

**<GSM Conducted Power>**

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850 and GPRS (3Tx slots) for GSM1900 are considered as the primary mode
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode, SAR measurement is not required for the secondary mode



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	33.13	32.90	33.16	33.50	24.13	23.90	24.16	24.50
GPRS 1 Tx slot	33.05	32.87	33.15	33.50	24.05	23.87	24.15	24.50
GPRS 2 Tx slots	30.84	30.16	30.38	31.50	24.84	24.16	24.38	25.50
GPRS 3 Tx slots	29.06	28.25	28.44	30.00	24.80	23.99	24.18	25.74
GPRS 4 Tx slots	28.41	27.53	27.50	29.50	25.41	24.53	24.50	26.50
EDGE 1 Tx slot	26.55	26.50	26.50	28.50	17.55	17.50	17.50	19.50
EDGE 2 Tx slots	24.78	24.43	24.60	26.00	18.78	18.43	18.60	20.00
EDGE 3 Tx slots	23.13	22.78	22.99	24.50	18.67	18.52	18.73	20.24
EDGE 4 Tx slots	22.43	22.25	22.29	24.00	19.43	19.25	19.29	21.00

Ant 3

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	29.70	29.43	29.93	30.50	20.70	20.43	20.93	21.50
GPRS 1 Tx slot	29.76	29.50	29.98	30.50	20.76	20.50	20.98	21.50
GPRS 2 Tx slots	26.84	26.97	27.00	28.00	20.84	20.97	21.00	22.00
GPRS 3 Tx slots	25.57	25.66	25.74	27.00	21.31	21.40	21.48	22.74
GPRS 4 Tx slots	24.13	24.20	24.25	25.50	21.13	21.20	21.25	22.50
EDGE 1 Tx slot	25.60	25.56	25.61	27.50	16.60	16.56	16.61	18.50
EDGE 2 Tx slots	23.25	23.22	23.14	25.00	17.25	17.22	17.14	19.00
EDGE 3 Tx slots	22.24	22.14	22.13	24.00	17.98	17.88	17.87	19.74
EDGE 4 Tx slots	21.10	21.00	21.02	23.00	18.10	18.00	18.02	20.00



Ant 1

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
TX Channel	824.2	836.4	848.8		824.2	836.4	848.8	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	30.50	30.31	30.45	31.00	21.50	21.31	21.45	22.00
GPRS 1 Tx slot	30.52	30.34	30.49	31.00	21.52	21.34	21.49	22.00
GPRS 2 Tx slots	28.98	28.48	28.46	29.00	22.98	22.48	22.46	23.00
GPRS 3 Tx slots	27.33	26.63	26.63	27.50	23.07	22.37	22.37	23.24
GPRS 4 Tx slots	26.60	25.94	25.98	27.00	23.60	22.94	22.98	24.00
EDGE 1 Tx slot	26.30	26.24	26.14	26.50	17.30	17.24	17.14	17.50
EDGE 2 Tx slots	24.64	24.56	24.62	25.00	18.64	18.56	18.62	19.00
EDGE 3 Tx slots	23.18	22.95	23.11	23.50	18.92	18.69	18.85	19.24
EDGE 4 Tx slots	22.50	22.23	22.34	23.00	19.50	19.23	19.34	20.00

Ant 3

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.32	29.41	29.45	29.50	20.32	20.41	20.45	20.50
GPRS 1 Tx slot	29.35	29.45	29.46	29.50	20.35	20.45	20.46	20.50
GPRS 2 Tx slots	26.95	26.99	26.96	27.00	20.95	20.99	20.96	21.00
GPRS 3 Tx slots	25.61	25.65	25.67	26.00	21.35	21.39	21.41	21.74
GPRS 4 Tx slots	24.17	23.68	24.21	24.50	21.17	20.68	21.21	21.50
EDGE 1 Tx slot	25.33	25.27	25.38	26.50	16.33	16.27	16.38	17.50
EDGE 2 Tx slots	23.23	22.95	23.06	24.00	17.23	16.95	17.06	18.00
EDGE 3 Tx slots	22.38	21.77	21.85	23.00	18.12	17.51	17.59	18.74
EDGE 4 Tx slots	21.30	20.63	20.77	22.00	18.30	17.63	17.77	19.00



Ant 1

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
TX Channel	824.2	836.4	848.8		824.2	836.4	848.8	
Frequency (MHz)								
GSM 1 Tx slot	29.01	29.10	28.80	29.50	20.01	20.10	19.80	20.50
GPRS 1 Tx slot	29.04	29.12	28.84	29.50	20.04	20.12	19.84	20.50
GPRS 2 Tx slots	26.86	26.38	26.43	27.00	20.86	20.38	20.43	21.00
GPRS 3 Tx slots	24.85	24.51	24.54	25.50	20.59	20.25	20.28	21.24
GPRS 4 Tx slots	24.27	23.76	23.78	25.00	21.27	20.76	20.78	22.00
EDGE 1 Tx slot	26.33	26.23	26.20	27.50	17.33	17.23	17.20	18.50
EDGE 2 Tx slots	24.69	24.53	24.46	25.50	18.69	18.53	18.46	19.50
EDGE 3 Tx slots	23.10	22.89	23.06	24.00	18.84	18.63	18.80	19.74
EDGE 4 Tx slots	22.54	22.29	22.27	23.50	19.54	19.29	19.27	20.50

Ant 3

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)								
GSM 1 Tx slot	27.25	27.40	27.39	27.50	18.25	18.40	18.39	18.50
GPRS 1 Tx slot	27.30	27.43	27.42	27.50	18.30	18.43	18.42	18.50
GPRS 2 Tx slots	24.83	24.90	24.94	25.00	18.83	18.90	18.94	19.00
GPRS 3 Tx slots	23.30	23.42	23.39	24.00	19.04	19.16	19.13	19.74
GPRS 4 Tx slots	21.96	21.99	21.97	22.50	18.96	18.99	18.97	19.50
EDGE 1 Tx slot	25.18	25.24	25.26	26.50	16.18	16.24	16.26	17.50
EDGE 2 Tx slots	23.35	22.85	22.86	24.00	17.35	16.85	16.86	18.00
EDGE 3 Tx slots	22.16	21.67	21.74	23.00	17.90	17.41	17.48	18.74
EDGE 4 Tx slots	20.60	20.20	20.14	21.50	17.60	17.20	17.14	18.50



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	29.01	29.10	28.80	30.00	20.01	20.10	19.80	21.00
GPRS 1 Tx slot	29.04	29.12	28.84	30.00	20.04	20.12	19.84	21.00
GPRS 2 Tx slots	26.86	26.38	26.43	27.50	20.86	20.38	20.43	21.50
GPRS 3 Tx slots	24.85	24.51	24.54	26.00	20.59	20.25	20.28	21.74
GPRS 4 Tx slots	24.27	23.76	23.78	25.50	21.27	20.76	20.78	22.50
EDGE 1 Tx slot	26.33	26.23	26.20	28.00	17.33	17.23	17.20	19.00
EDGE 2 Tx slots	24.69	24.53	24.46	26.00	18.69	18.53	18.46	20.00
EDGE 3 Tx slots	23.10	22.89	23.06	24.50	18.84	18.63	18.80	20.24
EDGE 4 Tx slots	22.54	22.29	22.27	24.00	19.54	19.29	19.27	21.00

Ant 3

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	27.25	27.40	27.39	28.00	18.25	18.40	18.39	19.00
GPRS 1 Tx slot	27.30	27.43	27.42	28.00	18.30	18.43	18.42	19.00
GPRS 2 Tx slots	24.83	24.90	24.94	25.50	18.83	18.90	18.94	19.50
GPRS 3 Tx slots	23.30	23.42	23.39	24.50	19.04	19.16	19.13	20.24
GPRS 4 Tx slots	21.96	21.99	21.97	23.00	18.96	18.99	18.97	20.00
EDGE 1 Tx slot	25.18	25.24	25.26	27.00	16.18	16.24	16.26	18.00
EDGE 2 Tx slots	23.35	22.85	22.86	24.50	17.35	16.85	16.86	18.50
EDGE 3 Tx slots	22.16	21.67	21.74	23.50	17.90	17.41	17.48	19.24
EDGE 4 Tx slots	20.60	20.20	20.14	22.00	17.60	17.20	17.14	19.00



Ant 0

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.85	32.68	32.50	33.00	23.85	23.68	23.50	24.00
GPRS 1 Tx slot	32.90	32.70	32.54	33.00	23.90	23.70	23.54	24.00
GPRS 2 Tx slots	30.30	29.90	29.82	31.00	24.30	23.90	23.82	25.00
GPRS 3 Tx slots	28.74	27.96	27.91	29.50	24.48	23.70	23.65	25.24
GPRS 4 Tx slots	28.56	27.67	27.66	29.00	25.56	24.67	24.66	26.00
EDGE 1 Tx slot	26.40	26.25	26.12	28.00	17.40	17.25	17.12	19.00
EDGE 2 Tx slots	24.63	24.43	24.50	25.50	18.63	18.43	18.50	19.50
EDGE 3 Tx slots	23.04	22.78	22.99	24.00	18.78	18.52	18.73	19.74
EDGE 4 Tx slots	22.37	22.22	22.32	23.50	19.37	19.22	19.32	20.50

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	24.80	24.95	24.91	25.00	15.80	15.95	15.91	16.00
GPRS 1 Tx slot	24.84	24.97	24.94	25.00	15.84	15.97	15.94	16.00
GPRS 2 Tx slots	22.20	22.26	22.17	22.50	16.20	16.26	16.17	16.50
GPRS 3 Tx slots	19.12	19.22	19.19	21.00	14.86	14.96	14.93	16.74
GPRS 4 Tx slots	19.08	19.11	19.00	19.50	16.08	16.11	16.00	16.50
EDGE 1 Tx slot	23.27	23.27	23.27	23.50	14.27	14.27	14.27	14.50
EDGE 2 Tx slots	20.71	20.39	20.23	21.00	14.71	14.39	14.23	15.00
EDGE 3 Tx slots	20.22	19.53	19.89	20.50	15.96	15.27	15.63	16.24
EDGE 4 Tx slots	17.04	16.70	16.68	17.50	14.04	13.70	13.68	14.50



