12	
5	16QAM	1	12	21.07	21.18	21.14	
5	16QAM	1	24	21.14	21.25	21.23	22.8
5	16QAM	12	0	20.83	20.87	20.92	
5	16QAM	12	7	20.93	20.88	20.91	
5	16QAM	12	13	20.90	20.96	20.95	22.8
5	16QAM	25	0	20.82	20.82	20.89	
5	64QAM	1	0	20.81	20.96	20.93	
5	64QAM	1	12	20.90	20.98	20.97	22.8
5	64QAM	1	24	20.97	21.08	21.10	
5	64QAM	12	0	20.87	20.89	20.90	
5	64QAM	12	7	20.93	20.89	20.87	22.8
5	64QAM	12	13	20.91	20.96	21.05	
5	64QAM	25	0	20.86	20.87	20.90	



Band 12							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	
10	QPSK	1	25	24.58	24.57	24.54	25.7
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.64	23.68	23.68	
10	QPSK	25	12	23.74	23.70	23.69	24.7
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	24.7
10	16QAM	1	49	24.00	24.00	23.96	
10	16QAM	25	0	22.96	22.71	22.88	
10	16QAM	25	12	22.75	22.69	22.68	23.7
10	16QAM	25	25	22.70	22.75	22.71	
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	23.7
10	64QAM	1	49	22.88	22.88	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.59	24.56	
5	QPSK	1	12	24.60	24.62	24.60	25.7
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	
5	QPSK	12	7	23.69	23.69	23.74	24.7
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	
5	16QAM	1	0	23.98	23.92	23.87	24.7
5	16QAM	1	12	23.98	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	23.7
5	16QAM	12	13	22.69	22.76	22.68	
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.49	22.84	23.7
5	64QAM	1	12	22.63	22.87	22.86	
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	22.7
5	64QAM	12	7	21.65	21.76	21.81	
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	
3	QPSK	1	8	24.62	24.62	24.60	25.7
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	
3	QPSK	8	4	23.69	23.64	22.71	24.7
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	
3	16QAM	1	0	24.00	24.02	23.95	24.7
3	16QAM	1	8	23.96	23.98	23.98	
3	16QAM	1	14	23.91	23.96	23.91	
3	16QAM	8	0	22.75	22.71	22.71	23.7
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	
3	16QAM	15	0	22.73	22.69	22.68	
3	64QAM	1	0	22.46	22.70	22.87	23.7
3	64QAM	1	8	22.67	22.88	22.90	
3	64QAM	1	14	22.66	22.84	22.81	
3	64QAM	8	0	21.50	21.75	21.71	22.7
3	64QAM	8	4	21.58	21.74	21.78	
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	
1.4	QPSK	1	3	24.60	24.61	24.57	25.7
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	24.7
1.4	QPSK	6	0	23.62	23.64	23.59	
1.4	16QAM	1	0	23.87	23.83	23.87	24.7
1.4	16QAM	1	3	23.89	23.98	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	
1.4	16QAM	3	0	23.64	23.58	23.62	24.7
1.4	16QAM	3	1	23.73	23.86	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	
1.4	16QAM	6	0	22.71	22.71	22.67	23.7
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	
1.4	64QAM	1	5	22.74	22.78	22.68	23.7
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	
1.4	64QAM	3	3	22.60	22.77	22.71	
1.4	64QAM	6	0	21.44	21.65	21.61	22.7



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.17		25.2
10	QPSK	1	25		24.10		
10	QPSK	1	49		24.14		
10	QPSK	25	0		23.17		24.2
10	QPSK	25	12		23.21		
10	QPSK	25	25		23.21		
10	QPSK	50	0		23.20		24.2
10	16QAM	1	0		23.42		
10	16QAM	1	25		23.45		
10	16QAM	1	49		23.42		23.2
10	16QAM	25	0		22.20		
10	16QAM	25	12		22.23		
10	16QAM	25	25		22.20		23.2
10	16QAM	50	0		22.23		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.40		23.2
10	64QAM	1	49		22.34		
10	64QAM	25	0		21.24		
10	64QAM	25	12		21.23		22.2
10	64QAM	25	25		21.25		
10	64QAM	50	0		21.26		
Channel				23205 23230 23255			Tune-up limit (dBm)
Frequency (MHz)				779.5 782 784.5			
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.18	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.23	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.28	21.25	
5	64QAM	25	0	20.98	21.26	21.23	



Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.59		25.7
10	QPSK	1	25		24.53		
10	QPSK	1	49		24.43		
10	QPSK	25	0		23.56		24.7
10	QPSK	25	12		23.56		
10	QPSK	25	25		23.59		
10	QPSK	50	0		23.53		24.7
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.92		
10	16QAM	1	49		23.83		23.7
10	16QAM	25	0		22.95		
10	16QAM	25	12		22.53		
10	16QAM	25	25		22.58		23.7
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.64		23.7
10	64QAM	1	49		22.72		
10	64QAM	25	0		21.39		
10	64QAM	25	12		21.38		22.7
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.44		
Channel				23305 23330 23355			Tune-up limit (dBm)
Frequency (MHz)				790.5 793 795.5			
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.56	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	24.7
5	QPSK	12	7	23.66	23.57	23.53	
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.58	23.53	23.50	24.7
5	16QAM	1	0	23.83	23.80	23.82	
5	16QAM	1	12	23.88	23.86	23.87	
5	16QAM	1	24	23.87	23.80	23.78	23.7
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.58	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.46	
5	64QAM	1	12	22.57	22.35	22.58	23.7
5	64QAM	1	24	22.32	22.41	22.77	
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.28	21.63	22.7
5	64QAM	12	13	21.31	21.27	21.61	
5	64QAM	25	0	21.34	21.26	21.51	



Band 17						
Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				23780	23790	23800
Frequency (MHz)				706	710	711
10	QPSK	1	0	24.60	24.56	24.55
10	QPSK	1	25	24.61	24.62	24.59
10	QPSK	1	49	24.64	24.67	24.63
10	QPSK	25	0	23.65	23.68	23.66
10	QPSK	25	12	23.79	23.75	23.70
10	QPSK	25	25	23.81	23.82	23.80
10	QPSK	50	0	23.69	23.72	23.69
10	16QAM	1	0	23.93	23.95	23.94
10	16QAM	1	25	24.03	24.06	24.01
10	16QAM	1	49	24.01	24.02	23.98
10	16QAM	25	0	22.66	22.65	22.65
10	16QAM	25	12	22.79	22.75	22.73
10	16QAM	25	25	22.78	22.77	22.78
10	16QAM	50	0	22.69	22.69	22.67
10	64QAM	1	0	22.64	22.70	22.79
10	64QAM	1	25	22.72	22.67	22.63
10	64QAM	1	49	22.84	22.76	22.59
10	64QAM	25	0	21.42	21.42	21.41
10	64QAM	25	12	21.51	21.48	21.48
10	64QAM	25	25	21.61	21.67	21.66
10	64QAM	50	0	21.53	21.64	21.67
Channel				23765	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	24.57	24.58	24.58
5	QPSK	1	12	24.66	24.65	24.63
5	QPSK	1	24	24.65	24.66	24.64
5	QPSK	12	0	23.66	23.69	23.67
5	QPSK	12	7	23.76	23.76	23.78
5	QPSK	12	13	23.74	23.77	23.73
5	QPSK	25	0	23.74	23.71	23.75
5	16QAM	1	0	23.81	23.83	23.91
5	16QAM	1	12	23.95	23.97	23.96
5	16QAM	1	24	24.00	24.05	23.99
5	16QAM	12	0	22.73	22.71	22.74
5	16QAM	12	7	22.79	22.77	22.79
5	16QAM	12	13	22.77	22.80	22.77
5	16QAM	25	0	22.74	22.75	22.77
5	64QAM	1	0	22.26	22.42	22.71
5	64QAM	1	12	22.62	22.61	22.61
5	64QAM	1	24	22.53	22.52	22.48
5	64QAM	12	0	21.55	21.47	21.65
5	64QAM	12	7	21.69	21.47	21.76
5	64QAM	12	13	21.66	21.50	21.70
5	64QAM	25	0	21.52	21.44	21.69



Band 25							
AR 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1890	1890	1905	
20	QPSK	1	0	18.30	18.31	18.23	20.2
20	QPSK	1	49	18.21	18.26	18.23	
20	QPSK	1	99	18.24	18.20	18.21	
20	QPSK	50	0	18.35	18.32	18.28	20.2
20	QPSK	50	24	18.40	18.43	18.35	
20	QPSK	50	50	18.33	18.37	18.33	
20	QPSK	100	0	18.40	18.42	18.29	20.2
20	16QAM	1	0	18.65	18.63	18.61	
20	16QAM	1	49	18.57	18.61	18.55	
20	16QAM	1	99	18.46	18.55	18.48	20.2
20	16QAM	50	0	18.36	18.39	18.33	
20	16QAM	50	24	18.40	18.45	18.31	
20	16QAM	50	50	18.36	18.41	18.36	20.2
20	16QAM	100	0	18.39	18.40	18.32	
20	64QAM	1	0	18.55	18.49	18.48	
20	64QAM	1	49	18.49	18.51	18.43	20.2
20	64QAM	1	99	18.44	18.43	18.47	
20	64QAM	50	0	18.38	18.39	18.32	
20	64QAM	50	24	18.42	18.46	18.33	20.2
20	64QAM	50	50	18.36	18.39	18.37	
20	64QAM	100	0	18.39	18.44	18.31	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	18.30	18.22	18.20	20.2
15	QPSK	1	37	18.24	18.25	18.21	
15	QPSK	1	74	18.22	18.23	18.21	
15	QPSK	36	0	18.29	18.25	18.25	20.2
15	QPSK	36	20	18.30	18.39	18.28	
15	QPSK	36	39	18.28	18.33	18.28	
15	QPSK	75	0	18.31	18.36	18.28	20.2
15	16QAM	1	0	18.64	18.63	18.55	
15	16QAM	1	37	18.57	18.58	18.52	
15	16QAM	1	74	18.37	18.45	18.43	20.2
15	16QAM	36	0	18.32	18.31	18.27	
15	16QAM	36	20	18.34	18.43	18.31	
15	16QAM	36	39	18.32	18.41	18.29	20.2
15	16QAM	75	0	18.39	18.31	18.32	
15	64QAM	1	0	18.50	18.44	18.46	
15	64QAM	1	37	18.39	18.50	18.34	20.2
15	64QAM	1	74	18.42	18.40	18.44	
15	64QAM	36	0	18.31	18.29	18.22	
15	64QAM	36	20	18.33	18.45	18.24	20.2
15	64QAM	36	39	18.33	18.37	18.37	
15	64QAM	75	0	18.30	18.43	18.25	
Channel				26950	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1895	1880	1910	
10	QPSK	1	0	18.23	18.27	18.22	20.2
10	QPSK	1	25	18.21	18.25	18.21	
10	QPSK	1	49	18.24	18.23	18.23	
10	QPSK	25	0	18.31	18.27	18.24	20.2
10	QPSK	25	12	18.30	18.36	18.28	
10	QPSK	25	25	18.23	18.37	18.27	
10	QPSK	50	0	18.34	18.37	18.26	20.2
10	16QAM	1	0	18.63	18.53	18.52	
10	16QAM	1	25	18.50	18.52	18.52	
10	16QAM	1	49	18.36	18.50	18.43	20.2
10	16QAM	25	0	18.33	18.35	18.27	
10	16QAM	25	12	18.40	18.44	18.21	
10	16QAM	25	25	18.34	18.34	18.34	20.2
10	16QAM	50	0	18.29	18.31	18.26	
10	64QAM	1	0	18.53	18.40	18.45	
10	64QAM	1	25	18.48	18.41	18.41	20.2
10	64QAM	1	49	18.34	18.35	18.38	
10	64QAM	25	0	18.31	18.34	18.24	
10	64QAM	25	12	18.40	18.45	18.32	20.2
10	64QAM	25	25	18.28	18.32	18.28	
10	64QAM	50	0	18.34	18.42	18.27	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.29	18.31	18.22	20.2
5	QPSK	1	12	18.25	18.20	18.23	
5	QPSK	1	24	18.24	18.22	18.24	
5	QPSK	12	0	18.32	18.25	18.23	20.2
5	QPSK	12	7	18.30	18.37	18.25	
5	QPSK	12	13	18.24	18.29	18.23	
5	QPSK	25	0	18.39	18.36	18.21	20.2
5	16QAM	1	0	18.57	18.56	18.51	
5	16QAM	1	12	18.48	18.58	18.45	
5	16QAM	1	24	18.37	18.55	18.44	20.2
5	16QAM	12	0	18.30	18.39	18.26	
5	16QAM	12	7	18.32	18.43	18.24	
5	16QAM	12	13	18.29	18.34	18.28	20.2
5	16QAM	25	0	18.36	18.33	18.24	
5	64QAM	1	0	18.55	18.47	18.46	
5	64QAM	1	12	18.42	18.42	18.38	20.2
5	64QAM	1	24	18.41	18.40	18.43	
5	64QAM	12	0	18.30	18.33	18.28	
5	64QAM	12	7	18.41	18.39	18.26	20.2
5	64QAM	12	13	18.34	18.36	18.31	
5	64QAM	25	0	18.38	18.43	18.25	
Channel				26955	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.22	18.24	18.24	20.2
3	QPSK	1	8	18.23	18.21	18.20	
3	QPSK	1	14	18.21	18.22	18.21	
3	QPSK	8	0	18.35	18.28	18.28	20.2
3	QPSK	8	4	18.30	18.39	18.33	
3	QPSK	8	7	18.29	18.35	18.33	
3	QPSK	15	0	18.35	18.40	18.26	20.2
3	16QAM	1	0	18.59	18.53	18.61	
3	16QAM	1	8	18.52	18.53	18.50	
3	16QAM	1	14	18.36	18.51	18.39	20.2
3	16QAM	8	0	18.32	18.34	18.32	
3	16QAM	8	4	18.31	18.43	18.29	
3	16QAM	8	7	18.31	18.32	18.28	20.2
3	16QAM	15	0	18.34	18.35	18.31	
3	64QAM	1	0	18.52	18.44	18.45	
3	64QAM	1	8	18.45	18.50	18.33	20.2
3	64QAM	1	14	18.41	18.37	18.47	
3	64QAM	8	0	18.36	18.30	18.31	
3	64QAM	8	4	18.34	18.42	18.32	20.2
3	64QAM	8	7	18.32	18.35	18.37	
3	64QAM	15	0	18.33	18.41	18.27	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1890	1914.3	
1.4	QPSK	1	0	18.30	18.26	18.24	20.2
1.4	QPSK	1	3	18.23	18.25	18.21	
1.4	QPSK	1	5	18.24	18.25	18.22	
1.4	QPSK	3	0	18.25	18.32	18.23	20.2
1.4	QPSK	3	1	18.38	18.33	18.35	
1.4	QPSK	3	3	18.32	18.28	18.33	
1.4	QPSK	6	0	18.37	18.42	18.24	20.2
1.4	16QAM	1	0	18.55	18.55	18.55	
1.4	16QAM	1	3	18.49	18.57	18.55	
1.4	16QAM	1	5	18.44	18.48	18.42	20.2
1.4	16QAM	3	0	18.28	18.30	18.28	
1.4	16QAM	3	1	18.35	18.45	18.28	
1.4	16QAM	3	3	18.34	18.36	18.29	20.2
1.4	16QAM	6	0	18.29	18.34	18.22	
1.4	64QAM	1	0	18.54	18.41	18.40	
1.4	64QAM	1	3	18.45	18.46	18.40	20.2
1.4	64QAM	1	5	18.42	18.38	18.45	
1.4	64QAM	3	0	18.37	18.28	18.30	
1.4	64QAM	3	1	18.33	18.36	18.33	20.2
1.4	64QAM	3	3	18.29	18.36	18.34	
1.4	64QAM	6	0	18.30	18.40	18.21	



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.45	24.40	24.62	
15	QPSK	1	37	24.34	24.39	24.41	25.7
15	QPSK	1	74	24.35	24.39	24.31	
15	QPSK	36	0	23.51	23.51	23.54	
15	QPSK	36	20	23.52	23.46	23.50	24.7
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	24.7
15	16QAM	1	74	23.64	23.68	23.59	
15	16QAM	36	0	22.51	22.54	22.56	
15	16QAM	36	20	22.53	22.51	22.50	23.7
15	16QAM	36	39	22.50	22.53	22.54	
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	
15	64QAM	1	37	22.43	22.68	22.68	23.7
15	64QAM	1	74	22.57	22.61	21.80	
15	64QAM	36	0	21.21	21.58	21.60	
15	64QAM	36	20	21.40	21.53	21.54	22.7
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	
10	QPSK	1	25	24.44	24.47	24.45	25.7
10	QPSK	1	49	24.46	24.49	24.37	
10	QPSK	25	0	23.64	23.56	23.57	
10	QPSK	25	12	23.58	23.54	23.57	24.7
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.57	23.53	23.49	
10	16QAM	1	0	23.92	23.87	23.87	24.7
10	16QAM	1	25	23.85	23.87	23.86	
10	16QAM	1	49	23.86	23.90	23.75	
10	16QAM	25	0	22.62	22.57	22.57	
10	16QAM	25	12	22.60	22.55	22.57	23.7
10	16QAM	25	25	22.53	22.58	22.53	
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.76	
10	64QAM	1	25	22.33	22.80	22.64	23.7
10	64QAM	1	49	22.74	22.81	21.99	
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.16	21.61	21.57	22.7
10	64QAM	25	25	21.31	21.58	20.89	
10	64QAM	50	0	21.25	21.57	21.35	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	
5	QPSK	1	12	24.56	24.55	24.17	25.7
5	QPSK	1	24	24.46	24.53	24.41	
5	QPSK	12	0	23.64	23.59	23.60	
5	QPSK	12	7	23.63	23.63	23.33	24.7
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	
5	16QAM	1	0	23.95	23.85	23.86	24.7
5	16QAM	1	12	23.84	23.87	23.49	
5	16QAM	1	24	23.77	23.88	23.69	
5	16QAM	12	0	22.71	22.65	22.61	
5	16QAM	12	7	22.67	22.64	22.48	23.7
5	16QAM	12	13	22.55	22.59	22.45	
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	
5	64QAM	1	12	22.31	22.76	21.70	23.7
5	64QAM	1	24	22.14	22.76	21.71	
5	64QAM	12	0	21.38	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.58	20.73	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	
3	QPSK	1	8	24.60	24.51	24.26	25.7
3	QPSK	1	14	24.46	24.50	24.37	
3	QPSK	6	0	23.69	23.57	23.20	
3	QPSK	6	4	23.68	23.63	23.32	24.7
3	QPSK	6	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.58	23.29	
3	16QAM	1	0	23.93	23.85	23.53	24.7
3	16QAM	1	8	23.92	23.91	23.53	
3	16QAM	1	14	23.81	23.90	23.67	
3	16QAM	6	0	22.74	22.63	22.36	
3	16QAM	6	4	22.75	22.67	22.45	23.7
3	16QAM	6	7	22.65	22.66	22.54	
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	
3	64QAM	1	8	22.49	22.84	21.84	23.7
3	64QAM	1	14	22.30	22.80	21.76	
3	64QAM	6	0	21.40	21.65	20.75	
3	64QAM	6	4	21.44	21.72	20.79	22.7
3	64QAM	6	7	21.37	21.65	20.72	
3	64QAM	15	0	21.36	21.60	20.62	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	
1.4	QPSK	1	3	24.56	24.54	24.39	25.7
1.4	QPSK	1	5	24.45	24.41	24.28	
1.4	QPSK	3	0	24.56	24.43	24.39	
1.4	QPSK	3	1	24.58	24.46	24.40	
1.4	QPSK	3	3	24.53	24.46	24.36	24.7
1.4	QPSK	6	0	23.60	23.53	23.42	
1.4	16QAM	1	0	23.86	23.73	23.57	
1.4	16QAM	1	3	23.90	23.90	23.76	24.7
1.4	16QAM	1	5	23.79	23.76	23.66	
1.4	16QAM	3	0	23.62	23.52	23.44	
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	
1.4	16QAM	6	0	22.66	22.58	22.52	23.7
1.4	64QAM	1	0	22.39	22.67	21.78	
1.4	64QAM	1	3	22.45	22.75	21.75	
1.4	64QAM	1	5	22.41	22.65	21.74	23.7
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	
1.4	64QAM	3	3	22.43	22.64	21.82	
1.4	64QAM	6	0	21.34	21.56	20.84	22.7



Band 30							
Arif 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2771.0	2771.0		
Frequency (MHz)				2310			
10	QPSK	1	0	20.72			22.3
10	QPSK	1	25	20.49			
10	QPSK	1	49	20.50			
10	QPSK	25	0	20.56			22.3
10	QPSK	25	12	20.61			
10	QPSK	25	25	20.70			
10	QPSK	50	0	20.59			22.3
10	16QAM	1	0	20.87			
10	16QAM	1	25	20.86			
10	16QAM	1	49	20.88			22.3
10	16QAM	25	0	20.53			
10	16QAM	25	12	20.56			
10	16QAM	25	25	20.68			22.3
10	16QAM	50	0	20.56			
10	64QAM	1	0	20.74			
10	64QAM	1	25	20.80			22.3
10	64QAM	1	49	20.77			
10	64QAM	25	0	19.75			
10	64QAM	25	12	19.81			21.3
10	64QAM	25	25	19.89			
10	64QAM	50	0	19.78			
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.44	20.48	20.45	22.3
5	QPSK	1	12	20.53	20.62	20.56	
5	QPSK	1	24	20.60	20.60	20.52	
5	QPSK	12	0	20.63	20.56	20.59	22.3
5	QPSK	12	7	20.66	20.67	20.62	
5	QPSK	12	13	20.65	20.66	20.59	
5	QPSK	25	0	20.66	20.54	20.55	22.3
5	16QAM	1	0	20.77	20.76	20.76	
5	16QAM	1	12	20.67	20.65	20.66	
5	16QAM	1	24	20.81	20.82	20.85	22.3
5	16QAM	12	0	20.60	20.53	20.59	
5	16QAM	12	7	20.64	20.65	20.65	
5	16QAM	12	13	20.65	20.64	20.64	22.3
5	16QAM	25	0	20.64	20.57	20.63	
5	64QAM	1	0	20.70	20.71	20.72	
5	64QAM	1	12	20.73	20.75	20.74	22.3
5	64QAM	1	24	20.82	20.83	20.84	
5	64QAM	12	0	19.84	19.80	19.83	
5	64QAM	12	7	19.89	19.90	19.87	21.3
5	64QAM	12	13	19.90	19.89	19.87	
5	64QAM	25	0	19.84	19.77	19.81	





Band 66							
AR 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132332	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.83	18.90	18.88	20.8
20	QPSK	1	49	18.80	18.82	18.86	
20	QPSK	1	99	18.82	18.88	18.82	
20	QPSK	50	0	18.80	18.81	18.80	20.8
20	QPSK	50	24	18.80	18.82	18.81	
20	QPSK	50	50	18.81	18.83	18.81	
20	QPSK	100	0	18.86	18.84	18.94	20.8
20	16QAM	1	0	19.13	19.15	19.23	
20	16QAM	1	49	19.04	19.08	19.11	
20	16QAM	1	99	19.19	19.09	19.08	20.8
20	16QAM	50	0	18.87	18.91	18.98	
20	16QAM	50	24	18.94	18.90	18.93	
20	16QAM	50	50	18.91	18.94	19.00	20.8
20	16QAM	100	0	18.80	18.88	18.96	
20	64QAM	1	0	19.04	19.05	19.03	
20	64QAM	1	49	18.92	18.91	18.87	20.8
20	64QAM	1	99	19.06	19.05	18.97	
20	64QAM	50	0	18.89	18.90	19.01	
20	64QAM	50	24	18.95	18.90	18.94	20.8
20	64QAM	50	50	18.92	18.95	18.98	
20	64QAM	100	0	18.93	18.88	18.95	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.80	18.83	18.88	20.8
15	QPSK	1	37	18.80	18.80	18.80	
15	QPSK	1	74	18.80	18.82	18.80	
15	QPSK	36	0	18.81	18.90	18.94	20.8
15	QPSK	36	20	18.86	18.83	18.93	
15	QPSK	36	39	18.88	18.91	18.99	
15	QPSK	75	0	18.89	18.86	18.94	20.8
15	16QAM	1	0	19.12	19.15	19.17	
15	16QAM	1	37	19.03	19.06	19.12	
15	16QAM	1	74	19.12	19.13	19.10	20.8
15	16QAM	36	0	18.86	18.90	18.95	
15	16QAM	36	20	18.92	18.86	18.90	
15	16QAM	36	39	18.90	18.95	18.98	20.8
15	16QAM	75	0	18.94	18.87	18.94	
15	64QAM	1	0	19.04	18.96	19.04	
15	64QAM	1	37	18.96	19.00	19.04	20.8
15	64QAM	1	74	19.02	19.04	19.02	
15	64QAM	36	0	18.87	18.94	18.97	
15	64QAM	36	20	18.91	18.89	18.93	20.8
15	64QAM	36	39	18.91	18.97	19.00	
15	64QAM	75	0	18.92	18.89	18.93	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.81	18.83	18.88	20.8
10	QPSK	1	25	18.80	18.83	18.86	
10	QPSK	1	49	18.80	18.82	18.88	
10	QPSK	25	0	18.82	18.86	18.92	20.8
10	QPSK	25	12	18.90	18.89	18.94	
10	QPSK	25	25	18.86	18.95	18.98	
10	QPSK	50	0	18.89	18.90	18.96	20.8
10	16QAM	1	0	19.21	19.22	19.17	
10	16QAM	1	25	19.12	19.20	19.14	
10	16QAM	1	49	19.12	19.17	19.15	20.8
10	16QAM	25	0	18.91	18.89	18.96	
10	16QAM	25	12	18.94	18.91	18.99	
10	16QAM	25	25	18.89	18.96	19.00	20.8
10	16QAM	50	0	18.92	18.89	18.95	
10	64QAM	1	0	19.04	19.07	19.11	
10	64QAM	1	25	19.05	19.11	19.18	20.8
10	64QAM	1	49	18.99	18.99	19.20	
10	64QAM	25	0	18.92	18.92	19.00	
10	64QAM	25	12	18.95	18.93	19.03	20.8
10	64QAM	25	25	18.90	18.96	19.08	
10	64QAM	50	0	18.94	18.92	19.02	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.80	18.80	18.87	20.8
5	QPSK	1	12	18.87	18.80	18.95	
5	QPSK	1	24	18.80	18.84	18.91	
5	QPSK	12	0	18.92	18.88	19.00	20.8
5	QPSK	12	7	18.93	18.96	19.06	
5	QPSK	12	13	18.92	18.95	19.02	
5	QPSK	25	0	18.91	18.87	18.99	20.8
5	16QAM	1	0	19.14	19.11	19.16	
5	16QAM	1	12	19.18	19.14	19.19	
5	16QAM	1	24	19.10	19.19	19.20	20.8
5	16QAM	12	0	18.93	18.93	19.06	
5	16QAM	12	7	18.96	19.02	19.08	
5	16QAM	12	13	18.95	18.99	19.02	20.8
5	16QAM	25	0	18.92	18.92	19.03	
5	64QAM	1	0	19.10	19.04	19.14	
5	64QAM	1	12	19.11	19.11	19.12	20.8
5	64QAM	1	24	19.07	19.09	19.09	
5	64QAM	12	0	18.96	18.97	19.12	
5	64QAM	12	7	18.97	19.02	19.11	20.8
5	64QAM	12	13	18.98	18.96	19.10	
5	64QAM	25	0	18.91	18.80	19.05	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.82	18.80	18.82	20.8
3	QPSK	1	8	18.91	18.86	18.86	
3	QPSK	1	14	18.86	18.80	18.84	
3	QPSK	8	0	18.89	18.83	18.92	20.8
3	QPSK	8	4	18.86	18.90	18.93	
3	QPSK	8	7	18.93	18.89	18.90	
3	QPSK	15	0	18.91	18.81	18.91	20.8
3	16QAM	1	0	19.07	19.06	19.16	
3	16QAM	1	8	19.15	19.11	19.16	
3	16QAM	1	14	19.15	19.09	19.13	20.8
3	16QAM	8	0	18.90	18.85	18.96	
3	16QAM	8	4	18.99	18.94	18.98	
3	16QAM	8	7	18.99	18.92	18.93	20.8
3	16QAM	15	0	18.96	18.83	18.93	
3	64QAM	1	0	19.05	18.97	19.08	
3	64QAM	1	8	19.15	19.13	19.09	20.8
3	64QAM	1	14	19.07	19.06	19.00	
3	64QAM	8	0	18.97	18.89	18.96	
3	64QAM	8	4	19.04	18.99	19.01	20.8
3	64QAM	8	7	19.00	18.95	18.97	
3	64QAM	15	0	18.97	18.86	18.95	
Channel				131979	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1776.3	
1.4	QPSK	1	0	18.81	18.87	18.91	20.8
1.4	QPSK	1	3	18.85	18.91	18.96	
1.4	QPSK	1	5	18.80	18.83	18.89	
1.4	QPSK	3	0	18.84	18.90	18.92	20.8
1.4	QPSK	3	1	18.89	18.94	18.96	
1.4	QPSK	3	3	18.85	18.90	18.93	
1.4	QPSK	6	0	18.91	18.96	19.00	20.8
1.4	16QAM	1	0	19.16	19.20	19.22	
1.4	16QAM	1	3	19.22	19.08	19.11	
1.4	16QAM	1	5	19.15	19.17	19.22	20.8
1.4	16QAM	3	0	18.94	18.97	18.99	
1.4	16QAM	3	1	19.02	19.01	19.06	
1.4	16QAM	3	3	18.92	18.97	19.01	20.8
1.4	16QAM	6	0	18.96	18.94	19.10	
1.4	64QAM	1	0	19.11	19.09	19.17	
1.4	64QAM	1	3	19.14	19.15	19.22	20.8
1.4	64QAM	1	5	19.06	19.10	19.16	
1.4	64QAM	3	0	19.03	19.06	19.15	
1.4	64QAM	3	1	19.06	19.13	19.20	20.8
1.4	64QAM	3	3	19.02	19.07	19.14	
1.4	64QAM	6	0	18.91	18.97	19.06	



Band 71						
Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	693
20	QPSK	1	0	24.67	24.60	24.58
20	QPSK	1	49	24.58	24.59	24.56
20	QPSK	1	99	24.61	24.56	24.53
20	QPSK	50	0	23.69	23.68	23.64
20	QPSK	50	24	23.74	23.67	23.63
20	QPSK	50	50	23.75	23.69	23.68
20	QPSK	100	0	23.72	23.66	23.71
20	16QAM	1	0	23.99	23.90	23.92
20	16QAM	1	49	23.94	23.93	23.91
20	16QAM	1	99	23.97	23.91	23.93
20	16QAM	50	0	22.69	22.68	22.67
20	16QAM	50	24	22.75	22.68	22.66
20	16QAM	50	50	22.75	22.73	22.68
20	16QAM	100	0	22.72	22.65	22.70
20	64QAM	1	0	21.88	22.69	22.77
20	64QAM	1	49	22.51	22.82	22.02
20	64QAM	1	99	22.87	22.68	22.55
20	64QAM	50	0	20.78	21.69	21.35
20	64QAM	50	24	21.19	21.42	21.50
20	64QAM	50	50	21.70	21.49	21.63
20	64QAM	100	0	21.39	21.66	21.66
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	24.65	24.60	24.56
15	QPSK	1	37	24.65	24.58	24.52
15	QPSK	1	74	24.58	24.62	24.55
15	QPSK	36	0	23.67	23.69	23.61
15	QPSK	36	20	23.75	23.67	23.71
15	QPSK	36	39	23.65	23.71	23.65
15	QPSK	75	0	23.73	23.65	23.60
15	16QAM	1	0	24.04	23.93	23.89
15	16QAM	1	37	23.69	23.98	23.91
15	16QAM	1	74	23.91	23.91	23.90
15	16QAM	36	0	22.63	22.67	22.63
15	16QAM	36	20	22.72	22.69	22.71
15	16QAM	36	39	22.69	22.71	22.68
15	16QAM	75	0	22.75	22.67	22.62
15	64QAM	1	0	21.78	22.28	22.61
15	64QAM	1	37	21.70	22.87	22.80
15	64QAM	1	74	22.85	22.43	22.62
15	64QAM	36	0	20.76	21.71	21.42
15	64QAM	36	20	20.88	21.68	21.75
15	64QAM	36	39	21.38	21.40	21.71
15	64QAM	75	0	21.18	21.65	21.52
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	24.57	24.56	24.57
10	QPSK	1	25	24.53	24.56	24.57
10	QPSK	1	49	24.62	24.64	24.53
10	QPSK	25	0	23.73	23.62	23.60
10	QPSK	25	12	23.69	23.75	23.62
10	QPSK	25	25	23.63	23.70	23.65
10	QPSK	50	0	23.73	23.74	23.61
10	16QAM	1	0	24.03	23.97	23.96
10	16QAM	1	25	23.89	23.97	23.94
10	16QAM	1	49	23.96	24.00	23.86
10	16QAM	25	0	22.59	22.65	22.60
10	16QAM	25	12	22.52	22.74	22.63
10	16QAM	25	25	22.54	22.71	22.65
10	16QAM	50	0	22.73	22.73	22.59
10	64QAM	1	0	21.71	22.19	22.73
10	64QAM	1	25	21.81	22.89	22.80
10	64QAM	1	49	22.02	22.82	22.25
10	64QAM	25	0	20.70	21.54	21.63
10	64QAM	25	12	20.65	21.76	21.61
10	64QAM	25	25	20.65	21.66	21.37
10	64QAM	50	0	20.70	21.56	21.58
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	24.33	24.63	24.62
5	QPSK	1	12	24.62	24.59	24.59
5	QPSK	1	24	24.57	24.62	24.51
5	QPSK	12	0	23.49	23.69	23.64
5	QPSK	12	7	23.63	23.70	23.68
5	QPSK	12	13	23.60	23.88	23.61
5	QPSK	25	0	23.60	23.69	23.59
5	16QAM	1	0	23.66	23.99	23.92
5	16QAM	1	12	23.86	23.94	23.87
5	16QAM	1	24	23.80	23.94	23.83
5	16QAM	12	0	22.42	22.74	22.69
5	16QAM	12	7	22.60	22.75	22.70
5	16QAM	12	13	22.61	22.70	22.63
5	16QAM	25	0	22.52	22.72	22.63
5	64QAM	1	0	21.83	21.95	22.65
5	64QAM	1	12	21.71	22.83	22.44
5	64QAM	1	24	21.72	22.88	21.98
5	64QAM	12	0	20.70	21.46	21.42
5	64QAM	12	7	20.79	21.76	21.57
5	64QAM	12	13	20.60	21.72	21.38
5	64QAM	25	0	20.77	21.50	21.21



Band 2							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./18000	Power Middle Ch./18000	Power High Ch./19000	Tune-up limit (dbm)
Channel				18000	18000	19000	
Frequency (MHz)				1800	1800	1900	
20	QPSK	1	0	23.08	23.12	23.11	
20	QPSK	1	49	23.06	23.06	23.06	24.2
20	QPSK	1	99	23.01	23.05	23.07	
20	QPSK	50	0	23.15	23.17	23.09	
20	QPSK	50	24	23.22	23.21	23.20	24
20	QPSK	50	50	23.20	23.25	23.21	
20	QPSK	100	0	23.23	23.15	22.99	
20	16QAM	1	0	23.39	23.46	23.41	
20	16QAM	1	49	23.39	23.45	22.85	24
20	16QAM	1	99	23.31	23.41	23.33	
20	16QAM	50	0	22.83	22.87	22.33	
20	16QAM	50	24	22.74	22.71	22.35	23
20	16QAM	50	50	22.71	22.75	22.69	
20	16QAM	100	0	22.72	22.64	22.52	
20	64QAM	1	0	22.67	22.33	22.32	
20	64QAM	1	49	22.24	22.76	21.22	23
20	64QAM	1	99	21.79	22.77	21.85	
20	64QAM	50	0	20.33	20.32	20.32	
20	64QAM	50	24	20.31	20.30	20.35	22
20	64QAM	50	50	20.79	20.33	20.85	
20	64QAM	100	0	21.17	20.35	20.60	
Channel				18675	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.06	23.07	23.06	
15	QPSK	1	37	23.06	23.03	23.06	24.2
15	QPSK	1	74	23.01	23.03	23.00	
15	QPSK	36	0	23.10	23.11	22.99	
15	QPSK	36	20	23.13	23.14	23.14	24
15	QPSK	36	39	23.13	23.19	23.16	
15	QPSK	75	0	23.20	23.10	22.93	
15	16QAM	1	0	23.33	23.39	23.35	
15	16QAM	1	37	23.30	23.43	22.94	24
15	16QAM	1	74	23.29	23.39	23.25	
15	16QAM	36	0	22.53	22.64	22.33	
15	16QAM	36	20	22.69	22.69	22.27	23
15	16QAM	36	39	22.69	22.67	22.85	
15	16QAM	75	0	22.72	22.54	22.47	
15	64QAM	1	0	22.58	22.25	22.23	
15	64QAM	1	37	22.24	22.73	21.21	23
15	64QAM	1	74	21.73	22.76	21.93	
15	64QAM	36	0	21.61	21.57	20.29	
15	64QAM	36	20	21.23	21.63	20.34	22
15	64QAM	36	39	20.73	21.70	20.85	
15	64QAM	75	0	21.14	21.30	20.51	
Channel				18950	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.08	23.04	23.01	
10	QPSK	1	25	23.06	23.02	23.01	24.2
10	QPSK	1	49	23.00	23.04	23.01	
10	QPSK	25	0	23.08	23.14	23.04	
10	QPSK	25	12	23.19	23.17	23.18	24
10	QPSK	25	25	23.18	23.20	23.14	
10	QPSK	50	0	23.19	23.14	22.92	
10	16QAM	1	0	23.37	23.42	23.33	
10	16QAM	1	25	23.37	23.45	22.80	24
10	16QAM	1	49	23.28	23.41	23.32	
10	16QAM	25	0	22.99	22.83	22.25	
10	16QAM	25	12	22.73	22.68	22.28	23
10	16QAM	25	25	22.62	22.65	22.63	
10	16QAM	50	0	22.62	22.55	22.50	
10	64QAM	1	0	22.60	22.32	22.32	
10	64QAM	1	25	22.18	22.66	21.21	23
10	64QAM	1	49	21.72	22.72	21.80	
10	64QAM	25	0	21.60	21.58	20.23	
10	64QAM	25	12	21.20	21.64	20.27	22
10	64QAM	25	25	20.72	21.68	20.81	
10	64QAM	50	0	21.16	21.36	20.50	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				1822.5	1880	1907.5	
5	QPSK	1	0	23.05	23.07	23.09	
5	QPSK	1	12	23.03	23.00	23.02	24.2
5	QPSK	1	24	23.01	23.00	23.03	
5	QPSK	12	0	23.13	23.07	23.07	
5	QPSK	12	7	23.18	23.12	23.14	24
5	QPSK	12	13	23.14	23.19	23.15	
5	QPSK	25	0	23.17	23.13	22.92	
5	16QAM	1	0	23.29	23.38	23.35	
5	16QAM	1	12	23.33	23.38	22.85	24
5	16QAM	1	24	23.30	23.32	23.26	
5	16QAM	12	0	22.62	22.60	22.32	
5	16QAM	12	7	22.73	22.82	22.25	23
5	16QAM	12	13	22.64	22.73	22.68	
5	16QAM	25	0	22.70	22.59	22.49	
5	64QAM	1	0	22.57	22.24	22.29	
5	64QAM	1	12	22.24	22.68	21.20	23
5	64QAM	1	24	21.72	22.67	21.91	
5	64QAM	12	0	21.53	21.54	20.30	
5	64QAM	12	7	21.16	21.89	20.35	22
5	64QAM	12	13	20.70	21.67	20.76	
5	64QAM	25	0	21.17	21.36	20.55	
Channel				18915	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.07	23.07	23.09	
3	QPSK	1	8	23.05	23.06	23.00	24.2
3	QPSK	1	14	23.02	23.00	23.02	
3	QPSK	8	0	23.09	23.11	22.99	
3	QPSK	8	4	23.16	23.12	23.10	24
3	QPSK	8	7	23.15	23.15	23.12	
3	QPSK	15	0	23.13	23.09	22.98	
3	16QAM	1	0	23.29	23.45	23.33	
3	16QAM	1	8	23.30	23.35	22.76	24
3	16QAM	1	14	23.31	23.34	23.26	
3	16QAM	8	0	22.58	22.67	22.31	
3	16QAM	8	4	22.67	22.69	22.27	23
3	16QAM	8	7	22.70	22.73	22.85	
3	16QAM	15	0	22.62	22.59	22.47	
3	64QAM	1	0	22.66	22.31	22.30	
3	64QAM	1	8	22.22	22.68	21.22	23
3	64QAM	1	14	21.70	22.75	21.89	
3	64QAM	8	0	21.54	21.56	20.25	
3	64QAM	8	4	21.16	21.70	20.30	22
3	64QAM	8	7	20.69	21.67	20.81	
3	64QAM	15	0	21.12	21.37	20.55	
Channel				18507	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				18097	18300	19043	
1.4	QPSK	1	0	23.06	23.09	23.05	
1.4	QPSK	1	3	23.00	23.01	23.05	24.2
1.4	QPSK	1	5	23.00	23.04	23.02	
1.4	QPSK	3	0	23.06	23.10	23.07	
1.4	QPSK	3	1	23.20	23.13	23.17	
1.4	QPSK	3	3	23.12	23.23	23.11	24
1.4	QPSK	6	0	23.17	23.11	22.91	
1.4	16QAM	1	0	23.35	23.44	23.39	
1.4	16QAM	1	3	23.35	23.41	22.82	24
1.4	16QAM	1	5	23.22	23.34	23.24	
1.4	16QAM	3	0	22.63	22.62	22.26	
1.4	16QAM	3	1	22.72	22.67	22.30	
1.4	16QAM	3	3	22.61	22.69	22.62	23
1.4	16QAM	6	0	22.66	22.55	22.51	
1.4	64QAM	1	0	22.67	22.28	22.30	
1.4	64QAM	1	3	22.20	22.72	21.23	23
1.4	64QAM	1	5	21.71	22.67	21.82	
1.4	64QAM	3	0	21.56	21.61	21.62	
1.4	64QAM	3	1	21.62	21.69	21.68	
1.4	64QAM	3	3	21.66	21.68	21.65	22
1.4	64QAM	6	0	21.14	21.32	20.58	



Band 4							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.95	23.01	22.99	24.1
20	QPSK	1	49	22.92	22.95	22.90	
20	QPSK	1	99	22.93	22.96	22.92	
20	QPSK	50	0	23.02	23.03	22.99	24.1
20	QPSK	50	24	23.08	22.94	22.91	
20	QPSK	50	50	22.97	22.95	22.92	
20	QPSK	100	0	23.01	23.01	22.87	24.1
20	16QAM	1	0	23.29	23.36	23.31	
20	16QAM	1	49	23.19	23.16	23.14	
20	16QAM	1	99	23.20	23.08	23.03	24.1
20	16QAM	50	0	22.61	22.67	22.60	
20	16QAM	50	24	22.66	22.58	22.52	
20	16QAM	50	50	22.59	22.58	22.53	23.7
20	16QAM	100	0	22.62	22.63	22.48	
20	64QAM	1	0	22.74	22.83	22.06	
20	64QAM	1	49	22.64	22.14	22.62	23.7
20	64QAM	1	99	22.67	21.78	22.63	
20	64QAM	50	0	21.65	21.69	21.22	
20	64QAM	50	24	21.68	21.24	21.56	22.7
20	64QAM	50	50	21.62	21.03	21.54	
20	64QAM	100	0	21.69	21.60	21.54	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.92	22.99	22.98	24.1
15	QPSK	1	37	22.92	22.96	22.91	
15	QPSK	1	74	22.96	22.92	22.93	
15	QPSK	36	0	23.00	23.03	22.95	24.1
15	QPSK	36	20	23.02	22.93	22.90	
15	QPSK	36	39	22.87	22.87	22.91	
15	QPSK	75	0	22.98	22.99	22.87	24.1
15	16QAM	1	0	23.28	23.34	23.27	
15	16QAM	1	37	23.10	23.09	23.11	
15	16QAM	1	74	23.19	23.02	23.02	23.7
15	16QAM	36	0	22.52	22.58	22.54	
15	16QAM	36	20	22.61	22.53	22.50	
15	16QAM	36	39	22.58	22.58	22.49	23.7
15	16QAM	75	0	22.60	22.60	22.45	
15	64QAM	1	0	22.67	22.81	22.00	
15	64QAM	1	37	22.57	22.05	22.55	23.7
15	64QAM	1	74	22.65	21.73	22.56	
15	64QAM	36	0	21.56	21.63	21.16	
15	64QAM	36	20	21.66	21.21	21.50	22.7
15	64QAM	36	39	21.61	21.02	21.47	
15	64QAM	75	0	21.60	21.55	21.45	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.93	22.91	22.94	24.1
10	QPSK	1	25	22.92	22.90	22.93	
10	QPSK	1	49	22.94	22.92	22.91	
10	QPSK	25	0	22.97	23.03	22.93	24.1
10	QPSK	25	12	23.01	22.94	22.87	
10	QPSK	25	25	22.93	22.88	22.84	
10	QPSK	50	0	22.93	22.93	22.78	24.1
10	16QAM	1	0	23.26	23.34	23.22	
10	16QAM	1	25	23.17	23.07	23.07	
10	16QAM	1	49	23.17	23.01	22.96	23.7
10	16QAM	25	0	22.45	22.62	22.59	
10	16QAM	25	12	22.61	22.49	22.49	
10	16QAM	25	25	22.49	22.56	22.53	23.7
10	16QAM	50	0	22.57	22.56	22.43	
10	64QAM	1	0	22.73	22.78	22.04	
10	64QAM	1	25	22.56	22.06	22.62	23.7
10	64QAM	1	49	22.68	21.76	22.55	
10	64QAM	25	0	21.63	21.68	21.13	
10	64QAM	25	12	21.67	21.15	21.52	22.7
10	64QAM	25	25	21.54	21.00	21.46	
10	64QAM	50	0	21.69	21.53	21.53	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.97	22.98	22.96	24.1
5	QPSK	1	12	22.95	22.95	22.92	
5	QPSK	1	24	22.93	22.97	22.96	
5	QPSK	12	0	22.97	22.95	22.98	24.1
5	QPSK	12	7	22.97	22.91	22.83	
5	QPSK	12	13	22.97	22.92	22.91	
5	QPSK	25	0	22.91	22.94	22.80	24.1
5	16QAM	1	0	23.21	23.35	23.31	
5	16QAM	1	12	23.10	23.13	23.08	
5	16QAM	1	24	23.18	23.07	23.02	23.7
5	16QAM	12	0	22.51	22.63	22.60	
5	16QAM	12	7	22.60	22.55	22.44	
5	16QAM	12	13	22.54	22.52	22.46	23.7
5	16QAM	25	0	22.60	22.57	22.45	
5	64QAM	1	0	22.71	22.77	22.02	
5	64QAM	1	12	22.58	22.10	22.61	23.7
5	64QAM	1	24	22.57	21.75	22.58	
5	64QAM	12	0	21.61	21.65	21.17	
5	64QAM	12	7	21.61	21.24	21.56	22.7
5	64QAM	12	13	21.58	20.95	21.46	
5	64QAM	25	0	21.68	21.58	21.49	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.92	22.92	22.98	24.1
3	QPSK	1	8	22.90	22.91	22.94	
3	QPSK	1	14	22.93	22.95	22.96	
3	QPSK	8	0	22.93	23.00	22.92	24.1
3	QPSK	8	4	23.00	22.85	22.86	
3	QPSK	8	7	22.96	22.93	22.88	
3	QPSK	15	0	23.01	22.99	22.78	24.1
3	16QAM	1	0	23.29	23.33	23.30	
3	16QAM	1	8	23.16	23.14	23.11	
3	16QAM	1	14	23.14	23.01	22.94	23.7
3	16QAM	8	0	22.54	22.61	22.59	
3	16QAM	8	4	22.59	22.57	22.50	
3	16QAM	8	7	22.58	22.56	22.49	23.7
3	16QAM	15	0	22.60	22.55	22.43	
3	64QAM	1	0	22.64	22.76	21.96	
3	64QAM	1	8	22.60	22.07	22.57	23.7
3	64QAM	1	14	22.65	21.73	22.61	
3	64QAM	8	0	21.62	21.67	21.12	
3	64QAM	8	4	21.66	21.18	21.53	22.7
3	64QAM	8	7	21.52	20.94	21.51	
3	64QAM	15	0	21.59	21.52	21.54	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.92	22.8	22.95	24.1
1.4	QPSK	1	3	22.96	22.95	22.94	
1.4	QPSK	1	5	22.93	22.94	22.95	
1.4	QPSK	3	0	23.01	22.96	22.98	24.1
1.4	QPSK	3	1	22.99	22.91	22.90	
1.4	QPSK	3	3	22.94	22.93	22.95	
1.4	QPSK	6	0	22.92	22.94	22.87	24.1
1.4	16QAM	1	0	23.27	23.35	23.29	
1.4	16QAM	1	3	23.17	23.14	23.13	
1.4	16QAM	1	5	23.10	23.08	22.97	24.1
1.4	16QAM	3	0	22.75	22.73	22.76	
1.4	16QAM	3	1	22.73	22.72	22.70	
1.4	16QAM	3	3	22.74	22.73	22.74	23.7
1.4	16QAM	6	0	22.65	22.61	22.48	
1.4	64QAM	1	0	22.64	22.81	21.99	
1.4	64QAM	1	3	22.54	22.04	22.59	23.7
1.4	64QAM	1	5	22.59	21.75	22.60	
1.4	64QAM	3	0	21.72	21.77	21.75	
1.4	64QAM	3	1	21.77	21.76	21.76	22.7
1.4	64QAM	3	3	21.74	21.79	21.78	
1.4	64QAM	6	0	21.60	21.56	21.46	



Band 5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20505	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.76	23.75	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.60	23.7
10	16QAM	25	0	22.96	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.76	22.73	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.48	21.77	
10	64QAM	25	0	21.67	21.76	21.76	
10	64QAM	25	12	21.80	21.77	21.68	22.7
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.76	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.94	22.82	
5	64QAM	1	12	22.90	22.85	21.90	23.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.76	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	24.7
3	QPSK	8	4	23.68	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.90	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	23.7
3	64QAM	1	14	22.64	22.82	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.56	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.86	23.28	
1.4	16QAM	1	3	23.93	23.95	23.39	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.86	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.28	
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	22.7
1.4	64QAM	3	3	22.64	22.76	21.77	
1.4	64QAM	6	0	21.60	21.69	20.74	



Band 7							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.88	23.95	23.99	24.9
20	QPSK	1	49	23.94	23.99	23.98	
20	QPSK	1	99	23.99	24.08	24.04	
20	QPSK	50	0	23.50	23.86	23.88	24.4
20	QPSK	50	24	23.95	23.91	23.90	
20	QPSK	50	50	23.96	24.03	24.02	
20	QPSK	100	0	23.90	23.91	23.90	
20	16QAM	1	0	24.02	24.08	24.14	24.4
20	16QAM	1	49	24.10	24.16	24.15	
20	16QAM	1	99	24.15	24.26	24.16	
20	16QAM	50	0	22.83	22.86	22.91	23.4
20	16QAM	50	24	22.93	22.91	22.92	
20	16QAM	50	50	22.94	23.03	22.98	
20	16QAM	100	0	22.90	22.89	22.92	
20	64QAM	1	0	22.87	22.96	22.99	23.4
20	64QAM	1	49	22.92	23.04	22.70	
20	64QAM	1	99	23.04	23.13	22.55	
20	64QAM	50	0	21.82	21.89	21.91	22.4
20	64QAM	50	24	21.95	21.94	21.75	
20	64QAM	50	50	21.95	22.02	21.58	
20	64QAM	100	0	21.92	21.90	21.79	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.91	24.01	23.99	24.9
15	QPSK	1	37	23.95	24.02	24.02	
15	QPSK	1	74	24.01	24.10	24.04	
15	QPSK	36	0	23.79	23.86	23.86	24.4
15	QPSK	36	20	23.93	23.92	23.89	
15	QPSK	36	39	23.92	23.97	23.95	
15	QPSK	75	0	23.86	23.87	23.88	
15	16QAM	1	0	23.99	24.11	24.13	24.4
15	16QAM	1	37	24.05	24.14	24.11	
15	16QAM	1	74	24.13	24.19	24.11	
15	16QAM	36	0	22.82	22.87	22.88	23.4
15	16QAM	36	20	22.90	22.90	22.88	
15	16QAM	36	39	22.93	23.00	22.95	
15	16QAM	75	0	22.90	22.90	22.90	
15	64QAM	1	0	22.86	22.95	22.96	23.4
15	64QAM	1	37	22.99	23.07	22.41	
15	64QAM	1	74	23.04	23.12	22.69	
15	64QAM	36	0	21.81	21.91	21.76	22.4
15	64QAM	36	20	21.93	21.93	21.55	
15	64QAM	36	39	21.97	22.02	21.61	
15	64QAM	75	0	21.90	21.90	21.60	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.87	23.94	23.91	24.9
10	QPSK	1	25	23.85	23.93	23.92	
10	QPSK	1	49	23.92	24.02	23.92	
10	QPSK	25	0	23.85	23.86	23.80	24.4
10	QPSK	25	12	23.87	23.90	23.86	
10	QPSK	25	25	23.86	23.96	23.89	
10	QPSK	50	0	23.87	23.89	23.84	
10	16QAM	1	0	24.05	24.11	24.09	24.4
10	16QAM	1	25	24.03	24.15	24.14	
10	16QAM	1	49	24.13	24.21	24.12	
10	16QAM	25	0	22.86	22.85	22.82	23.4
10	16QAM	25	12	22.89	22.96	22.85	
10	16QAM	25	25	22.87	22.95	22.89	
10	16QAM	50	0	22.85	22.88	22.84	
10	64QAM	1	0	22.96	22.98	22.70	23.4
10	64QAM	1	25	22.97	23.07	22.76	
10	64QAM	1	49	23.01	23.12	22.69	
10	64QAM	25	0	21.85	21.88	21.53	22.4
10	64QAM	25	12	21.92	21.92	21.64	
10	64QAM	25	25	21.91	21.97	21.69	
10	64QAM	50	0	21.88	21.92	21.52	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.91	23.93	23.94	24.9
5	QPSK	1	12	23.94	24.06	23.97	
5	QPSK	1	24	23.95	24.04	23.95	
5	QPSK	12	0	23.83	23.90	23.86	24.4
5	QPSK	12	7	23.87	23.91	23.87	
5	QPSK	12	13	23.83	23.93	23.89	
5	QPSK	25	0	23.83	23.86	23.84	
5	16QAM	1	0	24.05	24.12	24.09	24.4
5	16QAM	1	12	24.08	24.15	24.06	
5	16QAM	1	24	24.10	24.17	24.07	
5	16QAM	12	0	22.87	22.90	22.90	23.4
5	16QAM	12	7	22.89	22.94	22.87	
5	16QAM	12	13	22.90	22.96	22.89	
5	16QAM	25	0	22.87	22.89	22.86	
5	64QAM	1	0	22.96	23.02	22.70	23.4
5	64QAM	1	12	22.96	23.08	22.72	
5	64QAM	1	24	23.00	23.10	22.82	
5	64QAM	12	0	21.95	21.93	21.59	22.4
5	64QAM	12	7	21.89	21.95	21.69	
5	64QAM	12	13	21.92	22.02	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



Band 12							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.64	24.61	24.63	
10	QPSK	1	25	24.63	24.68	24.65	25.7
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	
10	QPSK	25	12	23.87	23.80	23.76	24.7
10	QPSK	25	25	23.98	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	24.7
10	16QAM	1	49	24.12	24.08	24.07	
10	16QAM	25	0	22.76	22.79	22.77	
10	16QAM	25	12	22.62	22.80	22.78	23.7
10	16QAM	25	25	22.81	22.85	22.79	
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	25	22.76	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.78	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	22.7
10	64QAM	25	25	21.82	21.90	21.84	
10	64QAM	50	0	21.83	21.81	21.80	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	
5	QPSK	1	12	24.72	24.73	24.71	25.7
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.79	23.78	
5	QPSK	12	7	23.79	23.75	23.81	24.7
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	
5	16QAM	1	0	24.02	24.04	23.98	24.7
5	16QAM	1	12	24.03	24.01	24.02	
5	16QAM	1	24	24.02	24.07	24.03	
5	16QAM	12	0	22.85	22.83	22.80	23.7
5	16QAM	12	7	22.81	22.78	22.85	
5	16QAM	12	13	22.83	22.82	22.80	
5	16QAM	25	0	22.81	22.82	22.75	
5	64QAM	1	0	22.62	22.73	22.91	23.7
5	64QAM	1	12	22.83	22.94	22.94	
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	22.7
5	64QAM	12	7	21.88	21.85	21.88	
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23025	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	
3	QPSK	1	8	24.73	24.74	24.73	25.7
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.78	23.73	
3	QPSK	8	4	23.78	23.74	23.77	24.7
3	QPSK	8	7	23.73	23.76	23.75	
3	QPSK	15	0	23.77	23.75	23.73	
3	16QAM	1	0	24.08	24.01	24.02	24.7
3	16QAM	1	8	24.06	24.08	24.08	
3	16QAM	1	14	24.00	24.05	23.98	
3	16QAM	8	0	22.88	22.83	22.82	23.7
3	16QAM	8	4	22.90	22.83	22.87	
3	16QAM	8	7	22.84	22.84	22.83	
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.67	22.90	22.95	23.7
3	64QAM	1	8	22.91	23.01	22.98	
3	64QAM	1	14	22.92	22.95	22.88	
3	64QAM	8	0	21.82	21.81	21.81	22.7
3	64QAM	8	4	21.87	21.84	21.87	
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.65	21.78	21.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.59	24.59	
1.4	QPSK	1	3	24.68	24.67	24.64	25.7
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	
1.4	QPSK	3	1	24.70	24.64	24.68	
1.4	QPSK	3	3	24.64	24.67	24.61	24.7
1.4	QPSK	6	0	23.71	23.74	23.67	
1.4	16QAM	1	0	23.99	23.93	23.96	24.7
1.4	16QAM	1	3	24.02	24.02	23.98	
1.4	16QAM	1	5	23.92	23.94	23.91	24.7
1.4	16QAM	3	0	23.75	23.69	23.69	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.70	23.73	23.65	23.7
1.4	16QAM	6	0	22.78	22.80	22.76	
1.4	64QAM	1	0	22.73	22.89	22.85	23.7
1.4	64QAM	1	3	22.90	22.97	22.89	
1.4	64QAM	1	5	22.82	22.85	22.81	23.7
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	
1.4	64QAM	3	3	22.83	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	22.7



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.23		
10	QPSK	1	25		24.22		25.2
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30		
10	QPSK	25	12		23.33		24.2
10	QPSK	25	25		23.34		
10	QPSK	50	0		23.35		
10	16QAM	1	0		23.58		
10	16QAM	1	25		23.57		24.2
10	16QAM	1	49		23.54		
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		23.2
10	16QAM	25	25		22.38		
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.52		23.2
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.36		
10	64QAM	25	12		21.38		22.2
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.62	24.61	24.59	
5	QPSK	1	12	24.69	24.74	24.66	25.2
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	
5	QPSK	12	7	23.76	23.70	23.65	24.2
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	
5	16QAM	1	0	23.83	23.86	23.80	24.2
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	23.2
5	16QAM	12	13	22.72	22.74	22.70	
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.69	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.2
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.2
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.03	21.17	





Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.66			25.7
10	QPSK	1	25	24.65			
10	QPSK	1	49	24.67			
10	QPSK	25	0	23.71			24.7
10	QPSK	25	12	23.70			
10	QPSK	25	25	23.73			
10	QPSK	50	0	23.68			24.7
10	16QAM	1	0	24.08			
10	16QAM	1	25	24.08			
10	16QAM	1	49	23.96			23.7
10	16QAM	25	0	22.98			
10	16QAM	25	12	22.70			
10	16QAM	25	25	22.71			22.7
10	16QAM	50	0	22.70			
10	64QAM	1	0	22.92			
10	64QAM	1	25	22.66			23.7
10	64QAM	1	49	22.90			
10	64QAM	25	0	21.71			
10	64QAM	25	12	21.37			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.44			
Channel				23305 23330 23355			Tune-up limit (dBm)
Frequency (MHz)				790.5 793 795.5			
5	QPSK	1	0	24.64	24.61	24.62	25.7
5	QPSK	1	12	24.72	24.70	24.69	
5	QPSK	1	24	24.70	24.63	24.56	
5	QPSK	12	0	23.74	23.69	23.64	24.7
5	QPSK	12	7	23.77	23.72	23.68	
5	QPSK	12	13	23.74	23.72	23.68	
5	QPSK	25	0	23.74	23.68	23.64	24.7
5	16QAM	1	0	23.97	23.92	23.91	
5	16QAM	1	12	24.03	23.99	23.96	
5	16QAM	1	24	23.99	23.93	23.89	23.7
5	16QAM	12	0	22.79	22.70	22.69	
5	16QAM	12	7	22.81	22.74	22.71	
5	16QAM	12	13	22.75	22.72	22.72	23.7
5	16QAM	25	0	22.75	22.72	22.66	
5	64QAM	1	0	22.66	22.72	22.34	
5	64QAM	1	12	22.94	22.37	22.32	23.7
5	64QAM	1	24	22.49	22.18	22.72	
5	64QAM	12	0	21.82	21.48	21.13	
5	64QAM	12	7	21.85	21.29	21.25	22.7
5	64QAM	12	13	21.60	21.11	21.55	
5	64QAM	25	0	21.69	21.22	21.29	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				706	710	714	
10	QPSK	1	0	24.66	24.65	24.61	
10	QPSK	1	25	24.69	24.70	24.71	25.7
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	
10	QPSK	25	12	23.88	23.82	23.79	24.7
10	QPSK	25	25	23.88	23.88	23.88	
10	QPSK	50	0	23.79	23.78	23.79	
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	24.7
10	16QAM	1	49	24.12	24.10	24.09	
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	23.7
10	16QAM	25	25	22.89	22.90	22.82	
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.76	22.88	
10	64QAM	1	25	22.71	22.71	22.65	23.7
10	64QAM	1	49	22.87	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	22.7
10	64QAM	25	25	21.65	21.78	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.65	24.68	
5	QPSK	1	12	24.74	24.79	24.75	25.7
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	
5	QPSK	12	7	23.85	23.81	23.82	24.7
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	
5	16QAM	1	0	23.99	23.98	23.99	24.7
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	23.7
5	16QAM	12	13	22.84	22.88	22.84	
5	16QAM	25	0	22.65	22.65	22.67	
5	64QAM	1	0	22.40	22.44	22.76	23.7
5	64QAM	1	12	22.76	22.60	22.94	
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



Band 25							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1880	1880	1905	
20	QPSK	1	0	23.09	23.12	23.02	24.2
20	QPSK	1	49	23.06	23.06	23.05	
20	QPSK	1	99	23.00	23.04	23.01	
20	QPSK	50	0	23.01	23.16	22.56	24
20	QPSK	50	24	23.02	23.26	23.04	
20	QPSK	50	50	22.98	23.24	23.26	
20	QPSK	100	0	22.43	23.24	22.31	24
20	16QAM	1	0	23.09	23.43	22.58	
20	16QAM	1	49	23.09	23.42	22.49	
20	16QAM	1	99	22.40	23.41	22.22	23
20	16QAM	50	0	22.51	22.72	21.77	
20	16QAM	50	24	22.07	22.79	22.07	
20	16QAM	50	50	21.65	22.75	21.92	23
20	16QAM	100	0	21.45	21.98	21.45	
20	64QAM	1	0	21.20	21.21	21.22	
20	64QAM	1	49	21.22	21.74	21.24	23
20	64QAM	1	99	21.20	22.09	21.23	
20	64QAM	50	0	20.89	21.06	21.07	
20	64QAM	50	24	20.17	21.08	20.38	22
20	64QAM	50	50	20.02	21.11	20.24	
20	64QAM	100	0	20.00	20.03	20.04	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	23.04	23.11	23.02	24.2
15	QPSK	1	37	23.02	23.10	23.05	
15	QPSK	1	74	23.00	23.04	23.06	
15	QPSK	36	0	22.93	23.08	22.60	24
15	QPSK	36	20	22.99	23.22	23.00	
15	QPSK	36	39	22.81	23.15	23.18	
15	QPSK	75	0	22.42	23.24	22.22	24
15	16QAM	1	0	23.08	23.42	22.52	
15	16QAM	1	37	23.06	23.35	22.42	
15	16QAM	1	74	22.36	23.40	22.21	23
15	16QAM	36	0	22.47	22.67	21.74	
15	16QAM	36	20	22.07	22.76	21.97	
15	16QAM	36	39	21.64	22.69	21.85	23
15	16QAM	75	0	21.45	21.98	21.38	
15	64QAM	1	0	21.17	21.14	21.18	
15	64QAM	1	37	21.21	21.64	21.24	23
15	64QAM	1	74	21.16	22.01	21.15	
15	64QAM	36	0	20.79	20.98	21.03	
15	64QAM	36	20	20.07	21.06	20.38	22
15	64QAM	36	39	20.11	21.04	20.15	
15	64QAM	75	0	20.15	20.30	20.12	
Channel				26050	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	23.07	23.07	23.02	24.2
10	QPSK	1	25	23.03	23.02	23.01	
10	QPSK	1	49	23.01	23.00	23.03	
10	QPSK	25	0	22.99	23.10	22.56	24
10	QPSK	25	12	22.99	23.21	23.00	
10	QPSK	25	25	22.88	23.24	23.21	
10	QPSK	50	0	22.36	23.15	22.30	24
10	16QAM	1	0	23.01	23.35	22.50	
10	16QAM	1	25	23.08	23.34	22.42	
10	16QAM	1	49	22.36	23.32	22.13	23
10	16QAM	25	0	22.49	22.71	21.76	
10	16QAM	25	12	22.02	22.79	22.06	
10	16QAM	25	25	21.57	22.70	21.83	23
10	16QAM	50	0	21.37	21.90	21.43	
10	64QAM	1	0	21.14	21.11	21.18	
10	64QAM	1	25	21.17	21.72	21.17	23
10	64QAM	1	49	21.19	21.98	21.17	
10	64QAM	25	0	20.88	21.02	20.98	
10	64QAM	25	12	20.08	20.98	20.29	22
10	64QAM	25	25	20.03	21.11	20.21	
10	64QAM	50	0	20.05	20.10	20.02	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	23.06	23.02	23.01	24.2
5	QPSK	1	12	23.04	23.04	23.00	
5	QPSK	1	24	23.05	23.03	23.02	
5	QPSK	12	0	22.95	23.15	22.51	24
5	QPSK	12	7	22.93	23.23	23.01	
5	QPSK	12	13	22.78	23.17	23.26	
5	QPSK	25	0	22.34	23.20	22.27	24
5	16QAM	1	0	23.02	23.35	22.54	
5	16QAM	1	12	23.07	23.32	22.43	
5	16QAM	1	24	22.34	23.37	22.19	23
5	16QAM	12	0	22.47	22.64	21.75	
5	16QAM	12	7	22.04	22.76	22.00	
5	16QAM	12	13	21.59	22.68	21.92	23
5	16QAM	25	0	21.41	21.91	21.42	
5	64QAM	1	0	21.13	21.16	21.14	
5	64QAM	1	12	21.13	21.73	21.24	23
5	64QAM	1	24	21.12	22.09	21.14	
5	64QAM	12	0	20.84	20.99	21.07	
5	64QAM	12	7	20.17	21.06	20.36	22
5	64QAM	12	13	20.00	21.10	20.16	
5	64QAM	25	0	20.02	20.01	20.00	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	23.03	23.09	23.04	24.2
3	QPSK	1	8	23.01	23.07	23.02	
3	QPSK	1	14	23.05	23.04	23.00	
3	QPSK	8	0	22.94	23.06	22.47	24
3	QPSK	8	4	22.95	23.20	22.98	
3	QPSK	8	7	22.85	23.23	23.22	
3	QPSK	15	0	22.36	23.21	22.24	24
3	16QAM	1	0	23.01	23.40	22.52	
3	16QAM	1	8	23.04	23.36	22.46	
3	16QAM	1	14	22.30	23.32	22.14	23
3	16QAM	8	0	22.51	22.64	21.71	
3	16QAM	8	4	21.98	22.79	22.05	
3	16QAM	8	7	21.62	22.72	21.91	23
3	16QAM	15	0	21.35	21.94	21.37	
3	64QAM	1	0	21.11	21.19	21.18	
3	64QAM	1	8	21.12	21.68	21.17	23
3	64QAM	1	14	21.17	22.02	21.15	
3	64QAM	8	0	20.89	21.03	21.00	
3	64QAM	8	4	20.13	21.02	20.31	22
3	64QAM	8	7	20.03	21.02	20.15	
3	64QAM	15	0	20.05	20.00	20.05	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	23.02	23.05	23.02	24.2
1.4	QPSK	1	3	23.05	23.01	23.00	
1.4	QPSK	1	5	23.04	23.00	23.06	
1.4	QPSK	3	0	23.02	23.16	23.00	24
1.4	QPSK	3	1	23.01	23.19	23.03	
1.4	QPSK	3	3	23.05	23.15	23.24	
1.4	QPSK	6	0	22.34	23.18	22.26	24
1.4	16QAM	1	0	23.02	23.35	22.57	
1.4	16QAM	1	3	23.08	23.34	22.44	
1.4	16QAM	1	5	22.38	23.33	22.13	24
1.4	16QAM	3	0	22.44	22.70	22.01	
1.4	16QAM	3	1	22.06	22.70	22.02	
1.4	16QAM	3	3	22.00	22.69	22.03	23
1.4	16QAM	6	0	21.45	21.98	21.41	
1.4	64QAM	1	0	21.10	21.15	21.19	
1.4	64QAM	1	3	21.22	21.68	21.19	23
1.4	64QAM	1	5	21.20	22.02	21.18	
1.4	64QAM	3	0	21.12	21.01	21.07	
1.4	64QAM	3	1	21.08	21.05	21.03	23
1.4	64QAM	3	3	21.10	21.11	21.10	
1.4	64QAM	6	0	20.20	20.20	20.22	



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.76	24.52	24.57	
15	QPSK	1	37	24.46	24.51	24.50	25.7
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	24.7
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.96	22.67	
15	16QAM	36	20	22.65	22.61	22.60	23.7
15	16QAM	36	39	22.59	22.65	22.62	
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	23.7
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	22.7
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	
10	QPSK	1	25	24.97	24.55	24.59	25.7
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	24.07	23.96	23.96	24.7
10	16QAM	1	25	23.94	24.01	23.97	
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	23.7
10	16QAM	25	25	22.64	22.63	22.63	
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	23.7
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	
5	QPSK	1	12	24.72	24.63	24.47	25.7
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.80	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	24.7
5	16QAM	1	12	24.00	23.97	23.85	
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	23.7
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	23.7
5	64QAM	1	12	22.90	22.88	22.03	
5	64QAM	1	24	22.81	22.86	21.86	
5	64QAM	12	0	21.83	21.78	21.45	22.7
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	
3	QPSK	1	8	24.75	24.60	24.16	25.7
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	6	0	23.83	23.68	23.38	
3	QPSK	6	4	23.77	23.72	23.28	24.7
3	QPSK	6	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	24.7
3	16QAM	1	8	24.06	24.06	23.47	
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	6	0	22.86	22.77	22.54	23.7
3	16QAM	6	4	22.88	22.77	22.42	
3	16QAM	6	7	22.78	22.76	22.45	
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.63	22.00	23.7
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	
3	64QAM	6	0	21.79	21.74	20.85	22.7
3	64QAM	6	4	21.88	21.81	20.77	
3	64QAM	6	7	21.81	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	
1.4	QPSK	1	3	24.71	24.63	24.26	25.7
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.69	24.55	24.17	
1.4	QPSK	3	1	24.74	24.56	24.22	24.7
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	24.7
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	24.7
1.4	16QAM	1	5	23.93	23.86	23.65	
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	23.7
1.4	16QAM	6	0	22.82	22.75	22.46	
1.4	64QAM	1	0	22.74	22.76	21.86	23.7
1.4	64QAM	1	3	22.88	22.88	21.90	
1.4	64QAM	1	5	22.88	22.78	21.85	
1.4	64QAM	3	0	22.76	22.73	21.85	22.7
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	22.7



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2774.0			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		20.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.86	22.86	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.29	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.14	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132332	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.96	22.88	22.80	24.1
20	QPSK	1	49	22.82	22.68	22.67	
20	QPSK	1	99	22.87	22.70	22.60	
20	QPSK	50	0	23.07	22.90	22.84	24.1
20	QPSK	50	24	23.08	22.85	22.85	
20	QPSK	50	50	23.03	22.89	22.84	
20	QPSK	100	0	23.06	22.90	22.86	24.1
20	16QAM	1	0	23.29	23.23	23.15	
20	16QAM	1	49	23.18	23.03	23.00	
20	16QAM	1	99	23.21	23.00	22.91	23.7
20	16QAM	50	0	22.88	22.90	22.49	
20	16QAM	50	24	22.67	22.54	22.45	
20	16QAM	50	50	22.64	22.50	22.47	23.7
20	16QAM	100	0	22.63	22.51	22.46	
20	64QAM	1	0	22.73	22.06	22.55	
20	64QAM	1	49	22.69	22.54	22.46	23.7
20	64QAM	1	99	22.74	22.56	22.46	
20	64QAM	50	0	21.69	21.24	21.50	
20	64QAM	50	24	21.70	21.54	21.46	22.7
20	64QAM	50	50	21.66	21.49	21.48	
20	64QAM	100	0	21.68	21.52	21.45	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.94	22.88	22.74	24.1
15	QPSK	1	37	22.82	22.67	22.65	
15	QPSK	1	74	22.83	22.68	22.53	
15	QPSK	36	0	23.06	22.80	22.80	24.1
15	QPSK	36	20	23.07	22.86	22.75	
15	QPSK	36	39	22.95	22.85	22.78	
15	QPSK	75	0	23.05	22.83	22.77	24.1
15	16QAM	1	0	23.24	23.19	23.12	
15	16QAM	1	37	23.11	23.03	22.98	
15	16QAM	1	74	23.21	22.97	22.81	23.7
15	16QAM	36	0	22.68	22.50	22.44	
15	16QAM	36	20	22.61	22.51	22.39	
15	16QAM	36	39	22.59	22.40	22.40	23.7
15	16QAM	75	0	22.55	22.45	22.36	
15	64QAM	1	0	22.69	22.05	22.50	
15	64QAM	1	37	22.66	22.54	22.42	23.7
15	64QAM	1	74	22.74	22.47	22.46	
15	64QAM	36	0	21.64	21.16	21.42	
15	64QAM	36	20	21.62	21.47	21.37	22.7
15	64QAM	36	39	21.62	21.42	21.40	
15	64QAM	75	0	21.65	21.43	21.44	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.94	22.81	22.74	24.1
10	QPSK	1	25	22.73	22.68	22.61	
10	QPSK	1	49	22.78	22.65	22.56	
10	QPSK	25	0	23.00	22.84	22.79	24.1
10	QPSK	25	12	23.01	22.86	22.82	
10	QPSK	25	25	22.99	22.80	22.79	
10	QPSK	50	0	22.97	22.88	22.84	24.1
10	16QAM	1	0	23.26	23.23	23.12	
10	16QAM	1	25	23.12	22.99	22.95	
10	16QAM	1	49	23.21	22.94	22.91	23.7
10	16QAM	25	0	22.65	22.45	22.42	
10	16QAM	25	12	22.66	22.52	22.42	
10	16QAM	25	25	22.64	22.41	22.39	23.7
10	16QAM	50	0	22.60	22.46	22.45	
10	64QAM	1	0	22.66	21.98	22.54	
10	64QAM	1	25	22.69	22.46	22.44	23.7
10	64QAM	1	49	22.68	22.50	22.37	
10	64QAM	25	0	21.64	21.19	21.47	
10	64QAM	25	12	21.65	21.51	21.37	22.7
10	64QAM	25	25	21.65	21.47	21.42	
10	64QAM	50	0	21.63	21.47	21.43	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.89	22.78	22.70	24.1
5	QPSK	1	12	22.79	22.61	22.60	
5	QPSK	1	24	22.84	22.70	22.56	
5	QPSK	12	0	22.99	22.88	22.77	24.1
5	QPSK	12	7	23.07	22.93	22.82	
5	QPSK	12	13	22.94	22.86	22.75	
5	QPSK	25	0	23.06	22.88	22.83	24.1
5	16QAM	1	0	23.26	23.21	23.11	
5	16QAM	1	12	23.12	23.01	22.98	
5	16QAM	1	24	23.14	22.93	22.86	23.7
5	16QAM	12	0	22.60	22.41	22.44	
5	16QAM	12	7	22.58	22.48	22.35	
5	16QAM	12	13	22.57	22.50	22.42	23.7
5	16QAM	25	0	22.62	22.51	22.42	
5	64QAM	1	0	22.63	21.96	22.47	
5	64QAM	1	12	22.63	22.44	22.43	23.7
5	64QAM	1	24	22.67	22.53	22.37	
5	64QAM	12	0	21.59	21.21	21.47	
5	64QAM	12	7	21.67	21.47	21.42	22.7
5	64QAM	12	13	21.61	21.39	21.45	
5	64QAM	25	0	21.61	21.46	21.44	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.80	22.84	22.73	24.1
3	QPSK	1	8	22.81	22.59	22.63	
3	QPSK	1	14	22.79	22.62	22.53	
3	QPSK	8	0	22.97	22.88	22.74	24.1
3	QPSK	8	4	23.02	22.91	22.75	
3	QPSK	8	7	22.95	22.87	22.79	
3	QPSK	15	0	23.00	22.85	22.77	24.1
3	16QAM	1	0	23.23	23.17	23.10	
3	16QAM	1	8	23.10	22.97	22.94	
3	16QAM	1	14	23.11	22.99	22.91	23.7
3	16QAM	8	0	22.64	22.40	22.42	
3	16QAM	8	4	22.64	22.48	22.39	
3	16QAM	8	7	22.58	22.45	22.42	23.7
3	16QAM	15	0	22.63	22.46	22.41	
3	64QAM	1	0	22.70	22.02	22.46	
3	64QAM	1	8	22.66	22.45	22.45	23.7
3	64QAM	1	14	22.68	22.46	22.40	
3	64QAM	8	0	21.61	21.15	21.42	
3	64QAM	8	4	21.62	21.53	21.44	22.7
3	64QAM	8	7	21.66	21.45	21.48	
3	64QAM	15	0	21.61	21.44	21.40	
Channel				131979	132322	132685	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.81	22.85	22.75	24.1
1.4	QPSK	1	3	22.73	22.63	22.65	
1.4	QPSK	1	5	22.81	22.60	22.53	
1.4	QPSK	3	0	22.99	22.80	22.84	24.1
1.4	QPSK	3	1	23.07	22.87	22.82	
1.4	QPSK	3	3	23.02	22.81	22.84	
1.4	QPSK	6	0	22.98	22.86	22.82	24.1
1.4	16QAM	1	0	23.23	23.14	23.05	
1.4	16QAM	1	3	23.16	22.98	23.00	
1.4	16QAM	1	5	23.14	22.93	22.85	24.1
1.4	16QAM	3	0	22.59	22.46	22.39	
1.4	16QAM	3	1	22.60	22.51	22.39	
1.4	16QAM	3	3	22.55	22.44	22.44	23.7
1.4	16QAM	6	0	22.59	22.45	22.37	
1.4	64QAM	1	0	22.63	21.97	22.51	
1.4	64QAM	1	3	22.63	22.54	22.42	23.7
1.4	64QAM	1	5	22.71	22.48	22.41	
1.4	64QAM	3	0	21.77	21.74	21.76	
1.4	64QAM	3	1	21.73	21.74	21.75	22.7
1.4	64QAM	3	3	21.72	21.70	21.74	
1.4	64QAM	6	0	21.66	21.50	21.44	



Band 71						
Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	24.77	24.67	24.68
20	QPSK	1	49	24.65	24.65	24.65
20	QPSK	1	99	24.68	24.66	24.61
20	QPSK	50	0	23.76	23.76	23.72
20	QPSK	50	24	23.80	23.74	23.75
20	QPSK	50	50	23.84	23.78	23.75
20	QPSK	100	0	23.79	23.71	23.77
20	16QAM	1	0	24.06	23.96	24.00
20	16QAM	1	49	24.01	24.03	24.04
20	16QAM	1	99	24.03	24.01	23.95
20	16QAM	50	0	22.77	22.75	22.75
20	16QAM	50	24	22.82	22.77	22.73
20	16QAM	50	50	22.82	22.77	22.78
20	16QAM	100	0	22.79	22.73	22.78
20	64QAM	1	0	22.04	22.83	22.82
20	64QAM	1	49	22.63	22.90	22.29
20	64QAM	1	99	22.94	22.89	22.87
20	64QAM	50	0	21.00	21.79	21.49
20	64QAM	50	24	21.30	21.64	21.57
20	64QAM	50	50	21.84	21.60	21.74
20	64QAM	100	0	21.53	21.76	21.80
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	24.74	24.65	24.63
15	QPSK	1	37	24.62	24.66	24.61
15	QPSK	1	74	24.65	24.68	24.64
15	QPSK	36	0	23.73	23.71	23.69
15	QPSK	36	20	23.80	23.73	23.78
15	QPSK	36	39	23.73	23.76	23.74
15	QPSK	75	0	23.81	23.74	23.68
15	16QAM	1	0	24.05	24.01	23.98
15	16QAM	1	37	23.95	24.02	24.00
15	16QAM	1	74	23.97	24.00	23.98
15	16QAM	36	0	22.76	22.75	22.71
15	16QAM	36	20	22.79	22.74	22.79
15	16QAM	36	39	22.77	22.79	22.75
15	16QAM	75	0	22.63	22.73	22.70
15	64QAM	1	0	22.02	22.43	22.76
15	64QAM	1	37	21.86	22.94	22.88
15	64QAM	1	74	22.88	22.60	22.84
15	64QAM	36	0	20.97	21.77	21.44
15	64QAM	36	20	20.94	21.78	21.81
15	64QAM	36	39	21.48	21.56	21.78
15	64QAM	75	0	21.29	21.75	21.67
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	24.76	24.64	24.66
10	QPSK	1	25	24.61	24.62	24.63
10	QPSK	1	49	24.66	24.71	24.62
10	QPSK	25	0	23.78	23.71	23.69
10	QPSK	25	12	23.79	23.82	23.70
10	QPSK	25	25	23.72	23.78	23.74
10	QPSK	50	0	23.80	23.81	23.71
10	16QAM	1	0	24.10	24.02	24.04
10	16QAM	1	25	23.98	24.06	24.00
10	16QAM	1	49	23.98	24.07	23.96
10	16QAM	25	0	22.76	22.70	22.68
10	16QAM	25	12	22.78	22.81	22.68
10	16QAM	25	25	22.65	22.77	22.73
10	16QAM	50	0	22.79	22.80	22.69
10	64QAM	1	0	21.80	22.30	22.77
10	64QAM	1	25	22.01	22.95	22.95
10	64QAM	1	49	22.14	22.96	22.45
10	64QAM	25	0	20.82	21.71	21.71
10	64QAM	25	12	20.84	21.84	21.76
10	64QAM	25	25	20.71	21.81	21.64
10	64QAM	50	0	20.83	21.77	21.69
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	24.57	24.69	24.72
5	QPSK	1	12	24.71	24.66	24.70
5	QPSK	1	24	24.70	24.68	24.63
5	QPSK	12	0	23.73	23.76	23.74
5	QPSK	12	7	23.84	23.79	23.76
5	QPSK	12	13	23.76	23.76	23.70
5	QPSK	25	0	23.76	23.76	23.68
5	16QAM	1	0	23.75	24.01	24.02
5	16QAM	1	12	23.97	24.03	23.97
5	16QAM	1	24	23.95	24.02	23.93
5	16QAM	12	0	22.64	22.80	22.78
5	16QAM	12	7	22.86	22.80	22.78
5	16QAM	12	13	22.77	22.77	22.70
5	16QAM	25	0	22.69	22.81	22.70
5	64QAM	1	0	21.74	22.06	22.91
5	64QAM	1	12	21.79	22.94	22.70
5	64QAM	1	24	21.96	22.96	22.25
5	64QAM	12	0	20.82	21.49	21.68
5	64QAM	12	7	21.00	21.86	21.73
5	64QAM	12	13	20.99	21.81	21.61
5	64QAM	25	0	20.76	21.69	21.48



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./18700	Power Middle Ch./18900	Power High Ch./19100	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				18700	18900	19100	
20	QPSK	1	0	18.28	18.29	18.28	
20	QPSK	1	49	18.22	18.24	18.20	19.4
20	QPSK	1	99	18.20	18.23	18.22	
20	QPSK	50	0	18.33	18.31	18.26	
20	QPSK	50	24	18.40	18.33	18.34	19.4
20	QPSK	50	50	18.35	18.40	18.35	
20	QPSK	100	0	18.41	18.32	18.37	
20	16QAM	1	0	18.58	18.62	18.55	
20	16QAM	1	49	18.55	18.53	18.47	19.4
20	16QAM	1	99	18.45	18.50	18.46	
20	16QAM	50	0	18.32	18.30	18.28	
20	16QAM	50	24	18.39	18.33	18.38	19.4
20	16QAM	50	50	18.38	18.37	18.35	
20	16QAM	100	0	18.38	18.29	18.35	
20	64QAM	1	0	18.51	18.48	18.46	
20	64QAM	1	49	18.46	18.45	18.44	19.4
20	64QAM	1	99	18.39	18.46	18.42	
20	64QAM	50	0	18.35	18.35	18.30	
20	64QAM	50	24	18.43	18.37	18.40	19.4
20	64QAM	50	50	18.39	18.41	18.38	
20	64QAM	100	0	18.40	18.32	18.38	
Channel				18675	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				18675	18800	1902.5	
15	QPSK	1	0	18.21	18.22	18.21	
15	QPSK	1	37	18.20	18.24	18.24	19.4
15	QPSK	1	74	18.23	18.22	18.22	
15	QPSK	36	0	18.26	18.25	18.20	
15	QPSK	36	20	18.36	18.24	18.30	19.4
15	QPSK	36	39	18.33	18.40	18.34	
15	QPSK	75	0	18.36	18.28	18.37	
15	16QAM	1	0	18.50	18.60	18.49	
15	16QAM	1	37	18.52	18.49	18.43	19.4
15	16QAM	1	74	18.38	18.40	18.42	
15	16QAM	36	0	18.28	18.29	18.22	
15	16QAM	36	20	18.29	18.24	18.27	19.4
15	16QAM	36	39	18.35	18.34	18.28	
15	16QAM	75	0	18.31	18.32	18.34	
15	64QAM	1	0	18.43	18.38	18.41	
15	64QAM	1	37	18.44	18.38	18.36	19.4
15	64QAM	1	74	18.30	18.42	18.38	
15	64QAM	36	0	18.31	18.32	18.25	
15	64QAM	36	20	18.33	18.29	18.39	19.4
15	64QAM	36	39	18.31	18.36	18.32	
15	64QAM	75	0	18.39	18.28	18.34	
Channel				18950	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				18950	18800	19005	
10	QPSK	1	0	18.20	18.20	18.24	
10	QPSK	1	25	18.20	18.22	18.22	19.4
10	QPSK	1	49	18.21	18.22	18.24	
10	QPSK	25	0	18.31	18.24	18.20	
10	QPSK	25	12	18.33	18.32	18.34	19.4
10	QPSK	25	25	18.29	18.36	18.34	
10	QPSK	50	0	18.36	18.31	18.33	
10	16QAM	1	0	18.55	18.56	18.49	
10	16QAM	1	25	18.48	18.43	18.45	19.4
10	16QAM	1	49	18.42	18.47	18.43	
10	16QAM	25	0	18.32	18.25	18.20	
10	16QAM	25	12	18.36	18.23	18.32	19.4
10	16QAM	25	25	18.38	18.30	18.28	
10	16QAM	50	0	18.33	18.25	18.25	
10	64QAM	1	0	18.42	18.43	18.43	
10	64QAM	1	25	18.40	18.43	18.38	19.4
10	64QAM	1	49	18.30	18.40	18.36	
10	64QAM	25	0	18.32	18.28	18.21	
10	64QAM	25	12	18.43	18.37	18.34	19.4
10	64QAM	25	25	18.36	18.38	18.36	
10	64QAM	50	0	18.39	18.23	18.34	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				18625	18800	1907.5	
5	QPSK	1	0	18.27	18.22	18.23	
5	QPSK	1	12	18.21	18.22	18.22	19.4
5	QPSK	1	24	18.21	18.23	18.21	
5	QPSK	12	0	18.26	18.22	18.20	
5	QPSK	12	7	18.32	18.26	18.25	19.4
5	QPSK	12	13	18.26	18.37	18.30	
5	QPSK	25	0	18.40	18.26	18.29	
5	16QAM	1	0	18.46	18.51	18.53	
5	16QAM	1	12	18.55	18.52	18.37	19.4
5	16QAM	1	24	18.44	18.48	18.46	
5	16QAM	12	0	18.25	18.21	18.24	
5	16QAM	12	7	18.33	18.31	18.32	19.4
5	16QAM	12	13	18.33	18.32	18.28	
5	16QAM	25	0	18.30	18.27	18.33	
5	64QAM	1	0	18.43	18.45	18.40	
5	64QAM	1	12	18.41	18.45	18.40	19.4
5	64QAM	1	24	18.29	18.44	18.32	
5	64QAM	12	0	18.34	18.27	18.26	
5	64QAM	12	7	18.40	18.36	18.33	19.4
5	64QAM	12	13	18.35	18.34	18.34	
5	64QAM	25	0	18.35	18.28	18.37	
Channel				18915	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				18915	18800	1908.5	
3	QPSK	1	0	18.23	18.23	18.22	
3	QPSK	1	8	18.20	18.21	18.23	19.4
3	QPSK	1	14	18.21	18.22	18.22	
3	QPSK	8	0	18.31	18.26	18.24	
3	QPSK	8	4	18.39	18.32	18.27	19.4
3	QPSK	8	7	18.30	18.37	18.28	
3	QPSK	15	0	18.39	18.28	18.27	
3	16QAM	1	0	18.55	18.53	18.50	
3	16QAM	1	8	18.50	18.48	18.41	19.4
3	16QAM	1	14	18.40	18.46	18.38	
3	16QAM	8	0	18.28	18.21	18.22	
3	16QAM	8	4	18.39	18.25	18.28	19.4
3	16QAM	8	7	18.28	18.37	18.34	
3	16QAM	15	0	18.35	18.20	18.32	
3	64QAM	1	0	18.50	18.42	18.44	
3	64QAM	1	8	18.44	18.38	18.38	19.4
3	64QAM	1	14	18.39	18.45	18.33	
3	64QAM	8	0	18.31	18.35	18.23	
3	64QAM	8	4	18.38	18.33	18.32	19.4
3	64QAM	8	7	18.35	18.31	18.31	
3	64QAM	15	0	18.33	18.26	18.32	
Channel				18507	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				18507	18900	19193	
1.4	QPSK	1	0	18.21	18.20	18.21	
1.4	QPSK	1	3	18.21	18.22	18.21	19.4
1.4	QPSK	1	5	18.23	18.20	18.22	
1.4	QPSK	3	0	18.24	18.25	18.24	
1.4	QPSK	3	1	18.33	18.29	18.31	
1.4	QPSK	3	3	18.31	18.35	18.30	19.4
1.4	QPSK	6	0	18.35	18.30	18.37	
1.4	16QAM	1	0	18.46	18.44	18.45	
1.4	16QAM	1	3	18.54	18.46	18.44	19.4
1.4	16QAM	1	5	18.42	18.49	18.45	
1.4	16QAM	3	0	18.31	18.23	18.23	
1.4	16QAM	3	1	18.34	18.26	18.26	
1.4	16QAM	3	3	18.31	18.34	18.26	19.4
1.4	16QAM	6	0	18.31	18.30	18.31	
1.4	64QAM	1	0	18.51	18.42	18.45	
1.4	64QAM	1	3	18.40	18.44	18.40	19.4
1.4	64QAM	1	5	18.39	18.40	18.32	
1.4	64QAM	3	0	18.29	18.27	18.23	
1.4	64QAM	3	1	18.33	18.36	18.38	
1.4	64QAM	3	3	18.37	18.40	18.36	19.4
1.4	64QAM	6	0	18.30	18.27	18.29	





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



Band 5							
Ant 1							
Band	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.43	24.46	24.43	25.7
10	QPSK	1	25	24.39	24.46	24.45	
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	
10	QPSK	25	12	23.56	23.57	23.57	24.7
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.56	
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	24.7
10	16QAM	1	49	23.83	23.86	23.78	
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.65	23.7
10	16QAM	25	25	22.54	22.60	22.57	
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	
10	64QAM	1	25	22.73	22.49	22.51	23.7
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.64	21.60	21.58	
10	64QAM	25	12	21.63	21.53	21.47	22.7
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.46	24.46	24.45	25.7
5	QPSK	1	12	24.44	24.46	24.19	
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	
5	QPSK	12	7	23.54	23.61	23.25	24.7
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.54	23.52	23.37	
5	16QAM	1	0	23.81	23.80	23.87	24.7
5	16QAM	1	12	23.78	23.86	23.43	
5	16QAM	1	24	23.79	23.83	23.43	
5	16QAM	12	0	22.65	22.62	22.60	
5	16QAM	12	7	22.57	22.64	22.38	23.7
5	16QAM	12	13	22.52	22.59	22.35	
5	16QAM	25	0	22.57	22.59	22.51	
5	64QAM	1	0	22.87	22.79	22.18	23.7
5	64QAM	1	12	22.72	22.71	21.72	
5	64QAM	1	24	22.72	22.73	21.73	
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.56	21.85	22.7
5	64QAM	12	13	21.60	21.61	20.71	
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	25.7
3	QPSK	1	8	24.43	24.45	24.13	
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	
3	QPSK	8	4	23.55	23.62	23.16	24.7
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.56	23.17	
3	16QAM	1	0	23.87	23.84	23.44	24.7
3	16QAM	1	8	23.89	23.89	23.38	
3	16QAM	1	14	23.74	23.82	23.44	
3	16QAM	8	0	22.66	22.61	22.26	23.7
3	16QAM	8	4	22.66	22.71	22.30	
3	16QAM	8	7	22.60	22.65	22.40	
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	23.7
3	64QAM	1	8	22.83	22.74	21.72	
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	22.7
3	64QAM	8	4	21.66	21.56	20.73	
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.42	24.41	24.09	25.7
1.4	QPSK	1	3	24.45	24.45	24.26	
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	
1.4	QPSK	3	1	24.46	24.46	24.30	
1.4	QPSK	3	3	24.41	24.45	24.42	24.7
1.4	QPSK	6	0	23.50	23.51	23.36	
1.4	16QAM	1	0	23.75	23.73	23.46	24.7
1.4	16QAM	1	3	23.79	23.84	23.67	
1.4	16QAM	1	5	23.68	23.74	23.60	
1.4	16QAM	3	0	23.56	23.51	23.29	24.7
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	
1.4	16QAM	6	0	22.58	22.61	22.49	23.7
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	
1.4	64QAM	1	5	22.64	22.61	21.72	23.7
1.4	64QAM	3	0	22.66	22.60	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	
1.4	64QAM	3	3	22.63	22.60	21.75	
1.4	64QAM	6	0	21.54	21.47	20.72	22.7