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	29.54	29.35	29.58	30.00	20.54	20.35	20.58	21.00
GPRS 1 Tx slot	29.56	29.37	29.59	30.00	20.56	20.37	20.59	21.00
GPRS 2 Tx slots	27.86	27.63	27.98	28.00	21.86	21.63	21.98	22.00
GPRS 3 Tx slots	26.29	26.16	26.10	26.50	22.03	21.90	21.84	22.24
GPRS 4 Tx slots	25.38	25.19	25.36	26.00	22.38	22.19	22.36	23.00
EDGE 1 Tx slot	26.58	26.54	26.50	28.00	17.58	17.54	17.50	19.00
EDGE 2 Tx slots	24.92	24.76	24.78	25.50	18.92	18.76	18.78	19.50
EDGE 3 Tx slots	23.25	23.05	23.06	24.00	18.99	18.79	18.80	19.74
EDGE 4 Tx slots	22.75	22.33	22.44	23.50	19.75	19.33	19.44	20.50

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	20.59	20.61	20.55	22.00	11.59	11.61	11.55	13.00
GPRS 1 Tx slot	20.61	20.62	20.58	22.00	11.61	11.62	11.58	13.00
GPRS 2 Tx slots	18.21	18.28	18.87	19.50	12.21	12.28	12.87	13.50
GPRS 3 Tx slots	17.53	17.63	17.60	18.50	13.27	13.37	13.34	14.24
GPRS 4 Tx slots	15.86	15.93	15.86	17.00	12.86	12.93	12.86	14.00
EDGE 1 Tx slot	21.05	21.03	21.21	21.50	12.05	12.03	12.21	12.50
EDGE 2 Tx slots	17.14	17.12	17.24	18.00	11.14	11.12	11.24	12.00
EDGE 3 Tx slots	17.13	17.22	17.36	17.50	12.87	12.96	13.10	13.24
EDGE 4 Tx slots	15.53	15.51	15.59	16.00	12.53	12.51	12.59	13.00



Ant 0

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	29.54	29.35	29.58	30.50	20.54	20.35	20.58	21.50
GPRS 1 Tx slot	29.56	29.37	29.59	30.50	20.56	20.37	20.59	21.50
GPRS 2 Tx slots	27.86	27.63	27.98	28.50	21.86	21.63	21.98	22.50
GPRS 3 Tx slots	26.29	26.16	26.10	27.00	22.03	21.90	21.84	22.74
GPRS 4 Tx slots	25.30	25.11	25.47	26.50	22.30	22.11	22.47	23.50
EDGE 1 Tx slot	26.58	26.54	26.50	28.50	17.58	17.54	17.50	19.50
EDGE 2 Tx slots	24.92	24.76	24.78	26.00	18.92	18.76	18.78	20.00
EDGE 3 Tx slots	23.25	23.05	23.06	24.50	18.99	18.79	18.80	20.24
EDGE 4 Tx slots	22.75	22.33	22.44	24.00	19.75	19.33	19.44	21.00

Ant 2

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	20.59	20.61	20.55	22.50	11.59	11.61	11.55	13.50
GPRS 1 Tx slot	20.61	20.62	20.58	22.50	11.61	11.62	11.58	13.50
GPRS 2 Tx slots	18.21	18.28	18.87	20.00	12.21	12.28	12.87	14.00
GPRS 3 Tx slots	17.53	17.63	17.60	19.00	13.27	13.37	13.34	14.74
GPRS 4 Tx slots	15.86	15.93	15.86	17.50	12.86	12.93	12.86	14.50
EDGE 1 Tx slot	21.05	21.03	21.21	22.00	12.05	12.03	12.21	13.00
EDGE 2 Tx slots	17.14	17.12	17.24	18.50	11.14	11.12	11.24	12.50
EDGE 3 Tx slots	17.13	17.22	17.36	18.00	12.87	12.96	13.10	13.74
EDGE 4 Tx slots	15.53	15.51	15.59	16.50	12.53	12.51	12.59	13.50



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	31.58	31.35	31.60	32.00	22.58	22.35	22.60	23.00
GPRS 1 Tx slot	31.60	31.37	31.64	32.00	22.60	22.37	22.64	23.00
GPRS 2 Tx slots	29.29	28.72	28.85	30.00	23.29	22.72	22.85	24.00
GPRS 3 Tx slots	28.37	27.69	27.57	28.50	24.11	23.43	23.31	24.24
GPRS 4 Tx slots	27.39	26.56	26.93	28.00	24.39	23.56	23.93	25.00
EDGE 1 Tx slot	26.32	26.04	26.25	27.50	17.32	17.04	17.25	18.50
EDGE 2 Tx slots	24.43	24.45	24.27	25.50	18.43	18.45	18.27	19.50
EDGE 3 Tx slots	22.99	22.89	22.83	24.00	18.73	18.63	18.57	19.74
EDGE 4 Tx slots	22.35	22.23	22.23	23.50	19.35	19.23	19.23	20.50

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	26.08	26.25	26.21	26.50	17.08	17.25	17.21	17.50
GPRS 1 Tx slot	26.11	26.27	26.24	26.50	17.11	17.27	17.24	17.50
GPRS 2 Tx slots	23.42	23.50	23.40	24.00	17.42	17.50	17.40	18.00
GPRS 3 Tx slots	22.49	22.53	22.42	23.00	18.23	18.27	18.16	18.74
GPRS 4 Tx slots	18.92	18.94	18.87	20.50	15.92	15.94	15.87	17.50
EDGE 1 Tx slot	25.14	25.22	25.04	25.50	16.14	16.22	16.04	16.50
EDGE 2 Tx slots	22.27	21.99	21.85	22.50	16.27	15.99	15.85	16.50
EDGE 3 Tx slots	21.17	20.75	20.69	21.50	16.91	16.49	16.43	17.24
EDGE 4 Tx slots	19.95	19.27	19.61	20.00	16.95	16.27	16.61	17.00



Ant 0

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	29.55	29.32	29.56	30.00	20.55	20.32	20.56	21.00
GPRS 1 Tx slot	29.59	29.36	29.58	30.00	20.59	20.36	20.58	21.00
GPRS 2 Tx slots	27.96	27.44	27.75	28.00	21.96	21.44	21.75	22.00
GPRS 3 Tx slots	26.39	25.89	25.82	26.50	22.13	21.63	21.56	22.24
GPRS 4 Tx slots	25.39	24.82	25.14	26.00	22.39	21.82	22.14	23.00
EDGE 1 Tx slot	26.44	26.30	26.30	27.50	17.44	17.30	17.30	18.50
EDGE 2 Tx slots	24.91	24.60	24.68	25.50	18.91	18.60	18.68	19.50
EDGE 3 Tx slots	23.19	22.93	22.98	24.00	18.93	18.67	18.72	19.74
EDGE 4 Tx slots	22.56	22.20	22.42	23.50	19.56	19.20	19.42	20.50

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	24.50	24.65	24.55	25.00	15.50	15.65	15.55	16.00
GPRS 1 Tx slot	24.54	24.69	24.59	25.00	15.54	15.69	15.59	16.00
GPRS 2 Tx slots	20.50	20.54	20.50	22.50	14.50	14.54	14.50	16.50
GPRS 3 Tx slots	21.44	21.49	21.48	21.50	17.18	17.23	17.22	17.24
GPRS 4 Tx slots	18.15	18.23	18.83	20.00	15.15	15.23	15.83	17.00
EDGE 1 Tx slot	23.04	22.99	22.78	23.50	14.04	13.99	13.78	14.50
EDGE 2 Tx slots	20.80	20.61	20.65	21.00	14.80	14.61	14.65	15.00
EDGE 3 Tx slots	19.74	19.34	19.25	20.00	15.48	15.08	14.99	15.74
EDGE 4 Tx slots	16.76	16.45	16.29	17.00	13.76	13.45	13.29	14.00



Ant 0

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	29.55	29.32	29.56	30.50	20.55	20.32	20.56	21.50
GPRS 1 Tx slot	29.59	29.36	29.58	30.50	20.59	20.36	20.58	21.50
GPRS 2 Tx slots	27.96	27.44	27.75	28.50	21.96	21.44	21.75	22.50
GPRS 3 Tx slots	26.39	25.89	25.82	27.00	22.13	21.63	21.56	22.74
GPRS 4 Tx slots	25.39	24.82	25.14	26.50	22.39	21.82	22.14	23.50
EDGE 1 Tx slot	26.44	26.30	26.30	28.00	17.44	17.30	17.30	19.00
EDGE 2 Tx slots	24.91	24.60	24.68	26.00	18.91	18.60	18.68	20.00
EDGE 3 Tx slots	23.19	22.93	22.98	24.50	18.93	18.67	18.72	20.24
EDGE 4 Tx slots	22.56	22.20	22.42	24.00	19.56	19.20	19.42	21.00

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	24.50	24.65	24.55	25.00	15.50	15.65	15.55	16.00
GPRS 1 Tx slot	24.54	24.69	24.59	25.00	15.54	15.69	15.59	16.00
GPRS 2 Tx slots	20.50	20.54	20.50	22.50	14.50	14.54	14.50	16.50
GPRS 3 Tx slots	21.44	21.49	21.50	21.50	17.18	17.23	17.24	17.24
GPRS 4 Tx slots	18.15	18.23	18.83	20.00	15.15	15.23	15.83	17.00
EDGE 1 Tx slot	23.04	22.99	22.78	23.50	14.04	13.99	13.78	14.50
EDGE 2 Tx slots	20.80	20.61	20.65	21.00	14.80	14.61	14.65	15.00
EDGE 3 Tx slots	19.74	19.34	19.25	20.00	15.48	15.08	14.99	15.74
EDGE 4 Tx slots	16.76	16.45	16.29	17.00	13.76	13.45	13.29	14.00



<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required
3. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the
4. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1"
5. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set Gain Factors (β_c and β_d) and parameters were set according to each
 - ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - iii. Set RMC 12.2Kbps + HSDPA mode.
 - iv. Set Cell Power = -86 dBm
 - v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
 - vi. Select HSDPA Uplink Parameters
 - vii. Set Delta ACK, Delta NACK and Delta CQI = 8
 - viii. Set Ack-Nack Repetition Factor to 3
 - ix. Set CQI Feedback Cycle (k) to 4 ms
 - x. Set CQI Repetition Factor to 2
 - xi. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

Setup Configuration

HSUPA Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in
 - iii. Set Cell Power = -86 dBm
 - iv. Set Channel Type = 12.2k + HSPA
 - v. Set UE Target Power
 - vi. Power Ctrl Mode= Alternating bits
 - vii. Set and observe the E-TFCI
 - viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- d. The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{cc}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1} : 47/15 β_{ed2} : 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF0) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

Setup Configuration



DC-HSDPA 3GPP release 8 Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration below
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set RMC 12.2Kbps + HSDPA mode.
 - ii. Set Cell Power = -25 dBm
 - iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
 - iv. Select HSDPA Uplink Parameters
 - v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4
 - a). Subtest 1: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - vi. Set Delta ACK, Delta NACK and Delta CQI = 8
 - vii. Set Ack-Nack Repetition Factor to 3
 - viii. Set CQI Feedback Cycle (k) to 4 ms
 - ix. Set CQI Repetition Factor to 2
 - x. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification. A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table. Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

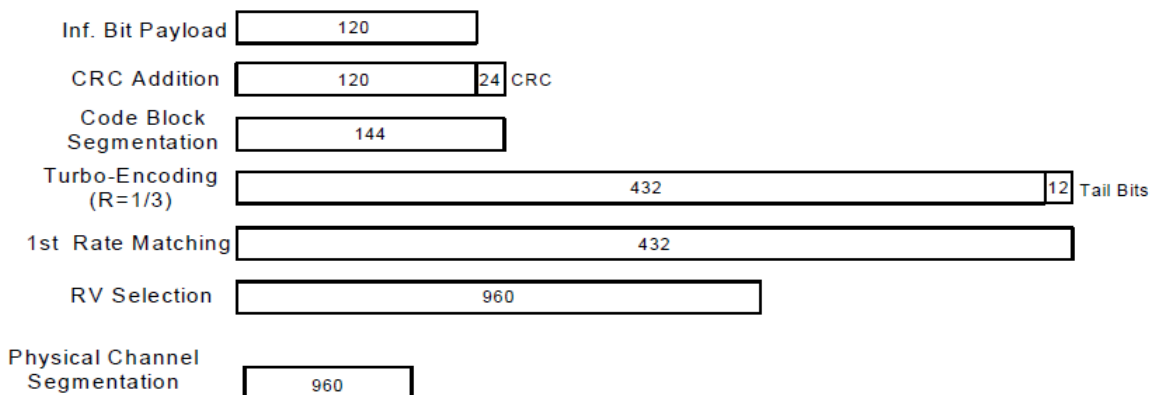


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK) Setup Configuration



Band	Ant 3			Tune-up Limit (dBm)	Ant 3			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)
	WCDMA II				WCDMA IV				WCDMA V			
TX Channel	9262	9400	9538	24.00	1312	1413	1513	24.00	4132	4182	4233	25.00
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	22.83	22.88	22.94	24.00	22.93	22.95	22.93	24.00	23.98	24.01	23.98	25.00
3GPP Rel 99 RMC 12.2Kbps	22.85	22.90	22.96	24.00	22.94	22.97	22.94	24.00	23.99	24.03	23.99	25.00
3GPP Rel 6 HSDPA Subtest-1	22.42	22.47	22.48	23.50	22.47	22.52	22.51	23.50	22.99	23.04	23.01	24.50
3GPP Rel 6 HSDPA Subtest-2	22.44	22.46	22.48	23.50	22.46	22.53	22.50	23.50	23.00	23.04	23.01	24.50
3GPP Rel 6 HSDPA Subtest-3	21.39	21.45	21.52	23.00	21.46	21.51	21.49	23.00	22.50	22.54	22.52	24.00
3GPP Rel 6 HSDPA Subtest-4	21.39	21.44	21.51	23.00	21.45	21.52	21.48	23.00	22.48	22.53	22.51	24.00
3GPP Rel 8 DC-HSDPA Subtest-1	22.39	22.45	22.39	23.50	22.41	22.45	22.48	23.50	22.94	22.95	22.97	24.50
3GPP Rel 8 DC-HSDPA Subtest-2	22.40	22.44	22.42	23.50	22.39	22.44	22.44	23.50	22.97	23.01	23.01	24.50
3GPP Rel 8 DC-HSDPA Subtest-3	21.37	21.36	21.43	23.00	21.43	21.48	21.47	23.00	22.46	22.46	22.49	24.00
3GPP Rel 8 DC-HSDPA Subtest-4	21.33	21.37	21.44	23.00	21.45	21.46	21.48	23.00	22.38	22.43	22.42	24.00
3GPP Rel 6 HSUPA Subtest-1	22.46	22.21	22.50	23.50	22.18	22.54	22.51	23.50	22.99	23.02	23.00	24.50
3GPP Rel 6 HSUPA Subtest-2	19.92	19.97	20.04	21.50	19.96	20.02	19.98	21.50	18.98	19.01	18.98	22.50
3GPP Rel 6 HSUPA Subtest-3	20.92	20.97	21.03	22.50	20.96	21.02	21.00	22.50	19.50	19.51	19.41	23.50
3GPP Rel 6 HSUPA Subtest-4	19.91	19.97	20.03	21.50	19.98	20.03	19.98	21.50	18.98	19.03	18.97	22.50
3GPP Rel 6 HSUPA Subtest-5	22.40	22.50	22.50	23.50	22.50	22.50	22.50	23.50	23.00	23.00	23.00	24.50



Band	Ant 3			Tune-up Limit (dBm)	Ant 3			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)	
	WCDMA II				WCDMA IV				WCDMA V				
	TX Channel	9262	9400		9538	1312	1413		1513	4132	4182		4233
Rx Channel	9662	9800	9938	1537	1638	1738	4357	4407	4458				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	20.90	20.95	20.97	22.00	20.45	20.57	20.50	21.50	23.47	23.51	23.46	24.50
3GPP Rel 99	RMC 12.2Kbps	20.92	20.99	21.00	22.00	20.49	20.58	20.53	21.50	23.51	23.56	23.51	24.50
3GPP Rel 6	HSDPA Subtest-1	20.49	20.49	20.52	21.50	20.07	20.08	20.05	21.00	22.51	22.55	22.53	24.00
3GPP Rel 6	HSDPA Subtest-2	20.47	20.55	20.51	21.50	20.01	20.08	20.05	21.00	22.52	22.56	22.52	24.00
3GPP Rel 6	HSDPA Subtest-3	19.48	19.53	19.54	21.00	19.08	19.10	19.03	20.50	22.04	22.05	22.01	23.50
3GPP Rel 6	HSDPA Subtest-4	19.44	19.53	19.56	21.00	19.04	19.06	19.04	20.50	22.05	22.06	22.04	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	20.55	20.48	20.43	21.50	20.16	20.11	20.04	21.00	22.52	22.46	22.49	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	20.39	20.47	20.59	21.50	20.02	20.04	20.01	21.00	22.56	22.50	22.47	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	19.56	19.59	19.57	21.00	19.17	19.01	18.97	20.50	21.94	22.01	22.02	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	19.42	19.54	19.52	21.00	19.02	19.08	18.97	20.50	22.14	22.03	22.06	23.50
3GPP Rel 6	HSUPA Subtest-1	20.49	20.51	20.54	22.00	19.71	19.79	19.77	21.00	22.55	22.53	22.56	24.00
3GPP Rel 6	HSUPA Subtest-2	18.00	18.02	18.02	20.00	17.54	17.55	17.49	19.00	18.53	18.57	18.55	22.00
3GPP Rel 6	HSUPA Subtest-3	19.01	19.03	19.05	21.00	18.55	18.56	18.57	20.00	19.00	19.06	19.01	23.00
3GPP Rel 6	HSUPA Subtest-4	18.00	18.04	18.01	20.00	17.57	17.59	17.55	19.00	18.51	18.54	18.53	22.00
3GPP Rel 6	HSUPA Subtest-5	20.50	20.50	20.50	22.00	20.00	20.00	20.10	21.00	22.50	22.50	22.50	24.00



		Ant 3			Ant 3			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	18.83	18.90	18.89	20.00	18.42	18.53	18.51	19.50	22.01	22.06	22.02	23.00
3GPP Rel 99	RMC 12.2Kbps	18.88	18.93	18.90	20.00	18.46	18.55	18.50	19.50	22.05	22.07	22.05	23.00
3GPP Rel 6	HSDPA Subtest-1	18.36	18.44	18.48	19.00	18.03	18.04	17.99	18.50	21.08	21.07	21.02	22.00
3GPP Rel 6	HSDPA Subtest-2	18.38	18.45	18.49	19.00	18.00	18.09	17.99	18.50	21.06	21.06	21.04	22.00
3GPP Rel 6	HSDPA Subtest-3	17.37	17.43	17.50	18.50	16.97	17.06	16.99	18.00	20.56	20.57	20.53	21.50
3GPP Rel 6	HSDPA Subtest-4	17.37	17.47	17.48	18.50	16.98	17.06	16.99	18.00	20.59	20.54	20.54	21.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.33	18.50	18.42	19.00	18.10	18.04	18.07	18.50	21.17	21.10	21.12	22.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.44	18.35	18.57	19.00	17.96	18.11	17.95	18.50	21.07	21.12	21.02	22.00
3GPP Rel 8	DC-HSDPA Subtest-3	17.27	17.36	17.41	18.50	17.03	17.13	17.07	18.00	20.65	20.47	20.55	21.50
3GPP Rel 8	DC-HSDPA Subtest-4	17.40	17.54	17.53	18.50	16.96	17.15	16.90	18.00	20.58	20.61	20.49	21.50
3GPP Rel 6	HSUPA Subtest-1	18.43	18.39	18.47	19.00	17.70	17.72	17.66	18.50	21.04	21.08	21.04	22.00
3GPP Rel 6	HSUPA Subtest-2	15.94	15.90	15.94	17.00	15.54	15.53	15.47	16.50	17.10	17.10	17.10	18.50
3GPP Rel 6	HSUPA Subtest-3	16.83	16.95	16.92	18.00	16.50	16.53	16.51	17.50	17.57	17.56	17.55	19.00
3GPP Rel 6	HSUPA Subtest-4	15.94	15.92	15.98	17.00	15.47	15.50	15.49	16.50	17.05	17.10	17.08	18.50
3GPP Rel 6	HSUPA Subtest-5	18.40	18.40	18.50	19.00	18.00	18.10	18.00	18.50	21.10	21.10	21.00	22.00