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



Band 12							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	
10	QPSK	1	25	24.58	24.57	24.54	25.7
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.64	23.68	23.68	
10	QPSK	25	12	23.74	23.70	23.69	24.7
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	24.7
10	16QAM	1	49	24.00	24.00	23.96	
10	16QAM	25	0	22.66	22.71	22.68	
10	16QAM	25	12	22.75	22.69	22.68	23.7
10	16QAM	25	25	22.70	22.75	22.71	
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	23.7
10	64QAM	1	49	22.58	22.86	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.59	24.56	
5	QPSK	1	12	24.60	24.62	24.60	25.7
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	
5	QPSK	12	7	23.69	23.69	23.74	24.7
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	
5	16QAM	1	0	23.98	23.92	23.87	24.7
5	16QAM	1	12	23.98	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	23.7
5	16QAM	12	13	22.69	22.76	22.68	
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.49	22.84	23.7
5	64QAM	1	12	22.63	22.87	22.86	
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	22.7
5	64QAM	12	7	21.65	21.76	21.81	
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	
3	QPSK	1	8	24.62	24.62	24.60	25.7
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	
3	QPSK	8	4	23.69	23.64	22.71	24.7
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	
3	16QAM	1	0	24.00	24.02	23.95	24.7
3	16QAM	1	8	23.96	23.98	23.96	
3	16QAM	1	14	23.91	23.96	23.91	
3	16QAM	8	0	22.75	22.71	22.71	23.7
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	
3	16QAM	15	0	22.73	22.69	22.68	
3	64QAM	1	0	22.46	22.70	22.87	23.7
3	64QAM	1	8	22.67	22.86	22.90	
3	64QAM	1	14	22.66	22.84	22.81	
3	64QAM	8	0	21.50	21.75	21.71	22.7
3	64QAM	8	4	21.58	21.74	21.79	
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	
1.4	QPSK	1	3	24.60	24.61	24.57	25.7
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	24.7
1.4	QPSK	6	0	23.62	23.64	23.59	
1.4	16QAM	1	0	23.87	23.83	23.87	24.7
1.4	16QAM	1	3	23.89	23.96	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	
1.4	16QAM	3	0	23.64	23.58	23.62	24.7
1.4	16QAM	3	1	23.73	23.86	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	
1.4	16QAM	6	0	22.71	22.71	22.67	23.7
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	
1.4	64QAM	1	5	22.74	22.78	22.68	23.7
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	
1.4	64QAM	3	3	22.60	22.77	22.71	
1.4	64QAM	6	0	21.44	21.65	21.61	22.7



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.17		25.2
10	QPSK	1	25		24.10		
10	QPSK	1	49		24.14		
10	QPSK	25	0		23.17		24.2
10	QPSK	25	12		23.21		
10	QPSK	25	25		23.21		
10	QPSK	50	0		23.20		24.2
10	16QAM	1	0		23.42		
10	16QAM	1	25		23.45		
10	16QAM	1	49		23.42		23.2
10	16QAM	25	0		22.20		
10	16QAM	25	12		22.23		
10	16QAM	25	25		22.20		23.2
10	16QAM	50	0		22.23		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.40		23.2
10	64QAM	1	49		22.34		
10	64QAM	25	0		21.24		
10	64QAM	25	12		21.23		22.2
10	64QAM	25	25		21.25		
10	64QAM	50	0		21.26		
Channel				23205 23230 23255			Tune-up limit (dBm)
Frequency (MHz)				779.5 782 784.5			
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.18	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.23	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.28	21.25	
5	64QAM	25	0	20.98	21.26	21.23	



Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.59		25.7
10	QPSK	1	25		24.53		
10	QPSK	1	49		24.43		
10	QPSK	25	0		23.56		24.7
10	QPSK	25	12		23.56		
10	QPSK	25	25		23.59		
10	QPSK	50	0		23.53		24.7
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.92		
10	16QAM	1	49		23.83		23.7
10	16QAM	25	0		22.95		
10	16QAM	25	12		22.53		
10	16QAM	25	25		22.58		23.7
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.64		23.7
10	64QAM	1	49		22.72		
10	64QAM	25	0		21.39		
10	64QAM	25	12		21.38		22.7
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.44		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.58	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	24.7
5	QPSK	12	7	23.66	23.57	23.53	
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.58	23.53	23.50	24.7
5	16QAM	1	0	23.83	23.80	23.82	
5	16QAM	1	12	23.88	23.86	23.87	
5	16QAM	1	24	23.87	23.80	23.78	23.7
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.58	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.49	
5	64QAM	1	12	22.57	22.35	22.58	23.7
5	64QAM	1	24	22.32	22.41	22.77	
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.28	21.63	22.7
5	64QAM	12	13	21.31	21.27	21.61	
5	64QAM	25	0	21.34	21.26	21.51	



Band 17							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				706	710	711	
10	QPSK	1	0	24.60	24.56	24.55	
10	QPSK	1	25	24.61	24.62	24.59	25.7
10	QPSK	1	49	24.64	24.67	24.63	
10	QPSK	25	0	23.65	23.68	23.66	
10	QPSK	25	12	23.79	23.75	23.70	24.7
10	QPSK	25	25	23.81	23.82	23.80	
10	QPSK	50	0	23.69	23.72	23.69	
10	16QAM	1	0	23.93	23.95	23.94	
10	16QAM	1	25	24.03	24.06	24.01	24.7
10	16QAM	1	49	24.01	24.02	23.98	
10	16QAM	25	0	22.66	22.65	22.65	
10	16QAM	25	12	22.79	22.75	22.73	23.7
10	16QAM	25	25	22.78	22.77	22.78	
10	16QAM	50	0	22.69	22.69	22.67	
10	64QAM	1	0	22.64	22.70	22.79	
10	64QAM	1	25	22.72	22.67	22.63	23.7
10	64QAM	1	49	22.84	22.76	22.59	
10	64QAM	25	0	21.42	21.42	21.41	
10	64QAM	25	12	21.51	21.48	21.48	22.7
10	64QAM	25	25	21.61	21.67	21.66	
10	64QAM	50	0	21.53	21.64	21.67	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.57	24.58	24.58	
5	QPSK	1	12	24.66	24.65	24.63	25.7
5	QPSK	1	24	24.65	24.66	24.64	
5	QPSK	12	0	23.66	23.69	23.67	
5	QPSK	12	7	23.76	23.76	23.78	24.7
5	QPSK	12	13	23.74	23.77	23.73	
5	QPSK	25	0	23.74	23.71	23.75	
5	16QAM	1	0	23.81	23.83	23.91	24.7
5	16QAM	1	12	23.95	23.97	23.96	
5	16QAM	1	24	24.00	24.05	23.99	
5	16QAM	12	0	22.73	22.71	22.74	
5	16QAM	12	7	22.79	22.77	22.79	23.7
5	16QAM	12	13	22.77	22.80	22.77	
5	16QAM	25	0	22.74	22.75	22.77	
5	64QAM	1	0	22.26	22.42	22.71	
5	64QAM	1	12	22.62	22.61	22.61	23.7
5	64QAM	1	24	22.53	22.52	22.48	
5	64QAM	12	0	21.55	21.47	21.65	
5	64QAM	12	7	21.69	21.47	21.76	22.7
5	64QAM	12	13	21.66	21.50	21.70	
5	64QAM	25	0	21.52	21.44	21.69	22.7



Band 25							
AR 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1890	1890	1905	
20	QPSK	1	0	18.30	18.31	18.23	19.4
20	QPSK	1	49	18.21	18.26	18.23	
20	QPSK	1	99	18.24	18.20	18.21	
20	QPSK	50	0	18.35	18.32	18.28	
20	QPSK	50	24	18.40	18.43	18.35	19.4
20	QPSK	50	50	18.33	18.37	18.33	
20	QPSK	100	0	18.40	18.42	18.29	
20	16QAM	1	0	18.65	18.63	18.61	
20	16QAM	1	49	18.57	18.61	18.55	19.4
20	16QAM	1	99	18.46	18.55	18.48	
20	16QAM	50	0	18.36	18.39	18.33	
20	16QAM	50	24	18.40	18.45	18.31	19.4
20	16QAM	50	50	18.36	18.41	18.36	
20	16QAM	100	0	18.39	18.40	18.32	
20	64QAM	1	0	18.55	18.49	18.48	
20	64QAM	1	49	18.49	18.51	18.43	19.4
20	64QAM	1	99	18.44	18.43	18.47	
20	64QAM	50	0	18.38	18.39	18.32	
20	64QAM	50	24	18.42	18.46	18.33	19.4
20	64QAM	50	50	18.36	18.39	18.37	
20	64QAM	100	0	18.39	18.44	18.31	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	18.30	18.22	18.20	
15	QPSK	1	37	18.24	18.25	18.21	19.4
15	QPSK	1	74	18.22	18.23	18.21	
15	QPSK	36	0	18.29	18.25	18.25	
15	QPSK	36	20	18.30	18.39	18.28	19.4
15	QPSK	36	39	18.28	18.33	18.28	
15	QPSK	75	0	18.31	18.36	18.28	
15	16QAM	1	0	18.64	18.63	18.55	
15	16QAM	1	37	18.57	18.58	18.52	19.4
15	16QAM	1	74	18.37	18.45	18.43	
15	16QAM	36	0	18.32	18.31	18.27	
15	16QAM	36	20	18.34	18.43	18.31	19.4
15	16QAM	36	39	18.32	18.41	18.29	
15	16QAM	75	0	18.39	18.31	18.32	
15	64QAM	1	0	18.50	18.44	18.46	
15	64QAM	1	37	18.39	18.50	18.34	19.4
15	64QAM	1	74	18.42	18.40	18.44	
15	64QAM	36	0	18.31	18.29	18.22	
15	64QAM	36	20	18.33	18.45	18.24	19.4
15	64QAM	36	39	18.33	18.37	18.37	
15	64QAM	75	0	18.30	18.43	18.25	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1895	1880	1910	
10	QPSK	1	0	18.23	18.27	18.22	
10	QPSK	1	25	18.21	18.25	18.21	19.4
10	QPSK	1	49	18.24	18.23	18.23	
10	QPSK	25	0	18.31	18.27	18.24	
10	QPSK	25	12	18.30	18.36	18.28	19.4
10	QPSK	25	25	18.23	18.37	18.27	
10	QPSK	50	0	18.34	18.37	18.26	
10	16QAM	1	0	18.63	18.53	18.52	
10	16QAM	1	25	18.50	18.52	18.52	19.4
10	16QAM	1	49	18.36	18.50	18.43	
10	16QAM	25	0	18.33	18.35	18.27	
10	16QAM	25	12	18.40	18.44	18.21	19.4
10	16QAM	25	25	18.34	18.34	18.34	
10	16QAM	50	0	18.29	18.31	18.26	
10	64QAM	1	0	18.53	18.40	18.45	
10	64QAM	1	25	18.48	18.41	18.41	19.4
10	64QAM	1	49	18.34	18.35	18.38	
10	64QAM	25	0	18.31	18.34	18.24	
10	64QAM	25	12	18.40	18.45	18.32	19.4
10	64QAM	25	25	18.28	18.32	18.28	
10	64QAM	50	0	18.34	18.42	18.27	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.29	18.31	18.22	
5	QPSK	1	12	18.25	18.20	18.23	19.4
5	QPSK	1	24	18.24	18.22	18.24	
5	QPSK	12	0	18.32	18.25	18.23	
5	QPSK	12	7	18.30	18.37	18.25	19.4
5	QPSK	12	13	18.24	18.29	18.23	
5	QPSK	25	0	18.39	18.36	18.21	
5	16QAM	1	0	18.57	18.56	18.51	
5	16QAM	1	12	18.48	18.58	18.45	19.4
5	16QAM	1	24	18.37	18.55	18.44	
5	16QAM	12	0	18.30	18.39	18.26	
5	16QAM	12	7	18.32	18.43	18.24	19.4
5	16QAM	12	13	18.29	18.34	18.28	
5	16QAM	25	0	18.36	18.33	18.24	
5	64QAM	1	0	18.55	18.47	18.46	
5	64QAM	1	12	18.42	18.42	18.38	19.4
5	64QAM	1	24	18.41	18.40	18.43	
5	64QAM	12	0	18.30	18.33	18.28	
5	64QAM	12	7	18.41	18.39	18.26	19.4
5	64QAM	12	13	18.34	18.36	18.31	
5	64QAM	25	0	18.38	18.43	18.25	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.22	18.24	18.24	
3	QPSK	1	8	18.23	18.21	18.20	19.4
3	QPSK	1	14	18.21	18.22	18.21	
3	QPSK	8	0	18.35	18.28	18.28	
3	QPSK	8	4	18.30	18.39	18.33	19.4
3	QPSK	8	7	18.29	18.35	18.33	
3	QPSK	15	0	18.35	18.40	18.26	
3	16QAM	1	0	18.59	18.53	18.61	
3	16QAM	1	8	18.52	18.53	18.50	19.4
3	16QAM	1	14	18.36	18.51	18.39	
3	16QAM	8	0	18.32	18.34	18.32	
3	16QAM	8	4	18.31	18.43	18.29	19.4
3	16QAM	8	7	18.31	18.32	18.28	
3	16QAM	15	0	18.34	18.35	18.31	
3	64QAM	1	0	18.52	18.44	18.45	
3	64QAM	1	8	18.45	18.50	18.33	19.4
3	64QAM	1	14	18.41	18.37	18.47	
3	64QAM	8	0	18.36	18.30	18.31	
3	64QAM	8	4	18.34	18.42	18.32	19.4
3	64QAM	8	7	18.32	18.35	18.37	
3	64QAM	15	0	18.33	18.41	18.27	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1890	1914.3	
1.4	QPSK	1	0	18.30	18.26	18.24	
1.4	QPSK	1	3	18.23	18.25	18.21	19.4
1.4	QPSK	1	5	18.24	18.25	18.22	
1.4	QPSK	3	0	18.25	18.32	18.23	
1.4	QPSK	3	1	18.38	18.33	18.35	19.4
1.4	QPSK	3	3	18.32	18.28	18.33	
1.4	QPSK	6	0	18.37	18.42	18.24	
1.4	16QAM	1	0	18.55	18.55	18.56	
1.4	16QAM	1	3	18.49	18.57	18.55	19.4
1.4	16QAM	1	5	18.44	18.48	18.42	
1.4	16QAM	3	0	18.28	18.30	18.28	
1.4	16QAM	3	1	18.35	18.45	18.28	19.4
1.4	16QAM	3	3	18.34	18.36	18.29	
1.4	16QAM	6	0	18.29	18.34	18.22	
1.4	64QAM	1	0	18.54	18.41	18.40	19.4
1.4	64QAM	1	3	18.45	18.46	18.40	
1.4	64QAM	1	5	18.42	18.38	18.45	19.4
1.4	64QAM	3	0	18.37	18.28	18.30	
1.4	64QAM	3	1	18.33	18.36	18.33	
1.4	64QAM	3	3	18.29	18.36	18.34	19.4
1.4	64QAM	6	0	18.30	18.40	18.21	





Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.45	24.40	24.62	25.7
15	QPSK	1	37	24.34	24.39	24.41	
15	QPSK	1	74	24.35	24.39	24.31	
15	QPSK	36	0	23.51	23.51	23.54	24.7
15	QPSK	36	20	23.52	23.46	23.50	
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	24.7
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	
15	16QAM	1	74	23.64	23.68	23.59	23.7
15	16QAM	36	0	22.51	22.54	22.56	
15	16QAM	36	20	22.53	22.51	22.50	
15	16QAM	36	39	22.50	22.53	22.54	23.7
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	
15	64QAM	1	37	22.43	22.68	22.68	23.7
15	64QAM	1	74	22.57	22.61	21.80	
15	64QAM	36	0	21.21	21.58	21.60	
15	64QAM	36	20	21.40	21.53	21.54	22.7
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	25.7
10	QPSK	1	25	24.44	24.47	24.45	
10	QPSK	1	49	24.46	24.49	24.37	
10	QPSK	25	0	23.64	23.56	23.57	24.7
10	QPSK	25	12	23.58	23.54	23.57	
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.57	23.53	23.49	24.7
10	16QAM	1	0	23.92	23.87	23.87	
10	16QAM	1	25	23.85	23.87	23.86	
10	16QAM	1	49	23.86	23.90	23.75	23.7
10	16QAM	25	0	22.62	22.57	22.57	
10	16QAM	25	12	22.60	22.55	22.57	
10	16QAM	25	25	22.53	22.58	22.53	23.7
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.76	
10	64QAM	1	25	22.33	22.80	22.64	23.7
10	64QAM	1	49	22.74	22.81	21.99	
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.16	21.61	21.57	22.7
10	64QAM	25	25	21.31	21.58	20.89	
10	64QAM	50	0	21.25	21.57	21.35	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	25.7
5	QPSK	1	12	24.56	24.55	24.17	
5	QPSK	1	24	24.46	24.53	24.41	
5	QPSK	12	0	23.64	23.59	23.60	24.7
5	QPSK	12	7	23.63	23.63	23.33	
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	24.7
5	16QAM	1	0	23.95	23.85	23.86	
5	16QAM	1	12	23.84	23.87	23.49	
5	16QAM	1	24	23.77	23.88	23.69	23.7
5	16QAM	12	0	22.71	22.65	22.61	
5	16QAM	12	7	22.67	22.64	22.48	
5	16QAM	12	13	22.55	22.59	22.45	23.7
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	
5	64QAM	1	12	22.31	22.76	21.70	23.7
5	64QAM	1	24	22.14	22.75	21.71	
5	64QAM	12	0	21.38	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.58	20.73	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	25.7
3	QPSK	1	8	24.60	24.51	24.26	
3	QPSK	1	14	24.46	24.50	24.37	
3	QPSK	6	0	23.69	23.57	23.20	24.7
3	QPSK	6	4	23.68	23.63	23.32	
3	QPSK	6	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.58	23.29	24.7
3	16QAM	1	0	23.93	23.85	23.53	
3	16QAM	1	8	23.92	23.91	23.53	
3	16QAM	1	14	23.81	23.90	23.67	23.7
3	16QAM	6	0	22.74	22.63	22.36	
3	16QAM	6	4	22.75	22.67	22.45	
3	16QAM	6	7	22.65	22.66	22.54	23.7
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	
3	64QAM	1	8	22.49	22.84	21.84	23.7
3	64QAM	1	14	22.30	22.80	21.76	
3	64QAM	6	0	21.40	21.65	20.75	
3	64QAM	6	4	21.44	21.72	20.79	22.7
3	64QAM	6	7	21.37	21.65	20.72	
3	64QAM	15	0	21.36	21.60	20.62	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	25.7
1.4	QPSK	1	3	24.56	24.54	24.39	
1.4	QPSK	1	5	24.45	24.41	24.28	
1.4	QPSK	3	0	24.56	24.43	24.39	24.7
1.4	QPSK	3	1	24.58	24.46	24.40	
1.4	QPSK	3	3	24.53	24.46	24.36	
1.4	QPSK	6	0	23.60	23.53	23.42	24.7
1.4	16QAM	1	0	23.86	23.73	23.57	
1.4	16QAM	1	3	23.90	23.90	23.76	
1.4	16QAM	1	5	23.79	23.75	23.66	24.7
1.4	16QAM	3	0	23.62	23.52	23.44	
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	23.7
1.4	16QAM	6	0	22.66	22.58	22.52	
1.4	64QAM	1	0	22.39	22.67	21.78	
1.4	64QAM	1	3	22.45	22.75	21.75	23.7
1.4	64QAM	1	5	22.41	22.65	21.74	
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	22.7
1.4	64QAM	3	3	22.43	22.64	21.82	
1.4	64QAM	6	0	21.34	21.56	20.84	



Band 30							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2771.0	2771.0		
Frequency (MHz)				2310			
10	QPSK	1	0	20.72			21.5
10	QPSK	1	25	20.49			
10	QPSK	1	49	20.50			
10	QPSK	25	0	20.56			
10	QPSK	25	12	20.61			21.5
10	QPSK	25	25	20.70			
10	QPSK	50	0	20.59			
10	16QAM	1	0	20.87			21.5
10	16QAM	1	25	20.86			
10	16QAM	1	49	20.88			
10	16QAM	25	0	20.53			21.5
10	16QAM	25	12	20.56			
10	16QAM	25	25	20.68			
10	16QAM	50	0	20.56			
10	64QAM	1	0	20.74			21.5
10	64QAM	1	25	20.80			
10	64QAM	1	49	20.77			
10	64QAM	25	0	19.75			20.5
10	64QAM	25	12	19.81			
10	64QAM	25	25	19.89			
10	64QAM	50	0	19.78			
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.44	20.48	20.45	21.5
5	QPSK	1	12	20.53	20.62	20.56	
5	QPSK	1	24	20.60	20.60	20.52	
5	QPSK	12	0	20.63	20.56	20.59	
5	QPSK	12	7	20.66	20.67	20.62	21.5
5	QPSK	12	13	20.65	20.66	20.59	
5	QPSK	25	0	20.66	20.54	20.55	
5	16QAM	1	0	20.77	20.76	20.76	21.5
5	16QAM	1	12	20.67	20.65	20.66	
5	16QAM	1	24	20.81	20.82	20.85	
5	16QAM	12	0	20.60	20.53	20.59	
5	16QAM	12	7	20.64	20.65	20.65	21.5
5	16QAM	12	13	20.65	20.64	20.64	
5	16QAM	25	0	20.64	20.57	20.63	
5	64QAM	1	0	20.70	20.71	20.72	21.5
5	64QAM	1	12	20.73	20.75	20.74	
5	64QAM	1	24	20.82	20.83	20.84	
5	64QAM	12	0	19.84	19.80	19.83	
5	64QAM	12	7	19.89	19.90	19.87	20.5
5	64QAM	12	13	19.90	19.89	19.87	
5	64QAM	25	0	19.84	19.77	19.81	



Band 66							
AR 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132332	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.83	18.90	18.88	20
20	QPSK	1	49	18.80	18.82	18.86	
20	QPSK	1	99	18.82	18.88	18.82	
20	QPSK	50	0	18.80	18.81	18.80	20
20	QPSK	50	24	18.80	18.82	18.81	
20	QPSK	50	50	18.81	18.83	18.81	
20	QPSK	100	0	18.86	18.84	18.94	20
20	16QAM	1	0	19.13	19.15	19.23	
20	16QAM	1	49	19.04	19.08	19.11	
20	16QAM	1	99	19.19	19.09	19.08	20
20	16QAM	50	0	18.87	18.91	18.98	
20	16QAM	50	24	18.94	18.90	18.93	
20	16QAM	50	50	18.91	18.94	19.00	20
20	16QAM	100	0	18.80	18.88	18.96	
20	64QAM	1	0	19.04	19.05	19.03	
20	64QAM	1	49	18.92	18.91	18.87	20
20	64QAM	1	99	19.06	19.05	18.97	
20	64QAM	50	0	18.89	18.90	19.01	
20	64QAM	50	24	18.95	18.90	18.94	20
20	64QAM	50	50	18.92	18.95	18.98	
20	64QAM	100	0	18.93	18.88	18.95	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.80	18.83	18.88	20
15	QPSK	1	37	18.80	18.80	18.80	
15	QPSK	1	74	18.80	18.82	18.80	
15	QPSK	36	0	18.81	18.90	18.94	20
15	QPSK	36	20	18.86	18.83	18.93	
15	QPSK	36	39	18.88	18.91	18.99	
15	QPSK	75	0	18.89	18.86	18.94	20
15	16QAM	1	0	19.12	19.15	19.17	
15	16QAM	1	37	19.03	19.06	19.12	
15	16QAM	1	74	19.12	19.13	19.10	20
15	16QAM	36	0	18.86	18.90	18.95	
15	16QAM	36	20	18.92	18.86	18.90	
15	16QAM	36	39	18.90	18.95	18.98	20
15	16QAM	75	0	18.94	18.87	18.94	
15	64QAM	1	0	19.04	18.96	19.04	
15	64QAM	1	37	18.96	19.00	19.04	20
15	64QAM	1	74	19.02	19.04	19.02	
15	64QAM	36	0	18.87	18.94	18.97	
15	64QAM	36	20	18.91	18.89	18.93	20
15	64QAM	36	39	18.91	18.97	19.00	
15	64QAM	75	0	18.92	18.89	18.93	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.81	18.83	18.88	20
10	QPSK	1	25	18.80	18.83	18.86	
10	QPSK	1	49	18.80	18.82	18.88	
10	QPSK	25	0	18.82	18.86	18.92	20
10	QPSK	25	12	18.90	18.89	18.94	
10	QPSK	25	25	18.86	18.95	18.98	
10	QPSK	50	0	18.89	18.90	18.96	20
10	16QAM	1	0	19.21	19.22	19.17	
10	16QAM	1	25	19.12	19.20	19.14	
10	16QAM	1	49	19.12	19.17	19.15	20
10	16QAM	25	0	18.91	18.89	18.96	
10	16QAM	25	12	18.94	18.91	18.99	
10	16QAM	25	25	18.89	18.96	19.00	20
10	16QAM	50	0	18.92	18.89	18.95	
10	64QAM	1	0	19.04	19.07	19.11	
10	64QAM	1	25	19.05	19.11	19.18	20
10	64QAM	1	49	18.99	18.99	19.20	
10	64QAM	25	0	18.92	18.92	19.00	
10	64QAM	25	12	18.95	18.93	19.03	20
10	64QAM	25	25	18.90	18.96	19.08	
10	64QAM	50	0	18.94	18.92	19.02	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.80	18.80	18.87	20
5	QPSK	1	12	18.87	18.80	18.95	
5	QPSK	1	24	18.80	18.84	18.91	
5	QPSK	12	0	18.92	18.88	19.00	20
5	QPSK	12	7	18.93	18.96	19.06	
5	QPSK	12	13	18.92	18.95	19.02	
5	QPSK	25	0	18.91	18.87	18.99	20
5	16QAM	1	0	19.14	19.11	19.16	
5	16QAM	1	12	19.18	19.14	19.19	
5	16QAM	1	24	19.10	19.19	19.20	20
5	16QAM	12	0	18.93	18.93	19.06	
5	16QAM	12	7	18.96	19.02	19.08	
5	16QAM	12	13	18.95	18.99	19.02	20
5	16QAM	25	0	18.92	18.92	19.03	
5	64QAM	1	0	19.10	19.04	19.14	
5	64QAM	1	12	19.11	19.11	19.12	20
5	64QAM	1	24	19.07	19.09	19.09	
5	64QAM	12	0	18.96	18.97	19.12	
5	64QAM	12	7	18.97	19.02	19.11	20
5	64QAM	12	13	18.98	18.96	19.10	
5	64QAM	25	0	18.91	18.80	19.05	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.82	18.80	18.82	20
3	QPSK	1	8	18.91	18.86	18.86	
3	QPSK	1	14	18.86	18.80	18.84	
3	QPSK	8	0	18.89	18.83	18.92	20
3	QPSK	8	4	18.96	18.90	18.93	
3	QPSK	8	7	18.93	18.89	18.90	
3	QPSK	15	0	18.91	18.81	18.91	20
3	16QAM	1	0	19.07	19.06	19.16	
3	16QAM	1	8	19.15	19.11	19.16	
3	16QAM	1	14	19.15	19.09	19.13	20
3	16QAM	8	0	18.90	18.85	18.96	
3	16QAM	8	4	18.99	18.94	18.98	
3	16QAM	8	7	18.99	18.92	18.93	20
3	16QAM	15	0	18.96	18.83	18.93	
3	64QAM	1	0	19.05	18.97	19.08	
3	64QAM	1	8	19.15	19.13	19.09	20
3	64QAM	1	14	19.07	19.06	19.00	
3	64QAM	8	0	18.97	18.89	18.96	
3	64QAM	8	4	19.04	18.99	19.01	20
3	64QAM	8	7	19.00	18.95	18.97	
3	64QAM	15	0	18.97	18.86	18.95	
Channel				131979	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1776.3	
1.4	QPSK	1	0	18.81	18.87	18.91	20
1.4	QPSK	1	3	18.85	18.91	18.96	
1.4	QPSK	1	5	18.80	18.83	18.89	
1.4	QPSK	3	0	18.84	18.90	18.92	20
1.4	QPSK	3	1	18.89	18.94	18.96	
1.4	QPSK	3	3	18.85	18.90	18.93	
1.4	QPSK	6	0	18.91	18.96	19.00	20
1.4	16QAM	1	0	19.18	19.20	19.22	
1.4	16QAM	1	3	19.22	19.08	19.11	
1.4	16QAM	1	5	19.15	19.17	19.22	20
1.4	16QAM	3	0	18.94	18.97	18.99	
1.4	16QAM	3	1	19.02	19.01	19.06	
1.4	16QAM	3	3	18.92	18.97	19.01	20
1.4	16QAM	6	0	18.96	19.04	19.10	
1.4	64QAM	1	0	19.11	19.09	19.17	
1.4	64QAM	1	3	19.14	19.15	19.22	20
1.4	64QAM	1	5	19.06	19.10	19.16	
1.4	64QAM	3	0	19.03	19.06	19.15	
1.4	64QAM	3	1	19.06	19.13	19.20	20
1.4	64QAM	3	3	19.02	19.07	19.14	
1.4	64QAM	6	0	18.91	18.97	19.06	



Band 71						
Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	693
20	QPSK	1	0	24.67	24.60	24.58
20	QPSK	1	49	24.58	24.59	24.56
20	QPSK	1	99	24.61	24.56	24.53
20	QPSK	50	0	23.69	23.68	23.64
20	QPSK	50	24	23.74	23.67	23.63
20	QPSK	50	50	23.75	23.69	23.68
20	QPSK	100	0	23.72	23.66	23.71
20	16QAM	1	0	23.99	23.90	23.92
20	16QAM	1	49	23.94	23.93	23.91
20	16QAM	1	99	23.97	23.91	23.93
20	16QAM	50	0	22.69	22.68	22.67
20	16QAM	50	24	22.75	22.68	22.66
20	16QAM	50	50	22.75	22.73	22.68
20	16QAM	100	0	22.72	22.65	22.70
20	64QAM	1	0	21.88	22.69	22.77
20	64QAM	1	49	22.51	22.82	22.02
20	64QAM	1	99	22.87	22.68	22.55
20	64QAM	50	0	20.78	21.69	21.35
20	64QAM	50	24	21.19	21.42	21.50
20	64QAM	50	50	21.70	21.49	21.63
20	64QAM	100	0	21.39	21.66	21.66
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	24.65	24.60	24.56
15	QPSK	1	37	24.65	24.58	24.52
15	QPSK	1	74	24.58	24.62	24.55
15	QPSK	36	0	23.67	23.69	23.61
15	QPSK	36	20	23.75	23.67	23.71
15	QPSK	36	39	23.65	23.71	23.65
15	QPSK	75	0	23.73	23.65	23.60
15	16QAM	1	0	24.04	23.93	23.89
15	16QAM	1	37	23.69	23.98	23.91
15	16QAM	1	74	23.91	23.91	23.90
15	16QAM	36	0	22.63	22.67	22.63
15	16QAM	36	20	22.72	22.69	22.71
15	16QAM	36	39	22.69	22.71	22.68
15	16QAM	75	0	22.75	22.67	22.62
15	64QAM	1	0	21.78	22.28	22.61
15	64QAM	1	37	21.70	22.87	22.80
15	64QAM	1	74	22.85	22.43	22.62
15	64QAM	36	0	20.76	21.71	21.42
15	64QAM	36	20	20.88	21.68	21.75
15	64QAM	36	39	21.38	21.40	21.71
15	64QAM	75	0	21.18	21.65	21.52
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	24.57	24.56	24.57
10	QPSK	1	25	24.53	24.56	24.57
10	QPSK	1	49	24.62	24.64	24.53
10	QPSK	25	0	23.73	23.62	23.60
10	QPSK	25	12	23.69	23.75	23.62
10	QPSK	25	25	23.63	23.70	23.65
10	QPSK	50	0	23.73	23.74	23.61
10	16QAM	1	0	24.03	23.97	23.96
10	16QAM	1	25	23.89	23.97	23.94
10	16QAM	1	49	23.96	24.00	23.86
10	16QAM	25	0	22.59	22.65	22.60
10	16QAM	25	12	22.52	22.74	22.63
10	16QAM	25	25	22.54	22.71	22.65
10	16QAM	50	0	22.73	22.73	22.59
10	64QAM	1	0	21.71	22.19	22.73
10	64QAM	1	25	21.81	22.89	22.80
10	64QAM	1	49	22.02	22.82	22.25
10	64QAM	25	0	20.70	21.54	21.63
10	64QAM	25	12	20.65	21.76	21.61
10	64QAM	25	25	20.65	21.66	21.37
10	64QAM	50	0	20.70	21.56	21.58
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	24.33	24.63	24.62
5	QPSK	1	12	24.62	24.59	24.59
5	QPSK	1	24	24.57	24.62	24.51
5	QPSK	12	0	23.49	23.69	23.64
5	QPSK	12	7	23.63	23.70	23.68
5	QPSK	12	13	23.60	23.88	23.61
5	QPSK	25	0	23.60	23.69	23.59
5	16QAM	1	0	23.66	23.99	23.92
5	16QAM	1	12	23.86	23.94	23.87
5	16QAM	1	24	23.80	23.94	23.83
5	16QAM	12	0	22.42	22.74	22.69
5	16QAM	12	7	22.60	22.75	22.70
5	16QAM	12	13	22.61	22.70	22.63
5	16QAM	25	0	22.52	22.72	22.63
5	64QAM	1	0	21.83	21.95	22.65
5	64QAM	1	12	21.71	22.83	22.44
5	64QAM	1	24	21.72	22.88	21.98
5	64QAM	12	0	20.70	21.46	21.42
5	64QAM	12	7	20.79	21.76	21.57
5	64QAM	12	13	20.60	21.72	21.38
5	64QAM	25	0	20.77	21.50	21.21



Band 2							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./1800	Power Middle Ch./1800	Power High Ch./1900	Tune-up limit (dbm)
Channel				1800	1800	1900	
Frequency (MHz)				1800	1800	1900	
20	QPSK	1	0	24.53	24.68	24.96	
20	QPSK	1	49	24.53	24.72	24.75	25.7
20	QPSK	1	99	24.52	24.71	24.80	
20	QPSK	50	0	23.61	23.75	23.86	
20	QPSK	50	24	23.73	23.80	23.89	24.7
20	QPSK	50	50	23.71	23.88	23.97	
20	QPSK	100	0	23.72	23.77	23.87	
20	16QAM	1	0	23.88	24.03	24.14	
20	16QAM	1	49	23.87	24.06	24.07	24.7
20	16QAM	1	99	23.83	24.02	24.16	
20	16QAM	50	0	22.94	22.77	22.89	
20	16QAM	50	24	22.74	22.80	22.88	23.7
20	16QAM	50	50	22.73	22.89	22.97	
20	16QAM	100	0	22.72	22.75	22.89	
20	64QAM	1	0	22.72	22.88	23.02	
20	64QAM	1	49	22.78	22.91	22.11	23.7
20	64QAM	1	99	22.86	22.94	22.83	
20	64QAM	50	0	21.65	21.76	21.34	
20	64QAM	50	24	21.76	21.84	21.35	22.7
20	64QAM	50	50	21.60	21.91	21.81	
20	64QAM	100	0	21.70	21.81	21.42	
Channel				1867.5	1890	1912.5	Tune-up limit (dbm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.54	24.73	24.81	
15	QPSK	1	37	24.56	24.72	24.81	25.7
15	QPSK	1	74	24.59	24.72	24.85	
15	QPSK	36	0	23.64	23.75	23.85	
15	QPSK	36	20	23.74	23.80	23.98	24.7
15	QPSK	36	39	23.72	23.90	23.99	
15	QPSK	75	0	23.71	23.79	23.91	
15	16QAM	1	0	23.80	24.04	24.13	
15	16QAM	1	37	23.88	24.02	24.12	24.7
15	16QAM	1	74	23.88	24.05	24.19	
15	16QAM	36	0	22.62	22.77	22.86	
15	16QAM	36	20	22.71	22.80	22.96	23.7
15	16QAM	36	39	22.72	22.90	22.99	
15	16QAM	75	0	22.72	22.81	22.91	
15	64QAM	1	0	22.74	22.87	22.37	
15	64QAM	1	37	22.78	22.92	22.37	23.7
15	64QAM	1	74	22.63	22.97	22.76	
15	64QAM	36	0	21.67	21.81	21.25	
15	64QAM	36	20	21.77	21.85	21.57	22.7
15	64QAM	36	39	21.68	21.94	21.75	
15	64QAM	75	0	21.63	21.83	21.44	
Channel				1895.0	1900	1915.0	Tune-up limit (dbm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.53	24.68	24.83	
10	QPSK	1	25	24.54	24.73	24.84	25.7
10	QPSK	1	49	24.58	24.76	24.85	
10	QPSK	25	0	23.66	23.76	23.86	
10	QPSK	25	12	23.72	23.81	23.91	24.7
10	QPSK	25	25	23.71	23.90	24.02	
10	QPSK	50	0	23.69	23.80	23.93	
10	16QAM	1	0	23.92	24.09	24.18	
10	16QAM	1	25	23.93	24.12	24.27	24.7
10	16QAM	1	49	23.94	24.12	24.24	
10	16QAM	25	0	22.94	22.75	22.85	
10	16QAM	25	12	22.71	22.82	22.94	23.7
10	16QAM	25	25	22.72	22.87	23.02	
10	16QAM	50	0	22.69	22.80	22.92	
10	64QAM	1	0	22.84	22.95	22.38	
10	64QAM	1	25	22.85	23.07	22.86	23.7
10	64QAM	1	49	22.84	23.07	22.84	
10	64QAM	25	0	21.69	21.78	21.47	
10	64QAM	25	12	21.76	21.85	21.75	22.7
10	64QAM	25	25	21.74	21.92	21.76	
10	64QAM	50	0	21.71	21.82	21.56	
Channel				1862.5	1890	1917.5	Tune-up limit (dbm)
Frequency (MHz)				1822.5	1880	1907.5	
5	QPSK	1	0	24.55	24.66	24.86	
5	QPSK	1	12	24.62	24.80	24.82	25.7
5	QPSK	1	24	24.60	24.81	24.85	
5	QPSK	12	0	23.68	23.77	23.98	
5	QPSK	12	7	23.70	23.90	24.00	24.7
5	QPSK	12	13	23.68	23.90	24.03	
5	QPSK	25	0	23.67	23.80	23.98	
5	16QAM	1	0	23.86	23.97	24.28	
5	16QAM	1	12	23.90	24.09	24.24	24.7
5	16QAM	1	24	23.94	24.12	24.28	
5	16QAM	12	0	22.68	22.82	23.00	
5	16QAM	12	7	22.71	22.94	23.02	23.7
5	16QAM	12	13	22.72	22.88	23.03	
5	16QAM	25	0	22.71	22.81	23.04	
5	64QAM	1	0	22.87	22.98	22.73	
5	64QAM	1	12	22.80	23.03	22.88	23.7
5	64QAM	1	24	22.87	23.06	22.75	
5	64QAM	12	0	21.73	21.85	21.81	
5	64QAM	12	7	21.79	21.95	21.84	22.7
5	64QAM	12	13	21.75	21.92	21.72	
5	64QAM	25	0	21.68	21.82	21.84	
Channel				1861.5	1890	1918.5	Tune-up limit (dbm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.55	24.69	24.88	
3	QPSK	1	8	24.64	24.83	24.95	25.7
3	QPSK	1	14	24.58	24.79	24.93	
3	QPSK	8	0	23.67	23.80	23.97	
3	QPSK	8	4	23.70	23.90	24.01	24.7
3	QPSK	8	7	23.64	23.87	23.99	
3	QPSK	15	0	23.64	23.80	23.99	
3	16QAM	1	0	23.83	23.99	24.18	
3	16QAM	1	8	23.96	24.14	24.25	24.7
3	16QAM	1	14	23.94	24.10	24.25	
3	16QAM	8	0	22.72	22.86	23.05	
3	16QAM	8	4	22.77	22.96	23.06	23.7
3	16QAM	8	7	22.71	22.95	23.06	
3	16QAM	15	0	22.69	22.82	22.99	
3	64QAM	1	0	22.81	23.01	22.83	
3	64QAM	1	8	22.94	23.12	22.86	23.7
3	64QAM	1	14	22.84	23.06	22.70	
3	64QAM	8	0	21.73	21.83	21.74	
3	64QAM	8	4	21.75	21.95	21.76	22.7
3	64QAM	8	7	21.71	21.93	21.68	
3	64QAM	15	0	21.71	21.81	21.66	
Channel				1850.7	1890	1919.3	Tune-up limit (dbm)
Frequency (MHz)				1809.7	1820	1902.3	
1.4	QPSK	1	0	24.46	24.67	24.82	
1.4	QPSK	1	3	24.54	24.74	24.90	25.7
1.4	QPSK	1	5	24.47	24.69	24.84	
1.4	QPSK	3	0	24.54	24.71	24.84	
1.4	QPSK	3	1	24.58	24.77	24.88	
1.4	QPSK	3	3	24.52	24.73	24.85	
1.4	QPSK	6	0	23.58	23.80	23.99	24.7
1.4	16QAM	1	0	23.82	23.99	24.18	
1.4	16QAM	1	3	23.87	24.13	24.23	24.7
1.4	16QAM	1	5	23.82	24.01	24.17	
1.4	16QAM	3	0	23.60	23.79	23.91	
1.4	16QAM	3	1	23.66	23.85	23.97	
1.4	16QAM	3	3	23.59	23.79	23.88	23.7
1.4	16QAM	6	0	22.65	22.84	22.97	
1.4	64QAM	1	0	22.80	22.92	22.63	
1.4	64QAM	1	3	22.84	23.05	22.68	23.7
1.4	64QAM	1	5	22.77	22.96	22.58	
1.4	64QAM	3	0	22.71	22.93	22.63	
1.4	64QAM	3	1	22.79	22.99	22.69	
1.4	64QAM	3	3	22.74	22.94	22.56	22.7
1.4	64QAM	6	0	21.61	21.82	21.53	



Band 4							
Part 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	24.42	24.50	24.45	25.7
20	QPSK	1	49	24.32	24.32	24.33	
20	QPSK	1	99	24.31	24.35	24.31	
20	QPSK	50	0	23.47	23.50	23.54	24.7
20	QPSK	50	24	23.51	23.55	23.54	
20	QPSK	50	50	23.46	23.43	23.48	
20	QPSK	100	0	23.50	23.60	23.41	24.7
20	16QAM	1	0	23.78	23.83	23.76	
20	16QAM	1	49	23.66	23.64	23.66	
20	16QAM	1	99	23.69	23.66	23.60	23.7
20	16QAM	50	0	22.49	22.54	22.55	
20	16QAM	50	24	22.52	22.55	22.53	
20	16QAM	50	50	22.46	22.45	22.48	23.7
20	16QAM	100	0	22.49	22.56	22.42	
20	64QAM	1	0	22.24	22.68	22.19	
20	64QAM	1	49	22.53	22.52	22.56	23.7
20	64QAM	1	99	22.58	22.03	22.57	
20	64QAM	50	0	21.50	21.54	21.24	
20	64QAM	50	24	21.54	21.45	21.56	22.7
20	64QAM	50	50	21.47	21.07	21.48	
20	64QAM	100	0	21.54	21.56	21.48	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	24.44	24.48	24.49	25.7
15	QPSK	1	37	24.29	24.32	24.34	
15	QPSK	1	74	24.31	24.31	24.30	
15	QPSK	36	0	23.55	23.55	23.51	24.7
15	QPSK	36	20	23.49	23.52	23.53	
15	QPSK	36	39	23.44	23.46	23.45	
15	QPSK	75	0	23.49	23.54	23.45	24.7
15	16QAM	1	0	23.73	23.80	23.81	
15	16QAM	1	37	23.59	23.63	23.68	
15	16QAM	1	74	23.63	23.62	23.61	23.7
15	16QAM	36	0	22.53	22.50	22.51	
15	16QAM	36	20	22.47	22.50	22.52	
15	16QAM	36	39	22.45	22.44	22.45	23.7
15	16QAM	75	0	22.49	22.54	22.45	
15	64QAM	1	0	22.25	22.67	22.48	
15	64QAM	1	37	22.54	22.34	22.63	23.7
15	64QAM	1	74	22.53	22.12	22.56	
15	64QAM	36	0	21.55	21.58	21.52	
15	64QAM	36	20	21.46	21.41	21.53	22.7
15	64QAM	36	39	21.45	21.06	21.47	
15	64QAM	75	0	21.49	21.46	21.44	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.39	24.42	24.45	25.7
10	QPSK	1	25	24.35	24.42	24.42	
10	QPSK	1	49	24.36	24.38	24.40	
10	QPSK	25	0	23.45	23.47	23.46	24.7
10	QPSK	25	12	23.50	23.57	23.48	
10	QPSK	25	25	23.52	23.57	23.56	
10	QPSK	50	0	23.53	23.55	23.50	24.7
10	16QAM	1	0	23.73	23.79	23.81	
10	16QAM	1	25	23.73	23.82	23.81	
10	16QAM	1	49	23.75	23.75	23.81	23.7
10	16QAM	25	0	22.47	22.45	22.46	
10	16QAM	25	12	22.51	22.57	22.52	
10	16QAM	25	25	22.49	22.54	22.57	23.7
10	16QAM	50	0	22.50	22.56	22.48	
10	64QAM	1	0	22.08	22.84	22.89	
10	64QAM	1	25	22.65	22.44	22.71	23.7
10	64QAM	1	49	22.67	22.01	22.71	
10	64QAM	25	0	21.44	21.50	21.52	
10	64QAM	25	12	21.51	21.35	21.52	22.7
10	64QAM	25	25	21.51	21.03	21.58	
10	64QAM	50	0	21.53	21.32	21.54	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.37	24.38	24.40	25.7
5	QPSK	1	12	24.46	24.46	24.48	
5	QPSK	1	24	24.43	24.48	24.46	
5	QPSK	12	0	23.48	23.44	23.53	24.7
5	QPSK	12	7	23.52	23.54	23.54	
5	QPSK	12	13	23.51	23.52	23.50	
5	QPSK	25	0	23.46	23.53	23.50	24.7
5	16QAM	1	0	23.70	23.78	23.79	
5	16QAM	1	12	23.74	23.72	23.79	
5	16QAM	1	24	23.77	23.78	23.82	23.7
5	16QAM	12	0	22.50	22.46	22.57	
5	16QAM	12	7	22.53	22.57	22.56	
5	16QAM	12	13	22.54	22.57	22.55	23.7
5	16QAM	25	0	22.51	22.53	22.55	
5	64QAM	1	0	22.06	22.62	22.67	
5	64QAM	1	12	22.43	22.33	22.71	23.7
5	64QAM	1	24	22.74	22.09	22.71	
5	64QAM	12	0	21.11	21.51	21.57	
5	64QAM	12	7	21.40	21.31	21.64	22.7
5	64QAM	12	13	21.55	21.06	21.63	
5	64QAM	25	0	21.35	21.27	21.54	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.38	24.38	24.41	25.7
3	QPSK	1	8	24.46	24.48	24.48	
3	QPSK	1	14	24.40	24.43	24.43	
3	QPSK	8	0	23.46	23.44	23.51	24.7
3	QPSK	8	4	23.52	23.52	23.52	
3	QPSK	8	7	23.46	23.51	23.51	
3	QPSK	15	0	23.46	23.55	23.50	24.7
3	16QAM	1	0	23.70	23.75	23.76	
3	16QAM	1	8	23.79	23.83	23.81	
3	16QAM	1	14	23.74	23.75	23.78	23.7
3	16QAM	8	0	22.52	22.49	22.56	
3	16QAM	8	4	22.59	22.62	22.62	
3	16QAM	8	7	22.58	22.58	22.57	23.7
3	16QAM	15	0	22.50	22.56	22.57	
3	64QAM	1	0	22.01	22.49	22.89	
3	64QAM	1	8	22.30	22.39	22.75	23.7
3	64QAM	1	14	22.40	22.19	22.71	
3	64QAM	8	0	20.99	21.39	21.60	
3	64QAM	8	4	21.16	21.32	21.61	22.7
3	64QAM	8	7	21.27	21.20	21.58	
3	64QAM	15	0	21.14	21.29	21.56	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.31	24.33	24.33	25.7
1.4	QPSK	1	3	24.37	24.39	24.42	
1.4	QPSK	1	5	24.30	24.35	24.37	
1.4	QPSK	3	0	24.31	24.35	24.41	24.7
1.4	QPSK	3	1	24.39	24.41	24.43	
1.4	QPSK	3	3	24.35	24.37	24.38	
1.4	QPSK	6	0	23.39	23.42	23.44	24.7
1.4	16QAM	1	0	23.66	23.65	23.69	
1.4	16QAM	1	3	23.71	23.72	23.75	
1.4	16QAM	1	5	23.64	23.65	23.66	24.7
1.4	16QAM	3	0	23.43	23.44	23.47	
1.4	16QAM	3	1	23.49	23.49	23.55	
1.4	16QAM	3	3	23.41	23.45	23.44	23.7
1.4	16QAM	6	0	22.44	22.50	22.52	
1.4	64QAM	1	0	21.95	22.35	22.63	
1.4	64QAM	1	3	22.08	22.32	22.89	23.7
1.4	64QAM	1	5	22.09	22.21	22.63	
1.4	64QAM	3	0	21.99	22.35	22.57	
1.4	64QAM	3	1	22.17	22.46	22.64	23.7
1.4	64QAM	3	3	22.11	22.27	22.61	
1.4	64QAM	6	0	20.96	21.20	21.45	



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	20505	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.76	24.62	24.62	25.7
10	QPSK	1	25	24.58	24.62	24.62	
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.68	23.73	23.72	24.7
10	QPSK	25	12	23.75	23.74	23.72	
10	QPSK	25	25	23.72	23.76	23.75	
10	QPSK	50	0	23.75	23.70	23.73	24.7
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	25	23.98	24.05	24.00	
10	16QAM	1	49	24.00	24.04	23.60	23.7
10	16QAM	25	0	22.96	22.74	22.71	
10	16QAM	25	12	22.78	22.72	22.75	
10	16QAM	25	25	22.72	22.76	22.73	23.7
10	16QAM	50	0	22.77	22.74	22.75	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	25	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.48	21.77	
10	64QAM	25	0	21.67	21.76	21.76	
10	64QAM	25	12	21.80	21.77	21.68	22.7
10	64QAM	25	25	21.76	21.64	21.09	
10	64QAM	50	0	21.79	21.74	21.27	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.75	24.69	24.67	25.7
5	QPSK	1	12	24.65	24.72	24.40	
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	24.7
5	QPSK	12	7	23.73	23.76	23.42	
5	QPSK	12	13	23.70	23.74	23.13	
5	QPSK	25	0	23.74	23.70	23.60	24.7
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	
5	16QAM	1	24	23.96	23.99	23.34	23.7
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.61	
5	16QAM	12	13	22.74	22.75	22.31	23.7
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.94	22.62	
5	64QAM	1	12	22.90	22.85	21.90	23.7
5	64QAM	1	24	22.89	22.62	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	22.7
5	64QAM	12	13	21.75	21.66	20.71	
5	64QAM	25	0	21.73	21.76	20.81	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.52	25.7
3	QPSK	1	8	24.67	24.70	24.11	
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	24.7
3	QPSK	8	4	23.68	23.74	23.21	
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.26	24.7
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	
3	16QAM	1	14	23.89	23.92	23.42	23.7
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	
3	16QAM	8	7	22.75	22.78	22.29	23.7
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.65	22.90	21.96	
3	64QAM	1	8	22.66	22.97	21.74	23.7
3	64QAM	1	14	22.64	22.62	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.82	20.72	22.7
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.56	24.53	23.98	25.7
1.4	QPSK	1	3	24.59	24.61	24.06	
1.4	QPSK	1	5	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	24.7
1.4	QPSK	3	1	24.62	24.57	24.05	
1.4	QPSK	3	3	24.60	24.58	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.86	23.26	
1.4	16QAM	1	3	23.93	23.95	23.39	
1.4	16QAM	1	5	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	23.7
1.4	16QAM	6	0	22.71	22.74	22.26	
1.4	64QAM	1	0	22.64	22.60	21.77	
1.4	64QAM	1	3	22.66	22.68	21.78	23.7
1.4	64QAM	1	5	22.62	22.79	21.73	
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	23.7
1.4	64QAM	3	3	22.64	22.76	21.77	
1.4	64QAM	6	0	21.60	21.69	20.74	



Band 7							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.69	24.76	24.80	25.7
20	QPSK	1	49	24.74	24.81	24.78	
20	QPSK	1	99	24.84	24.83	24.83	
20	QPSK	50	0	23.50	23.87	23.89	24.7
20	QPSK	50	24	23.92	23.91	23.91	
20	QPSK	50	50	23.94	23.92	23.92	
20	QPSK	100	0	23.91	23.89	23.91	
20	16QAM	1	0	24.01	24.09	24.15	24.7
20	16QAM	1	49	24.12	24.17	24.15	
20	16QAM	1	99	24.15	24.21	24.14	
20	16QAM	50	0	22.81	22.87	22.91	23.7
20	16QAM	50	24	22.93	22.92	22.94	
20	16QAM	50	50	22.96	23.02	22.98	
20	16QAM	100	0	22.92	22.90	22.92	
20	64QAM	1	0	22.89	22.96	22.99	23.7
20	64QAM	1	49	22.98	23.07	22.88	
20	64QAM	1	99	23.07	23.13	22.92	
20	64QAM	50	0	21.84	21.92	21.92	22.7
20	64QAM	50	24	21.95	21.95	21.71	
20	64QAM	50	50	21.98	22.04	21.58	
20	64QAM	100	0	21.94	21.92	21.71	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.67	24.77	24.82	25.7
15	QPSK	1	37	24.72	24.81	24.81	
15	QPSK	1	74	24.80	24.80	24.83	
15	QPSK	36	0	23.77	23.87	23.90	24.7
15	QPSK	36	20	23.93	23.91	23.91	
15	QPSK	36	39	23.94	24.00	23.95	
15	QPSK	75	0	23.88	23.91	23.88	
15	16QAM	1	0	24.00	24.11	24.14	24.7
15	16QAM	1	37	24.05	24.14	24.15	
15	16QAM	1	74	24.14	24.24	24.13	
15	16QAM	36	0	22.80	22.89	22.90	23.7
15	16QAM	36	20	22.92	22.92	22.90	
15	16QAM	36	39	22.95	23.02	22.95	
15	16QAM	75	0	22.91	22.92	22.89	
15	64QAM	1	0	22.89	23.01	23.01	23.7
15	64QAM	1	37	22.99	23.08	22.38	
15	64QAM	1	74	23.01	23.14	22.69	
15	64QAM	36	0	21.85	21.94	21.72	22.7
15	64QAM	36	20	21.93	21.93	21.52	
15	64QAM	36	39	21.97	22.06	21.58	
15	64QAM	75	0	21.91	21.95	21.57	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.68	24.75	24.75	25.7
10	QPSK	1	25	24.64	24.74	24.73	
10	QPSK	1	49	24.71	24.83	24.78	
10	QPSK	25	0	23.54	23.87	23.82	24.7
10	QPSK	25	12	23.88	23.89	23.84	
10	QPSK	25	25	23.85	23.96	23.92	
10	QPSK	50	0	23.88	23.91	23.83	
10	16QAM	1	0	24.04	24.13	24.11	24.7
10	16QAM	1	25	24.04	24.17	24.14	
10	16QAM	1	49	24.13	24.22	24.15	
10	16QAM	25	0	22.85	22.86	22.82	23.7
10	16QAM	25	12	22.96	22.91	22.87	
10	16QAM	25	25	22.89	22.97	22.92	
10	16QAM	50	0	22.87	22.89	22.84	
10	64QAM	1	0	22.97	22.99	22.86	23.7
10	64QAM	1	25	23.00	23.09	22.74	
10	64QAM	1	49	23.01	23.14	22.89	
10	64QAM	25	0	21.88	21.89	21.50	22.7
10	64QAM	25	12	21.92	21.93	21.62	
10	64QAM	25	25	21.92	22.00	21.66	
10	64QAM	50	0	21.92	21.94	21.50	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.69	24.76	24.74	25.7
5	QPSK	1	12	24.75	24.80	24.75	
5	QPSK	1	24	24.74	24.80	24.77	
5	QPSK	12	0	23.83	23.88	23.88	24.7
5	QPSK	12	7	23.87	23.86	23.90	
5	QPSK	12	13	23.84	23.98	23.88	
5	QPSK	25	0	23.54	23.88	23.85	
5	16QAM	1	0	24.05	24.10	24.09	24.7
5	16QAM	1	12	24.08	24.16	24.07	
5	16QAM	1	24	24.07	24.17	24.10	
5	16QAM	12	0	22.88	22.91	22.93	23.7
5	16QAM	12	7	22.88	22.93	22.89	
5	16QAM	12	13	22.90	22.97	22.89	
5	16QAM	25	0	22.88	22.89	22.87	
5	64QAM	1	0	23.00	23.00	22.69	23.7
5	64QAM	1	12	22.99	23.08	22.72	
5	64QAM	1	24	23.01	23.10	22.82	
5	64QAM	12	0	21.91	21.94	21.57	22.7
5	64QAM	12	7	21.87	21.95	21.72	
5	64QAM	12	13	21.81	22.05	21.75	
5	64QAM	25	0	21.87	21.90	21.63	





Band 12							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.64	24.61	24.63	25.7
10	QPSK	1	25	24.63	24.68	24.65	
10	QPSK	1	49	24.76	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	24.7
10	QPSK	25	12	23.87	23.80	23.76	
10	QPSK	25	25	23.98	23.85	23.83	
10	QPSK	50	0	23.83	23.80	23.79	24.7
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	25	24.06	24.05	24.01	
10	16QAM	1	49	24.12	24.08	24.07	23.7
10	16QAM	25	0	22.76	22.79	22.77	
10	16QAM	25	12	22.82	22.80	22.78	
10	16QAM	25	25	22.81	22.85	22.79	23.7
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	25	22.76	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.78	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	22.7
10	64QAM	25	25	21.82	21.90	21.84	
10	64QAM	50	0	21.83	21.81	21.80	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.70	24.72	24.67	25.7
5	QPSK	1	12	24.72	24.73	24.71	
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.79	23.78	24.7
5	QPSK	12	7	23.79	23.75	23.81	
5	QPSK	12	13	23.75	23.82	23.77	
5	QPSK	25	0	23.79	23.76	23.75	24.7
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	
5	16QAM	1	24	24.02	24.07	24.03	23.7
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	
5	16QAM	12	13	22.83	22.82	22.80	23.7
5	16QAM	25	0	22.81	22.85	22.75	
5	64QAM	1	0	22.62	22.73	22.91	
5	64QAM	1	12	22.83	22.94	22.94	23.7
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	
5	64QAM	12	7	21.88	21.85	21.88	22.7
5	64QAM	12	13	21.82	21.87	21.84	
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23025	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.75	24.69	24.72	25.7
3	QPSK	1	8	24.73	24.74	24.73	
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.78	23.73	24.7
3	QPSK	8	4	23.78	23.74	23.77	
3	QPSK	8	7	23.73	23.76	23.75	
3	QPSK	15	0	23.77	23.75	23.73	24.7
3	16QAM	1	0	24.08	24.01	24.02	
3	16QAM	1	8	24.06	24.08	24.08	
3	16QAM	1	14	24.00	24.05	23.98	23.7
3	16QAM	8	0	22.88	22.83	22.82	
3	16QAM	8	4	22.90	22.83	22.87	
3	16QAM	8	7	22.84	22.84	22.83	23.7
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.67	22.90	22.95	
3	64QAM	1	8	22.91	23.01	22.98	23.7
3	64QAM	1	14	22.92	22.95	22.88	
3	64QAM	8	0	21.82	21.81	21.81	
3	64QAM	8	4	21.87	21.84	21.87	22.7
3	64QAM	8	7	21.82	21.85	21.81	
3	64QAM	15	0	21.65	21.78	21.77	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.64	24.59	24.59	25.7
1.4	QPSK	1	3	24.68	24.67	24.64	
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	24.7
1.4	QPSK	3	1	24.70	24.64	24.68	
1.4	QPSK	3	3	24.64	24.67	24.61	
1.4	QPSK	6	0	23.71	23.74	23.67	24.7
1.4	16QAM	1	0	23.99	23.93	23.96	
1.4	16QAM	1	3	24.02	24.02	23.98	
1.4	16QAM	1	5	23.92	23.94	23.91	24.7
1.4	16QAM	3	0	23.75	23.69	23.69	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.70	23.73	23.65	23.7
1.4	16QAM	6	0	22.78	22.80	22.76	
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.89	23.7
1.4	64QAM	1	5	22.82	22.85	22.81	
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	23.7
1.4	64QAM	3	3	22.83	22.83	22.79	
1.4	64QAM	6	0	21.72	21.75	21.71	



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0	24.23	24.23		25.2
10	QPSK	1	25	24.22			
10	QPSK	1	49	24.35			
10	QPSK	25	0	23.30			24.2
10	QPSK	25	12	23.33			
10	QPSK	25	25	23.34			
10	QPSK	50	0	23.35			24.2
10	16QAM	1	0	23.58			
10	16QAM	1	25	23.57			
10	16QAM	1	49	23.54			23.2
10	16QAM	25	0	22.31			
10	16QAM	25	12	22.34			
10	16QAM	25	25	22.38			23.2
10	16QAM	50	0	22.35			
10	64QAM	1	0	22.30			
10	64QAM	1	25	22.52			23.2
10	64QAM	1	49	22.46			
10	64QAM	25	0	21.36			
10	64QAM	25	12	21.38			22.2
10	64QAM	25	25	21.37			
10	64QAM	50	0	21.39			
Channel				23205 23230 23255			Tune-up limit (dBm)
Frequency (MHz)				779.5 782 784.5			
5	QPSK	1	0	24.23	24.20	24.18	25.2
5	QPSK	1	12	24.28	24.27	24.23	
5	QPSK	1	24	24.30	24.23	24.34	
5	QPSK	12	0	23.38	23.33	23.29	24.2
5	QPSK	12	7	23.41	23.32	23.31	
5	QPSK	12	13	23.38	23.35	23.29	
5	QPSK	25	0	23.37	23.33	23.32	24.2
5	16QAM	1	0	23.51	23.48	23.52	
5	16QAM	1	12	23.50	23.47	23.47	
5	16QAM	1	24	23.59	23.51	23.49	23.2
5	16QAM	12	0	22.43	22.35	22.38	
5	16QAM	12	7	22.42	22.33	22.35	
5	16QAM	12	13	22.40	22.37	22.37	23.2
5	16QAM	25	0	22.43	22.34	22.33	
5	64QAM	1	0	22.14	22.47	22.39	
5	64QAM	1	12	22.50	22.44	22.45	23.2
5	64QAM	1	24	22.47	22.47	22.38	
5	64QAM	12	0	21.47	21.41	21.37	
5	64QAM	12	7	21.47	21.37	21.42	22.2
5	64QAM	12	13	21.44	21.41	21.38	
5	64QAM	25	0	21.41	21.37	21.34	



Band 14							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.66			25.7
10	QPSK	1	25	24.65			
10	QPSK	1	49	24.67			
10	QPSK	25	0	23.71			24.7
10	QPSK	25	12	23.70			
10	QPSK	25	25	23.73			
10	QPSK	50	0	23.68			24.7
10	16QAM	1	0	24.08			
10	16QAM	1	25	24.08			
10	16QAM	1	49	23.96			23.7
10	16QAM	25	0	22.98			
10	16QAM	25	12	22.70			
10	16QAM	25	25	22.71			22.7
10	16QAM	50	0	22.70			
10	64QAM	1	0	22.92			
10	64QAM	1	25	22.66			23.7
10	64QAM	1	49	22.90			
10	64QAM	25	0	21.71			
10	64QAM	25	12	21.37			22.7
10	64QAM	25	25	21.38			
10	64QAM	50	0	21.44			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.62	24.61	24.59	25.7
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.7
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.7
5	16QAM	1	0	23.83	23.96	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.7
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.7
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.69	22.60	22.19	
5	64QAM	1	12	22.82	22.09	22.17	23.7
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.05	21.11	22.7
5	64QAM	12	13	21.44	20.88	21.53	
5	64QAM	25	0	21.56	21.03	21.17	



Band 17							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				706	710	714	
10	QPSK	1	0	24.66	24.65	24.61	
10	QPSK	1	25	24.69	24.70	24.71	25.7
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	
10	QPSK	25	12	23.88	23.82	23.79	24.7
10	QPSK	25	25	23.88	23.88	23.88	
10	QPSK	50	0	23.79	23.78	23.79	
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	25	24.14	24.11	24.08	24.7
10	16QAM	1	49	24.12	24.10	24.09	
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	23.7
10	16QAM	25	25	22.89	22.90	22.82	
10	16QAM	50	0	22.80	22.80	22.77	
10	64QAM	1	0	22.65	22.76	22.88	
10	64QAM	1	25	22.71	22.71	22.65	23.7
10	64QAM	1	49	22.87	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	22.7
10	64QAM	25	25	21.65	21.78	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				23765	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.66	24.65	24.68	
5	QPSK	1	12	24.74	24.79	24.75	25.7
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	
5	QPSK	12	7	23.85	23.81	23.82	24.7
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	
5	16QAM	1	0	23.99	23.98	23.99	24.7
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.89	23.7
5	16QAM	12	13	22.84	22.88	22.84	
5	16QAM	25	0	22.65	22.65	22.67	
5	64QAM	1	0	22.40	22.44	22.76	23.7
5	64QAM	1	12	22.76	22.60	22.94	
5	64QAM	1	24	22.59	22.57	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.58	21.88	
5	64QAM	25	0	21.55	21.51	21.79	



Band 25							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / 26140	Power Middle Ch. / 26340	Power High Ch. / 26590	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1890	1890	1905	
20	QPSK	1	0	24.65	24.76	24.91	25.7
20	QPSK	1	49	24.64	24.72	24.82	
20	QPSK	1	99	24.61	24.75	24.23	
20	QPSK	50	0	23.71	23.86	23.94	24.7
20	QPSK	50	24	23.80	23.95	24.01	
20	QPSK	50	50	23.73	23.92	24.00	
20	QPSK	100	0	23.81	23.94	23.97	24.7
20	16QAM	1	0	23.95	24.08	24.19	
20	16QAM	1	49	23.98	24.09	24.15	
20	16QAM	1	99	23.89	24.08	23.60	23.7
20	16QAM	50	0	22.72	22.85	22.96	
20	16QAM	50	24	22.80	22.95	22.98	
20	16QAM	50	50	22.76	22.93	23.05	23.7
20	16QAM	100	0	22.78	22.93	22.94	
20	64QAM	1	0	22.86	22.94	22.43	
20	64QAM	1	49	22.70	22.91	22.54	23.7
20	64QAM	1	99	22.42	22.97	21.74	
20	64QAM	50	0	21.75	21.89	21.33	
20	64QAM	50	24	21.66	22.01	21.58	22.7
20	64QAM	50	50	21.43	21.95	21.32	
20	64QAM	100	0	21.70	21.95	21.16	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	24.65	24.77	24.86	25.7
15	QPSK	1	37	24.65	24.76	24.88	
15	QPSK	1	74	24.63	24.77	24.32	
15	QPSK	36	0	23.72	23.86	23.96	24.7
15	QPSK	36	20	23.79	23.95	24.07	
15	QPSK	36	39	23.74	23.89	23.93	
15	QPSK	75	0	23.77	23.94	23.96	24.7
15	16QAM	1	0	23.83	24.07	24.15	
15	16QAM	1	37	23.97	24.09	24.18	
15	16QAM	1	74	23.92	24.10	23.69	23.7
15	16QAM	36	0	22.73	22.87	22.98	
15	16QAM	36	20	22.78	22.96	23.06	
15	16QAM	36	39	22.72	22.90	23.02	23.7
15	16QAM	75	0	22.77	22.94	22.96	
15	64QAM	1	0	22.63	22.92	22.34	
15	64QAM	1	37	22.88	22.97	22.77	23.7
15	64QAM	1	74	22.42	22.97	21.81	
15	64QAM	36	0	21.77	21.92	21.56	
15	64QAM	36	20	21.82	21.98	21.69	22.7
15	64QAM	36	39	21.58	21.93	21.28	
15	64QAM	75	0	21.79	21.95	21.27	
Channel				26050	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	24.65	24.70	24.88	25.7
10	QPSK	1	25	24.55	24.70	24.90	
10	QPSK	1	49	24.60	24.75	24.20	
10	QPSK	25	0	23.74	23.81	23.94	24.7
10	QPSK	25	12	23.79	23.93	24.00	
10	QPSK	25	25	23.79	23.93	23.65	
10	QPSK	50	0	23.78	23.93	23.95	24.7
10	16QAM	1	0	23.98	24.12	24.22	
10	16QAM	1	25	23.98	24.13	24.27	
10	16QAM	1	49	23.98	24.13	23.58	23.7
10	16QAM	25	0	22.76	22.85	22.96	
10	16QAM	25	12	22.80	22.95	22.97	
10	16QAM	25	25	22.76	22.90	22.84	23.7
10	16QAM	50	0	22.78	22.91	22.97	
10	64QAM	1	0	22.91	22.95	22.66	
10	64QAM	1	25	22.92	23.05	22.53	23.7
10	64QAM	1	49	22.81	23.07	21.74	
10	64QAM	25	0	21.79	21.82	21.82	
10	64QAM	25	12	21.84	21.96	21.46	22.7
10	64QAM	25	25	21.82	21.93	21.00	
10	64QAM	50	0	21.76	21.94	21.20	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.60	24.72	24.90	25.7
5	QPSK	1	12	24.65	24.84	24.43	
5	QPSK	1	24	24.64	24.80	24.08	
5	QPSK	12	0	23.72	23.83	23.86	24.7
5	QPSK	12	7	23.79	23.91	23.61	
5	QPSK	12	13	23.78	23.94	23.38	
5	QPSK	25	0	23.74	23.90	23.55	24.7
5	16QAM	1	0	24.03	24.05	24.22	
5	16QAM	1	12	23.94	24.12	23.81	
5	16QAM	1	24	23.97	24.15	23.46	23.7
5	16QAM	12	0	22.74	22.86	22.99	
5	16QAM	12	7	22.81	22.95	22.77	
5	16QAM	12	13	22.82	22.98	22.55	23.7
5	16QAM	25	0	22.79	22.90	22.73	
5	64QAM	1	0	22.86	23.00	22.35	
5	64QAM	1	12	22.84	23.00	21.93	23.7
5	64QAM	1	24	22.86	23.03	21.55	
5	64QAM	12	0	21.76	21.92	21.17	
5	64QAM	12	7	21.84	21.99	21.00	22.7
5	64QAM	12	13	21.68	22.00	20.74	
5	64QAM	25	0	21.81	21.93	20.87	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.54	24.63	24.53	25.7
3	QPSK	1	8	24.69	24.83	24.34	
3	QPSK	1	14	24.67	24.83	24.09	
3	QPSK	8	0	23.69	23.80	23.60	24.7
3	QPSK	8	4	23.78	23.90	23.40	
3	QPSK	8	7	23.75	23.89	23.37	
3	QPSK	15	0	23.72	23.90	23.43	24.7
3	16QAM	1	0	23.90	23.95	23.83	
3	16QAM	1	8	24.00	24.20	23.68	
3	16QAM	1	14	23.99	24.16	23.42	23.7
3	16QAM	8	0	22.76	22.89	22.72	
3	16QAM	8	4	22.82	22.96	22.61	
3	16QAM	8	7	22.81	22.99	22.48	23.7
3	16QAM	15	0	22.79	22.91	22.56	
3	64QAM	1	0	22.80	22.87	21.94	
3	64QAM	1	8	22.93	23.11	21.80	23.7
3	64QAM	1	14	22.90	23.08	21.57	
3	64QAM	8	0	21.76	21.90	20.85	
3	64QAM	8	4	21.84	22.00	20.77	22.7
3	64QAM	8	7	21.83	21.99	20.64	
3	64QAM	15	0	21.79	21.92	20.73	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1890	1914.3	
1.4	QPSK	1	0	24.51	24.65	24.19	25.7
1.4	QPSK	1	3	24.62	24.74	24.13	
1.4	QPSK	1	5	24.59	24.76	24.02	
1.4	QPSK	3	0	24.56	24.71	24.13	24.7
1.4	QPSK	3	1	24.63	24.77	24.17	
1.4	QPSK	3	3	24.59	24.77	24.04	
1.4	QPSK	6	0	23.67	23.83	23.21	24.7
1.4	16QAM	1	0	23.80	23.95	23.48	
1.4	16QAM	1	3	23.99	24.12	23.47	
1.4	16QAM	1	5	23.94	24.09	23.36	24.7
1.4	16QAM	3	0	23.60	23.77	23.31	
1.4	16QAM	3	1	23.70	23.85	23.31	
1.4	16QAM	3	3	23.65	23.82	23.22	23.7
1.4	16QAM	6	0	22.73	22.90	22.41	
1.4	64QAM	1	0	22.77	22.91	21.92	
1.4	64QAM	1	3	22.85	23.04	21.85	23.7
1.4	64QAM	1	5	22.79	22.99	22.00	
1.4	64QAM	3	0	22.72	22.92	21.81	
1.4	64QAM	3	1	22.80	22.97	21.78	23.7
1.4	64QAM	3	3	22.78	22.96	21.73	
1.4	64QAM	6	0	21.67	21.85	20.79	



Band 26							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.76	24.52	24.57	
15	QPSK	1	37	24.46	24.51	24.50	25.7
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.67	23.65	23.65	
15	QPSK	36	20	23.66	23.61	23.63	24.7
15	QPSK	36	39	23.60	23.63	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.85	24.7
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.96	22.87	
15	16QAM	36	20	22.65	22.61	22.60	23.7
15	16QAM	36	39	22.59	22.65	22.62	
15	16QAM	75	0	22.67	22.62	22.65	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	23.7
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.68	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	22.7
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	
10	QPSK	1	25	24.97	24.55	24.59	25.7
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	24.07	23.96	23.96	24.7
10	16QAM	1	25	23.94	24.01	23.97	
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	23.7
10	16QAM	25	25	22.64	22.63	22.63	
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	23.7
10	64QAM	1	25	22.90	22.93	22.93	
10	64QAM	1	49	22.89	22.91	21.83	
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.76	21.69	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.65	21.50	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.61	24.68	
5	QPSK	1	12	24.72	24.63	24.47	25.7
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.80	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	24.7
5	16QAM	1	12	24.00	23.97	23.85	
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	23.7
5	16QAM	12	7	22.81	22.76	22.71	
5	16QAM	12	13	22.73	22.68	22.44	
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.69	22.90	22.83	23.7
5	64QAM	1	12	22.90	22.88	22.03	
5	64QAM	1	24	22.81	22.86	21.86	
5	64QAM	12	0	21.83	21.78	21.45	22.7
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.72	24.62	24.62	
3	QPSK	1	8	24.75	24.60	24.16	25.7
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	6	0	23.83	23.68	23.38	
3	QPSK	6	4	23.77	23.72	23.28	24.7
3	QPSK	6	7	23.74	23.70	23.29	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	24.7
3	16QAM	1	8	24.06	24.06	23.47	
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	6	0	22.86	22.77	22.54	23.7
3	16QAM	6	4	22.88	22.77	22.42	
3	16QAM	6	7	22.78	22.76	22.45	
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.63	22.00	23.7
3	64QAM	1	8	23.03	22.95	21.88	
3	64QAM	1	14	22.86	22.90	21.83	
3	64QAM	6	0	21.79	21.74	20.85	22.7
3	64QAM	6	4	21.88	21.81	20.77	
3	64QAM	6	7	21.61	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	
1.4	QPSK	1	3	24.71	24.63	24.26	25.7
1.4	QPSK	1	5	24.61	24.55	24.29	
1.4	QPSK	3	0	24.69	24.55	24.17	
1.4	QPSK	3	1	24.74	24.56	24.22	
1.4	QPSK	3	3	24.67	24.55	24.37	
1.4	QPSK	6	0	23.71	23.63	23.29	24.7
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.98	23.59	
1.4	16QAM	1	5	23.93	23.86	23.65	24.7
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	1	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	
1.4	16QAM	6	0	22.82	22.75	22.46	23.7
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.88	22.88	21.90	
1.4	64QAM	1	5	22.88	22.76	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	3	22.84	22.79	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	22.7



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2774.0			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.96		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		20.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.86	22.86	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.96	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.19	
5	16QAM	1	12	22.29	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.14	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66							
Ann 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132072	132332	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	24.35	24.39	24.57	25.7
20	QPSK	1	49	24.22	24.27	24.30	
20	QPSK	1	99	24.34	24.32	24.26	
20	QPSK	50	0	23.40	23.47	23.49	24.7
20	QPSK	50	24	23.46	23.43	23.47	
20	QPSK	50	50	23.47	23.48	23.50	
20	QPSK	100	0	23.46	23.40	23.47	24.7
20	16QAM	1	0	23.67	23.74	23.76	
20	16QAM	1	49	23.56	23.64	23.63	
20	16QAM	1	99	23.70	23.64	23.60	23.7
20	16QAM	50	0	22.37	22.46	22.54	
20	16QAM	50	24	22.46	22.43	22.47	
20	16QAM	50	50	22.44	22.47	22.51	23.7
20	16QAM	100	0	22.44	22.41	22.48	
20	64QAM	1	0	22.46	22.43	22.61	
20	64QAM	1	49	22.44	22.57	22.12	23.7
20	64QAM	1	99	22.58	22.59	22.49	
20	64QAM	50	0	21.39	21.46	21.51	
20	64QAM	50	24	21.48	21.45	21.31	22.7
20	64QAM	50	50	21.45	21.49	21.54	
20	64QAM	100	0	21.49	21.46	21.48	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	24.30	24.41	24.38	25.7
15	QPSK	1	37	24.21	24.29	24.33	
15	QPSK	1	74	24.34	24.36	24.31	
15	QPSK	36	0	23.37	23.44	23.49	24.7
15	QPSK	36	20	23.43	23.43	23.47	
15	QPSK	36	39	23.42	23.48	23.52	
15	QPSK	75	0	23.44	23.43	23.47	24.7
15	16QAM	1	0	23.60	23.74	23.73	
15	16QAM	1	37	23.56	23.63	23.68	
15	16QAM	1	74	23.64	23.66	23.65	23.7
15	16QAM	36	0	22.36	22.46	22.49	
15	16QAM	36	20	22.42	22.40	22.45	
15	16QAM	36	39	22.42	22.46	22.50	23.7
15	16QAM	75	0	22.46	22.41	22.45	
15	64QAM	1	0	22.46	22.59	22.58	
15	64QAM	1	37	22.47	22.56	22.44	23.7
15	64QAM	1	74	22.55	22.58	22.57	
15	64QAM	36	0	21.38	21.49	21.21	
15	64QAM	36	20	21.43	21.44	21.46	22.7
15	64QAM	36	39	21.45	21.50	21.52	
15	64QAM	75	0	21.44	21.42	21.47	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	24.37	24.44	24.45	25.7
10	QPSK	1	25	24.30	24.40	24.44	
10	QPSK	1	49	24.30	24.39	24.41	
10	QPSK	25	0	23.41	23.46	23.49	24.7
10	QPSK	25	12	23.45	23.49	23.49	
10	QPSK	25	25	23.44	23.50	23.57	
10	QPSK	50	0	23.46	23.47	23.49	24.7
10	16QAM	1	0	23.72	23.82	23.84	
10	16QAM	1	25	23.70	23.79	23.81	
10	16QAM	1	49	23.73	23.76	23.81	23.7
10	16QAM	25	0	22.48	22.47	22.50	
10	16QAM	25	12	22.48	22.47	22.52	
10	16QAM	25	25	22.41	22.50	22.55	23.7
10	16QAM	50	0	22.45	22.46	22.48	
10	64QAM	1	0	22.37	22.81	22.08	
10	64QAM	1	25	22.61	22.71	22.78	23.7
10	64QAM	1	49	22.61	22.67	22.72	
10	64QAM	25	0	21.45	21.49	21.49	
10	64QAM	25	12	21.48	21.51	21.55	22.7
10	64QAM	25	25	21.45	21.53	21.60	
10	64QAM	50	0	21.47	21.49	21.52	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	24.35	24.40	24.49	25.7
5	QPSK	1	12	24.39	24.40	24.52	
5	QPSK	1	24	24.33	24.43	24.46	
5	QPSK	12	0	23.44	23.46	23.58	24.7
5	QPSK	12	7	23.47	23.56	23.59	
5	QPSK	12	13	23.44	23.53	23.57	
5	QPSK	25	0	23.43	23.45	23.55	24.7
5	16QAM	1	0	23.75	23.79	23.80	
5	16QAM	1	12	23.73	23.81	23.84	
5	16QAM	1	24	23.67	23.78	23.80	23.7
5	16QAM	12	0	22.46	22.51	22.62	
5	16QAM	12	7	22.50	22.81	22.64	
5	16QAM	12	13	22.47	22.57	22.58	23.7
5	16QAM	25	0	22.46	22.46	22.59	
5	64QAM	1	0	22.41	22.71	22.81	
5	64QAM	1	12	22.64	22.73	22.77	23.7
5	64QAM	1	24	22.65	22.75	22.73	
5	64QAM	12	0	21.47	21.53	21.64	
5	64QAM	12	7	21.53	21.61	21.64	22.7
5	64QAM	12	13	21.49	21.55	21.60	
5	64QAM	25	0	21.44	21.49	21.59	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	24.38	24.42	24.50	25.7
3	QPSK	1	8	24.40	24.52	24.56	
3	QPSK	1	14	24.35	24.45	24.48	
3	QPSK	8	0	23.45	23.49	23.55	24.7
3	QPSK	8	4	23.47	23.55	23.57	
3	QPSK	8	7	23.43	23.52	23.54	
3	QPSK	15	0	23.44	23.49	23.57	24.7
3	16QAM	1	0	23.70	23.70	23.82	
3	16QAM	1	8	23.76	23.83	23.87	
3	16QAM	1	14	23.66	23.78	23.81	23.7
3	16QAM	8	0	22.50	22.55	22.65	
3	16QAM	8	4	22.55	22.61	22.63	
3	16QAM	8	7	22.51	22.58	22.59	23.7
3	16QAM	15	0	22.47	22.49	22.58	
3	64QAM	1	0	22.40	22.89	22.78	
3	64QAM	1	8	22.70	22.85	22.81	23.7
3	64QAM	1	14	22.67	22.73	22.75	
3	64QAM	8	0	21.39	21.53	21.65	
3	64QAM	8	4	21.53	21.64	21.66	22.7
3	64QAM	8	7	21.50	21.58	21.58	
3	64QAM	15	0	21.48	21.49	21.62	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	24.27	24.36	24.43	25.7
1.4	QPSK	1	3	24.30	24.40	24.40	
1.4	QPSK	1	5	24.22	24.37	24.41	
1.4	QPSK	3	0	24.33	24.43	24.44	24.7
1.4	QPSK	3	1	24.35	24.47	24.48	
1.4	QPSK	3	3	24.27	24.38	24.42	
1.4	QPSK	6	0	23.38	23.43	23.48	24.7
1.4	16QAM	1	0	23.59	23.73	23.75	
1.4	16QAM	1	3	23.65	23.80	23.83	
1.4	16QAM	1	5	23.59	23.73	23.76	24.7
1.4	16QAM	3	0	23.40	23.55	23.53	
1.4	16QAM	3	1	23.46	23.57	23.55	
1.4	16QAM	3	3	23.36	23.50	23.50	23.7
1.4	16QAM	6	0	22.44	21.83	22.58	
1.4	64QAM	1	0	22.30	21.79	22.64	
1.4	64QAM	1	3	22.41	21.72	22.74	23.7
1.4	64QAM	1	5	22.41	21.82	22.67	
1.4	64QAM	3	0	22.31	21.74	22.82	
1.4	64QAM	3	1	22.44	21.79	22.68	23.7
1.4	64QAM	3	3	22.43	21.75	22.61	
1.4	64QAM	6	0	21.21	20.71	21.51	





Band 71						
Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	24.77	24.67	24.68
20	QPSK	1	49	24.65	24.65	24.65
20	QPSK	1	99	24.68	24.66	24.61
20	QPSK	50	0	23.76	23.76	23.72
20	QPSK	50	24	23.80	23.74	23.75
20	QPSK	50	50	23.84	23.78	23.75
20	QPSK	100	0	23.79	23.71	23.77
20	16QAM	1	0	24.06	23.96	24.00
20	16QAM	1	49	24.01	24.03	24.04
20	16QAM	1	99	24.03	24.01	23.95
20	16QAM	50	0	22.77	22.75	22.75
20	16QAM	50	24	22.82	22.77	22.73
20	16QAM	50	50	22.82	22.77	22.78
20	16QAM	100	0	22.79	22.73	22.78
20	64QAM	1	0	22.04	22.83	22.82
20	64QAM	1	49	22.63	22.90	22.29
20	64QAM	1	99	22.94	22.89	22.87
20	64QAM	50	0	21.00	21.79	21.49
20	64QAM	50	24	21.30	21.64	21.57
20	64QAM	50	50	21.84	21.60	21.74
20	64QAM	100	0	21.53	21.76	21.80
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	24.74	24.65	24.63
15	QPSK	1	37	24.62	24.66	24.61
15	QPSK	1	74	24.65	24.68	24.64
15	QPSK	36	0	23.73	23.71	23.69
15	QPSK	36	20	23.80	23.73	23.78
15	QPSK	36	39	23.73	23.76	23.74
15	QPSK	75	0	23.81	23.74	23.68
15	16QAM	1	0	24.05	24.01	23.98
15	16QAM	1	37	23.95	24.02	24.00
15	16QAM	1	74	23.97	24.00	23.98
15	16QAM	36	0	22.76	22.75	22.71
15	16QAM	36	20	22.79	22.74	22.79
15	16QAM	36	39	22.77	22.79	22.75
15	16QAM	75	0	22.63	22.73	22.70
15	64QAM	1	0	22.02	22.43	22.76
15	64QAM	1	37	21.86	22.94	22.88
15	64QAM	1	74	22.88	22.60	22.84
15	64QAM	36	0	20.97	21.77	21.44
15	64QAM	36	20	20.94	21.78	21.81
15	64QAM	36	39	21.48	21.56	21.78
15	64QAM	75	0	21.29	21.75	21.67
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	24.76	24.64	24.66
10	QPSK	1	25	24.61	24.62	24.63
10	QPSK	1	49	24.66	24.71	24.62
10	QPSK	25	0	23.78	23.71	23.69
10	QPSK	25	12	23.79	23.82	23.70
10	QPSK	25	25	23.72	23.78	23.74
10	QPSK	50	0	23.80	23.81	23.71
10	16QAM	1	0	24.10	24.02	24.04
10	16QAM	1	25	23.98	24.06	24.00
10	16QAM	1	49	23.98	24.07	23.96
10	16QAM	25	0	22.76	22.70	22.68
10	16QAM	25	12	22.78	22.81	22.68
10	16QAM	25	25	22.65	22.77	22.73
10	16QAM	50	0	22.79	22.80	22.69
10	64QAM	1	0	21.80	22.30	22.77
10	64QAM	1	25	22.01	22.95	22.95
10	64QAM	1	49	22.14	22.96	22.45
10	64QAM	25	0	20.82	21.71	21.71
10	64QAM	25	12	20.84	21.84	21.76
10	64QAM	25	25	20.71	21.81	21.64
10	64QAM	50	0	20.83	21.77	21.69
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	24.57	24.69	24.72
5	QPSK	1	12	24.71	24.66	24.70
5	QPSK	1	24	24.70	24.68	24.63
5	QPSK	12	0	23.73	23.76	23.74
5	QPSK	12	7	23.84	23.79	23.76
5	QPSK	12	13	23.76	23.76	23.70
5	QPSK	25	0	23.76	23.76	23.68
5	16QAM	1	0	23.75	24.01	24.02
5	16QAM	1	12	23.97	24.03	23.97
5	16QAM	1	24	23.95	24.02	23.93
5	16QAM	12	0	22.64	22.80	22.78
5	16QAM	12	7	22.86	22.80	22.78
5	16QAM	12	13	22.77	22.77	22.70
5	16QAM	25	0	22.69	22.81	22.70
5	64QAM	1	0	21.74	22.06	22.91
5	64QAM	1	12	21.79	22.94	22.70
5	64QAM	1	24	21.96	22.96	22.25
5	64QAM	12	0	20.82	21.49	21.68
5	64QAM	12	7	21.00	21.86	21.73
5	64QAM	12	13	20.99	21.81	21.61
5	64QAM	25	0	20.76	21.69	21.48



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./18700	Power Middle Ch./18900	Power High Ch./19100	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				18700	18900	19100	
20	QPSK	1	0	24.72	24.80	24.91	
20	QPSK	1	49	24.67	24.74	24.77	25.7
20	QPSK	1	99	24.64	24.71	24.79	
20	QPSK	50	0	23.78	23.84	23.88	
20	QPSK	50	24	23.87	23.86	23.91	24.7
20	QPSK	50	50	23.88	23.94	23.96	
20	QPSK	100	0	23.86	23.87	23.94	
20	16QAM	1	0	24.10	24.10	24.20	
20	16QAM	1	49	24.03	24.08	24.18	24.7
20	16QAM	1	99	23.93	24.12	24.12	
20	16QAM	50	0	22.80	22.85	22.89	
20	16QAM	50	24	22.89	22.87	22.94	23.7
20	16QAM	50	50	22.87	22.95	23.00	
20	16QAM	100	0	22.86	22.86	22.89	
20	64QAM	1	0	22.94	22.98	23.03	
20	64QAM	1	49	22.91	22.97	22.38	23.7
20	64QAM	1	99	22.84	23.00	22.49	
20	64QAM	50	0	21.81	21.87	21.54	
20	64QAM	50	24	21.92	21.92	21.54	22.7
20	64QAM	50	50	21.86	21.97	21.58	
20	64QAM	100	0	21.87	21.90	21.49	
Channel				18675	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				18675	18900	19025	
15	QPSK	1	0	24.75	24.83	24.87	
15	QPSK	1	37	24.70	24.80	24.88	25.7
15	QPSK	1	74	24.73	24.80	24.90	
15	QPSK	36	0	23.84	23.87	23.91	
15	QPSK	36	20	23.93	23.90	24.03	24.7
15	QPSK	36	39	23.87	23.97	24.03	
15	QPSK	75	0	23.90	23.91	23.93	
15	16QAM	1	0	24.02	24.13	24.19	
15	16QAM	1	37	24.06	24.14	24.20	24.7
15	16QAM	1	74	24.03	24.13	24.18	
15	16QAM	36	0	22.81	22.86	22.92	
15	16QAM	36	20	22.88	22.90	23.03	23.7
15	16QAM	36	39	22.88	22.97	23.03	
15	16QAM	75	0	22.91	22.91	22.93	
15	64QAM	1	0	22.88	23.01	22.51	
15	64QAM	1	37	22.96	23.01	22.46	23.7
15	64QAM	1	74	22.80	23.04	22.53	
15	64QAM	36	0	21.85	21.91	21.44	
15	64QAM	36	20	21.94	21.91	21.56	22.7
15	64QAM	36	39	21.84	22.04	21.51	
15	64QAM	75	0	21.89	21.91	21.47	
Channel				18950	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				18950	18900	19050	
10	QPSK	1	0	24.76	24.72	24.89	
10	QPSK	1	25	24.69	24.82	24.87	25.7
10	QPSK	1	49	24.72	24.83	24.87	
10	QPSK	25	0	23.86	23.85	23.90	
10	QPSK	25	12	23.87	23.89	23.95	24.7
10	QPSK	25	25	23.88	24.00	24.05	
10	QPSK	50	0	23.87	23.89	23.97	
10	16QAM	1	0	24.12	24.15	24.23	
10	16QAM	1	25	24.13	24.18	24.27	24.7
10	16QAM	1	49	24.08	24.18	24.25	
10	16QAM	25	0	22.86	22.85	22.91	
10	16QAM	25	12	22.90	22.90	22.96	23.7
10	16QAM	25	25	22.88	22.97	23.05	
10	16QAM	50	0	22.88	22.88	22.95	
10	64QAM	1	0	23.02	23.03	22.50	
10	64QAM	1	25	23.05	23.16	22.73	23.7
10	64QAM	1	49	22.95	23.10	22.59	
10	64QAM	25	0	21.88	21.88	21.51	
10	64QAM	25	12	21.94	21.92	21.66	22.7
10	64QAM	25	25	21.90	22.00	21.58	
10	64QAM	50	0	21.90	21.92	21.48	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				18625	18900	19075	
5	QPSK	1	0	24.73	24.75	24.88	
5	QPSK	1	12	24.76	24.89	24.88	25.7
5	QPSK	1	24	24.79	24.88	24.90	
5	QPSK	12	0	23.83	23.85	24.00	
5	QPSK	12	7	23.91	23.94	24.02	24.7
5	QPSK	12	13	23.88	23.93	24.03	
5	QPSK	25	0	23.85	23.87	24.01	
5	16QAM	1	0	24.07	24.08	24.20	
5	16QAM	1	12	24.05	24.15	24.20	24.7
5	16QAM	1	24	24.08	24.24	24.21	
5	16QAM	12	0	22.87	22.89	23.00	
5	16QAM	12	7	22.92	23.01	23.06	23.7
5	16QAM	12	13	22.86	22.96	23.04	
5	16QAM	25	0	22.86	22.90	23.04	
5	64QAM	1	0	23.04	23.07	22.61	
5	64QAM	1	12	23.00	23.13	22.65	23.7
5	64QAM	1	24	23.02	23.12	22.49	
5	64QAM	12	0	21.92	21.92	21.62	
5	64QAM	12	7	21.95	22.04	21.63	22.7
5	64QAM	12	13	21.93	22.00	21.53	
5	64QAM	25	0	21.90	21.90	21.45	
Channel				18615	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				18615	18900	19085	
3	QPSK	1	0	24.74	24.77	24.88	
3	QPSK	1	8	24.84	24.91	24.96	25.7
3	QPSK	1	14	24.77	24.88	24.95	
3	QPSK	8	0	23.85	23.88	23.98	
3	QPSK	8	4	23.86	23.95	24.02	24.7
3	QPSK	8	7	23.89	23.95	24.01	
3	QPSK	15	0	23.88	23.89	24.02	
3	16QAM	1	0	24.05	24.07	24.19	
3	16QAM	1	8	24.10	24.22	24.26	24.7
3	16QAM	1	14	24.04	24.22	24.25	
3	16QAM	8	0	22.91	22.94	23.06	
3	16QAM	8	4	22.83	23.01	23.12	23.7
3	16QAM	8	7	22.91	23.02	23.06	
3	16QAM	15	0	22.86	22.92	23.05	
3	64QAM	1	0	23.01	22.99	22.62	
3	64QAM	1	8	23.11	23.20	22.62	23.7
3	64QAM	1	14	23.05	23.14	22.49	
3	64QAM	8	0	21.89	21.90	21.55	
3	64QAM	8	4	21.93	22.02	21.56	22.7
3	64QAM	8	7	21.94	21.99	21.50	
3	64QAM	15	0	21.90	21.89	21.50	
Channel				18507	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				18507	18900	19093	
1.4	QPSK	1	0	24.71	24.79	24.80	
1.4	QPSK	1	3	24.80	24.85	24.88	25.7
1.4	QPSK	1	5	24.73	24.80	24.84	
1.4	QPSK	3	0	24.74	24.83	24.86	
1.4	QPSK	3	1	24.77	24.86	24.89	
1.4	QPSK	3	3	24.75	24.80	24.87	24.7
1.4	QPSK	6	0	23.79	23.88	23.94	
1.4	16QAM	1	0	24.02	24.14	24.17	
1.4	16QAM	1	3	24.10	24.19	24.21	24.7
1.4	16QAM	1	5	24.02	24.10	24.13	
1.4	16QAM	3	0	23.81	23.88	23.90	
1.4	16QAM	3	1	23.87	23.95	23.98	
1.4	16QAM	3	3	23.82	23.86	23.93	23.7
1.4	16QAM	6	0	22.84	22.93	23.02	
1.4	64QAM	1	0	22.85	23.01	22.45	
1.4	64QAM	1	3	23.02	23.08	22.49	
1.4	64QAM	1	5	22.97	23.03	22.43	23.7
1.4	64QAM	3	0	22.93	23.01	22.46	
1.4	64QAM	3	1	22.97	23.06	22.52	
1.4	64QAM	3	3	22.93	23.02	22.40	
1.4	64QAM	6	0	21.80	21.90	21.36	22.7



Band 4							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	24.64	24.72	24.65	
20	QPSK	1	49	24.52	24.51	24.51	25.7
20	QPSK	1	99	24.53	24.54	24.53	
20	QPSK	50	0	23.70	23.72	23.73	
20	QPSK	50	24	23.72	23.70	23.74	24.7
20	QPSK	50	50	23.64	23.70	23.69	
20	QPSK	100	0	23.69	23.75	23.61	
20	16QAM	1	0	23.98	24.04	23.99	
20	16QAM	1	49	23.85	23.87	23.88	24.7
20	16QAM	1	99	23.87	23.86	23.84	
20	16QAM	50	0	22.99	22.71	22.74	
20	16QAM	50	24	22.73	22.73	22.77	23.7
20	16QAM	50	50	22.65	22.64	22.68	
20	16QAM	100	0	22.71	22.73	22.65	
20	64QAM	1	0	22.84	22.90	22.69	
20	64QAM	1	49	22.73	22.72	22.77	23.7
20	64QAM	1	99	22.73	22.64	22.80	
20	64QAM	50	0	21.70	21.76	21.77	
20	64QAM	50	24	21.74	21.75	21.77	22.7
20	64QAM	50	50	21.68	21.64	21.69	
20	64QAM	100	0	21.76	21.76	21.70	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	24.67	24.71	24.70	
15	QPSK	1	37	24.62	24.51	24.57	25.7
15	QPSK	1	74	24.56	24.56	24.57	
15	QPSK	36	0	23.78	23.72	23.72	
15	QPSK	36	20	23.73	23.73	23.76	24.7
15	QPSK	36	39	23.66	23.67	23.71	
15	QPSK	75	0	23.70	23.75	23.68	
15	16QAM	1	0	23.98	24.02	24.04	
15	16QAM	1	37	23.88	23.87	23.92	24.7
15	16QAM	1	74	23.87	23.85	23.89	
15	16QAM	36	0	22.78	22.72	22.76	
15	16QAM	36	20	22.71	22.73	22.78	23.7
15	16QAM	36	39	22.67	22.68	22.71	
15	16QAM	75	0	22.72	22.75	22.69	
15	64QAM	1	0	22.84	22.92	22.93	23.7
15	64QAM	1	37	22.80	22.66	22.61	
15	64QAM	1	74	22.76	22.74	22.80	
15	64QAM	36	0	21.79	21.81	21.78	
15	64QAM	36	20	21.73	21.74	21.75	22.7
15	64QAM	36	39	21.71	21.62	21.76	
15	64QAM	75	0	21.71	21.75	21.67	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.59	24.65	24.66	
10	QPSK	1	25	24.57	24.57	24.71	25.7
10	QPSK	1	49	24.60	24.62	24.66	
10	QPSK	25	0	23.72	23.69	23.70	
10	QPSK	25	12	23.72	23.76	23.75	24.7
10	QPSK	25	25	23.75	23.77	23.81	
10	QPSK	50	0	23.75	23.75	23.76	
10	16QAM	1	0	23.98	24.02	24.06	
10	16QAM	1	25	23.97	24.02	24.03	24.7
10	16QAM	1	49	24.00	23.98	24.05	
10	16QAM	25	0	22.72	22.67	22.73	
10	16QAM	25	12	22.76	22.79	22.77	23.7
10	16QAM	25	25	22.74	22.72	22.78	
10	16QAM	50	0	22.75	22.77	22.74	
10	64QAM	1	0	22.70	22.83	22.90	
10	64QAM	1	25	22.68	22.80	22.98	23.7
10	64QAM	1	49	22.61	22.65	22.95	
10	64QAM	25	0	21.70	21.70	21.74	
10	64QAM	25	12	21.77	21.74	21.79	22.7
10	64QAM	25	25	21.76	21.57	21.83	
10	64QAM	50	0	21.78	21.74	21.79	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.63	24.62	24.67	
5	QPSK	1	12	24.69	24.67	24.71	25.7
5	QPSK	1	24	24.66	24.69	24.71	
5	QPSK	12	0	23.71	23.69	23.75	
5	QPSK	12	7	23.76	23.77	23.80	24.7
5	QPSK	12	13	23.72	23.76	23.77	
5	QPSK	25	0	23.70	23.73	23.77	
5	16QAM	1	0	23.97	23.92	24.05	
5	16QAM	1	12	23.98	24.00	24.04	24.7
5	16QAM	1	24	24.01	23.99	24.03	
5	16QAM	12	0	22.75	22.69	22.82	
5	16QAM	12	7	22.79	22.80	22.85	23.7
5	16QAM	12	13	22.78	22.80	22.80	
5	16QAM	25	0	22.74	22.76	22.79	
5	64QAM	1	0	22.72	22.67	22.99	
5	64QAM	1	12	22.92	22.74	22.98	23.7
5	64QAM	1	24	22.98	22.61	22.95	
5	64QAM	12	0	21.77	21.72	21.85	
5	64QAM	12	7	21.84	21.77	21.90	22.7
5	64QAM	12	13	21.78	21.62	21.84	
5	64QAM	25	0	21.74	21.65	21.82	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.64	24.60	24.69	
3	QPSK	1	8	24.71	24.71	24.71	25.7
3	QPSK	1	14	24.65	24.69	24.67	
3	QPSK	6	0	23.71	23.66	23.79	
3	QPSK	6	4	23.75	23.75	23.77	24.7
3	QPSK	6	7	23.74	23.76	23.74	
3	QPSK	15	0	23.74	23.73	23.78	
3	16QAM	1	0	23.99	23.92	23.98	
3	16QAM	1	8	24.05	24.07	24.10	24.7
3	16QAM	1	14	23.98	23.97	24.05	
3	16QAM	6	0	22.79	22.75	22.82	
3	16QAM	6	4	22.84	22.84	22.90	23.7
3	16QAM	6	7	22.81	22.79	22.83	
3	16QAM	15	0	22.80	22.74	22.78	
3	64QAM	1	0	22.75	22.84	22.95	
3	64QAM	1	8	23.00	22.81	23.01	23.7
3	64QAM	1	14	22.97	22.69	22.98	
3	64QAM	6	0	21.73	21.73	21.85	
3	64QAM	6	4	21.84	21.72	21.86	22.7
3	64QAM	6	7	21.83	21.64	21.83	
3	64QAM	15	0	21.74	21.70	21.78	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.54	24.59	24.58	
1.4	QPSK	1	3	24.63	24.63	24.66	25.7
1.4	QPSK	1	5	24.54	24.61	24.60	
1.4	QPSK	3	0	24.59	24.60	24.67	
1.4	QPSK	3	1	24.65	24.64	24.71	
1.4	QPSK	3	3	24.63	24.59	24.63	24.7
1.4	QPSK	6	0	23.68	23.67	23.72	
1.4	16QAM	1	0	23.69	23.69	23.94	
1.4	16QAM	1	3	23.95	23.97	24.00	24.7
1.4	16QAM	1	5	23.89	23.93	23.94	
1.4	16QAM	3	0	23.69	23.69	23.75	
1.4	16QAM	3	1	23.76	23.73	23.80	
1.4	16QAM	3	3	23.67	23.68	23.71	23.7
1.4	16QAM	6	0	22.73	22.75	22.78	
1.4	64QAM	1	0	22.68	22.71	22.88	
1.4	64QAM	1	3	22.81	22.75	22.94	23.7
1.4	64QAM	1	5	22.79	22.65	22.85	
1.4	64QAM	3	0	22.69	22.75	22.82	
1.4	64QAM	3	1	22.83	22.84	22.91	
1.4	64QAM	3	3	22.79	22.70	22.86	22.7
1.4	64QAM	6	0	21.63	21.62	21.71	



Band 5							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	23.31	23.29	23.32	24.2
10	QPSK	1	25	23.24	23.28	23.20	
10	QPSK	1	49	23.30	23.23	23.18	
10	QPSK	25	0	23.31	23.38	23.33	
10	QPSK	25	12	23.42	23.37	23.43	24.2
10	QPSK	25	25	23.38	23.40	23.37	
10	QPSK	50	0	23.42	23.38	23.29	
10	16QAM	1	0	23.71	23.68	23.70	
10	16QAM	1	25	23.61	23.66	23.63	24.2
10	16QAM	1	49	23.65	23.61	23.49	
10	16QAM	25	0	22.86	22.87	22.84	
10	16QAM	25	12	22.98	22.88	22.97	23.7
10	16QAM	25	25	22.89	22.92	22.82	
10	16QAM	50	0	22.95	22.89	22.84	
10	64QAM	1	0	23.02	23.01	23.00	
10	64QAM	1	25	23.03	22.88	22.71	23.7
10	64QAM	1	49	23.01	22.73	21.99	
10	64QAM	25	0	21.90	21.94	21.88	
10	64QAM	25	12	22.00	21.90	21.70	22.7
10	64QAM	25	25	21.94	21.93	21.02	
10	64QAM	50	0	21.99	21.90	21.55	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.24	23.23	23.32	24.2
5	QPSK	1	12	23.15	23.25	23.13	
5	QPSK	1	24	23.27	23.13	23.18	
5	QPSK	12	0	23.27	23.33	23.29	
5	QPSK	12	7	23.34	23.31	23.43	24.2
5	QPSK	12	13	23.37	23.36	23.29	
5	QPSK	25	0	23.32	23.36	23.29	
5	16QAM	1	0	23.62	23.37	23.69	24.2
5	16QAM	1	12	23.58	23.61	23.60	
5	16QAM	1	24	23.56	23.54	23.44	
5	16QAM	12	0	22.76	22.77	22.83	
5	16QAM	12	7	22.88	22.83	22.87	23.7
5	16QAM	12	13	22.82	22.90	22.81	
5	16QAM	25	0	22.90	22.87	22.81	
5	64QAM	1	0	22.98	22.96	22.98	23.7
5	64QAM	1	12	23.03	22.82	22.70	
5	64QAM	1	24	22.91	22.68	21.95	
5	64QAM	12	0	21.88	21.92	21.79	
5	64QAM	12	7	21.95	21.82	21.67	22.7
5	64QAM	12	13	21.92	21.93	21.02	
5	64QAM	25	0	21.95	21.89	21.54	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.28	23.21	23.28	24.2
3	QPSK	1	8	23.24	23.21	23.11	
3	QPSK	1	14	23.30	23.13	23.11	
3	QPSK	8	0	23.24	23.37	23.25	
3	QPSK	8	4	23.39	23.37	23.39	24.2
3	QPSK	8	7	23.29	23.34	23.34	
3	QPSK	15	0	23.41	23.33	23.24	
3	16QAM	1	0	23.65	23.57	23.68	24.2
3	16QAM	1	8	23.51	23.59	23.53	
3	16QAM	1	14	23.62	23.55	23.39	
3	16QAM	8	0	22.83	22.76	22.77	23.7
3	16QAM	8	4	22.96	22.79	22.95	
3	16QAM	8	7	22.80	22.87	22.73	
3	16QAM	15	0	22.91	22.89	22.80	
3	64QAM	1	0	22.93	22.91	22.99	
3	64QAM	1	8	22.94	22.78	22.64	23.7
3	64QAM	1	14	23.01	22.71	21.93	
3	64QAM	8	0	21.82	21.91	21.86	
3	64QAM	8	4	22.00	21.82	21.70	22.7
3	64QAM	8	7	21.89	21.88	21.01	
3	64QAM	15	0	21.95	21.82	21.54	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.31	23.25	23.22	24.2
1.4	QPSK	1	3	23.19	23.24	23.16	
1.4	QPSK	1	5	23.29	23.20	23.16	
1.4	QPSK	3	0	23.27	23.32	23.28	
1.4	QPSK	3	1	23.35	23.31	23.36	
1.4	QPSK	3	3	23.30	23.32	23.30	24.2
1.4	QPSK	6	0	23.41	23.33	23.19	
1.4	16QAM	1	0	23.66	23.61	23.63	24.2
1.4	16QAM	1	3	23.58	23.60	23.57	
1.4	16QAM	1	5	23.57	23.61	23.47	
1.4	16QAM	3	0	22.86	22.86	22.78	24.2
1.4	16QAM	3	1	22.95	22.85	22.97	
1.4	16QAM	3	3	22.84	22.86	22.74	
1.4	16QAM	6	0	22.92	22.89	22.81	23.7
1.4	64QAM	1	0	22.98	22.94	22.92	
1.4	64QAM	1	3	22.95	22.81	22.67	
1.4	64QAM	1	5	22.94	22.72	21.95	
1.4	64QAM	3	0	21.85	21.84	21.78	23.7
1.4	64QAM	3	1	21.97	21.84	21.77	
1.4	64QAM	3	3	21.85	21.94	21.72	
1.4	64QAM	6	0	21.94	21.67	21.45	22.7



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



Band 12							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.51	23.46	23.46	24.6
10	QPSK	1	25	23.43	23.49	23.49	
10	QPSK	1	49	23.54	23.58	23.50	
10	QPSK	25	0	23.59	23.60	23.61	24.1
10	QPSK	25	12	23.67	23.61	23.60	
10	QPSK	25	25	23.68	23.66	23.65	
10	QPSK	50	0	23.66	23.59	23.60	24.1
10	16QAM	1	0	23.87	23.80	23.80	
10	16QAM	1	25	23.86	23.86	23.87	
10	16QAM	1	49	23.96	23.89	23.87	23.1
10	16QAM	25	0	22.87	22.72	22.71	
10	16QAM	25	12	22.78	22.72	22.70	
10	16QAM	25	25	22.71	22.77	22.78	23.1
10	16QAM	50	0	22.75	22.69	22.68	
10	64QAM	1	0	22.83	22.76	22.85	
10	64QAM	1	25	22.67	22.92	22.73	22.1
10	64QAM	1	49	22.99	22.93	22.87	
10	64QAM	25	0	21.68	21.73	21.74	
10	64QAM	25	12	21.71	21.76	21.73	22.1
10	64QAM	25	25	21.77	21.78	21.78	
10	64QAM	50	0	21.74	21.72	21.72	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.51	23.47	23.47	24.6
5	QPSK	1	12	23.46	23.58	23.57	
5	QPSK	1	24	23.48	23.54	23.50	
5	QPSK	12	0	23.62	23.59	23.60	24.1
5	QPSK	12	7	23.60	23.56	23.65	
5	QPSK	12	13	23.58	23.61	23.58	
5	QPSK	25	0	23.61	23.58	23.57	24.1
5	16QAM	1	0	23.84	23.83	23.80	
5	16QAM	1	12	23.82	23.83	23.83	
5	16QAM	1	24	23.86	23.86	23.85	23.1
5	16QAM	12	0	22.77	22.77	22.73	
5	16QAM	12	7	22.72	22.72	22.78	
5	16QAM	12	13	22.71	22.71	22.73	23.1
5	16QAM	25	0	22.74	22.70	22.67	
5	64QAM	1	0	22.57	22.75	22.80	
5	64QAM	1	12	22.78	22.90	22.90	23.1
5	64QAM	1	24	22.77	22.88	22.85	
5	64QAM	12	0	21.60	21.80	21.81	
5	64QAM	12	7	21.75	21.74	21.80	22.1
5	64QAM	12	13	21.74	21.80	21.77	
5	64QAM	25	0	21.75	21.70	21.73	
Channel				23025	23095	23155	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.59	23.52	23.52	24.6
3	QPSK	1	8	23.57	23.59	23.54	
3	QPSK	1	14	23.48	23.54	23.50	
3	QPSK	8	0	23.61	23.59	23.56	24.1
3	QPSK	8	4	23.60	23.58	23.67	
3	QPSK	8	7	23.53	23.63	23.59	
3	QPSK	15	0	23.60	23.58	23.59	24.1
3	16QAM	1	0	23.92	23.85	23.89	
3	16QAM	1	8	23.89	23.90	23.92	
3	16QAM	1	14	23.79	23.87	23.81	23.1
3	16QAM	8	0	22.78	22.77	22.74	
3	16QAM	8	4	22.75	22.76	22.81	
3	16QAM	8	7	22.70	22.78	22.76	23.1
3	16QAM	15	0	22.75	22.70	22.71	
3	64QAM	1	0	22.82	22.87	22.85	
3	64QAM	1	8	22.86	22.92	22.94	23.1
3	64QAM	1	14	22.75	22.96	22.82	
3	64QAM	8	0	21.62	21.75	21.77	
3	64QAM	8	4	21.70	21.74	21.81	22.1
3	64QAM	8	7	21.74	21.75	21.72	
3	64QAM	15	0	21.60	21.70	21.70	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.46	23.42	23.44	24.6
1.4	QPSK	1	3	23.49	23.50	23.49	
1.4	QPSK	1	5	23.40	23.41	23.40	
1.4	QPSK	3	0	23.47	23.45	23.44	24.1
1.4	QPSK	3	1	23.51	23.47	23.45	
1.4	QPSK	3	3	23.45	23.45	23.44	
1.4	QPSK	6	0	23.50	23.57	23.49	24.1
1.4	16QAM	1	0	23.78	23.73	23.75	
1.4	16QAM	1	3	23.82	23.86	23.81	
1.4	16QAM	1	5	23.71	23.78	23.73	24.1
1.4	16QAM	3	0	23.57	23.53	23.50	
1.4	16QAM	3	1	23.61	23.57	23.57	
1.4	16QAM	3	3	23.51	23.54	23.48	23.1
1.4	16QAM	6	0	22.88	22.70	22.85	
1.4	64QAM	1	0	22.59	22.73	22.77	
1.4	64QAM	1	3	22.71	22.85	22.81	23.1
1.4	64QAM	1	5	22.70	22.79	22.75	
1.4	64QAM	3	0	22.58	22.73	22.73	
1.4	64QAM	3	1	22.64	22.78	22.80	22.1
1.4	64QAM	3	3	22.63	22.75	22.74	
1.4	64QAM	6	0	21.48	21.67	21.63	



Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		23.24		24.4
10	QPSK	1	25		23.22		
10	QPSK	1	49		23.30		
10	QPSK	25	0		23.11		24.2
10	QPSK	25	12		23.20		
10	QPSK	25	25		23.15		
10	QPSK	50	0		23.52		
10	16QAM	1	0		23.69		24.2
10	16QAM	1	25		23.66		
10	16QAM	1	49		23.68		
10	16QAM	25	0		22.43		23.2
10	16QAM	25	12		22.50		
10	16QAM	25	25		22.48		
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.60		23.2
10	64QAM	1	25		22.59		
10	64QAM	1	49		22.63		
10	64QAM	25	0		21.46		22.2
10	64QAM	25	12		21.56		
10	64QAM	25	25		21.48		
10	64QAM	50	0		21.57		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0		23.52	23.51	23.52
5	QPSK	1	12		23.57	23.53	23.53
5	QPSK	1	24		23.57	23.52	23.60
5	QPSK	12	0		23.43	23.42	23.40
5	QPSK	12	7		23.50	23.48	23.49
5	QPSK	12	13		23.48	23.46	23.47
5	QPSK	25	0		23.50	23.44	23.43
5	16QAM	1	0		23.58	23.61	23.58
5	16QAM	1	12		23.57	23.55	23.54
5	16QAM	1	24		23.63	23.64	23.65
5	16QAM	12	0		22.50	22.45	22.47
5	16QAM	12	7		22.52	22.47	22.52
5	16QAM	12	13		22.49	22.49	22.51
5	16QAM	25	0		22.55	22.49	22.49
5	64QAM	1	0		22.49	22.48	22.44
5	64QAM	1	12		22.50	22.48	22.53
5	64QAM	1	24		22.50	22.58	22.54
5	64QAM	12	0		21.59	21.50	21.50
5	64QAM	12	7		21.57	21.55	21.53
5	64QAM	12	13		21.57	21.52	21.53
5	64QAM	25	0		21.55	21.52	21.50



Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	23.64			24.6
10	QPSK	1	25	23.63			
10	QPSK	1	49	23.60			
10	QPSK	25	0	23.69			24.6
10	QPSK	25	12	23.66			
10	QPSK	25	25	23.73			
10	QPSK	50	0	23.68			24.6
10	16QAM	1	0	24.12			
10	16QAM	1	25	24.04			
10	16QAM	1	49	23.99			24.6
10	16QAM	25	0	22.79			
10	16QAM	25	12	22.80			
10	16QAM	25	25	22.83			23.6
10	16QAM	50	0	22.80			
10	64QAM	1	0	22.51			
10	64QAM	1	25	22.49			23.6
10	64QAM	1	49	22.99			
10	64QAM	25	0	21.25			
10	64QAM	25	12	21.23			22.6
10	64QAM	25	25	21.58			
10	64QAM	50	0	21.34			
Channel				23305 23330 23355			
Frequency (MHz)				790.5 793 795.5			
5	QPSK	1	0	23.66	23.57	23.59	24.6
5	QPSK	1	12	23.73	23.72	23.67	
5	QPSK	1	24	23.69	23.63	23.61	
5	QPSK	12	0	23.77	23.71	23.70	24.6
5	QPSK	12	7	23.76	23.70	23.76	
5	QPSK	12	13	23.74	23.73	23.70	
5	QPSK	25	0	23.75	23.65	23.63	24.6
5	16QAM	1	0	23.96	23.86	23.90	
5	16QAM	1	12	23.99	23.96	23.99	
5	16QAM	1	24	23.95	23.96	23.93	23.6
5	16QAM	12	0	22.88	22.79	22.85	
5	16QAM	12	7	22.92	22.84	22.90	
5	16QAM	12	13	22.86	22.80	22.85	23.6
5	16QAM	25	0	22.68	22.79	22.61	
5	64QAM	1	0	22.47	22.26	22.37	
5	64QAM	1	12	22.31	22.15	22.60	23.6
5	64QAM	1	24	22.06	22.37	23.00	
5	64QAM	12	0	21.39	21.08	21.32	
5	64QAM	12	7	21.26	21.11	21.67	22.6
5	64QAM	12	13	21.10	21.23	21.87	
5	64QAM	25	0	21.15	21.06	21.63	





Band 17						
Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				23780	23790	23800
Frequency (MHz)				706	710	714
10	QPSK	1	0	23.46	23.45	23.46
10	QPSK	1	25	23.48	23.52	23.51
10	QPSK	1	49	23.53	23.55	23.53
10	QPSK	25	0	23.55	23.54	23.55
10	QPSK	25	12	23.72	23.94	23.82
10	QPSK	25	25	23.71	23.71	23.70
10	QPSK	50	0	23.62	23.62	23.61
10	16QAM	1	0	23.86	23.83	23.81
10	16QAM	1	25	23.93	23.96	23.94
10	16QAM	1	49	23.94	23.93	23.89
10	16QAM	25	0	22.85	22.94	22.85
10	16QAM	25	12	22.79	22.72	22.72
10	16QAM	25	25	22.77	22.79	22.79
10	16QAM	50	0	22.71	22.70	22.68
10	64QAM	1	0	22.59	22.81	22.83
10	64QAM	1	25	22.76	22.73	22.67
10	64QAM	1	49	22.85	22.89	22.74
10	64QAM	25	0	21.51	21.45	21.50
10	64QAM	25	12	21.65	21.57	21.63
10	64QAM	25	25	21.67	21.77	21.74
10	64QAM	50	0	21.63	21.70	21.63
Channel				23765	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	23.48	23.47	23.50
5	QPSK	1	12	23.56	23.63	23.59
5	QPSK	1	24	23.63	23.60	23.59
5	QPSK	12	0	23.59	23.63	23.67
5	QPSK	12	7	23.69	23.63	23.68
5	QPSK	12	13	23.65	23.65	23.65
5	QPSK	25	0	23.61	23.59	23.66
5	16QAM	1	0	23.62	23.63	23.82
5	16QAM	1	12	23.90	23.87	23.87
5	16QAM	1	24	23.94	23.92	23.92
5	16QAM	12	0	22.72	22.75	22.69
5	16QAM	12	7	22.78	22.73	22.78
5	16QAM	12	13	22.77	22.79	22.77
5	16QAM	25	0	22.78	22.74	22.80
5	64QAM	1	0	22.37	22.57	22.85
5	64QAM	1	12	22.78	22.71	22.90
5	64QAM	1	24	22.65	22.64	22.63
5	64QAM	12	0	21.60	21.59	21.79
5	64QAM	12	7	21.82	21.68	21.85
5	64QAM	12	13	21.72	21.62	21.79
5	64QAM	25	0	21.57	21.50	21.73



Band 25							
Arif 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	24.79	24.78	24.93	25.7
20	QPSK	1	49	24.72	24.74	24.80	
20	QPSK	1	99	24.65	24.74	24.39	
20	QPSK	50	0	23.83	23.89	23.94	24.7
20	QPSK	50	24	23.88	23.99	24.01	
20	QPSK	50	50	23.82	23.93	24.00	
20	QPSK	100	0	23.89	23.97	23.98	24.7
20	16QAM	1	0	24.14	24.15	24.16	
20	16QAM	1	49	24.07	24.11	24.17	
20	16QAM	1	99	23.99	24.10	23.73	23.7
20	16QAM	50	0	22.84	22.92	22.95	
20	16QAM	50	24	22.89	22.99	22.95	
20	16QAM	50	50	22.85	22.94	23.02	23.7
20	16QAM	100	0	22.87	22.95	22.93	
20	64QAM	1	0	23.00	22.99	22.68	
20	64QAM	1	49	22.97	22.98	22.58	23.7
20	64QAM	1	99	22.84	22.99	21.87	
20	64QAM	50	0	21.87	21.93	21.49	
20	64QAM	50	24	21.91	22.00	21.57	22.7
20	64QAM	50	50	21.79	21.97	21.23	
20	64QAM	100	0	21.89	22.01	21.26	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	24.82	24.87	24.89	25.7
15	QPSK	1	37	24.75	24.80	24.87	
15	QPSK	1	74	24.72	24.82	24.39	
15	QPSK	36	0	23.86	23.93	23.99	24.7
15	QPSK	36	20	23.89	24.02	24.06	
15	QPSK	36	39	23.83	23.96	23.88	
15	QPSK	75	0	23.89	23.90	23.95	24.7
15	16QAM	1	0	24.07	24.15	24.19	
15	16QAM	1	37	24.12	24.14	24.22	
15	16QAM	1	74	24.05	24.12	23.75	23.7
15	16QAM	36	0	22.86	22.95	22.97	
15	16QAM	36	20	22.93	23.01	23.05	
15	16QAM	36	39	22.84	22.96	23.00	23.7
15	16QAM	75	0	22.90	22.93	22.96	
15	64QAM	1	0	23.03	23.00	22.46	
15	64QAM	1	37	22.99	23.06	22.62	23.7
15	64QAM	1	74	22.74	23.02	21.89	
15	64QAM	36	0	21.92	21.98	21.61	
15	64QAM	36	20	21.94	22.03	21.57	22.7
15	64QAM	36	39	21.77	22.00	21.24	
15	64QAM	75	0	21.91	21.92	21.31	
Channel				26050	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	24.77	24.76	24.87	25.7
10	QPSK	1	25	24.70	24.79	24.86	
10	QPSK	1	49	24.74	24.79	24.33	
10	QPSK	25	0	23.90	23.86	23.93	24.7
10	QPSK	25	12	23.95	23.97	23.96	
10	QPSK	25	25	23.92	23.97	23.73	
10	QPSK	50	0	23.93	23.97	23.87	24.7
10	16QAM	1	0	24.14	24.15	24.22	
10	16QAM	1	25	24.13	24.18	24.23	
10	16QAM	1	49	24.11	24.17	23.69	23.7
10	16QAM	25	0	22.83	22.86	22.93	
10	16QAM	25	12	22.92	23.00	22.98	
10	16QAM	25	25	22.89	22.93	22.91	23.7
10	16QAM	50	0	22.92	22.97	22.96	
10	64QAM	1	0	23.01	22.97	22.67	
10	64QAM	1	25	23.08	23.13	22.41	23.7
10	64QAM	1	49	22.88	23.08	21.84	
10	64QAM	25	0	21.94	21.99	21.52	
10	64QAM	25	12	21.98	22.00	21.37	22.7
10	64QAM	25	25	21.94	22.00	21.06	
10	64QAM	50	0	21.96	22.02	21.17	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.80	24.75	24.92	25.7
5	QPSK	1	12	24.84	24.85	24.56	
5	QPSK	1	24	24.81	24.88	24.29	
5	QPSK	12	0	23.88	23.91	23.88	24.7
5	QPSK	12	7	23.96	23.99	23.76	
5	QPSK	12	13	23.96	23.99	23.60	
5	QPSK	25	0	23.93	23.93	23.64	24.7
5	16QAM	1	0	24.22	24.11	24.18	
5	16QAM	1	12	24.13	24.19	23.93	
5	16QAM	1	24	24.15	24.18	23.70	23.7
5	16QAM	12	0	22.88	22.95	23.01	
5	16QAM	12	7	22.93	23.02	22.88	
5	16QAM	12	13	22.98	23.02	22.75	23.7
5	16QAM	25	0	22.96	22.97	22.60	
5	64QAM	1	0	23.07	23.01	22.33	
5	64QAM	1	12	23.05	23.07	21.98	23.7
5	64QAM	1	24	23.06	23.11	21.75	
5	64QAM	12	0	21.95	21.98	21.17	
5	64QAM	12	7	22.01	22.06	21.03	22.7
5	64QAM	12	13	22.03	22.06	20.88	
5	64QAM	25	0	21.93	22.00	20.98	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.72	24.71	24.65	25.7
3	QPSK	1	8	24.88	24.91	24.53	
3	QPSK	1	14	24.85	24.90	24.29	
3	QPSK	8	0	23.87	23.89	23.71	24.7
3	QPSK	8	4	23.92	23.96	23.66	
3	QPSK	8	7	23.96	23.97	23.54	
3	QPSK	15	0	23.93	23.95	23.58	24.7
3	16QAM	1	0	24.09	24.01	23.89	
3	16QAM	1	8	24.20	24.26	23.84	
3	16QAM	1	14	24.21	24.24	23.63	23.7
3	16QAM	8	0	22.92	22.95	22.83	
3	16QAM	8	4	23.03	23.04	22.76	
3	16QAM	8	7	23.01	23.02	22.67	23.7
3	16QAM	15	0	22.97	22.97	22.70	
3	64QAM	1	0	22.95	22.96	22.01	
3	64QAM	1	8	23.12	23.20	21.98	23.7
3	64QAM	1	14	23.11	23.16	21.75	
3	64QAM	8	0	21.93	22.00	20.95	
3	64QAM	8	4	21.99	22.07	20.94	22.7
3	64QAM	8	7	22.00	22.06	20.84	
3	64QAM	15	0	21.94	21.96	20.88	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1890	1914.3	
1.4	QPSK	1	0	24.71	24.73	24.37	25.7
1.4	QPSK	1	3	24.80	24.83	24.31	
1.4	QPSK	1	5	24.79	24.84	24.20	
1.4	QPSK	3	0	24.78	24.81	24.32	24.7
1.4	QPSK	3	1	24.82	24.83	24.33	
1.4	QPSK	3	3	24.77	24.83	24.24	
1.4	QPSK	6	0	23.85	23.91	23.41	24.7
1.4	16QAM	1	0	24.05	24.05	23.64	
1.4	16QAM	1	3	24.12	24.17	23.64	
1.4	16QAM	1	5	24.07	24.12	23.54	24.7
1.4	16QAM	3	0	23.81	23.87	23.49	
1.4	16QAM	3	1	23.88	23.93	23.48	
1.4	16QAM	3	3	23.84	23.93	23.42	23.7
1.4	16QAM	6	0	22.93	22.94	22.98	
1.4	64QAM	1	0	22.97	22.97	21.78	
1.4	64QAM	1	3	23.08	23.12	21.71	23.7
1.4	64QAM	1	5	23.03	23.06	21.72	
1.4	64QAM	3	0	22.92	22.96	21.80	
1.4	64QAM	3	1	23.00	23.05	21.85	23.7
1.4	64QAM	3	3	22.98	23.01	21.71	
1.4	64QAM	6	0	21.90	21.93	20.71	



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.31	23.22	23.23	
15	QPSK	1	37	23.18	23.23	23.22	24.2
15	QPSK	1	74	23.23	23.22	23.10	
15	QPSK	36	0	23.36	23.35	23.36	
15	QPSK	36	20	23.38	23.40	23.31	24.2
15	QPSK	36	39	23.33	23.36	23.30	
15	QPSK	75	0	23.40	23.33	23.32	
15	16QAM	1	0	23.59	23.53	23.56	
15	16QAM	1	37	23.48	23.54	23.53	24.2
15	16QAM	1	74	23.46	23.50	23.40	
15	16QAM	36	0	22.84	22.84	22.87	
15	16QAM	36	20	22.86	22.85	22.81	23.7
15	16QAM	36	39	22.82	22.83	22.82	
15	16QAM	75	0	22.88	22.80	22.83	
15	64QAM	1	0	22.65	22.89	22.89	
15	64QAM	1	37	22.51	22.94	22.95	23.7
15	64QAM	1	74	22.51	22.92	21.70	
15	64QAM	36	0	21.22	21.89	21.89	
15	64QAM	36	20	21.47	21.95	21.86	22.7
15	64QAM	36	39	21.86	21.92	21.33	
15	64QAM	75	0	21.63	21.84	21.53	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.22	23.17	23.19	
10	QPSK	1	25	23.16	23.20	23.13	24.2
10	QPSK	1	49	23.19	23.19	23.02	
10	QPSK	25	0	23.28	23.35	23.28	
10	QPSK	25	12	23.37	23.35	23.31	24.2
10	QPSK	25	25	23.24	23.26	23.21	
10	QPSK	50	0	23.34	23.32	23.27	
10	16QAM	1	0	23.55	23.52	23.49	
10	16QAM	1	25	23.45	23.46	23.51	24.2
10	16QAM	1	49	23.43	23.41	23.33	
10	16QAM	25	0	22.77	22.80	22.78	
10	16QAM	25	12	22.81	22.80	22.80	23.7
10	16QAM	25	25	22.81	22.73	22.82	
10	16QAM	50	0	22.81	22.75	22.77	
10	64QAM	1	0	22.62	22.82	22.75	
10	64QAM	1	25	22.50	22.92	22.87	23.7
10	64QAM	1	49	22.85	22.91	21.69	
10	64QAM	25	0	21.14	21.89	21.84	
10	64QAM	25	12	21.42	21.86	21.80	22.7
10	64QAM	25	25	21.80	21.89	21.26	
10	64QAM	50	0	21.62	21.62	21.51	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.30	23.13	23.16	
5	QPSK	1	12	23.10	23.21	23.20	24.2
5	QPSK	1	24	23.23	23.20	23.01	
5	QPSK	12	0	23.27	23.26	23.30	
5	QPSK	12	7	23.39	23.34	23.31	24.2
5	QPSK	12	13	23.24	23.31	23.29	
5	QPSK	25	0	23.33	23.31	23.31	
5	16QAM	1	0	23.54	23.48	23.55	
5	16QAM	1	12	23.46	23.45	23.44	24.2
5	16QAM	1	24	23.43	23.43	23.33	
5	16QAM	12	0	22.75	22.79	22.86	
5	16QAM	12	7	22.82	22.81	22.75	23.7
5	16QAM	12	13	22.78	22.80	22.72	
5	16QAM	25	0	22.81	22.76	22.78	
5	64QAM	1	0	22.62	22.79	22.85	
5	64QAM	1	12	22.46	22.85	22.94	23.7
5	64QAM	1	24	22.51	22.80	21.60	
5	64QAM	12	0	21.22	21.82	21.83	
5	64QAM	12	7	21.45	21.93	21.83	22.7
5	64QAM	12	13	21.77	21.86	21.33	
5	64QAM	25	0	21.55	21.84	21.46	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.22	23.14	23.17	
3	QPSK	1	8	23.11	23.13	23.20	24.2
3	QPSK	1	14	23.23	23.18	23.00	
3	QPSK	6	0	23.30	23.35	23.31	
3	QPSK	6	4	23.35	23.32	23.28	24.2
3	QPSK	6	7	23.27	23.30	23.21	
3	QPSK	15	0	23.35	23.33	23.29	
3	16QAM	1	0	23.55	23.46	23.55	
3	16QAM	1	8	23.46	23.48	23.53	24.2
3	16QAM	1	14	23.45	23.43	23.39	
3	16QAM	6	0	22.83	22.83	22.80	
3	16QAM	6	4	22.83	22.87	22.81	23.7
3	16QAM	6	7	22.77	22.73	22.81	
3	16QAM	15	0	22.83	22.78	22.77	
3	64QAM	1	0	22.60	22.84	22.84	
3	64QAM	1	8	22.47	22.91	22.89	23.7
3	64QAM	1	14	22.87	22.92	21.61	
3	64QAM	6	0	21.20	21.80	21.88	
3	64QAM	6	4	21.47	21.95	21.83	22.7
3	64QAM	6	7	21.75	21.85	21.23	
3	64QAM	15	0	21.61	21.75	21.44	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.29	23.19	23.14	
1.4	QPSK	1	3	23.18	23.21	23.19	24.2
1.4	QPSK	1	5	23.23	23.17	23.09	
1.4	QPSK	3	0	23.26	23.35	23.31	
1.4	QPSK	3	1	23.34	23.35	23.27	24.2
1.4	QPSK	3	3	23.23	23.35	23.21	
1.4	QPSK	6	0	23.33	23.26	23.32	24.2
1.4	16QAM	1	0	23.53	23.53	23.50	
1.4	16QAM	1	3	23.45	23.49	23.53	
1.4	16QAM	1	5	23.46	23.44	23.30	24.2
1.4	16QAM	3	0	22.77	22.81	22.83	
1.4	16QAM	3	1	22.79	22.80	22.71	
1.4	16QAM	3	3	22.78	22.78	22.80	
1.4	16QAM	6	0	22.85	22.73	22.74	23.7
1.4	64QAM	1	0	22.62	22.85	22.79	
1.4	64QAM	1	3	22.47	22.92	22.88	
1.4	64QAM	1	5	22.88	22.91	21.99	23.7
1.4	64QAM	3	0	21.73	21.80	21.79	
1.4	64QAM	3	1	21.72	21.86	21.84	
1.4	64QAM	3	3	21.83	21.82	21.70	
1.4	64QAM	6	0	21.55	21.79	21.51	22.7



Band 30							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2774.0	2774.0	2774.0	
Frequency (MHz)				2310			
10	QPSK	1	0	22.92			23.7
10	QPSK	1	25	22.76			
10	QPSK	1	49	22.77			
10	QPSK	25	0	21.83			22.7
10	QPSK	25	12	21.86			
10	QPSK	25	25	21.97			
10	QPSK	50	0	21.86			22.7
10	16QAM	1	0	22.20			
10	16QAM	1	25	22.17			
10	16QAM	1	49	22.20			21.7
10	16QAM	25	0	20.94			
10	16QAM	25	12	20.85			
10	16QAM	25	25	20.99			21.7
10	16QAM	50	0	20.87			
10	64QAM	1	0	21.04			
10	64QAM	1	25	21.09			21.7
10	64QAM	1	49	21.04			
10	64QAM	25	0	19.67			
10	64QAM	25	12	19.92			20.7
10	64QAM	25	25	20.00			
10	64QAM	50	0	19.89			
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.75	22.76	22.76	23.7
5	QPSK	1	12	22.89	22.90	22.87	
5	QPSK	1	24	22.91	22.88	22.86	
5	QPSK	12	0	21.90	21.85	21.87	22.7
5	QPSK	12	7	21.95	21.97	21.93	
5	QPSK	12	13	21.96	21.96	21.93	
5	QPSK	25	0	21.83	21.87	21.90	22.7
5	16QAM	1	0	22.08	22.07	22.10	
5	16QAM	1	12	22.14	22.14	22.12	
5	16QAM	1	24	22.18	22.21	22.15	21.7
5	16QAM	12	0	20.92	20.87	20.90	
5	16QAM	12	7	20.96	20.99	20.95	
5	16QAM	12	13	20.97	20.97	20.94	21.7
5	16QAM	25	0	20.98	20.99	20.93	
5	64QAM	1	0	20.98	21.06	21.06	
5	64QAM	1	12	21.04	21.09	21.07	21.7
5	64QAM	1	24	21.12	21.13	21.12	
5	64QAM	12	0	19.99	19.91	19.96	
5	64QAM	12	7	20.03	20.03	20.00	20.7
5	64QAM	12	13	20.02	20.02	20.00	
5	64QAM	25	0	19.98	19.94	19.94	



Band 66							
AR 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				132092	132322	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	24.56	24.59	24.79	25.7
20	QPSK	1	49	24.39	24.48	24.52	
20	QPSK	1	99	24.55	24.55	24.44	
20	QPSK	50	0	23.57	23.67	23.71	24.7
20	QPSK	50	24	23.64	23.94	23.69	
20	QPSK	50	50	23.65	23.68	23.72	
20	QPSK	100	0	23.63	23.61	23.68	24.7
20	16QAM	1	0	23.91	23.92	24.01	
20	16QAM	1	49	23.77	23.83	23.86	
20	16QAM	1	99	23.67	23.88	23.81	23.7
20	16QAM	50	0	22.58	22.98	22.74	
20	16QAM	50	24	22.64	22.64	22.68	
20	16QAM	50	50	22.64	22.70	22.72	23.7
20	16QAM	100	0	22.63	22.59	22.71	
20	64QAM	1	0	22.74	22.85	22.81	
20	64QAM	1	49	22.64	22.74	22.69	23.7
20	64QAM	1	99	22.76	22.76	22.71	
20	64QAM	50	0	21.69	21.69	21.76	
20	64QAM	50	24	21.67	21.67	21.71	22.7
20	64QAM	50	50	21.63	21.72	21.75	
20	64QAM	100	0	21.69	21.64	21.71	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	24.52	24.62	24.65	25.7
15	QPSK	1	37	24.41	24.54	24.56	
15	QPSK	1	74	24.54	24.58	24.55	
15	QPSK	36	0	23.60	23.67	23.72	24.7
15	QPSK	36	20	23.66	23.65	23.70	
15	QPSK	36	39	23.62	23.70	23.74	
15	QPSK	75	0	23.64	23.64	23.71	24.7
15	16QAM	1	0	23.81	23.96	23.98	
15	16QAM	1	37	23.78	23.86	23.92	
15	16QAM	1	74	23.84	23.92	23.84	23.7
15	16QAM	36	0	22.58	22.68	22.70	
15	16QAM	36	20	22.62	22.65	22.67	
15	16QAM	36	39	22.62	22.71	22.72	23.7
15	16QAM	75	0	22.65	22.67	22.71	
15	64QAM	1	0	22.69	22.80	22.83	
15	64QAM	1	37	22.67	22.74	22.80	23.7
15	64QAM	1	74	22.76	22.81	22.72	
15	64QAM	36	0	21.60	21.71	21.76	
15	64QAM	36	20	21.64	21.64	21.69	22.7
15	64QAM	36	39	21.68	21.72	21.75	
15	64QAM	75	0	21.65	21.67	21.72	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	24.57	24.58	24.70	25.7
10	QPSK	1	25	24.55	24.64	24.65	
10	QPSK	1	49	24.55	24.81	24.66	
10	QPSK	25	0	23.64	23.69	23.73	24.7
10	QPSK	25	12	23.65	23.71	23.72	
10	QPSK	25	25	23.65	23.75	23.75	
10	QPSK	50	0	23.68	23.69	23.74	24.7
10	16QAM	1	0	23.97	24.04	24.05	
10	16QAM	1	25	23.91	24.02	24.03	
10	16QAM	1	49	23.92	23.99	24.04	23.7
10	16QAM	25	0	22.66	22.96	22.73	
10	16QAM	25	12	22.67	22.71	22.74	
10	16QAM	25	25	22.65	22.74	22.77	23.7
10	16QAM	50	0	22.67	22.69	22.73	
10	64QAM	1	0	22.85	22.87	22.77	
10	64QAM	1	25	22.81	22.94	22.98	23.7
10	64QAM	1	49	22.83	22.95	22.95	
10	64QAM	25	0	21.66	21.72	21.75	
10	64QAM	25	12	21.72	21.73	21.76	22.7
10	64QAM	25	25	21.70	21.77	21.78	
10	64QAM	50	0	21.72	21.72	21.78	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	24.57	24.61	24.73	25.7
5	QPSK	1	12	24.59	24.69	24.71	
5	QPSK	1	24	24.54	24.66	24.71	
5	QPSK	12	0	23.66	23.71	23.81	24.7
5	QPSK	12	7	23.68	23.79	23.81	
5	QPSK	12	13	23.63	23.78	23.81	
5	QPSK	25	0	23.65	23.70	23.79	24.7
5	16QAM	1	0	23.93	23.95	24.04	
5	16QAM	1	12	23.95	24.02	24.03	
5	16QAM	1	24	23.91	23.99	24.03	23.7
5	16QAM	12	0	22.70	22.75	22.85	
5	16QAM	12	7	22.73	22.81	22.86	
5	16QAM	12	13	22.70	22.77	22.81	23.7
5	16QAM	25	0	22.67	22.70	22.79	
5	64QAM	1	0	22.84	22.94	23.03	
5	64QAM	1	12	22.90	22.98	22.98	23.7
5	64QAM	1	24	22.87	22.94	22.91	
5	64QAM	12	0	21.73	21.76	21.87	
5	64QAM	12	7	21.78	21.84	21.87	22.7
5	64QAM	12	13	21.69	21.82	21.82	
5	64QAM	25	0	21.68	21.73	21.83	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	24.59	24.64	24.72	25.7
3	QPSK	1	8	24.64	24.74	24.78	
3	QPSK	1	14	24.58	24.68	24.67	
3	QPSK	8	0	23.68	23.70	23.76	24.7
3	QPSK	8	4	23.69	23.85	23.79	
3	QPSK	8	7	23.67	23.72	23.76	
3	QPSK	15	0	23.68	23.67	23.78	24.7
3	16QAM	1	0	23.92	23.98	24.05	
3	16QAM	1	8	24.00	24.10	24.14	
3	16QAM	1	14	23.99	24.00	24.00	23.7
3	16QAM	8	0	22.72	22.70	22.86	
3	16QAM	8	4	22.77	22.83	22.89	
3	16QAM	8	7	22.72	22.84	22.81	23.7
3	16QAM	15	0	22.70	22.75	22.79	
3	64QAM	1	0	22.82	22.93	22.94	
3	64QAM	1	8	22.93	23.05	23.03	23.7
3	64QAM	1	14	22.85	22.99	22.97	
3	64QAM	8	0	21.76	21.73	21.81	
3	64QAM	8	4	21.78	21.82	21.87	22.7
3	64QAM	8	7	21.75	21.81	21.84	
3	64QAM	15	0	21.69	21.74	21.81	
Channel				131979	132322	132685	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	24.47	24.52	24.61	25.7
1.4	QPSK	1	3	24.56	24.66	24.71	
1.4	QPSK	1	5	24.51	24.56	24.65	
1.4	QPSK	3	0	24.52	24.63	24.65	24.7
1.4	QPSK	3	1	24.59	24.68	24.71	
1.4	QPSK	3	3	24.53	24.64	24.66	
1.4	QPSK	6	0	23.60	23.70	23.71	24.7
1.4	16QAM	1	0	23.83	23.94	23.95	
1.4	16QAM	1	3	23.92	24.01	24.03	
1.4	16QAM	1	5	23.84	23.93	23.94	24.7
1.4	16QAM	3	0	23.62	23.75	23.76	
1.4	16QAM	3	1	23.68	23.79	23.80	
1.4	16QAM	3	3	23.61	23.71	23.72	23.7
1.4	16QAM	6	0	22.67	22.76	22.77	
1.4	64QAM	1	0	22.76	22.88	22.91	
1.4	64QAM	1	3	22.84	22.94	22.95	23.7
1.4	64QAM	1	5	22.80	22.87	22.89	
1.4	64QAM	3	0	22.76	22.82	22.89	
1.4	64QAM	3	1	22.79	22.88	22.92	23.7
1.4	64QAM	3	3	22.75	22.85	22.87	
1.4	64QAM	6	0	21.62	21.73	21.75	



Band 71						
Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	23.51	23.41	23.36
20	QPSK	1	49	23.40	23.39	23.36
20	QPSK	1	99	23.42	23.37	23.31
20	QPSK	50	0	23.54	23.48	23.43
20	QPSK	50	24	23.57	23.47	23.44
20	QPSK	50	50	23.57	23.49	23.46
20	QPSK	100	0	23.55	23.45	23.43
20	16QAM	1	0	23.85	23.73	23.69
20	16QAM	1	49	23.72	23.76	23.70
20	16QAM	1	99	23.80	23.68	23.64
20	16QAM	50	0	22.85	22.89	22.76
20	16QAM	50	24	22.89	22.89	22.74
20	16QAM	50	50	22.86	22.79	22.77
20	16QAM	100	0	22.87	22.76	22.71
20	64QAM	1	0	22.23	22.83	22.83
20	64QAM	1	49	22.84	22.91	22.55
20	64QAM	1	99	22.97	22.74	22.48
20	64QAM	50	0	21.26	21.83	21.78
20	64QAM	50	24	21.73	21.83	21.77
20	64QAM	50	50	21.90	21.83	21.79
20	64QAM	100	0	21.74	21.77	21.74
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	23.54	23.45	23.39
15	QPSK	1	37	23.41	23.39	23.35
15	QPSK	1	74	23.43	23.40	23.35
15	QPSK	36	0	23.52	23.48	23.42
15	QPSK	36	20	23.58	23.48	23.42
15	QPSK	36	39	23.47	23.52	23.46
15	QPSK	75	0	23.58	23.47	23.41
15	16QAM	1	0	23.84	23.73	23.69
15	16QAM	1	37	23.75	23.74	23.69
15	16QAM	1	74	23.74	23.71	23.66
15	16QAM	36	0	22.85	22.79	22.75
15	16QAM	36	20	22.86	22.77	22.74
15	16QAM	36	39	22.82	22.80	22.78
15	16QAM	75	0	22.80	22.76	22.72
15	64QAM	1	0	22.19	22.85	22.85
15	64QAM	1	37	22.04	22.92	22.93
15	64QAM	1	74	22.94	22.85	22.67
15	64QAM	36	0	21.06	21.81	21.77
15	64QAM	36	20	21.25	21.81	21.79
15	64QAM	36	39	21.83	21.76	21.81
15	64QAM	75	0	21.63	21.79	21.74
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	23.53	23.40	23.40
10	QPSK	1	25	23.40	23.34	23.36
10	QPSK	1	49	23.42	23.40	23.31
10	QPSK	25	0	23.58	23.47	23.44
10	QPSK	25	12	23.59	23.56	23.45
10	QPSK	25	25	23.55	23.52	23.46
10	QPSK	50	0	23.59	23.56	23.43
10	16QAM	1	0	23.83	23.73	23.77
10	16QAM	1	25	23.80	23.80	23.78
10	16QAM	1	49	23.80	23.79	23.71
10	16QAM	25	0	22.85	22.76	22.72
10	16QAM	25	12	22.89	22.86	22.71
10	16QAM	25	25	22.83	22.80	22.76
10	16QAM	50	0	22.90	22.84	22.72
10	64QAM	1	0	22.08	22.70	22.96
10	64QAM	1	25	22.21	23.01	22.94
10	64QAM	1	49	22.55	22.89	22.85
10	64QAM	25	0	20.98	21.81	21.76
10	64QAM	25	12	21.03	21.88	21.79
10	64QAM	25	25	21.12	21.84	21.61
10	64QAM	50	0	21.11	21.86	21.73
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	23.56	23.46	23.40
5	QPSK	1	12	23.54	23.45	23.35
5	QPSK	1	24	23.47	23.41	23.34
5	QPSK	12	0	23.66	23.52	23.45
5	QPSK	12	7	23.61	23.55	23.45
5	QPSK	12	13	23.54	23.49	23.40
5	QPSK	25	0	23.58	23.54	23.39
5	16QAM	1	0	23.84	23.79	23.71
5	16QAM	1	12	23.78	23.77	23.69
5	16QAM	1	24	23.76	23.72	23.63
5	16QAM	12	0	22.74	22.87	22.78
5	16QAM	12	7	22.83	22.88	22.80
5	16QAM	12	13	22.85	22.83	22.72
5	16QAM	25	0	22.78	22.84	22.71
5	64QAM	1	0	21.70	22.53	22.71
5	64QAM	1	12	21.79	23.04	22.89
5	64QAM	1	24	22.03	23.04	22.65
5	64QAM	12	0	20.85	21.90	21.55
5	64QAM	12	7	20.96	21.91	21.68
5	64QAM	12	13	20.91	21.86	21.52
5	64QAM	25	0	20.83	21.87	21.45



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. / 18000	Middle Ch. / 18600	High Ch. / 19100	Tune-up limit (dBm)
Channel				1800	1860	1900	
Frequency (MHz)							
20	QPSK	1	0	23.08	23.12	23.11	24.2
20	QPSK	1	49	23.06	23.06	23.06	
20	QPSK	1	99	23.01	23.05	23.07	
20	QPSK	50	0	23.15	23.17	23.09	24.2
20	QPSK	50	24	23.22	23.21	23.20	
20	QPSK	50	50	23.20	23.25	23.21	
20	QPSK	100	0	23.23	23.15	22.99	24
20	16QAM	1	0	23.39	23.46	23.41	
20	16QAM	1	49	23.39	23.45	22.85	
20	16QAM	1	99	23.31	23.41	23.33	23
20	16QAM	50	0	22.63	22.67	22.33	
20	16QAM	50	24	22.74	22.71	22.35	
20	16QAM	50	50	22.71	22.75	22.69	23
20	16QAM	100	0	22.72	22.64	22.52	
20	64QAM	1	0	22.67	22.33	22.32	
20	64QAM	1	49	22.24	22.76	21.22	22
20	64QAM	1	99	21.79	22.77	21.86	
20	64QAM	50	0	20.33	20.32	20.32	
20	64QAM	50	24	20.31	20.30	20.35	22
20	64QAM	50	50	20.79	20.33	20.85	
20	64QAM	100	0	21.17	20.35	20.60	
Channel				1807.5	1880	1922.5	Tune-up limit (dBm)
Frequency (MHz)							
15	QPSK	1	0	23.06	23.07	23.06	24.2
15	QPSK	1	37	23.06	23.03	23.06	
15	QPSK	1	74	23.01	23.03	23.00	
15	QPSK	36	0	23.10	23.11	22.99	24.2
15	QPSK	36	20	23.13	23.14	23.14	
15	QPSK	36	39	23.13	23.19	23.16	
15	QPSK	75	0	23.20	23.10	22.93	24
15	16QAM	1	0	23.33	23.39	23.35	
15	16QAM	1	37	23.30	23.43	22.84	
15	16QAM	1	74	23.29	23.39	23.25	23
15	16QAM	36	0	22.83	22.64	22.33	
15	16QAM	36	20	22.69	22.69	22.37	
15	16QAM	36	39	22.69	22.67	22.65	23
15	16QAM	75	0	22.72	22.54	22.47	
15	64QAM	1	0	22.88	22.25	22.23	
15	64QAM	1	37	22.24	22.73	21.21	22
15	64QAM	1	74	21.73	22.76	21.93	
15	64QAM	36	0	21.61	21.57	20.29	
15	64QAM	36	20	21.23	21.63	20.34	22
15	64QAM	36	39	20.73	21.70	20.85	
15	64QAM	75	0	21.14	21.30	20.81	
Channel				1850	1890	19150	Tune-up limit (dBm)
Frequency (MHz)							
10	QPSK	1	0	23.08	23.04	23.01	24.2
10	QPSK	1	25	23.06	23.02	23.01	
10	QPSK	1	49	23.00	23.04	23.01	
10	QPSK	25	0	23.08	23.14	23.04	24.2
10	QPSK	25	12	23.19	23.17	23.18	
10	QPSK	25	25	23.18	23.20	23.14	
10	QPSK	50	0	23.18	23.14	22.92	24
10	16QAM	1	0	23.37	23.42	23.33	
10	16QAM	1	25	23.37	23.45	22.80	
10	16QAM	1	49	23.26	23.41	23.32	23
10	16QAM	25	0	22.69	22.63	22.25	
10	16QAM	25	12	22.73	22.69	22.26	
10	16QAM	25	25	22.62	22.65	22.63	23
10	16QAM	50	0	22.62	22.55	22.50	
10	64QAM	1	0	22.60	22.32	22.35	
10	64QAM	1	25	22.18	22.66	21.21	23
10	64QAM	1	49	21.72	22.72	21.90	
10	64QAM	25	0	21.60	21.58	20.23	
10	64QAM	25	12	21.20	21.64	20.27	22
10	64QAM	25	25	20.72	21.68	20.81	
10	64QAM	50	0	21.16	21.36	20.50	
Channel				1822.5	1890	1917.5	Tune-up limit (dBm)
Frequency (MHz)							
5	QPSK	1	0	23.05	23.07	23.09	24.2
5	QPSK	1	12	23.03	23.00	23.02	
5	QPSK	1	24	23.01	23.00	23.03	
5	QPSK	12	0	23.13	23.07	23.07	24.2
5	QPSK	12	7	23.18	23.12	23.14	
5	QPSK	12	13	23.14	23.19	23.15	
5	QPSK	25	0	23.17	23.13	22.92	24
5	16QAM	1	0	23.29	23.36	23.35	
5	16QAM	1	12	23.33	23.38	22.85	
5	16QAM	1	24	23.30	23.32	23.26	23
5	16QAM	12	0	22.62	22.60	22.32	
5	16QAM	12	7	22.73	22.62	22.25	
5	16QAM	12	13	22.64	22.73	22.68	23
5	16QAM	25	0	22.70	22.59	22.48	
5	64QAM	1	0	22.57	22.24	22.29	
5	64QAM	1	12	22.24	22.68	21.20	23
5	64QAM	1	24	21.72	22.67	21.91	
5	64QAM	12	0	21.53	21.54	20.30	
5	64QAM	12	7	21.16	21.69	20.35	22
5	64QAM	12	13	20.70	21.67	20.76	
5	64QAM	25	0	21.17	21.36	20.55	
Channel				1815	1890	1915	Tune-up limit (dBm)
Frequency (MHz)							
3	QPSK	1	0	23.07	23.07	23.09	24.2
3	QPSK	1	8	23.05	23.06	23.00	
3	QPSK	1	14	23.02	23.00	23.02	
3	QPSK	8	0	23.09	23.11	22.99	24.2
3	QPSK	8	4	23.16	23.12	23.10	
3	QPSK	8	7	23.15	23.15	23.12	
3	QPSK	15	0	23.13	23.09	22.98	24
3	16QAM	1	0	23.29	23.45	23.33	
3	16QAM	1	8	23.30	23.35	22.76	
3	16QAM	1	14	23.31	23.34	23.26	23
3	16QAM	8	0	22.68	22.67	22.31	
3	16QAM	8	4	22.67	22.69	22.27	
3	16QAM	8	7	22.70	22.73	22.65	23
3	16QAM	15	0	22.62	22.59	22.47	
3	64QAM	1	0	22.66	22.21	22.30	
3	64QAM	1	8	22.22	22.66	21.22	23
3	64QAM	1	14	21.70	22.75	21.89	
3	64QAM	8	0	21.54	21.56	20.25	
3	64QAM	8	4	21.16	21.70	20.30	22
3	64QAM	8	7	20.69	21.67	20.81	
3	64QAM	15	0	21.12	21.37	20.55	
Channel				18607	18900	19163	Tune-up limit (dBm)
Frequency (MHz)							
1.4	QPSK	1	0	23.06	23.09	23.06	24.2
1.4	QPSK	1	3	23.00	23.01	23.05	
1.4	QPSK	1	5	23.00	23.04	23.02	
1.4	QPSK	3	0	23.06	23.10	23.07	24.2
1.4	QPSK	3	1	23.20	23.13	23.17	
1.4	QPSK	3	3	23.12	23.23	23.11	
1.4	QPSK	6	0	23.17	23.11	22.91	24.2
1.4	16QAM	1	0	23.35	23.44	23.39	
1.4	16QAM	1	3	23.35	23.41	22.82	
1.4	16QAM	1	5	23.22	23.34	23.24	24
1.4	16QAM	3	0	22.63	22.62	22.26	
1.4	16QAM	3	1	22.72	22.67	22.30	
1.4	16QAM	3	3	22.61	22.69	22.62	23
1.4	16QAM	6	0	22.66	22.55	22.51	
1.4	64QAM	1	0	22.67	22.28	22.30	
1.4	64QAM	1	3	22.20	22.72	21.23	23
1.4	64QAM	1	5	21.71	22.67	21.62	
1.4	64QAM	3	0	21.56	21.61	21.62	
1.4	64QAM	3	1	21.62	21.69	21.68	22
1.4	64QAM	3	3	21.66	21.68	21.65	
1.4	64QAM	6	0	21.14	21.32	20.56	



Band 4							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. / Channel	Midle Ch. / Channel	High Ch. / Channel	Tune-up limit (dBm)
				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.96	23.01	22.96	24.1
20	QPSK	1	49	22.92	22.95	22.92	
20	QPSK	1	99	22.93	22.86	22.92	
20	QPSK	50	0	23.02	23.03	22.99	
20	QPSK	50	24	23.08	22.94	22.91	24.1
20	QPSK	50	50	22.97	22.95	22.92	
20	QPSK	100	0	23.01	23.01	22.87	
20	16QAM	1	0	23.29	23.36	23.31	24.1
20	16QAM	1	49	23.19	23.16	23.14	
20	16QAM	1	99	23.20	23.08	23.07	
20	16QAM	50	0	22.61	22.67	22.60	
20	16QAM	50	24	22.66	22.58	22.52	23.6
20	16QAM	50	50	22.59	22.58	22.53	
20	16QAM	100	0	22.62	22.63	22.45	
20	64QAM	1	0	22.74	22.83	22.06	
20	64QAM	1	49	22.64	22.14	22.62	23.6
20	64QAM	1	99	22.67	21.78	22.63	
20	64QAM	50	0	21.85	21.69	21.52	
20	64QAM	50	24	21.68	21.24	21.56	22.8
20	64QAM	50	50	21.62	21.03	21.54	
20	64QAM	100	0	21.69	21.60	21.54	
Channel				20050	20175	20300	
Frequency (MHz)				1717.5	1732.5	1747.5	Tune-up limit (dBm)
15	QPSK	1	0	22.92	22.99	22.96	24.1
15	QPSK	1	37	22.92	22.86	22.91	
15	QPSK	1	74	23.06	22.92	22.93	
15	QPSK	36	0	23.00	23.03	22.95	24.1
15	QPSK	36	20	23.02	22.93	22.90	
15	QPSK	36	39	22.87	22.87	22.91	
15	QPSK	75	0	22.98	22.93	22.87	
15	16QAM	1	0	23.26	23.34	23.27	24.1
15	16QAM	1	37	23.10	23.09	23.11	
15	16QAM	1	74	23.19	23.02	23.02	
15	16QAM	36	0	22.52	22.58	22.54	23.6
15	16QAM	36	20	22.51	22.53	22.55	
15	16QAM	36	39	22.58	22.58	22.49	
15	16QAM	75	0	22.60	22.60	22.45	
15	64QAM	1	0	22.67	22.81	22.00	23.6
15	64QAM	1	37	22.57	22.05	22.58	
15	64QAM	1	74	22.65	21.73	22.56	
15	64QAM	36	0	21.56	21.83	21.16	22.8
15	64QAM	36	20	21.68	21.21	21.50	
15	64QAM	36	39	21.61	21.62	21.47	
15	64QAM	75	0	21.60	21.56	21.45	
Channel				20050	20175	20300	
Frequency (MHz)				1715	1732.5	1750	Tune-up limit (dBm)
10	QPSK	1	0	22.93	22.91	22.94	24.1
10	QPSK	1	25	22.92	22.80	22.91	
10	QPSK	1	49	22.94	22.92	22.91	
10	QPSK	25	0	22.97	23.03	22.93	24.1
10	QPSK	25	12	23.01	22.84	22.87	
10	QPSK	25	25	22.93	22.88	22.84	
10	QPSK	50	0	22.93	22.93	22.78	
10	16QAM	1	0	23.26	23.34	23.22	24.1
10	16QAM	1	25	23.17	23.07	23.07	
10	16QAM	1	49	23.17	23.01	22.98	
10	16QAM	25	0	22.55	22.62	22.59	23.6
10	16QAM	25	12	22.61	22.49	22.49	
10	16QAM	25	25	22.49	22.56	22.53	
10	16QAM	50	0	22.57	22.56	22.43	
10	64QAM	1	0	22.73	22.78	22.43	23.6
10	64QAM	1	25	22.55	22.06	22.82	
10	64QAM	1	49	22.66	21.78	22.55	
10	64QAM	25	0	21.63	21.68	21.13	22.8
10	64QAM	25	12	21.67	21.15	21.52	
10	64QAM	25	25	21.54	21.00	21.46	
10	64QAM	50	0	21.69	21.53	21.53	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1812.5	1825.5	1838.5	
5	QPSK	1	0	22.97	22.98	22.96	24.1
5	QPSK	1	12	22.95	22.96	22.92	
5	QPSK	1	24	22.93	22.97	22.96	
5	QPSK	12	0	22.97	22.95	22.96	24.1
5	QPSK	12	7	22.97	22.91	22.93	
5	QPSK	12	13	22.97	22.92	22.91	
5	QPSK	25	0	22.91	22.94	22.80	
5	16QAM	1	0	23.21	23.35	23.31	24.1
5	16QAM	1	12	23.10	23.13	23.08	
5	16QAM	1	24	23.18	23.07	23.02	
5	16QAM	12	0	22.51	22.63	22.60	23.6
5	16QAM	12	7	22.60	22.55	22.44	
5	16QAM	12	13	22.54	22.52	22.46	
5	16QAM	25	0	22.60	22.57	22.45	
5	64QAM	1	0	22.71	22.77	22.02	23.6
5	64QAM	1	12	22.58	22.10	22.61	
5	64QAM	1	24	22.57	21.75	22.58	
5	64QAM	12	0	21.61	21.65	21.17	22.8
5	64QAM	12	7	21.61	21.24	21.56	
5	64QAM	12	13	21.58	20.95	21.46	
5	64QAM	25	0	21.69	21.58	21.49	
Channel				19950	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.92	22.92	22.98	24.1
3	QPSK	1	8	22.90	22.91	22.94	
3	QPSK	1	14	22.95	22.95	22.96	
3	QPSK	8	0	22.93	23.00	22.92	24.1
3	QPSK	8	4	23.00	22.86	22.86	
3	QPSK	8	7	22.96	22.93	22.88	
3	QPSK	15	0	23.01	22.99	22.78	
3	16QAM	1	0	23.29	23.33	23.30	24.1
3	16QAM	1	8	23.16	23.14	23.11	
3	16QAM	1	14	23.14	23.01	22.94	
3	16QAM	8	0	22.54	22.61	22.55	23.6
3	16QAM	8	4	22.59	22.57	22.57	
3	16QAM	8	7	22.58	22.66	22.49	
3	16QAM	15	0	22.60	22.55	22.43	
3	64QAM	1	0	22.64	22.76	21.96	23.6
3	64QAM	1	8	22.60	22.07	22.61	
3	64QAM	1	14	22.65	21.73	22.61	
3	64QAM	8	0	21.62	21.67	21.12	22.8
3	64QAM	8	4	21.66	21.18	21.53	
3	64QAM	8	7	21.52	20.94	21.51	
3	64QAM	15	0	21.59	21.52	21.54	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.92	22.91	22.95	24.1
1.4	QPSK	1	2	22.96	22.95	22.94	
1.4	QPSK	1	5	22.93	22.94	22.95	
1.4	QPSK	3	0	23.01	22.86	22.98	24.1
1.4	QPSK	3	1	22.99	22.91	22.90	
1.4	QPSK	3	4	22.94	22.93	22.95	
1.4	QPSK	6	0	22.92	22.94	22.87	24.1
1.4	16QAM	1	0	23.27	23.35	23.29	
1.4	16QAM	1	3	23.17	23.14	23.13	24.1
1.4	16QAM	1	6	23.10	23.08	22.97	
1.4	16QAM	3	0	22.75	22.73	22.76	
1.4	16QAM	3	1	22.73	22.72	22.70	
1.4	16QAM	3	3	22.74	22.73	22.74	23.6
1.4	16QAM	6	0	22.55	22.61	22.46	
1.4	64QAM	1	0	22.64	22.81	21.99	23.6
1.4	64QAM	1	3	22.54	22.04	22.99	
1.4	64QAM	1	6	22.59	21.76	22.60	
1.4	64QAM	3	0	21.72	21.77	21.78	22.8
1.4	64QAM	3	1	21.77	21.76	21.76	
1.4	64QAM	3	3	21.74	21.79	21.78	
1.4	64QAM	6	0	21.60	21.56	21.46	22.8





Band 5							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low	Mid	High	Tune-up limit (dBm)
				Ch. / Channel	Ch. / Channel	Ch. / Channel	
Channel				20450	20625	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.76	24.62	24.62	
10	QPSK	1	26	24.58	24.62	24.62	25.7
10	QPSK	1	49	24.58	24.62	24.26	
10	QPSK	25	0	23.88	23.73	23.72	
10	QPSK	25	12	23.78	23.74	23.72	
10	QPSK	25	26	23.72	23.78	23.73	24.7
10	QPSK	50	0	23.75	23.70	23.73	
10	16QAM	1	0	24.01	24.01	23.99	
10	16QAM	1	26	23.98	24.05	24.05	24.7
10	16QAM	1	49	24.05	24.04	23.60	
10	16QAM	25	0	22.86	22.74	22.71	
10	16QAM	25	12	22.76	22.72	22.75	23.7
10	16QAM	25	26	22.72	22.76	22.79	
10	16QAM	50	0	22.71	22.74	22.76	
10	64QAM	1	0	22.88	22.88	22.87	
10	64QAM	1	26	22.92	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.88	21.77	
10	64QAM	25	0	21.87	21.78	21.76	
10	64QAM	25	12	21.80	21.77	21.68	
10	64QAM	25	26	21.76	21.64	21.66	22.7
10	64QAM	50	0	21.79	21.74	21.27	
Channel				829.5	836.5	843.5	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	840.5	
5	QPSK	1	0	24.75	24.68	24.67	
5	QPSK	1	12	24.65	24.72	24.40	25.7
5	QPSK	1	24	24.61	24.65	24.19	
5	QPSK	12	0	23.77	23.72	23.75	
5	QPSK	12	7	23.73	23.78	23.42	
5	QPSK	12	13	23.70	23.74	23.13	24.7
5	QPSK	25	0	23.74	23.70	23.60	
5	16QAM	1	0	24.08	24.03	24.01	
5	16QAM	1	12	23.99	24.03	23.67	24.7
5	16QAM	1	24	23.96	23.99	23.34	
5	16QAM	12	0	22.81	22.77	22.75	
5	16QAM	12	7	22.78	22.81	22.81	23.7
5	16QAM	12	13	22.74	22.75	22.31	
5	16QAM	25	0	22.75	22.72	22.69	
5	64QAM	1	0	22.75	22.94	22.62	
5	64QAM	1	12	22.96	22.85	21.96	23.7
5	64QAM	1	24	22.89	22.82	21.71	
5	64QAM	12	0	21.73	21.80	21.31	
5	64QAM	12	7	21.80	21.79	20.75	
5	64QAM	12	13	21.76	21.86	20.71	22.7
5	64QAM	25	0	21.73	21.76	20.81	
Channel				20418	20625	20638	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	847.5	
3	QPSK	1	0	24.70	24.66	24.62	
3	QPSK	1	8	24.67	24.70	24.11	25.7
3	QPSK	1	14	24.54	24.62	24.05	
3	QPSK	8	0	23.76	23.73	23.36	
3	QPSK	8	4	23.68	23.74	23.21	24.7
3	QPSK	8	7	23.67	23.72	23.15	
3	QPSK	15	0	23.72	23.67	23.20	
3	16QAM	1	0	24.01	23.96	23.87	
3	16QAM	1	8	23.99	24.02	23.50	24.7
3	16QAM	1	14	23.89	23.92	23.42	
3	16QAM	8	0	22.83	22.76	22.54	
3	16QAM	8	4	22.79	22.80	22.36	23.7
3	16QAM	8	7	22.75	22.78	22.29	
3	16QAM	15	0	22.77	22.69	22.43	
3	64QAM	1	0	22.85	22.90	21.96	23.7
3	64QAM	1	8	22.86	22.97	21.74	
3	64QAM	1	14	22.84	22.82	21.71	
3	64QAM	8	0	21.61	21.75	20.73	
3	64QAM	8	4	21.69	21.62	20.72	22.7
3	64QAM	8	7	21.70	21.76	20.71	
3	64QAM	15	0	21.74	21.69	20.78	
Channel				20407	20625	20643	Tune-up limit (dBm)
Frequency (MHz)				826.7	836.5	848.3	
1.4	QPSK	1	0	24.56	24.53	23.98	
1.4	QPSK	1	3	24.59	24.81	24.06	25.7
1.4	QPSK	1	6	24.51	24.53	24.06	
1.4	QPSK	3	0	24.62	24.57	23.99	
1.4	QPSK	3	1	24.62	24.57	24.06	
1.4	QPSK	3	3	24.60	24.59	24.12	
1.4	QPSK	6	0	23.64	23.64	23.08	24.7
1.4	16QAM	1	0	23.88	23.86	23.28	
1.4	16QAM	1	3	23.93	23.95	23.38	
1.4	16QAM	1	6	23.83	23.89	23.43	24.7
1.4	16QAM	3	0	23.67	23.62	23.14	
1.4	16QAM	3	1	23.71	23.66	23.17	
1.4	16QAM	3	3	23.64	23.67	23.21	
1.4	16QAM	6	0	22.71	22.74	22.28	23.7
1.4	64QAM	1	0	22.64	22.80	21.77	
1.4	64QAM	1	3	22.66	22.88	21.78	
1.4	64QAM	1	6	22.62	22.79	21.73	23.7
1.4	64QAM	3	0	22.61	22.78	21.72	
1.4	64QAM	3	1	22.66	22.79	21.77	
1.4	64QAM	3	3	22.64	22.79	21.77	
1.4	64QAM	6	0	21.50	21.69	20.74	22.7



Band 7							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Low	Mid	High	Tune-up limit (dBm)
				Ch. / Channel	Ch. / Channel	Ch. / Channel	
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.88	23.95	23.99	
20	QPSK	1	49	23.94	23.99	23.98	24.9
20	QPSK	1	99	23.99	24.08	24.04	
20	QPSK	50	0	23.80	23.86	23.88	
20	QPSK	50	24	23.96	23.91	23.96	24.4
20	QPSK	50	50	23.96	24.03	24.02	
20	QPSK	100	0	23.90	23.91	23.90	
20	16QAM	1	0	24.02	24.08	24.14	24.4
20	16QAM	1	49	24.10	24.16	24.15	
20	16QAM	1	99	24.15	24.28	24.16	
20	16QAM	50	0	22.83	22.88	22.91	
20	16QAM	50	24	22.93	22.91	22.92	23.4
20	16QAM	50	50	22.94	23.03	22.96	
20	16QAM	100	0	22.90	22.88	22.92	
20	64QAM	1	0	22.87	22.95	22.99	
20	64QAM	1	49	22.92	23.04	22.70	23.4
20	64QAM	1	99	23.04	23.13	22.95	
20	64QAM	50	0	21.82	21.88	21.91	
20	64QAM	50	24	21.95	21.94	21.75	22.4
20	64QAM	50	50	21.95	22.02	21.58	
20	64QAM	100	0	21.82	21.90	21.79	
Channel				20925	21100	21325	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.91	24.01	23.99	
15	QPSK	1	37	23.95	24.02	24.02	24.9
15	QPSK	1	74	24.01	24.10	24.04	
15	QPSK	36	0	23.79	23.86	23.86	
15	QPSK	36	20	23.93	23.92	23.89	24.4
15	QPSK	36	39	23.92	23.97	23.95	
15	QPSK	75	0	23.86	23.87	23.88	
15	16QAM	1	0	23.99	24.11	24.13	
15	16QAM	1	37	24.05	24.14	24.11	24.4
15	16QAM	1	74	24.13	24.19	24.11	
15	16QAM	36	0	22.82	22.87	22.88	
15	16QAM	36	20	22.90	22.90	22.86	23.4
15	16QAM	36	39	22.93	23.00	22.95	
15	16QAM	75	0	22.90	22.90	22.90	
15	64QAM	1	0	22.86	22.96	22.96	
15	64QAM	1	37	22.96	23.07	22.41	23.4
15	64QAM	1	74	23.04	23.12	22.95	
15	64QAM	36	0	21.81	21.81	21.76	
15	64QAM	36	20	21.93	21.93	21.55	22.4
15	64QAM	36	39	21.97	22.02	21.61	
15	64QAM	75	0	21.90	21.90	21.60	
Channel				20950	21100	21450	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.87	23.94	23.91	
10	QPSK	1	25	23.88	23.93	23.92	24.9
10	QPSK	1	49	23.92	24.02	23.92	
10	QPSK	25	0	23.85	23.86	23.80	
10	QPSK	25	12	23.87	23.90	23.86	24.4
10	QPSK	25	25	23.86	23.86	23.89	
10	QPSK	50	0	23.87	23.89	23.84	
10	16QAM	1	0	24.05	24.11	24.09	
10	16QAM	1	25	24.03	24.15	24.14	24.4
10	16QAM	1	49	24.13	24.21	24.12	
10	16QAM	25	0	22.86	22.85	22.82	
10	16QAM	25	12	22.89	22.86	22.85	23.4
10	16QAM	25	25	22.87	22.95	22.89	
10	16QAM	50	0	22.85	22.88	22.84	
10	64QAM	1	0	22.96	22.98	22.70	
10	64QAM	1	25	22.97	23.07	22.76	23.4
10	64QAM	1	49	23.01	23.12	22.89	
10	64QAM	25	0	21.85	21.88	21.53	
10	64QAM	25	12	21.92	21.92	21.64	22.4
10	64QAM	25	25	21.91	21.97	21.69	
10	64QAM	50	0	21.88	21.92	21.52	
Channel				20975	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.91	23.93	23.94	
5	QPSK	1	12	23.94	24.06	23.97	24.9
5	QPSK	1	24	23.95	24.04	23.95	
5	QPSK	12	0	23.83	23.90	23.86	
5	QPSK	12	7	23.87	23.91	23.87	24.4
5	QPSK	12	13	23.83	23.93	23.89	
5	QPSK	25	0	23.83	23.86	23.84	
5	16QAM	1	0	24.05	24.12	24.09	
5	16QAM	1	12	24.06	24.15	24.06	24.4
5	16QAM	1	24	24.10	24.17	24.07	
5	16QAM	12	0	22.87	22.90	22.90	
5	16QAM	12	7	22.89	22.94	22.87	23.4
5	16QAM	12	13	22.96	22.96	22.96	
5	16QAM	25	0	22.87	22.89	22.86	
5	64QAM	1	0	22.96	23.02	22.70	
5	64QAM	1	12	22.96	23.08	22.72	23.4
5	64QAM	1	24	23.00	23.10	22.92	
5	64QAM	12	0	21.95	21.93	21.59	
5	64QAM	12	7	21.89	21.95	21.69	22.4
5	64QAM	12	13	21.92	22.02	21.75	
5	64QAM	25	0	21.87	21.90	21.63	



Band 12							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low	Mid	High	Tune-up limit (dBm)
				Ch. / Channel	Ch. / Channel	Ch. / Channel	
Channel				23060	23065	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.64	24.61	24.63	
10	QPSK	1	26	24.63	24.68	24.65	25.7
10	QPSK	1	49	24.78	24.71	24.70	
10	QPSK	25	0	23.74	23.78	23.77	
10	QPSK	25	12	23.87	23.80	23.78	
10	QPSK	25	26	23.88	23.85	23.83	24.7
10	QPSK	50	0	23.83	23.80	23.79	
10	16QAM	1	0	24.03	23.97	23.99	
10	16QAM	1	26	24.08	24.05	24.01	24.7
10	16QAM	1	49	24.12	24.08	24.07	
10	16QAM	25	0	22.76	22.79	22.77	
10	16QAM	25	12	22.82	22.80	22.78	23.7
10	16QAM	25	26	22.81	22.85	22.79	
10	16QAM	50	0	22.83	22.78	22.76	
10	64QAM	1	0	22.91	22.84	22.87	
10	64QAM	1	26	22.76	22.99	22.73	23.7
10	64QAM	1	49	23.06	22.96	22.95	
10	64QAM	25	0	21.79	21.80	21.79	
10	64QAM	25	12	21.88	21.83	21.81	
10	64QAM	25	26	21.82	21.90	21.84	22.7
10	64QAM	50	0	21.83	21.81	21.80	
Channel				23025	23025	23125	
Frequency (MHz)				701.5	707.5	713.5	Tune-up limit (dBm)
5	QPSK	1	0	24.70	24.72	24.67	
5	QPSK	1	12	24.72	24.73	24.71	25.7
5	QPSK	1	24	24.69	24.71	24.72	
5	QPSK	12	0	23.83	23.78	23.78	
5	QPSK	12	7	23.78	23.75	23.81	
5	QPSK	12	13	23.75	23.82	23.77	24.7
5	QPSK	25	0	23.79	23.76	23.75	
5	16QAM	1	0	24.02	24.04	23.98	
5	16QAM	1	12	24.03	24.01	24.02	24.7
5	16QAM	1	24	24.02	24.07	24.03	
5	16QAM	12	0	22.85	22.83	22.80	
5	16QAM	12	7	22.81	22.78	22.85	23.7
5	16QAM	12	13	22.83	22.82	22.80	
5	16QAM	25	0	22.81	22.82	22.78	
5	64QAM	1	0	22.82	22.73	22.91	
5	64QAM	1	12	22.88	22.84	22.84	23.7
5	64QAM	1	24	22.80	22.98	22.93	
5	64QAM	12	0	21.81	21.89	21.87	
5	64QAM	12	7	21.88	21.85	21.88	
5	64QAM	12	13	21.82	21.87	21.84	22.7
5	64QAM	25	0	21.83	21.79	21.79	
Channel				23028	23028	23168	
Frequency (MHz)				700.5	707.5	714.5	Tune-up limit (dBm)
3	QPSK	1	0	24.75	24.69	24.72	
3	QPSK	1	8	24.73	24.74	24.73	25.7
3	QPSK	1	14	24.65	24.71	24.67	
3	QPSK	8	0	23.79	23.78	23.73	
3	QPSK	8	4	23.78	23.74	23.77	
3	QPSK	8	7	23.73	23.76	23.76	24.7
3	QPSK	15	0	23.77	23.75	23.73	
3	16QAM	1	0	24.08	24.01	24.02	
3	16QAM	1	8	24.06	24.08	24.08	24.7
3	16QAM	1	14	24.00	24.05	23.98	
3	16QAM	8	0	22.88	22.83	22.82	
3	16QAM	8	4	22.90	22.83	22.87	23.7
3	16QAM	8	7	22.84	22.84	22.83	
3	16QAM	15	0	22.80	22.80	22.75	
3	64QAM	1	0	22.97	22.90	22.95	
3	64QAM	1	8	22.91	23.01	22.98	23.7
3	64QAM	1	14	22.92	22.95	22.88	
3	64QAM	8	0	21.82	21.81	21.81	
3	64QAM	8	4	21.87	21.84	21.87	
3	64QAM	8	7	21.82	21.85	21.81	22.7
3	64QAM	15	0	21.65	21.78	21.77	
Channel				23017	23025	23173	
Frequency (MHz)				699.7	707.5	715.3	Tune-up limit (dBm)
1.4	QPSK	1	0	24.64	24.59	24.55	
1.4	QPSK	1	3	24.68	24.67	24.64	25.7
1.4	QPSK	1	5	24.60	24.58	24.55	
1.4	QPSK	3	0	24.67	24.60	24.62	
1.4	QPSK	3	1	24.70	24.64	24.68	
1.4	QPSK	3	3	24.64	24.67	24.61	
1.4	QPSK	6	0	23.71	23.74	23.67	24.7
1.4	16QAM	1	0	23.99	23.93	23.96	
1.4	16QAM	1	3	24.02	24.02	23.98	
1.4	16QAM	1	5	23.92	23.94	23.91	24.7
1.4	16QAM	3	0	23.75	23.69	23.69	
1.4	16QAM	3	1	23.81	23.75	23.75	
1.4	16QAM	3	3	23.76	23.73	23.68	23.7
1.4	64QAM	1	0	22.73	22.89	22.85	
1.4	64QAM	1	3	22.90	22.97	22.88	
1.4	64QAM	1	5	22.92	22.85	22.91	23.7
1.4	64QAM	3	0	22.68	22.81	22.82	
1.4	64QAM	3	1	22.78	22.85	22.88	
1.4	64QAM	3	3	22.83	22.83	22.79	22.7
1.4	64QAM	6	0	21.72	21.75	21.71	



Band 13							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. /	Midle Ch. /	High Ch. /	
Channel				25230		Tune-up limit (dBm)	
Frequency (MHz)				762			
10	QPSK	1	0		24.53	25.2	
10	QPSK	1	26		24.22		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.30	24.2	
10	QPSK	25	12		23.34		
10	QPSK	25	25		23.33		
10	QPSK	50	0		23.35	24.2	
10	16QAM	1	0		23.56		
10	16QAM	1	26		23.57		
10	16QAM	1	49		23.54	23.2	
10	16QAM	25	0		22.31		
10	16QAM	25	12		22.34		
10	16QAM	25	25		22.38	23.2	
10	16QAM	50	0		22.35		
10	64QAM	1	0		22.30		
10	64QAM	1	26		22.52	22.2	
10	64QAM	1	49		22.46		
10	64QAM	25	0		21.36		
10	64QAM	25	12		21.38	22.2	
10	64QAM	25	25		21.37		
10	64QAM	50	0		21.39		
Channel				25230	25230	Tune-up limit (dBm)	
Frequency (MHz)				779.6	762		764.6
5	QPSK	1	0	24.82	24.61	24.59	25.2
5	QPSK	1	12	24.69	24.74	24.66	
5	QPSK	1	24	24.64	24.62	24.54	
5	QPSK	12	0	23.71	23.68	23.65	24.2
5	QPSK	12	7	23.76	23.70	23.65	
5	QPSK	12	13	23.70	23.69	23.63	
5	QPSK	25	0	23.74	23.67	23.59	24.2
5	16QAM	1	0	23.93	23.94	23.90	
5	16QAM	1	12	24.00	23.98	23.93	
5	16QAM	1	24	23.99	23.90	23.89	23.2
5	16QAM	12	0	22.79	22.71	22.65	
5	16QAM	12	7	22.77	22.71	22.69	
5	16QAM	12	13	22.72	22.74	22.70	23.2
5	16QAM	25	0	22.75	22.71	22.62	
5	64QAM	1	0	22.89	22.80	22.19	
5	64QAM	1	12	22.86	22.69	22.17	23.2
5	64QAM	1	24	22.33	21.97	22.69	
5	64QAM	12	0	21.82	21.27	20.93	
5	64QAM	12	7	21.76	21.06	21.11	22.2
5	64QAM	12	13	21.44	20.96	21.53	
5	64QAM	25	0	21.56	21.03	21.17	



Band 14							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. /	Midle Ch. /	High Ch. /	Tune-up limit (dBm)
Channel				23330	23330	23330	
Frequency (MHz)				763			
10	QPSK	1	0		24.75		25.7
10	QPSK	1	25		24.69		
10	QPSK	1	49		24.60		
10	QPSK	25	0		23.71		24.7
10	QPSK	25	12		23.70		
10	QPSK	25	25		23.73		
10	QPSK	50	0		23.68		24.7
10	16QAM	1	0		24.08		
10	16QAM	1	25		24.08		
10	16QAM	1	49		23.98		23.7
10	16QAM	25	0		22.68		
10	16QAM	25	12		22.70		
10	16QAM	25	25		22.71		23.7
10	16QAM	50	0		22.70		
10	64QAM	1	0		22.92		
10	64QAM	1	25		22.86		23.7
10	64QAM	1	49		22.90		
10	64QAM	25	0		21.71		
10	64QAM	25	12		21.37		22.7
10	64QAM	25	25		21.38		
10	64QAM	50	0		21.44		
Channel				23326	23333	23338	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.84	24.61	24.62	25.7
5	QPSK	1	12	24.72	24.70	24.69	
5	QPSK	1	24	24.70	24.63	24.66	
5	QPSK	12	0	23.74	23.69	23.64	24.7
5	QPSK	12	7	23.77	23.72	23.68	
5	QPSK	12	13	23.74	23.72	23.68	
5	QPSK	25	0	23.74	23.68	23.64	24.7
5	16QAM	1	0	23.97	23.92	23.91	
5	16QAM	1	12	24.03	23.99	23.96	
5	16QAM	1	24	23.99	23.93	23.89	23.7
5	16QAM	12	0	22.79	22.70	22.69	
5	16QAM	12	7	22.81	22.74	22.71	
5	16QAM	12	13	22.75	22.72	22.72	23.7
5	16QAM	25	0	22.76	22.72	22.66	
5	64QAM	1	0	22.88	22.72	22.34	
5	64QAM	1	12	22.94	22.97	22.35	23.7
5	64QAM	1	24	22.48	22.18	22.72	
5	64QAM	12	0	21.82	21.48	21.13	
5	64QAM	12	7	21.88	21.29	21.25	22.7
5	64QAM	12	13	21.60	21.11	21.65	
5	64QAM	25	0	21.69	21.22	21.20	



Band 17							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low	Mid	High	Tune-up limit (dBm)
				Ch. / Channel	Ch. / Channel	Ch. / Channel	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.66	24.65	24.61	25.7
10	QPSK	1	26	24.69	24.70	24.71	
10	QPSK	1	49	24.75	24.80	24.72	
10	QPSK	25	0	23.73	23.76	23.76	24.7
10	QPSK	25	12	23.88	23.82	23.79	
10	QPSK	25	26	23.88	23.88	23.88	
10	QPSK	50	0	23.79	23.78	23.79	24.7
10	16QAM	1	0	24.00	23.99	24.01	
10	16QAM	1	26	24.14	24.11	24.08	
10	16QAM	1	49	24.12	24.10	24.09	23.7
10	16QAM	25	0	22.74	22.74	22.73	
10	16QAM	25	12	22.90	22.79	22.81	
10	16QAM	25	26	22.89	22.90	22.82	23.7
10	16QAM	50	0	22.90	22.90	22.77	
10	64QAM	1	0	22.85	22.75	22.88	
10	64QAM	1	26	22.71	22.71	22.65	23.7
10	64QAM	1	49	22.87	22.93	22.76	
10	64QAM	25	0	21.49	21.50	21.47	
10	64QAM	25	12	21.61	21.54	21.52	22.7
10	64QAM	25	26	21.65	21.76	21.84	
10	64QAM	50	0	21.62	21.68	21.62	
Channel				709.5	710.0	710.5	Tune-up limit (dBm)
Frequency (MHz)				709.5	710	710.5	
5	QPSK	1	0	24.66	24.66	24.68	25.7
5	QPSK	1	12	24.74	24.79	24.75	
5	QPSK	1	24	24.79	24.79	24.78	
5	QPSK	12	0	23.76	23.76	23.79	24.7
5	QPSK	12	7	23.85	23.81	23.82	
5	QPSK	12	13	23.83	23.86	23.83	
5	QPSK	25	0	23.81	23.79	23.82	24.7
5	16QAM	1	0	23.99	23.98	23.99	
5	16QAM	1	12	24.02	24.06	24.04	
5	16QAM	1	24	24.13	24.14	24.10	23.7
5	16QAM	12	0	22.79	22.83	22.81	
5	16QAM	12	7	22.89	22.86	22.86	
5	16QAM	12	13	22.84	22.88	22.84	23.7
5	16QAM	25	0	22.85	22.83	22.87	
5	64QAM	1	0	22.40	22.44	22.79	
5	64QAM	1	12	22.76	22.80	22.94	23.7
5	64QAM	1	24	22.95	22.97	22.67	
5	64QAM	12	0	21.61	21.45	21.75	
5	64QAM	12	7	21.73	21.52	21.89	22.7
5	64QAM	12	13	21.65	21.66	21.68	
5	64QAM	25	0	21.55	21.51	21.79	