Band	Ant 3			Tune-up Limit (dBm)	Ant 3			Tune-up Limit (dBm)	Ant 1			Tune-up Limit (dBm)	
	WCDMA II	WCDMA IV	WCDMA V										
TX Channel	9262	9400	9538	1312	1413	1513	4132	4182	4233				
Rx Channel	9662	9800	9938	1537	1638	1738	4357	4407	4458				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	18.83	18.90	18.89	20.50	18.42	18.53	18.51	20.00	22.01	22.06	22.02	23.50
3GPP Rel 99	RMC 12.2Kbps	18.88	18.93	18.93	20.50	18.46	18.55	18.50	20.00	22.05	22.07	22.05	23.50
3GPP Rel 6	HSDPA Subtest-1	18.36	18.44	18.48	19.50	18.03	18.04	17.99	19.00	21.08	21.07	21.02	22.50
3GPP Rel 6	HSDPA Subtest-2	18.38	18.45	18.49	19.50	18.00	18.09	17.99	19.00	21.06	21.06	21.04	22.50
3GPP Rel 6	HSDPA Subtest-3	17.37	17.43	17.50	19.00	16.97	17.06	16.99	18.50	20.56	20.57	20.53	22.00
3GPP Rel 6	HSDPA Subtest-4	17.37	17.47	17.48	19.00	16.98	17.06	16.99	18.50	20.59	20.54	20.54	22.00
3GPP Rel 8	DC-HSDPA Subtest-1	18.33	18.50	18.42	19.50	18.10	18.04	18.07	19.00	21.17	21.10	21.12	22.50
3GPP Rel 8	DC-HSDPA Subtest-2	18.44	18.35	18.57	19.50	17.96	18.11	17.95	19.00	21.07	21.12	21.02	22.50
3GPP Rel 8	DC-HSDPA Subtest-3	17.27	17.36	17.41	19.00	17.03	17.13	17.07	18.50	20.65	20.47	20.55	22.00
3GPP Rel 8	DC-HSDPA Subtest-4	17.40	17.54	17.53	19.00	16.96	17.15	16.90	18.50	20.58	20.61	20.49	22.00
3GPP Rel 6	HSUPA Subtest-1	18.43	18.39	18.47	19.50	17.70	17.72	17.66	19.00	21.04	21.08	21.04	22.50
3GPP Rel 6	HSUPA Subtest-2	15.94	15.90	15.94	17.50	15.54	15.53	15.47	17.00	17.10	17.10	17.10	19.00
3GPP Rel 6	HSUPA Subtest-3	16.83	16.95	16.92	18.50	16.50	16.53	16.51	18.00	17.57	17.56	17.55	19.50
3GPP Rel 6	HSUPA Subtest-4	15.94	15.92	15.98	17.50	15.47	15.50	15.49	17.00	17.05	17.10	17.08	19.00
3GPP Rel 6	HSUPA Subtest-5	18.40	18.40	18.50	19.50	18.00	18.10	18.00	19.00	21.10	21.10	21.00	22.50



		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	15.77	15.75	15.71	17.00	15.26	15.28	15.23	16.50	24.01	24.00	23.98	25.00
3GPP Rel 99	RMC 12.2Kbps	15.87	15.85	15.83	17.00	15.31	15.36	15.34	16.50	24.03	24.02	23.98	25.00
3GPP Rel 6	HSDPA Subtest-1	15.35	15.35	15.37	16.00	14.87	14.89	14.88	15.50	23.00	23.04	23.01	24.50
3GPP Rel 6	HSDPA Subtest-2	15.35	15.40	15.34	16.00	14.85	14.88	14.89	15.50	23.00	23.04	23.01	24.50
3GPP Rel 6	HSDPA Subtest-3	14.37	14.37	14.38	15.50	13.79	13.84	13.91	15.00	22.51	22.53	22.49	24.00
3GPP Rel 6	HSDPA Subtest-4	14.38	14.39	14.37	15.50	13.79	13.85	13.89	15.00	22.50	22.52	22.51	24.00
3GPP Rel 8	DC-HSDPA Subtest-1	15.26	15.35	15.42	16.00	14.81	14.96	14.93	15.50	22.96	22.97	22.95	23.50
3GPP Rel 8	DC-HSDPA Subtest-2	15.30	15.50	15.26	16.00	14.75	14.83	14.80	15.50	22.96	23.01	22.93	23.50
3GPP Rel 6	DC-HSDPA Subtest-3	14.33	14.35	14.37	15.50	13.89	13.74	13.93	15.00	22.48	22.51	22.47	23.00
3GPP Rel 8	DC-HSDPA Subtest-4	14.44	14.30	14.43	15.50	13.77	13.94	13.99	15.00	22.42	22.46	22.47	23.00
3GPP Rel 6	HSUPA Subtest-1	13.85	13.88	13.85	14.00	13.28	13.35	13.34	14.00	22.98	23.01	22.99	24.50
3GPP Rel 6	HSUPA Subtest-2	12.88	12.91	12.86	14.00	12.34	12.35	12.34	13.50	18.97	19.00	18.98	22.50
3GPP Rel 6	HSUPA Subtest-3	13.39	13.40	13.37	15.00	12.82	12.85	12.84	14.50	19.48	19.50	19.44	23.50
3GPP Rel 6	HSUPA Subtest-4	12.89	12.92	12.85	14.00	12.35	12.35	12.36	13.50	18.93	18.99	18.95	22.50
3GPP Rel 6	HSUPA Subtest-5	15.40	15.40	15.40	16.00	14.90	14.90	14.90	15.50	22.90	23.00	23.00	24.50



Band		Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	12.82	12.85	12.84	14.00	12.35	12.39	12.36	13.50	22.43	22.48	22.45	23.50
3GPP Rel 99	RMC 12.2Kbps	12.84	12.88	12.86	14.00	12.36	12.41	12.37	13.50	22.45	22.49	22.46	23.50
3GPP Rel 6	HSDPA Subtest-1	12.37	12.39	12.39	13.00	11.89	11.96	11.89	12.50	21.47	21.48	21.46	22.50
3GPP Rel 6	HSDPA Subtest-2	12.36	12.37	12.38	13.00	11.88	11.95	11.87	12.50	21.46	21.48	21.44	22.50
3GPP Rel 6	HSDPA Subtest-3	11.35	11.39	11.38	12.50	10.87	10.91	10.86	12.00	20.96	20.99	20.96	22.00
3GPP Rel 6	HSDPA Subtest-4	11.34	11.37	11.36	12.50	10.86	10.90	10.85	12.00	20.97	20.97	20.95	22.00
3GPP Rel 8	DC-HSDPA Subtest-1	12.28	12.28	12.30	13.00	11.79	11.85	11.78	12.50	21.38	21.39	21.35	22.50
3GPP Rel 8	DC-HSDPA Subtest-2	12.26	12.26	12.29	13.00	11.77	11.84	11.77	12.50	21.35	21.37	21.32	22.50
3GPP Rel 8	DC-HSDPA Subtest-3	11.25	11.28	11.27	12.50	10.75	10.81	10.77	12.00	20.88	20.88	20.87	22.00
3GPP Rel 8	DC-HSDPA Subtest-4	11.22	11.28	11.24	12.50	10.72	10.79	10.74	12.00	20.87	20.86	20.84	22.00
3GPP Rel 6	HSUPA Subtest-1	11.05	11.12	11.04	12.50	10.35	10.42	10.37	11.50	21.50	21.47	21.43	22.50
3GPP Rel 6	HSUPA Subtest-2	9.87	9.90	9.90	11.00	9.36	9.43	9.37	10.50	17.50	17.48	17.44	18.50
3GPP Rel 6	HSUPA Subtest-3	10.42	10.43	10.42	11.50	9.85	9.89	9.87	11.00	17.95	17.99	17.97	19.00
3GPP Rel 6	HSUPA Subtest-4	9.86	9.90	9.91	11.00	9.41	9.45	9.36	10.50	17.51	17.50	17.49	18.50
3GPP Rel 6	HSUPA Subtest-5	12.40	12.40	12.40	13.00	11.90	11.94	11.92	12.50	21.50	21.48	21.47	22.50



Band	Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)	
	WCDMA II				WCDMA IV				WCDMA V				
TX Channel	9262	9400	9538	14.50	1312	1413	1513	14.00	4132	4182	4233	24.00	
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	12.82	12.85	12.84	14.50	12.35	12.39	12.36	14.00	22.43	22.48	22.45	24.00
3GPP Rel 99	RMC 12.2Kbps	12.84	12.88	12.86	14.50	12.36	12.41	12.37	14.00	22.45	22.49	22.46	24.00
3GPP Rel 6	HSDPA Subtest-1	12.37	12.39	12.39	13.50	11.89	11.96	11.89	13.00	21.47	21.48	21.46	23.00
3GPP Rel 6	HSDPA Subtest-2	12.36	12.37	12.38	13.50	11.88	11.95	11.87	13.00	21.46	21.48	21.44	23.00
3GPP Rel 6	HSDPA Subtest-3	11.35	11.39	11.38	13.00	10.87	10.91	10.86	12.50	20.96	20.99	20.96	22.50
3GPP Rel 6	HSDPA Subtest-4	11.34	11.37	11.36	13.00	10.86	10.90	10.85	12.50	20.97	20.97	20.95	22.50
3GPP Rel 8	DC-HSDPA Subtest-1	12.28	12.28	12.30	13.50	11.79	11.85	11.78	13.00	21.38	21.39	21.35	23.00
3GPP Rel 8	DC-HSDPA Subtest-2	12.26	12.26	12.29	13.50	11.77	11.84	11.77	13.00	21.35	21.37	21.32	23.00
3GPP Rel 8	DC-HSDPA Subtest-3	11.25	11.28	11.27	13.00	10.75	10.81	10.77	12.50	20.88	20.88	20.87	22.50
3GPP Rel 8	DC-HSDPA Subtest-4	11.22	11.28	11.24	13.00	10.72	10.79	10.74	12.50	20.87	20.86	20.84	22.50
3GPP Rel 6	HSUPA Subtest-1	11.05	11.12	11.04	13.00	10.35	10.42	10.37	12.00	21.50	21.47	21.43	23.00
3GPP Rel 6	HSUPA Subtest-2	9.87	9.90	9.90	11.50	9.36	9.43	9.37	11.00	17.50	17.48	17.44	19.00
3GPP Rel 6	HSUPA Subtest-3	10.42	10.43	10.42	12.00	9.85	9.89	9.87	11.50	17.95	17.99	17.97	19.50
3GPP Rel 6	HSUPA Subtest-4	9.86	9.90	9.91	11.50	9.41	9.45	9.36	11.00	17.51	17.50	17.49	19.00
3GPP Rel 6	HSUPA Subtest-5	12.40	12.40	12.40	13.50	11.90	11.94	11.92	13.00	21.50	21.48	21.47	23.00