Band 25							
Arif 2							
Band	Modulation	RB Size	RB Offset	Low Ch. / Channel	Mid Ch. / Channel	High Ch. / Channel	Tune-up limit (dBm)
Band	Modulation	RB Size	RB Offset	Low Ch. / Channel	Mid Ch. / Channel	High Ch. / Channel	Tune-up limit (dBm)
20	QPSK	1	0	23.09	23.12	23.02	24.2
20	QPSK	1	49	23.06	23.08	23.05	24.2
20	QPSK	1	99	23.00	23.04	23.01	24.2
20	QPSK	50	0	23.01	23.16	22.96	24.2
20	QPSK	50	24	23.02	23.08	23.04	24.2
20	QPSK	50	50	22.88	23.24	23.26	24.2
20	QPSK	100	0	22.43	23.24	22.31	24
20	16QAM	1	0	23.09	23.43	22.58	24
20	16QAM	1	49	23.06	23.42	22.49	24
20	16QAM	1	99	22.90	23.41	22.22	24
20	16QAM	50	0	22.51	22.72	21.77	23
20	16QAM	50	24	22.07	22.79	22.07	23
20	16QAM	50	50	21.65	22.75	21.92	23
20	16QAM	100	0	21.45	21.08	21.45	23
20	64QAM	1	0	21.20	21.21	21.22	23
20	64QAM	1	49	21.22	21.74	21.24	23
20	64QAM	1	99	21.20	22.09	21.23	23
20	64QAM	50	0	20.89	21.06	21.07	22
20	64QAM	50	24	20.17	21.08	20.38	22
20	64QAM	50	50	20.02	21.11	20.24	22
20	64QAM	100	0	20.00	20.03	20.04	22
Channel				26950	26340	26950	Tune-up limit (dBm)
Frequency (MHz)				1807.5	1800	1807.5	
15	QPSK	1	0	23.04	23.11	23.02	24.2
15	QPSK	1	37	23.02	23.10	23.05	24.2
15	QPSK	1	74	23.00	23.04	23.06	24.2
15	QPSK	36	0	22.93	23.08	22.90	24.2
15	QPSK	36	20	22.99	23.22	23.00	24.2
15	QPSK	36	39	22.81	23.15	23.18	24.2
15	QPSK	75	0	22.42	23.24	22.22	24
15	16QAM	1	0	23.08	23.42	22.52	24
15	16QAM	1	37	23.06	23.35	22.42	24
15	16QAM	1	74	22.96	23.40	22.21	24
15	16QAM	36	0	22.47	22.67	21.74	23
15	16QAM	36	20	22.07	22.76	21.97	23
15	16QAM	36	39	21.64	22.69	21.85	23
15	16QAM	75	0	21.45	21.68	21.38	23
15	64QAM	1	0	21.17	21.14	21.18	23
15	64QAM	1	37	21.21	21.64	21.28	23
15	64QAM	1	74	21.16	22.01	21.15	23
15	64QAM	36	0	20.79	20.86	21.03	22
15	64QAM	36	20	20.07	21.06	20.38	22
15	64QAM	36	39	20.11	21.04	20.16	22
15	64QAM	75	0	20.15	20.30	20.12	22
Channel				26950	26340	26950	Tune-up limit (dBm)
Frequency (MHz)				1807.5	1800	1807.5	
10	QPSK	1	0	23.07	23.07	23.02	24.2
10	QPSK	1	25	23.03	23.02	23.01	24.2
10	QPSK	1	49	23.01	23.00	23.03	24.2
10	QPSK	25	0	22.99	23.10	22.96	24.2
10	QPSK	25	12	22.99	23.21	23.00	24.2
10	QPSK	25	25	22.86	23.24	23.21	24.2
10	QPSK	50	0	22.30	23.15	22.20	24
10	16QAM	1	0	23.01	23.35	22.50	24
10	16QAM	1	25	23.08	23.34	22.42	24
10	16QAM	1	49	22.96	23.32	22.13	24
10	16QAM	25	0	22.49	22.71	21.76	23
10	16QAM	25	12	22.02	22.79	22.06	23
10	16QAM	25	25	21.57	22.70	21.83	23
10	16QAM	50	0	21.37	21.90	21.43	23
10	64QAM	1	0	21.14	21.11	21.18	23
10	64QAM	1	25	21.17	21.72	21.17	23
10	64QAM	1	49	21.19	21.99	21.17	23
10	64QAM	25	0	20.88	21.02	20.98	22
10	64QAM	25	12	20.06	20.98	20.26	22
10	64QAM	25	25	20.03	21.11	20.21	22
10	64QAM	50	0	20.05	20.10	20.02	22
Channel				26950	26340	26950	Tune-up limit (dBm)
Frequency (MHz)				1807.5	1800	1807.5	
5	QPSK	1	0	23.06	23.02	23.01	24.2
5	QPSK	1	12	23.04	23.04	23.00	24.2
5	QPSK	1	24	23.05	23.03	23.02	24.2
5	QPSK	12	0	22.95	23.15	22.91	24.2
5	QPSK	12	7	22.93	23.23	23.01	24.2
5	QPSK	12	13	22.78	23.17	23.28	24.2
5	QPSK	25	0	22.34	23.20	22.27	24
5	16QAM	1	0	23.02	23.38	22.54	24
5	16QAM	1	12	23.07	23.32	22.43	24
5	16QAM	1	24	22.34	23.37	22.19	24
5	16QAM	12	0	22.47	22.64	21.76	23
5	16QAM	12	7	22.04	22.76	22.00	23
5	16QAM	12	13	21.56	22.68	21.92	23
5	16QAM	25	0	21.41	21.91	21.42	23
5	64QAM	1	0	21.13	21.16	21.14	23
5	64QAM	1	12	21.13	21.73	21.24	23
5	64QAM	1	24	21.12	22.09	21.14	23
5	64QAM	12	0	20.84	20.99	21.07	22
5	64QAM	12	7	20.17	21.06	20.36	22
5	64QAM	12	13	20.00	21.10	20.16	22
5	64QAM	25	0	20.02	20.01	20.00	22
Channel				26950	26340	26950	Tune-up limit (dBm)
Frequency (MHz)				1807.5	1800	1807.5	
3	QPSK	1	0	23.03	23.09	23.04	24.2
3	QPSK	1	8	23.01	23.07	23.02	24.2
3	QPSK	1	14	23.08	23.04	23.08	24.2
3	QPSK	8	0	22.94	23.06	22.47	24.2
3	QPSK	8	4	22.95	23.20	22.98	24.2
3	QPSK	8	7	22.85	23.23	23.22	24.2
3	QPSK	15	0	22.36	23.21	22.24	24
3	16QAM	1	0	23.01	23.40	22.52	24
3	16QAM	1	8	23.04	23.36	22.46	24
3	16QAM	1	14	22.30	23.32	22.14	24
3	16QAM	8	0	22.51	22.64	21.71	23
3	16QAM	8	4	21.98	22.79	22.05	23
3	16QAM	8	7	21.62	22.72	21.91	23
3	16QAM	15	0	21.35	21.84	21.37	23
3	64QAM	1	0	21.11	21.19	21.18	23
3	64QAM	1	8	21.12	21.68	21.17	23
3	64QAM	1	14	21.17	22.02	21.15	23
3	64QAM	8	0	20.89	21.03	21.00	22
3	64QAM	8	4	20.13	21.02	20.31	22
3	64QAM	8	7	20.03	21.02	20.15	22
3	64QAM	15	0	20.05	20.00	20.05	22
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1800	1914.3	
1.4	QPSK	1	0	23.02	23.03	23.02	24.2
1.4	QPSK	1	2	23.05	23.01	23.05	24.2
1.4	QPSK	1	5	23.04	23.00	23.06	24.2
1.4	QPSK	3	0	23.02	23.16	23.00	24.2
1.4	QPSK	3	1	23.01	23.19	23.03	24.2
1.4	QPSK	3	4	23.05	23.15	23.24	24.2
1.4	QPSK	6	0	22.34	23.18	22.26	24.2
1.4	16QAM	1	0	23.02	23.38	22.57	24
1.4	16QAM	1	3	23.08	23.34	22.44	24
1.4	16QAM	1	6	22.36	23.33	22.13	24
1.4	16QAM	3	0	22.44	22.70	22.01	23
1.4	16QAM	3	1	22.06	22.70	22.02	23
1.4	16QAM	3	3	22.00	22.69	22.03	23
1.4	16QAM	6	0	21.45	21.08	21.41	23
1.4	64QAM	1	0	21.10	21.15	21.19	23
1.4	64QAM	1	3	21.22	21.68	21.19	23
1.4	64QAM	1	6	21.20	22.02	21.18	23
1.4	64QAM	3	0	21.12	21.01	21.07	22
1.4	64QAM	3	1	21.08	21.05	21.03	22
1.4	64QAM	3	3	21.10	21.11	21.10	22
1.4	64QAM	6	0	20.20	20.29	20.22	22.7



Band 26							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low	Mid	High	Tune-up limit (dBm)
				Ch. / Channel	Ch. / Channel	Ch. / Channel	
Channel				26765	26865	26965	
Frequency (MHz)				621.5	631.5	641.5	
15	QPSK	1	0	24.76	24.52	24.57	
15	QPSK	1	37	24.46	24.51	24.50	25.7
15	QPSK	1	74	24.49	24.48	24.27	
15	QPSK	36	0	23.87	23.85	23.85	
15	QPSK	36	20	23.88	23.81	23.83	24.7
15	QPSK	36	39	23.80	23.83	23.64	
15	QPSK	75	0	23.68	23.60	23.62	
15	16QAM	1	0	23.93	23.86	23.88	
15	16QAM	1	37	23.82	23.86	23.86	24.7
15	16QAM	1	74	23.81	23.83	23.62	
15	16QAM	36	0	22.63	22.66	22.67	
15	16QAM	36	20	22.65	22.61	22.60	23.7
15	16QAM	36	39	22.59	22.65	22.62	
15	16QAM	75	0	22.87	22.82	22.85	
15	64QAM	1	0	22.78	22.72	22.72	
15	64QAM	1	37	22.70	22.80	22.76	23.7
15	64QAM	1	74	22.69	22.72	22.70	
15	64QAM	36	0	21.69	21.69	21.72	
15	64QAM	36	20	21.69	21.63	21.65	22.7
15	64QAM	36	39	21.65	21.71	21.58	
15	64QAM	75	0	21.69	21.63	21.63	
Channel				676.5	686.5	696.5	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.72	24.59	24.60	
10	QPSK	1	25	24.57	24.55	24.59	25.7
10	QPSK	1	49	24.60	24.64	24.38	
10	QPSK	25	0	23.74	23.66	23.68	
10	QPSK	25	12	23.76	23.66	23.65	24.7
10	QPSK	25	25	23.65	23.68	23.67	
10	QPSK	50	0	23.70	23.65	23.66	
10	16QAM	1	0	23.07	23.08	23.08	
10	16QAM	1	25	23.94	24.01	23.97	24.7
10	16QAM	1	49	23.97	24.02	23.73	
10	16QAM	25	0	22.74	22.69	22.66	
10	16QAM	25	12	22.76	22.71	22.67	23.7
10	16QAM	25	25	22.64	22.63	22.63	
10	16QAM	50	0	22.72	22.66	22.63	
10	64QAM	1	0	22.84	22.78	22.88	
10	64QAM	1	25	22.96	22.85	22.85	23.7
10	64QAM	1	49	22.89	22.91	21.83	
10	64QAM	25	0	21.80	21.71	21.72	
10	64QAM	25	12	21.78	21.89	21.72	22.7
10	64QAM	25	25	21.68	21.70	21.21	
10	64QAM	50	0	21.72	21.68	21.50	
Channel				26716	26865	27016	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.75	24.81	24.68	
5	QPSK	1	12	24.72	24.63	24.47	25.7
5	QPSK	1	24	24.56	24.64	24.43	
5	QPSK	12	0	23.79	23.72	23.74	
5	QPSK	12	7	23.80	23.72	23.57	24.7
5	QPSK	12	13	23.71	23.67	23.31	
5	QPSK	25	0	23.76	23.67	23.64	
5	16QAM	1	0	24.09	23.94	23.99	
5	16QAM	1	12	24.00	23.97	23.85	24.7
5	16QAM	1	24	23.91	24.01	23.71	
5	16QAM	12	0	22.84	22.72	22.73	
5	16QAM	12	7	22.81	22.76	22.71	23.7
5	16QAM	12	13	22.73	22.68	22.44	
5	16QAM	25	0	22.78	22.66	22.72	
5	64QAM	1	0	22.89	22.80	22.83	23.7
5	64QAM	1	12	22.90	22.88	22.83	
5	64QAM	1	24	22.81	22.89	21.86	
5	64QAM	12	0	21.83	21.78	21.45	22.7
5	64QAM	12	7	21.84	21.81	21.00	
5	64QAM	12	13	21.74	21.78	20.80	
5	64QAM	25	0	21.77	21.68	20.99	
Channel				27076	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
3	QPSK	1	0	24.72	24.62	24.52	
3	QPSK	1	8	24.75	24.69	24.16	25.7
3	QPSK	1	14	24.63	24.66	24.26	
3	QPSK	8	0	23.83	23.88	23.39	
3	QPSK	8	4	23.71	23.72	23.29	24.7
3	QPSK	8	7	23.74	23.70	23.28	
3	QPSK	15	0	23.78	23.67	23.30	
3	16QAM	1	0	24.09	23.91	23.81	
3	16QAM	1	8	24.06	24.06	23.47	24.7
3	16QAM	1	14	23.95	23.95	23.55	
3	16QAM	8	0	22.86	22.77	22.54	
3	16QAM	8	4	22.88	22.77	22.42	23.7
3	16QAM	8	7	22.78	22.76	22.46	
3	16QAM	15	0	22.78	22.70	22.47	
3	64QAM	1	0	22.72	22.83	22.00	23.7
3	64QAM	1	8	23.03	22.96	21.88	
3	64QAM	1	14	22.96	22.90	21.93	
3	64QAM	8	0	21.79	21.74	20.85	
3	64QAM	8	4	21.88	21.81	20.77	22.7
3	64QAM	8	7	21.81	21.72	20.92	
3	64QAM	15	0	21.81	21.67	20.86	
Channel				26927	26865	27023	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.68	24.52	24.13	
1.4	QPSK	1	3	24.71	24.63	24.26	25.7
1.4	QPSK	1	6	24.61	24.55	24.29	
1.4	QPSK	3	0	24.69	24.55	24.17	
1.4	QPSK	3	1	24.74	24.58	24.22	
1.4	QPSK	3	3	24.67	24.55	24.37	24.7
1.4	QPSK	6	0	23.71	23.63	23.29	
1.4	16QAM	1	0	24.01	23.86	23.45	
1.4	16QAM	1	3	24.04	23.96	23.59	
1.4	16QAM	1	6	23.93	23.86	23.65	24.7
1.4	16QAM	3	0	23.75	23.65	23.27	
1.4	16QAM	3	0	23.79	23.65	23.32	
1.4	16QAM	3	3	23.71	23.67	23.46	
1.4	16QAM	6	0	22.82	22.75	22.46	23.7
1.4	64QAM	1	0	22.74	22.76	21.86	
1.4	64QAM	1	3	22.98	22.88	21.90	
1.4	64QAM	1	6	22.86	22.78	21.85	23.7
1.4	64QAM	3	0	22.76	22.73	21.85	
1.4	64QAM	3	1	22.82	22.82	21.93	
1.4	64QAM	3	1	22.84	22.78	21.86	
1.4	64QAM	6	0	21.65	21.68	20.87	22.7





Band 30							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. /	Mid Ch. /	High Ch. /	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		23.02		23.7
10	QPSK	1	25		23.01		
10	QPSK	1	49		22.92		
10	QPSK	25	0		21.98		22.7
10	QPSK	25	12		22.00		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.00		22.7
10	16QAM	1	0		22.30		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.31		21.7
10	16QAM	25	0		20.98		
10	16QAM	25	12		20.98		
10	16QAM	25	25		21.11		21.7
10	16QAM	50	0		20.98		
10	64QAM	1	0		21.18		
10	64QAM	1	25		21.21		21.7
10	64QAM	1	49		21.22		
10	64QAM	25	0		19.98		
10	64QAM	25	12		20.04		20.7
10	64QAM	25	25		20.13		
10	64QAM	50	0		20.02		
Channel				23.65	23.13	22.35	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.86	22.86	22.88	23.7
5	QPSK	1	12	22.99	23.01	22.99	
5	QPSK	1	24	23.01	23.00	22.96	
5	QPSK	12	0	22.02	21.98	21.97	22.7
5	QPSK	12	7	22.08	22.07	22.05	
5	QPSK	12	13	22.06	22.06	22.03	
5	QPSK	25	0	22.04	21.99	22.00	22.7
5	16QAM	1	0	22.17	22.16	22.18	
5	16QAM	1	12	22.26	22.25	22.21	
5	16QAM	1	24	22.32	22.32	22.30	21.7
5	16QAM	12	0	21.06	21.01	21.03	
5	16QAM	12	7	21.09	21.09	21.09	
5	16QAM	12	13	21.07	21.10	21.05	21.7
5	16QAM	25	0	21.05	21.02	21.02	
5	64QAM	1	0	21.11	21.14	21.15	
5	64QAM	1	12	21.19	21.20	21.16	21.7
5	64QAM	1	24	21.25	21.22	21.22	
5	64QAM	12	0	20.09	20.02	20.07	
5	64QAM	12	7	20.15	20.14	20.10	20.7
5	64QAM	12	13	20.11	20.11	20.10	
5	64QAM	25	0	20.10	20.01	20.03	



Band 66							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch. / Channel	Mid Ch. / Channel	High Ch. / Channel	Tune-up limit (dBm)
Channel							
Frequency (MHz)							
20	QPSK	1	0	22.96	22.88	22.80	24.1
20	QPSK	1	49	22.82	22.88	22.87	
20	QPSK	1	99	22.87	22.70	22.60	
20	QPSK	50	0	23.07	22.90	22.84	24.1
20	QPSK	50	24	23.08	22.85	22.85	
20	QPSK	50	50	23.03	22.89	22.84	
20	QPSK	100	0	23.06	22.90	22.80	24.1
20	16QAM	1	0	23.29	23.23	23.15	
20	16QAM	1	49	23.18	23.03	23.00	
20	16QAM	1	99	23.21	23.00	22.91	23.6
20	16QAM	50	0	22.88	22.50	22.49	
20	16QAM	50	24	22.87	22.54	22.45	
20	16QAM	50	50	22.64	22.50	22.47	23.6
20	16QAM	100	0	22.83	22.51	22.46	
20	64QAM	1	0	22.73	22.06	22.55	
20	64QAM	1	49	22.69	22.54	22.46	22.8
20	64QAM	1	99	22.74	22.55	22.46	
20	64QAM	50	0	21.89	21.04	21.50	
20	64QAM	50	24	21.70	21.54	21.46	22.8
20	64QAM	50	50	21.66	21.49	21.48	
20	64QAM	100	0	21.68	21.52	21.45	
Channel							
Frequency (MHz)							
15	QPSK	1	0	22.94	22.88	22.74	24.1
15	QPSK	1	37	22.82	22.87	22.57	
15	QPSK	1	74	22.83	22.88	22.53	
15	QPSK	36	0	23.06	22.80	22.80	24.1
15	QPSK	36	20	23.07	22.86	22.75	
15	QPSK	36	39	22.95	22.85	22.78	
15	16QAM	1	0	23.24	23.19	23.12	24.1
15	16QAM	1	37	23.11	23.03	22.98	
15	16QAM	1	74	23.21	22.97	22.81	
15	16QAM	36	0	22.88	22.50	22.44	23.6
15	16QAM	36	20	22.81	22.51	22.39	
15	16QAM	36	39	22.59	22.40	22.40	
15	16QAM	75	0	22.55	22.43	22.36	23.6
15	64QAM	1	0	22.89	22.05	22.50	
15	64QAM	1	37	22.86	22.54	22.42	
15	64QAM	1	74	22.74	22.47	22.46	22.8
15	64QAM	36	0	21.64	21.15	21.42	
15	64QAM	36	20	21.62	21.47	21.37	
15	64QAM	36	39	21.62	21.42	21.40	22.8
15	64QAM	75	0	21.65	21.43	21.44	
Channel							
Frequency (MHz)							
10	QPSK	1	0	22.94	22.81	22.74	24.1
10	QPSK	1	26	22.78	22.88	22.81	
10	QPSK	1	49	22.78	22.85	22.56	
10	QPSK	25	0	23.00	22.84	22.79	24.1
10	QPSK	25	12	23.01	22.86	22.82	
10	QPSK	25	25	22.99	22.80	22.79	
10	QPSK	50	0	22.97	22.88	22.84	24.1
10	16QAM	1	0	23.26	23.23	23.12	
10	16QAM	1	25	23.12	22.99	22.95	
10	16QAM	1	49	23.21	22.94	22.91	23.6
10	16QAM	25	0	22.85	22.45	22.42	
10	16QAM	25	12	22.86	22.52	22.42	
10	16QAM	25	25	22.64	22.41	22.39	23.6
10	16QAM	50	0	22.60	22.46	22.45	
10	64QAM	1	0	22.86	21.98	22.44	
10	64QAM	1	25	22.89	22.46	22.44	22.8
10	64QAM	1	49	22.66	22.50	22.37	
10	64QAM	25	0	21.64	21.19	21.47	
10	64QAM	25	12	21.65	21.46	21.44	22.8
10	64QAM	25	25	21.65	21.47	21.42	
10	64QAM	50	0	21.63	21.47	21.43	
Channel							
Frequency (MHz)							
5	QPSK	1	0	22.98	22.78	22.70	24.1
5	QPSK	1	12	22.79	22.81	22.60	
5	QPSK	1	24	22.84	22.70	22.56	
5	QPSK	12	0	22.99	22.88	22.77	24.1
5	QPSK	12	7	23.07	22.83	22.82	
5	QPSK	12	13	22.94	22.86	22.75	
5	QPSK	25	0	23.06	22.88	22.83	24.1
5	16QAM	1	0	23.26	23.21	23.11	
5	16QAM	1	12	23.12	23.01	22.98	
5	16QAM	1	24	23.14	22.93	22.86	23.6
5	16QAM	12	0	22.60	22.41	22.44	
5	16QAM	12	7	22.58	22.48	22.35	
5	16QAM	12	13	22.57	22.80	22.42	23.6
5	16QAM	25	0	22.62	22.51	22.42	
5	64QAM	1	0	22.63	21.96	22.47	
5	64QAM	1	12	22.63	22.44	22.43	22.8
5	64QAM	1	24	22.97	22.53	22.37	
5	64QAM	12	0	21.58	21.21	21.47	
5	64QAM	12	7	21.67	21.47	21.42	22.8
5	64QAM	12	13	21.61	21.39	21.45	
5	64QAM	25	0	21.61	21.46	21.44	
Channel							
Frequency (MHz)							
3	QPSK	1	0	22.90	22.84	22.73	24.1
3	QPSK	1	8	22.81	22.59	22.63	
3	QPSK	1	14	22.79	22.82	22.53	
3	QPSK	8	0	22.97	22.88	22.74	24.1
3	QPSK	8	4	23.02	22.81	22.75	
3	QPSK	8	7	22.95	22.87	22.79	
3	QPSK	15	0	23.00	22.85	22.77	24.1
3	16QAM	1	0	23.23	23.17	23.10	
3	16QAM	1	8	23.10	22.97	22.94	
3	16QAM	1	14	23.11	22.99	22.91	23.6
3	16QAM	8	0	22.84	22.40	22.42	
3	16QAM	8	4	22.84	22.48	22.39	
3	16QAM	8	7	22.58	22.45	22.42	23.6
3	16QAM	15	0	22.63	22.46	22.41	
3	64QAM	1	0	22.70	22.02	22.46	
3	64QAM	8	0	22.66	22.45	22.45	22.8
3	64QAM	1	14	22.88	22.45	22.40	
3	64QAM	8	0	21.61	21.15	21.42	
3	64QAM	8	4	21.62	21.53	21.44	22.8
3	64QAM	8	7	21.56	21.45	21.48	
3	64QAM	15	0	21.61	21.44	21.40	
Channel							
Frequency (MHz)							
1.4	QPSK	1	0	22.91	22.89	22.75	24.1
1.4	QPSK	1	2	22.73	22.83	22.65	
1.4	QPSK	1	5	22.81	22.80	22.53	
1.4	QPSK	3	0	22.99	22.80	22.84	24.1
1.4	QPSK	3	1	23.07	22.87	22.82	
1.4	QPSK	3	1	23.02	22.81	22.84	
1.4	QPSK	6	0	22.98	22.86	22.82	24.1
1.4	16QAM	1	0	23.28	23.14	23.05	
1.4	16QAM	1	3	23.16	22.98	23.00	
1.4	16QAM	1	6	23.14	22.99	22.95	24.1
1.4	16QAM	3	0	22.59	22.46	22.39	
1.4	16QAM	3	1	22.60	22.51	22.39	
1.4	16QAM	3	3	22.55	22.44	22.44	23.6
1.4	16QAM	6	0	22.56	22.45	22.37	
1.4	64QAM	1	0	22.63	21.97	22.51	
1.4	64QAM	1	3	22.63	22.54	22.42	23.6
1.4	64QAM	1	6	22.71	22.48	22.41	
1.4	64QAM	3	0	21.77	21.74	21.76	
1.4	64QAM	3	1	21.73	21.74	21.75	22.8
1.4	64QAM	3	3	21.72	21.70	21.74	
1.4	64QAM	6	0	21.68	21.50	21.44	



Band 71							
Art 0							
BW (MHz)	Modulation	RB Size	RB Offset	Low	Mid	High	Tune-up limit (dBm)
				Ch. / Channel	Ch. / Channel	Ch. / Channel	
Channel				153222	153222	153222	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.77	24.67	24.66	25.7
20	QPSK	1	49	24.65	24.65	24.65	
20	QPSK	1	99	24.68	24.66	24.61	
20	QPSK	50	0	23.78	23.76	23.72	24.7
20	QPSK	50	24	23.86	23.74	23.73	
20	QPSK	50	50	23.84	23.78	23.75	
20	QPSK	100	0	23.79	23.71	23.77	24.7
20	16QAM	1	0	24.06	23.96	24.00	
20	16QAM	1	49	24.01	24.03	24.04	
20	16QAM	1	99	24.03	24.01	23.95	23.7
20	16QAM	50	0	22.77	22.75	22.75	
20	16QAM	50	24	22.82	22.77	22.73	
20	16QAM	50	50	22.82	22.77	22.76	23.7
20	16QAM	100	0	22.78	22.73	22.78	
20	64QAM	1	0	22.04	22.83	22.82	
20	64QAM	1	49	22.63	22.80	22.29	23.7
20	64QAM	1	99	22.94	22.88	22.87	
20	64QAM	50	0	21.00	21.78	21.49	
20	64QAM	50	24	21.30	21.64	21.57	22.7
20	64QAM	50	50	21.84	21.60	21.74	
20	64QAM	100	0	21.53	21.78	21.80	
Channel				153172	153272	153372	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.74	24.65	24.63	25.7
15	QPSK	1	37	24.62	24.66	24.61	
15	QPSK	1	74	24.65	24.68	24.64	
15	QPSK	36	0	23.73	23.71	23.69	24.7
15	QPSK	36	20	23.80	23.73	23.78	
15	QPSK	36	39	23.73	23.76	23.74	
15	QPSK	75	0	23.81	23.74	23.68	24.7
15	16QAM	1	0	24.05	24.01	23.98	
15	16QAM	1	37	23.95	24.02	24.00	
15	16QAM	1	74	23.97	24.00	23.98	23.7
15	16QAM	36	0	22.76	22.75	22.71	
15	16QAM	36	20	22.79	22.74	22.79	
15	16QAM	36	39	22.77	22.79	22.75	23.7
15	16QAM	75	0	22.83	22.73	22.70	
15	64QAM	1	0	22.02	22.43	22.76	
15	64QAM	1	37	21.86	22.84	22.88	23.7
15	64QAM	1	74	22.88	22.80	22.84	
15	64QAM	36	0	20.97	21.77	21.44	
15	64QAM	36	20	20.94	21.78	21.81	22.7
15	64QAM	36	39	21.48	21.86	21.78	
15	64QAM	75	0	21.25	21.75	21.67	
Channel				153172	153272	153422	Tune-up limit (dBm)
Frequency (MHz)				668	678	683	
10	QPSK	1	0	24.76	24.64	24.66	25.7
10	QPSK	1	25	24.61	24.62	24.63	
10	QPSK	1	49	24.66	24.71	24.62	
10	QPSK	25	0	23.78	23.71	23.69	24.7
10	QPSK	25	12	23.79	23.82	23.70	
10	QPSK	25	25	23.72	23.76	23.74	
10	QPSK	50	0	23.80	23.81	23.71	24.7
10	16QAM	1	0	24.10	24.02	24.04	
10	16QAM	1	25	23.98	24.06	24.00	
10	16QAM	1	49	23.98	24.07	23.98	23.7
10	16QAM	25	0	22.76	22.70	22.68	
10	16QAM	25	12	22.78	22.81	22.68	
10	16QAM	25	25	22.65	22.77	22.73	23.7
10	16QAM	50	0	22.79	22.80	22.69	
10	64QAM	1	0	21.80	22.30	22.77	
10	64QAM	1	25	22.01	22.95	22.95	23.7
10	64QAM	1	49	22.14	22.88	22.45	
10	64QAM	25	0	20.82	21.71	21.71	
10	64QAM	25	12	20.84	21.84	21.76	22.7
10	64QAM	25	25	20.71	21.81	21.64	
10	64QAM	50	0	20.83	21.77	21.69	
Channel				153147	153247	153447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	685.5	
5	QPSK	1	0	24.57	24.69	24.72	25.7
5	QPSK	1	12	24.71	24.68	24.70	
5	QPSK	1	24	24.70	24.68	24.63	
5	QPSK	12	0	23.73	23.76	23.74	24.7
5	QPSK	12	7	23.84	23.79	23.76	
5	QPSK	12	13	23.78	23.76	23.70	
5	QPSK	25	0	23.76	23.76	23.68	24.7
5	16QAM	1	0	23.75	24.01	24.02	
5	16QAM	1	12	23.97	24.03	23.97	
5	16QAM	1	24	23.95	24.02	23.93	23.7
5	16QAM	12	0	22.64	22.80	22.78	
5	16QAM	12	7	22.86	22.80	22.78	
5	16QAM	12	13	22.77	22.77	22.70	23.7
5	16QAM	25	0	22.68	22.81	22.70	
5	64QAM	1	0	21.74	22.06	22.91	
5	64QAM	1	12	21.79	22.94	22.70	23.7
5	64QAM	1	24	21.96	22.96	22.25	
5	64QAM	12	0	20.82	21.49	21.68	
5	64QAM	12	7	21.00	21.86	21.73	22.7
5	64QAM	12	13	20.99	21.81	21.61	
5	64QAM	25	0	20.78	21.69	21.48	



Band 2							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./18700	Power Middle Ch./18900	Power High Ch./19100	Tune-up limit (dbm)
Channel				18700	18900	19100	
Frequency (MHz)				18700	18900	19100	
20	QPSK	1	0	18.28	18.29	18.28	
20	QPSK	1	49	18.22	18.24	18.20	19.4
20	QPSK	1	99	18.20	18.23	18.22	
20	QPSK	50	0	18.33	18.31	18.26	
20	QPSK	50	24	18.40	18.33	18.34	19.4
20	QPSK	50	50	18.35	18.40	18.35	
20	QPSK	100	0	18.41	18.32	18.37	
20	16QAM	1	0	18.58	18.62	18.55	
20	16QAM	1	49	18.55	18.53	18.47	19.4
20	16QAM	1	99	18.45	18.50	18.46	
20	16QAM	50	0	18.32	18.30	18.28	
20	16QAM	50	24	18.39	18.33	18.36	19.4
20	16QAM	50	50	18.38	18.37	18.35	
20	16QAM	100	0	18.38	18.29	18.35	
20	64QAM	1	0	18.51	18.48	18.46	
20	64QAM	1	49	18.46	18.45	18.44	19.4
20	64QAM	1	99	18.39	18.46	18.42	
20	64QAM	50	0	18.35	18.35	18.30	
20	64QAM	50	24	18.43	18.37	18.40	19.4
20	64QAM	50	50	18.39	18.41	18.38	
20	64QAM	100	0	18.40	18.32	18.38	
Channel				18675	18900	19125	Tune-up limit (dbm)
Frequency (MHz)				18675	18800	19025	
15	QPSK	1	0	18.21	18.22	18.21	
15	QPSK	1	37	18.20	18.24	18.24	19.4
15	QPSK	1	74	18.23	18.22	18.22	
15	QPSK	36	0	18.26	18.25	18.20	
15	QPSK	36	20	18.36	18.24	18.30	19.4
15	QPSK	36	39	18.33	18.40	18.34	
15	QPSK	75	0	18.36	18.28	18.37	
15	16QAM	1	0	18.50	18.60	18.49	
15	16QAM	1	37	18.52	18.49	18.43	19.4
15	16QAM	1	74	18.38	18.40	18.42	
15	16QAM	36	0	18.28	18.29	18.22	
15	16QAM	36	20	18.29	18.24	18.27	19.4
15	16QAM	36	39	18.35	18.34	18.28	
15	16QAM	75	0	18.31	18.32	18.34	
15	64QAM	1	0	18.43	18.38	18.41	
15	64QAM	1	37	18.44	18.38	18.36	19.4
15	64QAM	1	74	18.30	18.42	18.38	
15	64QAM	36	0	18.31	18.32	18.25	
15	64QAM	36	20	18.33	18.29	18.39	19.4
15	64QAM	36	39	18.31	18.36	18.32	
15	64QAM	75	0	18.39	18.28	18.34	
Channel				18950	18900	19150	Tune-up limit (dbm)
Frequency (MHz)				18950	18800	19005	
10	QPSK	1	0	18.20	18.20	18.24	
10	QPSK	1	25	18.20	18.22	18.22	19.4
10	QPSK	1	49	18.21	18.22	18.24	
10	QPSK	25	0	18.31	18.24	18.20	
10	QPSK	25	12	18.33	18.32	18.34	19.4
10	QPSK	25	25	18.29	18.36	18.34	
10	QPSK	50	0	18.36	18.31	18.33	
10	16QAM	1	0	18.55	18.56	18.49	
10	16QAM	1	25	18.48	18.43	18.45	19.4
10	16QAM	1	49	18.42	18.47	18.43	
10	16QAM	25	0	18.32	18.25	18.20	
10	16QAM	25	12	18.36	18.23	18.32	19.4
10	16QAM	25	25	18.38	18.30	18.28	
10	16QAM	50	0	18.33	18.25	18.25	
10	64QAM	1	0	18.42	18.43	18.43	
10	64QAM	1	25	18.40	18.43	18.38	19.4
10	64QAM	1	49	18.30	18.40	18.36	
10	64QAM	25	0	18.32	18.28	18.21	
10	64QAM	25	12	18.43	18.37	18.34	19.4
10	64QAM	25	25	18.36	18.38	18.36	
10	64QAM	50	0	18.39	18.23	18.34	
Channel				18625	18900	19175	Tune-up limit (dbm)
Frequency (MHz)				18625	18800	19075	
5	QPSK	1	0	18.27	18.22	18.23	
5	QPSK	1	12	18.21	18.22	18.22	19.4
5	QPSK	1	24	18.21	18.23	18.21	
5	QPSK	12	0	18.26	18.22	18.20	
5	QPSK	12	7	18.32	18.26	18.25	19.4
5	QPSK	12	13	18.26	18.37	18.30	
5	QPSK	25	0	18.40	18.26	18.29	
5	16QAM	1	0	18.46	18.51	18.53	
5	16QAM	1	12	18.55	18.52	18.37	19.4
5	16QAM	1	24	18.44	18.48	18.46	
5	16QAM	12	0	18.25	18.21	18.24	
5	16QAM	12	7	18.33	18.31	18.32	19.4
5	16QAM	12	13	18.33	18.32	18.28	
5	16QAM	25	0	18.30	18.27	18.33	
5	64QAM	1	0	18.43	18.45	18.40	
5	64QAM	1	12	18.41	18.45	18.40	19.4
5	64QAM	1	24	18.29	18.44	18.32	
5	64QAM	12	0	18.34	18.27	18.26	
5	64QAM	12	7	18.40	18.36	18.33	19.4
5	64QAM	12	13	18.35	18.34	18.34	
5	64QAM	25	0	18.35	18.28	18.37	
Channel				18915	18900	19185	Tune-up limit (dbm)
Frequency (MHz)				18915	18800	19085	
3	QPSK	1	0	18.23	18.23	18.22	
3	QPSK	1	8	18.20	18.21	18.23	19.4
3	QPSK	1	14	18.21	18.22	18.22	
3	QPSK	8	0	18.31	18.26	18.24	
3	QPSK	8	4	18.39	18.32	18.27	19.4
3	QPSK	8	7	18.30	18.37	18.28	
3	QPSK	15	0	18.39	18.28	18.27	
3	16QAM	1	0	18.55	18.53	18.50	
3	16QAM	1	8	18.50	18.48	18.41	19.4
3	16QAM	1	14	18.40	18.46	18.38	
3	16QAM	8	0	18.28	18.21	18.22	
3	16QAM	8	4	18.39	18.25	18.28	19.4
3	16QAM	8	7	18.28	18.37	18.34	
3	16QAM	15	0	18.35	18.20	18.32	
3	64QAM	1	0	18.50	18.42	18.44	
3	64QAM	1	8	18.44	18.38	18.38	19.4
3	64QAM	1	14	18.39	18.45	18.33	
3	64QAM	8	0	18.31	18.35	18.23	
3	64QAM	8	4	18.38	18.33	18.32	19.4
3	64QAM	8	7	18.35	18.31	18.31	
3	64QAM	15	0	18.33	18.26	18.32	
Channel				18507	18900	19193	Tune-up limit (dbm)
Frequency (MHz)				18507	18900	19193	
1.4	QPSK	1	0	18.21	18.20	18.21	
1.4	QPSK	1	3	18.21	18.22	18.21	19.4
1.4	QPSK	1	5	18.23	18.20	18.22	
1.4	QPSK	3	0	18.24	18.25	18.24	
1.4	QPSK	3	1	18.33	18.29	18.31	
1.4	QPSK	3	3	18.31	18.35	18.30	19.4
1.4	QPSK	6	0	18.35	18.30	18.37	
1.4	16QAM	1	0	18.46	18.44	18.45	
1.4	16QAM	1	3	18.54	18.46	18.44	19.4
1.4	16QAM	1	5	18.42	18.49	18.45	
1.4	16QAM	3	0	18.31	18.23	18.23	
1.4	16QAM	3	1	18.34	18.26	18.26	
1.4	16QAM	3	3	18.31	18.34	18.26	19.4
1.4	16QAM	6	0	18.31	18.30	18.31	
1.4	64QAM	1	0	18.51	18.42	18.45	
1.4	64QAM	1	3	18.40	18.44	18.40	19.4
1.4	64QAM	1	5	18.39	18.40	18.32	
1.4	64QAM	3	0	18.29	18.27	18.23	
1.4	64QAM	3	1	18.33	18.36	18.38	
1.4	64QAM	3	3	18.37	18.40	18.36	19.4
1.4	64QAM	6	0	18.30	18.27	18.29	



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



Band 5							
Ant 1							
Band	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.43	24.46	24.43	25.7
10	QPSK	1	25	24.39	24.46	24.45	
10	QPSK	1	49	24.42	24.47	24.40	
10	QPSK	25	0	23.49	23.55	23.56	24.7
10	QPSK	25	12	23.56	23.57	23.57	
10	QPSK	25	25	23.54	23.57	23.47	
10	QPSK	50	0	23.57	23.55	23.56	24.7
10	16QAM	1	0	23.84	23.81	23.88	
10	16QAM	1	25	23.77	23.82	23.84	
10	16QAM	1	49	23.83	23.86	23.78	23.7
10	16QAM	25	0	22.49	22.55	22.53	
10	16QAM	25	12	22.59	22.57	22.65	
10	16QAM	25	25	22.54	22.60	22.57	23.7
10	16QAM	50	0	22.56	22.55	22.55	
10	64QAM	1	0	22.71	22.68	22.74	
10	64QAM	1	25	22.73	22.49	22.51	23.7
10	64QAM	1	49	22.73	22.35	21.70	
10	64QAM	25	0	21.64	21.60	21.58	
10	64QAM	25	12	21.63	21.53	21.47	22.7
10	64QAM	25	25	21.58	21.61	20.76	
10	64QAM	50	0	21.59	21.57	21.25	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.46	24.46	24.45	25.7
5	QPSK	1	12	24.44	24.46	24.19	
5	QPSK	1	24	24.46	24.45	24.23	
5	QPSK	12	0	23.59	23.59	23.58	24.7
5	QPSK	12	7	23.54	23.61	23.25	
5	QPSK	12	13	23.52	23.56	23.24	
5	QPSK	25	0	23.54	23.52	23.37	24.7
5	16QAM	1	0	23.81	23.80	23.87	
5	16QAM	1	12	23.78	23.86	23.43	
5	16QAM	1	24	23.79	23.83	23.43	23.7
5	16QAM	12	0	22.65	22.62	22.60	
5	16QAM	12	7	22.57	22.64	22.38	
5	16QAM	12	13	22.52	22.59	22.35	23.7
5	16QAM	25	0	22.57	22.59	22.51	
5	64QAM	1	0	22.87	22.79	22.18	
5	64QAM	1	12	22.72	22.71	21.72	23.7
5	64QAM	1	24	22.72	22.73	21.73	
5	64QAM	12	0	21.69	21.69	20.87	
5	64QAM	12	7	21.63	21.56	21.85	22.7
5	64QAM	12	13	21.60	21.61	20.71	
5	64QAM	25	0	21.57	21.61	20.73	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.43	24.43	24.20	25.7
3	QPSK	1	8	24.43	24.45	24.13	
3	QPSK	1	14	24.39	24.42	24.17	
3	QPSK	8	0	23.60	23.60	23.07	24.7
3	QPSK	8	4	23.55	23.62	23.16	
3	QPSK	8	7	23.52	23.58	23.25	
3	QPSK	15	0	23.57	23.56	23.17	24.7
3	16QAM	1	0	23.87	23.84	23.44	
3	16QAM	1	8	23.89	23.89	23.38	
3	16QAM	1	14	23.74	23.82	23.44	23.7
3	16QAM	8	0	22.66	22.61	22.26	
3	16QAM	8	4	22.66	22.71	22.30	
3	16QAM	8	7	22.60	22.65	22.40	23.7
3	16QAM	15	0	22.60	22.54	22.27	
3	64QAM	1	0	22.81	22.74	21.74	
3	64QAM	1	8	22.83	22.74	21.72	23.7
3	64QAM	1	14	22.70	22.64	21.71	
3	64QAM	8	0	21.69	21.58	20.75	
3	64QAM	8	4	21.66	21.56	20.73	22.7
3	64QAM	8	7	21.62	21.61	20.80	
3	64QAM	15	0	21.63	21.60	20.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.42	24.41	24.09	25.7
1.4	QPSK	1	3	24.45	24.45	24.26	
1.4	QPSK	1	5	24.38	24.39	24.21	
1.4	QPSK	3	0	24.41	24.41	24.22	24.7
1.4	QPSK	3	1	24.46	24.46	24.30	
1.4	QPSK	3	3	24.41	24.45	24.42	
1.4	QPSK	6	0	23.50	23.51	23.36	24.7
1.4	16QAM	1	0	23.75	23.73	23.46	
1.4	16QAM	1	3	23.79	23.84	23.67	
1.4	16QAM	1	5	23.68	23.74	23.60	24.7
1.4	16QAM	3	0	23.56	23.51	23.29	
1.4	16QAM	3	1	23.60	23.58	23.35	
1.4	16QAM	3	3	23.51	23.53	23.45	23.7
1.4	16QAM	6	0	22.58	22.61	22.49	
1.4	64QAM	1	0	22.69	22.61	21.73	
1.4	64QAM	1	3	22.75	22.64	21.71	23.7
1.4	64QAM	1	5	22.64	22.61	21.72	
1.4	64QAM	3	0	22.66	22.80	21.73	
1.4	64QAM	3	1	22.69	22.63	21.74	22.7
1.4	64QAM	3	3	22.63	22.60	21.75	
1.4	64QAM	6	0	21.64	21.47	20.72	



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



Band 12							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23090	23095	23150	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.57	24.53	24.51	
10	QPSK	1	25	24.58	24.57	24.54	25.7
10	QPSK	1	49	24.63	24.62	24.58	
10	QPSK	25	0	23.64	23.68	23.68	
10	QPSK	25	12	23.74	23.70	23.69	24.7
10	QPSK	25	25	23.72	23.75	23.74	
10	QPSK	50	0	23.73	23.67	23.68	
10	16QAM	1	0	23.94	23.91	23.89	
10	16QAM	1	25	23.94	23.99	23.95	24.7
10	16QAM	1	49	24.00	24.00	23.96	
10	16QAM	25	0	22.96	22.71	22.88	
10	16QAM	25	12	22.75	22.69	22.68	23.7
10	16QAM	25	25	22.70	22.75	22.71	
10	16QAM	50	0	22.72	22.69	22.64	
10	64QAM	1	0	22.60	22.76	22.82	
10	64QAM	1	25	22.56	22.89	22.57	23.7
10	64QAM	1	49	22.88	22.88	22.83	
10	64QAM	25	0	21.48	21.60	21.64	
10	64QAM	25	12	21.63	21.71	21.72	22.7
10	64QAM	25	25	21.72	21.77	21.76	
10	64QAM	50	0	21.55	21.68	21.70	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.62	24.59	24.56	
5	QPSK	1	12	24.60	24.62	24.60	25.7
5	QPSK	1	24	24.62	24.61	24.61	
5	QPSK	12	0	23.73	23.71	23.68	
5	QPSK	12	7	23.69	23.69	23.74	24.7
5	QPSK	12	13	23.71	23.71	23.67	
5	QPSK	25	0	23.70	23.67	23.66	
5	16QAM	1	0	23.98	23.92	23.87	24.7
5	16QAM	1	12	23.98	23.95	23.93	
5	16QAM	1	24	23.95	23.93	23.93	
5	16QAM	12	0	22.77	22.73	22.70	
5	16QAM	12	7	22.74	22.70	22.79	23.7
5	16QAM	12	13	22.69	22.76	22.68	
5	16QAM	25	0	22.73	22.71	22.70	
5	64QAM	1	0	22.46	22.49	22.84	23.7
5	64QAM	1	12	22.63	22.87	22.86	
5	64QAM	1	24	22.48	22.86	22.85	
5	64QAM	12	0	21.51	21.79	21.76	22.7
5	64QAM	12	7	21.65	21.76	21.81	
5	64QAM	12	13	21.71	21.79	21.76	
5	64QAM	25	0	21.60	21.70	21.70	
Channel				23025	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.62	24.60	24.61	
3	QPSK	1	8	24.62	24.62	24.60	25.7
3	QPSK	1	14	24.57	24.60	24.58	
3	QPSK	8	0	23.69	23.70	22.70	
3	QPSK	8	4	23.69	23.64	22.71	24.7
3	QPSK	8	7	23.62	23.70	22.70	
3	QPSK	15	0	23.70	23.66	22.70	
3	16QAM	1	0	24.00	24.02	23.95	24.7
3	16QAM	1	8	23.96	23.98	23.98	
3	16QAM	1	14	23.91	23.96	23.91	
3	16QAM	8	0	22.75	22.71	22.71	23.7
3	16QAM	8	4	22.78	22.75	22.82	
3	16QAM	8	7	22.71	22.77	22.71	
3	16QAM	15	0	22.73	22.69	22.68	
3	64QAM	1	0	22.46	22.70	22.87	23.7
3	64QAM	1	8	22.67	22.88	22.90	
3	64QAM	1	14	22.66	22.94	22.81	22.7
3	64QAM	8	0	21.50	21.75	21.71	
3	64QAM	8	4	21.58	21.74	21.79	
3	64QAM	8	7	21.58	21.79	21.71	
3	64QAM	15	0	21.55	21.68	21.69	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.50	24.53	
1.4	QPSK	1	3	24.60	24.61	24.57	25.7
1.4	QPSK	1	5	24.52	24.51	24.01	
1.4	QPSK	3	0	24.59	24.54	24.52	
1.4	QPSK	3	1	24.64	24.56	24.58	
1.4	QPSK	3	3	24.57	24.60	24.52	24.7
1.4	QPSK	6	0	23.62	23.64	23.59	
1.4	16QAM	1	0	23.87	23.83	23.87	24.7
1.4	16QAM	1	3	23.89	23.98	23.88	
1.4	16QAM	1	5	23.84	23.87	23.87	
1.4	16QAM	3	0	23.64	23.58	23.62	24.7
1.4	16QAM	3	1	23.73	23.86	23.65	
1.4	16QAM	3	3	23.61	23.65	23.59	
1.4	16QAM	6	0	22.71	22.71	22.67	23.7
1.4	64QAM	1	0	22.59	22.76	22.76	
1.4	64QAM	1	3	22.76	22.85	22.77	
1.4	64QAM	1	5	22.74	22.78	22.68	23.7
1.4	64QAM	3	0	22.55	22.72	22.74	
1.4	64QAM	3	1	22.59	22.77	22.79	
1.4	64QAM	3	3	22.60	22.77	22.77	
1.4	64QAM	6	0	21.44	21.65	21.61	22.7





Band 13							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.17		25.2
10	QPSK	1	25		24.10		
10	QPSK	1	49		24.14		
10	QPSK	25	0		23.17		24.2
10	QPSK	25	12		23.21		
10	QPSK	25	25		23.21		
10	QPSK	50	0		23.20		24.2
10	16QAM	1	0		23.42		
10	16QAM	1	25		23.45		
10	16QAM	1	49		23.42		23.2
10	16QAM	25	0		22.20		
10	16QAM	25	12		22.23		
10	16QAM	25	25		22.20		23.2
10	16QAM	50	0		22.23		
10	64QAM	1	0		22.30		
10	64QAM	1	25		22.40		23.2
10	64QAM	1	49		22.34		
10	64QAM	25	0		21.24		
10	64QAM	25	12		21.23		22.2
10	64QAM	25	25		21.25		
10	64QAM	50	0		21.26		
Channel				23205 23230 23255			Tune-up limit (dBm)
Frequency (MHz)				779.5 782 784.5			
5	QPSK	1	0	24.15	24.11	24.16	25.2
5	QPSK	1	12	24.16	24.14	24.11	
5	QPSK	1	24	24.15	24.12	24.14	
5	QPSK	12	0	23.22	23.22	23.17	24.2
5	QPSK	12	7	23.28	23.20	23.19	
5	QPSK	12	13	23.27	23.23	23.16	
5	QPSK	25	0	23.28	23.18	23.17	24.2
5	16QAM	1	0	23.38	23.42	23.37	
5	16QAM	1	12	23.39	23.40	23.32	
5	16QAM	1	24	23.46	23.41	23.37	23.2
5	16QAM	12	0	22.29	22.25	22.23	
5	16QAM	12	7	22.31	22.23	22.24	
5	16QAM	12	13	22.29	22.26	22.24	23.2
5	16QAM	25	0	22.31	22.21	22.23	
5	64QAM	1	0	21.89	22.34	22.30	
5	64QAM	1	12	22.40	22.32	22.33	23.2
5	64QAM	1	24	22.38	22.38	22.32	
5	64QAM	12	0	21.34	21.30	21.26	
5	64QAM	12	7	21.32	21.26	21.25	22.2
5	64QAM	12	13	21.25	21.28	21.25	
5	64QAM	25	0	20.98	21.26	21.23	



Band 14							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.59		25.7
10	QPSK	1	25		24.53		
10	QPSK	1	49		24.43		
10	QPSK	25	0		23.56		24.7
10	QPSK	25	12		23.56		
10	QPSK	25	25		23.59		
10	QPSK	50	0		23.53		24.7
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.92		
10	16QAM	1	49		23.83		23.7
10	16QAM	25	0		22.95		
10	16QAM	25	12		22.53		
10	16QAM	25	25		22.58		23.7
10	16QAM	50	0		22.53		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.64		23.7
10	64QAM	1	49		22.72		
10	64QAM	25	0		21.39		
10	64QAM	25	12		21.38		22.7
10	64QAM	25	25		21.58		
10	64QAM	50	0		21.44		
Channel				23305 23330 23355			Tune-up limit (dBm)
Frequency (MHz)				790.5 793 795.5			
5	QPSK	1	0	24.51	24.49	24.44	25.7
5	QPSK	1	12	24.58	24.56	24.56	
5	QPSK	1	24	24.54	24.49	24.43	
5	QPSK	12	0	23.59	23.56	23.51	24.7
5	QPSK	12	7	23.66	23.57	23.53	
5	QPSK	12	13	23.59	23.56	23.55	
5	QPSK	25	0	23.58	23.53	23.50	24.7
5	16QAM	1	0	23.83	23.80	23.82	
5	16QAM	1	12	23.88	23.86	23.87	
5	16QAM	1	24	23.87	23.80	23.78	23.7
5	16QAM	12	0	22.64	22.57	22.55	
5	16QAM	12	7	22.64	22.64	22.58	
5	16QAM	12	13	22.61	22.59	22.58	23.7
5	16QAM	25	0	22.66	22.54	22.52	
5	64QAM	1	0	22.60	22.51	22.46	
5	64QAM	1	12	22.57	22.35	22.58	23.7
5	64QAM	1	24	22.32	22.41	22.77	
5	64QAM	12	0	21.50	21.32	21.31	
5	64QAM	12	7	21.44	21.28	21.63	22.7
5	64QAM	12	13	21.31	21.27	21.61	
5	64QAM	25	0	21.34	21.26	21.51	



Band 17						
Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				23780	23790	23800
Frequency (MHz)				706	710	711
10	QPSK	1	0	24.60	24.56	24.55
10	QPSK	1	25	24.61	24.62	24.59
10	QPSK	1	49	24.64	24.67	24.63
10	QPSK	25	0	23.65	23.68	23.66
10	QPSK	25	12	23.79	23.75	23.70
10	QPSK	25	25	23.81	23.82	23.80
10	QPSK	50	0	23.69	23.72	23.69
10	16QAM	1	0	23.93	23.95	23.94
10	16QAM	1	25	24.03	24.06	24.01
10	16QAM	1	49	24.01	24.02	23.98
10	16QAM	25	0	22.86	22.95	22.95
10	16QAM	25	12	22.79	22.75	22.73
10	16QAM	25	25	22.78	22.77	22.78
10	16QAM	50	0	22.69	22.69	22.67
10	64QAM	1	0	22.64	22.70	22.79
10	64QAM	1	25	22.72	22.67	22.63
10	64QAM	1	49	22.84	22.76	22.59
10	64QAM	25	0	21.42	21.42	21.41
10	64QAM	25	12	21.51	21.48	21.48
10	64QAM	25	25	21.61	21.67	21.66
10	64QAM	50	0	21.53	21.64	21.67
Channel				23765	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	24.57	24.58	24.58
5	QPSK	1	12	24.66	24.65	24.63
5	QPSK	1	24	24.65	24.66	24.64
5	QPSK	12	0	23.66	23.69	23.67
5	QPSK	12	7	23.76	23.76	23.78
5	QPSK	12	13	23.74	23.77	23.73
5	QPSK	25	0	23.74	23.71	23.75
5	16QAM	1	0	23.81	23.83	23.91
5	16QAM	1	12	23.95	23.97	23.96
5	16QAM	1	24	24.00	24.05	23.99
5	16QAM	12	0	22.73	22.71	22.74
5	16QAM	12	7	22.79	22.77	22.79
5	16QAM	12	13	22.77	22.80	22.77
5	16QAM	25	0	22.74	22.75	22.77
5	64QAM	1	0	22.26	22.42	22.71
5	64QAM	1	12	22.62	22.61	22.61
5	64QAM	1	24	22.53	22.52	22.48
5	64QAM	12	0	21.55	21.47	21.65
5	64QAM	12	7	21.69	21.47	21.76
5	64QAM	12	13	21.66	21.50	21.70
5	64QAM	25	0	21.52	21.44	21.69



Band 25							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1890	1890	1905	
20	QPSK	1	0	18.30	18.31	18.23	
20	QPSK	1	49	18.21	18.26	18.23	19.4
20	QPSK	1	99	18.24	18.20	18.21	
20	QPSK	50	0	18.35	18.32	18.28	
20	QPSK	50	24	18.40	18.43	18.35	19.4
20	QPSK	50	50	18.33	18.37	18.33	
20	QPSK	100	0	18.40	18.42	18.29	
20	16QAM	1	0	18.65	18.63	18.61	
20	16QAM	1	49	18.57	18.61	18.55	19.4
20	16QAM	1	99	18.46	18.55	18.48	
20	16QAM	50	0	18.36	18.39	18.33	
20	16QAM	50	24	18.40	18.45	18.31	19.4
20	16QAM	50	50	18.36	18.41	18.36	
20	16QAM	100	0	18.39	18.40	18.32	
20	64QAM	1	0	18.55	18.49	18.48	
20	64QAM	1	49	18.49	18.51	18.43	19.4
20	64QAM	1	99	18.44	18.43	18.47	
20	64QAM	50	0	18.39	18.39	18.32	
20	64QAM	50	24	18.42	18.46	18.33	19.4
20	64QAM	50	50	18.36	18.39	18.37	
20	64QAM	100	0	18.39	18.44	18.31	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	18.30	18.22	18.20	
15	QPSK	1	37	18.24	18.25	18.21	19.4
15	QPSK	1	74	18.22	18.23	18.21	
15	QPSK	36	0	18.29	18.25	18.25	
15	QPSK	36	20	18.30	18.39	18.28	19.4
15	QPSK	36	39	18.28	18.33	18.28	
15	QPSK	75	0	18.31	18.36	18.28	
15	16QAM	1	0	18.64	18.63	18.55	
15	16QAM	1	37	18.57	18.58	18.52	19.4
15	16QAM	1	74	18.37	18.45	18.43	
15	16QAM	36	0	18.32	18.31	18.27	
15	16QAM	36	20	18.34	18.43	18.31	19.4
15	16QAM	36	39	18.32	18.41	18.29	
15	16QAM	75	0	18.39	18.31	18.32	
15	64QAM	1	0	18.50	18.44	18.46	
15	64QAM	1	37	18.39	18.50	18.34	19.4
15	64QAM	1	74	18.42	18.40	18.44	
15	64QAM	36	0	18.31	18.29	18.22	
15	64QAM	36	20	18.33	18.45	18.24	19.4
15	64QAM	36	39	18.33	18.37	18.37	
15	64QAM	75	0	18.30	18.40	18.25	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	18.23	18.27	18.22	
10	QPSK	1	25	18.21	18.25	18.21	19.4
10	QPSK	1	49	18.24	18.23	18.23	
10	QPSK	25	0	18.31	18.27	18.24	
10	QPSK	25	12	18.30	18.36	18.28	19.4
10	QPSK	25	25	18.23	18.37	18.27	
10	QPSK	50	0	18.34	18.37	18.28	
10	16QAM	1	0	18.63	18.53	18.52	
10	16QAM	1	25	18.50	18.52	18.52	19.4
10	16QAM	1	49	18.36	18.50	18.43	
10	16QAM	25	0	18.33	18.35	18.27	
10	16QAM	25	12	18.40	18.44	18.21	19.4
10	16QAM	25	25	18.34	18.34	18.34	
10	16QAM	50	0	18.29	18.31	18.26	
10	64QAM	1	0	18.53	18.40	18.45	
10	64QAM	1	25	18.48	18.41	18.41	19.4
10	64QAM	1	49	18.34	18.35	18.38	
10	64QAM	25	0	18.31	18.34	18.24	
10	64QAM	25	12	18.40	18.45	18.32	19.4
10	64QAM	25	25	18.28	18.32	18.28	
10	64QAM	50	0	18.34	18.42	18.27	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.29	18.31	18.22	
5	QPSK	1	12	18.25	18.20	18.23	19.4
5	QPSK	1	24	18.24	18.22	18.24	
5	QPSK	12	0	18.32	18.25	18.23	
5	QPSK	12	7	18.30	18.37	18.25	19.4
5	QPSK	12	13	18.24	18.29	18.23	
5	QPSK	25	0	18.39	18.36	18.21	
5	16QAM	1	0	18.57	18.56	18.51	
5	16QAM	1	12	18.48	18.58	18.45	19.4
5	16QAM	1	24	18.37	18.55	18.44	
5	16QAM	12	0	18.30	18.39	18.26	
5	16QAM	12	7	18.32	18.43	18.24	19.4
5	16QAM	12	13	18.29	18.34	18.28	
5	16QAM	25	0	18.38	18.33	18.24	
5	64QAM	1	0	18.55	18.47	18.46	
5	64QAM	1	12	18.42	18.42	18.38	19.4
5	64QAM	1	24	18.41	18.40	18.43	
5	64QAM	12	0	18.30	18.33	18.28	
5	64QAM	12	7	18.41	18.39	18.26	19.4
5	64QAM	12	13	18.34	18.36	18.31	
5	64QAM	25	0	18.38	18.43	18.25	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.22	18.24	18.24	
3	QPSK	1	8	18.23	18.21	18.20	19.4
3	QPSK	1	14	18.21	18.22	18.21	
3	QPSK	8	0	18.35	18.28	18.28	
3	QPSK	8	4	18.30	18.36	18.33	19.4
3	QPSK	8	7	18.29	18.35	18.33	
3	QPSK	15	0	18.35	18.40	18.26	
3	16QAM	1	0	18.59	18.53	18.61	
3	16QAM	1	8	18.52	18.53	18.50	19.4
3	16QAM	1	14	18.36	18.51	18.39	
3	16QAM	8	0	18.32	18.34	18.32	
3	16QAM	8	4	18.31	18.43	18.29	19.4
3	16QAM	8	7	18.31	18.32	18.28	
3	16QAM	15	0	18.34	18.35	18.31	
3	64QAM	1	0	18.52	18.44	18.45	
3	64QAM	1	8	18.45	18.50	18.33	19.4
3	64QAM	1	14	18.41	18.37	18.47	
3	64QAM	8	0	18.36	18.30	18.31	
3	64QAM	8	4	18.34	18.42	18.32	19.4
3	64QAM	8	7	18.32	18.35	18.37	
3	64QAM	15	0	18.33	18.41	18.27	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	18.30	18.26	18.24	
1.4	QPSK	1	3	18.23	18.25	18.21	19.4
1.4	QPSK	1	5	18.24	18.25	18.22	
1.4	QPSK	3	0	18.25	18.32	18.23	
1.4	QPSK	3	1	18.38	18.33	18.35	19.4
1.4	QPSK	3	3	18.32	18.28	18.33	
1.4	QPSK	6	0	18.37	18.42	18.24	
1.4	16QAM	1	0	18.55	18.55	18.56	
1.4	16QAM	1	3	18.49	18.57	18.55	19.4
1.4	16QAM	1	5	18.44	18.48	18.42	
1.4	16QAM	3	0	18.28	18.30	18.28	
1.4	16QAM	3	1	18.35	18.45	18.28	19.4
1.4	16QAM	3	3	18.34	18.36	18.29	
1.4	16QAM	6	0	18.39	18.34	18.22	19.4
1.4	64QAM	1	0	18.54	18.41	18.40	
1.4	64QAM	1	3	18.45	18.46	18.40	
1.4	64QAM	1	5	18.42	18.38	18.45	19.4
1.4	64QAM	3	0	18.37	18.28	18.30	
1.4	64QAM	3	1	18.33	18.36	18.33	
1.4	64QAM	3	3	18.29	18.36	18.34	19.4
1.4	64QAM	6	0	18.30	18.40	18.21	



Band 26							
Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.45	24.40	24.62	25.7
15	QPSK	1	37	24.34	24.39	24.41	
15	QPSK	1	74	24.35	24.39	24.31	
15	QPSK	36	0	23.51	23.51	23.54	24.7
15	QPSK	36	20	23.52	23.46	23.50	
15	QPSK	36	39	23.50	23.51	23.49	
15	QPSK	75	0	23.54	23.48	23.52	24.7
15	16QAM	1	0	23.79	23.73	23.79	
15	16QAM	1	37	23.67	23.74	23.74	
15	16QAM	1	74	23.64	23.68	23.59	23.7
15	16QAM	36	0	22.51	22.54	22.56	
15	16QAM	36	20	22.53	22.51	22.50	
15	16QAM	36	39	22.50	22.53	22.54	23.7
15	16QAM	75	0	22.54	22.51	22.55	
15	64QAM	1	0	22.48	22.58	22.61	
15	64QAM	1	37	22.43	22.68	22.68	23.7
15	64QAM	1	74	22.57	22.61	21.80	
15	64QAM	36	0	21.21	21.58	21.60	
15	64QAM	36	20	21.40	21.53	21.54	22.7
15	64QAM	36	39	21.54	21.58	21.28	
15	64QAM	75	0	21.53	21.51	21.47	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.56	24.50	24.50	25.7
10	QPSK	1	25	24.44	24.47	24.45	
10	QPSK	1	49	24.46	24.49	24.37	
10	QPSK	25	0	23.64	23.56	23.67	24.7
10	QPSK	25	12	23.58	23.54	23.67	
10	QPSK	25	25	23.53	23.57	23.49	
10	QPSK	50	0	23.57	23.53	23.49	24.7
10	16QAM	1	0	23.92	23.87	23.87	
10	16QAM	1	25	23.85	23.87	23.86	
10	16QAM	1	49	23.86	23.90	23.75	23.7
10	16QAM	25	0	22.62	22.57	22.57	
10	16QAM	25	12	22.60	22.55	22.57	
10	16QAM	25	25	22.53	22.58	22.53	23.7
10	16QAM	50	0	22.58	22.54	22.54	
10	64QAM	1	0	22.49	22.73	22.76	
10	64QAM	1	25	22.33	22.80	22.64	23.7
10	64QAM	1	49	22.74	22.81	21.99	
10	64QAM	25	0	21.24	21.61	21.61	
10	64QAM	25	12	21.16	21.61	21.57	22.7
10	64QAM	25	25	21.31	21.58	20.89	
10	64QAM	50	0	21.25	21.57	21.35	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.61	24.51	24.54	25.7
5	QPSK	1	12	24.56	24.55	24.17	
5	QPSK	1	24	24.46	24.53	24.41	
5	QPSK	12	0	23.64	23.59	23.60	24.7
5	QPSK	12	7	23.63	23.63	23.33	
5	QPSK	12	13	23.58	23.56	23.38	
5	QPSK	25	0	23.64	23.54	23.39	24.7
5	16QAM	1	0	23.95	23.85	23.86	
5	16QAM	1	12	23.84	23.87	23.49	
5	16QAM	1	24	23.77	23.88	23.69	23.7
5	16QAM	12	0	22.71	22.65	22.61	
5	16QAM	12	7	22.67	22.64	22.48	
5	16QAM	12	13	22.55	22.59	22.45	23.7
5	16QAM	25	0	22.61	22.56	22.57	
5	64QAM	1	0	22.36	22.77	22.28	
5	64QAM	1	12	22.31	22.76	21.70	23.7
5	64QAM	1	24	22.14	22.76	21.71	
5	64QAM	12	0	21.36	21.70	20.92	
5	64QAM	12	7	21.29	21.69	20.95	22.7
5	64QAM	12	13	21.16	21.65	20.83	
5	64QAM	25	0	21.20	21.58	20.73	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.59	24.50	24.25	25.7
3	QPSK	1	8	24.60	24.51	24.26	
3	QPSK	1	14	24.46	24.50	24.37	
3	QPSK	6	0	23.69	23.57	23.20	24.7
3	QPSK	6	4	23.68	23.63	23.32	
3	QPSK	6	7	23.61	23.55	23.49	
3	QPSK	15	0	23.66	23.58	23.29	24.7
3	16QAM	1	0	23.93	23.85	23.53	
3	16QAM	1	8	23.92	23.91	23.53	
3	16QAM	1	14	23.81	23.90	23.67	23.7
3	16QAM	6	0	22.74	22.63	22.36	
3	16QAM	6	4	22.75	22.67	22.45	
3	16QAM	6	7	22.65	22.66	22.54	23.7
3	16QAM	15	0	22.64	22.59	22.44	
3	64QAM	1	0	22.41	22.74	21.71	
3	64QAM	1	8	22.49	22.84	21.84	23.7
3	64QAM	1	14	22.30	22.80	21.76	
3	64QAM	6	0	21.40	21.65	20.75	
3	64QAM	6	4	21.44	21.72	20.79	22.7
3	64QAM	6	7	21.37	21.65	20.72	
3	64QAM	15	0	21.36	21.60	20.62	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.54	24.43	24.20	25.7
1.4	QPSK	1	3	24.56	24.54	24.39	
1.4	QPSK	1	5	24.45	24.41	24.28	
1.4	QPSK	3	0	24.56	24.43	24.39	24.7
1.4	QPSK	3	1	24.58	24.46	24.40	
1.4	QPSK	3	3	24.53	24.46	24.36	
1.4	QPSK	6	0	23.60	23.53	23.42	24.7
1.4	16QAM	1	0	23.86	23.73	23.67	
1.4	16QAM	1	3	23.90	23.90	23.76	
1.4	16QAM	1	5	23.79	23.75	23.66	24.7
1.4	16QAM	3	0	23.62	23.52	23.44	
1.4	16QAM	3	1	23.67	23.57	23.51	
1.4	16QAM	3	3	23.58	23.54	23.43	23.7
1.4	16QAM	6	0	22.66	22.58	22.52	
1.4	64QAM	1	0	22.39	22.67	21.78	
1.4	64QAM	1	3	22.45	22.75	21.75	23.7
1.4	64QAM	1	5	22.41	22.65	21.74	
1.4	64QAM	3	0	22.39	22.66	21.80	
1.4	64QAM	3	1	22.46	22.69	21.71	22.7
1.4	64QAM	3	3	22.43	22.64	21.82	
1.4	64QAM	6	0	21.34	21.56	20.84	



Band 30							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				2771.0	2771.0		
Frequency (MHz)				2310			
10	QPSK	1	0	20.72			21.5
10	QPSK	1	25	20.49			
10	QPSK	1	49	20.50			
10	QPSK	25	0	20.56			
10	QPSK	25	12	20.61			21.5
10	QPSK	25	25	20.70			
10	QPSK	50	0	20.59			
10	16QAM	1	0	20.87			21.5
10	16QAM	1	25	20.86			
10	16QAM	1	49	20.88			
10	16QAM	25	0	20.53			
10	16QAM	25	12	20.56			21.5
10	16QAM	25	25	20.68			
10	16QAM	50	0	20.56			
10	64QAM	1	0	20.74			21.5
10	64QAM	1	25	20.80			
10	64QAM	1	49	20.77			
10	64QAM	25	0	19.75			20.5
10	64QAM	25	12	19.81			
10	64QAM	25	25	19.89			
10	64QAM	50	0	19.78			
Channel				2768.5	2771.0	2773.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.44	20.48	20.45	21.5
5	QPSK	1	12	20.53	20.62	20.56	
5	QPSK	1	24	20.60	20.60	20.52	
5	QPSK	12	0	20.63	20.56	20.59	
5	QPSK	12	7	20.66	20.67	20.62	21.5
5	QPSK	12	13	20.65	20.66	20.59	
5	QPSK	25	0	20.66	20.54	20.55	
5	16QAM	1	0	20.77	20.76	20.76	21.5
5	16QAM	1	12	20.67	20.65	20.66	
5	16QAM	1	24	20.81	20.82	20.85	
5	16QAM	12	0	20.60	20.53	20.59	
5	16QAM	12	7	20.64	20.65	20.65	21.5
5	16QAM	12	13	20.65	20.64	20.64	
5	16QAM	25	0	20.64	20.57	20.63	
5	64QAM	1	0	20.70	20.71	20.72	21.5
5	64QAM	1	12	20.73	20.75	20.74	
5	64QAM	1	24	20.82	20.83	20.84	
5	64QAM	12	0	19.84	19.80	19.83	
5	64QAM	12	7	19.89	19.90	19.87	20.5
5	64QAM	12	13	19.90	19.89	19.87	
5	64QAM	25	0	19.84	19.77	19.81	



Band 66							
AR 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./	Power Middle Ch./	Power High Ch./	Tune-up limit (dBm)
Channel				132072	132332	132592	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.83	18.90	18.88	20
20	QPSK	1	49	18.80	18.82	18.86	
20	QPSK	1	99	18.82	18.88	18.82	
20	QPSK	50	0	18.80	18.81	18.80	20
20	QPSK	50	24	18.80	18.82	18.81	
20	QPSK	50	50	18.81	18.83	18.81	
20	QPSK	100	0	18.86	18.84	18.94	20
20	16QAM	1	0	19.13	19.15	19.23	
20	16QAM	1	49	19.04	19.08	19.11	
20	16QAM	1	99	19.19	19.09	19.08	20
20	16QAM	50	0	18.87	18.91	18.98	
20	16QAM	50	24	18.94	18.90	18.93	
20	16QAM	50	50	18.91	18.94	19.00	20
20	16QAM	100	0	18.80	18.88	18.96	
20	64QAM	1	0	19.04	19.05	19.03	
20	64QAM	1	49	18.92	18.91	18.87	20
20	64QAM	1	99	19.06	19.05	18.97	
20	64QAM	50	0	18.89	18.90	19.01	
20	64QAM	50	24	18.95	18.90	18.94	20
20	64QAM	50	50	18.92	18.95	18.98	
20	64QAM	100	0	18.93	18.88	18.95	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.80	18.83	18.88	20
15	QPSK	1	37	18.80	18.80	18.80	
15	QPSK	1	74	18.80	18.82	18.80	
15	QPSK	36	0	18.81	18.90	18.94	20
15	QPSK	36	20	18.86	18.83	18.93	
15	QPSK	36	39	18.88	18.91	18.99	
15	QPSK	75	0	18.89	18.86	18.94	20
15	16QAM	1	0	19.12	19.15	19.17	
15	16QAM	1	37	19.03	19.06	19.12	
15	16QAM	1	74	19.12	19.13	19.10	20
15	16QAM	36	0	18.86	18.90	18.95	
15	16QAM	36	20	18.92	18.86	18.90	
15	16QAM	36	39	18.90	18.95	18.98	20
15	16QAM	75	0	18.94	18.87	18.94	
15	64QAM	1	0	19.04	18.96	19.04	
15	64QAM	1	37	18.96	19.00	19.04	20
15	64QAM	1	74	19.02	19.04	19.02	
15	64QAM	36	0	18.87	18.94	18.97	
15	64QAM	36	20	18.91	18.89	18.93	20
15	64QAM	36	39	18.91	18.97	19.00	
15	64QAM	75	0	18.92	18.89	18.93	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.81	18.83	18.88	20
10	QPSK	1	25	18.80	18.83	18.86	
10	QPSK	1	49	18.80	18.82	18.88	
10	QPSK	25	0	18.82	18.86	18.92	20
10	QPSK	25	12	18.90	18.89	18.94	
10	QPSK	25	25	18.86	18.95	18.98	
10	QPSK	50	0	18.89	18.90	18.96	20
10	16QAM	1	0	19.21	19.22	19.17	
10	16QAM	1	25	19.12	19.20	19.14	
10	16QAM	1	49	19.12	19.17	19.15	20
10	16QAM	25	0	18.91	18.89	18.96	
10	16QAM	25	12	18.94	18.91	18.99	
10	16QAM	25	25	18.89	18.96	19.00	20
10	16QAM	50	0	18.92	18.89	18.95	
10	64QAM	1	0	19.04	19.07	19.11	
10	64QAM	1	25	19.05	19.11	19.18	20
10	64QAM	1	49	18.99	18.99	19.20	
10	64QAM	25	0	18.92	18.92	19.00	
10	64QAM	25	12	18.95	18.93	19.03	20
10	64QAM	25	25	18.90	18.96	19.08	
10	64QAM	50	0	18.94	18.92	19.02	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.80	18.80	18.87	20
5	QPSK	1	12	18.87	18.80	18.95	
5	QPSK	1	24	18.80	18.84	18.91	
5	QPSK	12	0	18.92	18.88	19.00	20
5	QPSK	12	7	18.93	18.96	19.06	
5	QPSK	12	13	18.92	18.95	19.02	
5	QPSK	25	0	18.91	18.87	18.99	20
5	16QAM	1	0	19.14	19.11	19.16	
5	16QAM	1	12	19.18	19.14	19.19	
5	16QAM	1	24	19.10	19.19	19.20	20
5	16QAM	12	0	18.93	18.93	19.06	
5	16QAM	12	7	18.96	19.02	19.08	
5	16QAM	12	13	18.95	18.99	19.02	20
5	16QAM	25	0	18.92	18.92	19.03	
5	64QAM	1	0	19.10	19.04	19.14	
5	64QAM	1	12	19.11	19.11	19.12	20
5	64QAM	1	24	19.07	19.09	19.09	
5	64QAM	12	0	18.96	18.97	19.12	
5	64QAM	12	7	18.97	19.02	19.11	20
5	64QAM	12	13	18.98	18.96	19.10	
5	64QAM	25	0	18.91	18.80	19.05	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.82	18.80	18.82	20
3	QPSK	1	8	18.91	18.86	18.86	
3	QPSK	1	14	18.86	18.80	18.84	
3	QPSK	8	0	18.89	18.83	18.92	20
3	QPSK	8	4	18.86	18.90	18.93	
3	QPSK	8	7	18.93	18.89	18.90	
3	QPSK	15	0	18.91	18.81	18.91	20
3	16QAM	1	0	19.07	19.06	19.16	
3	16QAM	1	8	19.15	19.11	19.16	
3	16QAM	1	14	19.15	19.09	19.13	20
3	16QAM	8	0	18.90	18.85	18.96	
3	16QAM	8	4	18.99	18.94	18.98	
3	16QAM	8	7	18.99	18.92	18.93	20
3	16QAM	15	0	18.96	18.83	18.93	
3	64QAM	1	0	19.05	18.97	19.08	
3	64QAM	1	8	19.15	19.13	19.09	20
3	64QAM	1	14	19.07	19.06	19.00	
3	64QAM	8	0	18.97	18.89	18.96	
3	64QAM	8	4	19.04	18.99	19.01	20
3	64QAM	8	7	19.00	18.95	18.97	
3	64QAM	15	0	18.97	18.86	18.95	
Channel				131979	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1773.3	
1.4	QPSK	1	0	18.81	18.87	18.91	20
1.4	QPSK	1	3	18.85	18.91	18.96	
1.4	QPSK	1	5	18.80	18.83	18.89	
1.4	QPSK	3	0	18.84	18.90	18.92	20
1.4	QPSK	3	1	18.89	18.94	18.96	
1.4	QPSK	3	3	18.85	18.90	18.93	
1.4	QPSK	6	0	18.91	18.96	19.00	20
1.4	16QAM	1	0	19.18	19.20	19.22	
1.4	16QAM	1	3	19.22	19.08	19.11	
1.4	16QAM	1	5	19.15	19.17	19.22	20
1.4	16QAM	3	0	18.94	18.97	18.99	
1.4	16QAM	3	1	19.02	19.01	19.06	
1.4	16QAM	3	3	18.92	18.97	19.01	20
1.4	16QAM	6	0	18.96	19.04	19.10	
1.4	64QAM	1	0	19.11	19.09	19.17	
1.4	64QAM	1	3	19.14	19.15	19.22	20
1.4	64QAM	1	5	19.06	19.10	19.16	
1.4	64QAM	3	0	19.03	19.06	19.15	
1.4	64QAM	3	1	19.06	19.13	19.20	20
1.4	64QAM	3	3	19.02	19.07	19.14	
1.4	64QAM	6	0	18.91	18.97	19.06	



Band 71						
Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /
Channel				133292	133332	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	24.67	24.60	24.58
20	QPSK	1	49	24.58	24.59	24.56
20	QPSK	1	99	24.61	24.56	24.53
20	QPSK	50	0	23.69	23.68	23.64
20	QPSK	50	24	23.74	23.67	23.63
20	QPSK	50	50	23.75	23.69	23.68
20	QPSK	100	0	23.72	23.66	23.71
20	16QAM	1	0	23.99	23.90	23.92
20	16QAM	1	49	23.94	23.93	23.91
20	16QAM	1	99	23.97	23.91	23.93
20	16QAM	50	0	22.69	22.68	22.67
20	16QAM	50	24	22.75	22.68	22.66
20	16QAM	50	50	22.75	22.73	22.68
20	16QAM	100	0	22.72	22.65	22.70
20	64QAM	1	0	21.88	22.69	22.77
20	64QAM	1	49	22.51	22.82	22.02
20	64QAM	1	99	22.87	22.68	22.55
20	64QAM	50	0	20.78	21.69	21.35
20	64QAM	50	24	21.19	21.42	21.50
20	64QAM	50	50	21.70	21.49	21.63
20	64QAM	100	0	21.39	21.66	21.66
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	24.65	24.60	24.56
15	QPSK	1	37	24.65	24.58	24.52
15	QPSK	1	74	24.58	24.62	24.55
15	QPSK	36	0	23.67	23.69	23.61
15	QPSK	36	20	23.75	23.67	23.71
15	QPSK	36	39	23.65	23.71	23.65
15	QPSK	75	0	23.73	23.65	23.60
15	16QAM	1	0	24.04	23.93	23.89
15	16QAM	1	37	23.69	23.98	23.91
15	16QAM	1	74	23.91	23.91	23.90
15	16QAM	36	0	22.63	22.67	22.63
15	16QAM	36	20	22.72	22.69	22.71
15	16QAM	36	39	22.69	22.71	22.68
15	16QAM	75	0	22.75	22.67	22.62
15	64QAM	1	0	21.78	22.28	22.61
15	64QAM	1	37	21.70	22.27	22.80
15	64QAM	1	74	22.85	22.43	22.62
15	64QAM	36	0	20.76	21.71	21.42
15	64QAM	36	20	20.88	21.68	21.75
15	64QAM	36	39	21.38	21.40	21.71
15	64QAM	75	0	21.18	21.65	21.52
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	24.57	24.56	24.57
10	QPSK	1	25	24.53	24.56	24.57
10	QPSK	1	49	24.62	24.64	24.53
10	QPSK	25	0	23.73	23.62	23.60
10	QPSK	25	12	23.69	23.75	23.62
10	QPSK	25	25	23.63	23.70	23.65
10	QPSK	50	0	23.73	23.74	23.61
10	16QAM	1	0	24.03	23.97	23.96
10	16QAM	1	25	23.89	23.97	23.94
10	16QAM	1	49	23.96	24.00	23.86
10	16QAM	25	0	22.59	22.65	22.60
10	16QAM	25	12	22.52	22.74	22.63
10	16QAM	25	25	22.54	22.71	22.65
10	16QAM	50	0	22.73	22.73	22.59
10	64QAM	1	0	21.71	22.19	22.73
10	64QAM	1	25	21.81	22.89	22.80
10	64QAM	1	49	22.02	22.82	22.25
10	64QAM	25	0	20.70	21.54	21.63
10	64QAM	25	12	20.65	21.76	21.61
10	64QAM	25	25	20.65	21.66	21.37
10	64QAM	50	0	20.70	21.56	21.58
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	24.33	24.63	24.62
5	QPSK	1	12	24.62	24.59	24.59
5	QPSK	1	24	24.57	24.62	24.51
5	QPSK	12	0	23.49	23.69	23.64
5	QPSK	12	7	23.63	23.70	23.68
5	QPSK	12	13	23.60	23.88	23.61
5	QPSK	25	0	23.60	23.69	23.59
5	16QAM	1	0	23.66	23.99	23.92
5	16QAM	1	12	23.86	23.94	23.87
5	16QAM	1	24	23.80	23.94	23.83
5	16QAM	12	0	22.42	22.74	22.69
5	16QAM	12	7	22.60	22.75	22.70
5	16QAM	12	13	22.61	22.70	22.63
5	16QAM	25	0	22.52	22.72	22.63
5	64QAM	1	0	21.83	21.95	22.65
5	64QAM	1	12	21.71	22.83	22.44
5	64QAM	1	24	21.72	22.88	21.98
5	64QAM	12	0	20.70	21.46	21.42
5	64QAM	12	7	20.79	21.76	21.57
5	64QAM	12	13	20.60	21.72	21.38
5	64QAM	25	0	20.77	21.50	21.21





Band 38						
Ann 2						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq
Channel				37850	38000	38150
Frequency (MHz)				2580	2585	2610
20	QPSK	1	0	24.95	24.88	24.81
20	QPSK	1	49	24.94	24.82	24.75
20	QPSK	1	99	24.93	24.78	24.75
20	QPSK	50	0	24.19	24.05	23.86
20	QPSK	50	24	24.17	24.04	24.00
20	QPSK	50	50	24.03	24.05	23.91
20	QPSK	100	0	24.11	23.94	23.93
20	16QAM	1	0	24.07	24.04	23.89
20	16QAM	1	49	24.07	23.88	23.82
20	16QAM	1	99	23.95	23.97	23.90
20	16QAM	50	0	23.16	23.06	22.97
20	16QAM	50	24	23.17	23.00	22.93
20	16QAM	50	50	23.08	23.06	22.99
20	16QAM	100	0	23.11	23.01	22.95
20	64QAM	1	0	22.81	22.78	22.67
20	64QAM	1	49	22.71	22.71	22.77
20	64QAM	1	99	22.68	22.82	22.78
20	64QAM	50	0	22.15	22.02	21.92
20	64QAM	50	24	22.14	22.04	22.04
20	64QAM	50	50	22.08	22.09	21.91
20	64QAM	100	0	22.08	21.96	22.05
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2585	2612.5
15	QPSK	1	0	24.92	24.90	24.81
15	QPSK	1	37	24.91	24.87	24.80
15	QPSK	1	74	24.90	24.81	24.76
15	QPSK	36	0	24.18	23.95	23.89
15	QPSK	36	20	24.14	24.00	23.91
15	QPSK	36	39	24.07	24.05	23.90
15	QPSK	75	0	24.08	24.00	23.82
15	16QAM	1	0	24.07	24.03	23.92
15	16QAM	1	37	23.92	23.82	23.86
15	16QAM	1	74	23.98	23.92	23.87
15	16QAM	36	0	23.07	22.98	22.86
15	16QAM	36	20	23.01	22.94	22.81
15	16QAM	36	39	23.04	22.97	22.92
15	16QAM	75	0	23.13	22.97	22.88
15	64QAM	1	0	22.75	22.74	22.75
15	64QAM	1	37	22.74	22.82	22.75
15	64QAM	1	74	22.70	22.71	22.72
15	64QAM	36	0	22.14	22.02	21.86
15	64QAM	36	20	22.08	21.98	21.93
15	64QAM	36	39	22.16	22.03	21.92
15	64QAM	75	0	22.16	21.95	21.86
Channel				37800	38000	38200
Frequency (MHz)				2575	2585	2615
10	QPSK	1	0	24.91	24.73	24.50
10	QPSK	1	25	24.81	24.78	24.76
10	QPSK	1	49	24.85	24.71	24.65
10	QPSK	25	0	24.13	23.95	23.83
10	QPSK	25	12	24.04	23.87	23.71
10	QPSK	25	25	24.06	23.98	23.79
10	QPSK	50	0	23.99	23.96	23.90
10	16QAM	1	0	24.02	23.97	23.87
10	16QAM	1	25	23.92	23.83	23.72
10	16QAM	1	49	23.88	23.95	23.91
10	16QAM	25	0	23.08	22.91	22.84
10	16QAM	25	12	23.04	22.90	22.89
10	16QAM	25	25	23.02	22.93	22.89
10	16QAM	50	0	23.11	22.95	22.77
10	64QAM	1	0	22.75	22.69	22.69
10	64QAM	1	25	22.70	22.77	22.72
10	64QAM	1	49	22.77	22.78	22.73
10	64QAM	25	0	22.11	21.98	21.85
10	64QAM	25	12	22.11	21.94	21.85
10	64QAM	25	25	22.11	21.98	21.80
10	64QAM	50	0	22.12	21.92	21.84
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2585	2617.5
5	QPSK	1	0	24.90	24.92	24.77
5	QPSK	1	12	24.93	24.92	24.78
5	QPSK	1	24	24.91	24.92	24.76
5	QPSK	12	0	24.16	23.96	23.94
5	QPSK	12	7	24.13	24.04	23.94
5	QPSK	12	13	24.09	24.02	23.96
5	QPSK	25	0	24.17	24.04	23.92
5	16QAM	1	0	24.23	24.02	23.93
5	16QAM	1	12	24.22	24.10	23.95
5	16QAM	1	24	24.19	24.14	24.05
5	16QAM	12	0	23.14	22.96	22.86
5	16QAM	12	7	23.13	23.13	22.93
5	16QAM	12	13	23.12	23.07	22.90
5	16QAM	25	0	23.12	22.99	22.99
5	64QAM	1	0	22.92	22.80	22.74
5	64QAM	1	12	22.93	22.87	22.72
5	64QAM	1	24	22.92	22.95	22.78
5	64QAM	12	0	22.17	22.04	22.00
5	64QAM	12	7	22.21	22.07	22.02
5	64QAM	12	13	22.17	22.10	21.97
5	64QAM	25	0	22.24	22.04	22.00



Band 41										
Ann 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39790	40185	40620	41065	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.36	24.32	24.31	24.29	24.12	25.7	
20	QPSK	1	49	24.33	24.31	24.18	24.57	24.42		
20	QPSK	1	99	24.33	24.30	24.25	24.12	24.27		
20	QPSK	50	0	23.53	23.47	23.28	23.52	23.42		
20	QPSK	50	24	23.54	23.48	23.35	23.57	23.55	24.7	
20	QPSK	50	50	23.48	23.44	23.34	23.51	23.50		
20	QPSK	100	0	23.52	23.48	23.36	23.53	23.44		
20	16QAM	1	0	23.52	23.45	23.45	23.44	23.23	24.7	
20	16QAM	1	49	23.45	23.43	23.32	23.65	23.52		
20	16QAM	1	99	23.47	23.47	23.35	23.26	23.35		
20	16QAM	50	0	22.56	22.48	22.33	22.56	22.45		
20	16QAM	50	24	22.56	22.51	22.41	22.59	22.54	23.7	
20	16QAM	50	50	22.52	22.46	22.36	22.52	22.53		
20	16QAM	100	0	22.54	22.50	22.39	22.49	22.47		
20	64QAM	1	0	22.26	22.14	22.13	22.10	21.88	23.7	
20	64QAM	1	49	22.19	22.22	22.04	22.46	22.27		
20	64QAM	1	99	22.19	22.25	22.08	22.02	22.03		
20	64QAM	50	0	21.55	21.50	21.35	21.55	21.44		
20	64QAM	50	24	21.57	21.51	21.40	21.60	21.56	22.7	
20	64QAM	50	50	21.52	21.48	21.38	21.50	21.53		
20	64QAM	100	0	21.56	21.50	21.41	21.51	21.47		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.36	24.32	24.25	24.42	24.22	25.7	
15	QPSK	1	37	24.32	24.25	24.18	24.53	24.39		
15	QPSK	1	74	24.34	24.36	24.27	24.27	24.35		
15	QPSK	36	0	23.41	23.47	23.31	23.53	23.47		
15	QPSK	36	20	23.51	23.45	23.37	23.64	23.51	24.7	
15	QPSK	36	39	23.46	23.44	23.33	23.53	23.47		
15	QPSK	75	0	23.50	23.46	23.38	23.58	23.47		
15	16QAM	1	0	23.53	23.48	23.43	23.56	23.36	24.7	
15	16QAM	1	37	23.41	23.39	23.25	23.65	23.52		
15	16QAM	1	74	23.49	23.57	23.45	23.46	23.44		
15	16QAM	36	0	22.40	22.46	22.27	22.48	22.40	23.7	
15	16QAM	36	20	22.47	22.45	22.33	22.50	22.48		
15	16QAM	36	39	22.45	22.42	22.31	22.53	22.46		
15	16QAM	75	0	22.52	22.48	22.38	22.59	22.49		
15	64QAM	1	0	22.24	22.18	22.07	22.26	22.05	23.7	
15	64QAM	1	37	22.22	22.20	22.07	22.42	22.27		
15	64QAM	1	74	22.17	22.34	22.15	22.21	22.16		
15	64QAM	36	0	21.44	21.49	21.34	21.58	21.47	22.7	
15	64QAM	36	20	21.54	21.47	21.38	21.65	21.57		
15	64QAM	36	39	21.48	21.48	21.36	21.57	21.51		
15	64QAM	75	0	21.54	21.48	21.39	21.61	21.51		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.25	24.32	24.17	24.41	24.12	25.7	
10	QPSK	1	25	24.24	24.24	24.09	24.48	24.33		
10	QPSK	1	49	24.29	24.33	24.20	24.21	24.31		
10	QPSK	25	0	23.38	23.37	23.21	23.49	23.39		
10	QPSK	25	12	23.42	23.35	23.29	23.57	23.47	24.7	
10	QPSK	25	25	23.39	23.43	23.27	23.48	23.39		
10	QPSK	50	0	23.48	23.43	23.35	23.56	23.41		
10	16QAM	1	0	23.45	23.42	23.33	23.56	23.32	24.7	
10	16QAM	1	25	23.37	23.29	23.23	23.64	23.48		
10	16QAM	1	49	23.47	23.47	23.43	23.40	23.41		
10	16QAM	25	0	22.35	22.45	22.21	22.47	22.39	23.7	
10	16QAM	25	12	22.45	22.37	22.23	22.52	22.44		
10	16QAM	25	25	22.39	22.40	22.28	22.48	22.44		
10	16QAM	50	0	22.46	22.44	22.28	22.57	22.47		
10	64QAM	1	0	22.18	22.09	22.05	22.19	22.05	23.7	
10	64QAM	1	25	22.12	22.20	22.03	22.37	22.24		
10	64QAM	1	49	22.06	22.30	22.07	22.17	22.12		
10	64QAM	25	0	21.37	21.47	21.24	21.55	21.40	22.7	
10	64QAM	25	12	21.47	21.38	21.37	21.63	21.47		
10	64QAM	25	25	21.43	21.44	21.26	21.49	21.46		
10	64QAM	50	0	21.50	21.43	21.35	21.58	21.51		
Channel				39675	40148	40620	41093	41655	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.48	24.39	24.27	24.54	24.46	25.7	
5	QPSK	1	12	24.46	24.39	24.32	24.56	24.43		
5	QPSK	1	24	24.39	24.38	24.25	24.52	24.33		
5	QPSK	12	0	23.57	23.52	23.43	23.64	23.57	24.7	
5	QPSK	12	7	23.57	23.52	23.47	23.67	23.56		
5	QPSK	12	13	23.56	23.48	23.44	23.68	23.51		
5	QPSK	25	0	23.55	23.50	23.42	23.63	23.53		
5	16QAM	1	0	23.60	23.53	23.37	23.66	23.59	24.7	
5	16QAM	1	12	23.61	23.60	23.51	23.73	23.68		
5	16QAM	1	24	23.61	23.55	23.49	23.68	23.54		
5	16QAM	12	0	22.55	22.49	22.38	22.64	22.52	23.7	
5	16QAM	12	7	22.55	22.52	22.43	22.66	22.57		
5	16QAM	12	13	22.53	22.50	22.40	22.65	22.52		
5	16QAM	25	0	22.60	22.54	22.45	22.65	22.58		
5	64QAM	1	0	22.35	22.35	22.18	22.41	22.30	23.7	
5	64QAM	1	12	22.38	22.36	22.20	22.47	22.28		
5	64QAM	1	24	22.38	22.38	22.23	22.46	22.23		
5	64QAM	12	0	21.61	21.53	21.50	21.67	21.57	22.7	
5	64QAM	12	7	21.63	21.58	21.50	21.70	21.61		
5	64QAM	12	13	21.58	21.57	21.46	21.73	21.54		
5	64QAM	25	0	21.61	21.56	21.46	21.69	21.60		



Band 41 HPUE										
Ann 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39790	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.85	25.94	26.04	26.10	25.81		
20	QPSK	1	49	26.01	26.04	26.01	26.39	26.18	27.5	
20	QPSK	1	99	25.92	25.97	25.99	25.89	25.96		
20	QPSK	50	0	25.19	25.21	25.15	25.40	25.22		
20	QPSK	50	24	25.21	25.24	25.21	25.45	25.34	26.5	
20	QPSK	50	50	25.18	25.21	25.19	25.34	25.29		
20	QPSK	100	0	25.22	25.22	25.20	25.35	25.24		
20	16QAM	1	0	25.26	25.37	25.40	25.48	25.12	26.5	
20	16QAM	1	49	25.27	25.32	25.31	25.69	25.49		
20	16QAM	1	99	25.31	25.32	25.32	25.23	25.28	25.5	
20	16QAM	50	0	24.24	24.26	24.18	24.43	24.24		
20	16QAM	50	24	24.24	24.29	24.22	24.50	24.36	25.5	
20	16QAM	50	50	24.21	24.26	24.21	24.40	24.30		
20	16QAM	100	0	24.22	24.25	24.22	24.38	24.27	24.5	
20	64QAM	1	0	24.15	24.12	24.20	24.26	24.00		
20	64QAM	1	49	24.10	24.16	24.13	24.58	24.38	25.5	
20	64QAM	1	99	24.13	24.20	24.17	24.13	24.18		
20	64QAM	50	0	23.26	23.27	23.18	23.45	23.24	24.5	
20	64QAM	50	24	23.27	23.28	23.27	23.49	23.37		
20	64QAM	50	50	23.21	23.27	23.23	23.39	23.32	24.5	
20	64QAM	100	0	23.26	23.26	23.23	23.38	23.25		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.97	26.01	25.98	26.26	25.97	27.5	
15	QPSK	1	37	26.01	25.97	25.98	26.35	26.18		
15	QPSK	1	74	25.97	26.08	26.03	26.12	26.10	26.5	
15	QPSK	36	0	25.05	25.18	25.09	25.40	25.23		
15	QPSK	36	20	25.13	25.17	25.13	25.46	25.29	26.5	
15	QPSK	36	39	25.12	25.17	25.10	25.36	25.26		
15	QPSK	75	0	25.16	25.17	25.14	25.42	25.25	26.5	
15	16QAM	1	0	25.29	25.27	25.23	25.45	25.26		
15	16QAM	1	37	25.21	25.21	25.19	25.63	25.44	25.5	
15	16QAM	1	74	25.25	25.34	25.29	25.45	25.32		
15	16QAM	36	0	24.06	24.17	24.05	24.35	24.20	25.5	
15	16QAM	36	20	24.13	24.15	24.11	24.47	24.26		
15	16QAM	36	39	24.09	24.14	24.09	24.37	24.23	24.5	
15	16QAM	75	0	24.15	24.19	24.15	24.45	24.26		
15	64QAM	1	0	24.10	24.09	24.04	24.37	24.09	25.5	
15	64QAM	1	37	24.06	24.10	24.08	24.51	24.29		
15	64QAM	1	74	24.09	24.24	24.14	24.31	24.21	24.5	
15	64QAM	36	0	23.08	23.22	23.10	23.40	23.26		
15	64QAM	36	20	23.15	23.20	23.15	23.51	23.34	25.5	
15	64QAM	36	39	23.13	23.18	23.14	23.37	23.27		
15	64QAM	75	0	23.16	23.19	23.16	23.45	23.27	24.5	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.92	25.92	25.81	26.20	26.11	27.5	
10	QPSK	1	25	25.92	25.94	26.00	26.30	26.13		
10	QPSK	1	49	25.97	25.96	25.90	26.26	26.00	26.5	
10	QPSK	25	0	25.10	25.11	25.09	25.41	25.24		
10	QPSK	25	12	25.16	25.13	25.12	25.41	25.26	26.5	
10	QPSK	25	25	25.10	25.19	25.11	25.49	25.22		
10	QPSK	50	0	25.15	25.18	25.16	25.45	25.26	26.5	
10	16QAM	1	0	25.29	25.26	25.20	25.53	25.38		
10	16QAM	1	25	25.26	25.28	25.35	25.67	25.40	25.5	
10	16QAM	1	49	25.32	25.29	25.25	25.57	25.40		
10	16QAM	25	0	24.20	24.10	24.13	24.46	24.35	24.5	
10	16QAM	25	12	24.25	24.19	24.20	24.45	24.28		
10	16QAM	25	25	24.15	24.19	24.10	24.47	24.21	25.5	
10	16QAM	50	0	24.16	24.19	24.12	24.46	24.29		
10	64QAM	1	0	24.20	24.16	24.07	24.48	24.27	24.5	
10	64QAM	1	25	24.13	24.17	24.17	24.50	24.33		
10	64QAM	1	49	24.14	24.16	24.21	24.47	24.31	24.5	
10	64QAM	25	0	23.21	23.18	23.18	23.44	23.25		
10	64QAM	25	12	23.24	23.32	23.24	23.48	23.36	25.5	
10	64QAM	25	25	23.13	23.16	23.20	23.52	23.21		
10	64QAM	50	0	23.18	23.23	23.19	23.44	23.27	24.5	
Channel				39675	40148	40620	41093	41595		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	26.01	26.01	25.91	26.29	26.11	27.5	
5	QPSK	1	12	26.02	26.03	26.02	26.38	26.14		
5	QPSK	1	24	25.99	26.02	25.96	26.31	26.04	26.5	
5	QPSK	12	0	25.16	25.19	25.16	25.44	25.31		
5	QPSK	12	7	25.19	25.23	25.19	25.47	25.27	26.5	
5	QPSK	12	13	25.18	25.20	25.16	25.52	25.29		
5	QPSK	25	0	25.16	25.18	25.18	25.46	25.27	26.5	
5	16QAM	1	0	25.38	25.36	25.30	25.61	25.46		
5	16QAM	1	12	25.33	25.34	25.37	25.68	25.45	25.5	
5	16QAM	1	24	25.36	25.39	25.35	25.65	25.43		
5	16QAM	12	0	24.20	24.20	24.21	24.51	24.36	24.5	
5	16QAM	12	7	24.27	24.24	24.24	24.53	24.32		
5	16QAM	12	13	24.20	24.21	24.18	24.55	24.28	25.5	
5	16QAM	25	0	24.18	24.26	24.20	24.49	24.34		
5	64QAM	1	0	24.26	24.24	24.15	24.51	24.37	24.5	
5	64QAM	1	12	24.20	24.24	24.23	24.59	24.36		
5	64QAM	1	24	24.04	24.23	24.21	24.54	24.31	24.5	
5	64QAM	12	0	23.23	23.28	23.21	23.50	23.35		
5	64QAM	12	7	23.25	23.32	23.27	23.50	23.37	25.5	
5	64QAM	12	13	23.22	23.26	23.23	23.54	23.31		
5	64QAM	25	0	23.20	23.29	23.24	23.53	23.37	24.5	



Band 48									
Ann 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	24.21	24.24	24.10	24.13	25.2	
20	QPSK	1	49	24.02	24.05	23.89	23.89		25.2
20	QPSK	1	99	23.99	23.98	23.84	23.82		
20	QPSK	50	0	23.24	23.27	23.16	23.16		
20	QPSK	50	24	23.21	23.13	23.07	23.07		24.2
20	QPSK	50	50	23.05	23.08	22.94	22.94		
20	QPSK	100	0	23.15	23.18	23.10	23.10		
20	16QAM	1	0	23.33	23.38	23.25	23.28		24.2
20	16QAM	1	49	23.12	23.15	22.98	22.98		
20	16QAM	1	99	23.10	23.09	22.96	22.96		
20	16QAM	50	0	22.27	22.28	22.19	22.20		23.2
20	16QAM	50	24	22.23	22.17	22.13	22.14		
20	16QAM	50	50	22.08	22.11	21.97	21.97		
20	16QAM	100	0	22.21	22.14	22.12	22.10		
20	64QAM	1	0	22.04	22.12	22.00	22.00		23.2
20	64QAM	1	49	21.86	21.87	21.78	21.75		
20	64QAM	1	99	21.83	21.79	21.65	21.68		
20	64QAM	50	0	21.27	21.30	21.19	21.19		22.2
20	64QAM	50	24	21.23	21.17	21.15	21.14		
20	64QAM	50	50	21.09	21.11	20.98	20.98		
20	64QAM	100	0	21.21	21.17	21.12	21.12		
Channel				56315	56820	56160	56655		
Frequency (MHz)				3657.5	3688	3642	3692.5		
15	QPSK	1	0	24.20	24.16	24.05	24.07	25.2	
15	QPSK	1	37	23.95	24.02	23.86	23.84		
15	QPSK	1	74	23.98	23.92	23.78	23.81		
15	QPSK	36	0	23.23	23.25	23.06	23.10		24.2
15	QPSK	36	20	23.14	23.07	23.00	23.04		
15	QPSK	36	39	23.03	23.04	22.91	22.90		
15	QPSK	75	0	23.09	23.07	23.07	23.04		24.2
15	16QAM	1	0	23.29	23.28	23.18	23.24		
15	16QAM	1	37	23.08	23.14	22.97	22.92		24.2
15	16QAM	1	74	23.06	23.00	22.89	22.91		
15	16QAM	36	0	22.18	22.23	22.13	22.13		23.2
15	16QAM	36	20	22.18	22.10	22.13	22.13		
15	16QAM	36	39	22.04	22.01	21.92	21.91		
15	16QAM	75	0	22.18	22.14	22.05	22.03		
15	64QAM	1	0	21.97	22.09	21.93	21.97		23.2
15	64QAM	1	37	21.82	21.86	21.76	21.70		
15	64QAM	1	74	21.80	21.77	21.56	21.67		
15	64QAM	36	0	21.20	21.30	21.10	21.13		22.2
15	64QAM	36	20	21.21	21.09	21.05	21.05		
15	64QAM	36	39	21.05	21.09	20.94	20.88		
15	64QAM	75	0	21.21	21.10	21.09	21.11		
Channel				56290	56815	56165	56690		
Frequency (MHz)				3595	3607.5	3642.5	3695		
10	QPSK	1	0	24.11	24.17	24.02	24.12	25.2	
10	QPSK	1	25	24.02	23.99	23.87	23.79		
10	QPSK	1	49	23.94	23.90	23.75	23.72		
10	QPSK	25	0	23.14	23.20	23.09	23.13		24.2
10	QPSK	25	12	23.11	23.08	23.04	22.97		
10	QPSK	25	25	22.97	23.03	22.86	22.86		
10	QPSK	50	0	23.17	23.05	23.03	23.05		24.2
10	16QAM	1	0	23.27	23.29	23.17	23.28		
10	16QAM	1	25	23.06	23.11	22.97	22.90		
10	16QAM	1	49	23.00	23.01	22.94	22.86		23.2
10	16QAM	25	0	22.21	22.24	22.15	22.11		
10	16QAM	25	12	22.19	22.17	22.10	22.14		
10	16QAM	25	25	22.08	22.09	21.88	21.88		
10	16QAM	50	0	22.12	22.08	22.11	22.00		
10	64QAM	1	0	22.02	22.07	21.95	21.90		23.2
10	64QAM	1	25	21.86	21.79	21.77	21.71		
10	64QAM	1	49	21.80	21.70	21.57	21.55		
10	64QAM	25	0	21.18	21.28	21.15	21.10		22.2
10	64QAM	25	12	21.23	21.12	21.12	21.08		
10	64QAM	25	25	21.06	21.01	20.98	20.94		
10	64QAM	50	0	21.13	21.09	21.09	21.05		
Channel				56265	56810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	24.12	24.19	24.10	24.10	25.2	
5	QPSK	1	12	23.99	23.99	23.86	23.79		
5	QPSK	1	24	23.99	23.96	23.80	23.80		
5	QPSK	12	0	23.17	23.22	23.09	23.09		24.2
5	QPSK	12	7	23.11	23.10	23.04	23.00		
5	QPSK	12	13	22.96	23.05	22.92	22.87		
5	QPSK	25	0	23.09	23.04	23.02	23.00		24.2
5	16QAM	1	0	23.32	23.30	23.19	23.18		
5	16QAM	1	12	23.04	23.13	22.97	22.93		23.2
5	16QAM	1	24	23.10	23.07	22.94	22.87		
5	16QAM	12	0	22.25	22.21	22.09	22.20		
5	16QAM	12	7	22.16	22.09	22.03	22.12		
5	16QAM	12	13	22.01	22.11	21.96	21.88		
5	16QAM	25	0	22.15	22.10	22.04	22.10		23.2
5	64QAM	1	0	21.96	22.10	21.91	21.90		
5	64QAM	1	12	21.96	21.85	21.75	21.87		
5	64QAM	1	24	21.77	21.72	21.57	21.64		
5	64QAM	12	0	21.19	21.23	21.19	21.15		22.2
5	64QAM	12	7	21.15	21.17	21.11	21.07		
5	64QAM	12	13	21.06	21.11	20.89	20.97		
5	64QAM	25	0	21.16	21.09	21.02	21.02		



Band 38						
Ann 0						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	24.16	24.06	24.03
20	QPSK	1	49	24.08	24.02	23.96
20	QPSK	1	99	24.06	23.99	23.92
20	QPSK	50	0	23.25	23.14	23.06
20	QPSK	50	24	23.24	23.12	23.11
20	QPSK	50	50	23.20	23.14	23.07
20	QPSK	100	0	23.23	23.10	23.11
20	16QAM	1	0	23.23	23.16	23.06
20	16QAM	1	49	23.16	23.12	23.03
20	16QAM	1	99	23.14	23.12	23.01
20	16QAM	50	0	22.29	22.16	22.07
20	16QAM	50	24	22.25	22.14	22.13
20	16QAM	50	50	22.24	22.17	22.09
20	16QAM	100	0	22.25	22.13	22.11
20	64QAM	1	0	21.55	21.88	21.77
20	64QAM	1	49	21.90	21.84	21.75
20	64QAM	1	99	21.88	21.83	21.72
20	64QAM	50	0	21.30	21.18	21.09
20	64QAM	50	24	21.27	21.13	21.14
20	64QAM	50	50	21.26	21.19	21.10
20	64QAM	100	0	21.26	21.13	21.12
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	24.09	24.04	23.96
15	QPSK	1	37	24.03	24.01	23.91
15	QPSK	1	74	24.07	24.02	23.92
15	QPSK	36	0	23.25	23.12	23.03
15	QPSK	36	20	23.24	23.08	23.01
15	QPSK	36	39	23.19	23.15	23.04
15	QPSK	75	0	23.21	23.08	23.02
15	16QAM	1	0	23.23	23.17	23.10
15	16QAM	1	37	23.06	23.03	22.98
15	16QAM	1	74	23.19	23.14	23.06
15	16QAM	36	0	22.22	22.10	22.02
15	16QAM	36	20	22.20	22.05	21.96
15	16QAM	36	39	22.16	22.11	22.02
15	16QAM	75	0	22.25	22.11	22.03
15	64QAM	1	0	21.88	21.84	21.73
15	64QAM	1	37	21.94	21.84	21.77
15	64QAM	1	74	21.89	21.83	21.73
15	64QAM	36	0	21.26	21.14	21.07
15	64QAM	36	20	21.24	21.10	21.00
15	64QAM	36	39	21.25	21.17	21.06
15	64QAM	75	0	21.25	21.12	21.03
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	24.09	23.99	23.91
10	QPSK	1	25	24.00	23.96	23.91
10	QPSK	1	49	24.03	24.01	23.91
10	QPSK	25	0	23.15	23.12	23.01
10	QPSK	25	12	23.19	23.07	22.99
10	QPSK	25	25	23.10	23.13	22.99
10	QPSK	50	0	23.11	23.03	22.95
10	16QAM	1	0	23.13	23.08	23.03
10	16QAM	1	25	23.04	22.97	22.94
10	16QAM	1	49	23.10	23.08	23.02
10	16QAM	25	0	22.17	22.00	21.97
10	16QAM	25	12	22.13	21.98	21.91
10	16QAM	25	25	22.10	22.06	22.00
10	16QAM	50	0	22.20	22.02	21.99
10	64QAM	1	0	21.86	21.76	21.70
10	64QAM	1	25	21.92	21.79	21.70
10	64QAM	1	49	21.85	21.75	21.70
10	64QAM	25	0	21.19	21.12	21.05
10	64QAM	25	12	21.18	21.08	21.00
10	64QAM	25	25	21.19	21.11	21.01
10	64QAM	50	0	21.17	21.04	21.01
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	24.15	24.05	23.94
5	QPSK	1	12	24.09	24.02	23.94
5	QPSK	1	24	24.10	23.99	23.95
5	QPSK	12	0	23.21	23.11	23.08
5	QPSK	12	7	23.26	23.20	23.06
5	QPSK	12	13	23.20	23.18	23.05
5	QPSK	25	0	23.25	23.09	23.06
5	16QAM	1	0	23.28	23.17	23.11
5	16QAM	1	12	23.28	23.26	23.18
5	16QAM	1	24	23.28	23.22	23.12
5	16QAM	12	0	22.21	22.09	22.05
5	16QAM	12	7	22.23	22.13	22.06
5	16QAM	12	13	22.18	22.13	22.02
5	16QAM	25	0	22.24	22.14	22.10
5	64QAM	1	0	21.80	21.74	21.70
5	64QAM	1	12	21.90	21.84	21.76
5	64QAM	1	24	21.81	21.82	21.70
5	64QAM	12	0	21.27	21.07	20.97
5	64QAM	12	7	21.20	21.02	20.91
5	64QAM	12	13	21.19	21.14	21.05
5	64QAM	25	0	21.19	21.02	20.97



Band 41										
Ann 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39790	40185	40620	41065	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.94	23.81	23.87	23.85	23.52		
20	QPSK	1	49	23.85	23.79	23.76	24.08	23.88		25.7
20	QPSK	1	99	23.84	23.79	23.82	23.88	23.75		
20	QPSK	50	0	23.05	22.96	22.85	23.02	22.86		
20	QPSK	50	24	23.04	22.97	22.93	23.06	22.98		24.7
20	QPSK	50	50	22.88	22.94	22.90	22.98	22.93		
20	QPSK	100	0	23.04	22.96	22.91	23.05	22.89		
20	16QAM	1	0	23.09	22.93	22.98	22.98	22.83		24.7
20	16QAM	1	49	22.97	22.92	22.87	23.18	22.98		
20	16QAM	1	99	22.97	22.97	22.94	22.70	22.84		
20	16QAM	50	0	22.08	22.00	21.90	22.06	21.87		
20	16QAM	50	24	22.10	22.01	21.96	22.08	22.01		23.7
20	16QAM	50	50	22.03	21.98	21.94	22.01	21.96		
20	16QAM	100	0	22.06	21.98	21.95	21.99	21.91		
20	64QAM	1	0	21.82	21.86	21.88	21.89	21.40		23.7
20	64QAM	1	49	21.73	21.71	21.65	21.83	21.80		
20	64QAM	1	99	21.74	21.75	21.66	21.43	21.61		
20	64QAM	50	0	21.10	21.02	20.92	21.07	20.90		
20	64QAM	50	24	21.11	21.01	20.97	21.12	20.99		22.7
20	64QAM	50	50	21.02	20.98	20.95	21.03	20.96		
20	64QAM	100	0	21.07	21.01	20.98	21.01	20.93		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.90	23.82	23.79	23.94	23.70		
15	QPSK	1	37	23.85	23.76	23.72	24.02	23.86		25.7
15	QPSK	1	74	23.84	23.86	23.84	23.77	23.82		
15	QPSK	36	0	22.83	22.95	22.85	23.06	22.90		
15	QPSK	36	20	23.02	22.91	22.91	23.12	22.99		24.7
15	QPSK	36	39	22.98	22.94	22.89	23.03	22.95		
15	QPSK	75	0	23.03	22.95	22.93	23.07	22.95		
15	16QAM	1	0	23.08	22.98	22.98	23.10	22.76		24.7
15	16QAM	1	37	22.93	22.90	22.82	23.13	22.96		
15	16QAM	1	74	23.00	23.05	23.00	22.94	22.95		
15	16QAM	36	0	21.95	21.93	21.82	22.01	21.85		
15	16QAM	36	20	22.03	21.90	21.89	22.09	21.95		23.7
15	16QAM	36	39	21.97	21.91	21.86	22.00	21.92		
15	16QAM	75	0	22.05	21.97	21.93	22.09	21.96		
15	64QAM	1	0	21.79	21.79	21.73	21.76	21.71		
15	64QAM	1	37	21.74	21.72	21.70	21.90	21.73		23.7
15	64QAM	1	74	21.74	21.86	21.71	21.75	21.78		
15	64QAM	36	0	20.97	20.99	20.90	21.07	20.82		
15	64QAM	36	20	21.02	20.97	20.93	21.14	21.01		22.7
15	64QAM	36	39	21.01	20.97	20.94	21.07	20.96		
15	64QAM	75	0	21.09	20.97	20.94	21.11	20.95		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.88	23.75	23.72	23.84	23.10		
10	QPSK	1	25	23.83	23.70	23.70	23.94	23.84		25.7
10	QPSK	1	49	23.75	23.78	23.84	23.77	23.74		
10	QPSK	25	0	22.81	22.91	22.82	23.04	22.89		
10	QPSK	25	12	22.82	22.81	22.91	23.02	22.97		24.7
10	QPSK	25	25	22.89	22.86	22.87	22.84	22.86		
10	QPSK	50	0	22.94	22.85	22.92	23.05	22.95		
10	16QAM	1	0	23.04	22.97	22.92	23.05	22.70		
10	16QAM	1	25	22.83	22.90	22.72	23.12	22.87		24.7
10	16QAM	1	49	22.83	23.00	22.99	22.92	22.87		
10	16QAM	25	0	21.91	21.92	21.74	21.91	21.85		
10	16QAM	25	12	22.01	21.91	21.85	22.06	21.85		23.7
10	16QAM	25	25	21.94	21.89	21.78	21.98	21.83		
10	16QAM	50	0	21.97	21.96	21.86	22.02	21.91		
10	64QAM	1	0	21.76	21.70	21.74	21.79	21.71		
10	64QAM	1	25	21.72	21.77	21.75	21.81	21.77		23.7
10	64QAM	1	49	21.70	21.79	21.70	21.79	21.70		
10	64QAM	25	0	20.87	20.93	20.80	21.07	20.84		
10	64QAM	25	12	20.99	20.88	20.92	21.10	20.97		22.7
10	64QAM	25	25	20.97	20.87	20.89	21.00	20.92		
10	64QAM	50	0	21.03	20.87	20.84	21.08	20.89		
Channel				39675	40148	40620	41093	41655		
Frequency (MHz)				2498.5	2545.8	2593	2640.0	2687.5		
5	QPSK	1	0	24.04	23.87	23.79	24.02	23.88		
5	QPSK	1	12	23.95	23.87	23.86	24.04	23.88		25.7
5	QPSK	1	24	23.88	23.85	23.81	24.02	23.79		
5	QPSK	12	0	23.08	22.88	22.96	23.15	23.03		
5	QPSK	12	7	23.09	23.01	22.95	23.17	23.02		24.7
5	QPSK	12	13	23.07	22.96	22.95	23.17	23.03		
5	QPSK	25	0	23.08	22.98	22.92	23.12	22.98		
5	16QAM	1	0	23.12	22.99	22.92	23.13	23.02		
5	16QAM	1	12	23.15	23.03	23.04	23.26	23.11		24.7
5	16QAM	1	24	23.14	23.00	23.00	23.18	23.01		
5	16QAM	12	0	22.07	21.97	21.94	22.11	22.03		
5	16QAM	12	7	22.09	22.01	21.97	22.13	22.00		23.7
5	16QAM	12	13	22.06	21.98	21.95	22.12	21.97		
5	16QAM	25	0	22.14	22.03	21.99	22.14	22.02		
5	64QAM	1	0	21.93	21.95	21.88	21.91	21.88		
5	64QAM	1	12	21.88	21.84	21.86	22.00	21.90		23.7
5	64QAM	1	24	21.94	22.02	21.86	21.95	21.88		
5	64QAM	12	0	21.16	21.13	21.04	21.27	21.06		
5	64QAM	12	7	21.14	21.10	21.13	21.25	21.20		22.7
5	64QAM	12	13	21.18	21.13	21.06	21.19	21.11		
5	64QAM	25	0	21.27	21.15	21.08	21.21	21.08		



Band 41 HPUE										
Ann 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39790	40185	40620	41065	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.71	25.60	25.64	25.74	25.50	27.5	
20	QPSK	1	49	25.74	25.66	25.64	25.64	25.66	27.5	
20	QPSK	1	99	25.61	25.58	25.61	25.50	25.64	27.5	
20	QPSK	50	0	24.93	24.86	24.76	25.02	24.88	26.5	
20	QPSK	50	24	24.94	24.85	24.84	25.09	25.00	26.5	
20	QPSK	50	50	24.86	24.83	24.82	25.01	24.97	26.5	
20	QPSK	100	0	24.82	24.86	24.83	24.96	24.90	26.5	
20	16QAM	1	0	25.07	24.95	25.03	25.13	24.75	26.5	
20	16QAM	1	49	24.95	24.95	24.92	25.34	25.14	26.5	
20	16QAM	1	99	24.97	24.92	24.94	24.82	24.98	26.5	
20	16QAM	50	0	23.94	23.89	23.79	24.07	23.89	25.5	
20	16QAM	50	24	23.96	23.91	23.87	24.11	24.01	25.5	
20	16QAM	50	50	23.91	23.88	23.86	24.01	23.98	25.5	
20	16QAM	100	0	23.97	23.98	23.87	23.98	23.94	25.5	
20	64QAM	1	0	23.88	23.75	23.80	23.88	23.64	24.5	
20	64QAM	1	49	23.80	23.79	23.74	24.20	23.99	24.5	
20	64QAM	1	99	23.82	23.80	23.79	23.70	23.86	24.5	
20	64QAM	50	0	22.99	22.89	22.81	23.09	22.93	24.5	
20	64QAM	50	24	22.96	22.91	22.86	23.10	23.03	24.5	
20	64QAM	50	50	22.92	22.89	22.86	23.05	23.01	24.5	
20	64QAM	100	0	22.96	22.90	22.87	23.01	22.94	24.5	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.80	25.70	25.65	25.91	25.65	27.5	
15	QPSK	1	37	25.76	25.54	25.60	25.62	25.84	27.5	
15	QPSK	1	74	25.69	25.76	25.72	25.74	25.79	27.5	
15	QPSK	36	0	24.83	24.86	24.76	25.05	24.90	26.5	
15	QPSK	36	20	24.91	24.82	24.82	25.12	24.99	26.5	
15	QPSK	36	39	24.86	24.82	24.80	25.02	24.95	26.5	
15	QPSK	75	0	24.93	24.94	24.83	25.08	24.95	26.5	
15	16QAM	1	0	25.08	25.00	24.98	25.21	24.97	26.5	
15	16QAM	1	37	24.97	24.91	24.83	25.28	25.15	26.5	
15	16QAM	1	74	24.95	25.03	24.98	25.06	25.08	26.5	
15	16QAM	36	0	23.84	23.86	23.75	24.04	23.87	25.5	
15	16QAM	36	20	23.89	23.83	23.80	24.12	23.96	25.5	
15	16QAM	36	39	23.85	23.83	23.77	24.02	23.96	25.5	
15	16QAM	75	0	23.94	23.87	23.82	24.10	23.95	25.5	
15	64QAM	1	0	23.87	23.76	23.70	24.04	23.77	25.5	
15	64QAM	1	37	23.86	23.79	23.71	24.19	23.97	25.5	
15	64QAM	1	74	23.84	23.89	23.82	23.90	23.95	25.5	
15	64QAM	36	0	22.86	22.87	22.77	23.08	22.84	24.5	
15	64QAM	36	20	22.96	22.85	22.82	23.16	23.01	24.5	
15	64QAM	36	39	22.92	22.85	22.81	23.04	22.97	24.5	
15	64QAM	75	0	22.95	22.88	22.86	23.10	22.96	24.5	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.80	25.66	25.54	25.82	25.61	27.5	
10	QPSK	1	25	25.72	25.61	25.64	25.69	25.85	27.5	
10	QPSK	1	49	25.67	25.68	25.58	25.97	25.69	27.5	
10	QPSK	25	0	24.83	24.78	24.87	25.13	25.03	26.5	
10	QPSK	25	12	25.00	24.86	24.87	25.12	24.99	26.5	
10	QPSK	25	25	24.92	24.93	24.79	25.15	24.99	26.5	
10	QPSK	50	0	24.92	24.76	24.88	25.11	25.00	26.5	
10	16QAM	1	0	25.12	25.05	24.90	25.26	25.10	26.5	
10	16QAM	1	25	25.12	24.95	24.93	25.25	25.18	26.5	
10	16QAM	1	49	25.16	24.97	25.02	25.30	25.05	26.5	
10	16QAM	25	0	24.00	23.85	23.84	24.11	23.98	25.5	
10	16QAM	25	12	24.07	23.96	23.87	24.13	24.10	25.5	
10	16QAM	25	25	23.91	23.85	23.85	24.12	24.00	25.5	
10	16QAM	50	0	23.92	23.84	23.91	24.17	24.06	25.5	
10	64QAM	1	0	24.05	23.82	23.86	24.20	24.06	25.5	
10	64QAM	1	25	23.93	23.85	23.91	24.20	24.03	25.5	
10	64QAM	1	49	23.97	23.95	23.86	24.15	24.04	25.5	
10	64QAM	25	0	23.02	22.86	22.90	23.12	23.08	24.5	
10	64QAM	25	12	23.04	22.96	22.94	23.14	23.02	24.5	
10	64QAM	25	25	22.94	22.94	22.91	23.21	23.01	24.5	
10	64QAM	50	0	22.97	22.96	22.84	23.10	23.03	24.5	
Channel				39675	40148	40620	41093	41665		
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	25.84	25.69	25.61	25.94	25.85	27.5	
5	QPSK	1	12	25.82	25.68	25.74	26.03	25.87	27.5	
5	QPSK	1	24	25.77	25.68	25.66	25.98	25.75	27.5	
5	QPSK	12	0	24.99	24.87	24.88	25.18	25.07	26.5	
5	QPSK	12	7	25.00	24.91	24.90	25.20	25.06	26.5	
5	QPSK	12	13	24.98	24.89	24.87	25.24	25.00	26.5	
5	QPSK	25	0	24.98	24.88	24.88	25.14	25.02	26.5	
5	16QAM	1	0	25.19	25.05	24.98	25.29	25.18	26.5	
5	16QAM	1	12	25.14	25.05	25.03	25.35	25.18	26.5	
5	16QAM	1	24	25.16	25.05	25.05	25.31	25.13	26.5	
5	16QAM	12	0	24.02	23.90	23.92	24.20	24.07	25.5	
5	16QAM	12	7	24.07	23.95	23.96	24.23	24.13	25.5	
5	16QAM	12	13	24.01	23.92	23.90	24.21	24.04	25.5	
5	16QAM	25	0	24.02	23.94	23.91	24.20	24.10	25.5	
5	64QAM	1	0	24.06	23.91	23.87	24.20	24.07	25.5	
5	64QAM	1	12	24.03	23.92	23.91	24.25	24.07	25.5	
5	64QAM	1	24	24.04	23.95	23.94	24.22	24.05	25.5	
5	64QAM	12	0	23.07	22.94	22.92	23.22	23.13	24.5	
5	64QAM	12	7	23.05	22.98	22.95	23.24	23.11	24.5	
5	64QAM	12	13	23.03	22.94	22.94	23.26	23.07	24.5	
5	64QAM	25	0	23.04	22.97	22.93	23.20	23.09	24.5	



Band 48 (3.5G Band)									
AR12									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	20.81	20.91	20.73	20.73	22.3	
20	QPSK	1	49	20.66	20.68	20.51	20.50		
20	QPSK	1	99	20.59	20.64	20.45	20.44		
20	QPSK	50	0	20.65	20.66	20.54	20.55		
20	QPSK	50	24	20.60	20.62	20.50	20.48	21.3	
20	QPSK	50	50	20.48	20.46	20.32	20.32		
20	QPSK	100	0	20.58	20.53	20.48	20.49		
20	16QAM	1	0	20.69	20.77	20.64	20.66		
20	16QAM	1	49	20.51	20.52	20.42	20.39	21.3	
20	16QAM	1	99	20.52	20.50	20.33	20.36		
20	16QAM	50	0	19.69	19.69	19.58	19.57		
20	16QAM	50	24	19.84	19.57	19.51	19.52	20.3	
20	16QAM	50	50	19.52	19.51	19.34	19.36		
20	16QAM	100	0	19.64	19.56	19.51	19.51		
20	64QAM	1	0	19.42	19.53	19.40	19.41		
20	64QAM	1	49	19.31	19.31	19.32	19.33	20.3	
20	64QAM	1	99	19.30	19.31	19.33	19.35		
20	64QAM	50	0	18.67	18.73	18.59	18.58		
20	64QAM	50	24	18.67	18.59	18.52	18.53	19.3	
20	64QAM	50	50	18.52	18.52	18.37	18.37		
20	64QAM	100	0	18.64	18.56	18.50	18.51		
Channel				55315	55820	56160	56655		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	20.72	20.77	20.60	20.34	22.3	
15	QPSK	1	37	20.63	20.65	20.47	20.31		
15	QPSK	1	74	20.62	20.64	20.45	20.30		
15	QPSK	36	0	20.61	20.65	20.52	20.34		
15	QPSK	36	20	20.59	20.58	20.46	20.30	21.3	
15	QPSK	36	39	20.47	20.46	20.30	20.31		
15	QPSK	75	0	20.52	20.62	20.47	20.33		
15	16QAM	1	0	20.64	20.70	20.61	20.32		
15	16QAM	1	37	20.42	20.49	20.32	20.31	21.3	
15	16QAM	1	74	20.55	20.56	20.40	20.33		
15	16QAM	36	0	19.80	19.62	19.49	19.19		
15	16QAM	36	20	19.55	19.54	19.42	19.12	20.3	
15	16QAM	36	39	19.44	19.42	19.27	19.06		
15	16QAM	75	0	19.53	19.60	19.48	19.18		
15	64QAM	1	0	19.36	19.47	19.35	19.06		
15	64QAM	1	37	19.28	19.31	19.17	18.88	20.3	
15	64QAM	1	74	19.25	19.29	19.11	18.80		
15	64QAM	36	0	18.64	18.67	18.54	18.27		
15	64QAM	36	20	18.61	18.60	18.47	18.16	19.3	
15	64QAM	36	39	18.50	18.47	18.35	18.09		
15	64QAM	75	0	18.53	18.62	18.47	18.19		
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	20.67	20.70	20.60	20.32	22.3	
10	QPSK	1	25	20.55	20.62	20.41	20.31		
10	QPSK	1	49	20.60	20.60	20.39	20.32		
10	QPSK	25	0	20.60	20.62	20.52	20.38		
10	QPSK	25	12	20.59	20.50	20.46	20.35	21.3	
10	QPSK	25	25	20.44	20.44	20.30	20.33		
10	QPSK	50	0	20.47	20.58	20.39	20.31		
10	16QAM	1	0	20.61	20.65	20.53	20.30		
10	16QAM	1	25	20.36	20.46	20.31	20.33	21.3	
10	16QAM	1	49	20.50	20.52	20.36	20.32		
10	16QAM	25	0	19.54	19.61	19.49	19.12		
10	16QAM	25	12	19.45	19.53	19.37	19.11	20.3	
10	16QAM	25	25	19.34	19.34	19.25	19.04		
10	16QAM	50	0	19.44	19.59	19.48	19.08		
10	64QAM	1	0	19.32	19.42	19.34	19.03		
10	64QAM	1	25	19.27	19.25	19.08	18.87	20.3	
10	64QAM	1	49	19.16	19.29	19.09	18.81		
10	64QAM	25	0	18.56	18.66	18.51	18.17		
10	64QAM	25	12	18.52	18.56	18.44	18.09	19.3	
10	64QAM	25	25	18.40	18.38	18.33	18.07		
10	64QAM	50	0	18.49	18.57	18.37	18.12		
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	20.70	20.74	20.53	20.34	22.3	
5	QPSK	1	12	20.59	20.57	20.47	20.31		
5	QPSK	1	24	20.54	20.61	20.36	20.32		
5	QPSK	12	0	20.54	20.62	20.48	20.36		
5	QPSK	12	7	20.59	20.53	20.41	20.33	21.3	
5	QPSK	12	13	20.38	20.42	20.35	20.34		
5	QPSK	25	0	20.50	20.52	20.47	20.32		
5	16QAM	1	0	20.63	20.67	20.58	20.32		
5	16QAM	1	12	20.42	20.41	20.31	20.30	21.3	
5	16QAM	1	24	20.50	20.46	20.35	20.31		
5	16QAM	12	0	19.51	19.56	19.39	19.16		
5	16QAM	12	7	19.45	19.49	19.35	19.09	20.3	
5	16QAM	12	13	19.37	19.41	19.21	19.04		
5	16QAM	25	0	19.52	19.51	19.42	19.10		
5	64QAM	1	0	19.28	19.42	19.31	18.98		
5	64QAM	1	12	19.19	19.31	19.13	18.83	20.3	
5	64QAM	1	24	19.17	19.29	19.10	18.81		
5	64QAM	12	0	18.60	18.62	18.47	18.24		
5	64QAM	12	7	18.53	18.53	18.46	18.14	19.3	
5	64QAM	12	13	18.42	18.46	18.35	18.00		
5	64QAM	25	0	18.43	18.61	18.42	18.15		





Band 38						
Ann 2						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq
Channel				37850	38000	38150
Frequency (MHz)				2580	2585	2610
20	QPSK	1	0	24.95	24.88	24.81
20	QPSK	1	49	24.94	24.82	24.75
20	QPSK	1	99	24.93	24.78	24.75
20	QPSK	50	0	24.19	24.05	23.86
20	QPSK	50	24	24.17	24.04	24.00
20	QPSK	50	50	24.03	24.05	23.91
20	QPSK	100	0	24.11	23.94	23.93
20	16QAM	1	0	24.07	24.04	23.89
20	16QAM	1	49	24.07	23.88	23.82
20	16QAM	1	99	23.95	23.97	23.90
20	16QAM	50	0	23.16	23.06	22.97
20	16QAM	50	24	23.17	23.00	22.93
20	16QAM	50	50	23.08	23.06	22.99
20	16QAM	100	0	23.11	23.01	22.95
20	64QAM	1	0	22.81	22.78	22.67
20	64QAM	1	49	22.71	22.71	22.77
20	64QAM	1	99	22.68	22.82	22.78
20	64QAM	50	0	22.15	22.02	21.92
20	64QAM	50	24	22.14	22.04	22.04
20	64QAM	50	50	22.08	22.09	21.91
20	64QAM	100	0	22.08	21.96	22.05
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2585	2612.5
15	QPSK	1	0	24.92	24.90	24.81
15	QPSK	1	37	24.91	24.87	24.80
15	QPSK	1	74	24.90	24.81	24.76
15	QPSK	36	0	24.18	23.95	23.89
15	QPSK	36	20	24.14	24.00	23.91
15	QPSK	36	39	24.07	24.05	23.90
15	QPSK	75	0	24.06	24.00	23.82
15	16QAM	1	0	24.07	24.03	23.92
15	16QAM	1	37	23.92	23.82	23.86
15	16QAM	1	74	23.96	23.92	23.87
15	16QAM	36	0	23.07	22.98	22.86
15	16QAM	36	20	23.01	22.94	22.81
15	16QAM	36	39	23.04	22.97	22.92
15	16QAM	75	0	23.13	22.97	22.88
15	64QAM	1	0	22.75	22.74	22.75
15	64QAM	1	37	22.74	22.82	22.75
15	64QAM	1	74	22.70	22.71	22.72
15	64QAM	36	0	22.14	22.02	21.86
15	64QAM	36	20	22.08	21.98	21.93
15	64QAM	36	39	22.16	22.03	21.92
15	64QAM	75	0	22.16	21.95	21.86
Channel				37800	38000	38200
Frequency (MHz)				2575	2585	2615
10	QPSK	1	0	24.91	24.73	24.50
10	QPSK	1	25	24.81	24.78	24.76
10	QPSK	1	49	24.85	24.71	24.65
10	QPSK	25	0	24.13	23.95	23.83
10	QPSK	25	12	24.04	23.87	23.71
10	QPSK	25	25	24.06	23.98	23.79
10	QPSK	50	0	23.99	23.96	23.90
10	16QAM	1	0	24.02	23.97	23.87
10	16QAM	1	25	23.92	23.83	23.72
10	16QAM	1	49	23.88	23.95	23.91
10	16QAM	25	0	23.08	22.91	22.84
10	16QAM	25	12	23.04	22.90	22.89
10	16QAM	25	25	23.02	22.93	22.89
10	16QAM	50	0	23.11	22.95	22.77
10	64QAM	1	0	22.75	22.69	22.69
10	64QAM	1	25	22.70	22.77	22.72
10	64QAM	1	49	22.77	22.78	22.73
10	64QAM	25	0	22.11	21.98	21.85
10	64QAM	25	12	22.11	21.94	21.85
10	64QAM	25	25	22.11	21.98	21.80
10	64QAM	50	0	22.12	21.92	21.84
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2585	2617.5
5	QPSK	1	0	24.90	24.92	24.77
5	QPSK	1	12	24.93	24.92	24.78
5	QPSK	1	24	24.91	24.92	24.76
5	QPSK	12	0	24.16	23.96	23.94
5	QPSK	12	7	24.13	24.04	23.94
5	QPSK	12	13	24.09	24.02	23.96
5	QPSK	25	0	24.17	24.04	23.92
5	16QAM	1	0	24.23	24.02	23.93
5	16QAM	1	12	24.22	24.10	23.95
5	16QAM	1	24	24.19	24.14	24.05
5	16QAM	12	0	23.14	22.96	22.86
5	16QAM	12	7	23.13	23.13	22.93
5	16QAM	12	13	23.12	23.07	22.90
5	16QAM	25	0	23.12	22.99	22.99
5	64QAM	1	0	22.92	22.80	22.74
5	64QAM	1	12	22.93	22.87	22.72
5	64QAM	1	24	22.92	22.95	22.78
5	64QAM	12	0	22.17	22.04	22.00
5	64QAM	12	7	22.21	22.07	22.02
5	64QAM	12	13	22.17	22.10	21.97
5	64QAM	25	0	22.24	22.04	22.00

Band 41										
Ann 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Power	Power	Tune-up limit (dBm)	
				Low Ch. / Freq.	Low Middle Ch. / Freq.	Middle Ch. / Freq.	High Middle Ch. / Freq.	High Ch. / Freq.		
Channel				39790	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.36	24.32	24.31	24.29	24.12	25.7	
20	QPSK	1	49	24.33	24.31	24.18	24.57	24.42		
20	QPSK	1	99	24.33	24.30	24.25	24.12	24.27	24.7	
20	QPSK	50	0	23.33	23.47	23.23	23.52	23.42		
20	QPSK	50	24	23.54	23.48	23.35	23.57	23.55	24.7	
20	QPSK	50	50	23.48	23.44	23.34	23.51	23.50		
20	QPSK	100	0	23.52	23.48	23.36	23.53	23.44	24.7	
20	16QAM	1	0	23.52	23.45	23.45	23.44	23.23		
20	16QAM	1	49	23.45	23.43	23.32	23.65	23.52	24.7	
20	16QAM	1	99	23.47	23.47	23.35	23.26	23.35		
20	16QAM	50	0	22.56	22.46	22.33	22.56	22.45	23.7	
20	16QAM	50	24	22.56	22.51	22.41	22.59	22.54		
20	16QAM	50	50	22.52	22.46	22.36	22.52	22.53	23.7	
20	16QAM	100	0	22.54	22.50	22.39	22.49	22.47		
20	64QAM	1	0	22.26	22.14	22.13	22.10	21.88	23.7	
20	64QAM	1	49	22.19	22.22	22.04	22.46	22.27		
20	64QAM	1	99	22.19	22.25	22.08	22.02	22.03	22.7	
20	64QAM	50	0	21.55	21.50	21.35	21.55	21.44		
20	64QAM	50	24	21.57	21.51	21.40	21.60	21.56	22.7	
20	64QAM	50	50	21.52	21.48	21.38	21.50	21.53		
20	64QAM	100	0	21.56	21.50	21.41	21.51	21.47		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.6	2682.5		
15	QPSK	1	0	24.36	24.32	24.25	24.42	24.22	25.7	
15	QPSK	1	37	24.32	24.25	24.15	24.53	24.39		
15	QPSK	1	74	24.34	24.36	24.27	24.27	24.35	24.7	
15	QPSK	36	0	23.41	23.47	23.31	23.53	23.47		
15	QPSK	36	20	23.51	23.45	23.37	23.64	23.51	24.7	
15	QPSK	36	39	23.46	23.44	23.33	23.53	23.47		
15	QPSK	75	0	23.50	23.46	23.38	23.58	23.47	24.7	
15	16QAM	1	0	23.53	23.48	23.43	23.56	23.36		
15	16QAM	1	37	23.41	23.39	23.25	23.65	23.52	23.7	
15	16QAM	1	74	23.49	23.57	23.45	23.46	23.44		
15	16QAM	36	0	22.40	22.46	22.27	22.48	22.40	23.7	
15	16QAM	36	20	22.47	22.45	22.33	22.50	22.48		
15	16QAM	36	39	22.45	22.42	22.31	22.53	22.46	23.7	
15	16QAM	75	0	22.52	22.48	22.38	22.59	22.49		
15	64QAM	1	0	22.24	22.18	22.07	22.26	22.05	23.7	
15	64QAM	1	37	22.22	22.20	22.07	22.42	22.27		
15	64QAM	1	74	22.17	22.34	22.15	22.21	22.16	22.7	
15	64QAM	36	0	21.44	21.48	21.34	21.58	21.47		
15	64QAM	36	20	21.54	21.47	21.38	21.65	21.57	22.7	
15	64QAM	36	39	21.48	21.48	21.36	21.57	21.51		
15	64QAM	75	0	21.54	21.48	21.39	21.61	21.51		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.25	24.32	24.17	24.41	24.12	25.7	
10	QPSK	1	25	24.24	24.24	24.09	24.48	24.33		
10	QPSK	1	49	24.29	24.33	24.20	24.21	24.31	24.7	
10	QPSK	25	0	23.38	23.37	23.21	23.49	23.39		
10	QPSK	25	12	23.42	23.35	23.29	23.57	23.47	24.7	
10	QPSK	25	25	23.39	23.43	23.27	23.48	23.39		
10	QPSK	50	0	23.48	23.43	23.35	23.56	23.41	24.7	
10	16QAM	1	0	23.45	23.42	23.33	23.56	23.32		
10	16QAM	1	25	23.37	23.29	23.23	23.64	23.48	24.7	
10	16QAM	1	49	23.47	23.47	23.43	23.40	23.41		
10	16QAM	25	0	22.35	22.49	22.21	22.47	22.39	23.7	
10	16QAM	25	12	22.45	22.37	22.23	22.52	22.44		
10	16QAM	25	25	22.39	22.40	22.28	22.48	22.44	23.7	
10	16QAM	50	0	22.46	22.44	22.28	22.57	22.47		
10	64QAM	1	0	22.18	22.09	22.05	22.19	22.05	23.7	
10	64QAM	1	25	22.12	22.20	22.03	22.37	22.24		
10	64QAM	1	49	22.06	22.30	22.07	22.17	22.12	22.7	
10	64QAM	25	0	21.37	21.47	21.24	21.55	21.40		
10	64QAM	25	12	21.47	21.38	21.37	21.63	21.47	22.7	
10	64QAM	25	25	21.43	21.44	21.26	21.49	21.46		
10	64QAM	50	0	21.50	21.43	21.35	21.58	21.51		
Channel				39675	40148	40620	41093	41655	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.48	24.35	24.27	24.54	24.46	25.7	
5	QPSK	1	12	24.46	24.39	24.32	24.56	24.43		
5	QPSK	1	24	24.39	24.38	24.25	24.52	24.33	24.7	
5	QPSK	12	0	23.57	23.52	23.43	23.64	23.57		
5	QPSK	12	7	23.57	23.52	23.47	23.67	23.56	24.7	
5	QPSK	12	13	23.56	23.48	23.44	23.68	23.51		
5	QPSK	25	0	23.55	23.50	23.42	23.63	23.53	24.7	
5	16QAM	1	0	23.60	23.53	23.37	23.66	23.59		
5	16QAM	1	12	23.61	23.60	23.51	23.73	23.68	24.7	
5	16QAM	1	24	23.61	23.55	23.49	23.68	23.54		
5	16QAM	12	0	22.55	22.49	22.38	22.64	22.52	23.7	
5	16QAM	12	7	22.55	22.52	22.43	22.66	22.57		
5	16QAM	12	13	22.53	22.50	22.40	22.65	22.52	23.7	
5	16QAM	25	0	22.60	22.54	22.45	22.65	22.58		
5	64QAM	1	0	22.35	22.35	22.18	22.41	22.30	23.7	
5	64QAM	1	12	22.38	22.36	22.20	22.47	22.28		
5	64QAM	1	24	22.38	22.38	22.23	22.46	22.23	22.7	
5	64QAM	12	0	21.61	21.53	21.50	21.67	21.57		
5	64QAM	12	7	21.63	21.58	21.50	21.70	21.61	22.7	
5	64QAM	12	13	21.58	21.57	21.46	21.73	21.54		
5	64QAM	25	0	21.61	21.56	21.46	21.69	21.60		



Band 41 HPUE										
Ann 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39790	40185	40620	41065	41490		
Frequency (MHz)				2596	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.85	25.94	26.04	26.10	25.81	27.5	
20	QPSK	1	49	26.01	26.04	26.01	26.39	26.16		
20	QPSK	1	99	25.92	25.97	25.99	25.69	25.96		
20	QPSK	50	0	25.19	25.21	25.15	25.40	25.22	26.5	
20	QPSK	50	24	25.21	25.24	25.21	25.45	25.34		
20	QPSK	50	50	25.18	25.21	25.19	25.34	25.29		
20	QPSK	100	0	25.22	25.22	25.20	25.36	25.24	26.5	
20	16QAM	1	0	25.26	25.37	25.40	25.48	25.12		
20	16QAM	1	49	25.27	25.32	25.31	25.69	25.49		
20	16QAM	1	99	25.31	25.32	25.32	25.23	25.28	25.5	
20	16QAM	50	0	24.24	24.26	24.18	24.43	24.24		
20	16QAM	50	24	24.24	24.29	24.22	24.50	24.36		
20	16QAM	50	50	24.21	24.26	24.21	24.40	24.30	25.5	
20	16QAM	100	0	24.22	24.25	24.22	24.38	24.27		
20	64QAM	1	0	24.15	24.12	24.20	24.26	24.00		
20	64QAM	1	49	24.10	24.16	24.13	24.58	24.38	25.5	
20	64QAM	1	99	24.13	24.20	24.17	24.13	24.18		
20	64QAM	50	0	23.26	23.27	23.18	23.45	23.24		
20	64QAM	50	24	23.27	23.28	23.27	23.49	23.37	24.5	
20	64QAM	50	50	23.21	23.27	23.23	23.39	23.32		
20	64QAM	100	0	23.26	23.26	23.23	23.38	23.25		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2593.5	2546.3	2593	2637.6	2682.5		
15	QPSK	1	0	25.97	26.01	25.98	26.26	25.97	27.5	
15	QPSK	1	37	26.01	25.97	25.98	26.35	26.18		
15	QPSK	1	74	25.97	26.08	26.03	26.12	26.10		
15	QPSK	36	0	25.05	25.18	25.09	25.40	25.23	26.5	
15	QPSK	36	20	25.13	25.17	25.13	25.46	25.29		
15	QPSK	36	39	25.12	25.17	25.10	25.36	25.26		
15	QPSK	75	0	25.16	25.17	25.14	25.42	25.25	26.5	
15	16QAM	1	0	25.29	25.27	25.23	25.66	25.26		
15	16QAM	1	37	25.21	25.21	25.19	25.63	25.44		
15	16QAM	1	74	25.25	25.34	25.29	25.45	25.32	25.5	
15	16QAM	36	0	24.06	24.17	24.05	24.35	24.20		
15	16QAM	36	20	24.13	24.15	24.11	24.47	24.26		
15	16QAM	36	39	24.08	24.14	24.09	24.37	24.23	25.5	
15	16QAM	75	0	24.15	24.19	24.15	24.45	24.26		
15	64QAM	1	0	24.10	24.09	24.04	24.37	24.09		
15	64QAM	1	37	24.06	24.10	24.08	24.51	24.29	25.5	
15	64QAM	1	74	24.08	24.24	24.14	24.31	24.21		
15	64QAM	36	0	23.08	23.22	23.10	23.40	23.26		
15	64QAM	36	20	23.15	23.20	23.15	23.51	23.34	24.5	
15	64QAM	36	39	23.13	23.18	23.14	23.37	23.27		
15	64QAM	75	0	23.16	23.19	23.16	23.45	23.27		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2591	2547	2592	2639	2695		
10	QPSK	1	0	25.92	25.92	25.91	26.20	26.11	27.5	
10	QPSK	1	25	25.92	25.94	26.00	26.30	26.13		
10	QPSK	1	49	25.97	25.96	25.90	26.26	26.00		
10	QPSK	25	0	25.10	25.11	25.09	25.41	25.24	26.5	
10	QPSK	25	12	25.16	25.13	25.12	25.41	25.26		
10	QPSK	25	25	25.10	25.19	25.11	25.49	25.22		
10	QPSK	50	0	25.15	25.16	25.16	25.45	25.26	26.5	
10	16QAM	1	0	25.29	25.26	25.20	25.53	25.38		
10	16QAM	1	25	25.26	25.28	25.35	25.67	25.40		
10	16QAM	1	49	25.32	25.29	25.25	25.57	25.40	25.5	
10	16QAM	25	0	24.20	24.10	24.13	24.46	24.35		
10	16QAM	25	12	24.25	24.19	24.20	24.45	24.28		
10	16QAM	25	25	24.15	24.19	24.10	24.47	24.21	25.5	
10	16QAM	50	0	24.16	24.19	24.12	24.46	24.29		
10	64QAM	1	0	24.20	24.16	24.07	24.48	24.27		
10	64QAM	1	25	24.13	24.17	24.17	24.50	24.33	25.5	
10	64QAM	1	49	24.14	24.16	24.21	24.47	24.31		
10	64QAM	25	0	23.21	23.18	23.18	23.44	23.25		
10	64QAM	25	12	23.24	23.32	23.24	23.48	23.36	24.5	
10	64QAM	25	25	23.13	23.16	23.20	23.52	23.21		
10	64QAM	50	0	23.18	23.23	23.19	23.44	23.27		
Channel				39675	40148	40620	41093	41655		
Frequency (MHz)				2498.5	2545.6	2592	2649.0	2697.5		
5	QPSK	1	0	26.01	26.01	25.91	26.29	26.11	27.5	
5	QPSK	1	12	26.02	26.03	26.02	26.38	26.14		
5	QPSK	1	24	25.99	26.02	25.96	26.31	26.04		
5	QPSK	12	0	25.16	25.19	25.16	25.44	25.31	26.5	
5	QPSK	12	7	25.19	25.23	25.19	25.47	25.27		
5	QPSK	12	13	25.18	25.20	25.16	25.52	25.29		
5	QPSK	25	0	25.16	25.18	25.18	25.46	25.27	26.5	
5	16QAM	1	0	25.38	25.36	25.30	25.61	25.46		
5	16QAM	1	12	25.33	25.34	25.37	25.68	25.45		
5	16QAM	1	24	25.36	25.39	25.35	25.66	25.43	25.5	
5	16QAM	12	0	24.20	24.20	24.21	24.51	24.36		
5	16QAM	12	7	24.27	24.24	24.24	24.53	24.32		
5	16QAM	12	13	24.20	24.21	24.18	24.55	24.28	25.5	
5	16QAM	25	0	24.18	24.26	24.20	24.49	24.34		
5	64QAM	1	0	24.26	24.24	24.15	24.51	24.37		
5	64QAM	1	12	24.20	24.24	24.23	24.59	24.36	25.5	
5	64QAM	1	24	24.04	24.23	24.21	24.54	24.31		
5	64QAM	12	0	23.23	23.26	23.21	23.50	23.35		
5	64QAM	12	7	23.25	23.32	23.27	23.50	23.37	24.5	
5	64QAM	12	13	23.22	23.26	23.23	23.54	23.31		
5	64QAM	25	0	23.20	23.29	23.24	23.53	23.37		



Band 48									
Ann 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	24.21	24.24	24.10	24.13		25.2
20	QPSK	1	49	24.02	24.05	23.89	23.89		
20	QPSK	1	99	23.99	23.98	23.84	23.82		
20	QPSK	50	0	23.24	23.27	23.16	23.16		
20	QPSK	50	24	23.21	23.13	23.07	23.07		
20	QPSK	50	50	23.05	23.08	22.94	22.94		24.2
20	QPSK	100	0	23.15	23.18	23.10	23.10		
20	16QAM	1	0	23.33	23.38	23.25	23.28		
20	16QAM	1	49	23.12	23.15	22.98	22.98		24.2
20	16QAM	1	99	23.10	23.09	22.96	22.96		
20	16QAM	50	0	22.27	22.28	22.19	22.20		
20	16QAM	50	24	22.23	22.17	22.13	22.14		23.2
20	16QAM	50	50	22.08	22.11	21.97	21.97		
20	16QAM	100	0	22.21	22.14	22.12	22.10		
20	64QAM	1	0	22.04	22.12	22.00	22.00		
20	64QAM	1	49	21.86	21.87	21.78	21.75		23.2
20	64QAM	1	99	21.83	21.79	21.65	21.68		
20	64QAM	50	0	21.27	21.30	21.19	21.19		
20	64QAM	50	24	21.23	21.17	21.15	21.14		
20	64QAM	50	50	21.09	21.11	20.98	20.98		22.2
20	64QAM	100	0	21.21	21.17	21.12	21.12		
Channel				56315	56820	56160	56665		
Frequency (MHz)				3657.5	3688	3642	3692.5		
15	QPSK	1	0	24.20	24.16	24.05	24.07		25.2
15	QPSK	1	37	23.95	24.02	23.86	23.84		
15	QPSK	1	74	23.98	23.92	23.78	23.81		
15	QPSK	36	0	23.23	23.25	23.06	23.10		
15	QPSK	36	20	23.14	23.07	23.00	23.04		24.2
15	QPSK	36	39	23.03	23.04	22.91	22.90		
15	QPSK	75	0	23.09	23.07	23.07	23.04		
15	16QAM	1	0	23.29	23.28	23.18	23.24		24.2
15	16QAM	1	37	23.08	23.14	22.97	22.92		
15	16QAM	1	74	23.06	23.00	22.89	22.91		
15	16QAM	36	0	22.18	22.23	22.13	22.13		23.2
15	16QAM	36	20	22.18	22.10	22.13	22.13		
15	16QAM	36	39	22.04	22.01	21.92	21.91		
15	16QAM	75	0	22.18	22.14	22.05	22.03		
15	64QAM	1	0	21.97	22.09	21.93	21.97		23.2
15	64QAM	1	37	21.82	21.86	21.76	21.70		
15	64QAM	1	74	21.80	21.77	21.56	21.67		
15	64QAM	36	0	21.20	21.30	21.10	21.13		
15	64QAM	36	20	21.21	21.09	21.05	21.05		22.2
15	64QAM	36	39	21.05	21.09	20.94	20.88		
15	64QAM	75	0	21.21	21.10	21.09	21.11		
Channel				56290	56815	56165	56690		
Frequency (MHz)				3595	3607.5	3643	3695		
10	QPSK	1	0	24.11	24.17	24.02	24.12		25.2
10	QPSK	1	25	24.02	23.99	23.87	23.79		
10	QPSK	1	49	23.94	23.90	23.75	23.72		
10	QPSK	25	0	23.14	23.20	23.09	23.13		
10	QPSK	25	12	23.11	23.08	23.04	22.97		24.2
10	QPSK	25	25	22.97	23.03	22.86	22.86		
10	QPSK	50	0	23.17	23.05	23.03	23.05		
10	16QAM	1	0	23.27	23.29	23.17	23.28		24.2
10	16QAM	1	25	23.06	23.11	22.97	22.90		
10	16QAM	1	49	23.00	23.01	22.94	22.86		
10	16QAM	25	0	22.21	22.24	22.15	22.11		
10	16QAM	25	12	22.19	22.17	22.10	22.14		23.2
10	16QAM	25	25	22.08	22.09	21.88	21.88		
10	16QAM	50	0	22.12	22.08	22.11	22.00		
10	64QAM	1	0	22.02	22.07	21.95	21.90		
10	64QAM	1	25	21.86	21.79	21.77	21.71		23.2
10	64QAM	1	49	21.80	21.70	21.57	21.55		
10	64QAM	25	0	21.18	21.28	21.15	21.10		
10	64QAM	25	12	21.23	21.12	21.12	21.08		22.2
10	64QAM	25	25	21.06	21.01	20.98	20.94		
10	64QAM	50	0	21.13	21.09	21.09	21.05		
Channel				56265	56810	56170	56715		
Frequency (MHz)				3524.5	3607	3643	3697.5		
5	QPSK	1	0	24.12	24.19	24.10	24.10		25.2
5	QPSK	1	12	23.99	23.99	23.86	23.79		
5	QPSK	1	24	23.99	23.96	23.80	23.80		
5	QPSK	12	0	23.17	23.22	23.09	23.09		
5	QPSK	12	7	23.11	23.10	23.04	23.00		24.2
5	QPSK	12	13	22.95	23.05	22.92	22.87		
5	QPSK	25	0	23.09	23.04	23.02	23.00		
5	16QAM	1	0	23.32	23.30	23.19	23.18		
5	16QAM	1	12	23.04	23.13	22.97	22.93		24.2
5	16QAM	1	24	23.10	23.07	22.94	22.87		
5	16QAM	12	0	22.25	22.21	22.09	22.20		
5	16QAM	12	7	22.16	22.09	22.03	22.12		23.2
5	16QAM	12	13	22.01	22.11	21.96	21.88		
5	16QAM	25	0	22.15	22.10	22.04	22.10		
5	64QAM	1	0	21.96	22.10	21.91	21.90		
5	64QAM	1	12	21.86	21.85	21.75	21.87		23.2
5	64QAM	1	24	21.77	21.72	21.57	21.64		
5	64QAM	12	0	21.19	21.23	21.19	21.15		
5	64QAM	12	7	21.15	21.17	21.11	21.07		22.2
5	64QAM	12	13	21.06	21.11	20.89	20.97		
5	64QAM	25	0	21.16	21.09	21.02	21.02		



Band 38						
Ann 0						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	24.16	24.06	24.03
20	QPSK	1	49	24.08	24.02	23.96
20	QPSK	1	99	24.06	23.99	23.92
20	QPSK	50	0	23.25	23.14	23.06
20	QPSK	50	24	23.26	23.15	23.11
20	QPSK	50	50	23.20	23.14	23.07
20	QPSK	100	0	23.23	23.10	23.11
20	16QAM	1	0	23.23	23.16	23.06
20	16QAM	1	49	23.16	23.12	23.03
20	16QAM	1	99	23.14	23.12	23.01
20	16QAM	50	0	22.29	22.16	22.07
20	16QAM	50	24	22.25	22.14	22.13
20	16QAM	50	50	22.24	22.17	22.09
20	16QAM	100	0	22.25	22.13	22.11
20	64QAM	1	0	21.55	21.88	21.77
20	64QAM	1	49	21.90	21.84	21.75
20	64QAM	1	99	21.88	21.83	21.72
20	64QAM	50	0	21.30	21.18	21.09
20	64QAM	50	24	21.27	21.13	21.14
20	64QAM	50	50	21.26	21.19	21.10
20	64QAM	100	0	21.26	21.13	21.12
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	24.09	24.04	23.96
15	QPSK	1	37	24.03	24.01	23.91
15	QPSK	1	74	24.07	24.02	23.92
15	QPSK	36	0	23.25	23.12	23.03
15	QPSK	36	20	23.24	23.08	23.01
15	QPSK	36	39	23.19	23.15	23.04
15	QPSK	75	0	23.21	23.08	23.02
15	16QAM	1	0	23.23	23.17	23.10
15	16QAM	1	37	23.06	23.03	22.98
15	16QAM	1	74	23.19	23.14	23.06
15	16QAM	36	0	22.22	22.10	22.02
15	16QAM	36	20	22.20	22.05	21.96
15	16QAM	36	39	22.16	22.11	22.02
15	16QAM	75	0	22.25	22.11	22.03
15	64QAM	1	0	21.88	21.84	21.73
15	64QAM	1	37	21.94	21.84	21.77
15	64QAM	1	74	21.89	21.83	21.73
15	64QAM	36	0	21.26	21.14	21.07
15	64QAM	36	20	21.24	21.10	21.00
15	64QAM	36	39	21.25	21.17	21.06
15	64QAM	75	0	21.25	21.12	21.03
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	24.09	23.99	23.91
10	QPSK	1	25	24.00	23.96	23.91
10	QPSK	1	49	24.03	24.01	23.91
10	QPSK	25	0	23.15	23.12	23.01
10	QPSK	25	12	23.19	23.07	22.99
10	QPSK	25	25	23.10	23.13	22.99
10	QPSK	50	0	23.11	23.03	22.95
10	16QAM	1	0	23.13	23.08	23.03
10	16QAM	1	25	23.04	22.97	22.94
10	16QAM	1	49	23.10	23.08	23.02
10	16QAM	25	0	22.17	22.00	21.97
10	16QAM	25	12	22.13	21.98	21.91
10	16QAM	25	25	22.10	22.06	22.00
10	16QAM	50	0	22.20	22.02	21.99
10	64QAM	1	0	21.86	21.76	21.70
10	64QAM	1	25	21.92	21.79	21.70
10	64QAM	1	49	21.85	21.75	21.70
10	64QAM	25	0	21.19	21.12	21.05
10	64QAM	25	12	21.18	21.08	21.00
10	64QAM	25	25	21.19	21.11	21.01
10	64QAM	50	0	21.17	21.04	21.01
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	24.15	24.05	23.94
5	QPSK	1	12	24.09	24.02	23.94
5	QPSK	1	24	24.10	23.99	23.95
5	QPSK	12	0	23.21	23.11	23.08
5	QPSK	12	7	23.26	23.20	23.06
5	QPSK	12	13	23.20	23.18	23.05
5	QPSK	25	0	23.25	23.09	23.06
5	16QAM	1	0	23.28	23.17	23.11
5	16QAM	1	12	23.28	23.26	23.18
5	16QAM	1	24	23.28	23.22	23.12
5	16QAM	12	0	22.21	22.09	22.05
5	16QAM	12	7	22.23	22.13	22.06
5	16QAM	12	13	22.18	22.13	22.02
5	16QAM	25	0	22.24	22.14	22.10
5	64QAM	1	0	21.80	21.74	21.70
5	64QAM	1	12	21.90	21.84	21.76
5	64QAM	1	24	21.81	21.82	21.70
5	64QAM	12	0	21.27	21.07	20.97
5	64QAM	12	7	21.20	21.02	20.91
5	64QAM	12	13	21.19	21.14	21.05
5	64QAM	25	0	21.19	21.02	20.97

Band 41										
Ann 9										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.84	23.81	23.87	23.85	23.52	25.7	
20	QPSK	1	49	23.85	23.79	23.76	24.08	23.88		
20	QPSK	1	99	23.84	23.79	23.82	23.88	23.75		
20	QPSK	50	0	23.05	22.96	22.85	23.02	22.86		
20	QPSK	50	24	23.04	22.97	22.93	23.06	22.98	24.7	
20	QPSK	50	50	22.88	22.94	22.90	22.98	22.93		
20	QPSK	100	0	23.04	22.96	22.91	23.05	22.89		
20	16QAM	1	0	23.09	22.93	22.96	22.98	22.83	24.7	
20	16QAM	1	49	22.97	22.92	22.87	23.18	22.96		
20	16QAM	1	99	22.97	22.97	22.94	22.70	22.84		
20	16QAM	50	0	22.08	22.00	21.90	22.06	21.87		
20	16QAM	50	24	22.10	22.01	21.96	22.08	22.01	23.7	
20	16QAM	50	50	22.03	21.98	21.94	22.01	21.96		
20	16QAM	100	0	22.06	21.98	21.95	21.99	21.91		
20	64QAM	1	0	21.82	21.86	21.85	21.89	21.80	23.7	
20	64QAM	1	49	21.73	21.71	21.65	21.83	21.80		
20	64QAM	1	99	21.74	21.75	21.66	21.43	21.61		
20	64QAM	50	0	21.10	21.02	20.92	21.07	20.90		
20	64QAM	50	24	21.11	21.01	20.97	21.12	20.99	22.7	
20	64QAM	50	50	21.02	20.98	20.95	21.03	20.96		
20	64QAM	100	0	21.07	21.01	20.98	21.01	20.93		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.90	23.82	23.79	23.94	23.70	25.7	
15	QPSK	1	37	23.85	23.78	23.72	24.02	23.86		
15	QPSK	1	74	23.84	23.86	23.84	23.77	23.82		
15	QPSK	36	0	22.83	22.95	22.85	23.06	22.90		
15	QPSK	36	20	23.02	22.91	22.91	23.12	22.99	24.7	
15	QPSK	36	39	22.88	22.94	22.89	23.03	22.95		
15	QPSK	75	0	23.03	22.95	22.93	23.07	22.95		
15	16QAM	1	0	23.09	22.98	22.96	23.10	22.76	24.7	
15	16QAM	1	37	22.93	22.90	22.82	23.13	22.96		
15	16QAM	1	74	23.00	23.05	23.00	22.94	22.95		
15	16QAM	36	0	21.95	21.93	21.82	22.01	21.85		
15	16QAM	36	20	22.03	21.90	21.89	22.09	21.95	23.7	
15	16QAM	36	39	21.87	21.91	21.86	22.00	21.92		
15	16QAM	75	0	22.05	21.97	21.93	22.09	21.86		
15	64QAM	1	0	21.79	21.79	21.73	21.76	21.71	23.7	
15	64QAM	1	37	21.74	21.72	21.70	21.90	21.73		
15	64QAM	1	74	21.74	21.86	21.71	21.75	21.78		
15	64QAM	36	0	20.87	20.99	20.96	21.07	20.82		
15	64QAM	36	20	21.02	20.97	20.93	21.14	21.01	22.7	
15	64QAM	36	39	21.01	20.97	20.94	21.07	20.96		
15	64QAM	75	0	21.09	20.97	20.94	21.11	20.95		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.88	23.75	23.72	23.84	23.10	25.7	
10	QPSK	1	25	23.83	23.70	23.70	23.94	23.84		
10	QPSK	1	49	23.75	23.78	23.84	23.77	23.74		
10	QPSK	25	0	22.81	22.91	22.82	23.04	22.89		
10	QPSK	25	12	22.82	22.81	22.91	23.02	22.97	24.7	
10	QPSK	25	25	22.89	22.86	22.87	22.84	22.86		
10	QPSK	50	0	22.04	22.85	22.82	23.05	22.95		
10	16QAM	1	0	23.04	22.97	22.92	23.05	22.70	24.7	
10	16QAM	1	25	22.83	22.90	22.72	23.12	22.87		
10	16QAM	1	49	22.83	23.00	22.99	22.92	22.87		
10	16QAM	25	0	21.81	21.92	21.74	21.91	21.85	23.7	
10	16QAM	25	12	22.01	21.81	21.85	22.06	21.85		
10	16QAM	25	25	21.94	21.89	21.78	21.98	21.83		
10	16QAM	50	0	21.97	21.96	21.86	22.02	21.91		
10	64QAM	1	0	21.76	21.70	21.74	21.79	21.71	23.7	
10	64QAM	1	25	21.72	21.77	21.75	21.81	21.77		
10	64QAM	1	49	21.70	21.79	21.70	21.79	21.70		
10	64QAM	25	0	20.87	20.83	20.80	21.07	20.84		
10	64QAM	25	12	20.99	20.88	20.92	21.10	20.97	22.7	
10	64QAM	25	25	20.87	20.87	20.89	21.00	20.92		
10	64QAM	50	0	21.03	20.87	20.84	21.08	20.89		
Channel				39675	40148	40620	41093	41595	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.0	2687.5		
5	QPSK	1	0	24.04	23.87	23.75	24.02	23.88	25.7	
5	QPSK	1	12	23.95	23.87	23.86	24.04	23.88		
5	QPSK	1	24	23.88	23.85	23.81	24.02	23.79		
5	QPSK	12	0	23.08	22.88	22.96	23.15	23.03	24.7	
5	QPSK	12	7	23.09	23.01	22.95	23.17	23.02		
5	QPSK	12	13	23.07	22.96	22.95	23.17	23.03		
5	QPSK	25	0	23.08	22.98	22.92	23.12	22.98		
5	16QAM	1	0	23.12	22.99	22.92	23.13	23.02	24.7	
5	16QAM	1	12	23.15	23.03	23.04	23.26	23.11		
5	16QAM	1	24	23.14	23.00	23.00	23.18	23.01		
5	16QAM	12	0	22.07	21.97	21.94	22.11	22.03	23.7	
5	16QAM	12	7	22.09	22.01	21.97	22.13	22.00		
5	16QAM	12	13	22.06	21.98	21.95	22.12	21.97		
5	16QAM	25	0	22.14	22.03	21.99	22.14	22.02		
5	64QAM	1	0	21.83	21.95	21.88	21.91	21.88	23.7	
5	64QAM	1	12	21.88	21.84	21.86	22.00	21.90		
5	64QAM	1	24	21.94	22.02	21.86	21.95	21.88		
5	64QAM	12	0	21.16	21.13	21.04	21.27	21.06	22.7	
5	64QAM	12	7	21.14	21.10	21.13	21.25	21.20		
5	64QAM	12	13	21.18	21.13	21.06	21.19	21.11		
5	64QAM	25	0	21.27	21.15	21.08	21.21	21.08		

Band 41 HPUE										
Ann 0										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39790	40185	40620	41065	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.71	25.60	25.64	25.74	25.50	27.5	
20	QPSK	1	49	25.74	25.66	25.64	25.64	25.86		
20	QPSK	1	99	25.61	25.58	25.61	25.50	25.64		
20	QPSK	50	0	24.93	24.86	24.76	25.02	24.88		
20	QPSK	50	24	24.94	24.85	24.84	25.09	25.00		
20	QPSK	50	50	24.86	24.83	24.82	25.01	24.97		
20	QPSK	100	0	24.82	24.86	24.83	24.96	24.90	26.5	
20	16QAM	1	0	25.07	24.95	25.03	25.13	24.75		
20	16QAM	1	49	24.96	24.95	24.92	25.34	25.14		
20	16QAM	1	99	24.97	24.92	24.94	24.82	24.98		
20	16QAM	50	0	23.94	23.89	23.79	24.07	23.89		
20	16QAM	50	24	23.96	23.91	23.87	24.11	24.01		
20	16QAM	50	50	23.91	23.88	23.86	24.01	23.98		
20	16QAM	100	0	23.97	23.86	23.87	23.98	23.94	25.5	
20	64QAM	1	0	23.88	23.75	23.80	23.88	23.64		
20	64QAM	1	49	23.80	23.79	23.74	24.20	23.99		
20	64QAM	1	99	23.82	23.80	23.79	23.70	23.86		
20	64QAM	50	0	22.99	22.89	22.81	23.09	22.93		
20	64QAM	50	24	22.98	22.91	22.86	23.10	23.03		
20	64QAM	50	50	22.92	22.89	22.86	23.05	23.01	24.5	
20	64QAM	100	0	22.96	22.90	22.87	23.01	22.94		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.80	25.70	25.65	25.91	25.65	27.5	
15	QPSK	1	37	25.76	25.64	25.60	25.62	25.84		
15	QPSK	1	74	25.69	25.76	25.72	25.74	25.79		
15	QPSK	36	0	24.83	24.86	24.76	25.05	24.90		
15	QPSK	36	20	24.81	24.82	24.82	25.12	24.99		
15	QPSK	36	39	24.86	24.82	24.80	25.02	24.95	26.5	
15	QPSK	75	0	24.83	24.84	24.83	25.08	24.95		
15	16QAM	1	0	25.08	25.00	24.98	25.21	24.97		
15	16QAM	1	37	24.97	24.91	24.83	25.28	25.15		
15	16QAM	1	74	24.95	25.03	24.98	25.06	25.08		
15	16QAM	36	0	23.84	23.86	23.75	24.04	23.87		
15	16QAM	36	20	23.89	23.83	23.80	24.12	23.96		
15	16QAM	36	39	23.85	23.83	23.77	24.02	23.96	25.5	
15	16QAM	75	0	23.94	23.87	23.82	24.10	23.95		
15	64QAM	1	0	23.87	23.76	23.70	24.04	23.77		
15	64QAM	1	37	23.86	23.79	23.71	24.19	23.97		
15	64QAM	1	74	23.84	23.89	23.82	23.90	23.95		
15	64QAM	36	0	22.86	22.87	22.77	23.08	22.84		
15	64QAM	36	20	22.96	22.85	22.82	23.16	23.01		
15	64QAM	36	39	22.92	22.85	22.81	23.04	22.97	24.5	
15	64QAM	75	0	22.95	22.88	22.86	23.10	22.96		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.80	25.66	25.54	25.82	25.61	27.5	
10	QPSK	1	25	25.72	25.61	25.64	25.69	25.85		
10	QPSK	1	49	25.67	25.68	25.58	25.97	25.69		
10	QPSK	25	0	24.83	24.78	24.87	25.13	25.03		
10	QPSK	25	12	25.00	24.86	24.87	25.12	24.99		
10	QPSK	25	25	24.82	24.83	24.79	25.15	24.99	26.5	
10	QPSK	50	0	24.92	24.76	24.88	25.11	25.00		
10	16QAM	1	0	25.12	25.05	24.90	25.26	25.10		
10	16QAM	1	25	25.12	24.95	24.93	25.25	25.18		
10	16QAM	1	49	25.16	24.97	25.02	25.30	25.05		
10	16QAM	25	0	24.00	23.85	23.84	24.11	23.98		
10	16QAM	25	12	24.07	23.96	23.87	24.13	24.10		
10	16QAM	25	25	23.91	23.85	23.85	24.12	24.00	25.5	
10	16QAM	50	0	23.92	23.84	23.91	24.17	24.06		
10	64QAM	1	0	24.05	23.82	23.86	24.20	24.06		
10	64QAM	1	25	23.93	23.85	23.91	24.20	24.03		
10	64QAM	1	49	23.97	23.95	23.86	24.15	24.04		
10	64QAM	25	0	23.02	22.86	22.90	23.12	23.08		
10	64QAM	25	12	23.04	22.96	22.94	23.14	23.02		
10	64QAM	25	25	22.94	22.94	22.91	23.21	23.01	24.5	
10	64QAM	50	0	22.97	22.96	22.84	23.10	23.03		
Channel				39675	40148	40620	41093	41595	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	25.84	25.69	25.61	25.94	25.85	27.5	
5	QPSK	1	12	25.82	25.68	25.74	26.03	25.87		
5	QPSK	1	24	25.77	25.68	25.66	25.98	25.75		
5	QPSK	12	0	24.99	24.87	24.88	25.18	25.07		
5	QPSK	12	7	25.00	24.91	24.90	25.20	25.06		
5	QPSK	12	13	24.98	24.89	24.87	25.24	25.00	26.5	
5	QPSK	25	0	24.98	24.88	24.88	25.14	25.02		
5	16QAM	1	0	25.19	25.05	24.98	25.29	25.18		
5	16QAM	1	12	25.14	25.05	25.03	25.35	25.18		
5	16QAM	1	24	25.16	25.05	25.05	25.31	25.13		
5	16QAM	12	0	24.02	23.90	23.92	24.20	24.07		
5	16QAM	12	7	24.07	23.95	23.96	24.23	24.13		
5	16QAM	12	13	24.01	23.92	23.90	24.21	24.04	25.5	
5	16QAM	25	0	24.02	23.94	23.91	24.20	24.10		
5	64QAM	1	0	24.06	23.91	23.87	24.20	24.07		
5	64QAM	1	12	24.03	23.92	23.91	24.25	24.07		
5	64QAM	1	24	24.04	23.95	23.94	24.22	24.05		
5	64QAM	12	0	23.07	22.94	22.92	23.22	23.13		
5	64QAM	12	7	23.05	22.98	22.95	23.24	23.11		
5	64QAM	12	13	23.03	22.94	22.94	23.26	23.07	24.5	
5	64QAM	25	0	23.04	22.97	22.93	23.20	23.09		



Band 48									
Ann 2									
Band	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)
20	Channel				55340	55830	56150	56640	22.3
	Frequency (MHz)				3560	3609	3641	3690	
	20	QPSK	1	0	21.79	21.71	21.58	21.42	
	20	QPSK	1	49	21.57	21.45	21.36	21.12	
	20	QPSK	1	99	21.53	21.43	21.28	21.03	
	20	QPSK	50	0	20.81	20.67	20.59	20.38	
	20	QPSK	50	24	20.78	20.68	20.53	20.31	
	20	QPSK	50	50	20.63	20.49	20.36	20.11	
	20	QPSK	100	0	20.78	20.58	20.49	20.30	
	20	16QAM	1	0	20.82	20.80	20.71	20.54	
	20	16QAM	1	49	20.65	20.53	20.42	20.22	
	20	16QAM	1	99	20.69	20.53	20.39	20.15	
	20	16QAM	50	0	19.87	19.73	19.62	19.41	
	20	16QAM	50	24	19.81	19.57	19.54	19.33	
	20	16QAM	50	50	19.68	19.51	19.39	19.15	
	20	64QAM	100	0	19.80	19.58	19.54	19.33	
20	64QAM	1	0	19.63	19.57	19.46	19.27		
20	64QAM	1	49	19.42	19.31	19.19	18.97		
20	64QAM	1	99	19.39	19.24	19.13	18.85		
20	64QAM	50	0	18.87	18.73	18.63	18.41		
20	64QAM	50	24	18.82	18.61	18.56	18.33		
20	64QAM	50	50	18.69	18.53	18.40	18.15		
20	64QAM	100	0	18.81	18.58	18.55	18.31		
15	Channel				55315	55820	56160	56655	19.3
	Frequency (MHz)				3557.5	3608	3642	3692.5	
	15	QPSK	1	0	21.67	21.60	21.50	21.28	
	15	QPSK	1	37	21.53	21.46	21.30	21.05	
	15	QPSK	1	74	21.54	21.45	21.31	21.02	
	15	QPSK	36	0	20.81	20.68	20.54	20.32	
	15	QPSK	36	20	20.74	20.62	20.49	20.24	
	15	QPSK	36	39	20.64	20.49	20.35	20.17	
	15	QPSK	75	0	20.68	20.64	20.51	20.24	
	15	16QAM	1	0	20.77	20.76	20.60	20.41	
	15	16QAM	1	37	20.61	20.51	20.33	20.14	
	15	16QAM	1	74	20.72	20.60	20.46	20.19	
	15	16QAM	36	0	19.77	19.65	19.53	19.29	
	15	16QAM	36	20	19.74	19.60	19.45	19.20	
	15	16QAM	36	39	19.63	19.49	19.32	19.14	
	15	16QAM	75	0	19.71	19.65	19.52	19.24	
15	64QAM	1	0	19.58	19.51	19.39	19.12		
15	64QAM	1	37	19.42	19.34	19.19	18.96		
15	64QAM	1	74	19.43	19.29	19.16	18.87		
15	64QAM	36	0	18.83	18.70	18.57	18.34		
15	64QAM	36	20	18.77	18.63	18.50	18.26		
15	64QAM	36	39	18.66	18.51	18.37	18.17		
15	64QAM	75	0	18.72	18.66	18.52	18.26		
10	Channel				55290	55815	56165	56690	22.3
	Frequency (MHz)				3555	3607.5	3642.5	3695	
	10	QPSK	1	0	21.66	21.62	21.49	21.26	
	10	QPSK	1	25	21.45	21.38	21.26	21.05	
	10	QPSK	1	49	21.51	21.41	21.26	20.95	
	10	QPSK	25	0	20.75	20.64	20.44	20.31	
	10	QPSK	25	12	20.67	20.52	20.48	20.15	
	10	QPSK	25	25	20.59	20.48	20.33	20.12	
	10	QPSK	50	0	20.63	20.62	20.42	20.14	
	10	16QAM	1	0	20.76	20.67	20.51	20.35	
	10	16QAM	1	25	20.58	20.47	20.33	20.05	
	10	16QAM	1	49	20.72	20.54	20.42	20.11	
	10	16QAM	25	0	19.70	19.56	19.43	19.29	
	10	16QAM	25	12	19.64	19.57	19.45	19.14	
	10	16QAM	25	25	19.62	19.45	19.28	19.11	
	10	16QAM	50	0	19.64	19.59	19.52	19.20	
10	64QAM	1	0	19.50	19.51	19.37	19.12		
10	64QAM	1	25	19.42	19.31	19.13	18.95		
10	64QAM	1	49	19.43	19.22	19.11	18.84		
10	64QAM	25	0	18.81	18.68	18.47	18.27		
10	64QAM	25	12	18.77	18.55	18.41	18.22		
10	64QAM	25	25	18.56	18.49	18.31	18.15		
10	64QAM	50	0	18.62	18.63	18.48	18.23		
5	Channel				55265	55810	56170	56715	19.3
	Frequency (MHz)				3552.5	3607	3643	3697.5	
	5	QPSK	1	0	21.65	21.58	21.51	21.57	
	5	QPSK	1	12	21.61	21.51	21.45	21.52	
	5	QPSK	1	24	21.53	21.43	21.39	21.47	
	5	QPSK	12	0	20.77	20.64	20.64	20.70	
	5	QPSK	12	7	20.77	20.67	20.58	20.67	
	5	QPSK	12	13	20.70	20.65	20.52	20.62	
	5	QPSK	25	0	20.72	20.63	20.53	20.63	
	5	16QAM	1	0	20.73	20.70	20.63	20.69	
	5	16QAM	1	12	20.82	20.72	20.64	20.74	
	5	16QAM	1	24	20.73	20.63	20.54	20.62	
	5	16QAM	12	0	19.74	19.67	19.52	19.65	
	5	16QAM	12	7	19.77	19.65	19.58	19.66	
	5	16QAM	12	13	19.70	19.59	19.50	19.60	
	5	16QAM	25	0	19.77	19.70	19.56	19.65	
5	64QAM	1	0	19.52	19.47	19.42	19.47		
5	64QAM	1	12	19.52	19.41	19.36	19.47		
5	64QAM	1	24	19.54	19.42	19.34	19.37		
5	64QAM	12	0	18.79	18.74	18.68	18.74		
5	64QAM	12	7	18.83	18.69	18.62	18.70		
5	64QAM	12	13	18.77	18.67	18.55	18.66		
5	64QAM	25	0	18.79	18.70	18.58	18.70		





Band 38							
Ann 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2585	2610	
20	QPSK	1	0	24.48	24.44	24.35	25.7
20	QPSK	1	49	24.49	24.48	24.36	
20	QPSK	1	99	24.48	24.44	24.35	
20	QPSK	50	0	24.07	24.08	23.96	24.7
20	QPSK	50	24	24.19	24.09	24.05	
20	QPSK	50	50	24.15	24.08	24.02	
20	QPSK	100	0	24.16	24.03	24.03	24.7
20	16QAM	1	0	24.09	24.04	23.97	
20	16QAM	1	49	24.07	24.02	23.95	
20	16QAM	1	99	24.07	24.01	23.93	23.7
20	16QAM	50	0	23.11	23.10	22.99	
20	16QAM	50	24	23.19	23.07	23.07	
20	16QAM	50	50	23.18	23.13	23.03	23.7
20	16QAM	100	0	23.18	23.07	23.05	
20	64QAM	1	0	22.80	22.75	22.68	
20	64QAM	1	49	22.82	22.75	22.69	22.7
20	64QAM	1	99	22.81	22.76	22.64	
20	64QAM	50	0	22.12	22.10	22.00	
20	64QAM	50	24	22.20	22.09	22.09	22.7
20	64QAM	50	50	22.15	22.14	22.06	
20	64QAM	100	0	22.20	22.08	22.07	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2585	2612.5	
15	QPSK	1	0	24.47	24.43	24.26	25.7
15	QPSK	1	37	24.47	24.46	24.35	
15	QPSK	1	74	24.43	24.38	24.34	
15	QPSK	36	0	24.03	24.00	23.93	24.7
15	QPSK	36	20	24.18	23.98	24.01	
15	QPSK	36	39	24.09	24.03	24.00	
15	QPSK	75	0	24.11	23.99	23.97	24.7
15	16QAM	1	0	24.06	24.04	23.93	
15	16QAM	1	37	24.05	24.01	23.88	
15	16QAM	1	74	24.00	24.01	23.91	23.7
15	16QAM	36	0	23.04	23.00	22.96	
15	16QAM	36	20	23.15	23.03	23.03	
15	16QAM	36	39	23.11	23.12	23.00	23.7
15	16QAM	75	0	23.15	22.98	23.02	
15	64QAM	1	0	22.79	22.70	22.67	
15	64QAM	1	37	22.75	22.72	22.60	23.7
15	64QAM	1	74	22.79	22.67	22.61	
15	64QAM	36	0	22.07	22.02	21.91	
15	64QAM	36	20	22.18	22.08	22.08	22.7
15	64QAM	36	39	22.10	22.05	21.98	
15	64QAM	75	0	22.16	22.04	22.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2585	2615	
10	QPSK	1	0	24.46	24.33	24.25	25.7
10	QPSK	1	25	24.42	24.40	24.35	
10	QPSK	1	49	24.39	24.39	24.35	
10	QPSK	25	0	24.00	24.03	23.92	24.7
10	QPSK	25	12	24.15	23.95	24.03	
10	QPSK	25	25	24.05	24.09	24.00	
10	QPSK	50	0	24.14	23.98	23.93	24.7
10	16QAM	1	0	24.09	23.99	23.90	
10	16QAM	1	25	24.03	24.02	23.88	
10	16QAM	1	49	24.06	23.91	23.87	23.7
10	16QAM	25	0	23.07	23.09	22.93	
10	16QAM	25	12	23.14	23.06	23.02	
10	16QAM	25	25	23.13	23.09	22.94	23.7
10	16QAM	50	0	23.13	23.02	23.05	
10	64QAM	1	0	22.76	22.75	22.65	
10	64QAM	1	25	22.73	22.74	22.66	23.7
10	64QAM	1	49	22.79	22.70	22.57	
10	64QAM	25	0	22.06	22.02	21.94	
10	64QAM	25	12	22.19	22.06	22.06	22.7
10	64QAM	25	25	22.09	22.04	22.04	
10	64QAM	50	0	22.18	22.02	22.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2585	2617.5	
5	QPSK	1	0	24.41	24.40	24.28	25.7
5	QPSK	1	12	24.44	24.45	24.32	
5	QPSK	1	24	24.38	24.38	24.26	
5	QPSK	12	0	24.06	24.03	23.94	24.7
5	QPSK	12	7	24.11	23.95	24.03	
5	QPSK	12	13	24.08	24.08	23.99	
5	QPSK	25	0	24.12	24.03	24.02	24.7
5	16QAM	1	0	24.06	23.98	23.91	
5	16QAM	1	12	24.04	23.97	23.91	
5	16QAM	1	24	24.05	23.97	23.89	23.7
5	16QAM	12	0	23.05	23.08	22.96	
5	16QAM	12	7	23.17	23.05	23.06	
5	16QAM	12	13	23.11	23.11	22.98	23.7
5	16QAM	25	0	23.12	23.05	22.98	
5	64QAM	1	0	22.79	22.65	22.61	
5	64QAM	1	12	22.73	22.71	22.67	23.7
5	64QAM	1	24	22.72	22.74	22.56	
5	64QAM	12	0	22.02	22.10	21.96	
5	64QAM	12	7	22.12	22.04	22.02	22.7
5	64QAM	12	13	22.10	22.10	22.06	
5	64QAM	25	0	22.13	21.98	21.99	



Band 41									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	24.23	24.38	24.45	24.14	23.88	25.7
20	QPSK	1	49	24.21	24.35	24.33	24.40	24.10	
20	QPSK	1	99	24.22	24.37	24.43	24.00	24.09	24.7
20	QPSK	50	0	23.79	23.94	23.94	24.05	23.90	
20	QPSK	50	24	23.90	24.07	24.16	24.15	24.02	24.7
20	QPSK	50	50	23.88	24.04	24.01	24.07	24.01	
20	QPSK	100	0	23.88	24.05	24.01	24.10	23.97	24.7
20	16QAM	1	0	23.80	23.95	24.05	23.94	23.87	
20	16QAM	1	49	23.80	23.95	23.92	24.23	24.04	24.7
20	16QAM	1	99	23.84	24.03	24.00	23.79	23.87	
20	16QAM	50	0	22.82	22.96	22.97	23.09	22.93	23.7
20	16QAM	50	24	22.81	23.09	23.05	23.22	23.06	
20	16QAM	50	50	22.90	23.07	23.04	23.08	23.02	23.7
20	16QAM	100	0	22.80	23.06	23.02	23.11	22.97	
20	64QAM	1	0	22.51	22.60	22.65	22.60	22.35	23.7
20	64QAM	1	49	22.51	22.71	22.68	22.99	22.79	
20	64QAM	1	99	22.56	22.76	22.68	22.53	22.55	22.7
20	64QAM	50	0	21.82	21.98	21.98	22.09	21.93	
20	64QAM	50	24	21.83	22.07	22.07	22.21	22.06	22.7
20	64QAM	50	50	21.82	22.07	22.05	22.08	22.03	
20	64QAM	100	0	21.91	22.08	22.04	22.14	21.96	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.6	2682.5	
15	QPSK	1	0	24.16	24.23	24.44	24.13	23.82	25.7
15	QPSK	1	37	24.11	24.31	24.25	24.32	24.22	
15	QPSK	1	74	24.21	24.34	24.40	23.97	24.02	24.7
15	QPSK	36	0	23.75	23.94	23.86	24.04	23.85	
15	QPSK	36	20	23.89	23.99	23.94	24.16	23.92	24.7
15	QPSK	36	39	23.80	24.03	24.00	23.98	23.98	
15	QPSK	75	0	23.89	23.99	24.01	24.08	23.95	24.7
15	16QAM	1	0	23.70	23.88	24.03	23.89	23.58	
15	16QAM	1	37	23.75	23.89	23.83	24.14	23.98	23.7
15	16QAM	1	74	23.79	23.98	23.97	23.78	23.81	
15	16QAM	36	0	22.79	22.88	22.89	23.03	22.84	23.7
15	16QAM	36	20	22.83	23.00	23.01	23.15	22.98	
15	16QAM	36	39	22.80	23.06	23.04	23.00	22.95	23.7
15	16QAM	75	0	22.89	23.05	22.92	23.04	22.95	
15	64QAM	1	0	22.44	22.53	22.58	22.54	22.29	23.7
15	64QAM	1	37	22.41	22.68	22.59	22.94	22.72	
15	64QAM	1	74	22.48	22.71	22.59	22.43	22.51	22.7
15	64QAM	36	0	21.77	21.98	21.95	22.07	21.88	
15	64QAM	36	20	21.88	22.01	22.05	22.15	21.98	22.7
15	64QAM	36	39	21.87	22.01	21.95	22.06	22.03	
15	64QAM	75	0	21.86	22.02	21.98	22.10	21.95	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	24.20	24.32	24.38	24.11	23.83	25.7
10	QPSK	1	25	24.15	24.28	24.28	24.38	24.22	
10	QPSK	1	49	24.13	24.30	24.38	23.91	24.05	24.7
10	QPSK	25	0	23.89	23.91	23.90	23.98	23.84	
10	QPSK	25	12	23.81	24.01	23.97	24.19	23.93	24.7
10	QPSK	25	25	23.81	24.03	23.98	23.97	23.94	
10	QPSK	50	0	23.83	23.96	23.96	24.06	23.96	24.7
10	16QAM	1	0	23.80	23.88	23.97	23.86	23.65	
10	16QAM	1	25	23.74	23.95	23.87	24.17	24.02	24.7
10	16QAM	1	49	23.78	23.95	23.94	23.71	23.87	
10	16QAM	25	0	22.79	22.94	22.94	23.09	22.96	23.7
10	16QAM	25	12	22.80	23.07	22.95	23.14	22.98	
10	16QAM	25	25	22.90	23.03	23.00	23.00	23.02	23.7
10	16QAM	50	0	22.81	23.02	22.97	23.05	22.94	
10	64QAM	1	0	22.43	22.59	22.64	22.52	22.35	23.7
10	64QAM	1	25	22.43	22.65	22.68	22.96	22.73	
10	64QAM	1	49	22.46	22.70	22.60	22.92	22.50	22.7
10	64QAM	25	0	21.73	21.88	21.98	22.07	21.88	
10	64QAM	25	12	21.85	22.03	22.01	22.15	21.98	22.7
10	64QAM	25	25	21.82	21.97	22.01	21.98	21.99	
10	64QAM	50	0	21.87	21.99	21.99	22.14	21.90	
Channel				39675	40148	40620	41093	41555	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.0	2687.5	
5	QPSK	1	0	24.16	24.23	24.40	24.14	23.78	25.7
5	QPSK	1	12	24.17	24.33	24.30	24.30	24.22	
5	QPSK	1	24	24.13	24.31	24.43	23.91	24.05	24.7
5	QPSK	12	0	23.72	23.88	23.92	23.99	23.84	
5	QPSK	12	7	23.81	24.05	24.00	24.15	24.02	24.7
5	QPSK	12	13	23.82	24.01	23.94	23.99	23.99	
5	QPSK	25	0	23.86	23.97	23.99	24.05	23.92	24.7
5	16QAM	1	0	23.71	23.90	23.98	23.89	23.61	
5	16QAM	1	12	23.79	23.91	23.86	24.18	24.03	24.7
5	16QAM	1	24	23.83	23.99	23.90	23.74	23.79	
5	16QAM	12	0	22.79	22.89	22.93	23.06	22.86	23.7
5	16QAM	12	7	22.81	22.99	23.01	23.22	23.04	
5	16QAM	12	13	22.90	23.05	23.03	22.99	22.94	23.7
5	16QAM	25	0	22.81	22.96	22.99	23.07	22.95	
5	64QAM	1	0	22.51	22.59	22.65	22.52	22.35	23.7
5	64QAM	1	12	22.46	22.66	22.65	22.83	22.69	
5	64QAM	1	24	22.54	22.71	22.69	22.50	22.47	22.7
5	64QAM	12	0	21.81	21.90	21.89	22.07	21.85	
5	64QAM	12	7	21.83	21.99	22.07	22.16	22.03	22.7
5	64QAM	12	13	21.82	22.05	22.01	22.04	22.02	
5	64QAM	25	0	21.90	22.03	22.01	22.05	21.91	