Band	Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
	WCDMA II	WCDMA II	WCDMA II		WCDMA IV	WCDMA IV	WCDMA IV		WCDMA V	WCDMA V	WCDMA V	
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99 AMR 12.2Kbps	18.30	18.29	18.35	19.50	17.82	17.83	17.82	19.00	24.01	24.00	23.98	25.00
3GPP Rel 99 RMC 12.2Kbps	18.33	18.31	18.36	19.50	17.83	17.85	17.83	19.00	24.03	24.02	23.98	25.00
3GPP Rel 6 HSDPA Subtest-1	17.82	17.85	17.87	18.50	17.33	17.40	17.33	18.00	23.00	23.04	23.01	24.50
3GPP Rel 6 HSDPA Subtest-2	17.81	17.85	17.88	18.50	17.34	17.37	17.36	18.00	23.00	23.04	23.01	24.50
3GPP Rel 6 HSDPA Subtest-3	16.86	16.83	16.87	18.00	16.35	16.38	16.34	17.50	22.51	22.53	22.49	24.00
3GPP Rel 6 HSDPA Subtest-4	16.85	16.84	16.82	18.00	16.30	16.37	16.37	17.50	22.50	22.52	22.51	24.00
3GPP Rel 8 DC-HSDPA Subtest-1	17.89	17.86	17.95	18.50	17.31	17.45	17.30	18.00	22.96	22.97	22.95	23.50
3GPP Rel 8 DC-HSDPA Subtest-2	17.89	17.86	17.93	18.50	17.26	17.45	17.33	18.00	22.96	23.01	22.93	23.50
3GPP Rel 8 DC-HSDPA Subtest-3	16.84	16.90	16.82	18.00	16.41	16.29	16.33	17.50	22.48	22.51	22.47	23.00
3GPP Rel 8 DC-HSDPA Subtest-4	16.88	16.89	16.74	18.00	16.34	16.32	16.45	17.50	22.42	22.46	22.47	23.00
3GPP Rel 6 HSUPA Subtest-1	17.68	17.57	17.55	18.50	17.33	17.40	17.39	18.00	22.98	23.01	22.99	24.50
3GPP Rel 6 HSUPA Subtest-2	15.36	15.37	15.41	16.50	14.83	14.83	14.88	16.00	18.97	19.00	18.98	22.50
3GPP Rel 6 HSUPA Subtest-3	16.37	16.35	16.36	17.50	15.84	15.89	15.87	17.00	19.48	19.50	19.44	23.50
3GPP Rel 6 HSUPA Subtest-4	15.36	15.34	15.45	16.50	14.88	14.85	14.86	16.00	18.93	18.99	18.95	22.50
3GPP Rel 6 HSUPA Subtest-5	17.90	17.90	17.90	18.50	17.40	17.40	17.40	18.00	22.90	23.00	23.00	24.50



Band		Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
		WCDMA II				WCDMA IV				WCDMA V			
TX Channel		9262	9400	9538	17.50	1312	1413	1513	17.00	4132	4182	4233	23.00
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	16.30	16.34	16.28	17.50	15.81	15.87	15.80	17.00	21.95	21.95	21.90	23.00
3GPP Rel 99	RMC 12.2Kbps	16.32	16.35	16.36	17.50	15.86	15.91	15.83	17.00	21.97	21.96	21.93	23.00
3GPP Rel 6	HSDPA Subtest-1	15.87	15.84	15.89	16.50	15.39	15.36	15.33	16.00	20.99	20.95	20.94	22.00
3GPP Rel 6	HSDPA Subtest-2	15.86	15.82	15.87	16.50	15.33	15.38	15.34	16.00	20.93	20.98	20.94	22.00
3GPP Rel 6	HSDPA Subtest-3	14.83	14.91	14.81	16.00	14.38	14.41	14.38	15.50	20.44	20.48	20.44	21.50
3GPP Rel 6	HSDPA Subtest-4	14.85	14.86	14.84	16.00	14.37	14.40	14.38	15.50	20.47	20.50	20.45	21.50
3GPP Rel 8	DC-HSDPA Subtest-1	15.89	15.83	15.94	16.50	15.38	15.38	15.25	16.00	21.02	20.88	20.87	22.00
3GPP Rel 8	DC-HSDPA Subtest-2	15.90	15.73	15.80	16.50	15.28	15.33	15.44	16.00	20.99	21.01	20.92	22.00
3GPP Rel 8	DC-HSDPA Subtest-3	14.76	14.94	14.82	16.00	14.39	14.46	14.34	15.50	20.41	20.54	20.43	21.50
3GPP Rel 8	DC-HSDPA Subtest-4	14.88	14.85	14.76	16.00	14.29	14.50	14.36	15.50	20.42	20.58	20.40	21.50
3GPP Rel 6	HSUPA Subtest-1	14.34	14.35	14.29	15.50	13.89	13.85	13.85	15.00	20.98	21.00	20.95	22.00
3GPP Rel 6	HSUPA Subtest-2	13.40	13.33	13.37	14.50	12.90	12.86	12.88	14.00	16.93	16.97	16.99	18.00
3GPP Rel 6	HSUPA Subtest-3	14.86	13.87	13.86	15.00	13.38	13.38	13.39	14.50	17.45	17.48	17.44	18.50
3GPP Rel 6	HSUPA Subtest-4	13.39	13.42	13.39	14.50	12.87	12.91	12.91	14.00	16.94	16.98	16.96	18.00
3GPP Rel 6	HSUPA Subtest-5	15.90	15.80	15.90	16.50	15.30	15.40	15.40	16.00	21.00	21.00	20.90	22.00

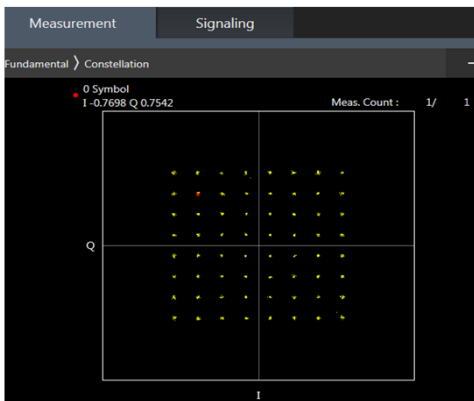


Band	Ant 2			Tune-up Limit (dBm)	Ant 2			Tune-up Limit (dBm)	Ant 0			Tune-up Limit (dBm)
	WCDMA II	WCDMA IV	WCDMA V									
TX Channel	9262	9400	9538	1312	1413	1513	4132	4182	4233			
Rx Channel	9662	9800	9938	1537	1638	1738	4357	4407	4458			
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99 AMR 12.2Kbps	16.30	16.34	16.28	18.00	15.81	15.87	15.80	17.50	21.95	21.97	21.90	23.50
3GPP Rel 99 RMC 12.2Kbps	16.32	16.36	16.32	18.00	15.86	15.91	15.83	17.50	21.97	21.98	21.93	23.50
3GPP Rel 6 HSDPA Subtest-1	15.87	15.84	15.89	17.00	15.39	15.36	15.33	16.50	20.99	20.95	20.94	22.50
3GPP Rel 6 HSDPA Subtest-2	15.86	15.82	15.87	17.00	15.33	15.38	15.34	16.50	20.93	20.98	20.94	22.50
3GPP Rel 6 HSDPA Subtest-3	14.83	14.91	14.81	16.50	14.38	14.41	14.38	16.00	20.44	20.48	20.44	22.00
3GPP Rel 6 HSDPA Subtest-4	14.85	14.86	14.84	16.50	14.37	14.40	14.38	16.00	20.47	20.50	20.45	22.00
3GPP Rel 8 DC-HSDPA Subtest-1	15.89	15.83	15.94	17.00	15.38	15.38	15.25	16.50	21.02	20.88	20.87	22.50
3GPP Rel 8 DC-HSDPA Subtest-2	15.90	15.73	15.80	17.00	15.28	15.33	15.44	16.50	20.99	21.01	20.92	22.50
3GPP Rel 8 DC-HSDPA Subtest-3	14.76	14.94	14.82	16.50	14.39	14.46	14.34	16.00	20.41	20.54	20.43	22.00
3GPP Rel 8 DC-HSDPA Subtest-4	14.88	14.85	14.76	16.50	14.29	14.50	14.36	16.00	20.42	20.58	20.40	22.00
3GPP Rel 6 HSUPA Subtest-1	14.34	14.35	14.29	16.00	13.89	13.85	13.85	15.50	20.98	21.00	20.95	22.50
3GPP Rel 6 HSUPA Subtest-2	13.40	13.33	13.37	15.00	12.90	12.86	12.88	14.50	16.93	16.97	16.99	18.50
3GPP Rel 6 HSUPA Subtest-3	14.86	13.87	13.86	15.50	13.38	13.38	13.39	15.00	17.45	17.48	17.44	19.00
3GPP Rel 6 HSUPA Subtest-4	13.39	13.42	13.39	15.00	12.87	12.91	12.91	14.50	16.94	16.98	16.96	18.50
3GPP Rel 6 HSUPA Subtest-5	15.90	15.80	15.90	17.00	15.30	15.40	15.40	16.50	21.00	21.00	20.90	22.50

<LTE Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth
9. According to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to 2017 TCB workshop, for 64 QAM and 16 QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 64QAM and 16QAM signal modulation are correct.