Band 41 HPUE									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.76	25.92	26.00	25.74	25.50	27.5
20	QPSK	1	49	25.76	25.92	25.89	25.59	25.81	
20	QPSK	1	99	25.83	26.00	26.01	25.58	25.70	
20	QPSK	50	0	25.56	25.73	25.73	25.96	25.82	
20	QPSK	50	24	25.67	25.84	25.98	25.94	25.95	26.5
20	QPSK	50	50	25.66	25.83	25.81	25.96	25.88	
20	QPSK	100	0	25.88	25.84	25.81	26.01	25.85	
20	16QAM	1	0	25.72	25.96	26.00	25.93	25.69	26.5
20	16QAM	1	49	25.74	25.93	25.91	26.23	26.02	
20	16QAM	1	99	25.72	25.99	25.93	25.81	25.86	
20	16QAM	50	0	24.61	24.75	24.78	24.99	24.83	25.5
20	16QAM	50	24	24.71	24.86	24.85	25.14	24.96	
20	16QAM	50	50	24.67	24.87	24.83	24.99	24.94	
20	16QAM	100	0	24.86	24.86	24.84	25.03	24.90	25.5
20	64QAM	1	0	24.58	24.94	24.66	24.76	24.54	
20	64QAM	1	49	24.62	24.74	24.71	25.09	24.58	25.5
20	64QAM	1	99	24.62	24.82	24.79	24.66	23.81	
20	64QAM	50	0	23.59	23.77	23.75	23.99	23.58	24.5
20	64QAM	50	24	23.69	23.86	23.84	24.15	23.40	
20	64QAM	50	50	23.68	23.87	23.83	24.01	23.15	
20	64QAM	100	0	23.70	23.86	23.83	24.05	23.28	24.5
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.71	25.90	26.00	25.68	25.51	27.5
15	QPSK	1	37	25.67	25.89	25.82	25.91	25.81	
15	QPSK	1	74	25.82	25.92	25.92	25.58	25.69	
15	QPSK	36	0	25.83	25.67	25.70	25.86	25.78	26.5
15	QPSK	36	20	25.67	25.84	25.95	25.91	25.90	
15	QPSK	36	39	25.62	25.81	25.71	25.86	25.79	
15	QPSK	75	0	25.60	25.82	25.76	25.97	25.84	26.5
15	16QAM	1	0	25.83	25.85	25.97	25.92	25.64	
15	16QAM	1	37	25.74	25.89	25.85	26.17	26.00	26.5
15	16QAM	1	74	25.67	25.96	25.87	25.77	25.84	
15	16QAM	36	0	24.54	24.73	24.75	24.93	24.75	25.5
15	16QAM	36	20	24.71	24.77	24.82	25.13	24.93	
15	16QAM	36	39	24.65	24.86	24.77	24.92	24.87	
15	16QAM	75	0	24.61	24.83	24.82	25.00	24.89	25.5
15	64QAM	1	0	24.50	24.59	24.56	24.73	24.46	
15	64QAM	1	37	24.64	24.66	24.67	25.09	24.50	25.5
15	64QAM	1	74	24.54	24.75	24.76	24.59	23.73	
15	64QAM	36	0	23.61	23.70	23.72	23.91	23.46	24.5
15	64QAM	36	20	23.65	23.82	23.79	24.12	23.40	
15	64QAM	36	39	23.60	23.80	23.75	23.95	23.12	
15	64QAM	75	0	23.70	23.84	23.74	23.98	23.22	24.5
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.75	25.99	25.94	25.66	25.52	27.5
10	QPSK	1	25	25.72	25.84	25.79	25.94	25.76	
10	QPSK	1	49	25.77	25.91	26.01	25.49	25.70	
10	QPSK	25	0	25.46	25.67	25.72	25.91	25.74	26.5
10	QPSK	25	12	25.59	25.81	25.89	25.86	25.85	
10	QPSK	25	25	25.61	25.77	25.76	25.90	25.79	
10	QPSK	50	0	25.60	25.82	25.71	25.91	25.76	26.5
10	16QAM	1	0	25.82	25.80	25.94	25.85	25.61	
10	16QAM	1	25	25.73	25.92	25.91	26.15	25.97	26.5
10	16QAM	1	49	25.71	25.93	25.84	25.75	25.78	
10	16QAM	25	0	24.61	24.73	24.72	24.96	24.82	25.5
10	16QAM	25	12	24.63	24.84	24.82	25.04	24.86	
10	16QAM	25	25	24.84	24.77	24.79	24.89	24.84	
10	16QAM	50	0	24.60	24.86	24.74	24.96	24.82	25.5
10	64QAM	1	0	24.65	24.60	24.56	24.69	24.49	
10	64QAM	1	25	24.56	24.74	24.69	25.08	24.50	25.5
10	64QAM	1	49	24.65	24.79	24.71	24.61	23.76	
10	64QAM	25	0	23.59	23.73	23.75	23.97	23.51	24.5
10	64QAM	25	12	23.59	23.86	23.84	24.13	23.39	
10	64QAM	25	25	23.64	23.79	23.80	23.94	23.12	
10	64QAM	50	0	23.68	23.83	23.82	24.02	23.21	24.5
Channel				39675	40148	40620	41093	41695	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5	
5	QPSK	1	0	25.69	25.88	25.92	25.70	25.53	27.5
5	QPSK	1	12	25.68	25.84	25.82	25.83	25.80	
5	QPSK	1	24	25.83	25.91	26.01	25.53	25.60	
5	QPSK	12	0	25.54	25.65	25.64	25.95	25.72	26.5
5	QPSK	12	7	25.60	25.82	25.97	25.94	26.88	
5	QPSK	12	13	25.59	25.76	25.75	25.92	25.87	
5	QPSK	25	0	25.60	25.76	25.73	25.92	25.82	26.5
5	16QAM	1	0	25.83	25.81	25.92	25.84	25.69	
5	16QAM	1	12	25.84	25.85	25.83	26.15	25.97	26.5
5	16QAM	1	24	25.68	25.95	25.84	25.71	25.81	
5	16QAM	12	0	24.67	24.65	24.72	24.99	24.74	25.5
5	16QAM	12	7	24.69	24.77	24.83	25.12	24.87	
5	16QAM	12	13	24.58	24.82	24.81	24.93	24.87	
5	16QAM	25	0	24.63	24.78	24.82	24.97	24.81	25.5
5	64QAM	1	0	24.52	24.60	24.62	24.66	24.47	
5	64QAM	1	12	24.67	24.67	24.64	25.01	24.53	24.5
5	64QAM	1	24	24.59	24.76	24.74	24.56	23.77	
5	64QAM	12	0	23.52	23.74	23.71	23.90	23.56	24.5
5	64QAM	12	7	23.62	23.85	23.81	24.08	23.40	
5	64QAM	12	13	23.64	23.83	23.76	23.95	23.12	
5	64QAM	25	0	23.60	23.85	23.80	23.96	23.16	24.5



Band 48								
Ann 7								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				55340	55830	56150	56640	
Frequency (MHz)				3560	3609	3641	3690	
20	QPSK	1	0	23.60	23.51	23.39	23.25	24.6
20	QPSK	1	49	23.40	23.27	23.12	22.88	
20	QPSK	1	99	23.37	23.23	23.04	22.81	
20	QPSK	50	0	23.15	23.02	22.88	22.63	
20	QPSK	50	24	23.10	22.88	22.83	22.55	24.1
20	QPSK	50	50	22.95	22.82	22.84	22.40	
20	QPSK	100	0	23.06	22.88	22.81	22.55	
20	16QAM	1	0	23.25	23.14	22.98	22.75	
20	16QAM	1	49	22.97	22.87	22.85	22.45	24.1
20	16QAM	1	99	22.99	22.84	22.66	22.42	
20	16QAM	50	0	22.16	22.06	21.91	21.66	
20	16QAM	50	24	22.11	21.91	21.83	21.60	23.1
20	16QAM	50	50	21.95	21.84	21.89	21.44	
20	16QAM	100	0	22.11	21.92	21.84	21.56	
20	64QAM	1	0	21.59	21.89	21.74	21.48	
20	64QAM	1	49	21.79	21.65	21.47	21.21	23.1
20	64QAM	1	99	21.72	21.55	21.35	21.15	
20	64QAM	50	0	21.19	21.08	20.92	20.66	
20	64QAM	50	24	21.10	20.92	20.87	20.59	22.1
20	64QAM	50	50	20.98	20.85	20.99	20.44	
20	64QAM	100	0	21.11	20.93	20.84	20.59	
Channel				56315	56820	56160	56865	Tune-up limit (dBm)
Frequency (MHz)				3657.5	3698	3642	3692.5	
15	QPSK	1	0	23.51	23.41	23.23	23.00	24.6
15	QPSK	1	37	23.39	23.27	23.07	22.81	
15	QPSK	1	74	23.37	23.25	23.02	22.81	
15	QPSK	36	0	23.11	23.00	22.85	22.58	
15	QPSK	36	20	23.06	22.93	22.78	22.53	24.1
15	QPSK	36	39	22.93	22.83	22.63	22.47	
15	QPSK	75	0	22.98	22.98	22.79	22.51	
15	16QAM	1	0	23.16	23.06	22.98	22.62	24.1
15	16QAM	1	37	22.90	22.83	22.65	22.40	
15	16QAM	1	74	23.04	22.91	22.69	22.47	
15	16QAM	36	0	22.08	21.98	21.80	21.56	
15	16QAM	36	20	22.01	21.90	21.71	21.48	23.1
15	16QAM	36	39	21.91	21.80	21.60	21.44	
15	16QAM	75	0	21.99	21.98	21.80	21.54	
15	64QAM	1	0	21.92	21.82	21.63	21.33	
15	64QAM	1	37	21.76	21.63	21.44	21.20	23.1
15	64QAM	1	74	21.75	21.60	21.41	21.16	
15	64QAM	36	0	21.12	21.02	20.86	20.60	
15	64QAM	36	20	21.07	20.95	20.79	20.54	22.1
15	64QAM	36	39	20.95	20.84	20.65	20.47	
15	64QAM	75	0	21.02	20.97	20.79	20.55	
Channel				56290	56815	56165	56890	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3642.5	3695	
10	QPSK	1	0	23.46	23.36	23.15	22.90	24.6
10	QPSK	1	25	23.34	23.17	23.01	22.72	
10	QPSK	1	49	23.31	23.25	23.02	22.81	
10	QPSK	25	0	23.04	22.91	22.76	22.49	
10	QPSK	25	12	22.97	22.90	22.70	22.43	24.1
10	QPSK	25	25	22.89	22.80	22.60	22.40	
10	QPSK	50	0	22.95	22.94	22.79	22.49	
10	16QAM	1	0	23.09	23.00	22.85	22.53	
10	16QAM	1	25	22.82	22.79	22.57	22.38	24.1
10	16QAM	1	49	22.95	22.89	22.63	22.47	
10	16QAM	25	0	22.01	21.94	21.72	21.47	
10	16QAM	25	12	21.96	21.90	21.66	21.39	23.1
10	16QAM	25	25	21.91	21.72	21.54	21.38	
10	16QAM	50	0	21.93	21.96	21.77	21.45	
10	64QAM	1	0	21.82	21.80	21.55	21.25	
10	64QAM	1	25	21.88	21.54	21.34	21.13	23.1
10	64QAM	1	49	21.67	21.54	21.41	21.12	
10	64QAM	25	0	21.08	20.95	20.85	20.54	
10	64QAM	25	12	21.05	20.88	20.71	20.49	22.1
10	64QAM	25	25	20.94	20.77	20.57	20.38	
10	64QAM	50	0	20.94	20.91	20.69	20.53	
Channel				56265	56810	56170	56715	Tune-up limit (dBm)
Frequency (MHz)				3652.5	3697	3643	3697.5	
5	QPSK	1	0	23.48	23.39	23.29	23.35	24.6
5	QPSK	1	12	23.47	23.36	23.24	23.37	
5	QPSK	1	24	23.41	23.29	23.21	23.31	
5	QPSK	12	0	23.11	22.99	22.88	22.98	
5	QPSK	12	7	23.08	22.97	22.87	22.92	24.1
5	QPSK	12	13	23.07	22.91	22.80	22.90	
5	QPSK	25	0	23.05	22.93	22.84	22.93	
5	16QAM	1	0	23.09	22.99	22.92	23.06	
5	16QAM	1	12	23.19	23.02	22.98	23.11	24.1
5	16QAM	1	24	23.10	22.99	22.82	22.93	
5	16QAM	12	0	22.04	21.93	21.89	21.97	
5	16QAM	12	7	22.07	21.98	21.82	21.97	23.1
5	16QAM	12	13	22.05	21.95	21.83	21.92	
5	16QAM	25	0	22.10	21.97	21.85	21.96	
5	64QAM	1	0	21.85	21.77	21.71	21.82	
5	64QAM	1	12	21.86	21.73	21.69	21.77	23.1
5	64QAM	1	24	21.88	21.76	21.59	21.73	
5	64QAM	12	0	21.10	20.98	20.97	21.02	
5	64QAM	12	7	21.14	21.02	20.92	20.98	22.1
5	64QAM	12	13	21.13	21.00	20.89	20.94	
5	64QAM	25	0	21.13	21.03	20.90	20.97	



Band 38						
Ann 0						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq
Channel				37850	38000	38150
Frequency (MHz)				2580	2585	2610
20	QPSK	1	0	21.98	21.98	21.86
20	QPSK	1	49	21.99	22.00	21.90
20	QPSK	1	99	22.00	21.98	21.85
20	QPSK	50	0	22.07	22.08	21.97
20	QPSK	50	24	22.15	22.07	22.02
20	QPSK	50	50	22.15	22.13	22.00
20	QPSK	100	0	22.15	22.08	22.04
20	16QAM	1	0	22.12	22.11	22.01
20	16QAM	1	49	22.09	22.07	21.99
20	16QAM	1	99	22.12	22.09	21.97
20	16QAM	50	0	22.12	22.09	22.01
20	16QAM	50	24	22.20	22.09	22.06
20	16QAM	50	50	22.18	22.14	22.06
20	16QAM	100	0	22.15	22.08	22.06
20	64QAM	1	0	21.75	21.77	21.66
20	64QAM	1	49	21.80	21.80	21.68
20	64QAM	1	99	21.80	21.79	21.64
20	64QAM	50	0	21.52	21.52	21.41
20	64QAM	50	24	21.59	21.49	21.49
20	64QAM	50	50	21.58	21.56	21.44
20	64QAM	100	0	21.58	21.47	21.46
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2585	2612.5
15	QPSK	1	0	21.94	21.92	21.83
15	QPSK	1	37	21.93	21.91	21.82
15	QPSK	1	74	21.98	21.94	21.82
15	QPSK	36	0	22.14	22.08	21.94
15	QPSK	36	20	22.14	22.02	21.94
15	QPSK	36	39	22.13	22.09	21.98
15	QPSK	75	0	22.15	22.03	21.92
15	QPSK	1	0	22.10	22.09	22.00
15	16QAM	1	37	22.05	22.02	21.90
15	16QAM	1	74	22.13	22.10	21.95
15	16QAM	36	0	22.12	22.03	21.95
15	16QAM	36	20	22.09	22.02	21.90
15	16QAM	36	39	22.08	22.08	21.96
15	16QAM	75	0	22.15	22.08	21.97
15	64QAM	1	0	21.74	21.72	21.60
15	64QAM	1	37	21.81	21.78	21.68
15	64QAM	1	74	21.84	21.78	21.64
15	64QAM	36	0	21.59	21.49	21.36
15	64QAM	36	20	21.55	21.45	21.32
15	64QAM	36	39	21.55	21.53	21.41
15	64QAM	75	0	21.57	21.47	21.35
Channel				37800	38000	38200
Frequency (MHz)				2575	2585	2615
10	QPSK	1	0	21.91	21.91	21.77
10	QPSK	1	25	21.86	21.88	21.73
10	QPSK	1	49	21.93	21.85	21.81
10	QPSK	25	0	22.08	22.07	21.88
10	QPSK	25	12	22.05	22.01	21.90
10	QPSK	25	25	22.04	22.01	21.88
10	QPSK	50	0	22.09	21.98	21.85
10	16QAM	1	0	22.00	22.03	21.90
10	16QAM	1	25	21.95	21.96	21.90
10	16QAM	1	49	22.11	22.03	21.87
10	16QAM	25	0	22.08	21.95	21.94
10	16QAM	25	12	22.06	21.98	21.88
10	16QAM	25	25	21.99	22.01	21.94
10	16QAM	50	0	22.13	22.02	21.87
10	64QAM	1	0	21.74	21.62	21.59
10	64QAM	1	25	21.71	21.68	21.67
10	64QAM	1	49	21.79	21.75	21.56
10	64QAM	25	0	21.49	21.46	21.36
10	64QAM	25	12	21.51	21.43	21.31
10	64QAM	25	25	21.48	21.47	21.38
10	64QAM	50	0	21.51	21.41	21.32
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2585	2617.5
5	QPSK	1	0	22.04	21.98	21.90
5	QPSK	1	12	22.03	21.99	21.88
5	QPSK	1	24	22.04	21.98	21.84
5	QPSK	12	0	22.15	22.07	21.98
5	QPSK	12	7	22.19	22.16	22.04
5	QPSK	12	13	22.14	22.16	22.02
5	QPSK	25	0	22.14	22.07	21.98
5	16QAM	1	0	22.16	22.09	22.04
5	16QAM	1	12	22.15	22.18	22.03
5	16QAM	1	24	22.19	22.17	22.03
5	16QAM	12	0	22.13	22.07	21.96
5	16QAM	12	7	22.12	22.16	22.00
5	16QAM	12	13	22.12	22.13	21.98
5	16QAM	25	0	22.18	22.08	22.00
5	64QAM	1	0	21.92	21.90	21.79
5	64QAM	1	12	21.89	21.91	21.79
5	64QAM	1	24	21.92	21.93	21.80
5	64QAM	12	0	21.56	21.49	21.41
5	64QAM	12	7	21.56	21.56	21.47
5	64QAM	12	13	21.57	21.53	21.41
5	64QAM	25	0	21.60	21.53	21.45



Band 41											
Ann 3											
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				39790	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	21.73	21.74	21.85	21.48	21.20	23.2		
20	QPSK	1	49	21.73	21.76	21.79	21.73	21.65			
20	QPSK	1	99	21.88	21.77	21.85	21.28	21.45			
20	QPSK	50	0	21.81	21.84	21.86	21.70	21.52			
20	QPSK	50	24	21.90	21.95	21.96	21.85	21.68			
20	QPSK	50	50	21.85	21.93	21.93	21.67	21.65	23.2		
20	QPSK	100	0	21.88	21.95	21.93	21.73	21.58			
20	16QAM	1	0	21.80	21.83	21.92	21.59	21.57	23.2		
20	16QAM	1	49	21.83	21.84	21.87	21.85	21.70			
20	16QAM	1	99	21.83	21.89	21.95	21.38	21.57			
20	16QAM	50	0	21.74	21.73	21.76	21.73	21.54			
20	16QAM	50	24	21.80	21.84	21.85	21.87	21.69	23.2		
20	16QAM	50	50	21.79	21.82	21.84	21.70	21.69			
20	16QAM	100	0	21.82	21.83	21.84	21.75	21.62			
20	64QAM	1	0	21.46	21.38	21.48	21.24	21.20	23.2		
20	64QAM	1	49	21.46	21.42	21.49	21.60	21.45			
20	64QAM	1	99	21.51	21.46	21.52	21.20	21.28			
20	64QAM	50	0	20.76	20.74	20.78	20.85	20.70			
20	64QAM	50	24	20.88	20.85	20.87	20.96	20.80	22.7		
20	64QAM	50	50	20.79	20.82	20.85	20.81	20.81			
20	64QAM	100	0	20.82	20.83	20.85	20.87	20.72	Tune-up limit (dBm)		
Channel				39725	40173	40620	41068	41515			
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5			
15	QPSK	1	0	21.73	21.77	21.79	21.61	21.32	23.2		
15	QPSK	1	37	21.69	21.75	21.73	21.75	21.54			
15	QPSK	1	74	21.86	21.85	21.86	21.48	21.54			
15	QPSK	36	0	21.86	21.85	21.85	21.71	21.56			
15	QPSK	36	20	21.85	21.91	21.91	21.74	21.67	23.2		
15	QPSK	36	39	21.84	21.93	21.93	21.71	21.64			
15	QPSK	75	0	21.87	21.93	21.94	21.68	21.60			
15	16QAM	1	0	21.87	21.85	21.89	21.75	21.44	23.2		
15	16QAM	1	37	21.76	21.75	21.82	21.82	21.68			
15	16QAM	1	74	21.87	21.90	21.90	21.62	21.67			
15	16QAM	36	0	21.74	21.69	21.69	21.71	21.52	23.2		
15	16QAM	36	20	21.75	21.73	21.76	21.73	21.63			
15	16QAM	36	39	21.72	21.77	21.76	21.70	21.64			
15	16QAM	75	0	21.82	21.81	21.82	21.73	21.63			
15	64QAM	1	0	21.45	21.38	21.44	21.45	21.20	23.2		
15	64QAM	1	37	21.47	21.45	21.48	21.57	21.45			
15	64QAM	1	74	21.49	21.55	21.55	21.29	21.43			
15	64QAM	36	0	20.77	20.75	20.76	20.84	20.70	22.7		
15	64QAM	36	20	20.77	20.82	20.81	20.88	20.78			
15	64QAM	36	39	20.76	20.81	20.82	20.83	20.80			
15	64QAM	75	0	20.81	20.80	20.82	20.83	20.74	Tune-up limit (dBm)		
Channel				39700	40160	40620	41080	41540			
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	21.63	21.71	21.73	21.82	21.30	23.2		
10	QPSK	1	25	21.64	21.69	21.64	21.65	21.46			
10	QPSK	1	49	21.62	21.79	21.76	21.41	21.52			
10	QPSK	25	0	21.85	21.80	21.80	21.65	21.53	23.2		
10	QPSK	25	12	21.80	21.86	21.82	21.66	21.59			
10	QPSK	25	25	21.84	21.87	21.87	21.61	21.58			
10	QPSK	50	0	21.81	21.91	21.94	21.61	21.57			
10	16QAM	1	0	21.79	21.76	21.87	21.67	21.44	23.2		
10	16QAM	1	25	21.74	21.68	21.73	21.76	21.62			
10	16QAM	1	49	21.67	21.88	21.86	21.56	21.62			
10	16QAM	25	0	21.71	21.68	21.61	21.61	21.45	23.2		
10	16QAM	25	12	21.86	21.69	21.75	21.66	21.57			
10	16QAM	25	25	21.89	21.71	21.67	21.65	21.58			
10	16QAM	50	0	21.72	21.75	21.80	21.67	21.61			
10	64QAM	1	0	21.45	21.31	21.43	21.41	21.25	23.2		
10	64QAM	1	25	21.47	21.35	21.48	21.48	21.40			
10	64QAM	1	49	21.45	21.46	21.45	21.27	21.34			
10	64QAM	25	0	20.72	20.73	20.71	20.84	20.77	22.7		
10	64QAM	25	12	20.75	20.80	20.79	20.80	20.77			
10	64QAM	25	25	20.72	20.72	20.76	20.76	20.76			
10	64QAM	50	0	20.73	20.77	20.79	20.79	20.75	Tune-up limit (dBm)		
Channel				39675	40148	40620	41093	41595			
Frequency (MHz)				2498.5	2545.8	2593	2639.3	2684.5			
5	QPSK	1	0	21.89	21.72	21.78	21.74	21.58	23.2		
5	QPSK	1	12	21.79	21.75	21.81	21.76	21.57			
5	QPSK	1	24	21.81	21.78	21.81	21.68	21.52			
5	QPSK	12	0	21.94	21.91	21.92	21.79	21.70	23.2		
5	QPSK	12	7	21.95	21.95	21.97	21.85	21.71			
5	QPSK	12	13	21.93	21.91	21.94	21.83	21.69			
5	QPSK	25	0	21.92	21.91	21.95	21.82	21.71			
5	16QAM	1	0	21.96	21.84	21.89	21.85	21.74	23.2		
5	16QAM	1	12	21.94	21.95	22.00	21.98	21.82			
5	16QAM	1	24	21.98	21.92	21.97	21.88	21.70			
5	16QAM	12	0	21.79	21.75	21.83	21.82	21.67	23.2		
5	16QAM	12	7	21.82	21.83	21.83	21.82	21.72			
5	16QAM	12	13	21.78	21.79	21.79	21.83	21.85			
5	16QAM	25	0	21.84	21.83	21.86	21.86	21.72			
5	64QAM	1	0	21.84	21.47	21.54	21.60	21.43	23.2		
5	64QAM	1	12	21.60	21.54	21.60	21.65	21.45			
5	64QAM	1	24	21.63	21.56	21.63	21.61	21.43			
5	64QAM	12	0	20.85	20.82	20.87	20.97	20.82	22.7		
5	64QAM	12	7	20.88	20.84	20.87	20.98	20.87			
5	64QAM	12	13	20.83	20.81	20.87	21.02	20.81			
5	64QAM	25	0	20.87	20.85	20.90	20.96	20.87			



Band 41 HPUE										
Ann 9										
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				39790	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.33	23.26	23.40	23.10	23.00	25	
20	QPSK	1	49	23.29	23.31	23.33	23.36	23.27	25	
20	QPSK	1	99	23.26	23.34	23.41	23.00	23.08	25	
20	QPSK	50	0	23.49	23.49	23.54	23.43	23.26	25	
20	QPSK	50	24	23.56	23.61	23.61	23.57	23.39	25	
20	QPSK	50	50	23.63	23.58	23.62	23.40	23.39	25	
20	QPSK	100	0	23.58	23.60	23.61	23.46	23.31	25	
20	16QAM	1	0	23.70	23.68	23.72	23.47	23.10	25	
20	16QAM	1	49	23.70	23.72	23.74	23.75	23.52	25	
20	16QAM	1	99	23.70	23.71	23.77	23.26	23.40	25	
20	16QAM	50	0	23.64	23.54	23.57	23.47	23.29	25	
20	16QAM	50	24	23.64	23.65	23.68	23.60	23.41	25	
20	16QAM	50	50	23.69	23.64	23.65	23.44	23.41	25	
20	16QAM	100	0	23.62	23.65	23.65	23.50	23.33	25	
20	64QAM	1	0	23.52	23.45	23.52	23.26	23.00	25	
20	64QAM	1	49	23.50	23.49	23.55	23.56	23.38	25	
20	64QAM	1	99	23.64	23.53	23.59	23.09	23.28	25	
20	64QAM	50	0	22.53	22.54	22.60	22.79	22.59	24.5	
20	64QAM	50	24	22.63	22.86	22.86	22.52	22.72	24.5	
20	64QAM	50	50	22.69	22.63	22.67	22.74	22.73	24.5	
20	64QAM	100	0	22.63	22.62	22.66	22.80	22.64	24.5	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.43	23.40	23.45	23.31	23.03	25	
15	QPSK	1	37	23.37	23.43	23.40	23.41	23.24	25	
15	QPSK	1	74	23.35	23.52	23.51	23.19	23.22	25	
15	QPSK	36	0	23.68	23.51	23.55	23.46	23.30	25	
15	QPSK	36	20	23.68	23.61	23.62	23.49	23.37	25	
15	QPSK	36	39	23.55	23.60	23.62	23.47	23.37	25	
15	QPSK	75	0	23.60	23.61	23.62	23.44	23.36	25	
15	16QAM	1	0	23.73	23.70	23.71	23.62	23.31	25	
15	16QAM	1	37	23.63	23.65	23.68	23.72	23.54	25	
15	16QAM	1	74	23.67	23.61	23.80	23.49	23.50	25	
15	16QAM	36	0	23.67	23.51	23.52	23.43	23.26	25	
15	16QAM	36	20	23.67	23.59	23.60	23.45	23.39	25	
15	16QAM	36	39	23.64	23.58	23.59	23.44	23.37	25	
15	16QAM	75	0	23.61	23.63	23.65	23.46	23.36	25	
15	64QAM	1	0	23.63	23.48	23.50	23.41	23.11	25	
15	64QAM	1	37	23.64	23.54	23.55	23.54	23.35	25	
15	64QAM	1	74	23.63	23.68	23.67	23.30	23.35	25	
15	64QAM	36	0	22.69	22.53	22.58	22.77	22.62	24.5	
15	64QAM	36	20	22.69	22.64	22.65	22.61	22.62	24.5	
15	64QAM	36	39	22.66	22.63	22.63	22.79	22.70	24.5	
15	64QAM	75	0	22.64	22.63	22.66	22.73	22.65	24.5	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2693		
10	QPSK	1	0	23.49	23.38	23.38	23.17	23.01	25	
10	QPSK	1	25	23.38	23.38	23.43	23.38	23.20	25	
10	QPSK	1	49	23.39	23.49	23.43	23.20	23.04	25	
10	QPSK	25	0	23.61	23.52	23.58	23.50	23.37	25	
10	QPSK	25	12	23.64	23.63	23.67	23.62	23.48	25	
10	QPSK	25	25	23.58	23.64	23.67	23.54	23.36	25	
10	QPSK	50	0	23.61	23.63	23.67	23.56	23.36	25	
10	16QAM	1	0	23.66	23.62	23.84	23.52	23.38	25	
10	16QAM	1	25	23.76	23.63	23.80	23.80	23.58	25	
10	16QAM	1	49	23.77	23.82	23.82	23.54	23.31	25	
10	16QAM	25	0	23.68	23.54	23.59	23.50	23.36	25	
10	16QAM	25	12	23.66	23.66	23.73	23.65	23.46	25	
10	16QAM	25	25	23.62	23.61	23.65	23.55	23.33	25	
10	16QAM	50	0	23.69	23.67	23.70	23.57	23.39	25	
10	64QAM	1	0	23.77	23.62	23.67	23.41	23.27	25	
10	64QAM	1	25	23.76	23.74	23.77	23.65	23.54	25	
10	64QAM	1	49	23.69	23.73	23.73	23.39	23.23	25	
10	64QAM	25	0	22.71	22.65	22.66	22.86	22.73	24.5	
10	64QAM	25	12	22.77	22.76	22.79	23.00	22.84	24.5	
10	64QAM	25	25	22.72	22.72	22.76	22.89	22.70	24.5	
10	64QAM	50	0	22.65	22.67	22.70	22.87	22.69	24.5	
Channel				39675	40148	40620	41093	41655		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2697.5		
5	QPSK	1	0	23.47	23.26	23.31	23.16	23.04	25	
5	QPSK	1	12	23.34	23.36	23.41	23.34	23.17	25	
5	QPSK	1	24	23.36	23.43	23.43	23.17	23.01	25	
5	QPSK	12	0	23.56	23.50	23.58	23.42	23.27	25	
5	QPSK	12	7	23.69	23.53	23.59	23.55	23.46	25	
5	QPSK	12	13	23.67	23.58	23.63	23.54	23.32	25	
5	QPSK	25	0	23.60	23.59	23.59	23.55	23.27	25	
5	16QAM	1	0	23.77	23.72	23.74	23.52	23.38	25	
5	16QAM	1	12	23.67	23.78	23.72	23.75	23.52	25	
5	16QAM	1	24	23.77	23.72	23.72	23.51	23.29	25	
5	16QAM	12	0	23.64	23.50	23.49	23.45	23.34	25	
5	16QAM	12	7	23.61	23.64	23.64	23.56	23.45	25	
5	16QAM	12	13	23.69	23.67	23.62	23.47	23.32	25	
5	16QAM	25	0	23.64	23.66	23.69	23.53	23.36	25	
5	64QAM	1	0	23.73	23.61	23.65	23.40	23.27	25	
5	64QAM	1	12	23.69	23.69	23.67	23.57	23.54	25	
5	64QAM	1	24	23.69	23.69	23.70	23.35	23.13	25	
5	64QAM	12	0	22.70	22.62	22.59	22.76	22.73	24.5	
5	64QAM	12	7	22.73	22.74	22.75	22.93	22.75	24.5	
5	64QAM	12	13	22.69	22.65	22.67	22.89	22.62	24.5	
5	64QAM	25	0	22.67	22.62	22.63	22.79	22.63	24.5	

Band 48									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	21.18	21.13	21.00	20.75	22.3	
20	QPSK	1	49	20.99	20.87	20.75	20.53		
20	QPSK	1	99	20.86	20.85	20.89	20.41		
20	QPSK	50	0	20.83	20.67	20.58	20.36	21.3	
20	QPSK	50	24	20.77	20.64	20.52	20.29		
20	QPSK	50	50	20.62	20.46	20.36	20.09		
20	QPSK	100	0	20.78	20.54	20.49	20.29		
20	16QAM	1	0	20.89	20.81	20.71	20.49	21.3	
20	16QAM	1	49	20.65	20.51	20.41	20.19		
20	16QAM	1	99	20.65	20.55	20.39	20.13		
20	16QAM	50	0	19.87	19.72	19.60	19.39	20.3	
20	16QAM	50	24	19.79	19.56	19.54	19.31		
20	16QAM	50	50	19.66	19.49	19.38	19.14		
20	16QAM	100	0	19.79	19.67	19.53	19.29		
20	64QAM	1	0	19.62	19.56	19.45	19.25	20.3	
20	64QAM	1	49	19.45	19.31	19.17	18.95		
20	64QAM	1	99	19.37	19.23	19.11	18.84		
20	64QAM	50	0	18.85	18.72	18.61	18.40	19.3	
20	64QAM	50	24	18.83	18.59	18.55	18.31		
20	64QAM	50	50	18.68	18.53	18.39	18.15		
20	64QAM	100	0	18.80	18.57	18.53	18.30		
Channel				56315	56820	56160	56865		
Frequency (MHz)				3657.5	3688	3642	3692.5		
15	QPSK	1	0	21.12	21.01	20.89	20.65	22.3	
15	QPSK	1	37	20.85	20.87	20.73	20.41		
15	QPSK	1	74	20.93	20.87	20.70	20.38		
15	QPSK	36	0	20.79	20.68	20.54	20.31	21.3	
15	QPSK	36	20	20.74	20.62	20.49	20.22		
15	QPSK	36	39	20.62	20.47	20.34	20.14		
15	QPSK	75	0	20.86	20.61	20.49	20.24		
15	16QAM	1	0	20.83	20.76	20.62	20.39	21.3	
15	16QAM	1	37	20.61	20.48	20.38	20.09		
15	16QAM	1	74	20.70	20.59	20.43	20.19		
15	16QAM	36	0	19.78	19.63	19.52	19.27	20.3	
15	16QAM	36	20	19.71	19.60	19.44	19.19		
15	16QAM	36	39	19.59	19.47	19.32	19.13		
15	16QAM	75	0	19.71	19.65	19.50	19.27		
15	64QAM	1	0	19.54	19.51	19.39	19.12	20.3	
15	64QAM	1	37	19.42	19.32	19.18	18.95		
15	64QAM	1	74	19.41	19.29	19.15	18.89		
15	64QAM	36	0	18.81	18.69	18.55	18.32	19.3	
15	64QAM	36	20	18.78	18.63	18.51	18.24		
15	64QAM	36	39	18.65	18.51	18.35	18.17		
15	64QAM	75	0	18.70	18.64	18.49	18.25		
Channel				56290	56815	56165	56890		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	21.10	20.93	20.80	20.55	22.3	
10	QPSK	1	25	20.94	20.84	20.67	20.39		
10	QPSK	1	49	20.84	20.83	20.64	20.30		
10	QPSK	25	0	20.77	20.65	20.46	20.31	21.3	
10	QPSK	25	12	20.67	20.52	20.42	20.15		
10	QPSK	25	25	20.59	20.37	20.32	20.14		
10	QPSK	50	0	20.67	20.55	20.40	20.16		
10	16QAM	1	0	20.82	20.70	20.60	20.35	21.3	
10	16QAM	1	25	20.53	20.47	20.30	20.06		
10	16QAM	1	49	20.68	20.58	20.33	20.19		
10	16QAM	25	0	19.76	19.62	19.45	19.23	20.3	
10	16QAM	25	12	19.62	19.59	19.44	19.16		
10	16QAM	25	25	19.49	19.47	19.27	19.10		
10	16QAM	50	0	19.68	19.55	19.44	19.23		
10	64QAM	1	0	19.54	19.46	19.34	19.03	20.3	
10	64QAM	1	25	19.39	19.28	19.12	18.92		
10	64QAM	1	49	19.35	19.27	19.09	18.85		
10	64QAM	25	0	18.72	18.61	18.53	18.26	19.3	
10	64QAM	25	12	18.69	18.57	18.45	18.20		
10	64QAM	25	25	18.56	18.48	18.30	18.12		
10	64QAM	50	0	18.69	18.55	18.47	18.17		
Channel				56265	56810	56170	56715		
Frequency (MHz)				3524.5	3607	3643	3697.5		
5	QPSK	1	0	21.03	20.98	20.93	21.03	22.3	
5	QPSK	1	12	20.98	20.93	20.89	20.97		
5	QPSK	1	24	20.98	20.85	20.77	20.86		
5	QPSK	12	0	20.76	20.66	20.61	20.71	21.3	
5	QPSK	12	7	20.74	20.69	20.53	20.52		
5	QPSK	12	13	20.70	20.61	20.55	20.60		
5	QPSK	25	0	20.70	20.64	20.52	20.61		
5	16QAM	1	0	20.78	20.66	20.66	20.73	21.3	
5	16QAM	1	12	20.81	20.75	20.63	20.75		
5	16QAM	1	24	20.77	20.67	20.52	20.65		
5	16QAM	12	0	19.71	19.65	19.52	19.70	20.3	
5	16QAM	12	7	19.74	19.68	19.56	19.63		
5	16QAM	12	13	19.72	19.65	19.53	19.57		
5	16QAM	25	0	19.76	19.67	19.56	19.68		
5	64QAM	1	0	19.50	19.47	19.43	19.46	20.3	
5	64QAM	1	12	19.49	19.40	19.36	19.45		
5	64QAM	1	24	19.53	19.43	19.33	19.43		
5	64QAM	12	0	18.77	18.74	18.66	18.73	19.3	
5	64QAM	12	7	18.79	18.69	18.64	18.71		
5	64QAM	12	13	18.78	18.67	18.54	18.63		
5	64QAM	25	0	18.81	18.70	18.60	18.68		





Band 38							
Ann 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2585	2610	
20	QPSK	1	0	24.48	24.44	24.35	25.1
20	QPSK	1	49	24.49	24.48	24.36	
20	QPSK	1	99	24.48	24.44	24.35	
20	QPSK	50	0	24.07	24.08	23.96	24.7
20	QPSK	50	24	24.19	24.09	24.05	
20	QPSK	50	50	24.15	24.08	24.02	
20	QPSK	100	0	24.16	24.03	24.03	24.7
20	16QAM	1	0	24.09	24.04	23.97	
20	16QAM	1	49	24.07	24.02	23.95	
20	16QAM	1	99	24.07	24.01	23.93	23.7
20	16QAM	50	0	23.11	23.10	22.99	
20	16QAM	50	24	23.19	23.07	23.07	
20	16QAM	50	50	23.18	23.13	23.03	23.7
20	16QAM	100	0	23.18	23.07	23.05	
20	64QAM	1	0	22.80	22.75	22.68	
20	64QAM	1	49	22.82	22.75	22.69	22.7
20	64QAM	1	99	22.81	22.76	22.64	
20	64QAM	50	0	22.12	22.10	22.00	
20	64QAM	50	24	22.20	22.09	22.09	22.7
20	64QAM	50	50	22.18	22.14	22.06	
20	64QAM	100	0	22.20	22.08	22.07	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2585	2612.5	
15	QPSK	1	0	24.47	24.43	24.26	25.1
15	QPSK	1	37	24.47	24.46	24.35	
15	QPSK	1	74	24.43	24.38	24.34	
15	QPSK	36	0	24.03	24.00	23.93	24.7
15	QPSK	36	20	24.18	23.98	24.01	
15	QPSK	36	39	24.09	24.03	24.00	
15	QPSK	75	0	24.11	23.99	23.97	24.7
15	16QAM	1	0	24.08	24.04	23.93	
15	16QAM	1	37	24.05	24.01	23.88	
15	16QAM	1	74	24.00	24.01	23.91	23.7
15	16QAM	36	0	23.04	23.00	22.96	
15	16QAM	36	20	23.15	23.03	23.03	
15	16QAM	36	39	23.11	23.12	23.00	23.7
15	16QAM	75	0	23.15	22.98	23.02	
15	64QAM	1	0	22.79	22.70	22.67	
15	64QAM	1	37	22.75	22.72	22.60	23.7
15	64QAM	1	74	22.79	22.67	22.61	
15	64QAM	36	0	22.07	22.02	21.91	
15	64QAM	36	20	22.18	22.08	22.08	22.7
15	64QAM	36	39	22.10	22.05	21.98	
15	64QAM	75	0	22.18	22.04	22.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2585	2615	
10	QPSK	1	0	24.46	24.33	24.25	25.1
10	QPSK	1	25	24.42	24.40	24.35	
10	QPSK	1	49	24.39	24.39	24.35	
10	QPSK	25	0	24.00	24.03	23.92	24.7
10	QPSK	25	12	24.15	23.95	24.03	
10	QPSK	25	25	24.05	24.09	24.00	
10	QPSK	50	0	24.14	23.98	23.93	24.7
10	16QAM	1	0	24.09	23.99	23.90	
10	16QAM	1	25	24.03	24.02	23.88	
10	16QAM	1	49	24.06	23.91	23.87	23.7
10	16QAM	25	0	23.07	23.09	22.93	
10	16QAM	25	12	23.14	23.08	23.02	
10	16QAM	25	25	23.13	23.09	22.94	23.7
10	16QAM	50	0	23.13	23.02	23.05	
10	64QAM	1	0	22.76	22.75	22.65	
10	64QAM	1	25	22.73	22.74	22.66	23.7
10	64QAM	1	49	22.79	22.70	22.57	
10	64QAM	25	0	22.08	22.02	21.94	
10	64QAM	25	12	22.19	22.06	22.06	22.7
10	64QAM	25	25	22.09	22.04	22.04	
10	64QAM	50	0	22.18	22.02	22.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2585	2617.5	
5	QPSK	1	0	24.41	24.40	24.28	25.1
5	QPSK	1	12	24.44	24.45	24.32	
5	QPSK	1	24	24.38	24.38	24.26	
5	QPSK	12	0	24.06	24.03	23.94	24.7
5	QPSK	12	7	24.11	23.95	24.03	
5	QPSK	12	13	24.08	24.08	23.99	
5	QPSK	25	0	24.12	24.03	24.02	24.7
5	16QAM	1	0	24.06	23.98	23.91	
5	16QAM	1	12	24.04	23.97	23.91	
5	16QAM	1	24	24.05	23.97	23.89	23.7
5	16QAM	12	0	23.05	23.08	22.96	
5	16QAM	12	7	23.17	23.05	23.06	
5	16QAM	12	13	23.11	23.11	22.98	23.7
5	16QAM	25	0	23.12	23.05	22.98	
5	64QAM	1	0	22.79	22.65	22.61	
5	64QAM	1	12	22.73	22.71	22.67	23.7
5	64QAM	1	24	22.72	22.74	22.56	
5	64QAM	12	0	22.02	22.10	21.96	
5	64QAM	12	7	22.12	22.04	22.02	22.7
5	64QAM	12	13	22.10	22.10	22.06	
5	64QAM	25	0	22.13	21.98	21.99	



Band 41									
Ann.2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	24.23	24.38	24.45	24.14	23.88	
20	QPSK	1	49	24.21	24.35	24.33	24.40	24.10	25.1
20	QPSK	1	99	24.22	24.37	24.43	24.00	24.09	
20	QPSK	50	0	23.79	23.94	23.94	24.05	23.90	
20	QPSK	50	24	23.90	24.07	24.16	24.15	24.02	24.7
20	QPSK	50	50	23.88	24.04	24.01	24.07	24.01	
20	QPSK	100	0	23.89	24.05	24.01	24.10	23.97	
20	16QAM	1	0	23.80	23.95	24.05	23.84	23.87	24.7
20	16QAM	1	49	23.80	23.95	23.92	24.23	24.04	
20	16QAM	1	99	23.84	24.03	24.00	23.79	23.87	
20	16QAM	50	0	22.82	22.96	22.97	23.09	22.93	
20	16QAM	50	24	22.81	23.09	23.05	23.22	23.06	23.7
20	16QAM	50	50	22.90	23.07	23.04	23.08	23.02	
20	16QAM	100	0	22.90	23.06	23.02	23.11	22.97	
20	64QAM	1	0	22.51	22.60	22.65	22.60	22.35	
20	64QAM	1	49	22.51	22.71	22.68	22.99	22.79	23.7
20	64QAM	1	99	22.56	22.76	22.68	22.53	22.55	
20	64QAM	50	0	21.82	21.88	21.98	22.09	21.93	
20	64QAM	50	24	21.83	22.07	22.07	22.21	22.06	22.7
20	64QAM	50	50	21.82	22.07	22.05	22.06	22.03	
20	64QAM	100	0	21.91	22.08	22.04	22.14	21.96	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	24.16	24.23	24.44	24.13	23.82	
15	QPSK	1	37	24.11	24.31	24.25	24.32	24.22	25.1
15	QPSK	1	74	24.21	24.34	24.40	23.97	24.02	
15	QPSK	36	0	23.75	23.94	23.86	24.04	23.85	
15	QPSK	36	20	23.89	23.99	23.94	24.16	23.92	24.7
15	QPSK	36	39	23.80	24.03	24.00	23.98	23.98	
15	QPSK	75	0	23.89	23.99	24.01	24.08	23.95	
15	16QAM	1	0	23.70	23.88	24.03	23.89	23.98	24.7
15	16QAM	1	37	23.75	23.89	23.83	24.14	23.98	
15	16QAM	1	74	23.79	23.98	23.97	23.78	23.81	
15	16QAM	36	0	22.79	22.88	22.89	23.03	22.84	
15	16QAM	36	20	22.83	23.00	23.01	23.15	22.98	23.7
15	16QAM	36	39	22.80	23.06	23.04	23.00	22.95	
15	16QAM	75	0	22.89	23.05	22.92	23.04	22.95	
15	64QAM	1	0	22.44	22.53	22.58	22.54	22.29	
15	64QAM	1	37	22.41	22.68	22.59	22.94	22.72	23.7
15	64QAM	1	74	22.48	22.71	22.59	22.43	22.51	
15	64QAM	36	0	21.77	21.98	21.95	22.07	21.88	
15	64QAM	36	20	21.88	22.01	22.05	22.15	21.98	22.7
15	64QAM	36	39	21.87	22.01	21.95	22.06	22.03	
15	64QAM	75	0	21.86	22.02	21.98	22.10	21.95	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	24.20	24.32	24.38	24.11	23.83	
10	QPSK	1	25	24.15	24.28	24.28	24.38	24.22	25.1
10	QPSK	1	49	24.13	24.30	24.38	23.91	24.05	
10	QPSK	25	0	23.89	23.91	23.90	23.98	23.84	
10	QPSK	25	12	23.81	24.01	23.97	24.19	23.93	24.7
10	QPSK	25	25	23.81	24.03	23.98	23.97	23.94	
10	QPSK	50	0	23.83	23.96	23.96	24.06	23.96	
10	16QAM	1	0	23.80	23.88	23.97	23.86	23.65	
10	16QAM	1	25	23.74	23.95	23.87	24.17	24.02	24.7
10	16QAM	1	49	23.78	23.95	23.94	23.71	23.87	
10	16QAM	25	0	22.79	22.94	22.94	23.09	22.98	
10	16QAM	25	12	22.90	23.07	22.95	23.14	22.98	23.7
10	16QAM	25	25	22.90	23.03	23.00	23.00	23.02	
10	16QAM	50	0	22.81	23.02	22.97	23.05	22.94	
10	64QAM	1	0	22.43	22.59	22.64	22.52	22.35	
10	64QAM	1	25	22.43	22.65	22.68	22.96	22.73	23.7
10	64QAM	1	49	22.46	22.70	22.60	22.92	22.90	
10	64QAM	25	0	21.73	21.88	21.98	22.07	21.88	
10	64QAM	25	12	21.85	22.03	22.01	22.15	21.98	22.7
10	64QAM	25	25	21.82	21.97	22.01	21.98	21.99	
10	64QAM	50	0	21.87	21.99	21.99	22.14	21.90	
Channel				39675	40148	40620	41093	41655	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	24.16	24.23	24.40	24.14	23.78	
5	QPSK	1	12	24.17	24.33	24.30	24.30	24.22	25.1
5	QPSK	1	24	24.13	24.31	24.43	23.91	24.05	
5	QPSK	12	0	23.72	23.88	23.92	23.99	23.84	
5	QPSK	12	7	23.81	24.05	24.00	24.15	24.02	24.7
5	QPSK	12	13	23.82	24.01	23.94	23.99	23.99	
5	QPSK	25	0	23.86	23.97	23.99	24.05	23.92	
5	16QAM	1	0	23.71	23.90	23.98	23.89	23.61	
5	16QAM	1	12	23.79	23.91	23.86	24.18	24.03	24.7
5	16QAM	1	24	23.83	23.99	23.90	23.74	23.79	
5	16QAM	12	0	22.79	22.89	22.93	23.06	22.86	
5	16QAM	12	7	22.81	22.99	23.01	23.22	23.04	23.7
5	16QAM	12	13	22.90	23.05	23.03	22.99	22.84	
5	16QAM	25	0	22.81	22.96	22.99	23.07	22.95	
5	64QAM	1	0	22.51	22.59	22.65	22.52	22.35	
5	64QAM	1	12	22.46	22.66	22.65	22.83	22.69	23.7
5	64QAM	1	24	22.54	22.71	22.69	22.90	22.47	
5	64QAM	12	0	21.81	21.90	21.89	22.07	21.85	
5	64QAM	12	7	21.83	21.99	22.07	22.16	22.03	22.7
5	64QAM	12	13	21.82	22.05	22.01	22.04	22.02	
5	64QAM	25	0	21.90	22.03	22.01	22.05	21.91	



Band 41 HPUE									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.76	25.92	26.00	25.74	25.50	26.9
20	QPSK	1	49	25.76	25.92	25.89	25.59	25.81	
20	QPSK	1	99	25.83	26.00	26.01	25.58	25.70	
20	QPSK	50	0	25.56	25.73	25.73	25.56	25.82	
20	QPSK	50	24	25.67	25.84	25.98	25.94	25.95	
20	QPSK	50	50	25.66	25.83	25.81	25.96	25.88	
20	QPSK	100	0	25.88	25.84	25.81	26.01	25.85	
20	16QAM	1	0	25.72	25.96	26.00	25.93	25.69	26.4
20	16QAM	1	49	25.74	25.93	25.91	26.23	26.02	
20	16QAM	1	99	25.72	25.99	25.93	25.81	25.86	
20	16QAM	50	0	24.61	24.75	24.78	24.99	24.83	
20	16QAM	50	24	24.71	24.86	24.85	25.14	24.96	
20	16QAM	50	50	24.67	24.87	24.83	24.99	24.94	
20	16QAM	100	0	24.68	24.86	24.84	25.03	24.90	
20	64QAM	1	0	24.58	24.94	24.66	24.76	24.54	
20	64QAM	1	49	24.62	24.74	24.71	25.09	24.58	
20	64QAM	1	99	24.62	24.82	24.79	24.66	23.81	
20	64QAM	50	0	23.59	23.77	23.75	23.99	23.58	
20	64QAM	50	24	23.69	23.86	23.84	24.15	23.40	
20	64QAM	50	50	23.68	23.87	23.83	24.01	23.15	
20	64QAM	100	0	23.70	23.86	23.83	24.05	23.28	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.71	25.90	26.00	25.68	25.51	26.9
15	QPSK	1	37	25.67	25.89	25.82	25.91	25.81	
15	QPSK	1	74	25.82	25.92	25.92	25.58	25.69	
15	QPSK	36	0	25.83	25.67	25.70	25.86	25.78	
15	QPSK	36	20	25.67	25.84	25.95	25.91	25.90	
15	QPSK	36	39	25.62	25.81	25.71	25.86	25.79	
15	QPSK	75	0	25.60	25.82	25.76	25.97	25.84	
15	16QAM	1	0	25.83	25.85	25.97	25.92	25.64	26.4
15	16QAM	1	37	25.74	25.89	25.85	26.17	26.00	
15	16QAM	1	74	25.67	25.96	25.87	25.77	25.84	
15	16QAM	36	0	24.54	24.73	24.75	24.93	24.75	
15	16QAM	36	20	24.71	24.77	24.82	25.13	24.93	
15	16QAM	36	39	24.65	24.86	24.77	24.92	24.87	
15	16QAM	75	0	24.61	24.83	24.82	25.00	24.89	
15	64QAM	1	0	24.50	24.59	24.56	24.73	24.46	
15	64QAM	1	37	24.64	24.66	24.67	25.09	24.50	
15	64QAM	1	74	24.54	24.75	24.76	24.59	23.73	
15	64QAM	36	0	23.61	23.70	23.72	23.91	23.46	
15	64QAM	36	20	23.65	23.82	23.79	24.12	23.40	
15	64QAM	36	39	23.60	23.80	23.75	23.95	23.12	
15	64QAM	75	0	23.70	23.84	23.74	23.98	23.22	
Channel				39700	40160	40620	41060	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.75	25.99	26.04	25.84	25.62	26.9
10	QPSK	1	25	25.72	25.84	25.79	25.94	25.76	
10	QPSK	1	49	25.77	25.91	26.01	25.49	25.70	
10	QPSK	25	0	25.46	25.67	25.72	25.91	25.74	
10	QPSK	25	12	25.59	25.81	25.89	25.86	25.85	
10	QPSK	25	25	25.61	25.77	25.76	25.90	25.79	
10	QPSK	50	0	25.60	25.82	25.71	25.91	25.76	
10	16QAM	1	0	25.82	25.80	25.94	25.85	25.61	26.4
10	16QAM	1	25	25.73	25.92	25.91	26.15	25.97	
10	16QAM	1	49	25.71	25.93	25.84	25.75	25.78	
10	16QAM	25	0	24.61	24.73	24.72	24.96	24.82	
10	16QAM	25	12	24.63	24.84	24.82	25.04	24.86	
10	16QAM	25	25	24.84	24.77	24.79	24.89	24.84	
10	16QAM	50	0	24.60	24.86	24.74	24.96	24.82	
10	64QAM	1	0	24.65	24.60	24.56	24.66	24.49	
10	64QAM	1	25	24.56	24.74	24.69	25.08	24.50	
10	64QAM	1	49	24.65	24.79	24.71	24.61	23.76	
10	64QAM	25	0	23.59	23.73	23.75	23.97	23.51	
10	64QAM	25	12	23.59	23.86	23.84	24.13	23.39	
10	64QAM	25	25	23.64	23.79	23.80	23.94	23.12	
10	64QAM	50	0	23.68	23.83	23.82	24.02	23.21	
Channel				39675	40148	40620	41063	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2685.5	
5	QPSK	1	0	25.69	25.88	25.92	25.70	25.53	26.9
5	QPSK	1	12	25.68	25.84	25.82	25.83	25.80	
5	QPSK	1	24	25.83	25.91	26.01	25.53	25.60	
5	QPSK	12	0	25.54	25.65	25.64	25.95	25.72	
5	QPSK	12	7	25.60	25.82	25.97	25.94	25.88	
5	QPSK	12	13	25.59	25.76	25.75	25.92	25.87	
5	QPSK	25	0	25.60	25.76	25.73	25.92	25.82	
5	16QAM	1	0	25.83	25.81	25.92	25.84	25.69	26.4
5	16QAM	1	12	25.64	25.85	25.83	26.15	25.97	
5	16QAM	1	24	25.68	25.95	25.84	25.71	25.81	
5	16QAM	12	0	24.67	24.65	24.72	24.69	24.74	
5	16QAM	12	7	24.69	24.77	24.83	25.12	24.87	
5	16QAM	12	13	24.58	24.82	24.81	24.93	24.87	
5	16QAM	25	0	24.63	24.78	24.82	24.97	24.81	
5	64QAM	1	0	24.52	24.60	24.62	24.66	24.47	
5	64QAM	1	12	24.67	24.67	24.64	25.01	24.53	
5	64QAM	1	24	24.59	24.78	24.74	24.56	23.77	
5	64QAM	12	0	23.52	23.74	23.71	23.90	23.56	
5	64QAM	12	7	23.62	23.85	23.81	24.08	23.40	
5	64QAM	12	13	23.64	23.83	23.76	23.95	23.12	
5	64QAM	25	0	23.60	23.85	23.80	23.96	23.16	



Band 48									
Ann 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	22.80	22.72	22.60	22.45	23.8	
20	QPSK	1	49	22.59	22.48	22.31	22.10	23.3	
20	QPSK	1	99	22.55	22.41	22.25	22.04	23.3	
20	QPSK	50	0	22.80	22.73	22.58	22.33	23.3	
20	QPSK	50	24	22.77	22.67	22.50	22.25	23.3	
20	QPSK	50	50	22.61	22.48	22.34	22.09	23.3	
20	QPSK	100	0	22.76	22.57	22.51	22.24	23.3	
20	16QAM	1	0	22.82	22.81	22.67	22.43	23.3	
20	16QAM	1	49	22.58	22.55	22.37	22.15	23.3	
20	16QAM	1	99	22.66	22.50	22.35	22.10	23.3	
20	16QAM	50	0	22.13	22.04	21.89	21.65	23.3	
20	16QAM	50	24	22.09	21.89	21.80	21.59	23.3	
20	16QAM	50	50	21.93	21.82	21.66	21.41	23.3	
20	16QAM	100	0	22.08	21.89	21.80	21.55	23.3	
20	64QAM	1	0	21.92	21.85	21.72	21.46	23.3	
20	64QAM	1	49	21.76	21.62	21.46	21.32	23.3	
20	64QAM	1	99	21.68	21.52	21.38	21.31	23.3	
20	64QAM	50	0	21.15	21.08	20.90	20.66	23.3	
20	64QAM	50	24	21.10	20.91	20.83	20.57	23.3	
20	64QAM	50	50	20.95	20.82	20.66	20.42	23.3	
20	64QAM	100	0	21.09	20.88	20.82	20.58	23.3	
Channel				56315	56820	56160	56865		
Frequency (MHz)				3657.5	3688	3642	3692.5		
15	QPSK	1	0	22.72	22.69	22.50	22.21	23.8	
15	QPSK	1	37	22.57	22.47	22.29	22.03	23.3	
15	QPSK	1	74	22.57	22.46	22.24	22.01	23.3	
15	QPSK	36	0	22.80	22.70	22.52	22.29	23.3	
15	QPSK	36	20	22.76	22.66	22.48	22.20	23.3	
15	QPSK	36	39	22.62	22.51	22.33	22.15	23.3	
15	QPSK	75	0	22.86	22.66	22.47	22.24	23.3	
15	16QAM	1	0	22.86	22.76	22.61	22.32	23.3	
15	16QAM	1	37	22.61	22.47	22.30	22.05	23.3	
15	16QAM	1	74	22.69	22.59	22.40	22.16	23.3	
15	16QAM	36	0	22.05	21.95	21.80	21.54	23.3	
15	16QAM	36	20	21.99	21.90	21.72	21.47	23.3	
15	16QAM	36	39	21.87	21.77	21.59	21.44	23.3	
15	16QAM	75	0	21.97	21.88	21.79	21.53	23.3	
15	64QAM	1	0	21.86	21.81	21.63	21.36	23.3	
15	64QAM	1	37	21.74	21.64	21.42	21.19	23.3	
15	64QAM	1	74	21.71	21.59	21.38	21.15	23.3	
15	64QAM	36	0	21.12	21.02	20.85	20.59	23.3	
15	64QAM	36	20	21.05	20.95	20.77	20.51	23.3	
15	64QAM	36	39	20.93	20.82	20.63	20.47	23.3	
15	64QAM	75	0	20.99	20.94	20.77	20.52	23.3	
Channel				56290	56815	56165	56890		
Frequency (MHz)				3595	3607.5	3642.5	3696		
10	QPSK	1	0	22.49	22.45	22.49	22.16	23.8	
10	QPSK	1	25	22.49	22.44	22.20	21.94	23.3	
10	QPSK	1	49	22.57	22.36	22.23	21.91	23.3	
10	QPSK	25	0	22.78	22.69	22.46	22.29	23.3	
10	QPSK	25	12	22.72	22.64	22.41	22.16	23.3	
10	QPSK	25	25	22.58	22.48	22.28	22.08	23.3	
10	QPSK	50	0	22.56	22.51	22.43	22.22	23.3	
10	16QAM	1	0	22.76	22.66	22.60	22.27	23.3	
10	16QAM	1	25	22.60	22.38	22.22	21.98	23.3	
10	16QAM	1	49	22.81	22.55	22.34	22.09	23.3	
10	16QAM	25	0	22.00	21.90	21.71	21.46	23.3	
10	16QAM	25	12	21.91	21.81	21.70	21.42	23.3	
10	16QAM	25	25	21.79	21.75	21.65	21.43	23.3	
10	16QAM	50	0	21.87	21.91	21.71	21.47	23.3	
10	64QAM	1	0	21.85	21.80	21.55	21.31	23.3	
10	64QAM	1	25	21.73	21.59	21.38	21.10	23.3	
10	64QAM	1	49	21.66	21.51	21.30	21.12	23.3	
10	64QAM	25	0	21.07	20.96	20.75	20.52	23.3	
10	64QAM	25	12	20.95	20.87	20.74	20.44	23.3	
10	64QAM	25	25	20.84	20.74	20.60	20.41	23.3	
10	64QAM	50	0	20.93	20.85	20.68	20.43	23.3	
Channel				56265	56810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.66	22.54	22.50	22.55	23.8	
5	QPSK	1	12	22.63	22.60	22.44	22.53	23.3	
5	QPSK	1	24	22.57	22.51	22.36	22.48	23.3	
5	QPSK	12	0	22.78	22.62	22.60	22.69	23.3	
5	QPSK	12	7	22.77	22.65	22.56	22.67	23.3	
5	QPSK	12	13	22.75	22.63	22.53	22.63	23.3	
5	QPSK	25	0	22.72	22.64	22.51	22.62	23.3	
5	16QAM	1	0	22.77	22.70	22.61	22.73	23.3	
5	16QAM	1	12	22.84	22.71	22.67	22.78	23.3	
5	16QAM	1	24	22.76	22.66	22.53	22.61	23.3	
5	16QAM	12	0	22.04	21.91	21.89	21.96	23.3	
5	16QAM	12	7	22.08	21.93	21.81	21.95	23.3	
5	16QAM	12	13	22.04	21.92	21.75	21.90	23.3	
5	16QAM	25	0	22.06	21.97	21.84	21.95	23.3	
5	64QAM	1	0	21.87	21.75	21.67	21.79	23.3	
5	64QAM	1	12	21.82	21.72	21.67	21.76	23.3	
5	64QAM	1	24	21.85	21.74	21.58	21.71	23.3	
5	64QAM	12	0	21.08	20.97	20.94	21.00	23.3	
5	64QAM	12	7	21.11	21.00	20.88	21.01	23.3	
5	64QAM	12	13	21.10	20.99	20.84	20.92	23.3	
5	64QAM	25	0	21.12	21.01	20.89	20.97	23.3	



Band 38							
Ann 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.20	21.19	21.08	22.4
20	QPSK	1	49	21.22	21.22	21.12	
20	QPSK	1	99	21.21	21.20	21.07	22.4
20	QPSK	50	0	21.28	21.29	21.22	
20	QPSK	50	24	21.40	21.30	21.25	22.4
20	QPSK	50	50	21.36	21.34	21.23	
20	QPSK	100	0	21.37	21.30	21.27	22.4
20	16QAM	1	0	21.34	21.31	21.23	
20	16QAM	1	49	21.33	21.34	21.22	22.4
20	16QAM	1	99	21.37	21.32	21.19	
20	16QAM	50	0	21.33	21.34	21.24	22.4
20	16QAM	50	24	21.45	21.34	21.30	
20	16QAM	50	50	21.41	21.40	21.28	22.4
20	16QAM	100	0	21.42	21.32	21.30	
20	64QAM	1	0	21.04	21.02	20.91	22.4
20	64QAM	1	49	21.05	21.06	20.98	
20	64QAM	1	99	21.07	21.09	20.90	22.4
20	64QAM	50	0	21.35	21.34	21.25	
20	64QAM	50	24	21.41	21.35	21.32	22.4
20	64QAM	50	50	21.42	21.38	21.28	
20	64QAM	100	0	21.40	21.34	21.30	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.17	21.17	21.06	22.4
15	QPSK	1	37	21.17	21.15	21.04	
15	QPSK	1	74	21.17	21.19	21.03	22.4
15	QPSK	36	0	21.38	21.29	21.17	
15	QPSK	36	20	21.34	21.27	21.15	22.4
15	QPSK	36	39	21.36	21.34	21.22	
15	QPSK	75	0	21.36	21.27	21.15	22.4
15	16QAM	1	0	21.34	21.33	21.25	
15	16QAM	1	37	21.26	21.25	21.18	22.4
15	16QAM	1	74	21.37	21.36	21.21	
15	16QAM	36	0	21.37	21.26	21.13	22.4
15	16QAM	36	20	21.34	21.25	21.12	
15	16QAM	36	39	21.35	21.29	21.20	22.4
15	16QAM	75	0	21.37	21.28	21.21	
15	64QAM	1	0	20.97	20.98	20.89	22.4
15	64QAM	1	37	21.06	21.04	20.93	
15	64QAM	1	74	21.08	21.06	20.92	22.4
15	64QAM	36	0	21.42	21.32	21.20	
15	64QAM	36	20	21.38	21.26	21.14	22.4
15	64QAM	36	39	21.38	21.35	21.24	
15	64QAM	75	0	21.38	21.30	21.20	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.06	21.03	21.00	22.4
10	QPSK	1	25	21.12	21.13	20.94	
10	QPSK	1	49	21.17	21.10	21.01	22.4
10	QPSK	25	0	21.31	21.28	21.17	
10	QPSK	25	12	21.28	21.21	21.08	22.4
10	QPSK	25	25	21.35	21.31	21.15	
10	QPSK	50	0	21.29	21.17	21.13	22.4
10	16QAM	1	0	21.29	21.28	21.20	
10	16QAM	1	25	21.24	21.23	21.10	22.4
10	16QAM	1	49	21.35	21.34	21.12	
10	16QAM	25	0	21.32	21.20	21.13	22.4
10	16QAM	25	12	21.27	21.24	21.07	
10	16QAM	25	25	21.27	21.29	21.10	22.4
10	16QAM	50	0	21.34	21.27	21.15	
10	64QAM	1	0	20.97	20.92	20.80	22.4
10	64QAM	1	25	21.04	20.97	20.83	
10	64QAM	1	49	21.02	20.96	20.86	22.4
10	64QAM	25	0	21.37	21.24	21.11	
10	64QAM	25	12	21.33	21.16	21.09	22.4
10	64QAM	25	25	21.37	21.26	21.22	
10	64QAM	50	0	21.28	21.27	21.15	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.11	21.17	20.98	22.4
5	QPSK	1	12	21.20	21.21	21.05	
5	QPSK	1	24	21.16	21.17	21.07	22.4
5	QPSK	12	0	21.24	21.24	21.22	
5	QPSK	12	7	21.37	21.22	21.17	22.4
5	QPSK	12	13	21.31	21.27	21.23	
5	QPSK	25	0	21.27	21.27	21.24	22.4
5	16QAM	1	0	21.31	21.27	21.13	
5	16QAM	1	12	21.24	21.24	21.20	22.4
5	16QAM	1	24	21.32	21.22	21.11	
5	16QAM	12	0	21.32	21.32	21.17	22.4
5	16QAM	12	7	21.24	21.32	21.30	
5	16QAM	12	13	21.34	21.33	21.26	22.4
5	16QAM	25	0	21.32	21.23	21.20	
5	64QAM	1	0	20.99	20.94	20.88	22.4
5	64QAM	1	12	20.96	21.06	20.92	
5	64QAM	1	24	21.02	21.07	20.91	22.4
5	64QAM	12	0	21.33	21.34	21.25	
5	64QAM	12	7	21.38	21.34	21.22	22.4
5	64QAM	12	13	21.38	21.32	21.19	
5	64QAM	25	0	21.40	21.25	21.21	



Band 41										
Ann 9										
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				39790	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	20.96	20.95	21.07	20.71	20.50		
20	QPSK	1	49	20.97	20.98	20.99	20.96	20.82	22.4	
20	QPSK	1	99	20.93	20.97	21.08	20.52	20.69		
20	QPSK	50	0	21.05	21.06	21.09	20.94	20.74		
20	QPSK	50	24	21.12	21.16	21.16	21.06	20.88		
20	QPSK	50	50	21.09	21.14	21.15	20.90	20.87	22.4	
20	QPSK	100	0	21.12	21.15	21.14	20.96	20.80		
20	16QAM	1	0	21.15	21.06	21.21	20.74	20.49	22.4	
20	16QAM	1	49	21.05	21.07	21.10	21.07	20.88		
20	16QAM	1	99	21.13	21.12	21.23	20.55	20.79		
20	16QAM	50	0	21.10	21.08	21.11	20.97	20.76		
20	16QAM	50	24	21.16	21.18	21.21	21.08	20.82	22.4	
20	16QAM	50	50	21.15	21.18	21.17	20.93	20.90		
20	16QAM	100	0	21.16	21.18	21.16	20.99	20.83		
20	64QAM	1	0	20.82	20.73	20.82	20.50	20.50		
20	64QAM	1	49	20.79	20.79	20.84	20.85	20.65	22.4	
20	64QAM	1	99	20.84	20.84	20.91	20.50	20.54		
20	64QAM	50	0	20.80	20.76	20.79	20.89	20.70		
20	64QAM	50	24	20.87	20.86	20.90	21.03	20.83	22.4	
20	64QAM	50	50	20.83	20.86	20.88	20.84	20.79		
20	64QAM	100	0	20.84	20.84	20.86	20.92	20.76		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2546.3	2593	2637.6	2682.5		
15	QPSK	1	0	20.97	20.94	21.00	20.84	20.57		
15	QPSK	1	37	20.94	20.94	20.97	20.69	20.77	22.4	
15	QPSK	1	74	20.90	21.05	21.08	20.73	20.75		
15	QPSK	36	0	21.12	21.04	21.08	20.94	20.79		
15	QPSK	36	20	21.10	21.14	21.13	20.97	20.92	22.4	
15	QPSK	36	39	21.07	21.12	21.14	20.95	20.88		
15	QPSK	75	0	21.12	21.13	21.15	20.83	20.83	22.4	
15	16QAM	1	0	21.17	21.13	21.18	20.92	20.86		
15	16QAM	1	37	21.01	21.02	21.03	20.96	20.90	22.4	
15	16QAM	1	74	21.10	21.20	21.20	20.79	20.89		
15	16QAM	36	0	21.11	21.02	21.08	20.91	20.74		
15	16QAM	36	20	21.11	21.11	21.12	20.94	20.84	22.4	
15	16QAM	36	39	21.07	21.11	21.11	20.83	20.86		
15	16QAM	75	0	21.16	21.17	21.19	20.94	20.86		
15	64QAM	1	0	20.81	20.73	20.76	20.81	20.50	22.4	
15	64QAM	1	37	20.80	20.81	20.83	20.79	20.61		
15	64QAM	1	74	20.82	20.91	20.95	20.51	20.83		
15	64QAM	36	0	20.80	20.77	20.77	20.67	20.71	22.4	
15	64QAM	36	20	20.81	20.84	20.85	20.91	20.82		
15	64QAM	36	39	20.78	20.84	20.84	20.86	20.82		
15	64QAM	75	0	20.84	20.84	20.87	20.85	20.78		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	20.93	20.89	20.96	20.77	20.55		
10	QPSK	1	25	20.90	20.84	20.89	20.93	20.75	22.4	
10	QPSK	1	49	20.85	20.97	21.00	20.65	20.67		
10	QPSK	25	0	21.02	20.96	21.07	20.91	20.70		
10	QPSK	25	12	21.08	21.08	21.05	20.90	20.84	22.4	
10	QPSK	25	25	21.03	21.03	21.09	20.95	20.80		
10	QPSK	50	0	21.02	21.10	21.15	20.85	20.75		
10	16QAM	1	0	21.11	21.13	21.14	20.82	20.57	22.4	
10	16QAM	1	25	21.00	20.96	20.94	20.93	20.87		
10	16QAM	1	49	21.00	21.13	21.18	20.79	20.85		
10	16QAM	25	0	21.05	20.99	21.07	20.81	20.72	22.4	
10	16QAM	25	12	21.02	21.08	21.05	20.91	20.82		
10	16QAM	25	25	21.05	21.05	21.10	20.90	20.77		
10	16QAM	50	0	21.06	21.14	21.13	20.87	20.77	22.4	
10	64QAM	1	0	20.78	20.73	20.72	20.59	20.48		
10	64QAM	1	25	20.80	20.74	20.80	20.69	20.56		
10	64QAM	1	49	20.75	20.86	20.85	20.43	20.55	22.4	
10	64QAM	25	0	20.72	20.76	20.68	20.78	20.71		
10	64QAM	25	12	20.78	20.80	20.81	20.82	20.77		
10	64QAM	25	25	20.73	20.76	20.76	20.84	20.79	22.4	
10	64QAM	50	0	20.74	20.76	20.81	20.83	20.74		
Channel				39675	40148	40620	41093	41695	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2639.3	2684.5		
5	QPSK	1	0	20.97	20.94	21.05	20.62	20.42		
5	QPSK	1	12	20.86	20.96	20.92	20.94	20.82	22.4	
5	QPSK	1	24	20.83	20.94	20.98	20.43	20.66		
5	QPSK	12	0	21.05	21.02	21.04	20.84	20.72		
5	QPSK	12	7	21.08	21.07	21.05	21.06	20.81	22.4	
5	QPSK	12	13	21.03	21.05	21.07	20.89	20.87		
5	QPSK	25	0	21.03	21.15	21.13	20.87	20.79		
5	16QAM	1	0	21.07	20.98	21.17	20.84	20.45	22.4	
5	16QAM	1	12	20.99	21.01	21.01	20.97	20.82		
5	16QAM	1	24	21.05	21.03	21.15	20.55	20.70		
5	16QAM	12	0	21.04	21.00	21.02	20.91	20.71	22.4	
5	16QAM	12	7	21.06	21.18	21.20	21.02	20.84		
5	16QAM	12	13	21.14	21.12	21.12	20.89	20.81		
5	16QAM	25	0	21.14	21.15	21.15	20.92	20.81		
5	64QAM	1	0	20.77	20.67	20.73	20.45	20.46	22.4	
5	64QAM	1	12	20.79	20.70	20.80	20.75	20.61		
5	64QAM	1	24	20.82	20.81	20.82	20.44	20.50		
5	64QAM	12	0	20.73	20.71	20.77	20.79	20.69	22.4	
5	64QAM	12	7	20.82	20.82	20.83	20.99	20.80		
5	64QAM	12	13	20.74	20.77	20.86	20.83	20.74		
5	64QAM	25	0	20.79	20.76	20.84	20.82	20.69		



Band 41 HPUE									
Ann 9									
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				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	22.56	22.49	22.63	22.33	22.30	24.2
20	QPSK	1	49	22.51	22.54	22.54	22.57	22.39	
20	QPSK	1	99	22.53	22.58	22.64	22.30	22.31	
20	QPSK	50	0	22.72	22.71	22.77	22.63	22.46	
20	QPSK	50	24	22.82	22.83	22.87	22.78	22.60	
20	QPSK	50	50	22.76	22.82	22.83	22.61	22.58	
20	QPSK	100	0	22.80	22.81	22.83	22.66	22.50	
20	16QAM	1	0	22.82	22.87	22.98	22.70	22.38	
20	16QAM	1	49	22.85	22.91	22.98	22.87	22.77	24.2
20	16QAM	1	99	22.89	22.91	23.01	22.47	22.66	
20	16QAM	50	0	22.76	22.72	22.78	22.68	22.49	
20	16QAM	50	24	22.82	22.86	22.87	22.82	22.63	
20	16QAM	50	50	22.81	22.84	22.87	22.64	22.62	
20	16QAM	100	0	22.82	22.85	22.87	22.72	22.54	
20	64QAM	1	0	22.73	22.67	22.74	22.47	22.30	
20	64QAM	1	49	22.72	22.76	22.73	22.83	22.63	
20	64QAM	1	99	22.77	22.77	22.85	22.30	22.51	
20	64QAM	50	0	22.57	22.57	22.61	22.68	22.52	
20	64QAM	50	24	22.65	22.70	22.70	22.81	22.61	
20	64QAM	50	50	22.80	22.66	22.69	22.64	22.64	
20	64QAM	100	0	22.84	22.85	22.69	22.73	22.55	
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	22.64	22.62	22.64	22.49	22.25	24.2
15	QPSK	1	37	22.66	22.58	22.67	22.61	22.43	
15	QPSK	1	74	22.57	22.73	22.75	22.37	22.43	
15	QPSK	36	0	22.80	22.74	22.78	22.63	22.49	
15	QPSK	36	20	22.83	22.78	22.86	22.68	22.62	
15	QPSK	36	39	22.76	22.81	22.81	22.68	22.59	
15	QPSK	75	0	22.82	22.82	22.86	22.63	22.54	
15	16QAM	1	0	22.89	22.86	22.94	22.84	22.53	24.2
15	16QAM	1	37	22.85	22.87	22.86	22.93	22.72	
15	16QAM	1	74	22.85	23.00	23.00	22.68	22.76	
15	16QAM	36	0	22.78	22.73	22.70	22.65	22.48	
15	16QAM	36	20	22.77	22.77	22.80	22.68	22.59	
15	16QAM	36	39	22.73	22.77	22.80	22.68	22.61	
15	16QAM	75	0	22.83	22.82	22.86	22.64	22.59	
15	64QAM	1	0	22.70	22.72	22.71	22.64	22.33	
15	64QAM	1	37	22.75	22.73	22.76	22.80	22.59	
15	64QAM	1	74	22.73	22.85	22.89	22.50	22.59	
15	64QAM	36	0	22.81	22.58	22.59	22.71	22.65	
15	64QAM	36	20	22.83	22.63	22.64	22.73	22.65	
15	64QAM	36	39	22.56	22.63	22.65	22.70	22.62	
15	64QAM	75	0	22.84	22.64	22.66	22.66	22.57	
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.55	22.40	22.54	22.28	22.28	24.2
10	QPSK	1	25	22.47	22.51	22.52	22.48	22.28	
10	QPSK	1	49	22.63	22.49	22.63	22.29	22.22	
10	QPSK	25	0	22.69	22.71	22.77	22.63	22.42	
10	QPSK	25	12	22.81	22.75	22.87	22.70	22.57	
10	QPSK	25	25	22.71	22.81	22.76	22.61	22.53	
10	QPSK	50	0	22.79	22.76	22.83	22.65	22.48	
10	16QAM	1	0	22.83	22.84	22.98	22.69	22.32	
10	16QAM	1	25	22.86	22.85	22.89	22.95	22.71	
10	16QAM	1	49	22.89	22.82	22.96	22.38	22.59	
10	16QAM	25	0	22.70	22.70	22.78	22.60	22.40	
10	16QAM	25	12	22.73	22.80	22.82	22.73	22.60	
10	16QAM	25	25	22.81	22.83	22.80	22.58	22.57	
10	16QAM	50	0	22.73	22.79	22.85	22.71	22.53	
10	64QAM	1	0	22.68	22.58	22.70	22.44	22.25	
10	64QAM	1	25	22.62	22.74	22.71	22.74	22.55	
10	64QAM	1	49	22.71	22.77	22.76	22.28	22.45	
10	64QAM	25	0	22.57	22.54	22.60	22.59	22.46	
10	64QAM	25	12	22.62	22.63	22.61	22.79	22.59	
10	64QAM	25	25	22.55	22.62	22.67	22.58	22.54	
10	64QAM	50	0	22.84	22.63	22.67	22.73	22.50	
Channel				39675	40148	40620	41093	41655	
Frequency (MHz)				2498.5	2545.8	2593	2640.0	2687.5	
5	QPSK	1	0	22.56	22.44	22.57	22.33	22.26	24.2
5	QPSK	1	12	22.47	22.54	22.54	22.56	22.30	
5	QPSK	1	24	22.48	22.55	22.63	22.21	22.25	
5	QPSK	12	0	22.66	22.63	22.71	22.56	22.44	
5	QPSK	12	7	22.82	22.77	22.87	22.72	22.65	
5	QPSK	12	13	22.72	22.81	22.74	22.59	22.51	
5	QPSK	25	0	22.72	22.73	22.79	22.66	22.49	
5	16QAM	1	0	22.86	22.85	22.96	22.69	22.35	
5	16QAM	1	12	22.80	22.84	22.89	22.95	22.70	
5	16QAM	1	24	22.84	22.86	22.98	22.39	22.63	
5	16QAM	12	0	22.75	22.71	22.70	22.59	22.48	
5	16QAM	12	7	22.79	22.84	22.84	22.80	22.61	
5	16QAM	12	13	22.79	22.79	22.81	22.56	22.58	
5	16QAM	25	0	22.72	22.81	22.84	22.64	22.53	
5	64QAM	1	0	22.89	22.66	22.73	22.47	22.20	
5	64QAM	1	12	22.68	22.73	22.73	22.61	22.60	24.2
5	64QAM	1	24	22.77	22.76	22.85	22.20	22.41	
5	64QAM	12	0	22.55	22.55	22.51	22.67	22.45	
5	64QAM	12	7	22.59	22.70	22.69	22.80	22.53	
5	64QAM	12	13	22.53	22.62	22.64	22.62	22.61	
5	64QAM	25	0	22.84	22.58	22.68	22.71	22.48	



Band 48									
Ann 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	20.38	20.29	20.20	20.20		
20	QPSK	1	49	20.18	20.07	19.96	19.96		21.7
20	QPSK	1	99	20.14	20.03	19.90	19.89		
20	QPSK	50	0	20.39	20.31	20.19	20.17		
20	QPSK	50	24	20.33	20.15	20.11	20.11		21.2
20	QPSK	50	50	20.21	20.09	19.97	19.96		
20	QPSK	100	0	20.32	20.18	20.11	20.09		
20	16QAM	1	0	20.51	20.44	20.31	20.33		
20	16QAM	1	49	20.28	20.18	20.07	20.06		21.2
20	16QAM	1	99	20.29	20.13	20.03	20.01		
20	16QAM	50	0	19.86	19.72	19.62	19.61		
20	16QAM	50	24	19.81	19.59	19.54	19.53		20.2
20	16QAM	50	50	19.66	19.51	19.40	19.39		
20	16QAM	100	0	19.80	19.66	19.51	19.52		
20	64QAM	1	0	20.19	20.18	20.09	20.06		
20	64QAM	1	49	20.09	19.98	19.87	19.82		20.2
20	64QAM	1	99	20.12	19.96	19.79	19.80		
20	64QAM	50	0	19.79	19.65	19.56	19.53		
20	64QAM	50	24	19.74	19.52	19.47	19.46		19.2
20	64QAM	50	50	19.62	19.47	19.33	19.30		
20	64QAM	100	0	19.84	19.59	19.56	19.57		
Channel				56315	56820	56160	56665	Tune-up limit (dBm)	
Frequency (MHz)				3657.5	3698	3642	3692.5		
15	QPSK	1	0	20.25	20.19	20.08	19.85		
15	QPSK	1	37	20.14	20.04	19.89	19.71		21.7
15	QPSK	1	74	20.11	20.01	19.88	19.70		
15	QPSK	36	0	20.34	20.28	20.14	19.91		
15	QPSK	36	20	20.29	20.20	20.06	19.83		21.2
15	QPSK	36	39	20.18	20.09	19.95	19.78		
15	QPSK	75	0	20.23	20.23	20.08	19.86		
15	16QAM	1	0	20.42	20.36	20.22	20.02		21.2
15	16QAM	1	37	20.23	20.11	19.92	19.78		
15	16QAM	1	74	20.29	20.21	20.06	19.79		
15	16QAM	36	0	19.75	19.64	19.51	19.27		
15	16QAM	36	20	19.72	19.55	19.43	19.21		20.2
15	16QAM	36	39	19.59	19.46	19.33	19.20		
15	16QAM	75	0	19.69	19.64	19.50	19.25		
15	64QAM	1	0	20.22	20.15	20.04	19.78		
15	64QAM	1	37	20.02	19.96	19.80	19.56		20.2
15	64QAM	1	74	20.11	19.97	19.81	19.59		
15	64QAM	36	0	19.80	19.67	19.53	19.32		
15	64QAM	36	20	19.76	19.61	19.48	19.24		19.2
15	64QAM	36	39	19.63	19.48	19.36	19.17		
15	64QAM	75	0	19.70	19.62	19.49	19.25		
Channel				56290	56815	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3556	3597.5	3542.5	3593		
10	QPSK	1	0	20.25	20.15	20.04	19.83		
10	QPSK	1	25	20.12	19.97	19.79	19.72		21.7
10	QPSK	1	49	20.01	20.00	19.87	19.70		
10	QPSK	25	0	20.28	20.19	20.10	19.81		
10	QPSK	25	12	20.22	20.15	20.03	19.81		21.2
10	QPSK	25	25	20.16	20.00	19.90	19.70		
10	QPSK	50	0	20.16	20.20	20.08	19.83		
10	16QAM	1	0	20.40	20.29	20.20	19.94		
10	16QAM	1	25	20.22	20.09	19.84	19.78		21.2
10	16QAM	1	49	20.24	20.19	20.00	19.77		
10	16QAM	25	0	19.71	19.59	19.42	19.25		
10	16QAM	25	12	19.66	19.47	19.42	19.22		20.2
10	16QAM	25	25	19.58	19.39	19.24	19.21		
10	16QAM	50	0	19.69	19.63	19.50	19.22		
10	64QAM	1	0	20.12	20.09	19.97	19.70		
10	64QAM	1	25	19.93	19.88	19.77	19.47		20.2
10	64QAM	1	49	20.07	19.97	19.72	19.57		
10	64QAM	25	0	19.73	19.57	19.43	19.28		
10	64QAM	25	12	19.72	19.59	19.48	19.17		19.2
10	64QAM	25	25	19.54	19.44	19.33	19.08		
10	64QAM	50	0	19.67	19.56	19.39	19.22		
Channel				56265	56810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3597	3543	3597.5		
5	QPSK	1	0	20.26	20.15	20.07	20.21		
5	QPSK	1	12	20.25	20.11	20.04	20.16		21.7
5	QPSK	1	24	20.23	20.03	19.98	20.12		
5	QPSK	12	0	20.37	20.23	20.15	20.30		
5	QPSK	12	7	20.40	20.27	20.11	20.28		21.2
5	QPSK	12	13	20.32	20.24	20.06	20.21		
5	QPSK	25	0	20.34	20.27	20.12	20.23		
5	16QAM	1	0	20.36	20.26	20.26	20.28		
5	16QAM	1	12	20.44	20.32	20.25	20.33		21.2
5	16QAM	1	24	20.38	20.29	20.17	20.24		
5	16QAM	12	0	19.73	19.63	19.61	19.66		
5	16QAM	12	7	19.77	19.65	19.56	19.65		20.2
5	16QAM	12	13	19.73	19.64	19.47	19.57		
5	16QAM	25	0	19.78	19.69	19.57	19.64		
5	64QAM	1	0	20.15	20.08	19.99	20.10		
5	64QAM	1	12	20.16	20.02	20.01	20.07		20.2
5	64QAM	1	24	20.14	20.01	19.91	19.97		
5	64QAM	12	0	19.73	19.64	19.56	19.67		
5	64QAM	12	7	19.77	19.65	19.51	19.62		19.2
5	64QAM	12	13	19.71	19.59	19.51	19.59		
5	64QAM	25	0	19.73	19.64	19.53	19.59		



Band 38						
Ann 2						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	24.95	24.88	24.81
20	QPSK	1	49	24.94	24.82	24.75
20	QPSK	1	99	24.93	24.78	24.75
20	QPSK	50	0	24.19	24.05	23.86
20	QPSK	50	24	24.17	24.04	24.00
20	QPSK	50	50	24.03	24.05	23.91
20	QPSK	100	0	24.11	23.94	23.93
20	16QAM	1	0	24.07	24.04	23.89
20	16QAM	1	49	24.07	23.88	23.82
20	16QAM	1	99	23.95	23.97	23.90
20	16QAM	50	0	23.16	23.06	22.97
20	16QAM	50	24	23.17	23.00	22.93
20	16QAM	50	50	23.08	23.06	22.99
20	16QAM	100	0	23.11	23.01	22.95
20	64QAM	1	0	22.81	22.78	22.67
20	64QAM	1	49	22.71	22.71	22.77
20	64QAM	1	99	22.68	22.82	22.78
20	64QAM	50	0	22.15	22.02	21.92
20	64QAM	50	24	22.14	22.04	22.04
20	64QAM	50	50	22.08	22.09	21.91
20	64QAM	100	0	22.08	21.96	22.05
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	24.92	24.90	24.81
15	QPSK	1	37	24.91	24.87	24.80
15	QPSK	1	74	24.90	24.81	24.78
15	QPSK	36	0	24.18	23.95	23.89
15	QPSK	36	20	24.14	24.00	23.91
15	QPSK	36	39	24.07	24.05	23.90
15	QPSK	75	0	24.06	24.00	23.82
15	16QAM	1	0	24.07	24.03	23.92
15	16QAM	1	37	23.92	23.82	23.86
15	16QAM	1	74	23.98	23.92	23.87
15	16QAM	36	0	23.07	22.98	22.86
15	16QAM	36	20	23.01	22.94	22.81
15	16QAM	36	39	23.04	22.97	22.92
15	16QAM	75	0	23.13	22.97	22.88
15	64QAM	1	0	22.75	22.74	22.75
15	64QAM	1	37	22.74	22.82	22.75
15	64QAM	1	74	22.70	22.71	22.72
15	64QAM	36	0	22.14	22.02	21.86
15	64QAM	36	20	22.08	21.98	21.93
15	64QAM	36	39	22.16	22.03	21.92
15	64QAM	75	0	22.16	21.95	21.86
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	24.91	24.73	24.50
10	QPSK	1	25	24.81	24.78	24.76
10	QPSK	1	49	24.85	24.71	24.65
10	QPSK	25	0	24.13	23.95	23.83
10	QPSK	25	12	24.04	23.87	23.71
10	QPSK	25	25	24.06	23.98	23.79
10	QPSK	50	0	23.99	23.96	23.90
10	16QAM	1	0	24.02	23.97	23.87
10	16QAM	1	25	23.92	23.83	23.72
10	16QAM	1	49	23.88	23.95	23.91
10	16QAM	25	0	23.08	22.91	22.84
10	16QAM	25	12	23.04	22.90	22.89
10	16QAM	25	25	23.02	22.93	22.89
10	16QAM	50	0	23.11	22.95	22.77
10	64QAM	1	0	22.75	22.69	22.69
10	64QAM	1	25	22.70	22.77	22.72
10	64QAM	1	49	22.77	22.78	22.73
10	64QAM	25	0	22.11	21.98	21.85
10	64QAM	25	12	22.11	21.94	21.85
10	64QAM	25	25	22.11	21.98	21.80
10	64QAM	50	0	22.12	21.92	21.84
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	24.90	24.92	24.77
5	QPSK	1	12	24.93	24.92	24.78
5	QPSK	1	24	24.91	24.92	24.76
5	QPSK	12	0	24.16	23.96	23.94
5	QPSK	12	7	24.13	24.04	23.94
5	QPSK	12	13	24.09	24.02	23.96
5	QPSK	25	0	24.17	24.04	23.92
5	16QAM	1	0	24.23	24.02	23.93
5	16QAM	1	12	24.22	24.10	23.95
5	16QAM	1	24	24.19	24.14	24.05
5	16QAM	12	0	23.14	22.96	22.86
5	16QAM	12	7	23.13	23.13	22.93
5	16QAM	12	13	23.12	23.07	22.90
5	16QAM	25	0	23.12	22.99	22.99
5	64QAM	1	0	22.92	22.80	22.74
5	64QAM	1	12	22.93	22.87	22.72
5	64QAM	1	24	22.92	22.95	22.78
5	64QAM	12	0	22.17	22.04	22.00
5	64QAM	12	7	22.21	22.07	22.02
5	64QAM	12	13	22.17	22.10	21.97
5	64QAM	25	0	22.24	22.04	22.00