64QAM



16QAM



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20450	Power Middle Ch. / Freq. 20525	Power High Ch. / Freq. 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	24.06	24.06	24.09	25
10	QPSK	1	25	24.05	24.03	24.04	
10	QPSK	1	49	24.10	24.13	24.04	
10	QPSK	25	0	23.14	23.15	23.14	24
10	QPSK	25	12	23.22	23.23	23.20	
10	QPSK	25	25	23.21	23.20	23.19	
10	QPSK	50	0	23.15	23.16	23.07	24
10	16QAM	1	0	23.45	23.47	23.46	
10	16QAM	1	25	23.41	23.41	23.46	
10	16QAM	1	49	23.43	23.45	23.42	23
10	16QAM	25	0	22.17	22.14	22.14	
10	16QAM	25	12	22.27	22.25	22.17	
10	16QAM	25	25	22.19	22.21	22.18	23
10	16QAM	50	0	22.15	22.17	22.06	
10	64QAM	1	0	22.27	22.31	22.28	
10	64QAM	1	25	22.36	22.37	22.38	23
10	64QAM	1	49	22.35	22.36	22.34	
10	64QAM	25	0	21.17	21.17	21.20	
10	64QAM	25	12	21.29	21.28	21.21	22
10	64QAM	25	25	21.25	21.24	21.23	
10	64QAM	50	0	21.19	21.20	21.10	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.92	23.98	23.95	25
5	QPSK	1	12	24.07	24.12	24.10	
5	QPSK	1	24	24.04	24.05	24.03	
5	QPSK	12	0	23.10	23.12	23.11	24
5	QPSK	12	7	23.21	23.22	23.24	
5	QPSK	12	13	23.19	23.20	23.16	
5	QPSK	25	0	23.19	23.16	23.17	24
5	16QAM	1	0	23.26	23.32	23.32	
5	16QAM	1	12	23.33	23.39	23.39	
5	16QAM	1	24	23.39	23.43	23.31	23
5	16QAM	12	0	22.12	22.17	22.13	
5	16QAM	12	7	22.23	22.23	22.22	
5	16QAM	12	13	22.18	22.22	22.18	23
5	16QAM	25	0	22.16	22.22	22.19	
5	64QAM	1	0	22.10	22.20	22.19	
5	64QAM	1	12	22.28	22.30	22.31	23
5	64QAM	1	24	22.26	22.29	22.23	
5	64QAM	12	0	21.20	21.20	21.20	
5	64QAM	12	7	21.29	21.31	21.28	22
5	64QAM	12	13	21.25	21.27	21.23	
5	64QAM	25	0	21.22	21.20	21.20	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.97	24.02	23.99	25
3	QPSK	1	8	24.11	24.12	24.10	
3	QPSK	1	14	24.08	24.07	24.04	
3	QPSK	8	0	23.12	23.12	23.08	24
3	QPSK	8	4	23.22	23.20	23.19	
3	QPSK	8	7	23.18	23.19	23.15	
3	QPSK	15	0	23.17	23.18	23.10	24
3	16QAM	1	0	23.27	23.34	23.35	
3	16QAM	1	8	23.39	23.50	23.46	
3	16QAM	1	14	23.40	23.44	23.35	23
3	16QAM	8	0	22.17	22.20	22.15	
3	16QAM	8	4	22.27	22.30	22.27	
3	16QAM	8	7	22.23	22.25	22.23	23
3	16QAM	15	0	22.20	22.22	22.14	
3	64QAM	1	0	22.20	22.22	22.23	
3	64QAM	1	8	22.41	22.39	22.34	23
3	64QAM	1	14	22.30	22.32	22.24	
3	64QAM	8	0	21.18	21.21	21.17	
3	64QAM	8	4	21.28	21.28	21.26	22
3	64QAM	8	7	21.25	21.28	21.22	
3	64QAM	15	0	21.22	21.23	21.14	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.92	24.03	23.98	25
1.4	QPSK	1	3	24.04	24.06	24.01	
1.4	QPSK	1	5	23.98	23.99	23.94	
1.4	QPSK	3	0	24.01	24.03	24.00	24
1.4	QPSK	3	1	24.03	24.08	24.02	
1.4	QPSK	3	3	24.02	24.03	23.99	
1.4	QPSK	6	0	23.13	23.14	23.10	24
1.4	16QAM	1	0	23.23	23.30	23.28	
1.4	16QAM	1	3	23.39	23.43	23.36	
1.4	16QAM	1	5	23.33	23.37	23.30	24
1.4	16QAM	3	0	23.08	23.12	23.07	
1.4	16QAM	3	1	23.12	23.18	23.12	
1.4	16QAM	3	3	23.06	23.13	23.06	23
1.4	16QAM	6	0	22.20	22.21	22.18	
1.4	64QAM	1	0	22.18	22.29	22.20	
1.4	64QAM	1	3	22.29	22.31	22.28	23
1.4	64QAM	1	5	22.23	22.26	22.20	
1.4	64QAM	3	0	22.22	22.24	22.20	
1.4	64QAM	3	1	22.27	22.31	22.25	23
1.4	64QAM	3	3	22.22	22.25	22.17	
1.4	64QAM	6	0	21.14	21.13	21.10	



Band 7_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. Freq. 20850	Middle Ch. Freq. 21100	High Ch. Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)				23.52	23.51	23.56	
20	QPSK	1	0	23.52	23.51	23.56	24.5
20	QPSK	1	49	23.56	23.55	23.62	
20	QPSK	1	99	23.61	23.61	23.71	
20	QPSK	50	0	22.60	22.64	22.67	23.5
20	QPSK	50	24	22.71	22.63	22.70	
20	QPSK	50	50	22.71	22.75	22.79	
20	QPSK	100	0	22.61	22.62	22.62	23.5
20	16QAM	1	0	22.88	22.85	22.89	
20	16QAM	1	49	22.95	22.93	23.00	
20	16QAM	1	99	22.98	23.02	23.08	22.5
20	16QAM	50	0	21.61	21.64	21.65	
20	16QAM	50	24	21.71	21.65	21.68	
20	16QAM	50	50	21.71	21.77	21.81	22.5
20	16QAM	100	0	21.64	21.58	21.62	
20	64QAM	1	0	21.70	21.70	21.76	
20	64QAM	1	49	21.73	21.74	21.82	22.5
20	64QAM	1	99	21.90	21.89	21.92	
20	64QAM	50	0	20.62	20.64	20.67	
20	64QAM	50	24	20.74	20.70	20.72	21.5
20	64QAM	50	50	20.77	20.77	20.81	
20	64QAM	100	0	20.66	20.63	20.66	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.55	23.56	23.61	24.5
15	QPSK	1	37	23.56	23.59	23.64	
15	QPSK	1	74	23.66	23.70	23.70	
15	QPSK	36	0	22.62	22.65	22.67	23.5
15	QPSK	36	20	22.73	22.69	22.79	
15	QPSK	36	39	22.74	22.77	22.80	
15	QPSK	75	0	22.67	22.64	22.65	23.5
15	16QAM	1	0	22.86	22.91	22.93	
15	16QAM	1	37	22.94	22.95	22.99	
15	16QAM	1	74	22.99	23.02	23.04	22.5
15	16QAM	36	0	21.64	21.63	21.68	
15	16QAM	36	20	21.74	21.65	21.81	
15	16QAM	36	39	21.72	21.76	21.78	22.5
15	64QAM	75	0	21.69	21.63	21.68	
15	64QAM	1	0	21.75	21.75	21.81	
15	64QAM	1	37	21.82	21.81	21.88	22.5
15	64QAM	1	74	21.85	21.90	21.94	
15	64QAM	36	0	20.65	20.68	20.73	
15	64QAM	36	20	20.76	20.71	20.82	21.5
15	64QAM	36	39	20.77	20.81	20.85	
15	64QAM	75	0	20.68	20.61	20.70	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.35	23.40	23.39	24.5
10	QPSK	1	25	23.36	23.44	23.40	
10	QPSK	1	49	23.41	23.46	23.48	
10	QPSK	25	0	22.38	22.44	22.45	23.5
10	QPSK	25	12	22.49	22.49	22.57	
10	QPSK	25	25	22.48	22.55	22.55	
10	QPSK	50	0	22.43	22.42	22.50	23.5
10	16QAM	1	0	22.72	22.75	22.77	
10	16QAM	1	25	22.74	22.83	22.79	
10	16QAM	1	49	22.81	22.85	22.88	22.5
10	16QAM	25	0	21.38	21.41	21.47	
10	16QAM	25	12	21.51	21.48	21.56	
10	16QAM	25	25	21.47	21.54	21.54	22.5
10	16QAM	50	0	21.44	21.39	21.50	
10	64QAM	1	0	21.55	21.58	21.64	
10	64QAM	1	25	21.68	21.71	21.73	22.5
10	64QAM	1	49	21.71	21.77	21.77	
10	64QAM	25	0	20.42	20.46	20.47	
10	64QAM	25	12	20.54	20.53	20.60	21.5
10	64QAM	25	25	20.52	20.57	20.59	
10	64QAM	50	0	20.45	20.42	20.50	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.32	23.38	23.43	24.5
5	QPSK	1	12	23.43	23.48	23.50	
5	QPSK	1	24	23.44	23.52	23.50	
5	QPSK	12	0	22.47	22.46	22.50	23.5
5	QPSK	12	7	22.52	22.48	22.59	
5	QPSK	12	13	22.48	22.53	22.53	
5	QPSK	25	0	22.48	22.49	22.50	23.5
5	16QAM	1	0	22.64	22.70	22.81	
5	16QAM	1	12	22.72	22.78	22.80	
5	16QAM	1	24	22.76	22.82	22.80	22.5
5	16QAM	12	0	21.47	21.44	21.51	
5	16QAM	12	7	21.51	21.53	21.59	
5	16QAM	12	13	21.50	21.55	21.51	22.5
5	64QAM	25	0	21.47	21.43	21.53	
5	64QAM	1	0	21.57	21.65	21.70	
5	64QAM	1	12	21.60	21.68	21.70	22.5
5	64QAM	1	24	21.66	21.72	21.75	
5	64QAM	12	0	20.54	20.52	20.60	
5	64QAM	12	7	20.59	20.55	20.63	21.5
5	64QAM	12	13	20.55	20.55	20.60	
5	64QAM	25	0	20.48	20.48	20.54	