Band 41									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	40185	40620	41065	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	24.36	24.32	24.31	24.29	24.12	25.7
20	QPSK	1	49	24.33	24.31	24.18	24.57	24.42	
20	QPSK	1	99	24.33	24.30	24.25	24.12	24.27	
20	QPSK	50	0	23.53	23.47	23.29	23.52	23.42	
20	QPSK	50	24	23.54	23.48	23.35	23.57	23.55	
20	QPSK	50	50	23.48	23.44	23.34	23.51	23.50	
20	QPSK	100	0	23.52	23.48	23.36	23.53	23.44	
20	16QAM	1	0	23.52	23.45	23.45	23.44	23.23	24.7
20	16QAM	1	49	23.45	23.43	23.32	23.65	23.52	
20	16QAM	1	99	23.47	23.47	23.35	23.26	23.35	
20	16QAM	50	0	22.56	22.48	22.33	22.56	22.45	
20	16QAM	50	24	22.56	22.51	22.41	22.59	22.54	
20	16QAM	50	50	22.52	22.46	22.36	22.52	22.53	
20	16QAM	100	0	22.54	22.50	22.39	22.49	22.47	
20	64QAM	1	0	22.28	22.14	22.13	22.10	21.88	23.7
20	64QAM	1	49	22.19	22.22	22.04	22.46	22.27	
20	64QAM	1	99	22.19	22.25	22.08	22.02	22.03	
20	64QAM	50	0	21.55	21.50	21.35	21.55	21.44	
20	64QAM	50	24	21.57	21.51	21.40	21.60	21.56	
20	64QAM	50	50	21.52	21.48	21.38	21.50	21.53	
20	64QAM	100	0	21.56	21.50	21.41	21.51	21.47	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	24.36	24.32	24.25	24.42	24.22	25.7
15	QPSK	1	37	24.32	24.25	24.15	24.53	24.39	
15	QPSK	1	74	24.34	24.36	24.27	24.27	24.35	
15	QPSK	36	0	23.41	23.47	23.31	23.53	23.47	
15	QPSK	36	20	23.51	23.45	23.37	23.64	23.51	
15	QPSK	36	39	23.46	23.44	23.33	23.53	23.47	
15	QPSK	75	0	23.50	23.46	23.38	23.58	23.47	
15	16QAM	1	0	23.53	23.48	23.43	23.56	23.36	24.7
15	16QAM	1	37	23.41	23.39	23.25	23.65	23.52	
15	16QAM	1	74	23.49	23.57	23.45	23.46	23.44	
15	16QAM	36	0	22.40	22.46	22.27	22.48	22.40	
15	16QAM	36	20	22.47	22.45	22.33	22.50	22.48	
15	16QAM	36	39	22.45	22.42	22.31	22.53	22.46	
15	16QAM	75	0	22.52	22.48	22.38	22.59	22.49	
15	64QAM	1	0	22.24	22.18	22.07	22.26	22.05	23.7
15	64QAM	1	37	22.22	22.20	22.07	22.42	22.27	
15	64QAM	1	74	22.17	22.34	22.15	22.21	22.16	
15	64QAM	36	0	21.44	21.49	21.34	21.58	21.47	22.7
15	64QAM	36	20	21.54	21.47	21.38	21.65	21.57	
15	64QAM	36	39	21.48	21.48	21.36	21.57	21.51	
15	64QAM	75	0	21.54	21.48	21.39	21.61	21.51	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	24.25	24.32	24.17	24.41	24.12	25.7
10	QPSK	1	25	24.24	24.24	24.09	24.48	24.33	
10	QPSK	1	49	24.29	24.33	24.20	24.21	24.31	
10	QPSK	25	0	23.38	23.37	23.21	23.49	23.39	
10	QPSK	25	12	23.42	23.35	23.29	23.57	23.47	
10	QPSK	25	25	23.39	23.43	23.27	23.48	23.39	
10	QPSK	50	0	23.48	23.43	23.35	23.56	23.41	
10	16QAM	1	0	23.45	23.42	23.33	23.56	23.32	24.7
10	16QAM	1	25	23.37	23.29	23.23	23.64	23.48	
10	16QAM	1	49	23.47	23.47	23.43	23.40	23.41	
10	16QAM	25	0	22.35	22.49	22.21	22.47	22.39	
10	16QAM	25	12	22.45	22.37	22.23	22.52	22.44	
10	16QAM	25	25	22.39	22.40	22.28	22.48	22.44	
10	16QAM	50	0	22.46	22.44	22.28	22.57	22.47	
10	64QAM	1	0	22.18	22.09	22.05	22.19	22.05	23.7
10	64QAM	1	25	22.12	22.20	22.03	22.37	22.24	
10	64QAM	1	49	22.06	22.30	22.07	22.17	22.12	
10	64QAM	25	0	21.37	21.47	21.24	21.55	21.40	22.7
10	64QAM	25	12	21.47	21.38	21.37	21.63	21.47	
10	64QAM	25	25	21.43	21.44	21.26	21.49	21.46	
10	64QAM	50	0	21.50	21.43	21.35	21.58	21.51	
Channel				39675	40148	40620	41093	41655	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	24.48	24.39	24.27	24.54	24.46	25.7
5	QPSK	1	12	24.46	24.39	24.32	24.56	24.43	
5	QPSK	1	24	24.39	24.38	24.25	24.52	24.33	
5	QPSK	12	0	23.57	23.52	23.43	23.64	23.57	
5	QPSK	12	7	23.57	23.52	23.47	23.67	23.56	
5	QPSK	12	13	23.56	23.48	23.44	23.66	23.51	
5	QPSK	25	0	23.55	23.50	23.42	23.63	23.53	
5	16QAM	1	0	23.60	23.53	23.37	23.66	23.59	24.7
5	16QAM	1	12	23.61	23.60	23.51	23.73	23.68	
5	16QAM	1	24	23.61	23.55	23.49	23.68	23.54	
5	16QAM	12	0	22.55	22.49	22.38	22.64	22.52	23.7
5	16QAM	12	7	22.55	22.52	22.43	22.66	22.57	
5	16QAM	12	13	22.53	22.50	22.40	22.65	22.52	
5	16QAM	25	0	22.60	22.54	22.45	22.65	22.58	
5	64QAM	1	0	22.35	22.35	22.18	22.41	22.30	23.7
5	64QAM	1	12	22.38	22.36	22.20	22.47	22.28	
5	64QAM	1	24	22.38	22.38	22.23	22.46	22.23	
5	64QAM	12	0	21.61	21.53	21.50	21.67	21.57	22.7
5	64QAM	12	7	21.63	21.58	21.50	21.70	21.61	
5	64QAM	12	13	21.58	21.57	21.46	21.73	21.54	
5	64QAM	25	0	21.61	21.56	21.46	21.69	21.60	



Band 41 HPUE									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.85	25.94	26.04	26.10	25.81	27.5
20	QPSK	1	49	26.01	26.04	26.01	26.39	26.18	
20	QPSK	1	99	25.92	25.97	25.99	25.89	25.96	26.5
20	QPSK	50	0	25.19	25.21	25.15	25.40	25.22	
20	QPSK	50	24	25.21	25.24	25.21	25.45	25.34	26.5
20	QPSK	50	50	25.18	25.21	25.19	25.34	25.29	
20	QPSK	100	0	25.22	25.22	25.20	25.35	25.24	26.5
20	16QAM	1	0	25.26	25.37	25.40	25.28	25.12	
20	16QAM	1	49	25.27	25.32	25.31	25.69	25.49	26.5
20	16QAM	1	99	25.31	25.32	25.32	25.23	25.28	
20	16QAM	50	0	24.24	24.26	24.18	24.43	24.24	25.5
20	16QAM	50	24	24.24	24.29	24.22	24.50	24.36	
20	16QAM	50	50	24.21	24.26	24.21	24.40	24.30	25.5
20	16QAM	100	0	24.22	24.25	24.22	24.38	24.27	
20	64QAM	1	0	24.15	24.12	24.20	24.26	24.00	25.5
20	64QAM	1	49	24.10	24.16	24.13	24.58	24.38	
20	64QAM	1	99	24.13	24.20	24.17	24.13	24.18	24.5
20	64QAM	50	0	23.26	23.27	23.18	23.45	23.24	
20	64QAM	50	24	23.27	23.28	23.27	23.49	23.37	24.5
20	64QAM	50	50	23.21	23.27	23.23	23.39	23.32	
20	64QAM	100	0	23.26	23.26	23.23	23.38	23.25	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.97	26.01	25.98	26.26	25.97	27.5
15	QPSK	1	37	26.01	25.97	25.98	26.35	26.18	
15	QPSK	1	74	25.97	26.08	26.03	26.12	26.10	26.5
15	QPSK	36	0	25.05	25.18	25.09	25.40	25.23	
15	QPSK	36	20	25.13	25.17	25.13	25.46	25.29	26.5
15	QPSK	36	39	25.12	25.17	25.10	25.36	25.26	
15	QPSK	75	0	25.16	25.17	25.14	25.42	25.25	26.5
15	16QAM	1	0	25.29	25.27	25.23	25.66	25.26	
15	16QAM	1	37	25.21	25.21	25.19	25.63	25.44	26.5
15	16QAM	1	74	25.25	25.34	25.29	25.45	25.32	
15	16QAM	36	0	24.06	24.17	24.05	24.35	24.20	25.5
15	16QAM	36	20	24.13	24.15	24.11	24.47	24.26	
15	16QAM	36	39	24.09	24.14	24.09	24.37	24.23	25.5
15	16QAM	75	0	24.15	24.19	24.15	24.45	24.26	
15	64QAM	1	0	24.10	24.09	24.04	24.37	24.09	25.5
15	64QAM	1	37	24.06	24.10	24.08	24.51	24.29	
15	64QAM	1	74	24.09	24.24	24.14	24.31	24.21	24.5
15	64QAM	36	0	23.08	23.22	23.10	23.40	23.26	
15	64QAM	36	20	23.15	23.20	23.15	23.51	23.34	24.5
15	64QAM	36	39	23.13	23.18	23.14	23.37	23.27	
15	64QAM	75	0	23.16	23.19	23.16	23.45	23.27	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.92	25.92	25.81	26.20	26.11	27.5
10	QPSK	1	25	25.92	25.94	26.00	26.30	26.13	
10	QPSK	1	49	25.97	25.96	25.90	26.26	26.00	26.5
10	QPSK	25	0	25.10	25.11	25.09	25.41	25.24	
10	QPSK	25	12	25.16	25.13	25.12	25.41	25.26	26.5
10	QPSK	25	25	25.10	25.19	25.11	25.49	25.22	
10	QPSK	50	0	25.15	25.18	25.16	25.45	25.26	26.5
10	16QAM	1	0	25.29	25.26	25.20	25.53	25.38	
10	16QAM	1	25	25.26	25.28	25.35	25.67	25.40	26.5
10	16QAM	1	49	25.32	25.29	25.25	25.57	25.40	
10	16QAM	25	0	24.20	24.10	24.13	24.46	24.35	25.5
10	16QAM	25	12	24.25	24.19	24.20	24.45	24.28	
10	16QAM	25	25	24.15	24.19	24.10	24.47	24.21	25.5
10	16QAM	50	0	24.16	24.19	24.12	24.46	24.29	
10	64QAM	1	0	24.20	24.16	24.07	24.48	24.27	25.5
10	64QAM	1	25	24.13	24.17	24.17	24.50	24.33	
10	64QAM	1	49	24.14	24.18	24.21	24.47	24.31	24.5
10	64QAM	25	0	23.21	23.18	23.18	23.44	23.25	
10	64QAM	25	12	23.24	23.32	23.24	23.48	23.36	24.5
10	64QAM	25	25	23.13	23.16	23.20	23.52	23.21	
10	64QAM	50	0	23.18	23.23	23.19	23.44	23.27	
Channel				39675	40148	40620	41093	41555	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	26.01	26.01	25.91	26.29	26.11	27.5
5	QPSK	1	12	26.02	26.03	26.02	26.38	26.14	
5	QPSK	1	24	25.99	26.02	25.96	26.31	26.04	26.5
5	QPSK	12	0	25.16	25.19	25.16	25.44	25.31	
5	QPSK	12	7	25.19	25.23	25.19	25.47	25.27	26.5
5	QPSK	12	13	25.18	25.20	25.16	25.52	25.29	
5	QPSK	25	0	25.16	25.18	25.18	25.46	25.27	26.5
5	16QAM	1	0	25.38	25.36	25.30	25.61	25.46	
5	16QAM	1	12	25.33	25.34	25.37	25.68	25.45	26.5
5	16QAM	1	24	25.36	25.39	25.35	25.65	25.43	
5	16QAM	12	0	24.20	24.20	24.21	24.51	24.36	25.5
5	16QAM	12	7	24.27	24.24	24.24	24.53	24.32	
5	16QAM	12	13	24.20	24.21	24.18	24.55	24.28	25.5
5	16QAM	25	0	24.18	24.26	24.20	24.49	24.34	
5	64QAM	1	0	24.26	24.24	24.15	24.51	24.37	25.5
5	64QAM	1	12	24.20	24.24	24.23	24.59	24.36	
5	64QAM	1	24	24.04	24.23	24.21	24.54	24.31	24.5
5	64QAM	12	0	23.23	23.28	23.21	23.50	23.35	
5	64QAM	12	7	23.25	23.32	23.27	23.50	23.37	24.5
5	64QAM	12	13	23.22	23.26	23.23	23.54	23.31	
5	64QAM	25	0	23.20	23.29	23.24	23.53	23.37	



Band 48									
Ann 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	24.21	24.24	24.10	24.13		25.2
20	QPSK	1	49	24.02	24.05	23.89	23.89		
20	QPSK	1	99	23.99	23.98	23.84	23.82		
20	QPSK	50	0	23.24	23.27	23.16	23.16		
20	QPSK	50	24	23.21	23.13	23.07	23.07		
20	QPSK	50	50	23.05	23.08	22.94	22.94		24.2
20	QPSK	100	0	23.15	23.18	23.10	23.10		
20	16QAM	1	0	23.33	23.38	23.25	23.28		
20	16QAM	1	49	23.12	23.15	22.98	22.98		24.2
20	16QAM	1	99	23.10	23.09	22.96	22.96		
20	16QAM	50	0	22.27	22.28	22.19	22.20		
20	16QAM	50	24	22.23	22.17	22.13	22.14		23.2
20	16QAM	50	50	22.08	22.11	21.97	21.97		
20	16QAM	100	0	22.21	22.14	22.12	22.10		
20	64QAM	1	0	22.04	22.12	22.00	22.00		
20	64QAM	1	49	21.86	21.87	21.78	21.75		23.2
20	64QAM	1	99	21.83	21.79	21.65	21.68		
20	64QAM	50	0	21.27	21.30	21.19	21.19		
20	64QAM	50	24	21.23	21.17	21.15	21.14		22.2
20	64QAM	50	50	21.09	21.11	20.98	20.98		
20	64QAM	100	0	21.21	21.17	21.12	21.12		
Channel				56315	56820	56160	56665		
Frequency (MHz)				3657.5	3688	3642	3692.5		
15	QPSK	1	0	24.20	24.16	24.05	24.07		25.2
15	QPSK	1	37	23.95	24.02	23.86	23.84		
15	QPSK	1	74	23.98	23.92	23.78	23.81		
15	QPSK	36	0	23.23	23.25	23.06	23.10		
15	QPSK	36	20	23.14	23.07	23.00	23.04		24.2
15	QPSK	36	39	23.03	23.04	22.91	22.90		
15	QPSK	75	0	23.09	23.07	23.07	23.04		
15	16QAM	1	0	23.29	23.28	23.18	23.24		24.2
15	16QAM	1	37	23.08	23.14	22.97	22.92		
15	16QAM	1	74	23.06	23.00	22.89	22.91		
15	16QAM	36	0	22.18	22.23	22.13	22.13		23.2
15	16QAM	36	20	22.18	22.10	22.13	22.13		
15	16QAM	36	39	22.04	22.01	21.92	21.91		
15	16QAM	75	0	22.16	22.14	22.05	22.03		
15	64QAM	1	0	21.97	22.09	21.93	21.97		23.2
15	64QAM	1	37	21.82	21.86	21.76	21.70		
15	64QAM	1	74	21.80	21.77	21.56	21.67		
15	64QAM	36	0	21.20	21.30	21.10	21.13		
15	64QAM	36	20	21.21	21.09	21.05	21.05		22.2
15	64QAM	36	39	21.05	21.09	20.94	20.88		
15	64QAM	75	0	21.21	21.10	21.09	21.11		
Channel				56290	56815	56165	56690		
Frequency (MHz)				3595	3607.5	3642.5	3695		
10	QPSK	1	0	24.11	24.17	24.02	24.12		25.2
10	QPSK	1	25	24.02	23.99	23.87	23.79		
10	QPSK	1	49	23.94	23.90	23.75	23.72		
10	QPSK	25	0	23.14	23.20	23.09	23.13		
10	QPSK	25	12	23.11	23.08	23.04	22.97		24.2
10	QPSK	25	25	22.97	23.03	22.86	22.86		
10	QPSK	50	0	23.17	23.05	23.03	23.05		
10	16QAM	1	0	23.27	23.29	23.17	23.28		24.2
10	16QAM	1	25	23.06	23.11	22.97	22.90		
10	16QAM	1	49	23.00	23.01	22.94	22.86		
10	16QAM	25	0	22.21	22.24	22.15	22.11		
10	16QAM	25	12	22.19	22.17	22.10	22.14		23.2
10	16QAM	25	25	22.08	22.09	21.88	21.88		
10	16QAM	50	0	22.12	22.08	22.11	22.00		
10	64QAM	1	0	22.02	22.07	21.95	21.90		
10	64QAM	1	25	21.86	21.79	21.77	21.71		23.2
10	64QAM	1	49	21.80	21.70	21.57	21.55		
10	64QAM	25	0	21.16	21.26	21.15	21.10		
10	64QAM	25	12	21.23	21.12	21.12	21.08		22.2
10	64QAM	25	25	21.06	21.01	20.98	20.94		
10	64QAM	50	0	21.13	21.09	21.09	21.05		
Channel				56265	56810	56170	56715		
Frequency (MHz)				3524.5	3607	3643	3697.5		
5	QPSK	1	0	24.12	24.19	24.10	24.10		25.2
5	QPSK	1	12	23.99	23.99	23.86	23.79		
5	QPSK	1	24	23.99	23.96	23.80	23.80		
5	QPSK	12	0	23.17	23.22	23.09	23.09		
5	QPSK	12	7	23.11	23.10	23.04	23.00		24.2
5	QPSK	12	13	22.95	23.05	22.92	22.87		
5	QPSK	25	0	23.09	23.04	23.02	23.00		
5	16QAM	1	0	23.32	23.30	23.19	23.18		24.2
5	16QAM	1	12	23.04	23.13	22.97	22.93		
5	16QAM	1	24	23.10	23.07	22.94	22.87		
5	16QAM	12	0	22.25	22.21	22.09	22.20		23.2
5	16QAM	12	7	22.16	22.09	22.03	22.12		
5	16QAM	12	13	22.01	22.11	21.96	21.88		
5	16QAM	25	0	22.15	22.10	22.04	22.10		
5	64QAM	1	0	21.96	22.10	21.91	21.90		23.2
5	64QAM	1	12	21.86	21.85	21.75	21.67		
5	64QAM	1	24	21.77	21.72	21.57	21.64		
5	64QAM	12	0	21.19	21.23	21.19	21.15		
5	64QAM	12	7	21.15	21.17	21.11	21.07		22.2
5	64QAM	12	13	21.06	21.11	20.89	20.97		
5	64QAM	25	0	21.16	21.09	21.02	21.02		



Band 38						
Ann 0						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	24.16	24.06	24.03
20	QPSK	1	49	24.08	24.02	23.96
20	QPSK	1	99	24.06	23.99	23.92
20	QPSK	50	0	23.25	23.14	23.06
20	QPSK	50	24	23.26	23.15	23.11
20	QPSK	50	50	23.20	23.14	23.07
20	QPSK	100	0	23.23	23.10	23.11
20	16QAM	1	0	23.23	23.16	23.06
20	16QAM	1	49	23.16	23.12	23.03
20	16QAM	1	99	23.14	23.12	23.01
20	16QAM	50	0	22.29	22.16	22.07
20	16QAM	50	24	22.25	22.14	22.13
20	16QAM	50	50	22.24	22.17	22.09
20	16QAM	100	0	22.25	22.13	22.11
20	64QAM	1	0	21.55	21.88	21.77
20	64QAM	1	49	21.90	21.84	21.75
20	64QAM	1	99	21.88	21.83	21.72
20	64QAM	50	0	21.30	21.18	21.09
20	64QAM	50	24	21.27	21.13	21.14
20	64QAM	50	50	21.26	21.19	21.10
20	64QAM	100	0	21.26	21.13	21.12
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	24.09	24.04	23.96
15	QPSK	1	37	24.03	24.01	23.91
15	QPSK	1	74	24.07	24.02	23.92
15	QPSK	36	0	23.25	23.12	23.03
15	QPSK	36	20	23.24	23.08	23.01
15	QPSK	36	39	23.19	23.15	23.04
15	QPSK	75	0	23.21	23.08	23.02
15	16QAM	1	0	23.23	23.17	23.10
15	16QAM	1	37	23.06	23.03	22.98
15	16QAM	1	74	23.19	23.14	23.06
15	16QAM	36	0	22.22	22.10	22.02
15	16QAM	36	20	22.20	22.05	21.96
15	16QAM	36	39	22.16	22.11	22.02
15	16QAM	75	0	22.25	22.11	22.03
15	64QAM	1	0	21.88	21.84	21.73
15	64QAM	1	37	21.94	21.84	21.77
15	64QAM	1	74	21.89	21.83	21.73
15	64QAM	36	0	21.26	21.14	21.07
15	64QAM	36	20	21.24	21.10	21.00
15	64QAM	36	39	21.25	21.17	21.06
15	64QAM	75	0	21.25	21.12	21.03
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	24.09	23.99	23.91
10	QPSK	1	25	24.00	23.96	23.91
10	QPSK	1	49	24.03	24.01	23.91
10	QPSK	25	0	23.15	23.12	23.01
10	QPSK	25	12	23.19	23.07	22.99
10	QPSK	25	25	23.10	23.13	22.99
10	QPSK	50	0	23.11	23.03	22.95
10	16QAM	1	0	23.13	23.08	23.03
10	16QAM	1	25	23.04	22.97	22.94
10	16QAM	1	49	23.10	23.08	23.02
10	16QAM	25	0	22.17	22.00	21.97
10	16QAM	25	12	22.13	21.98	21.91
10	16QAM	25	25	22.10	22.06	22.00
10	16QAM	50	0	22.20	22.02	21.99
10	64QAM	1	0	21.86	21.76	21.70
10	64QAM	1	25	21.92	21.79	21.70
10	64QAM	1	49	21.85	21.75	21.70
10	64QAM	25	0	21.19	21.12	21.05
10	64QAM	25	12	21.18	21.08	21.00
10	64QAM	25	25	21.19	21.11	21.01
10	64QAM	50	0	21.17	21.04	21.01
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	24.15	24.05	23.94
5	QPSK	1	12	24.09	24.02	23.94
5	QPSK	1	24	24.10	23.99	23.95
5	QPSK	12	0	23.21	23.11	23.08
5	QPSK	12	7	23.26	23.20	23.06
5	QPSK	12	13	23.20	23.18	23.05
5	QPSK	25	0	23.25	23.09	23.06
5	16QAM	1	0	23.28	23.17	23.11
5	16QAM	1	12	23.28	23.26	23.18
5	16QAM	1	24	23.28	23.22	23.12
5	16QAM	12	0	22.21	22.09	22.05
5	16QAM	12	7	22.23	22.13	22.06
5	16QAM	12	13	22.18	22.13	22.02
5	16QAM	25	0	22.24	22.14	22.10
5	64QAM	1	0	21.80	21.74	21.70
5	64QAM	1	12	21.90	21.84	21.76
5	64QAM	1	24	21.81	21.82	21.70
5	64QAM	12	0	21.27	21.07	20.97
5	64QAM	12	7	21.20	21.02	20.91
5	64QAM	12	13	21.19	21.14	21.05
5	64QAM	25	0	21.19	21.02	20.97



Band 41									
Ann 9									
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				39790	40185	40620	41065	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	23.94	23.81	23.87	23.85	23.52	25.7
20	QPSK	1	49	23.85	23.79	23.76	24.08	23.88	
20	QPSK	1	99	23.84	23.79	23.82	23.88	23.75	24.7
20	QPSK	50	0	23.05	22.96	22.85	23.02	22.86	
20	QPSK	50	24	23.06	22.97	22.93	23.06	22.98	24.7
20	QPSK	50	50	22.88	22.94	22.90	22.98	22.93	
20	QPSK	100	0	23.04	22.96	22.91	23.05	22.89	24.7
20	16QAM	1	0	23.09	22.93	22.99	22.98	22.83	
20	16QAM	1	49	22.97	22.92	22.87	23.18	22.98	23.7
20	16QAM	1	99	22.97	22.97	22.94	22.70	22.84	
20	16QAM	50	0	22.08	22.00	21.90	22.06	21.87	23.7
20	16QAM	50	24	22.10	22.01	21.96	22.08	22.01	
20	16QAM	50	50	22.03	21.98	21.94	22.01	21.96	23.7
20	16QAM	100	0	22.06	21.98	21.95	21.99	21.91	
20	64QAM	1	0	21.82	21.86	21.88	21.89	21.40	23.7
20	64QAM	1	49	21.73	21.71	21.65	21.83	21.80	
20	64QAM	1	99	21.74	21.75	21.66	21.43	21.61	22.7
20	64QAM	50	0	21.10	21.02	20.92	21.07	20.90	
20	64QAM	50	24	21.11	21.01	20.97	21.12	20.99	22.7
20	64QAM	50	50	21.02	20.98	20.95	21.03	20.96	
20	64QAM	100	0	21.07	21.01	20.98	21.01	20.93	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	23.90	23.82	23.79	23.94	23.70	25.7
15	QPSK	1	37	23.85	23.76	23.72	24.02	23.86	
15	QPSK	1	74	23.84	23.86	23.84	23.77	23.82	24.7
15	QPSK	36	0	22.83	22.95	22.85	23.06	22.90	
15	QPSK	36	20	23.02	22.91	22.91	23.12	22.99	24.7
15	QPSK	36	39	22.88	22.94	22.89	23.03	22.95	
15	QPSK	75	0	23.03	22.95	22.93	23.07	22.95	24.7
15	16QAM	1	0	23.08	22.98	22.98	23.10	22.76	
15	16QAM	1	37	22.93	22.90	22.82	23.13	22.96	23.7
15	16QAM	1	74	23.00	23.05	23.00	22.94	22.95	
15	16QAM	36	0	21.95	21.93	21.82	22.01	21.85	23.7
15	16QAM	36	20	22.03	21.90	21.89	22.09	21.95	
15	16QAM	36	39	21.97	21.91	21.86	22.00	21.92	23.7
15	16QAM	75	0	22.05	21.97	21.93	22.09	21.96	
15	64QAM	1	0	21.79	21.79	21.73	21.76	21.71	23.7
15	64QAM	1	37	21.74	21.72	21.70	21.90	21.73	
15	64QAM	1	74	21.74	21.86	21.71	21.75	21.78	22.7
15	64QAM	36	0	20.97	20.99	20.90	21.07	20.82	
15	64QAM	36	20	21.02	20.97	20.93	21.14	21.01	22.7
15	64QAM	36	39	21.01	20.97	20.94	21.07	20.96	
15	64QAM	75	0	21.09	20.97	20.94	21.11	20.95	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	23.88	23.75	23.72	23.84	23.10	25.7
10	QPSK	1	25	23.83	23.70	23.70	23.94	23.84	
10	QPSK	1	49	23.75	23.78	23.84	23.77	23.74	24.7
10	QPSK	25	0	22.81	22.91	22.82	23.04	22.89	
10	QPSK	25	12	22.82	22.81	22.91	23.02	22.97	24.7
10	QPSK	25	25	22.89	22.86	22.87	22.84	22.86	
10	QPSK	50	0	22.94	22.85	22.92	23.05	22.95	24.7
10	16QAM	1	0	23.04	22.97	22.92	23.05	22.70	
10	16QAM	1	25	22.83	22.90	22.72	23.12	22.87	24.7
10	16QAM	1	49	22.83	23.00	22.99	22.92	22.87	
10	16QAM	25	0	21.81	21.92	21.74	21.91	21.85	23.7
10	16QAM	25	12	22.01	21.81	21.85	22.06	21.85	
10	16QAM	25	25	21.94	21.89	21.78	21.88	21.83	23.7
10	16QAM	50	0	21.97	21.96	21.86	22.02	21.91	
10	64QAM	1	0	21.76	21.70	21.74	21.79	21.71	23.7
10	64QAM	1	25	21.72	21.77	21.75	21.81	21.77	
10	64QAM	1	49	21.70	21.79	21.70	21.79	21.70	22.7
10	64QAM	25	0	20.87	20.83	20.80	21.07	20.84	
10	64QAM	25	12	20.99	20.88	20.92	21.10	20.97	22.7
10	64QAM	25	25	20.97	20.87	20.89	21.00	20.92	
10	64QAM	50	0	21.03	20.87	20.84	21.08	20.89	
Channel				39675	40148	40620	41093	41655	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.0	2687.5	
5	QPSK	1	0	24.04	23.87	23.79	24.02	23.88	25.7
5	QPSK	1	12	23.95	23.87	23.86	24.04	23.88	
5	QPSK	1	24	23.88	23.85	23.81	24.02	23.79	24.7
5	QPSK	12	0	23.08	22.88	22.96	23.15	23.03	
5	QPSK	12	7	23.09	23.01	22.95	23.17	23.02	24.7
5	QPSK	12	13	23.07	22.96	22.95	23.17	23.03	
5	QPSK	25	0	23.08	22.98	22.92	23.12	22.98	24.7
5	16QAM	1	0	23.12	22.99	22.92	23.13	23.02	
5	16QAM	1	12	23.15	23.03	23.04	23.26	23.11	24.7
5	16QAM	1	24	23.14	23.00	23.00	23.18	23.01	
5	16QAM	12	0	22.07	21.97	21.94	22.11	22.03	23.7
5	16QAM	12	7	22.09	22.01	21.97	22.13	22.00	
5	16QAM	12	13	22.06	21.98	21.95	22.12	21.97	23.7
5	16QAM	25	0	22.14	22.03	21.99	22.14	22.02	
5	64QAM	1	0	21.83	21.95	21.88	21.91	21.88	23.7
5	64QAM	1	12	21.88	21.84	21.86	22.00	21.90	
5	64QAM	1	24	21.94	22.02	21.86	21.95	21.88	22.7
5	64QAM	12	0	21.16	21.13	21.04	21.27	21.06	
5	64QAM	12	7	21.14	21.10	21.13	21.25	21.20	22.7
5	64QAM	12	13	21.18	21.13	21.06	21.19	21.11	
5	64QAM	25	0	21.27	21.15	21.08	21.21	21.08	



Band 41 HPUE										
Ann 9										
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				39790	40185	40620	41065	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.71	25.60	25.64	25.74	25.50		
20	QPSK	1	49	25.74	25.66	25.64	25.64	25.66	27.5	
20	QPSK	1	99	25.61	25.58	25.61	25.50	25.64		
20	QPSK	50	0	24.93	24.86	24.76	25.02	24.88		
20	QPSK	50	24	24.94	24.85	24.84	25.09	25.00		
20	QPSK	50	50	24.86	24.83	24.82	25.01	24.97	26.5	
20	QPSK	100	0	24.82	24.86	24.83	24.95	24.90		
20	16QAM	1	0	25.07	24.95	25.03	25.13	24.75	26.5	
20	16QAM	1	49	24.95	24.95	24.92	25.34	25.14		
20	16QAM	1	99	24.97	24.92	24.94	24.82	24.98		
20	16QAM	50	0	23.94	23.89	23.79	24.07	23.89		
20	16QAM	50	24	23.96	23.91	23.87	24.11	24.01	25.5	
20	16QAM	50	50	23.91	23.88	23.86	24.01	23.98		
20	16QAM	100	0	23.97	23.86	23.87	23.98	23.94	25.5	
20	64QAM	1	0	23.88	23.75	23.80	23.88	23.64		
20	64QAM	1	49	23.80	23.79	23.74	24.20	23.99	25.5	
20	64QAM	1	99	23.82	23.80	23.79	23.70	23.86		
20	64QAM	50	0	22.99	22.89	22.81	23.09	22.93		
20	64QAM	50	24	22.96	22.91	22.86	23.10	23.03	24.5	
20	64QAM	50	50	22.92	22.89	22.86	23.05	23.01		
20	64QAM	100	0	22.96	22.90	22.87	23.01	22.94	Tune-up limit (dBm)	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.80	25.70	25.65	25.91	25.65		
15	QPSK	1	37	25.76	25.54	25.60	25.62	25.84	27.5	
15	QPSK	1	74	25.69	25.76	25.72	25.74	25.79		
15	QPSK	36	0	24.83	24.86	24.75	25.05	24.90		
15	QPSK	36	20	24.91	24.82	24.82	25.12	24.99	26.5	
15	QPSK	36	39	24.86	24.82	24.80	25.02	24.95		
15	QPSK	75	0	24.93	24.94	24.83	25.08	24.95	26.5	
15	16QAM	1	0	25.08	25.00	24.98	25.21	24.97		
15	16QAM	1	37	24.97	24.91	24.83	25.28	25.15	26.5	
15	16QAM	1	74	24.95	25.03	24.98	25.06	25.08		
15	16QAM	36	0	23.84	23.86	23.75	24.04	23.87		
15	16QAM	36	20	23.89	23.83	23.80	24.12	23.96	25.5	
15	16QAM	36	39	23.85	23.83	23.77	24.02	23.96		
15	16QAM	75	0	23.94	23.87	23.82	24.10	23.95	25.5	
15	64QAM	1	0	23.87	23.76	23.70	24.04	23.77		
15	64QAM	1	37	23.86	23.79	23.71	24.19	23.97	25.5	
15	64QAM	1	74	23.84	23.89	23.82	23.90	23.95		
15	64QAM	36	0	22.86	22.87	22.77	23.08	22.84		
15	64QAM	36	20	22.96	22.85	22.82	23.16	23.01	24.5	
15	64QAM	36	39	22.92	22.85	22.81	23.04	22.97		
15	64QAM	75	0	22.95	22.88	22.86	23.10	22.96	Tune-up limit (dBm)	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.80	25.66	25.54	25.82	25.61		
10	QPSK	1	25	25.72	25.61	25.64	25.89	25.85	27.5	
10	QPSK	1	49	25.67	25.68	25.58	25.97	25.69		
10	QPSK	25	0	24.83	24.78	24.87	25.13	25.03		
10	QPSK	25	12	25.00	24.86	24.87	25.12	24.99	26.5	
10	QPSK	25	25	24.92	24.93	24.79	25.15	24.99		
10	QPSK	50	0	24.92	24.76	24.88	25.11	25.00	26.5	
10	16QAM	1	0	25.12	25.05	24.90	25.26	25.10		
10	16QAM	1	25	25.12	24.95	24.93	25.25	25.18	26.5	
10	16QAM	1	49	25.16	24.97	25.02	25.30	25.05		
10	16QAM	25	0	24.00	23.85	23.84	24.11	23.98	25.5	
10	16QAM	25	12	24.07	23.95	23.87	24.13	24.10		
10	16QAM	25	25	23.91	23.85	23.85	24.12	24.00	25.5	
10	16QAM	50	0	23.92	23.84	23.91	24.17	24.06		
10	64QAM	1	0	24.05	23.82	23.86	24.20	24.06	25.5	
10	64QAM	1	25	23.93	23.85	23.91	24.20	24.03		
10	64QAM	1	49	23.97	23.95	23.86	24.15	24.04	25.5	
10	64QAM	25	0	23.02	22.86	22.90	23.12	23.08		
10	64QAM	25	12	23.04	22.96	22.94	23.14	23.02	24.5	
10	64QAM	25	25	22.94	22.94	22.91	23.21	23.01		
10	64QAM	50	0	22.97	22.96	22.84	23.10	23.03	Tune-up limit (dBm)	
Channel				39675	40148	40620	41093	41655		
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	25.84	25.69	25.61	25.94	25.85		
5	QPSK	1	12	25.82	25.68	25.74	26.03	25.87	27.5	
5	QPSK	1	24	25.77	25.68	25.66	25.98	25.75		
5	QPSK	12	0	24.99	24.87	24.88	25.18	25.07		
5	QPSK	12	7	25.00	24.91	24.90	25.20	25.06	26.5	
5	QPSK	12	13	24.98	24.89	24.87	25.24	25.00		
5	QPSK	25	0	24.98	24.88	24.88	25.14	25.02	26.5	
5	16QAM	1	0	25.19	25.05	24.98	25.29	25.18		
5	16QAM	1	12	25.14	25.05	25.03	25.35	25.18	26.5	
5	16QAM	1	24	25.16	25.05	25.05	25.31	25.13		
5	16QAM	12	0	24.02	23.90	23.92	24.20	24.07	25.5	
5	16QAM	12	7	24.07	23.95	23.96	24.23	24.13		
5	16QAM	12	13	24.01	23.92	23.90	24.21	24.04	25.5	
5	16QAM	25	0	24.02	23.94	23.91	24.20	24.10		
5	64QAM	1	0	24.06	23.91	23.87	24.20	24.07	25.5	
5	64QAM	1	12	24.03	23.92	23.91	24.25	24.07		
5	64QAM	1	24	24.04	23.95	23.94	24.22	24.05	25.5	
5	64QAM	12	0	23.07	22.94	22.92	23.22	23.13		
5	64QAM	12	7	23.05	22.98	22.95	23.24	23.11	24.5	
5	64QAM	12	13	23.03	22.94	22.94	23.26	23.07		
5	64QAM	25	0	23.04	22.97	22.93	23.20	23.09	Tune-up limit (dBm)	



Band 48									
Ann 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	21.79	21.71	21.58	21.42	22.3	
20	QPSK	1	49	21.57	21.45	21.36	21.12	22.3	
20	QPSK	1	99	21.53	21.43	21.28	21.03	22.3	
20	QPSK	50	0	20.81	20.67	20.59	20.38	21.3	
20	QPSK	50	24	20.78	20.68	20.53	20.31	21.3	
20	QPSK	50	50	20.63	20.49	20.36	20.11	21.3	
20	QPSK	100	0	20.78	20.58	20.49	20.30	21.3	
20	16QAM	1	0	20.82	20.80	20.71	20.54	21.3	
20	16QAM	1	49	20.65	20.53	20.42	20.22	21.3	
20	16QAM	1	99	20.69	20.53	20.39	20.15	21.3	
20	16QAM	50	0	19.87	19.73	19.62	19.41	20.3	
20	16QAM	50	24	19.81	19.57	19.54	19.33	20.3	
20	16QAM	50	50	19.68	19.51	19.39	19.15	20.3	
20	16QAM	100	0	19.80	19.58	19.54	19.33	20.3	
20	64QAM	1	0	19.63	19.57	19.46	19.27	20.3	
20	64QAM	1	49	19.42	19.31	19.19	18.97	20.3	
20	64QAM	1	99	19.39	19.24	19.13	18.85	20.3	
20	64QAM	50	0	18.87	18.73	18.63	18.41	19.3	
20	64QAM	50	24	18.82	18.61	18.56	18.33	19.3	
20	64QAM	50	50	18.69	18.53	18.40	18.15	19.3	
20	64QAM	100	0	18.81	18.58	18.55	18.31	19.3	
Channel				55315	55820	56160	56655		
Frequency (MHz)				3577.5	3608	3642	3692.5		
15	QPSK	1	0	21.67	21.60	21.50	21.28	22.3	
15	QPSK	1	37	21.53	21.46	21.30	21.05	22.3	
15	QPSK	1	74	21.54	21.45	21.31	21.02	22.3	
15	QPSK	36	0	20.81	20.68	20.54	20.32	21.3	
15	QPSK	36	20	20.74	20.62	20.49	20.24	21.3	
15	QPSK	36	39	20.64	20.49	20.35	20.17	21.3	
15	QPSK	75	0	20.68	20.64	20.51	20.24	21.3	
15	16QAM	1	0	20.77	20.76	20.60	20.41	21.3	
15	16QAM	1	37	20.61	20.51	20.33	20.14	21.3	
15	16QAM	1	74	20.72	20.60	20.46	20.19	21.3	
15	16QAM	36	0	19.77	19.65	19.53	19.29	20.3	
15	16QAM	36	20	19.74	19.60	19.45	19.20	20.3	
15	16QAM	36	39	19.63	19.49	19.32	19.14	20.3	
15	16QAM	75	0	19.71	19.65	19.52	19.24	20.3	
15	64QAM	1	0	19.58	19.51	19.39	19.12	20.3	
15	64QAM	1	37	19.42	19.34	19.19	18.96	20.3	
15	64QAM	1	74	19.43	19.29	19.16	18.87	20.3	
15	64QAM	36	0	18.83	18.70	18.57	18.34	19.3	
15	64QAM	36	20	18.77	18.63	18.50	18.26	19.3	
15	64QAM	36	39	18.66	18.51	18.37	18.17	19.3	
15	64QAM	75	0	18.72	18.66	18.52	18.26	19.3	
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3597.5	3643	3695		
10	QPSK	1	0	21.66	21.62	21.49	21.26	22.3	
10	QPSK	1	25	21.45	21.38	21.26	21.05	22.3	
10	QPSK	1	49	21.51	21.41	21.26	20.95	22.3	
10	QPSK	25	0	20.75	20.64	20.44	20.31	21.3	
10	QPSK	25	12	20.67	20.52	20.48	20.15	21.3	
10	QPSK	25	25	20.59	20.48	20.33	20.12	21.3	
10	QPSK	50	0	20.63	20.62	20.42	20.14	21.3	
10	16QAM	1	0	20.76	20.67	20.51	20.35	21.3	
10	16QAM	1	25	20.58	20.47	20.33	20.05	21.3	
10	16QAM	1	49	20.72	20.54	20.42	20.11	21.3	
10	16QAM	25	0	19.70	19.56	19.43	19.29	20.3	
10	16QAM	25	12	19.64	19.57	19.45	19.14	20.3	
10	16QAM	25	25	19.62	19.45	19.28	19.11	20.3	
10	16QAM	50	0	19.64	19.59	19.52	19.20	20.3	
10	64QAM	1	0	19.50	19.51	19.37	19.12	20.3	
10	64QAM	1	25	19.42	19.31	19.13	18.95	20.3	
10	64QAM	1	49	19.43	19.22	19.11	18.84	20.3	
10	64QAM	25	0	18.81	18.68	18.47	18.27	19.3	
10	64QAM	25	12	18.77	18.55	18.41	18.22	19.3	
10	64QAM	25	25	18.56	18.49	18.31	18.15	19.3	
10	64QAM	50	0	18.62	18.63	18.48	18.23	19.3	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3524.5	3597	3643	3697.5		
5	QPSK	1	0	21.65	21.58	21.51	21.57	22.3	
5	QPSK	1	12	21.61	21.51	21.45	21.52	22.3	
5	QPSK	1	24	21.53	21.43	21.39	21.47	22.3	
5	QPSK	12	0	20.77	20.64	20.64	20.70	21.3	
5	QPSK	12	7	20.77	20.67	20.58	20.67	21.3	
5	QPSK	12	13	20.70	20.65	20.52	20.62	21.3	
5	QPSK	25	0	20.72	20.63	20.53	20.63	21.3	
5	16QAM	1	0	20.73	20.70	20.63	20.69	21.3	
5	16QAM	1	12	20.82	20.72	20.64	20.74	21.3	
5	16QAM	1	24	20.73	20.63	20.54	20.62	21.3	
5	16QAM	12	0	19.74	19.67	19.62	19.65	20.3	
5	16QAM	12	7	19.77	19.65	19.58	19.66	20.3	
5	16QAM	12	13	19.70	19.59	19.50	19.60	20.3	
5	16QAM	25	0	19.77	19.70	19.56	19.65	20.3	
5	64QAM	1	0	19.52	19.47	19.42	19.47	20.3	
5	64QAM	1	12	19.52	19.41	19.36	19.47	20.3	
5	64QAM	1	24	19.54	19.42	19.34	19.37	20.3	
5	64QAM	12	0	18.79	18.74	18.68	18.74	19.3	
5	64QAM	12	7	18.83	18.69	18.62	18.70	19.3	
5	64QAM	12	13	18.77	18.67	18.55	18.66	19.3	
5	64QAM	25	0	18.79	18.70	18.58	18.70	19.3	





Band 38							
Ann 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2585	2610	
20	QPSK	1	0	24.48	24.44	24.35	25.1
20	QPSK	1	49	24.49	24.48	24.36	
20	QPSK	1	99	24.48	24.44	24.35	
20	QPSK	50	0	24.07	24.08	23.96	24.7
20	QPSK	50	24	24.19	24.09	24.05	
20	QPSK	50	50	24.15	24.08	24.02	
20	QPSK	100	0	24.16	24.03	24.03	24.7
20	16QAM	1	0	24.09	24.04	23.97	
20	16QAM	1	49	24.07	24.02	23.95	
20	16QAM	1	99	24.07	24.01	23.93	23.7
20	16QAM	50	0	23.11	23.10	22.99	
20	16QAM	50	24	23.19	23.07	23.07	
20	16QAM	50	50	23.18	23.13	23.03	23.7
20	16QAM	100	0	23.18	23.07	23.05	
20	64QAM	1	0	22.80	22.75	22.68	
20	64QAM	1	49	22.82	22.75	22.69	23.7
20	64QAM	1	99	22.81	22.76	22.64	
20	64QAM	50	0	22.12	22.10	22.00	
20	64QAM	50	24	22.20	22.09	22.09	22.7
20	64QAM	50	50	22.18	22.14	22.06	
20	64QAM	100	0	22.20	22.08	22.07	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2585	2612.5	
15	QPSK	1	0	24.47	24.43	24.26	25.1
15	QPSK	1	37	24.47	24.46	24.35	
15	QPSK	1	74	24.43	24.38	24.34	
15	QPSK	36	0	24.03	24.00	23.93	24.7
15	QPSK	36	20	24.18	23.98	24.01	
15	QPSK	36	39	24.09	24.03	24.00	
15	QPSK	75	0	24.11	23.99	23.97	24.7
15	16QAM	1	0	24.06	24.04	23.93	
15	16QAM	1	37	24.05	24.01	23.88	
15	16QAM	1	74	24.00	24.01	23.91	23.7
15	16QAM	36	0	23.04	23.00	22.96	
15	16QAM	36	20	23.15	23.03	23.03	
15	16QAM	36	39	23.11	23.12	23.00	23.7
15	16QAM	75	0	23.15	22.98	23.02	
15	64QAM	1	0	22.79	22.70	22.67	
15	64QAM	1	37	22.75	22.72	22.60	23.7
15	64QAM	1	74	22.79	22.67	22.61	
15	64QAM	36	0	22.07	22.02	21.91	
15	64QAM	36	20	22.18	22.08	22.08	22.7
15	64QAM	36	39	22.10	22.05	21.98	
15	64QAM	75	0	22.18	22.04	22.03	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2585	2615	
10	QPSK	1	0	24.46	24.33	24.25	25.1
10	QPSK	1	25	24.42	24.40	24.35	
10	QPSK	1	49	24.39	24.39	24.35	
10	QPSK	25	0	24.00	24.03	23.92	24.7
10	QPSK	25	12	24.15	23.95	24.03	
10	QPSK	25	25	24.05	24.09	24.00	
10	QPSK	50	0	24.14	23.98	23.93	24.7
10	16QAM	1	0	24.09	23.99	23.90	
10	16QAM	1	25	24.03	24.02	23.88	
10	16QAM	1	49	24.06	23.91	23.87	23.7
10	16QAM	25	0	23.07	23.09	22.93	
10	16QAM	25	12	23.14	23.08	23.02	
10	16QAM	25	25	23.13	23.09	22.94	23.7
10	16QAM	50	0	23.13	23.02	23.05	
10	64QAM	1	0	22.76	22.75	22.65	
10	64QAM	1	25	22.73	22.74	22.66	23.7
10	64QAM	1	49	22.79	22.70	22.57	
10	64QAM	25	0	22.06	22.02	21.94	
10	64QAM	25	12	22.19	22.06	22.06	22.7
10	64QAM	25	25	22.09	22.04	22.04	
10	64QAM	50	0	22.18	22.02	22.01	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2585	2617.5	
5	QPSK	1	0	24.41	24.40	24.28	25.1
5	QPSK	1	12	24.44	24.45	24.32	
5	QPSK	1	24	24.38	24.38	24.26	
5	QPSK	12	0	24.06	24.03	23.94	24.7
5	QPSK	12	7	24.11	23.95	24.03	
5	QPSK	12	13	24.08	24.08	23.99	
5	QPSK	25	0	24.12	24.03	24.02	24.7
5	16QAM	1	0	24.06	23.98	23.91	
5	16QAM	1	12	24.04	23.97	23.91	
5	16QAM	1	24	24.05	23.97	23.89	23.7
5	16QAM	12	0	23.05	23.08	22.96	
5	16QAM	12	7	23.17	23.05	23.06	
5	16QAM	12	13	23.11	23.11	22.98	23.7
5	16QAM	25	0	23.12	23.05	22.98	
5	64QAM	1	0	22.79	22.65	22.61	
5	64QAM	1	12	22.73	22.71	22.67	23.7
5	64QAM	1	24	22.72	22.74	22.56	
5	64QAM	12	0	22.02	22.10	21.96	
5	64QAM	12	7	22.12	22.04	22.02	22.7
5	64QAM	12	13	22.10	22.10	22.06	
5	64QAM	25	0	22.13	21.98	21.99	



Band 41									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	24.23	24.38	24.45	24.14	23.88	25.1
20	QPSK	1	49	24.21	24.35	24.33	24.40	24.10	
20	QPSK	1	99	24.22	24.37	24.43	24.00	24.09	24.7
20	QPSK	50	0	23.79	23.94	23.94	24.05	23.90	
20	QPSK	50	24	23.90	24.07	24.16	24.15	24.02	24.7
20	QPSK	50	50	23.88	24.04	24.01	24.07	24.01	
20	QPSK	100	0	23.89	24.05	24.01	24.10	23.97	24.7
20	16QAM	1	0	23.80	23.95	24.05	23.94	23.87	
20	16QAM	1	49	23.80	23.95	23.92	24.23	24.04	24.7
20	16QAM	1	99	23.84	24.03	24.00	23.79	23.87	
20	16QAM	50	0	22.82	22.96	22.97	23.09	22.93	23.7
20	16QAM	50	24	22.81	23.09	23.05	23.22	23.06	
20	16QAM	50	50	22.90	23.07	23.04	23.08	23.02	23.7
20	16QAM	100	0	22.90	23.06	23.02	23.11	22.97	
20	64QAM	1	0	22.51	22.60	22.65	22.60	22.35	23.7
20	64QAM	1	49	22.51	22.71	22.68	22.99	22.79	
20	64QAM	1	99	22.56	22.76	22.68	22.53	22.55	22.7
20	64QAM	50	0	21.82	21.98	21.98	22.09	21.93	
20	64QAM	50	24	21.83	22.07	22.07	22.21	22.06	22.7
20	64QAM	50	50	21.82	22.07	22.05	22.06	22.03	
20	64QAM	100	0	21.91	22.08	22.04	22.14	21.96	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	24.16	24.23	24.44	24.13	23.82	25.1
15	QPSK	1	37	24.11	24.31	24.25	24.32	24.22	
15	QPSK	1	74	24.21	24.34	24.40	23.97	24.02	24.7
15	QPSK	36	0	23.75	23.94	23.86	24.04	23.85	
15	QPSK	36	20	23.89	23.99	23.94	24.16	23.92	24.7
15	QPSK	36	39	23.80	24.03	24.00	23.98	23.98	
15	QPSK	75	0	23.99	23.99	24.01	24.08	23.95	24.7
15	16QAM	1	0	23.70	23.86	24.03	23.89	23.58	
15	16QAM	1	37	23.75	23.89	23.83	24.14	23.98	23.7
15	16QAM	1	74	23.79	23.98	23.97	23.78	23.81	
15	16QAM	36	0	22.79	22.88	22.89	23.03	22.84	23.7
15	16QAM	36	20	22.83	23.00	23.01	23.15	22.98	
15	16QAM	36	39	22.80	23.06	23.04	23.00	22.95	23.7
15	16QAM	75	0	22.89	23.05	22.92	23.04	22.95	
15	64QAM	1	0	22.44	22.53	22.58	22.54	22.29	23.7
15	64QAM	1	37	22.41	22.68	22.59	22.94	22.72	
15	64QAM	1	74	22.48	22.71	22.59	22.43	22.51	22.7
15	64QAM	36	0	21.77	21.98	21.95	22.07	21.88	
15	64QAM	36	20	21.85	22.01	22.05	22.15	21.98	22.7
15	64QAM	36	39	21.87	22.01	21.95	22.06	22.03	
15	64QAM	75	0	21.86	22.02	21.98	22.10	21.95	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	24.20	24.32	24.38	24.11	23.83	25.1
10	QPSK	1	25	24.15	24.28	24.28	24.38	24.22	
10	QPSK	1	49	24.13	24.30	24.38	23.91	24.05	24.7
10	QPSK	25	0	23.89	23.91	23.90	23.98	23.84	
10	QPSK	25	12	23.81	24.01	23.97	24.19	23.93	24.7
10	QPSK	25	25	23.81	24.03	23.98	23.97	23.94	
10	QPSK	50	0	23.83	23.96	23.96	24.06	23.96	24.7
10	16QAM	1	0	23.80	23.88	23.97	23.86	23.65	
10	16QAM	1	25	23.74	23.95	23.87	24.17	24.02	24.7
10	16QAM	1	49	23.78	23.95	23.94	23.71	23.87	
10	16QAM	25	0	22.79	22.94	22.94	23.09	22.96	23.7
10	16QAM	25	12	22.80	23.07	22.95	23.14	22.98	
10	16QAM	25	25	22.90	23.03	23.00	23.00	23.02	23.7
10	16QAM	50	0	22.81	23.02	22.97	23.05	22.94	
10	64QAM	1	0	22.43	22.59	22.64	22.52	22.35	23.7
10	64QAM	1	25	22.43	22.65	22.68	22.96	22.73	
10	64QAM	1	49	22.46	22.70	22.60	22.82	22.50	22.7
10	64QAM	25	0	21.73	21.85	21.95	22.07	21.88	
10	64QAM	25	12	21.85	22.03	22.01	22.15	21.98	22.7
10	64QAM	25	25	21.82	21.97	22.01	21.98	21.99	
10	64QAM	50	0	21.87	21.99	21.99	22.14	21.90	
Channel				39675	40148	40620	41093	41655	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	24.16	24.23	24.40	24.14	23.78	25.1
5	QPSK	1	12	24.17	24.33	24.30	24.30	24.22	
5	QPSK	1	24	24.13	24.31	24.43	23.91	24.05	24.7
5	QPSK	12	0	23.72	23.88	23.92	23.99	23.84	
5	QPSK	12	7	23.81	24.05	24.00	24.15	24.02	24.7
5	QPSK	12	13	23.82	24.01	23.94	23.99	23.99	
5	QPSK	25	0	23.86	23.97	23.99	24.05	23.92	24.7
5	16QAM	1	0	23.71	23.90	23.98	23.89	23.61	
5	16QAM	1	12	23.79	23.91	23.86	24.18	24.03	24.7
5	16QAM	1	24	23.83	23.99	23.90	23.74	23.79	
5	16QAM	12	0	22.79	22.89	22.93	23.06	22.86	23.7
5	16QAM	12	7	22.81	22.99	23.01	23.22	23.04	
5	16QAM	12	13	22.90	23.05	23.03	22.99	22.84	23.7
5	16QAM	25	0	22.81	22.96	22.99	23.07	22.95	
5	64QAM	1	0	22.51	22.59	22.65	22.52	22.35	23.7
5	64QAM	1	12	22.46	22.66	22.65	22.83	22.69	
5	64QAM	1	24	22.54	22.71	22.65	22.50	22.47	22.7
5	64QAM	12	0	21.81	21.90	21.89	22.07	21.85	
5	64QAM	12	7	21.83	21.99	22.07	22.16	22.03	22.7
5	64QAM	12	13	21.82	22.05	22.01	22.04	22.02	
5	64QAM	25	0	21.90	22.03	22.01	22.05	21.91	



Band 41 HPUE									
Ann 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	40185	40620	41055	41490	
Frequency (MHz)				2596	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.76	25.92	26.00	25.74	25.50	26.9
20	QPSK	1	49	25.76	25.92	25.89	25.99	25.81	
20	QPSK	1	99	25.83	26.00	26.01	25.88	25.70	26.4
20	QPSK	50	0	25.86	25.73	25.73	25.96	25.82	
20	QPSK	50	24	25.67	25.84	25.98	25.94	25.95	26.4
20	QPSK	50	50	25.66	25.83	25.81	25.96	25.88	
20	QPSK	100	0	25.88	25.84	25.81	26.01	25.85	26.4
20	16QAM	1	0	25.72	25.96	26.00	25.93	25.69	
20	16QAM	1	49	25.74	25.93	25.91	26.23	26.92	26.4
20	16QAM	1	99	25.72	25.99	25.93	25.81	25.86	
20	16QAM	50	0	24.61	24.75	24.78	24.99	24.83	25.4
20	16QAM	50	24	24.71	24.86	24.85	25.14	24.96	
20	16QAM	50	50	24.67	24.87	24.83	24.99	24.94	25.4
20	16QAM	100	0	24.68	24.86	24.84	25.03	24.90	
20	64QAM	1	0	24.58	24.94	24.66	24.76	24.54	25.4
20	64QAM	1	49	24.82	24.74	24.71	25.09	24.58	
20	64QAM	1	99	24.82	24.82	24.79	24.66	23.81	24.4
20	64QAM	50	0	23.59	23.77	23.75	23.99	23.58	
20	64QAM	50	24	23.69	23.86	23.84	24.15	23.40	24.4
20	64QAM	50	50	23.68	23.87	23.83	24.01	23.15	
20	64QAM	100	0	23.70	23.86	23.83	24.05	23.28	
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2593.5	2546.3	2593	2637.6	2682.5	
15	QPSK	1	0	25.71	25.90	26.00	25.68	25.51	26.9
15	QPSK	1	37	25.67	25.89	25.82	25.91	25.81	
15	QPSK	1	74	25.82	25.92	25.92	25.58	25.69	26.4
15	QPSK	36	0	25.83	25.67	25.70	25.86	25.78	
15	QPSK	36	20	25.67	25.84	25.95	25.91	25.90	26.4
15	QPSK	36	39	25.62	25.81	25.71	25.86	25.79	
15	QPSK	75	0	25.60	25.82	25.76	25.97	25.84	26.4
15	16QAM	1	0	25.83	25.85	25.87	25.92	25.84	
15	16QAM	1	37	25.74	25.89	25.85	26.17	26.00	26.4
15	16QAM	1	74	25.67	25.96	25.87	25.77	25.84	
15	16QAM	36	0	24.54	24.73	24.75	24.93	24.75	25.4
15	16QAM	36	20	24.71	24.77	24.82	25.13	24.93	
15	16QAM	36	39	24.65	24.86	24.77	24.92	24.87	25.4
15	16QAM	75	0	24.61	24.83	24.82	25.00	24.89	
15	64QAM	1	0	24.50	24.59	24.56	24.73	24.46	25.4
15	64QAM	1	37	24.64	24.66	24.67	25.09	24.50	
15	64QAM	1	74	24.54	24.75	24.76	24.59	23.73	24.4
15	64QAM	36	0	23.61	23.70	23.72	23.91	23.46	
15	64QAM	36	20	23.65	23.82	23.79	24.12	23.40	24.4
15	64QAM	36	39	23.60	23.80	23.75	23.95	23.12	
15	64QAM	75	0	23.70	23.84	23.74	23.98	23.22	
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2591	2547	2593	2639	2685	
10	QPSK	1	0	25.75	25.89	25.94	25.66	25.52	26.9
10	QPSK	1	25	25.72	25.84	25.79	25.94	25.76	
10	QPSK	1	49	25.77	25.91	26.01	25.49	25.70	26.4
10	QPSK	25	0	25.46	25.67	25.72	25.91	25.74	
10	QPSK	25	12	25.59	25.81	25.89	25.86	25.85	26.4
10	QPSK	25	25	25.61	25.77	25.76	25.90	25.79	
10	QPSK	50	0	25.60	25.82	25.71	25.91	25.76	26.4
10	16QAM	1	0	25.82	25.80	25.94	25.85	25.61	
10	16QAM	1	25	25.73	25.92	25.91	26.15	25.97	26.4
10	16QAM	1	49	25.71	25.93	25.84	25.75	25.78	
10	16QAM	25	0	24.61	24.73	24.72	24.96	24.82	25.4
10	16QAM	25	12	24.63	24.84	24.82	25.04	24.86	
10	16QAM	25	25	24.84	24.77	24.79	24.89	24.84	25.4
10	16QAM	50	0	24.60	24.86	24.74	24.96	24.82	
10	64QAM	1	0	24.65	24.60	24.56	24.69	24.49	25.4
10	64QAM	1	25	24.56	24.74	24.69	25.08	24.50	
10	64QAM	1	49	24.65	24.79	24.71	24.61	23.76	24.4
10	64QAM	25	0	23.59	23.73	23.75	23.97	23.61	
10	64QAM	25	12	23.59	23.86	23.84	24.13	23.39	24.4
10	64QAM	25	25	23.64	23.79	23.80	23.94	23.12	
10	64QAM	50	0	23.68	23.83	23.82	24.02	23.21	
Channel				39675	40148	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.0	2687.5	
5	QPSK	1	0	25.69	25.88	25.92	25.70	25.53	26.9
5	QPSK	1	12	25.68	25.84	25.82	25.93	25.80	
5	QPSK	1	24	25.83	25.91	26.01	25.53	25.60	26.4
5	QPSK	12	0	25.54	25.65	25.64	25.95	25.72	
5	QPSK	12	7	25.60	25.82	25.97	25.94	26.88	26.4
5	QPSK	12	13	25.59	25.76	25.76	25.92	25.97	
5	QPSK	25	0	25.60	25.76	25.73	25.92	25.82	26.4
5	16QAM	1	0	25.83	25.81	25.92	25.84	25.69	
5	16QAM	1	12	25.64	25.85	25.83	26.15	25.97	26.4
5	16QAM	1	24	25.68	25.95	25.84	25.71	25.81	
5	16QAM	12	0	24.67	24.65	24.72	24.99	24.74	25.4
5	16QAM	12	7	24.69	24.77	24.83	25.12	24.87	
5	16QAM	12	13	24.58	24.82	24.81	24.93	24.87	25.4
5	16QAM	25	0	24.63	24.78	24.82	24.97	24.81	
5	64QAM	1	0	24.52	24.60	24.62	24.66	24.47	25.4
5	64QAM	1	12	24.67	24.67	24.64	25.01	24.53	
5	64QAM	1	24	24.59	24.76	24.74	24.56	23.77	24.4
5	64QAM	12	0	23.52	23.74	23.71	23.90	23.56	
5	64QAM	12	7	23.62	23.85	23.81	24.08	23.40	24.4
5	64QAM	12	13	23.64	23.83	23.76	23.95	23.12	
5	64QAM	25	0	23.60	23.85	23.80	23.96	23.16	



Band 48									
Ann 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	22.80	22.72	22.60	22.45		
20	QPSK	1	49	22.59	22.48	22.31	22.10		23.8
20	QPSK	1	99	22.55	22.41	22.25	22.04		
20	QPSK	50	0	22.80	22.73	22.58	22.33		
20	QPSK	50	24	22.77	22.67	22.50	22.25		23.3
20	QPSK	50	50	22.61	22.48	22.34	22.09		
20	QPSK	100	0	22.76	22.57	22.51	22.24		
20	16QAM	1	0	22.82	22.81	22.67	22.43		
20	16QAM	1	49	22.68	22.55	22.37	22.15		23.3
20	16QAM	1	99	22.66	22.50	22.35	22.10		
20	16QAM	50	0	22.13	22.04	21.89	21.65		
20	16QAM	50	24	22.09	21.89	21.80	21.59		22.3
20	16QAM	50	50	21.93	21.82	21.66	21.41		
20	16QAM	100	0	22.06	21.89	21.80	21.55		
20	64QAM	1	0	21.92	21.85	21.72	21.46		
20	64QAM	1	49	21.76	21.62	21.46	21.32		22.3
20	64QAM	1	99	21.68	21.52	21.38	21.31		
20	64QAM	50	0	21.15	21.08	20.90	20.66		
20	64QAM	50	24	21.10	20.91	20.83	20.57		21.3
20	64QAM	50	50	20.95	20.82	20.66	20.42		
20	64QAM	100	0	21.09	20.88	20.82	20.56		
Channel				55315	55820	56160	56655		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	22.72	22.69	22.50	22.21		
15	QPSK	1	37	22.57	22.47	22.29	22.03		23.8
15	QPSK	1	74	22.57	22.46	22.24	22.01		
15	QPSK	36	0	22.80	22.70	22.52	22.29		
15	QPSK	36	20	22.76	22.66	22.48	22.20		23.3
15	QPSK	36	39	22.62	22.51	22.33	22.15		
15	QPSK	75	0	22.66	22.56	22.47	22.24		
15	16QAM	1	0	22.86	22.76	22.61	22.32		
15	16QAM	1	37	22.61	22.47	22.30	22.05		23.3
15	16QAM	1	74	22.69	22.59	22.40	22.16		
15	16QAM	36	0	22.05	21.95	21.80	21.54		
15	16QAM	36	20	21.99	21.90	21.72	21.47		22.3
15	16QAM	36	39	21.87	21.77	21.59	21.44		
15	16QAM	75	0	21.97	21.88	21.79	21.53		
15	64QAM	1	0	21.86	21.81	21.63	21.36		
15	64QAM	1	37	21.74	21.64	21.42	21.19		22.3
15	64QAM	1	74	21.71	21.59	21.38	21.15		
15	64QAM	36	0	21.12	21.02	20.85	20.59		
15	64QAM	36	20	21.05	20.95	20.77	20.51		21.3
15	64QAM	36	39	20.93	20.82	20.63	20.47		
15	64QAM	75	0	20.99	20.94	20.77	20.52		
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	22.49	22.45	22.49	22.16		
10	QPSK	1	25	22.49	22.44	22.20	21.94		23.8
10	QPSK	1	49	22.57	22.36	22.23	21.91		
10	QPSK	25	0	22.76	22.69	22.46	22.29		
10	QPSK	25	12	22.72	22.64	22.41	22.16		23.3
10	QPSK	25	25	22.58	22.48	22.28	22.08		
10	QPSK	50	0	22.56	22.51	22.43	22.22		
10	16QAM	1	0	22.76	22.66	22.60	22.27		
10	16QAM	1	25	22.60	22.38	22.22	21.98		23.3
10	16QAM	1	49	22.61	22.55	22.34	22.09		
10	16QAM	25	0	22.00	21.90	21.71	21.46		
10	16QAM	25	12	21.91	21.81	21.70	21.42		22.3
10	16QAM	25	25	21.79	21.75	21.65	21.43		
10	16QAM	50	0	21.87	21.91	21.71	21.47		
10	64QAM	1	0	21.85	21.80	21.55	21.31		
10	64QAM	1	25	21.73	21.59	21.38	21.10		22.3
10	64QAM	1	49	21.66	21.51	21.30	21.12		
10	64QAM	25	0	21.07	20.96	20.75	20.52		
10	64QAM	25	12	20.95	20.87	20.74	20.44		21.3
10	64QAM	25	25	20.84	20.74	20.60	20.41		
10	64QAM	50	0	20.93	20.85	20.68	20.43		
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	22.66	22.54	22.50	22.55		
5	QPSK	1	12	22.63	22.50	22.44	22.53		23.8
5	QPSK	1	24	22.57	22.51	22.36	22.48		
5	QPSK	12	0	22.78	22.62	22.60	22.69		
5	QPSK	12	7	22.77	22.65	22.56	22.67		23.3
5	QPSK	12	13	22.75	22.63	22.53	22.63		
5	QPSK	25	0	22.72	22.64	22.51	22.62		
5	16QAM	1	0	22.77	22.70	22.61	22.73		
5	16QAM	1	12	22.84	22.71	22.67	22.78		23.3
5	16QAM	1	24	22.76	22.66	22.53	22.61		
5	16QAM	12	0	22.04	21.91	21.89	21.96		
5	16QAM	12	7	22.08	21.93	21.81	21.95		22.3
5	16QAM	12	13	22.04	21.92	21.75	21.90		
5	16QAM	25	0	22.06	21.97	21.84	21.95		
5	64QAM	1	0	21.87	21.75	21.67	21.79		
5	64QAM	1	12	21.82	21.72	21.67	21.76		22.3
5	64QAM	1	24	21.85	21.74	21.58	21.71		
5	64QAM	12	0	21.08	20.97	20.94	21.00		
5	64QAM	12	7	21.11	21.00	20.88	21.01		21.3
5	64QAM	12	13	21.10	20.99	20.84	20.92		
5	64QAM	25	0	21.12	21.01	20.89	20.97		



Band 38							
Ann 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.20	21.19	21.08	22.4
20	QPSK	1	49	21.22	21.22	21.12	
20	QPSK	1	99	21.21	21.20	21.07	
20	QPSK	50	0	21.28	21.29	21.22	22.4
20	QPSK	50	24	21.40	21.30	21.25	
20	QPSK	50	50	21.36	21.34	21.23	
20	QPSK	100	0	21.37	21.30	21.27	22.4
20	16QAM	1	0	21.34	21.31	21.23	
20	16QAM	1	49	21.33	21.34	21.22	
20	16QAM	1	99	21.37	21.32	21.19	22.4
20	16QAM	50	0	21.33	21.34	21.24	
20	16QAM	50	24	21.45	21.34	21.30	
20	16QAM	50	50	21.41	21.40	21.28	22.4
20	16QAM	100	0	21.42	21.32	21.30	
20	64QAM	1	0	21.04	21.02	20.91	
20	64QAM	1	49	21.05	21.06	20.98	22.4
20	64QAM	1	99	21.07	21.09	20.90	
20	64QAM	50	0	21.35	21.34	21.25	
20	64QAM	50	24	21.41	21.35	21.32	22.4
20	64QAM	50	50	21.42	21.38	21.28	
20	64QAM	100	0	21.40	21.34	21.30	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.17	21.17	21.06	22.4
15	QPSK	1	37	21.17	21.15	21.04	
15	QPSK	1	74	21.17	21.19	21.03	
15	QPSK	36	0	21.38	21.29	21.17	22.4
15	QPSK	36	20	21.34	21.27	21.15	
15	QPSK	36	39	21.36	21.34	21.22	
15	QPSK	75	0	21.36	21.27	21.15	22.4
15	16QAM	1	0	21.34	21.33	21.25	
15	16QAM	1	37	21.26	21.25	21.18	
15	16QAM	1	74	21.37	21.36	21.21	22.4
15	16QAM	36	0	21.37	21.26	21.13	
15	16QAM	36	20	21.34	21.25	21.12	
15	16QAM	36	39	21.35	21.29	21.20	22.4
15	16QAM	75	0	21.37	21.28	21.21	
15	64QAM	1	0	20.97	20.98	20.89	
15	64QAM	1	37	21.06	21.04	20.93	22.4
15	64QAM	1	74	21.08	21.06	20.92	
15	64QAM	36	0	21.42	21.32	21.20	
15	64QAM	36	20	21.38	21.26	21.14	22.4
15	64QAM	36	39	21.38	21.35	21.24	
15	64QAM	75	0	21.38	21.30	21.20	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.06	21.03	21.00	22.4
10	QPSK	1	25	21.12	21.13	20.94	
10	QPSK	1	49	21.17	21.10	21.01	
10	QPSK	25	0	21.31	21.28	21.17	22.4
10	QPSK	25	12	21.28	21.21	21.08	
10	QPSK	25	25	21.35	21.31	21.15	
10	QPSK	50	0	21.29	21.17	21.13	22.4
10	16QAM	1	0	21.29	21.28	21.20	
10	16QAM	1	25	21.24	21.23	21.10	
10	16QAM	1	49	21.35	21.34	21.12	22.4
10	16QAM	25	0	21.32	21.20	21.13	
10	16QAM	25	12	21.27	21.24	21.07	
10	16QAM	25	25	21.27	21.29	21.10	22.4
10	16QAM	50	0	21.34	21.27	21.15	
10	64QAM	1	0	20.97	20.92	20.80	
10	64QAM	1	25	21.04	20.97	20.83	22.4
10	64QAM	1	49	21.02	20.96	20.86	
10	64QAM	25	0	21.37	21.24	21.11	
10	64QAM	25	12	21.33	21.16	21.09	22.4
10	64QAM	25	25	21.37	21.26	21.22	
10	64QAM	50	0	21.28	21.27	21.15	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.11	21.17	20.98	22.4
5	QPSK	1	12	21.20	21.21	21.05	
5	QPSK	1	24	21.16	21.17	21.07	
5	QPSK	12	0	21.24	21.24	21.22	22.4
5	QPSK	12	7	21.37	21.22	21.17	
5	QPSK	12	13	21.31	21.27	21.23	
5	QPSK	25	0	21.27	21.27	21.24	22.4
5	16QAM	1	0	21.31	21.27	21.13	
5	16QAM	1	12	21.24	21.24	21.20	
5	16QAM	1	24	21.32	21.22	21.11	22.4
5	16QAM	12	0	21.32	21.32	21.17	
5	16QAM	12	7	21.24	21.32	21.30	
5	16QAM	12	13	21.34	21.33	21.26	22.4
5	16QAM	25	0	21.32	21.23	21.20	
5	64QAM	1	0	20.99	20.94	20.88	
5	64QAM	1	12	20.96	21.06	20.92	22.4
5	64QAM	1	24	21.02	21.07	20.91	
5	64QAM	12	0	21.33	21.34	21.25	
5	64QAM	12	7	21.38	21.34	21.22	22.4
5	64QAM	12	13	21.38	21.32	21.19	
5	64QAM	25	0	21.40	21.25	21.21	



Band 41									
Ann 9									
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				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	20.99	20.95	21.07	20.71	20.50	22.4
20	QPSK	1	49	20.95	20.98	20.99	20.96	20.82	
20	QPSK	1	99	20.93	21.00	21.08	20.82	20.69	22.4
20	QPSK	50	0	21.05	21.06	21.09	20.94	20.74	
20	QPSK	50	24	21.12	21.16	21.16	21.06	20.88	22.4
20	QPSK	50	50	21.09	21.14	21.15	20.90	20.87	
20	QPSK	100	0	21.12	21.15	21.14	20.96	20.80	22.4
20	16QAM	1	0	21.15	21.06	21.21	20.74	20.49	
20	16QAM	1	49	21.05	21.07	21.10	21.07	20.88	22.4
20	16QAM	1	99	21.13	21.12	21.23	20.65	20.79	
20	16QAM	50	0	21.10	21.08	21.11	20.97	20.76	22.4
20	16QAM	50	24	21.16	21.18	21.21	21.08	20.92	
20	16QAM	50	50	21.15	21.18	21.17	20.93	20.90	22.4
20	16QAM	100	0	21.16	21.18	21.16	20.89	20.83	
20	64QAM	1	0	20.82	20.73	20.82	20.50	20.50	22.4
20	64QAM	1	49	20.79	20.79	20.84	20.85	20.65	
20	64QAM	1	99	20.84	20.84	20.91	20.50	20.54	22.4
20	64QAM	50	0	20.80	20.76	20.79	20.89	20.70	
20	64QAM	50	24	20.87	20.86	20.90	21.03	20.83	22.4
20	64QAM	50	50	20.83	20.86	20.88	20.84	20.79	
20	64QAM	100	0	20.84	20.84	20.86	20.92	20.76	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.6	2682.5	
15	QPSK	1	0	20.97	20.94	21.00	20.84	20.57	22.4
15	QPSK	1	37	20.94	20.94	20.97	20.69	20.77	
15	QPSK	1	74	20.90	21.05	21.08	20.73	20.75	22.4
15	QPSK	36	0	21.12	21.04	21.08	20.94	20.79	
15	QPSK	36	20	21.10	21.14	21.13	20.97	20.92	22.4
15	QPSK	36	39	21.07	21.12	21.14	20.95	20.88	
15	QPSK	75	0	21.12	21.13	21.15	20.83	20.83	22.4
15	16QAM	1	0	21.17	21.13	21.18	20.92	20.86	
15	16QAM	1	37	21.01	21.02	21.03	20.96	20.90	22.4
15	16QAM	1	74	21.10	21.20	21.20	20.79	20.89	
15	16QAM	36	0	21.11	21.02	21.08	20.91	20.74	22.4
15	16QAM	36	20	21.11	21.11	21.12	20.94	20.84	
15	16QAM	36	39	21.07	21.11	21.11	20.83	20.86	22.4
15	16QAM	75	0	21.16	21.17	21.19	20.94	20.86	
15	64QAM	1	0	20.81	20.73	20.76	20.81	20.50	22.4
15	64QAM	1	37	20.80	20.81	20.83	20.79	20.61	
15	64QAM	1	74	20.82	20.91	20.95	20.51	20.83	22.4
15	64QAM	36	0	20.80	20.77	20.77	20.67	20.71	
15	64QAM	36	20	20.81	20.84	20.85	20.91	20.82	22.4
15	64QAM	36	39	20.78	20.84	20.84	20.86	20.82	
15	64QAM	75	0	20.84	20.84	20.87	20.85	20.78	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	20.88	20.89	20.96	20.77	20.55	22.4
10	QPSK	1	25	20.90	20.84	20.89	20.83	20.75	
10	QPSK	1	49	20.85	20.97	21.00	20.65	20.67	22.4
10	QPSK	25	0	21.02	20.96	21.07	20.91	20.70	
10	QPSK	25	12	21.08	21.08	21.05	20.90	20.84	22.4
10	QPSK	25	25	21.03	21.03	21.09	20.85	20.80	
10	QPSK	50	0	21.02	21.10	21.15	20.85	20.75	22.4
10	16QAM	1	0	21.11	21.13	21.14	20.82	20.57	
10	16QAM	1	25	21.00	20.96	20.94	20.93	20.87	22.4
10	16QAM	1	49	21.00	21.13	21.18	20.79	20.85	
10	16QAM	25	0	21.05	20.99	21.07	20.81	20.72	22.4
10	16QAM	25	12	21.02	21.08	21.05	20.91	20.82	
10	16QAM	25	25	21.05	21.05	21.10	20.90	20.77	22.4
10	16QAM	50	0	21.06	21.14	21.13	20.87	20.77	
10	64QAM	1	0	20.78	20.73	20.72	20.59	20.48	22.4
10	64QAM	1	25	20.80	20.74	20.80	20.69	20.56	
10	64QAM	1	49	20.75	20.86	20.85	20.43	20.55	22.4
10	64QAM	25	0	20.72	20.76	20.88	20.78	20.71	
10	64QAM	25	12	20.78	20.80	20.81	20.82	20.77	22.4
10	64QAM	25	25	20.73	20.76	20.76	20.84	20.79	
10	64QAM	50	0	20.74	20.76	20.81	20.83	20.74	
Channel				39675	40148	40620	41093	41595	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	20.97	20.94	21.05	20.62	20.42	22.4
5	QPSK	1	12	20.88	20.96	20.92	20.94	20.82	
5	QPSK	1	24	20.83	20.94	20.98	20.43	20.66	22.4
5	QPSK	12	0	21.05	21.02	21.04	20.84	20.72	
5	QPSK	12	7	21.08	21.07	21.09	21.06	20.81	22.4
5	QPSK	12	13	21.03	21.05	21.07	20.89	20.87	
5	QPSK	25	0	21.03	21.15	21.13	20.87	20.79	22.4
5	16QAM	1	0	21.07	20.98	21.17	20.84	20.45	
5	16QAM	1	12	20.99	21.01	21.01	20.97	20.82	22.4
5	16QAM	1	24	21.05	21.03	21.15	20.55	20.70	
5	16QAM	12	0	21.04	21.00	21.02	20.91	20.71	22.4
5	16QAM	12	7	21.06	21.18	21.20	21.02	20.84	
5	16QAM	12	13	21.14	21.12	21.12	20.89	20.81	22.4
5	16QAM	25	0	21.14	21.15	21.15	20.92	20.81	
5	64QAM	1	0	20.77	20.67	20.73	20.45	20.46	22.4
5	64QAM	1	12	20.79	20.70	20.80	20.75	20.61	
5	64QAM	1	24	20.82	20.81	20.82	20.44	20.50	22.4
5	64QAM	12	0	20.73	20.71	20.77	20.79	20.69	
5	64QAM	12	7	20.82	20.82	20.83	20.99	20.80	22.4
5	64QAM	12	13	20.74	20.77	20.86	20.83	20.74	
5	64QAM	25	0	20.79	20.76	20.84	20.82	20.69	



Band 41 HPUE									
Ann 3									
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				39790	40185	40620	41065	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	22.56	22.49	22.63	22.33	22.30	24.2
20	QPSK	1	49	22.51	22.54	22.54	22.57	22.39	24.2
20	QPSK	1	99	22.53	22.58	22.64	22.30	22.31	24.2
20	QPSK	50	0	22.72	22.71	22.77	22.63	22.46	24.2
20	QPSK	50	24	22.82	22.83	22.87	22.78	22.60	24.2
20	QPSK	50	50	22.76	22.82	22.83	22.61	22.58	24.2
20	QPSK	100	0	22.80	22.81	22.83	22.66	22.50	24.2
20	16QAM	1	0	22.82	22.87	22.98	22.70	22.38	24.2
20	16QAM	1	49	22.86	22.91	22.96	22.97	22.77	24.2
20	16QAM	1	99	22.89	22.91	23.01	22.47	22.66	24.2
20	16QAM	50	0	22.76	22.72	22.78	22.68	22.49	24.2
20	16QAM	50	24	22.82	22.86	22.87	22.82	22.63	24.2
20	16QAM	50	50	22.81	22.84	22.87	22.64	22.62	24.2
20	16QAM	100	0	22.82	22.86	22.89	22.64	22.64	24.2
20	64QAM	1	0	22.73	22.67	22.74	22.47	22.30	24.2
20	64QAM	1	49	22.72	22.76	22.73	22.83	22.63	24.2
20	64QAM	1	99	22.77	22.77	22.85	22.30	22.51	24.2
20	64QAM	50	0	22.57	22.57	22.61	22.68	22.52	24.2
20	64QAM	50	24	22.65	22.70	22.70	22.61	22.61	24.2
20	64QAM	50	50	22.80	22.66	22.69	22.64	22.64	24.2
20	64QAM	100	0	22.84	22.65	22.69	22.73	22.55	24.2
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	22.64	22.62	22.64	22.49	22.25	24.2
15	QPSK	1	37	22.66	22.58	22.67	22.61	22.43	24.2
15	QPSK	1	74	22.57	22.73	22.75	22.37	22.43	24.2
15	QPSK	36	0	22.80	22.74	22.78	22.63	22.49	24.2
15	QPSK	36	20	22.83	22.78	22.86	22.68	22.62	24.2
15	QPSK	36	39	22.76	22.81	22.81	22.68	22.59	24.2
15	QPSK	75	0	22.82	22.82	22.86	22.63	22.54	24.2
15	16QAM	1	0	22.89	22.86	22.94	22.84	22.53	24.2
15	16QAM	1	37	22.85	22.87	22.86	22.93	22.72	24.2
15	16QAM	1	74	22.85	23.00	23.00	22.68	22.76	24.2
15	16QAM	36	0	22.78	22.73	22.70	22.65	22.48	24.2
15	16QAM	36	20	22.77	22.77	22.80	22.68	22.59	24.2
15	16QAM	36	39	22.73	22.77	22.80	22.68	22.61	24.2
15	16QAM	75	0	22.83	22.82	22.86	22.64	22.59	24.2
15	64QAM	1	0	22.70	22.72	22.71	22.64	22.33	24.2
15	64QAM	1	37	22.75	22.73	22.76	22.80	22.59	24.2
15	64QAM	1	74	22.73	22.85	22.89	22.50	22.59	24.2
15	64QAM	36	0	22.61	22.58	22.59	22.71	22.65	24.2
15	64QAM	36	20	22.63	22.63	22.64	22.73	22.65	24.2
15	64QAM	36	39	22.56	22.63	22.65	22.70	22.62	24.2
15	64QAM	75	0	22.64	22.64	22.66	22.66	22.57	24.2
Channel				39700	40160	40620	41060	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.56	22.40	22.54	22.28	22.28	24.2
10	QPSK	1	25	22.47	22.51	22.52	22.48	22.28	24.2
10	QPSK	1	49	22.63	22.49	22.63	22.29	22.22	24.2
10	QPSK	25	0	22.69	22.71	22.77	22.63	22.42	24.2
10	QPSK	25	12	22.81	22.75	22.87	22.70	22.57	24.2
10	QPSK	25	25	22.71	22.81	22.76	22.61	22.53	24.2
10	QPSK	50	0	22.79	22.76	22.83	22.65	22.48	24.2
10	16QAM	1	0	22.83	22.84	22.98	22.69	22.32	24.2
10	16QAM	1	25	22.86	22.85	22.89	22.95	22.71	24.2
10	16QAM	1	49	22.89	22.82	22.96	22.38	22.59	24.2
10	16QAM	25	0	22.70	22.70	22.78	22.60	22.40	24.2
10	16QAM	25	12	22.73	22.80	22.82	22.73	22.60	24.2
10	16QAM	25	25	22.81	22.83	22.80	22.58	22.57	24.2
10	16QAM	50	0	22.73	22.79	22.85	22.71	22.53	24.2
10	64QAM	1	0	22.68	22.58	22.70	22.44	22.25	24.2
10	64QAM	1	25	22.62	22.74	22.71	22.74	22.55	24.2
10	64QAM	1	49	22.71	22.77	22.76	22.28	22.45	24.2
10	64QAM	25	0	22.57	22.54	22.60	22.59	22.46	24.2
10	64QAM	25	12	22.62	22.63	22.61	22.79	22.59	24.2
10	64QAM	25	25	22.55	22.62	22.67	22.58	22.54	24.2
10	64QAM	50	0	22.64	22.63	22.67	22.73	22.50	24.2
Channel				39675	40148	40620	41063	41665	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	22.56	22.44	22.57	22.33	22.26	24.2
5	QPSK	1	12	22.47	22.54	22.54	22.56	22.30	24.2
5	QPSK	1	24	22.48	22.55	22.63	22.21	22.25	24.2
5	QPSK	12	0	22.66	22.63	22.71	22.56	22.44	24.2
5	QPSK	12	7	22.82	22.77	22.87	22.72	22.65	24.2
5	QPSK	12	13	22.72	22.81	22.74	22.59	22.51	24.2
5	QPSK	25	0	22.72	22.73	22.79	22.66	22.49	24.2
5	16QAM	1	0	22.86	22.85	22.96	22.69	22.35	24.2
5	16QAM	1	12	22.80	22.84	22.89	22.95	22.70	24.2
5	16QAM	1	24	22.84	22.86	22.98	22.39	22.63	24.2
5	16QAM	12	0	22.75	22.71	22.70	22.59	22.48	24.2
5	16QAM	12	7	22.79	22.84	22.84	22.80	22.61	24.2
5	16QAM	12	13	22.79	22.79	22.81	22.56	22.58	24.2
5	16QAM	25	0	22.72	22.81	22.84	22.64	22.53	24.2
5	64QAM	1	0	22.69	22.66	22.73	22.47	22.20	24.2
5	64QAM	1	12	22.68	22.73	22.73	22.61	22.60	24.2
5	64QAM	1	24	22.77	22.76	22.85	22.20	22.41	24.2
5	64QAM	12	0	22.55	22.55	22.51	22.67	22.45	24.2
5	64QAM	12	7	22.59	22.70	22.69	22.80	22.53	24.2
5	64QAM	12	13	22.53	22.62	22.64	22.62	22.61	24.2
5	64QAM	25	0	22.64	22.58	22.68	22.71	22.48	24.2