Band 12_Ant 1						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 23060	Power Middle Ch. Freq. 23095	Power High Ch. Freq. 23130
Channel				704	707.5	711
Frequency (MHz)						
10	QPSK	1	0	22.98	23.05	23.04
10	QPSK	1	25	23.05	23.05	23.03
10	QPSK	1	49	23.18	23.20	23.15
10	QPSK	25	0	22.05	22.06	22.08
10	QPSK	25	12	22.22	22.23	22.16
10	QPSK	25	25	22.20	22.20	22.22
10	QPSK	50	0	22.17	22.18	22.10
10	16QAM	1	0	22.28	22.42	22.44
10	16QAM	1	25	22.41	22.41	22.46
10	16QAM	1	49	22.50	22.49	22.48
10	16QAM	25	0	21.08	21.08	21.07
10	16QAM	25	12	21.25	21.23	21.19
10	16QAM	25	25	21.18	21.22	21.23
10	16QAM	50	0	21.16	21.16	21.10
10	64QAM	1	0	21.25	21.25	21.28
10	64QAM	1	25	21.35	21.38	21.37
10	64QAM	1	49	21.40	21.41	21.40
10	64QAM	25	0	20.08	20.09	20.11
10	64QAM	25	12	20.27	20.28	20.24
10	64QAM	25	25	20.22	20.23	20.22
10	64QAM	50	0	20.21	20.21	20.14
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	22.98	22.99	23.03
5	QPSK	1	12	23.11	23.13	23.11
5	QPSK	1	24	23.08	23.11	23.11
5	QPSK	12	0	22.12	22.14	22.13
5	QPSK	12	7	22.22	22.24	22.23
5	QPSK	12	13	22.19	22.20	22.20
5	QPSK	25	0	22.19	22.20	22.20
5	16QAM	1	0	22.25	22.31	22.39
5	16QAM	1	12	22.40	22.35	22.46
5	16QAM	1	24	22.41	22.46	22.44
5	16QAM	12	0	21.15	21.16	21.17
5	16QAM	12	7	21.22	21.24	21.23
5	16QAM	12	13	21.20	21.22	21.22
5	16QAM	25	0	21.21	21.23	21.23
5	64QAM	1	0	21.25	21.28	21.31
5	64QAM	1	12	21.28	21.34	21.32
5	64QAM	1	24	21.34	21.38	21.34
5	64QAM	12	0	20.21	20.21	20.23
5	64QAM	12	7	20.29	20.31	20.30
5	64QAM	12	13	20.25	20.27	20.28
5	64QAM	25	0	20.23	20.24	20.23
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	23.02	23.08	23.04
3	QPSK	1	8	23.15	23.19	23.14
3	QPSK	1	14	23.10	23.10	23.10
3	QPSK	8	0	22.13	22.16	22.12
3	QPSK	8	4	22.21	22.24	22.15
3	QPSK	8	7	22.18	22.23	22.16
3	QPSK	15	0	22.19	22.19	22.13
3	16QAM	1	0	22.26	22.35	22.36
3	16QAM	1	8	22.40	22.40	22.46
3	16QAM	1	14	22.43	22.44	22.42
3	16QAM	8	0	21.19	21.21	21.19
3	16QAM	8	4	21.29	21.29	21.22
3	16QAM	8	7	21.25	21.27	21.25
3	16QAM	15	0	21.21	21.24	21.15
3	64QAM	1	0	21.28	21.27	21.32
3	64QAM	1	8	21.39	21.39	21.37
3	64QAM	1	14	21.34	21.37	21.35
3	64QAM	8	0	20.20	20.21	20.23
3	64QAM	8	4	20.28	20.29	20.20
3	64QAM	8	7	20.25	20.25	20.24
3	64QAM	15	0	20.23	20.23	20.16
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	23.01	22.98	22.95
1.4	QPSK	1	3	23.05	23.09	23.07
1.4	QPSK	1	5	22.99	23.02	22.98
1.4	QPSK	3	0	23.01	23.04	22.97
1.4	QPSK	3	1	23.05	23.08	23.05
1.4	QPSK	3	3	23.01	23.03	22.99
1.4	QPSK	6	0	22.10	22.10	22.08
1.4	16QAM	1	0	22.31	22.29	22.25
1.4	16QAM	1	3	22.41	22.40	22.37
1.4	16QAM	1	5	22.30	22.33	22.33
1.4	16QAM	3	0	22.11	22.09	22.05
1.4	16QAM	3	1	22.16	22.14	22.15
1.4	16QAM	3	3	22.10	22.09	22.11
1.4	64QAM	6	0	21.19	21.20	21.17
1.4	64QAM	1	0	21.24	21.20	21.17
1.4	64QAM	1	3	21.29	21.34	21.27
1.4	64QAM	1	5	21.21	21.24	21.25
1.4	64QAM	3	0	21.22	21.22	21.16
1.4	64QAM	3	1	21.28	21.30	21.28
1.4	64QAM	3	3	21.21	21.24	21.22
1.4	64QAM	6	0	20.10	20.15	20.11



Band 13_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dB)
Channel				782			
Frequency (MHz)							
10	QPSK	1	0		23.15		24
10	QPSK	1	25		23.09		
10	QPSK	1	49		23.08		
10	QPSK	25	0		22.13		23
10	QPSK	25	12		22.15		
10	QPSK	25	25		22.21		
10	QPSK	50	0		22.10		23
10	16QAM	1	0		22.51		
10	16QAM	1	25		22.44		
10	16QAM	1	49		22.46		22
10	16QAM	25	0		21.15		
10	16QAM	25	12		21.18		
10	16QAM	25	25		21.19		22
10	16QAM	50	0		21.07		
10	64QAM	1	0		21.36		
10	64QAM	1	25		21.39		22
10	64QAM	1	49		21.35		
10	64QAM	25	0		20.18		
10	64QAM	25	12		20.21		21
10	64QAM	25	25		20.23		
10	64QAM	50	0		20.10		
Channel				23205	23230	23255	
Frequency (MHz)				779.5	782	784.5	Tune-up limit (dB)
5	QPSK	1	0	23.04	23.07	23.08	24
5	QPSK	1	12	23.09	23.12	23.14	
5	QPSK	1	24	23.14	23.13	23.12	
5	QPSK	12	0	22.11	22.12	22.12	23
5	QPSK	12	7	22.22	22.17	22.22	
5	QPSK	12	13	22.22	22.21	22.20	
5	QPSK	25	0	22.18	22.13	22.19	23
5	16QAM	1	0	22.36	22.34	22.42	
5	16QAM	1	12	22.36	22.37	22.41	
5	16QAM	1	24	22.48	22.44	22.47	22
5	16QAM	12	0	21.16	21.13	21.13	
5	16QAM	12	7	21.24	21.18	21.22	
5	16QAM	12	13	21.22	21.21	21.21	22
5	16QAM	25	0	21.21	21.14	21.20	
5	64QAM	1	0	21.33	21.28	21.28	
5	64QAM	1	12	21.32	21.29	21.28	22
5	64QAM	1	24	21.34	21.32	21.35	
5	64QAM	12	0	20.22	20.18	20.18	
5	64QAM	12	7	20.30	20.24	20.29	21
5	64QAM	12	13	20.26	20.26	20.28	
5	64QAM	25	0	20.22	20.16	20.24	



Band 17_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				23740	23790	23800	
10	QPSK	1	0	22.94	22.90	22.84	24
10	QPSK	1	25	22.96	23.00	23.02	
10	QPSK	1	49	23.07	23.04	23.05	
10	QPSK	25	0	22.04	22.04	22.08	23
10	QPSK	25	12	22.09	22.09	22.11	
10	QPSK	25	25	22.18	22.16	22.20	
10	QPSK	50	0	22.08	22.08	22.09	23
10	16QAM	1	0	22.26	22.28	22.29	
10	16QAM	1	25	22.37	22.33	22.37	
10	16QAM	1	49	22.43	22.41	22.40	22
10	16QAM	25	0	21.04	21.06	21.07	
10	16QAM	25	12	21.08	21.10	21.10	
10	16QAM	25	25	21.18	21.14	21.18	22
10	16QAM	50	0	21.06	21.06	21.08	
10	64QAM	1	0	21.11	21.09	21.20	
10	64QAM	1	25	21.26	21.29	21.29	22
10	64QAM	1	49	21.33	21.31	21.31	
10	64QAM	25	0	20.08	20.07	20.10	
10	64QAM	25	12	20.13	20.14	20.14	21
10	64QAM	25	25	20.21	20.21	20.20	
10	64QAM	50	0	20.11	20.10	20.11	
Channel				23755	23790	23825	Tune-up
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.88	22.92	22.85	24
5	QPSK	1	12	23.03	23.05	23.06	
5	QPSK	1	24	23.09	23.04	23.01	
5	QPSK	12	0	22.04	22.05	22.07	23
5	QPSK	12	7	22.15	22.15	22.17	
5	QPSK	12	13	22.14	22.15	22.15	
5	QPSK	25	0	22.11	22.14	22.09	23
5	16QAM	1	0	22.24	22.25	22.30	
5	16QAM	1	12	22.26	22.28	22.35	
5	16QAM	1	24	22.38	22.36	22.39	22
5	16QAM	12	0	21.08	21.08	21.08	
5	16QAM	12	7	21.15	21.17	21.19	
5	16QAM	12	13	21.15	21.14	21.15	22
5	16QAM	25	0	21.14	21.16	21.08	
5	64QAM	1	0	21.13	21.17	21.18	
5	64QAM	1	12	21.20	21.21	21.25	22
5	64QAM	1	24	21.32	21.28	21.27	
5	64QAM	12	0	20.10	20.13	20.15	
5	64QAM	12	7	20.24	20.24	20.26	21
5	64QAM	12	13	20.20	20.22	20.21	
5	64QAM	25	0	20.15	20.17	20.12	