Band 48										
Ann 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3669	3641	3690			
20	QPSK	1	0	20.38	20.29	20.20	20.20			
20	QPSK	1	49	20.18	20.07	19.96	19.96	21.7		
20	QPSK	1	99	20.14	20.03	19.90	19.89			
20	QPSK	50	0	20.39	20.31	20.19	20.17			
20	QPSK	50	24	20.33	20.15	20.11	20.11	21.2		
20	QPSK	50	50	20.21	20.09	19.97	19.96			
20	QPSK	100	0	20.32	20.18	20.11	20.09			
20	16QAM	1	0	20.51	20.44	20.31	20.33			
20	16QAM	1	49	20.28	20.18	20.07	20.06	21.2		
20	16QAM	1	99	20.29	20.13	20.03	20.01			
20	16QAM	50	0	19.86	19.72	19.62	19.61			
20	16QAM	50	24	19.81	19.59	19.54	19.53	20.2		
20	16QAM	50	50	19.66	19.51	19.40	19.39			
20	16QAM	100	0	19.80	19.66	19.51	19.52			
20	64QAM	1	0	20.19	20.18	20.09	20.06			
20	64QAM	1	49	20.09	19.98	19.87	19.82	20.2		
20	64QAM	1	99	20.12	19.96	19.79	19.80			
20	64QAM	50	0	19.79	19.65	19.56	19.53			
20	64QAM	50	24	19.74	19.52	19.47	19.46	19.2		
20	64QAM	50	50	19.62	19.47	19.33	19.30			
20	64QAM	100	0	19.84	19.59	19.56	19.57			
Channel				55315	55820	56160	56655	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3668	3642	3692.5			
15	QPSK	1	0	20.25	20.19	20.08	19.85			
15	QPSK	1	37	20.14	20.04	19.99	19.71	21.7		
15	QPSK	1	74	20.11	20.01	19.88	19.70			
15	QPSK	36	0	20.34	20.28	20.14	19.91			
15	QPSK	36	20	20.29	20.20	20.06	19.83	21.2		
15	QPSK	36	39	20.18	20.09	19.95	19.78			
15	QPSK	75	0	20.23	20.23	20.08	19.86			
15	16QAM	1	0	20.42	20.36	20.22	20.02	21.2		
15	16QAM	1	37	20.23	20.11	19.92	19.78			
15	16QAM	1	74	20.29	20.21	20.06	19.79			
15	16QAM	36	0	19.75	19.64	19.51	19.27	20.2		
15	16QAM	36	20	19.72	19.55	19.43	19.21			
15	16QAM	36	39	19.59	19.46	19.33	19.20			
15	16QAM	75	0	19.69	19.64	19.50	19.25	20.2		
15	64QAM	1	0	20.22	20.15	20.04	19.78			
15	64QAM	1	37	20.02	19.96	19.80	19.56	20.2		
15	64QAM	1	74	20.11	19.97	19.81	19.59			
15	64QAM	36	0	19.80	19.67	19.53	19.32	19.2		
15	64QAM	36	20	19.76	19.61	19.48	19.24			
15	64QAM	36	39	19.63	19.48	19.36	19.17			
15	64QAM	75	0	19.70	19.62	19.49	19.25	Tune-up limit (dBm)		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3643	3695			
10	QPSK	1	0	20.25	20.15	20.04	19.83			
10	QPSK	1	25	20.12	19.97	19.79	19.72	21.7		
10	QPSK	1	49	20.01	20.00	19.87	19.70			
10	QPSK	25	0	20.28	20.19	20.10	19.81			
10	QPSK	25	12	20.22	20.15	20.03	19.81	21.2		
10	QPSK	25	25	20.16	20.00	19.90	19.70			
10	QPSK	50	0	20.16	20.20	20.08	19.83			
10	16QAM	1	0	20.40	20.29	20.20	19.94	21.2		
10	16QAM	1	25	20.22	20.09	19.94	19.78			
10	16QAM	1	49	20.24	20.19	20.00	19.77			
10	16QAM	25	0	19.71	19.59	19.42	19.25	20.2		
10	16QAM	25	12	19.68	19.47	19.42	19.22			
10	16QAM	25	25	19.58	19.39	19.24	19.21			
10	16QAM	50	0	19.69	19.63	19.50	19.22	20.2		
10	64QAM	1	0	20.12	20.09	19.97	19.70			
10	64QAM	1	25	19.93	19.88	19.77	19.47	20.2		
10	64QAM	1	49	20.07	19.97	19.72	19.57			
10	64QAM	25	0	19.73	19.57	19.43	19.28	19.2		
10	64QAM	25	12	19.72	19.59	19.48	19.17			
10	64QAM	25	25	19.54	19.44	19.33	19.08			
10	64QAM	50	0	19.67	19.56	19.39	19.22			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	20.28	20.15	20.07	20.21			
5	QPSK	1	12	20.25	20.11	20.04	20.16	21.7		
5	QPSK	1	24	20.23	20.03	19.98	20.12			
5	QPSK	12	0	20.37	20.23	20.15	20.30			
5	QPSK	12	7	20.40	20.27	20.11	20.28	21.2		
5	QPSK	12	13	20.32	20.24	20.06	20.21			
5	QPSK	25	0	20.34	20.27	20.12	20.23			
5	16QAM	1	0	20.36	20.26	20.26	20.28	21.2		
5	16QAM	1	12	20.44	20.32	20.25	20.33			
5	16QAM	1	24	20.38	20.29	20.17	20.24			
5	16QAM	12	0	19.73	19.63	19.51	19.66	20.2		
5	16QAM	12	7	19.77	19.65	19.56	19.65			
5	16QAM	12	13	19.73	19.64	19.47	19.57			
5	16QAM	25	0	19.78	19.69	19.57	19.64	20.2		
5	64QAM	1	0	20.15	20.08	19.99	20.10			
5	64QAM	1	12	20.16	20.02	20.01	20.07	19.2		
5	64QAM	1	24	20.14	20.01	19.91	19.97			
5	64QAM	12	0	19.73	19.64	19.56	19.67			
5	64QAM	12	7	19.77	19.65	19.51	19.62	19.2		
5	64QAM	12	13	19.71	19.59	19.51	19.59			
5	64QAM	25	0	19.73	19.64	19.53	19.59			





n2							
Ari2							
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm) / (dBm)
Channel				372000	376000	380000	limit
Frequency (MHz)				1860	1860	1900	limit
20	PI2 BPSK	1	1	24.66	24.74	24.70	25.7
20	PI2 BPSK	1	53	24.65	24.69	24.68	25.7
20	PI2 BPSK	1	104	24.65	24.65	24.66	25.7
20	PI2 BPSK	50	0	24.15	24.34	24.19	25.7
20	PI2 BPSK	50	28	24.70	24.79	24.73	25.7
20	PI2 BPSK	50	56	24.25	24.28	24.31	25.7
20	PI2 BPSK	100	0	24.25	24.32	24.27	25.2
20	QPSK	1	1	24.00	24.09	24.04	25.2
20	QPSK	1	53	23.95	24.00	24.05	25.2
20	QPSK	1	104	24.00	24.03	23.97	25.2
20	QPSK	50	0	23.03	23.24	23.06	25.2
20	QPSK	50	28	23.55	23.62	23.63	25.2
20	QPSK	50	56	23.10	23.08	23.16	25.2
20	QPSK	100	0	23.10	23.17	23.07	24.7
20	16QAM	1	1	23.00	23.08	23.01	24.2
20	16QAM	1	53	22.96	23.04	23.02	24.2
20	16QAM	1	104	23.02	22.97	23.01	24.2
20	16QAM	50	0	22.19	22.39	22.24	24.2
20	16QAM	50	28	22.78	22.86	22.79	24.2
20	16QAM	50	56	22.36	22.27	22.38	24.2
20	16QAM	100	0	22.35	22.33	22.34	23.2
20	64QAM	1	1	21.96	22.13	22.00	23.2
20	64QAM	1	53	21.96	22.07	22.03	23.2
20	64QAM	1	104	21.95	21.98	22.01	23.2
20	64QAM	50	0	21.52	21.68	21.54	23.2
20	64QAM	50	28	22.09	22.13	22.06	23.2
20	64QAM	50	56	21.57	21.65	21.62	23.2
20	64QAM	100	0	21.68	21.66	21.58	23.2
20	256QAM	1	1	19.48	19.61	19.56	21.2
20	256QAM	1	53	19.47	19.52	19.49	21.2
20	256QAM	1	104	19.53	19.52	19.46	21.2
20	256QAM	50	0	19.51	19.69	19.55	21.2
20	256QAM	50	28	20.10	20.18	20.13	21.2
20	256QAM	50	56	19.57	19.58	19.66	21.2
20	256QAM	100	0	19.62	19.66	19.67	21.2
Channel				371500	376000	380500	limit
Frequency (MHz)				1857.5	1860	1902.5	limit
15	PI2 BPSK	1	1	24.32	24.36	24.34	25.7
Channel				371000	376000	381000	limit
Frequency (MHz)				1855	1860	1905	limit
10	PI2 BPSK	1	1	24.25	24.43	24.39	25.7
Channel				370500	376000	381000	limit
Frequency (MHz)				1852.5	1860	1907.5	limit
5	PI2 BPSK	1	1	24.27	24.38	24.34	25.7



n5							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)
Channel				166800	167800	167800	turn-up limit
Frequency (MHz)				834	837.5	837	limit
20	Pl2 BPSK	1	1	23.71	23.72	23.63	25.0
20	Pl2 BPSK	1	53	23.84	23.67	23.62	25.0
20	Pl2 BPSK	1	104	23.62	23.60	23.40	25.0
20	Pl2 BPSK	50	0	23.62	23.60	23.48	25.0
20	Pl2 BPSK	50	28	23.85	23.70	23.63	25.0
20	Pl2 BPSK	50	56	23.51	23.47	23.34	25.0
20	Pl2 BPSK	100	0	23.65	23.62	23.61	24.5
20	QPSK	1	1	23.08	23.09	23.03	24.5
20	QPSK	1	53	23.05	23.01	23.02	24.5
20	QPSK	1	104	22.89	22.89	22.70	24.5
20	QPSK	50	0	22.36	22.42	22.29	24.5
20	QPSK	50	28	22.50	22.52	22.43	24.5
20	QPSK	50	56	22.40	22.31	22.22	24.0
20	QPSK	100	0	22.43	22.50	22.49	24.0
20	16QAM	1	1	22.89	22.89	22.54	23.5
20	16QAM	1	53	22.67	22.73	22.67	23.5
20	16QAM	1	104	22.67	22.53	22.39	23.5
20	16QAM	50	0	21.65	21.77	21.58	23.5
20	16QAM	50	28	21.74	21.81	21.74	23.5
20	16QAM	50	56	21.67	21.59	21.50	22.5
20	16QAM	100	0	21.59	21.72	21.59	22.5
20	64QAM	1	1	21.03	21.14	20.99	22.5
20	64QAM	1	53	21.05	21.16	21.09	22.5
20	64QAM	1	104	21.06	21.22	21.04	22.5
20	64QAM	50	0	21.01	21.22	21.04	22.5
20	64QAM	50	28	21.00	21.20	20.99	22.5
20	64QAM	50	56	21.05	21.13	20.99	22.5
20	64QAM	100	0	21.00	21.22	20.99	22.5
Channel				166800	167800	166800	turn-up limit
Frequency (MHz)				837.5	837.5	841.5	limit
15	Pl2 BPSK	1	1	23.69	23.68	23.67	25.0
Channel				165800	167800	165800	turn-up limit
Frequency (MHz)				829	836.5	844	limit
10	Pl2 BPSK	1	1	23.67	23.67	23.60	25.0
Channel				165800	167800	165800	turn-up limit
Frequency (MHz)				836.5	836.5	846.5	limit
5	Pl2 BPSK	1	1	23.85	23.72	23.59	25.0



n25							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm) (dBm)
Channel				372000	376000	381000	limit
Frequency (MHz)				1260	1260	1905	limit
20	PI2 BPSK	1	1	24.61	24.69	24.65	25.7
20	PI2 BPSK	1	53	24.63	24.67	24.62	25.7
20	PI2 BPSK	1	104	24.33	24.68	23.60	25.7
20	PI2 BPSK	50	0	24.21	24.00	23.40	25.7
20	PI2 BPSK	50	28	24.84	24.77	24.41	25.7
20	PI2 BPSK	50	56	23.68	24.22	23.75	25.7
20	PI2 BPSK	100	0	24.20	24.21	23.55	25.2
20	QPSK	1	1	23.98	23.89	23.40	24.7
20	QPSK	1	53	23.94	24.05	23.96	24.7
20	QPSK	1	104	23.70	23.90	22.93	24.7
20	QPSK	50	0	23.08	22.85	22.73	24.7
20	QPSK	50	28	23.48	23.64	23.26	24.7
20	QPSK	50	56	22.72	23.36	22.71	24.7
20	QPSK	100	0	23.07	23.06	22.23	24.2
20	16QAM	1	1	22.84	22.89	22.21	23.7
20	16QAM	1	53	22.71	22.75	22.70	23.7
20	16QAM	1	104	22.41	22.68	22.31	23.7
20	16QAM	50	0	22.34	22.19	22.24	23.7
20	16QAM	50	28	22.84	22.97	22.52	23.7
20	16QAM	50	56	22.21	22.39	22.23	23.2
20	16QAM	100	0	22.31	22.39	21.72	23.2
20	64QAM	1	1	21.97	21.99	21.38	23.2
20	64QAM	1	53	22.02	22.03	21.92	23.2
20	64QAM	1	104	21.88	21.88	21.22	23.2
20	64QAM	50	0	21.98	21.75	21.21	23.2
20	64QAM	50	28	22.36	22.55	22.19	23.2
20	64QAM	50	56	21.44	21.97	21.47	23.2
20	64QAM	100	0	21.88	21.93	21.35	23.2
20	256QAM	1	1	19.54	19.67	19.24	21.2
20	256QAM	1	53	19.56	19.58	19.52	21.2
20	256QAM	1	104	19.31	19.58	19.25	21.2
20	256QAM	50	0	19.60	19.36	19.24	21.2
20	256QAM	50	28	20.00	20.12	19.79	21.2
20	256QAM	50	56	19.00	19.59	19.22	21.2
20	256QAM	100	0	19.90	19.61	19.21	21.2
Channel				371600	376000	381600	limit
Frequency (MHz)				1927.5	1260	1907.5	limit
15	PI2 BPSK	1	1	24.53	24.69	23.96	25.7
Channel				371000	375000	382000	limit
Frequency (MHz)				1855	1880	1910	limit
10	PI2 BPSK	1	1	24.52	24.52	23.99	25.7
Channel				376900	376000	382900	limit
Frequency (MHz)				1852.5	1880	1912.5	limit
5	PI2 BPSK	1	1	24.54	24.49	23.95	25.7



n66							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm)
Channel				344000	349000	354000	turn-up limit
Frequency (MHz)				1720	1745	1770	limit
20	Pl2 BPSK	1	1	24.43	23.71	24.32	25.7
20	Pl2 BPSK	1	53	24.34	24.21	24.23	25.7
20	Pl2 BPSK	1	104	24.45	24.33	24.33	25.7
20	Pl2 BPSK	50	0	24.16	23.72	23.82	25.7
20	Pl2 BPSK	50	28	24.45	24.42	24.33	25.7
20	Pl2 BPSK	50	56	23.81	24.05	23.94	25.7
20	Pl2 BPSK	100	0	23.92	23.76	23.90	25.2
20	QPSK	1	1	24.29	23.54	24.15	24.7
20	QPSK	1	53	24.17	24.01	24.04	24.7
20	QPSK	1	104	24.34	24.22	24.14	24.7
20	QPSK	50	0	23.48	22.80	23.21	24.7
20	QPSK	50	28	23.76	23.77	23.72	24.7
20	QPSK	50	56	23.19	23.41	23.28	24.2
20	QPSK	100	0	23.32	23.05	23.20	24.2
20	16QAM	1	1	22.82	22.06	22.62	23.7
20	16QAM	1	53	22.89	22.61	22.62	23.7
20	16QAM	1	104	22.77	22.73	22.67	23.7
20	16QAM	50	0	22.55	21.77	22.16	23.7
20	16QAM	50	28	22.84	22.79	22.64	23.7
20	16QAM	50	56	22.11	22.36	22.25	23.2
20	16QAM	100	0	22.31	22.16	22.25	23.2
20	64QAM	1	1	22.36	21.64	22.31	23.2
20	64QAM	1	53	22.29	22.19	22.22	23.2
20	64QAM	1	104	22.45	22.31	22.30	23.2
20	64QAM	50	0	22.07	21.32	21.62	23.2
20	64QAM	50	28	22.36	22.41	22.32	23.2
20	64QAM	50	56	21.76	22.03	21.87	23.2
20	64QAM	100	0	21.89	21.67	21.85	23.2
20	256QAM	1	1	19.78	19.23	19.67	21.2
20	256QAM	1	53	19.73	19.59	19.58	21.2
20	256QAM	1	104	19.76	19.67	19.63	21.2
20	256QAM	50	0	20.05	19.21	19.63	21.2
20	256QAM	50	28	20.27	20.30	20.14	21.2
20	256QAM	50	56	19.64	19.85	19.74	21.2
20	256QAM	100	0	19.74	19.61	19.79	21.2
Channel				343000	349000	354000	turn-up limit
Frequency (MHz)				1717.5	1745	1772.5	limit
15	Pl2 BPSK	1	1	24.34	23.73	24.28	25.7
Channel				343000	349000	355000	turn-up limit
Frequency (MHz)				1715	1745	1775	limit
10	Pl2 BPSK	1	1	24.37	23.71	24.28	25.7
Channel				342500	349000	355000	turn-up limit
Frequency (MHz)				1712.5	1745	1777.5	limit
5	Pl2 BPSK	1	1	24.43	23.74	24.28	25.7



n71							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Tune-up limit (dBm) (dBm)
Channel				134600	136100	137600	turn-up limit
Frequency (MHz)				170.5	190.5	210.5	limit
20	Pl2 BPSK	1	1	24.22	24.20	24.89	25.7
20	Pl2 BPSK	1	53	24.81	24.84	24.89	25.7
20	Pl2 BPSK	1	104	24.80	24.83	24.89	25.7
20	Pl2 BPSK	50	0	23.86	24.29	24.15	25.7
20	Pl2 BPSK	50	28	24.15	24.85	24.81	25.7
20	Pl2 BPSK	50	56	24.58	24.49	24.37	25.7
20	Pl2 BPSK	100	0	24.14	24.21	24.28	25.2
20	QPSK	1	1	23.96	23.60	24.18	25.2
20	QPSK	1	53	24.19	24.24	24.24	25.2
20	QPSK	1	104	24.13	24.13	23.97	25.2
20	QPSK	50	0	22.88	23.36	23.22	25.2
20	QPSK	50	28	23.77	23.96	23.81	25.2
20	QPSK	50	56	23.86	23.97	23.81	25.2
20	QPSK	100	0	23.17	23.24	23.33	24.7
20	16QAM	1	1	22.27	22.32	22.92	24.2
20	16QAM	1	53	22.88	22.83	22.94	24.2
20	16QAM	1	104	22.80	22.88	22.88	24.2
20	16QAM	50	0	22.21	22.39	22.24	24.2
20	16QAM	50	28	22.79	23.01	22.92	24.2
20	16QAM	50	56	22.82	22.83	22.41	24.2
20	16QAM	100	0	22.17	22.28	22.35	23.7
20	64QAM	1	1	22.06	22.12	22.78	23.2
20	64QAM	1	53	22.88	22.65	22.73	23.2
20	64QAM	1	104	22.89	22.85	22.40	23.2
20	64QAM	50	0	21.73	22.19	21.86	23.2
20	64QAM	50	28	22.84	22.83	22.80	23.2
20	64QAM	50	56	22.47	22.36	22.27	23.2
20	64QAM	100	0	22.03	22.04	22.15	23.2
20	256QAM	1	1	19.48	19.61	20.18	21.2
20	256QAM	1	53	20.08	20.06	20.16	21.2
20	256QAM	1	104	20.08	20.12	19.83	21.2
20	256QAM	50	0	19.85	20.36	20.17	21.2
20	256QAM	50	28	20.79	21.02	20.81	21.2
20	256QAM	50	56	20.85	20.49	20.39	21.2
20	256QAM	100	0	20.17	20.38	20.30	21.2
Channel				134100	136100	138100	turn-up limit
Frequency (MHz)				170.5	190.5	199.5	limit
15	Pl2 BPSK	1	1	24.20	24.21	24.88	25.7
Channel				133600	135100	136600	turn-up limit
Frequency (MHz)				168	188.5	193	limit
10	Pl2 BPSK	1	1	24.13	24.23	24.85	25.7
Channel				133100	135100	137100	turn-up limit
Frequency (MHz)				168.5	188.5	195.5	limit
5	Pl2 BPSK	1	1	24.20	24.29	24.80	25.7



n12							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				141300	141500	141700	
Frequency (MHz)				705.5	707.5	709.5	
15	PI/2 BPSK	1	1	23.74	23.76	23.73	24.7
15	PI/2 BPSK	1	40	23.58	23.65	23.63	
15	PI/2 BPSK	1	77	23.27	23.49	23.49	
15	PI/2 BPSK	36	0	23.31	23.31	23.28	24.7
15	PI/2 BPSK	36	22	23.61	23.62	23.60	
15	PI/2 BPSK	36	43	23.28	23.24	23.23	
15	PI/2 BPSK	75	0	23.33	23.38	23.31	24.2
15	QPSK	1	1	23.28	23.31	23.32	24.2
15	QPSK	1	40	23.14	23.19	23.13	
15	QPSK	1	77	23.14	22.98	23.06	
15	QPSK	36	0	22.30	22.31	22.31	24.2
15	QPSK	36	22	22.12	22.18	22.14	
15	QPSK	36	43	22.10	22.07	22.09	
15	QPSK	75	0	22.31	22.32	22.24	23.7
15	16QAM	1	1	22.29	22.32	22.33	23.2
15	16QAM	1	40	22.15	22.23	22.21	
15	16QAM	1	77	22.13	22.06	22.09	
15	16QAM	36	0	21.31	21.38	21.38	23.2
15	16QAM	36	22	21.24	21.25	21.31	
15	16QAM	36	43	21.19	21.10	21.09	
15	16QAM	75	0	21.22	21.08	21.12	22.2
15	64QAM	1	1	21.08	21.10	21.08	22.2
15	64QAM	1	40	20.95	20.94	20.95	
15	64QAM	1	77	20.86	20.80	20.85	
15	64QAM	36	0	20.50	20.54	20.62	22.2
15	64QAM	36	22	20.36	20.46	20.45	
15	64QAM	36	43	20.34	20.29	20.31	
15	64QAM	75	0	20.49	20.62	20.61	22.2
15	256QAM	1	1	18.80	18.84	18.87	20.2
15	256QAM	1	40	18.75	18.78	18.90	
15	256QAM	1	77	18.78	18.80	18.82	
15	256QAM	36	0	18.77	18.83	18.86	20.2
15	256QAM	36	22	18.78	18.78	18.91	
15	256QAM	36	43	18.74	18.78	18.91	
15	256QAM	75	0	18.72	18.78	18.84	20.2
Channel				140800	141500	142200	
Frequency (MHz)				704	707.5	711	
10	PI/2 BPSK	1	1	23.73	23.76	23.71	24.7
Channel				140300	141000	142700	
Frequency (MHz)				701.5	707.5	713.5	
5	PI/2 BPSK	1	1	23.65	23.75	23.63	24.7



n2							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm) (100-pp) (dBm)
				Low Ch. / Freq. 37200	Middle Ch. / Freq. 37600	High Ch. / Freq. 38000	
Channel				1880	1880	1900	
Frequency (MHz)							
20	PI/2 BPSK	1	1	24.57	24.47	24.40	
20	PI/2 BPSK	1	53	24.51	24.46	24.36	25.7
20	PI/2 BPSK	1	104	24.42	24.42	24.28	
20	PI/2 BPSK	50	0	24.05	24.07	23.95	
20	PI/2 BPSK	50	28	24.54	24.53	24.43	25.7
20	PI/2 BPSK	50	56	24.04	24.02	23.98	
20	PI/2 BPSK	100	0	24.11	24.00	23.97	25.2
20	QPSK	1	1	23.70	23.60	23.58	
20	QPSK	1	53	23.66	23.62	23.49	24.7
20	QPSK	1	104	23.59	23.62	23.46	
20	QPSK	50	0	22.76	22.78	22.70	
20	QPSK	50	28	23.27	23.28	23.18	24.7
20	QPSK	50	56	22.84	22.78	22.75	
20	QPSK	100	0	22.83	22.71	22.76	24.2
20	16QAM	1	1	22.92	22.91	22.72	
20	16QAM	1	53	22.81	22.78	22.76	23.7
20	16QAM	1	104	22.81	22.80	22.68	
20	16QAM	50	0	21.95	21.89	21.82	
20	16QAM	50	28	22.36	22.36	22.23	23.7
20	16QAM	50	56	21.93	21.86	21.87	
20	16QAM	100	0	21.96	21.85	21.80	23.2
20	64QAM	1	1	21.80	21.75	21.62	
20	64QAM	1	53	21.79	21.67	21.57	23.2
20	64QAM	1	104	21.72	21.63	21.57	
20	64QAM	50	0	21.39	21.39	21.30	
20	64QAM	50	28	21.80	21.84	21.75	23.2
20	64QAM	50	56	21.44	21.36	21.37	
20	64QAM	100	0	21.44	21.35	21.30	23.2
20	256QAM	1	1	19.44	19.35	19.20	
20	256QAM	1	53	19.35	19.28	19.26	21.2
20	256QAM	1	104	19.24	19.32	19.23	
20	256QAM	50	0	19.38	19.39	19.31	
20	256QAM	50	28	19.84	19.87	19.79	21.2
20	256QAM	50	56	19.35	19.38	19.36	
20	256QAM	100	0	19.42	19.35	19.35	21.2
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1880	1901.5	
15	PI/2 BPSK	1	1	24.57	24.37	24.39	25.7
Channel				371000	376000	381000	
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	24.49	24.39	24.31	25.7
Channel				370500	376000	381500	
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	24.49	24.37	24.37	25.7



n5							
Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (max)
Channel				16890	16790	16790	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	23.37	23.27	23.23	25.0
20	PI/2 BPSK	1	53	23.35	23.38	23.37	
20	PI/2 BPSK	1	104	23.28	23.22	23.19	
20	PI/2 BPSK	50	0	23.30	23.32	23.38	25.0
20	PI/2 BPSK	50	28	23.29	23.34	23.31	
20	PI/2 BPSK	50	56	23.28	23.28	23.22	
20	PI/2 BPSK	100	0	23.32	23.33	22.90	24.5
20	QPSK	1	1	23.30	23.30	23.21	24.5
20	QPSK	1	53	23.25	23.32	23.28	
20	QPSK	1	104	23.18	23.20	23.22	
20	QPSK	50	0	22.89	22.87	22.91	24.5
20	QPSK	50	28	23.22	23.31	23.30	
20	QPSK	50	56	22.74	22.78	22.75	
20	QPSK	100	0	22.87	22.88	22.90	24.0
20	16QAM	1	1	22.86	22.80	22.71	24.0
20	16QAM	1	53	22.77	22.88	22.85	
20	16QAM	1	104	22.77	22.70	22.74	
20	16QAM	50	0	22.39	22.47	22.41	24.0
20	16QAM	50	28	22.74	22.84	22.82	
20	16QAM	50	56	22.30	22.38	22.27	
20	16QAM	100	0	21.88	21.89	21.85	23.0
20	64QAM	1	1	21.41	21.32	21.32	22.5
20	64QAM	1	53	21.44	21.48	21.46	
20	64QAM	1	104	21.33	21.24	21.25	
20	64QAM	50	0	21.38	21.34	21.33	22.5
20	64QAM	50	28	21.43	21.47	21.45	
20	64QAM	50	56	21.34	21.27	21.28	
20	64QAM	100	0	21.37	21.29	21.24	22.5
20	256QAM	1	1	19.65	19.50	19.51	
20	256QAM	1	53	19.59	19.64	19.58	
20	256QAM	1	104	19.55	19.46	19.43	20.5
20	256QAM	50	0	19.36	19.17	19.23	
20	256QAM	50	28	19.35	19.38	19.36	
20	256QAM	50	56	19.19	19.22	19.15	20.5
20	256QAM	100	0	19.35	19.25	19.21	
Channel				166300	167300	168300	
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	23.28	23.17	23.22	25.0
Channel				168800	167300	168800	
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	23.34	23.27	23.21	25.0
Channel				163300	167300	169300	
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.31	23.26	23.18	25.0





n25							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (max)
Channel				37000	37600	38100	limit
Frequency (MHz)				1850	1880	1905	
20	PI/2 BPSK	1	1	24.51	24.48	24.33	25.7
20	PI/2 BPSK	1	53	24.50	24.48	24.32	
20	PI/2 BPSK	1	104	24.41	24.44	23.75	
20	PI/2 BPSK	50	0	24.06	24.08	23.72	25.7
20	PI/2 BPSK	50	28	24.48	24.47	24.28	
20	PI/2 BPSK	50	56	24.07	24.05	23.71	
20	PI/2 BPSK	100	0	24.05	24.03	23.52	25.2
20	QPSK	1	1	23.69	23.60	23.53	24.7
20	QPSK	1	53	23.66	23.60	23.30	
20	QPSK	1	104	23.55	23.54	22.72	
20	QPSK	50	0	22.75	22.76	22.74	24.7
20	QPSK	50	28	22.79	22.79	22.67	
20	QPSK	50	56	22.73	22.71	22.71	
20	QPSK	100	0	22.44	22.43	22.23	24.2
20	16QAM	1	1	22.69	22.65	22.45	23.2
20	16QAM	1	53	22.61	22.68	22.47	
20	16QAM	1	104	22.54	22.61	21.79	
20	16QAM	50	0	21.92	21.88	21.32	23.2
20	16QAM	50	28	22.37	22.31	22.11	
20	16QAM	50	56	21.91	21.89	21.41	
20	16QAM	100	0	21.83	21.89	21.37	23.2
20	64QAM	1	1	21.71	21.68	21.46	23.2
20	64QAM	1	53	21.62	21.65	21.48	
20	64QAM	1	104	21.61	21.56	21.21	
20	64QAM	50	0	21.38	21.43	20.83	23.2
20	64QAM	50	28	21.81	21.81	21.59	
20	64QAM	50	56	21.41	21.35	21.22	
20	64QAM	100	0	21.43	21.35	20.88	23.2
20	256QAM	1	1	19.41	19.30	19.22	21.2
20	256QAM	1	53	19.40	19.35	19.21	
20	256QAM	1	104	19.24	19.25	19.20	
20	256QAM	50	0	19.45	19.42	19.23	21.2
20	256QAM	50	28	19.86	19.87	19.61	
20	256QAM	50	56	19.41	19.45	19.21	
20	256QAM	100	0	19.36	19.43	19.22	21.2
Channel				37150	37600	38150	limit
Frequency (MHz)				1875	1880	1907.5	
15	PI/2 BPSK	1	1	24.47	24.39	24.24	25.7
Channel				371000	376000	382000	limit
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	24.45	24.45	24.25	25.7
Channel				370500	376000	382500	limit
Frequency (MHz)				1852.5	1880	1917.5	
5	PI/2 BPSK	1	1	24.50	24.46	24.25	25.7



n66							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				34000	34900	35000	limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	PI/2 BPSK	1	1	24.52	23.76	24.40	25.7
20	PI/2 BPSK	1	53	24.38	24.21	24.24	
20	PI/2 BPSK	1	104	24.53	24.41	24.27	
20	PI/2 BPSK	50	0	23.97	23.69	23.85	25.7
20	PI/2 BPSK	50	28	24.43	24.43	24.37	
20	PI/2 BPSK	50	56	23.80	24.06	23.93	
20	PI/2 BPSK	100	0	23.94	23.85	23.91	25.2
20	QPSK	1	1	23.84	23.11	23.76	24.7
20	QPSK	1	53	23.72	23.56	23.37	
20	QPSK	1	104	23.90	23.74	23.64	
20	QPSK	50	0	22.87	22.51	22.70	24.7
20	QPSK	50	28	23.32	23.33	23.20	
20	QPSK	50	56	22.69	22.87	22.79	
20	QPSK	100	0	22.76	22.66	22.77	24.2
20	16QAM	1	1	22.69	21.67	22.59	23.7
20	16QAM	1	53	22.49	22.37	22.34	
20	16QAM	1	104	22.71	22.52	22.46	
20	16QAM	50	0	22.00	21.69	21.85	23.7
20	16QAM	50	28	22.43	22.50	22.37	
20	16QAM	50	56	21.88	22.14	21.93	
20	16QAM	100	0	22.04	21.85	21.91	23.7
20	64QAM	1	1	22.27	21.55	22.19	23.2
20	64QAM	1	53	22.14	22.00	22.03	
20	64QAM	1	104	22.27	22.18	21.99	
20	64QAM	50	0	21.43	21.09	21.30	23.2
20	64QAM	50	28	21.85	21.86	21.86	
20	64QAM	50	56	21.29	21.56	21.33	
20	64QAM	100	0	21.38	21.32	21.34	23.2
20	256QAM	1	1	19.74	19.21	19.64	21.2
20	256QAM	1	53	19.58	19.45	19.51	
20	256QAM	1	104	19.78	19.69	19.57	
20	256QAM	50	0	19.33	19.22	19.21	21.2
20	256QAM	50	28	19.74	19.75	19.68	
20	256QAM	50	56	19.20	19.44	19.24	
20	256QAM	100	0	19.29	19.22	19.29	21.2
Channel				34300	34900	34900	limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	PI/2 BPSK	1	1	24.47	23.67	24.35	25.7
Channel				34300	34900	355000	limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	PI/2 BPSK	1	1	24.46	23.76	24.33	25.7
Channel				34300	34900	355000	limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	PI/2 BPSK	1	1	24.45	23.70	24.31	25.7



n71							
Ant 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (max)
Channel				134600	138100	137600	
Frequency (MHz)				673	680.5	686	
20	PI/2 BPSK	1	1	24.51	24.41	24.50	
20	PI/2 BPSK	1	53	24.32	24.40	24.41	25.7
20	PI/2 BPSK	1	104	24.31	24.40	24.22	
20	PI/2 BPSK	50	0	23.93	24.35	24.16	
20	PI/2 BPSK	50	28	24.63	24.45	24.47	25.7
20	PI/2 BPSK	50	56	24.39	24.31	24.20	
20	PI/2 BPSK	100	0	24.20	24.24	24.24	25.2
20	QPSK	1	1	23.89	23.80	23.87	
20	QPSK	1	53	23.70	23.77	23.74	24.7
20	QPSK	1	104	23.64	23.75	23.62	
20	QPSK	50	0	23.10	23.46	23.35	
20	QPSK	50	28	23.74	23.65	23.60	24.7
20	QPSK	50	56	23.52	23.45	23.35	
20	QPSK	100	0	23.32	23.34	23.41	24.2
20	16QAM	1	1	22.66	22.65	22.51	
20	16QAM	1	53	22.46	22.59	22.61	23.7
20	16QAM	1	104	22.41	22.54	22.35	
20	16QAM	50	0	22.12	22.54	22.32	
20	16QAM	50	28	22.76	22.63	22.65	23.7
20	16QAM	50	56	22.52	22.41	22.38	
20	16QAM	100	0	22.31	22.42	22.44	23.2
20	64QAM	1	1	22.22	22.16	22.22	
20	64QAM	1	53	22.09	22.12	22.14	23.2
20	64QAM	1	104	22.08	22.14	21.99	
20	64QAM	50	0	21.62	21.98	21.85	
20	64QAM	50	28	22.28	22.14	22.10	23.2
20	64QAM	50	56	22.09	21.99	21.80	
20	64QAM	100	0	21.81	21.89	21.87	23.2
20	256QAM	1	1	19.88	19.73	19.84	
20	256QAM	1	53	19.66	19.79	19.78	21.2
20	256QAM	1	104	19.64	19.70	19.65	
20	256QAM	50	0	19.67	20.06	19.87	
20	256QAM	50	28	20.34	20.15	20.20	21.2
20	256QAM	50	56	20.17	20.06	20.00	
20	256QAM	100	0	19.92	19.99	20.04	21.2
Channel				134100	138100	138100	
Frequency (MHz)				670.5	680.5	680.5	
15	PI/2 BPSK	1	1	24.50	24.38	24.49	25.7
Channel				133600	138100	138600	
Frequency (MHz)				668	680.5	693	
10	PI/2 BPSK	1	1	24.44	24.35	24.42	25.7
Channel				133100	138100	139100	
Frequency (MHz)				665.5	680.5	695.5	
5	PI/2 BPSK	1	1	24.45	24.37	24.41	25.7



n12								
Act 1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				141300	141500	141700		
Frequency (MHz)				705.5	707.5	709.5		
15	PI/2 BPSK	1	1	23.31	23.32	23.26		
15	PI/2 BPSK	1	40	23.20	23.26	23.17	24.7	
15	PI/2 BPSK	1	77	23.11	23.11	23.05		
15	PI/2 BPSK	36	0	23.24	23.21	23.19		
15	PI/2 BPSK	36	22	23.25	23.26	23.20	24.7	
15	PI/2 BPSK	36	43	23.16	23.16	23.07		
15	PI/2 BPSK	75	0	23.25	23.29	23.24	24.2	
15	QPSK	1	1	22.84	22.90	22.86		
15	QPSK	1	40	22.70	22.76	22.69	24.2	
15	QPSK	1	77	22.66	22.67	22.55		
15	QPSK	36	0	22.34	22.33	22.33		
15	QPSK	36	22	22.38	22.42	22.40	24.2	
15	QPSK	36	43	22.35	22.26	22.27		
15	QPSK	75	0	22.43	22.40	22.36	23.7	
15	16QAM	1	1	22.32	22.37	22.29		
15	16QAM	1	40	22.28	22.35	22.17	23.7	
15	16QAM	1	77	22.13	22.12	22.06		
15	16QAM	36	0	21.72	21.73	21.70		
15	16QAM	36	22	21.74	21.75	21.72	23.7	
15	16QAM	36	43	21.73	21.70	21.74		
15	16QAM	75	0	21.46	21.58	21.44	22.7	
15	64QAM	1	1	21.13	21.15	21.13		
15	64QAM	1	40	21.07	21.15	21.01	22.2	
15	64QAM	1	77	20.92	20.99	20.94		
15	64QAM	36	0	20.96	20.93	20.90		
15	64QAM	36	22	20.96	20.97	20.93	22.2	
15	64QAM	36	43	20.88	20.92	20.87		
15	64QAM	75	0	21.04	21.02	21.04	22.2	
15	256QAM	1	1	18.76	18.73	18.70		
15	256QAM	1	40	18.63	18.66	18.64	20.2	
15	256QAM	1	77	18.52	18.54	18.49		
15	256QAM	36	0	19.12	19.02	19.02		
15	256QAM	36	22	19.10	19.13	19.05	20.2	
15	256QAM	36	43	18.96	19.02	18.94		
15	256QAM	75	0	19.10	19.19	19.10	20.2	
Channel				140800	141500	142200		
Frequency (MHz)				704	707.5	711		
10	PI/2 BPSK	1	1	23.30	23.23	23.24	24.7	
Channel				140300	141600	142700		
Frequency (MHz)				701.5	707.5	713.5		
5	PI/2 BPSK	1	1	23.29	23.24	23.19	24.7	



n5							
Act 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (100-pp limit)
Channel				165800	167300	167900	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	22.63	22.49	22.47	24.0
20	PI/2 BPSK	1	53	22.55	22.78	22.65	
20	PI/2 BPSK	1	104	22.51	22.50	22.48	
20	PI/2 BPSK	50	0	22.55	22.59	22.51	24.0
20	PI/2 BPSK	50	28	22.58	22.60	22.59	
20	PI/2 BPSK	50	56	22.50	22.56	22.43	
20	PI/2 BPSK	100	0	22.54	22.55	22.14	24.0
20	QPSK	1	1	22.56	22.51	22.49	24.0
20	QPSK	1	53	22.52	22.52	22.57	
20	QPSK	1	104	22.43	22.47	22.45	
20	QPSK	50	0	22.51	22.49	22.58	24.0
20	QPSK	50	28	22.88	22.88	22.90	
20	QPSK	50	56	22.37	22.43	22.41	
20	QPSK	100	0	22.48	22.50	22.54	24.0
20	16QAM	1	1	22.81	22.71	22.51	24.0
20	16QAM	1	53	22.70	22.80	22.75	
20	16QAM	1	104	22.63	22.64	22.60	
20	16QAM	50	0	21.91	22.07	21.96	24.0
20	16QAM	50	28	22.30	22.43	22.41	
20	16QAM	50	56	21.88	21.96	21.94	
20	16QAM	100	0	21.88	21.89	21.85	23.0
20	64QAM	1	1	21.41	21.32	21.32	22.5
20	64QAM	1	53	21.44	21.48	21.46	
20	64QAM	1	104	21.33	21.24	21.25	
20	64QAM	50	0	21.38	21.34	21.33	22.5
20	64QAM	50	28	21.40	21.47	21.45	
20	64QAM	50	56	21.34	21.27	21.26	
20	64QAM	100	0	21.37	21.29	21.24	21.5
20	256QAM	1	1	19.65	19.50	19.51	20.5
20	256QAM	1	53	19.59	19.64	19.58	
20	256QAM	1	104	19.55	19.46	19.43	
20	256QAM	50	0	19.70	19.50	19.62	20.5
20	256QAM	50	28	19.69	19.75	19.69	
20	256QAM	50	56	19.55	19.59	19.54	
20	256QAM	100	0	19.66	19.59	19.51	20.5
Channel				168300	167300	168300	
Frequency (MHz)				831.5	835.5	841.5	
15	PI/2 BPSK	1	1	22.62	22.46	22.44	24.0
Channel				165800	167300	168800	
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	22.55	22.43	22.38	24.0
Channel				165300	167300	166300	
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	23.31	23.26	23.18	24.0



n2							
Act 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm) (UE up limit)
				Low Ch. / Freq. 37200	Middle Ch. / Freq. 37600	High Ch. / Freq. 38000	
Channel				1860	1880	1900	
Frequency (MHz)							
20	PI/2 BPSK	1	1	23.08	23.10	23.10	
20	PI/2 BPSK	1	53	23.12	23.13	23.11	24.5
20	PI/2 BPSK	1	104	23.06	23.08	23.07	
20	PI/2 BPSK	50	0	23.06	23.08	22.97	
20	PI/2 BPSK	50	28	23.13	23.18	23.08	24.5
20	PI/2 BPSK	50	56	23.01	23.06	23.05	
20	PI/2 BPSK	100	0	23.10	23.06	23.01	24.0
20	QPSK	1	1	22.93	22.99	22.90	
20	QPSK	1	53	23.01	23.01	22.98	24.0
20	QPSK	1	104	22.84	22.91	22.97	
20	QPSK	50	0	22.90	22.85	22.81	
20	QPSK	50	28	22.92	22.93	22.96	24.0
20	QPSK	50	56	22.88	22.86	22.93	
20	QPSK	100	0	22.91	22.91	22.90	24.0
20	16QAM	1	1	22.62	22.53	22.52	
20	16QAM	1	53	22.52	22.59	22.59	23.5
20	16QAM	1	104	22.53	22.47	22.59	
20	16QAM	50	0	22.26	22.24	22.21	
20	16QAM	50	28	22.25	22.20	22.27	23.5
20	16QAM	50	56	22.16	22.24	22.26	
20	16QAM	100	0	22.29	22.22	22.18	23.0
20	64QAM	1	1	21.82	21.86	21.80	
20	64QAM	1	53	21.85	21.80	21.87	23.0
20	64QAM	1	104	21.79	21.84	21.84	
20	64QAM	50	0	21.75	21.79	21.73	
20	64QAM	50	28	21.79	21.87	21.87	23.0
20	64QAM	50	56	21.79	21.73	21.86	
20	64QAM	100	0	21.84	21.80	21.86	23.0
20	256QAM	1	1	19.45	19.40	19.35	
20	256QAM	1	53	19.46	19.52	19.48	20.5
20	256QAM	1	104	19.37	19.34	19.43	
20	256QAM	50	0	19.45	19.35	19.45	
20	256QAM	50	28	19.50	19.52	19.46	20.5
20	256QAM	50	56	19.42	19.40	19.41	
20	256QAM	100	0	19.43	19.46	19.39	20.5
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1860	1901.5	
15	PI/2 BPSK	1	1	23.05	23.12	23.03	24.5
Channel				371000	376000	381000	
Frequency (MHz)				1855	1860	1905	
10	PI/2 BPSK	1	1	23.13	23.10	23.06	24.5
Channel				370500	375000	379500	
Frequency (MHz)				1852.5	1860	1907.5	
5	PI/2 BPSK	1	1	23.08	23.07	23.08	24.5



n25							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (max)
Channel				37200	37600	38100	
Frequency (MHz)				1850	1850	1905	
20	PI/2 BPSK	1	1	23.09	23.11	23.08	24.5
20	PI/2 BPSK	1	53	23.11	23.15	23.12	
20	PI/2 BPSK	1	104	23.07	23.04	23.06	
20	PI/2 BPSK	50	0	23.07	23.05	23.02	24.5
20	PI/2 BPSK	50	28	23.10	23.13	23.12	
20	PI/2 BPSK	50	56	23.05	23.08	23.06	
20	PI/2 BPSK	100	0	23.07	23.07	23.05	24.0
20	QPSK	1	1	22.90	22.95	22.91	24.0
20	QPSK	1	53	22.96	23.00	22.98	
20	QPSK	1	104	22.89	22.92	22.95	
20	QPSK	50	0	22.95	22.89	22.82	24.0
20	QPSK	50	28	22.95	22.96	22.93	
20	QPSK	50	56	22.87	22.91	22.94	
20	QPSK	100	0	22.95	22.94	22.89	24.0
20	16QAM	1	1	22.59	22.54	22.48	23.5
20	16QAM	1	53	22.51	22.60	22.62	
20	16QAM	1	104	22.52	22.52	22.54	
20	16QAM	50	0	22.23	22.20	22.16	23.5
20	16QAM	50	28	22.26	22.25	22.26	
20	16QAM	50	56	22.18	22.19	22.23	
20	16QAM	100	0	22.24	22.26	22.20	23.0
20	64QAM	1	1	21.85	21.91	21.81	23.0
20	64QAM	1	53	21.83	21.89	21.84	
20	64QAM	1	104	21.84	21.84	21.81	
20	64QAM	50	0	21.80	21.76	21.73	23.0
20	64QAM	50	28	21.84	21.91	21.86	
20	64QAM	50	56	21.75	21.78	21.82	
20	64QAM	100	0	21.87	21.83	21.81	23.0
20	256QAM	1	1	19.40	19.45	19.40	20.5
20	256QAM	1	53	19.49	19.54	19.47	
20	256QAM	1	104	19.39	19.34	19.42	
20	256QAM	50	0	19.42	19.37	19.40	20.5
20	256QAM	50	28	19.48	19.50	19.50	
20	256QAM	50	56	19.45	19.39	19.43	
20	256QAM	100	0	19.40	19.46	19.40	20.5
Channel				37150	37600	38150	
Frequency (MHz)				1877.5	1880	1927.5	
15	PI/2 BPSK	1	1	23.08	23.10	23.02	24.5
Channel				37100	37600	38200	
Frequency (MHz)				1855	1850	1910	
10	PI/2 BPSK	1	1	23.03	23.01	23.02	24.5
Channel				37050	37600	38250	
Frequency (MHz)				1852.5	1850	1917.5	
5	PI/2 BPSK	1	1	23.09	23.05	23.07	24.5



n2							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (100-pp limit)
Channel				1860	1880	1900	
Frequency (MHz)							
20	PI/2 BPSK	1	1	17.77	17.69	17.71	
20	PI/2 BPSK	1	53	17.79	17.67	17.78	19.2
20	PI/2 BPSK	1	104	17.76	17.75	17.69	
20	PI/2 BPSK	50	0	17.73	17.84	17.74	
20	PI/2 BPSK	50	28	17.87	17.86	17.83	19.2
20	PI/2 BPSK	50	56	17.61	17.67	17.68	
20	PI/2 BPSK	100	0	17.70	17.71	17.73	19.2
20	QPSK	1	1	17.78	17.73	17.76	
20	QPSK	1	53	17.79	17.67	17.83	19.2
20	QPSK	1	104	17.77	17.70	17.74	
20	QPSK	50	0	17.68	17.88	17.77	
20	QPSK	50	28	17.84	17.85	17.84	19.2
20	QPSK	50	56	17.57	17.58	17.69	
20	QPSK	100	0	17.71	17.73	17.72	19.2
20	16QAM	1	1	17.74	17.72	17.76	
20	16QAM	1	53	17.82	17.72	17.76	19.2
20	16QAM	1	104	17.81	17.77	17.74	
20	16QAM	50	0	17.71	17.79	17.73	
20	16QAM	50	28	17.92	17.85	17.81	19.2
20	16QAM	50	56	17.63	17.58	17.70	
20	16QAM	100	0	17.66	17.86	17.71	19.2
20	64QAM	1	1	17.72	17.69	17.71	
20	64QAM	1	53	17.81	17.71	17.73	19.2
20	64QAM	1	104	17.72	17.78	17.70	
20	64QAM	50	0	17.68	17.83	17.78	
20	64QAM	50	28	17.90	17.85	17.78	19.2
20	64QAM	50	56	17.66	17.58	17.69	
20	64QAM	100	0	17.71	17.75	17.77	19.2
20	256QAM	1	1	17.80	17.70	17.87	
20	256QAM	1	53	17.83	17.70	17.73	19.2
20	256QAM	1	104	17.71	17.72	17.71	
20	256QAM	50	0	17.74	17.85	17.72	
20	256QAM	50	28	17.86	17.82	17.86	19.2
20	256QAM	50	56	17.64	17.62	17.71	
20	256QAM	100	0	17.66	17.73	17.72	19.2
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1860	1901.5	
15	PI/2 BPSK	1	1	17.80	17.71	17.69	19.2
Channel				371000	376000	381000	
Frequency (MHz)				1855	1860	1905	
10	PI/2 BPSK	1	1	17.82	17.69	17.72	19.2
Channel				310500	315000	319500	
Frequency (MHz)				1852.5	1860	1907.5	
5	PI/2 BPSK	1	1	17.79	17.66	17.74	19.2





n25							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm) (dBm)
Channel				37200	37600	38100	
Frequency (MHz)				1850	1880	1905	
20	PV2 BPSK	1	1	17.75	17.70	17.74	19.2
20	PV2 BPSK	1	53	17.76	17.71	17.75	
20	PV2 BPSK	1	104	17.74	17.70	17.72	
20	PV2 BPSK	50	0	17.76	17.70	17.78	
20	PV2 BPSK	50	28	17.83	17.82	17.81	19.2
20	PV2 BPSK	50	56	17.64	17.62	17.65	
20	PV2 BPSK	100	0	17.70	17.69	17.69	19.2
20	QPSK	1	1	17.75	17.67	17.77	
20	QPSK	1	53	17.73	17.75	17.70	19.2
20	QPSK	1	104	17.73	17.69	17.77	
20	QPSK	50	0	17.80	17.74	17.77	
20	QPSK	50	28	17.78	17.87	17.85	19.2
20	QPSK	50	56	17.68	17.64	17.61	
20	QPSK	100	0	17.69	17.69	17.64	19.2
20	16QAM	1	1	17.77	17.75	17.77	
20	16QAM	1	53	17.79	17.70	17.76	19.2
20	16QAM	1	104	17.77	17.75	17.74	
20	16QAM	50	0	17.76	17.84	17.81	
20	16QAM	50	28	17.84	17.77	17.84	19.2
20	16QAM	50	56	17.65	17.64	17.66	
20	16QAM	100	0	17.69	17.65	17.74	19.2
20	64QAM	1	1	17.79	17.70	17.69	
20	64QAM	1	53	17.77	17.68	17.80	19.2
20	64QAM	1	104	17.74	17.73	17.77	
20	64QAM	50	0	17.78	17.76	17.83	
20	64QAM	50	28	17.81	17.87	17.78	19.2
20	64QAM	50	56	17.62	17.66	17.63	
20	64QAM	100	0	17.69	17.73	17.74	19.2
20	256QAM	1	1	17.77	17.68	17.76	
20	256QAM	1	53	17.76	17.75	17.80	19.2
20	256QAM	1	104	17.74	17.72	17.72	
20	256QAM	50	0	17.79	17.76	17.81	
20	256QAM	50	28	17.82	17.85	17.86	19.2
20	256QAM	50	56	17.62	17.60	17.70	
20	256QAM	100	0	17.75	17.68	17.74	19.2
Channel				37150	37600	38150	
Frequency (MHz)				1877.5	1880	1927.5	
15	PV2 BPSK	1	1	17.75	17.71	17.70	19.2
Channel				37100	37600	38200	
Frequency (MHz)				1855	1880	1910	
10	PV2 BPSK	1	1	17.73	17.72	17.71	19.2
Channel				37050	37600	38250	
Frequency (MHz)				1852.5	1880	1912.5	
5	PV2 BPSK	1	1	17.80	17.68	17.75	19.2



n66							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				34000	34900	35000	
Frequency (MHz)				1720	1745	1770	
20	PI/2 BPSK	1	1	19.20	19.13	19.18	
20	PI/2 BPSK	1	53	19.02	19.06	19.03	20.9
20	PI/2 BPSK	1	104	19.09	19.10	19.07	
20	PI/2 BPSK	50	0	19.14	19.01	19.03	
20	PI/2 BPSK	50	28	19.16	19.14	19.12	20.9
20	PI/2 BPSK	50	56	19.01	19.04	19.02	
20	PI/2 BPSK	100	0	19.04	19.01	19.00	20.9
20	QPSK	1	1	19.13	19.05	19.09	
20	QPSK	1	53	19.96	19.96	19.02	20.9
20	QPSK	1	104	19.04	19.06	19.04	
20	QPSK	50	0	19.02	19.90	18.80	
20	QPSK	50	28	18.97	18.96	18.95	20.9
20	QPSK	50	56	18.92	18.91	18.91	
20	QPSK	100	0	18.90	18.91	18.90	20.9
20	16QAM	1	1	19.09	18.93	19.05	
20	16QAM	1	53	18.91	18.90	18.88	20.9
20	16QAM	1	104	18.99	18.94	18.92	
20	16QAM	50	0	19.13	18.92	19.00	
20	16QAM	50	28	19.12	19.09	19.10	20.9
20	16QAM	50	56	18.96	18.96	18.96	
20	16QAM	100	0	18.97	18.93	18.99	20.9
20	64QAM	1	1	19.31	19.28	19.35	
20	64QAM	1	53	19.18	19.23	19.20	20.9
20	64QAM	1	104	19.28	19.22	19.25	
20	64QAM	50	0	19.00	18.90	18.91	
20	64QAM	50	28	19.04	18.95	19.02	20.9
20	64QAM	50	56	18.91	18.93	18.92	
20	64QAM	100	0	18.93	18.91	18.90	20.9
20	256QAM	1	1	18.93	18.93	18.91	
20	256QAM	1	53	18.90	18.91	18.90	20.9
20	256QAM	1	104	18.90	18.90	18.90	
20	256QAM	50	0	19.10	19.00	18.94	
20	256QAM	50	28	19.13	19.12	19.02	20.9
20	256QAM	50	56	18.97	19.00	18.96	
20	256QAM	100	0	19.00	18.96	18.97	20.9
Channel				34300	34900	34900	
Frequency (MHz)				1717.5	1745	1772.5	
15	PI/2 BPSK	1	1	19.19	19.11	19.14	20.9
Channel				34300	34900	35000	
Frequency (MHz)				1715	1745	1775	
10	PI/2 BPSK	1	1	19.15	19.15	19.19	20.9
Channel				34250	34900	35500	
Frequency (MHz)				1712.5	1745	1777.5	
5	PI/2 BPSK	1	1	19.22	19.13	19.16	20.9



n2							
Act 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (UE-MB)
Channel				37200	37600	38000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	23.08	23.10	23.10	
20	PI/2 BPSK	1	53	23.12	23.13	23.11	23.7
20	PI/2 BPSK	1	104	23.06	23.08	23.07	
20	PI/2 BPSK	50	0	23.06	23.08	22.97	
20	PI/2 BPSK	50	28	23.13	23.18	23.08	23.7
20	PI/2 BPSK	50	56	23.01	23.06	23.05	
20	PI/2 BPSK	100	0	23.10	23.06	23.01	23.7
20	QPSK	1	1	22.93	22.99	22.90	
20	QPSK	1	53	23.01	23.01	22.98	23.7
20	QPSK	1	104	22.84	22.91	22.97	
20	QPSK	50	0	22.90	22.85	22.81	
20	QPSK	50	28	22.92	22.93	22.96	23.7
20	QPSK	50	56	22.88	22.86	22.93	
20	QPSK	100	0	22.91	22.91	22.90	23.7
20	16QAM	1	1	22.62	22.53	22.52	
20	16QAM	1	53	22.52	22.59	22.59	23.2
20	16QAM	1	104	22.53	22.47	22.59	
20	16QAM	50	0	22.26	22.24	22.21	
20	16QAM	50	28	22.25	22.20	22.27	23.2
20	16QAM	50	56	22.16	22.24	22.26	
20	16QAM	100	0	22.29	22.22	22.18	23.2
20	64QAM	1	1	21.82	21.86	21.80	
20	64QAM	1	53	21.85	21.80	21.87	22.7
20	64QAM	1	104	21.79	21.84	21.84	
20	64QAM	50	0	21.75	21.79	21.73	
20	64QAM	50	28	21.79	21.87	21.87	22.7
20	64QAM	50	56	21.79	21.73	21.86	
20	64QAM	100	0	21.84	21.80	21.86	22.7
20	256QAM	1	1	19.45	19.40	19.35	
20	256QAM	1	53	19.46	19.52	19.48	20.2
20	256QAM	1	104	19.37	19.34	19.43	
20	256QAM	50	0	19.45	19.35	19.45	
20	256QAM	50	28	19.50	19.52	19.46	20.2
20	256QAM	50	56	19.42	19.40	19.41	
20	256QAM	100	0	19.43	19.46	19.39	20.2
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1860	1901.5	
15	PI/2 BPSK	1	1	23.05	23.12	23.03	23.7
Channel				371000	376000	381000	
Frequency (MHz)				1855	1860	1905	
10	PI/2 BPSK	1	1	23.13	23.10	23.06	23.7
Channel				370500	375000	379500	
Frequency (MHz)				1852.5	1860	1907.5	
5	PI/2 BPSK	1	1	23.08	23.07	23.08	23.7



n25							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (max)
Channel				37200	37600	38100	
Frequency (MHz)				1850	1850	1905	
20	PI/2 BPSK	1	1	23.09	23.11	23.08	23.7
20	PI/2 BPSK	1	53	23.11	23.15	23.12	
20	PI/2 BPSK	1	104	23.07	23.04	23.06	
20	PI/2 BPSK	50	0	23.07	23.06	23.02	23.7
20	PI/2 BPSK	50	28	23.10	23.13	23.12	
20	PI/2 BPSK	50	56	23.05	23.08	23.06	
20	PI/2 BPSK	100	0	23.07	23.07	23.05	23.7
20	QPSK	1	1	22.90	22.95	22.91	23.7
20	QPSK	1	53	22.96	23.00	22.98	
20	QPSK	1	104	22.89	22.92	22.95	
20	QPSK	50	0	22.95	22.89	22.82	23.7
20	QPSK	50	28	22.95	22.96	22.93	
20	QPSK	50	56	22.87	22.91	22.94	
20	QPSK	100	0	22.95	22.94	22.89	23.7
20	16QAM	1	1	22.59	22.54	22.48	23.2
20	16QAM	1	53	22.51	22.60	22.62	
20	16QAM	1	104	22.52	22.52	22.54	
20	16QAM	50	0	22.23	22.20	22.16	23.2
20	16QAM	50	28	22.26	22.25	22.26	
20	16QAM	50	56	22.18	22.19	22.23	
20	16QAM	100	0	22.24	22.26	22.20	23.2
20	64QAM	1	1	21.85	21.91	21.81	22.7
20	64QAM	1	53	21.83	21.89	21.84	
20	64QAM	1	104	21.84	21.84	21.81	
20	64QAM	50	0	21.80	21.76	21.73	22.7
20	64QAM	50	28	21.84	21.91	21.86	
20	64QAM	50	56	21.75	21.78	21.82	
20	64QAM	100	0	21.87	21.83	21.81	22.7
20	256QAM	1	1	19.40	19.45	19.40	20.2
20	256QAM	1	53	19.49	19.54	19.47	
20	256QAM	1	104	19.39	19.34	19.42	
20	256QAM	50	0	19.42	19.37	19.40	20.2
20	256QAM	50	28	19.48	19.50	19.50	
20	256QAM	50	56	19.45	19.39	19.43	
20	256QAM	100	0	19.40	19.46	19.40	20.2
Channel				37150	37600	38150	
Frequency (MHz)				1877.5	1880	1927.5	
15	PI/2 BPSK	1	1	23.08	23.10	23.02	23.7
Channel				37100	37600	38200	
Frequency (MHz)				1855	1850	1910	
10	PI/2 BPSK	1	1	23.03	23.01	23.02	23.7
Channel				37050	37600	38250	
Frequency (MHz)				1852.5	1850	1917.5	
5	PI/2 BPSK	1	1	23.09	23.05	23.07	23.7



n66							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				34000	34900	35600	
Frequency (MHz)				1720	1745	1770	
20	PI/2 BPSK	1	1	24.73	23.96	24.62	25.3
20	PI/2 BPSK	1	53	24.64	24.51	24.63	
20	PI/2 BPSK	1	104	24.75	24.63	24.63	
20	PI/2 BPSK	50	0	24.46	23.70	24.12	25.3
20	PI/2 BPSK	50	28	24.75	24.72	24.63	
20	PI/2 BPSK	50	56	24.11	24.35	24.24	
20	PI/2 BPSK	100	0	24.22	24.06	24.20	24.8
20	QPSK	1	1	24.29	23.54	24.15	24.3
20	QPSK	1	53	24.17	24.01	24.04	
20	QPSK	1	104	24.34	24.22	24.14	
20	QPSK	50	0	23.48	22.80	23.21	24.3
20	QPSK	50	28	23.76	23.77	23.72	
20	QPSK	50	56	23.19	23.41	23.28	
20	QPSK	100	0	23.32	23.06	23.20	23.8
20	16QAM	1	1	22.82	22.06	22.62	23.3
20	16QAM	1	53	22.69	22.61	22.62	
20	16QAM	1	104	22.77	22.73	22.67	
20	16QAM	50	0	22.55	21.77	22.16	23.3
20	16QAM	50	28	22.84	22.79	22.64	
20	16QAM	50	56	22.11	22.36	22.25	
20	16QAM	100	0	22.31	22.16	22.25	22.8
20	64QAM	1	1	22.38	21.64	22.31	22.8
20	64QAM	1	53	22.29	22.19	22.22	
20	64QAM	1	104	22.45	22.31	22.30	
20	64QAM	50	0	22.07	21.32	21.62	22.8
20	64QAM	50	28	22.39	22.41	22.32	
20	64QAM	50	56	21.76	22.03	21.87	
20	64QAM	100	0	21.89	21.67	21.85	22.8
20	256QAM	1	1	19.78	19.01	19.67	20.8
20	256QAM	1	53	19.73	19.59	19.58	
20	256QAM	1	104	19.76	19.67	19.63	
20	256QAM	50	0	20.05	19.21	19.63	20.8
20	256QAM	50	28	20.27	20.30	20.14	
20	256QAM	50	56	19.64	19.85	19.74	
20	256QAM	100	0	19.74	19.61	19.79	20.8
Channel				34300	34900	35400	
Frequency (MHz)				1717.5	1745	1772.5	
15	PI/2 BPSK	1	1	24.69	23.90	24.55	25.3
Channel				34300	34900	35500	
Frequency (MHz)				1715	1745	1775	
10	PI/2 BPSK	1	1	24.72	23.95	24.55	25.3
Channel				34250	34800	35500	
Frequency (MHz)				1712.5	1745	1777.5	
5	PI/2 BPSK	1	1	24.72	23.87	24.57	25.3



n2							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (100-pp) (dBm)
Channel				1860	1880	1900	
Frequency (MHz)							
20	PI/2 BPSK	1	1	17.77	17.69	17.71	
20	PI/2 BPSK	1	53	17.79	17.67	17.78	18.4
20	PI/2 BPSK	1	104	17.76	17.75	17.69	
20	PI/2 BPSK	50	0	17.73	17.84	17.74	
20	PI/2 BPSK	50	28	17.87	17.86	17.83	18.4
20	PI/2 BPSK	50	56	17.61	17.67	17.68	
20	PI/2 BPSK	100	0	17.70	17.71	17.73	18.4
20	QPSK	1	1	17.78	17.73	17.76	
20	QPSK	1	53	17.79	17.67	17.83	18.4
20	QPSK	1	104	17.77	17.70	17.74	
20	QPSK	50	0	17.68	17.88	17.77	
20	QPSK	50	28	17.84	17.85	17.84	18.4
20	QPSK	50	56	17.57	17.58	17.69	
20	QPSK	100	0	17.71	17.73	17.72	18.4
20	16QAM	1	1	17.74	17.72	17.75	
20	16QAM	1	53	17.82	17.72	17.76	18.4
20	16QAM	1	104	17.81	17.77	17.74	
20	16QAM	50	0	17.71	17.79	17.73	
20	16QAM	50	28	17.92	17.85	17.81	18.4
20	16QAM	50	56	17.63	17.58	17.70	
20	16QAM	100	0	17.66	17.86	17.71	18.4
20	64QAM	1	1	17.72	17.69	17.71	
20	64QAM	1	53	17.81	17.71	17.73	18.4
20	64QAM	1	104	17.72	17.78	17.70	
20	64QAM	50	0	17.68	17.83	17.78	
20	64QAM	50	28	17.90	17.85	17.78	18.4
20	64QAM	50	56	17.66	17.58	17.69	
20	64QAM	100	0	17.71	17.75	17.77	18.4
20	256QAM	1	1	17.80	17.70	17.87	
20	256QAM	1	53	17.83	17.70	17.73	18.4
20	256QAM	1	104	17.71	17.72	17.71	
20	256QAM	50	0	17.74	17.85	17.72	
20	256QAM	50	28	17.86	17.82	17.86	18.4
20	256QAM	50	56	17.64	17.62	17.71	
20	256QAM	100	0	17.66	17.73	17.72	18.4
Channel				371500	376000	380500	
Frequency (MHz)				1851.5	1860	1901.5	
15	PI/2 BPSK	1	1	17.80	17.71	17.69	18.4
Channel				371000	376000	381000	
Frequency (MHz)				1855	1860	1905	
10	PI/2 BPSK	1	1	17.82	17.69	17.72	18.4
Channel				310500	315000	319500	
Frequency (MHz)				1852.5	1860	1907.5	
5	PI/2 BPSK	1	1	17.79	17.66	17.74	18.4



n25							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (min)
Channel				37200	37600	38100	
Frequency (MHz)				1850	1880	1905	
20	PV2 BPSK	1	1	17.75	17.70	17.74	
20	PV2 BPSK	1	53	17.76	17.71	17.75	18.4
20	PV2 BPSK	1	104	17.74	17.70	17.72	
20	PV2 BPSK	50	0	17.76	17.70	17.78	
20	PV2 BPSK	50	28	17.83	17.82	17.81	18.4
20	PV2 BPSK	50	56	17.64	17.62	17.65	
20	PV2 BPSK	100	0	17.70	17.69	17.69	18.4
20	QPSK	1	1	17.75	17.67	17.77	
20	QPSK	1	53	17.73	17.75	17.70	18.4
20	QPSK	1	104	17.73	17.69	17.77	
20	QPSK	50	0	17.80	17.74	17.77	
20	QPSK	50	28	17.78	17.87	17.85	18.4
20	QPSK	50	56	17.68	17.64	17.61	
20	QPSK	100	0	17.69	17.69	17.64	18.4
20	16QAM	1	1	17.77	17.75	17.77	
20	16QAM	1	53	17.79	17.70	17.76	18.4
20	16QAM	1	104	17.77	17.75	17.74	
20	16QAM	50	0	17.76	17.84	17.81	
20	16QAM	50	28	17.84	17.77	17.84	18.4
20	16QAM	50	56	17.65	17.64	17.66	
20	16QAM	100	0	17.69	17.65	17.74	18.4
20	64QAM	1	1	17.79	17.70	17.69	
20	64QAM	1	53	17.77	17.68	17.80	18.4
20	64QAM	1	104	17.74	17.73	17.77	
20	64QAM	50	0	17.78	17.76	17.83	
20	64QAM	50	28	17.81	17.87	17.78	18.4
20	64QAM	50	56	17.62	17.66	17.63	
20	64QAM	100	0	17.69	17.73	17.74	18.4
20	256QAM	1	1	17.77	17.68	17.76	
20	256QAM	1	53	17.76	17.75	17.80	18.4
20	256QAM	1	104	17.74	17.72	17.72	
20	256QAM	50	0	17.79	17.76	17.81	
20	256QAM	50	28	17.82	17.85	17.86	18.4
20	256QAM	50	56	17.62	17.60	17.70	
20	256QAM	100	0	17.75	17.68	17.74	18.4
Channel				37150	37600	38150	
Frequency (MHz)				1877.5	1880	1927.5	
15	PV2 BPSK	1	1	17.75	17.71	17.70	18.4
Channel				37100	37600	38200	
Frequency (MHz)				1855	1880	1910	
10	PV2 BPSK	1	1	17.73	17.72	17.71	18.4
Channel				37050	37600	38250	
Frequency (MHz)				1852.5	1880	1912.5	
5	PV2 BPSK	1	1	17.80	17.68	17.75	18.4



n66							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				34000	34900	35600	
Frequency (MHz)				1720	1745	1770	
20	PV2 BPSK	1	1	19.20	19.13	19.18	
20	PV2 BPSK	1	53	19.02	19.06	19.03	20.1
20	PV2 BPSK	1	104	19.09	19.10	19.07	
20	PV2 BPSK	50	0	19.14	19.01	19.03	
20	PV2 BPSK	50	28	19.16	19.14	19.12	20.1
20	PV2 BPSK	50	56	19.01	19.04	19.02	
20	PV2 BPSK	100	0	19.04	19.01	19.00	20.1
20	QPSK	1	1	19.13	19.05	19.09	
20	QPSK	1	53	19.96	19.96	19.02	20.1
20	QPSK	1	104	19.04	19.06	19.04	
20	QPSK	50	0	19.02	19.90	18.80	
20	QPSK	50	28	18.97	18.96	18.95	20.1
20	QPSK	50	56	18.92	18.91	18.91	
20	QPSK	100	0	18.90	18.91	18.90	20.1
20	16QAM	1	1	19.09	18.93	19.05	
20	16QAM	1	53	18.91	18.90	18.88	20.1
20	16QAM	1	104	18.99	18.94	18.92	
20	16QAM	50	0	19.13	18.92	19.00	
20	16QAM	50	28	19.12	19.09	19.10	20.1
20	16QAM	50	56	18.96	18.96	18.96	
20	16QAM	100	0	18.97	18.93	18.99	20.1
20	64QAM	1	1	19.31	19.28	19.35	
20	64QAM	1	53	19.18	19.23	19.20	20.1
20	64QAM	1	104	19.28	19.22	19.25	
20	64QAM	50	0	19.00	18.90	18.91	
20	64QAM	50	28	19.04	18.95	19.02	20.1
20	64QAM	50	56	18.91	18.93	18.92	
20	64QAM	100	0	18.93	18.91	18.90	20.1
20	256QAM	1	1	18.93	18.93	18.91	
20	256QAM	1	53	18.90	18.91	18.90	20.1
20	256QAM	1	104	18.90	18.90	18.90	
20	256QAM	50	0	19.10	19.00	18.94	
20	256QAM	50	28	19.13	19.12	19.02	20.1
20	256QAM	50	56	18.97	19.00	18.96	
20	256QAM	100	0	19.00	18.96	18.97	20.1
Channel				34300	34900	35400	
Frequency (MHz)				1717.5	1745	1772.5	
15	PV2 BPSK	1	1	19.19	19.11	19.14	20.1
Channel				34300	34900	355000	
Frequency (MHz)				1715	1745	1775	
10	PV2 BPSK	1	1	19.15	19.15	19.19	20.1
Channel				34250	34900	355500	
Frequency (MHz)				1712.5	1745	1777.5	
5	PV2 BPSK	1	1	19.22	19.13	19.16	20.1





n5							
Act 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm) (100-pp limit)
Channel				16880	16730	16730	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	22.63	22.49	22.47	
20	PI/2 BPSK	1	53	22.55	22.78	22.65	23.2
20	PI/2 BPSK	1	104	22.51	22.50	22.48	
20	PI/2 BPSK	50	0	22.55	22.59	22.51	
20	PI/2 BPSK	50	28	22.58	22.60	22.59	23.2
20	PI/2 BPSK	50	56	22.50	22.56	22.43	
20	PI/2 BPSK	100	0	22.54	22.55	22.14	23.2
20	QPSK	1	1	22.56	22.51	22.49	
20	QPSK	1	53	22.52	22.52	22.57	23.2
20	QPSK	1	104	22.43	22.47	22.45	
20	QPSK	50	0	22.51	22.49	22.58	
20	QPSK	50	28	22.88	22.88	22.90	23.2
20	QPSK	50	56	22.37	22.43	22.41	
20	QPSK	100	0	22.48	22.50	22.54	23.2
20	16QAM	1	1	22.81	22.71	22.51	
20	16QAM	1	53	22.70	22.80	22.75	23.2
20	16QAM	1	104	22.63	22.84	22.60	
20	16QAM	50	0	21.91	22.07	21.96	
20	16QAM	50	28	22.30	22.43	22.41	23.2
20	16QAM	50	56	21.88	21.96	21.94	
20	16QAM	100	0	21.88	21.89	21.85	23.0
20	64QAM	1	1	21.41	21.32	21.32	
20	64QAM	1	53	21.44	21.48	21.46	22.5
20	64QAM	1	104	21.33	21.24	21.25	
20	64QAM	50	0	21.38	21.34	21.33	
20	64QAM	50	28	21.40	21.47	21.45	22.5
20	64QAM	50	56	21.34	21.27	21.26	
20	64QAM	100	0	21.37	21.29	21.24	22.5
20	256QAM	1	1	19.65	19.50	19.51	
20	256QAM	1	53	19.59	19.64	19.58	20.5
20	256QAM	1	104	19.55	19.46	19.43	
20	256QAM	50	0	19.70	19.50	19.62	
20	256QAM	50	28	19.69	19.75	19.69	20.5
20	256QAM	50	56	19.55	19.59	19.54	
20	256QAM	100	0	19.66	19.59	19.51	20.5
Channel				16830	16730	16830	
Frequency (MHz)				831.5	835.5	841.5	
15	PI/2 BPSK	1	1	22.62	22.46	22.44	23.2
Channel				16580	16730	16880	
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	22.55	22.43	22.38	23.2
Channel				16330	16730	16830	
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	22.61	22.41	22.42	23.2



Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
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	19.10	19.90	100.00	19.20	19.90	100.00	19.50	19.50	19.40	19.50	22.46	22.5	
		6	2437	19.00	19.90		18.70	19.90		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	18.80	19.90		17.90	19.90		19.00	19.50	18.40	19.50	21.72	22.5	
	802.11g 6Mbps	1	2412	15.20	16.00	98.08	15.20	16.00	97.60	15.50	15.00	15.60	16.00	18.56	18.0	
		6	2437	19.00	19.50		18.60	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	16.20	16.50		15.80	16.50		16.30	16.50	15.90	16.50	19.11	19.5	
	802.11n-HT20 MCS0	1	2412	14.20	15.00	97.94	14.00	15.00	97.93	14.60	15.00	14.50	15.00	17.56	18.0	
		6	2437	18.90	19.50		18.50	19.50		19.30	19.50	18.90	19.50	22.11	22.5	
		11	2462	15.50	15.50		15.10	15.50		15.50	15.50	15.20	15.50	18.36	18.5	
	802.11ac-VHT20 MCS0	1	2412	14.10	14.50	97.69	13.90	14.50	97.95	14.50	14.50	14.40	14.50	17.46	17.5	
		6	2437	18.80	19.50		18.40	19.50		19.20	19.50	18.80	19.50	22.01	22.5	
		11	2462	15.40	15.50		15.00	15.50		15.40	15.50	15.10	15.50	18.26	18.5	

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.00	17.50	97.84	17.00	17.50	97.83	17.40	17.50	17.10	17.50	20.26	20.5	
		40	5200	17.60	18.00		17.90	18.00		18.00	18.00	17.60	18.00	20.81	21.0	
		44	5220	17.70	18.00		17.80	18.00		18.00	18.00	17.80	18.00	20.86	21.0	
		48	5240	17.10	17.50		16.90	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
		48	5240	17.10	17.50		16.90	17.50		17.20	17.50	17.00	17.50	20.11	20.5	
	802.11n-HT20 MCS0	36	5180	16.80	17.50	97.42	16.90	17.50	97.94	17.20	17.50	17.00	17.50	20.11	20.5	
		40	5200	17.70	18.00		17.00	18.00		17.90	18.00	17.60	18.00	20.76	21.0	
		44	5220	17.50	18.00		17.30	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		48	5240	17.30	17.50		17.20	17.50		17.30	17.50	17.40	17.50	20.36	20.5	
		48	5240	17.30	17.50		17.20	17.50		17.30	17.50	17.40	17.50	20.36	20.5	
	802.11n-VHT40 MCS0	38	5190	15.70	16.00	95.67	15.40	16.00	95.03	15.80	16.00	15.50	16.00	18.66	19.0	
		46	5230	17.10	17.50		17.20	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
		38	5190	16.70	17.50		16.80	17.50		17.10	17.50	16.90	17.50	20.01	20.5	
		46	5230	17.10	17.50		16.90	17.50		17.80	18.00	17.50	18.00	20.66	21.0	
		46	5230	17.10	17.50		16.90	17.50		17.50	18.00	17.60	18.00	20.56	21.0	
	802.11ac-VHT20 MCS0	40	5200	17.60	18.00	97.69	17.20	18.00	97.95	17.80	18.00	17.50	18.00	20.66	21.0	
		44	5220	17.40	18.00		17.20	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
		48	5240	17.20	17.50		17.10	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
		38	5190	15.60	16.00		15.30	16.00		15.70	16.00	15.40	16.00	18.56	19.0	
		46	5230	17.00	17.50		17.10	17.50		17.10	17.50	17.20	17.50	20.16	20.5	
	802.11ac-VHT80 MCS0	42	5210	14.60	15.00	92.68	14.90	15.00	91.94	14.70	15.00	15.00	15.00	17.88	18.0	

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) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.40	18.00	97.84	17.20	18.00	97.83	17.60	18.00	17.50	18.00	20.56	21.0	
		56	5280	17.50	17.50		17.10	17.50		17.50	17.50	17.20	17.50	20.42	20.5	
		60	5300	17.50	17.50		16.80	17.50		17.50	17.50	16.90	17.50	20.22	20.5	
		64	5320	17.30	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		64	5320	17.30	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
	802.11n-HT20 MCS0	52	5260	17.60	18.00	97.42	17.60	18.00	97.94	17.70	18.00	17.80	18.00	20.76	21.0	
		56	5280	17.50	17.50		16.80	17.50		17.40	17.50	17.50	17.50	20.50	20.5	
		60	5300	17.50	17.50		17.00	17.50		17.50	17.50	17.40	17.50	20.46	20.5	
		64	5320	17.00	17.00		16.60	17.00		17.00	17.00	16.90	17.00	19.96	20.0	
		64	5320	17.00	17.00		16.60	17.00		17.00	17.00	16.90	17.00	19.96	20.0	
	802.11n-VHT40 MCS0	54	5270	17.20	17.50	95.67	17.10	17.50	95.03	17.30	17.50	17.20	17.50	20.26	20.5	
		62	5310	16.50	16.50		16.40	16.50		16.50	16.50	15.80	16.50	19.17	19.5	
		52	5260	17.50	18.00		17.50	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		56	5280	17.40	17.50		16.70	17.50		17.30	17.50	17.40	17.50	20.41	20.5	
		60	5300	17.40	17.50		16.90	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
	802.11ac-VHT20 MCS0	54	5320	16.90	17.00	97.69	16.50	17.00	97.95	16.90	17.00	16.80	17.00	19.86	20.0	
		60	5300	17.40	17.50		17.00	17.50		17.00	17.50	17.10	17.50	20.16	20.5	
		64	5320	16.90	17.00		16.80	17.00		17.20	17.50	17.10	17.50	20.16	20.5	
		54	5270	17.10	17.50		17.00	17.50		16.40	16.50	15.60	16.50	19.03	19.5	
		62	5310	16.40	16.50		16.40	16.50		16.40	16.50	15.60	16.50	19.03	19.5	
	802.11ac-VHT80 MCS0	58	5290	15.90	16.00	92.68	14.90	16.00	91.94	16.00	16.00	15.10	16.00	18.58	19.0	



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

Transmit Antenna		Ant 4				Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.40	18.50	97.84	18.20	18.50	97.83	18.50	18.50	18.30	18.50	21.41	21.5	98.08
		157	5785	18.20	18.50		18.00	18.50		18.30	18.50	18.10	18.50	21.21	21.5	
		165	5825	16.90	17.00		16.30	17.00		17.00	17.00	16.40	17.00	19.72	20.0	
		149	5745	18.30	18.50	18.10	18.50	18.40	18.50	18.20	18.50	21.31	21.5			
		157	5785	18.20	18.50	18.00	18.50	18.30	18.50	18.10	18.50	21.21	21.5			
		165	5825	18.20	18.50	17.80	18.50	18.30	18.50	17.90	18.50	21.11	21.5			
		151	5755	17.30	17.50	17.10	17.50	17.40	17.50	17.20	17.50	20.31	20.5			
		159	5795	17.30	17.50	17.00	17.50	17.40	17.50	17.10	17.50	20.26	20.5			
		149	5745	18.20	18.50	18.00	18.50	18.30	18.50	18.10	18.50	21.21	21.5			
		157	5785	18.10	18.50	17.90	18.50	18.20	18.50	18.00	18.50	21.11	21.5			
		165	5825	18.10	18.50	17.70	18.50	18.20	18.50	17.80	18.50	21.01	21.5			
		151	5755	17.20	17.50	17.00	17.50	17.30	17.50	17.10	17.50	20.21	20.5			
		159	5795	17.20	17.50	16.90	17.50	17.30	17.50	17.00	17.50	20.16	20.5			
		155	5775	17.30	17.50	17.20	17.50	17.40	17.50	17.30	17.50	20.36	20.5			



Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.10	19.90	100.00	19.20	19.90	100.00	19.50	19.50	19.40	19.50	22.46	22.5	
		6	2437	19.00	19.90		18.70	19.90		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	18.80	19.90		17.90	19.90		19.00	19.50	18.40	19.50	21.72	22.5	
	802.11g 6Mbps	1	2412	15.20	16.00	98.08	15.20	16.00	97.60	15.50	16.00	15.60	16.00	18.56	18.0	
		6	2437	19.00	19.50		18.60	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	16.20	16.50		15.80	16.50		16.30	16.50	15.90	16.50	19.11	19.5	
	802.11n-HT20 MCS0	1	2412	14.20	15.00	97.94	14.00	15.00	97.93	14.60	15.00	14.50	15.00	17.56	18.0	
		6	2437	18.90	19.50		18.50	19.50		19.30	19.50	18.90	19.50	22.11	22.5	
		11	2462	15.50	15.50		15.10	15.50		15.50	15.50	15.20	15.50	18.36	18.5	
	802.11ac-VHT20 MCS0	1	2412	14.10	14.50	97.69	13.90	14.50	97.95	14.50	14.50	14.40	14.50	17.46	17.5	
		6	2437	18.80	19.50		18.40	19.50		19.20	19.50	18.80	19.50	22.01	22.5	
		11	2462	15.40	15.50		15.00	15.50		15.40	15.50	15.10	15.50	18.26	18.5	

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.00	17.50	97.84	17.00	17.50	97.83	17.40	17.50	17.10	17.50	20.26	20.5	
		40	5200	17.60	18.00		17.90	18.00		18.00	18.00	17.60	18.00	20.81	21.0	
		44	5220	17.70	18.00		17.80	18.00		17.80	18.00	17.80	18.00	20.86	21.0	
		48	5240	17.10	17.50		16.90	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
		48	5240	16.80	17.50		16.90	17.50		17.20	17.50	17.00	17.50	20.11	20.5	
	802.11n-HT20 MCS0	40	5200	17.70	18.00	97.42	17.00	18.00	97.94	17.90	18.00	17.60	18.00	20.76	21.0	
		44	5220	17.50	18.00		17.30	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		48	5240	17.30	17.50		17.20	17.50		17.30	17.50	17.40	17.50	20.36	20.5	
		38	5190	15.70	16.00		15.40	16.00		15.80	16.00	15.50	16.00	18.66	19.0	
		46	5230	17.10	17.50		17.20	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
	802.11ac-VHT20 MCS0	36	5180	16.70	17.50	97.69	16.80	17.50	97.95	17.10	17.50	16.90	17.50	20.01	20.5	
		40	5200	17.60	18.00		16.90	18.00		17.80	18.00	17.50	18.00	20.66	21.0	
		44	5220	17.40	18.00		17.20	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
		48	5240	17.20	17.50		17.10	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
		38	5190	15.60	16.00		15.30	16.00		15.70	16.00	15.40	16.00	18.56	19.0	
	802.11ac-VHT40 MCS0	46	5230	17.00	17.50	96.08	17.10	17.50	95.69	17.10	17.50	17.20	17.50	20.16	20.5	
		42	5210	14.60	15.00		14.90	15.00		14.70	15.00	15.00	15.00	17.86	18.0	

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) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.40	18.00	97.84	17.20	18.00	97.83	17.60	18.00	17.50	18.00	20.56	21.0	
		56	5280	17.50	17.50		17.10	17.50		17.50	17.50	17.20	17.50	20.42	20.5	
		60	5300	17.50	17.50		16.80	17.50		17.50	17.50	16.90	17.50	20.22	20.5	
		64	5320	17.30	17.50		16.70	17.50		17.40	17.50	16.80	17.50	20.12	20.5	
		52	5260	17.60	18.00		17.60	18.00		17.70	18.00	17.80	18.00	20.76	21.0	
	802.11n-HT20 MCS0	56	5280	17.50	17.50	97.42	16.80	17.50	97.94	17.40	17.50	17.50	17.50	20.50	20.5	
		60	5300	17.50	17.50		17.00	17.50		17.50	17.50	17.40	17.50	20.46	20.5	
		64	5320	17.00	17.00		16.60	17.00		17.00	17.00	16.90	17.00	19.96	20.0	
		54	5270	17.20	17.50		17.10	17.50		17.30	17.50	17.20	17.50	20.26	20.5	
		62	5310	16.50	16.50		16.40	16.50		16.50	16.50	15.80	16.50	19.17	19.5	
	802.11ac-VHT20 MCS0	52	5260	17.50	18.00	97.69	17.50	18.00	97.95	17.60	18.00	17.70	18.00	20.66	21.0	
		56	5280	17.40	17.50		16.70	17.50		17.30	17.50	17.40	17.50	20.41	20.5	
		60	5300	17.40	17.50		16.90	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		64	5320	16.90	17.00		16.50	17.00		16.80	17.00	16.80	17.00	19.86	20.0	
		54	5270	17.10	17.50		17.00	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
	802.11ac-VHT40 MCS0	62	5310	16.40	16.50	96.08	16.40	16.50	95.69	16.40	16.50	15.60	16.50	19.03	19.5	
		58	5290	15.90	16.00		14.90	16.00		14.70	16.00	15.10	16.00	18.58	19.0	



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

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



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

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	14.60	15.00	97.84	17.00	17.50	97.83	14.70	15.00	17.10	17.50	19.07	19.4	
		40	5200	14.60	15.00		17.90	18.00		14.70	15.00	17.70	18.00	19.46	19.8	
		44	5220	14.80	15.00		17.80	18.00		14.70	15.00	17.70	18.00	19.46	19.8	
		48	5240	14.90	15.00		16.90	17.50		14.80	15.00	17.40	17.50	19.30	19.4	
	802.11n-HT20 MCS0	36	5180	14.90	15.00	97.42	16.90	17.50	97.94	14.90	15.00	17.30	17.50	19.27	19.4	
		40	5200	14.90	15.00		17.00	18.00		14.60	15.00	17.70	18.00	19.43	19.8	
		44	5220	14.70	15.00		17.30	18.00		14.60	15.00	17.70	18.00	19.43	19.8	
		48	5240	14.70	15.00		17.20	17.50		14.60	15.00	17.40	17.50	19.23	19.4	
	802.11n-VHT40 MCS0	38	5190	14.70	15.00	95.67	15.40	16.00	95.03	14.60	15.00	15.90	16.00	18.31	18.5	
		46	5230	14.70	15.00		17.20	17.50		14.60	15.00	17.20	17.50	19.10	19.4	
		36	5180	14.80	15.00		16.80	17.50		14.80	15.00	17.20	17.50	19.17	19.4	
		40	5200	14.80	15.00		16.90	18.00		14.50	15.00	17.60	18.00	19.33	19.8	
	802.11ac-VHT20 MCS0	44	5220	14.80	15.00	97.69	17.20	18.00	97.95	14.50	15.00	17.60	18.00	19.33	19.8	
		48	5240	14.80	15.00		17.10	17.50		14.50	15.00	17.30	17.50	19.13	19.4	
		38	5190	14.60	15.00		15.30	16.00		14.50	15.00	15.80	16.00	18.21	18.5	
		46	5230	14.60	15.00		17.10	17.50		14.50	15.00	17.10	17.50	19.00	19.4	
	802.11ac-VHT40 MCS0	38	5190	14.60	15.00	96.08	15.30	16.00	95.69	14.50	15.00	15.80	16.00	18.21	18.5	
	46	5230	14.60	15.00	96.08	17.10	17.50	95.69	14.50	15.00	17.10	17.50	19.00	19.4		
	802.11ac-VHT80 MCS0	42	5210	14.60	15.00	92.68	14.90	15.00	91.94	14.70	15.00	15.00	15.00	17.88	18.0	

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) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5260	14.90	15.00	97.84	17.20	18.00	97.83	14.80	15.00	17.90	18.00	19.57	19.8	
		56	5280	14.80	15.00		17.10	17.50		14.80	15.00	17.10	17.50	19.11	19.4	
		60	5300	14.90	15.00		16.80	17.50		14.90	15.00	17.20	17.50	19.21	19.4	
		64	5320	14.60	15.00		16.70	17.50		14.90	15.00	17.30	17.50	19.27	19.4	
	802.11n-HT20 MCS0	52	5260	14.70	15.00	97.42	17.60	18.00	97.94	14.80	15.00	17.80	18.00	19.56	19.8	
		56	5280	14.70	15.00		16.80	17.50		14.90	15.00	17.10	17.50	19.15	19.4	
		60	5300	14.70	15.00		17.00	17.50		14.90	15.00	17.10	17.50	19.15	19.4	
		64	5320	14.90	15.00		16.60	17.00		14.70	15.00	16.80	17.00	18.89	19.1	
	802.11n-VHT40 MCS0	54	5270	14.70	15.00	95.67	17.10	17.50	95.03	14.90	15.00	17.10	17.50	19.15	19.4	
		62	5310	14.70	15.00		16.40	16.50		14.60	15.00	16.50	16.50	18.70	18.8	
		52	5260	14.60	15.00		17.50	18.00		14.70	15.00	17.70	18.00	19.46	19.8	
		56	5280	14.60	15.00		16.70	17.50		14.80	15.00	17.00	17.50	19.05	19.4	
	802.11ac-VHT20 MCS0	60	5300	14.60	15.00	97.69	16.90	17.50	97.95	14.80	15.00	17.00	17.50	19.05	19.4	
		64	5320	14.80	15.00		15.50	17.00		14.60	15.00	16.70	17.00	18.79	19.1	
		54	5270	14.60	15.00		17.00	17.50		14.80	15.00	17.00	17.50	19.05	19.4	
		62	5310	14.60	15.00		16.40	16.50		14.50	15.00	16.50	16.50	18.60	18.9	
	802.11ac-VHT40 MCS0	62	5310	14.60	15.00	96.08	16.40	16.50	95.69	14.50	15.00	16.50	16.50	18.60	18.9	
	58	5290	14.60	15.00	92.68	14.90	16.00	91.94	14.80	15.00	15.50	16.00	18.17	18.5		



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

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	13.40	13.50	97.84	18.20	18.50	97.83	13.30	13.50	18.30	18.50	19.49	19.7	
		157	5785	13.40	13.50		18.00	18.50		13.30	13.50	18.30	18.50	19.49	19.7	
		165	5825	13.30	13.50		16.30	17.00		13.30	13.50	16.90	17.00	18.47	18.6	
	802.11n-HT20 MCS0	149	5745	13.40	13.50	97.42	18.10	18.50	97.94	13.40	13.50	18.40	18.50	19.59	19.7	
		157	5785	13.30	13.50		18.00	18.50		13.00	13.50	18.10	18.50	19.27	19.7	
		165	5825	13.20	13.50		17.80	18.50		13.30	13.50	18.40	18.50	19.57	19.7	
	802.11n-HT40 MCS0	151	5755	13.30	13.50	95.67	17.10	17.50	95.03	13.50	13.50	17.40	17.50	18.88	19.0	
		159	5795	13.30	13.50		17.00	17.50		13.40	13.50	17.30	17.50	18.78	19.0	
		149	5745	13.30	13.50		18.00	18.50		13.20	13.50	18.30	18.50	19.47	19.7	
	802.11ac-VHT20 MCS0	157	5785	13.20	13.50	97.69	17.90	18.50	97.95	13.40	13.50	18.50	18.50	19.67	19.7	
		165	5825	13.10	13.50		17.70	18.50		13.30	13.50	18.40	18.50	19.57	19.7	
		151	5755	13.20	13.50		17.00	17.50		13.40	13.50	17.40	17.50	18.86	19.0	
	802.11ac-VHT40 MCS0	159	5795	13.20	13.50	96.08	16.90	17.50	95.69	13.30	13.50	17.30	17.50	18.76	19.0	
		155	5775	13.40	13.50		17.20	17.50		13.30	13.50	17.40	17.50	18.83	19.0	



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	19.20	19.90	100.00	19.50	19.50	19.40	19.50	22.46	22.5	100.00
		6	2437	15.70	16.00		18.70	19.90		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	15.70	16.00		17.90	19.90		19.00	19.50	18.40	19.50	21.72	22.5	
	802.11g 6Mbps	1	2412	15.20	16.00	98.08	15.20	16.00	97.60	15.50	16.00	15.60	16.00	18.56	18.0	97.84
		6	2437	15.70	16.00		18.60	19.50		19.40	19.50	19.00	19.50	22.21	22.5	
		11	2462	16.20	16.50		15.80	16.50		16.30	16.50	15.90	16.50	19.11	19.5	
	802.11n-HT20 MCS0	1	2412	14.20	15.00	97.94	14.00	15.00	97.93	14.60	15.00	14.50	15.00	17.56	18.0	97.94
		6	2437	15.70	16.00		18.50	19.50		19.30	19.50	18.90	19.50	22.11	22.5	
		11	2462	15.50	15.50		15.10	15.50		15.50	15.50	15.20	15.50	18.36	18.5	
	802.11ac-VHT20 MCS0	1	2412	14.10	14.50	97.69	13.90	14.50	97.95	14.50	14.50	14.40	14.50	17.46	17.5	97.95
		6	2437	15.60	16.00		18.40	19.50		19.20	19.50	18.80	19.50	22.01	22.5	
		11	2462	15.40	15.50		15.00	15.50		15.40	15.50	15.10	15.50	18.26	18.5	

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.40	17.50	97.84	15.10	15.50	97.83	17.40	17.50	15.10	15.50	19.41	19.6	98.08
		40	5200	17.40	17.50		15.10	15.50		17.30	17.50	15.10	15.50	19.35	19.6	
		44	5220	17.10	17.50		15.40	15.50		17.10	17.50	15.10	15.50	19.22	19.6	
		48	5240	17.20	17.50		15.40	15.50		17.20	17.50	15.00	15.50	19.25	19.6	
	802.11n-HT20 MCS0	36	5180	17.10	17.50	97.42	15.20	15.50	97.94	17.20	17.50	15.40	15.50	19.40	19.6	97.42
		40	5200	17.20	17.50		15.40	15.50		17.30	17.50	15.30	15.50	19.42	19.6	
		44	5220	17.40	17.50		15.20	15.50		17.30	17.50	15.40	15.50	19.46	19.6	
		48	5240	17.40	17.50		15.30	15.50		17.10	17.50	15.40	15.50	19.34	19.6	
	802.11n-VHT40 MCS0	38	5190	15.70	16.00	95.67	15.10	15.50	95.03	15.80	16.00	15.50	15.50	18.66	18.8	95.66
		46	5230	17.30	17.50		15.20	15.50		17.40	17.50	15.40	15.50	19.52	19.6	
		36	5180	17.00	17.50		15.10	15.50		17.30	17.50	15.00	15.50	19.31	19.6	
		40	5200	17.10	17.50		15.30	15.50		17.40	17.50	15.10	15.50	19.41	19.6	
	802.11ac-VHT20 MCS0	36	5180	17.00	17.50	97.69	15.10	15.50	97.95	17.30	17.50	15.00	15.50	19.31	19.6	97.69
		40	5200	17.10	17.50		15.30	15.50		17.40	17.50	15.10	15.50	19.41	19.6	
		44	5220	17.30	17.50		15.10	15.50		17.10	17.50	15.20	15.50	19.26	19.6	
		48	5240	17.30	17.50		15.20	15.50		17.20	17.50	15.30	15.50	19.36	19.6	
	802.11ac-VHT40 MCS0	38	5190	15.60	16.00	96.08	15.30	15.50	95.69	15.70	16.00	15.40	15.50	18.56	18.8	95.69
		46	5230	17.20	17.50		15.10	15.50		17.00	17.50	15.30	15.50	19.24	19.6	
	802.11ac-VHT80 MCS0	42	5210	14.60	15.00	92.68	14.90	15.00	91.94	14.70	15.00	15.00	15.00	17.88	18.0	91.87

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm) 1+2(1)	Tune-Up Limit 1+2(1)	Average power (dBm) 1+2(2)	Tune-Up Limit 1+2(2)	Average power (dBm) 1+2	Tune-Up Limit 1+2	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.20	17.50	97.84	15.30	15.50	97.83	17.30	17.50	15.40	15.50	19.46	19.6	98.08
		56	5280	17.30	17.50		15.20	15.50		17.40	17.50	15.30	15.50	19.46	19.6	
		60	5300	17.30	17.50		15.30	15.50		17.40	17.50	15.40	15.50	19.52	19.6	
		64	5320	17.20	17.50		15.30	15.50		17.30	17.50	15.40	15.50	19.46	19.6	
	802.11n-HT20 MCS0	52	5260	17.20	17.50	97.42	15.10	15.50	97.94	17.30	17.50	15.20	15.50	19.39	19.6	97.42
		56	5280	17.40	17.50		15.10	15.50		17.40	17.50	15.20	15.50	19.45	19.6	
		60	5300	17.40	17.50		15.10	15.50		17.40	17.50	15.20	15.50	19.45	19.6	
		64	5320	16.90	17.00		15.20	15.50		16.90	17.00	15.30	15.50	19.18	19.3	
	802.11n-HT40 MCS0	54	5270	17.40	17.50	95.67	15.10	15.50	95.03	17.40	17.50	15.20	15.50	19.45	19.6	95.66
		62	5310	16.40	16.50		15.40	15.50		16.40	16.50	15.40	15.50	18.94	19.0	
		52	5260	17.10	17.50		15.00	15.50		17.20	17.50	15.10	15.50	19.29	19.6	
		56	5280	17.30	17.50		15.00	15.50		17.30	17.50	15.10	15.50	19.35	19.6	
	802.11ac-VHT20 MCS0	60	5300	17.30	17.50	97.69	15.00	15.50	97.95	17.30	17.50	15.10	15.50	19.35	19.6	97.69
		64	5320	16.80	17.00		15.10	15.50		16.80	17.00	15.20	15.50	19.08	19.3	
		54	5270	17.30	17.50		15.00	15.50		17.30	17.50	15.10	15.50	19.35	19.6	
		62	5310	16.30	16.50		15.30	15.50		16.30	16.50	15.30	15.50	18.84	19.0	
	802.11ac-VHT40 MCS0	58	5290	15.90	16.00	92.68	15.10	15.50	91.94	15.90	16.00	15.20	15.50	18.57	18.8	91.87





Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
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	15.90	16.00	97.84	17.50	18.50	97.83	15.80	16.00	18.20	18.50	20.17	20.4	98.08
		116	5580	15.70	16.00		17.30	18.50		15.80	16.00	18.20	18.50	20.10	20.4	
		124	5620	15.80	16.00		17.40	18.50		15.80	16.00	18.20	18.50	20.17	20.4	
		132	5660	15.80	16.00		17.10	18.50		15.70	16.00	15.10	18.50	20.07	20.4	
	802.11n-HT20 MCS0	144	5720	15.60	16.00	97.42	17.20	18.50	97.94	15.80	16.00	18.40	18.50	20.30	20.4	97.42
		100	5500	15.80	16.00		17.90	18.50		15.90	16.00	18.40	18.50	20.34	20.4	
		116	5580	15.70	16.00		17.50	18.50		15.90	16.00	18.10	18.50	20.15	20.4	
		124	5620	15.80	16.00		17.20	18.50		15.80	16.00	18.10	18.50	20.15	20.4	
	802.11n-HT40 MCS0	132	5660	15.70	16.00	95.67	18.10	18.50	95.03	15.90	16.00	18.10	18.50	20.15	20.4	95.66
		144	5720	15.90	16.00		18.10	18.50		15.80	16.00	18.30	18.50	20.24	20.4	
		102	5510	15.90	16.00		16.50	17.00		15.80	16.00	16.60	17.00	19.23	19.5	
		110	5550	15.90	16.00		16.60	17.50		15.80	16.00	17.40	17.50	19.68	19.8	
	802.11ac-VHT20 MCS0	126	5630	15.70	16.00	97.69	16.70	17.50	97.95	15.70	16.00	17.30	17.50	19.58	19.8	97.69
		134	5670	15.70	16.00		17.20	17.50		15.60	16.00	17.10	17.50	19.42	19.8	
		142	5710	15.90	16.00		17.30	17.50		15.70	16.00	17.30	17.50	19.58	19.8	
		100	5500	15.70	16.00		17.80	18.50		15.80	16.00	18.30	18.50	20.24	20.4	
	802.11ac-VHT40 MCS0	116	5580	15.60	16.00	96.08	17.40	18.50	95.69	15.80	16.00	18.00	18.50	20.05	20.4	96.08
		124	5620	15.70	16.00		17.10	18.50		15.80	16.00	18.00	18.50	20.05	20.4	
		132	5660	15.60	16.00		17.90	18.50		15.80	16.00	18.00	18.50	20.05	20.4	
		144	5720	15.80	16.00		18.00	18.50		15.70	16.00	18.20	18.50	20.14	20.4	
	802.11ac-VHT80 MCS0	102	5510	15.80	16.00	92.68	16.40	17.00	91.94	15.70	16.00	16.50	17.00	19.13	19.5	92.68
		110	5550	15.80	16.00		16.50	17.50		15.70	16.00	17.30	17.50	19.58	19.8	
		126	5630	15.60	16.00		16.60	17.50		15.60	16.00	17.20	17.50	19.48	19.8	
		134	5670	15.60	16.00		17.10	17.50		15.50	16.00	17.00	17.50	19.32	19.8	
802.11ac-VHT80 MCS0	142	5710	15.80	16.00	91.87	17.20	17.50	91.94	15.60	16.00	17.20	17.50	19.48	19.8	91.87	
	106	5530	15.40	16.00		15.30	16.00		15.60	16.00	15.50	16.00	18.56	19.0		
	122	5610	15.90	16.00		16.80	17.50		15.70	16.00	17.10	17.50	19.47	19.8		
	138	5690	15.80	16.00		17.00	17.50		15.70	16.00	17.00	17.50	19.41	19.8		

Transmit Antenna		Ant 4					Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.30	16.50	97.84	18.20	18.50	97.83	16.40	16.50	18.10	18.50	20.34	20.6	98.08
		157	5785	16.40	16.50		18.00	18.50		16.20	16.50	18.30	18.50	20.39	20.6	
		165	5825	16.30	16.50		16.30	17.00		16.30	16.50	16.90	17.00	19.62	19.8	
	802.11n-HT20 MCS0	149	5745	16.30	16.50	97.42	18.10	18.50	97.94	16.40	16.50	18.40	18.50	20.52	20.6	97.42
		157	5785	16.30	16.50		18.00	18.50		16.10	16.50	18.10	18.50	20.22	20.6	
		165	5825	16.20	16.50		17.80	18.50		16.30	16.50	18.40	18.50	20.49	20.6	
	802.11n-HT40 MCS0	151	5755	16.20	16.50	95.67	17.10	17.50	95.03	16.40	16.50	17.40	17.50	19.94	20.0	95.66
		159	5795	16.20	16.50		17.00	17.50		16.40	16.50	17.30	17.50	19.88	20.0	
	802.11ac-VHT20 MCS0	149	5745	16.20	16.50	97.69	18.00	18.50	97.95	16.30	16.50	18.30	18.50	20.42	20.6	97.69
		157	5785	16.20	16.50		17.90	18.50		16.00	16.50	18.50	18.50	20.44	20.6	
		165	5825	16.10	16.50		17.70	18.50		16.20	16.50	18.40	18.50	20.45	20.6	
	802.11ac-VHT40 MCS0	151	5755	16.10	16.50	96.08	17.00	17.50	95.69	16.30	16.50	17.40	17.50	19.90	20.0	96.08
159		5795	16.10	16.50	16.90		17.50	16.30		16.50	17.30	17.50	19.84	20.0		
802.11ac-VHT80 MCS0	155	5775	16.10	16.50	92.68	17.20	17.50	91.94	16.30	16.50	17.40	17.50	19.90	20.0	91.87	



**General Note:**

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

**Bluetooth Default Power Table**

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

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

**Bluetooth Power Table 1**

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

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

**Bluetooth Power Table 2**

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

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



Bluetooth Power Table 3

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

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