Band 25_Ant 3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 26140	Power Middle Ch. Freq. 26340	Power High Ch. Freq. 26590	Tune-up (dBm)	
Channel				1860	1860	1905		
Frequency (MHz)								
20	QPSK	1	0	23.31	23.26	23.27	24	
20	QPSK	1	49	23.19	23.20	23.26		
20	QPSK	1	99	23.18	23.28	23.23		
20	QPSK	50	0	22.34	22.28	22.30		
20	QPSK	50	24	22.35	22.35	22.32	23	
20	QPSK	50	50	22.28	22.33	22.31		
20	QPSK	100	0	22.23	22.25	22.33		
20	16QAM	1	0	22.62	22.59	22.65		
20	16QAM	1	49	22.55	22.58	22.58	23	
20	16QAM	1	99	22.56	22.64	22.57		
20	16QAM	50	0	21.34	21.28	21.32		
20	16QAM	50	24	21.33	21.38	21.31		
20	16QAM	50	50	21.29	21.35	21.35	22	
20	16QAM	100	0	21.24	21.27	21.31		
20	64QAM	1	0	21.53	21.48	21.52		
20	64QAM	1	49	21.42	21.46	21.49		
20	64QAM	1	99	21.45	21.47	21.49	22	
20	64QAM	50	0	20.37	20.30	20.35		
20	64QAM	50	24	20.36	20.39	20.34		
20	64QAM	50	50	20.31	20.38	20.37		
20	64QAM	100	0	20.28	20.29	20.33	21	
Channel				26115	26340	26615		Tune-up (dBm)
Frequency (MHz)				1857.5	1860	1907.5		
15	QPSK	1	0	23.08	23.27	23.30		24
15	QPSK	1	37	23.23	23.22	23.23		
15	QPSK	1	74	23.13	23.27	23.26		
15	QPSK	36	0	22.27	22.20	22.24		
15	QPSK	36	20	22.34	22.37	22.41	23	
15	QPSK	36	39	22.30	22.33	22.33		
15	QPSK	75	0	22.28	22.31	22.34		
15	16QAM	1	0	22.39	22.57	22.62		
15	16QAM	1	37	22.58	22.59	22.57	23	
15	16QAM	1	74	22.44	22.58	22.61		
15	16QAM	36	0	21.28	21.20	21.23		
15	16QAM	36	20	21.34	21.39	21.39		
15	16QAM	36	39	21.30	21.34	21.36	22	
15	16QAM	75	0	21.30	21.33	21.37		
15	64QAM	1	0	21.32	21.48	21.51		
15	64QAM	1	37	21.48	21.47	21.52		
15	64QAM	1	74	21.36	21.51	21.51	22	
15	64QAM	36	0	20.32	20.26	20.29		
15	64QAM	36	20	20.38	20.40	20.41		
15	64QAM	36	39	20.31	20.38	20.41		
15	64QAM	75	0	20.30	20.32	20.37	21	
Channel				26090	26340	26640		Tune-up (dBm)
Frequency (MHz)				1855	1860	1910		
10	QPSK	1	0	22.76	22.70	23.03		24
10	QPSK	1	25	22.65	22.95	22.85		
10	QPSK	1	49	22.70	22.74	23.02		
10	QPSK	25	0	22.02	21.95	21.98		
10	QPSK	25	12	22.11	22.12	22.13	23	
10	QPSK	25	25	22.03	22.05	22.07		
10	QPSK	50	0	22.04	22.06	22.08		
10	16QAM	1	0	22.10	22.09	22.39		
10	16QAM	1	25	22.23	22.36	22.37	23	
10	16QAM	1	49	22.09	22.14	22.39		
10	16QAM	25	0	21.02	20.92	20.96		
10	16QAM	25	12	21.10	21.13	21.15		
10	16QAM	25	25	21.05	21.05	21.06	22	
10	16QAM	50	0	21.03	21.08	21.08		
10	64QAM	1	0	21.05	20.93	21.23		
10	64QAM	1	25	21.28	21.25	21.27		
10	64QAM	1	49	21.00	21.05	21.19	22	
10	64QAM	25	0	20.08	19.97	20.00		
10	64QAM	25	12	20.16	20.17	20.22		
10	64QAM	25	25	20.07	20.08	20.11		
10	64QAM	50	0	20.06	20.08	20.11	21	
Channel				26065	26340	26665		Tune-up (dBm)
Frequency (MHz)				1852.5	1860	1912.5		
5	QPSK	1	0	22.88	22.89	22.93		24
5	QPSK	1	12	23.03	23.01	23.04		
5	QPSK	1	24	23.02	23.07	23.02		
5	QPSK	12	0	22.09	22.04	22.03		
5	QPSK	12	7	22.11	22.11	22.15	23	
5	QPSK	12	13	22.10	22.14	22.12		
5	QPSK	25	0	22.08	22.09	22.09		
5	16QAM	1	0	22.29	22.23	22.27		
5	16QAM	1	12	22.29	22.31	22.34	23	
5	16QAM	1	24	22.32	22.36	22.35		
5	16QAM	12	0	21.10	21.03	21.04		
5	16QAM	12	7	21.15	21.14	21.13		
5	16QAM	12	13	21.13	21.12	21.16	22	
5	16QAM	25	0	21.13	21.16	21.11		
5	64QAM	1	0	21.28	21.13	21.17		
5	64QAM	1	12	21.28	21.21	21.23		
5	64QAM	1	24	21.24	21.27	21.28	22	
5	64QAM	12	0	20.13	20.07	20.08		
5	64QAM	12	7	20.20	20.20	20.19		
5	64QAM	12	13	20.19	20.11	20.19		
5	64QAM	25	0	20.11	20.11	20.12	21	
Channel				26047	26340	26675		Tune-up (dBm)
Frequency (MHz)				1850.7	1860	1914.3		
1.4	QPSK	1	0	23.03	22.95	22.97		24
3	QPSK	1	8	23.11	23.14	23.10		
3	QPSK	1	14	23.07	23.12	23.12		
3	QPSK	8	0	22.14	22.05	22.08		
3	QPSK	8	4	22.16	22.18	22.11	23	
3	QPSK	8	7	22.14	22.16	22.16		
3	QPSK	15	0	22.13	22.12	22.10		
3	16QAM	1	0	22.35	22.28	22.32		
3	16QAM	1	8	22.43	22.45	22.46	23	
3	16QAM	1	14	22.41	22.42	22.45		
3	16QAM	8	0	21.18	21.12	21.14		
3	16QAM	8	4	21.21	21.19	21.18		
3	16QAM	8	7	21.19	21.23	21.22	22	
3	16QAM	15	0	21.17	21.17	21.13		
3	64QAM	1	0	21.31	21.24	21.22		
3	64QAM	1	8	21.37	21.35	21.39		
3	64QAM	1	14	21.35	21.36	21.33	22	
3	64QAM	8	0	20.22	20.14	20.13		
3	64QAM	8	4	20.22	20.21	20.17		
3	64QAM	8	7	20.24	20.21	20.22		
3	64QAM	15	0	20.18	20.19	20.15	21	
Channel				26047	26340	26675		Tune-up (dBm)
Frequency (MHz)				1850.7	1860	1914.3		
1.4	QPSK	1	0	22.99	22.94	22.91		24
1.4	QPSK	1	3	23.08	23.02	23.04		
1.4	QPSK	1	5	22.97	22.95	22.96		
1.4	QPSK	3	0	23.02	22.95	22.92		
1.4	QPSK	3	1	23.05	23.05	22.98	23	
1.4	QPSK	3	3	23.00	23.00	23.00		
1.4	QPSK	6	0	22.08	22.06	22.02		
1.4	16QAM	1	0	22.32	22.27	22.25		
1.4	16QAM	1	3	22.38	22.34	22.36	23	
1.4	16QAM	1	5	22.32	22.31	22.32		
1.4	16QAM	3	0	22.07	22.07	22.03		
1.4	16QAM	3	1	22.14	22.13	22.07		
1.4	16QAM	3	3	22.07	22.08	22.08	22	
1.4	16QAM	6	0	21.16	21.16	21.10		
1.4	64QAM	1	0	21.29	21.21	21.16		
1.4	64QAM	1	3	21.29	21.30	21.28		
1.4	64QAM	1	5	21.23	21.22	21.21	22	
1.4	64QAM	3	0	21.21	21.20	21.15		
1.4	64QAM	3	1	21.27	21.25	21.20		
1.4	64QAM	3	3	21.24	21.21	21.22		
1.4	64QAM	6	0	20.10	20.07	20.03	21	



Band 26_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up (dBm)
				Low Ch. Freq. 26765	Middle Ch. Freq. 26865	High Ch. Freq. 26965	
Channel				821.5	831.5	841.5	
Frequency (MHz)				23.14	23.18	23.16	
15	QPSK	1	0	23.25	23.22	23.17	24
15	QPSK	1	37	23.24	23.19	23.10	
15	QPSK	36	0	22.17	22.18	22.14	
15	QPSK	36	20	22.32	22.28	22.31	23
15	QPSK	36	39	22.27	22.25	22.21	
15	QPSK	75	0	22.19	22.18	22.16	
15	16QAM	1	0	22.48	22.51	22.47	
15	16QAM	1	37	22.54	22.54	22.49	23
15	16QAM	1	74	22.57	22.49	22.44	
15	16QAM	36	0	21.16	21.17	21.17	
15	16QAM	36	20	21.25	21.26	21.30	22
15	16QAM	36	39	21.28	21.26	21.23	
15	16QAM	75	0	21.18	21.16	21.16	
15	64QAM	1	0	21.34	21.34	21.39	
15	64QAM	1	37	21.46	21.44	21.45	22
15	64QAM	1	74	21.49	21.39	21.32	
15	64QAM	36	0	20.23	20.23	20.20	
15	64QAM	36	20	20.29	20.26	20.33	21
15	64QAM	36	39	20.35	20.30	20.27	
15	64QAM	75	0	20.20	20.20	20.17	
Channel				26740	26865	26980	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.03	23.00	23.05	24
10	QPSK	1	25	23.07	23.03	22.98	
10	QPSK	1	49	23.01	23.09	22.94	
10	QPSK	25	0	21.95	21.96	21.99	23
10	QPSK	25	12	22.14	22.07	22.10	
10	QPSK	25	25	22.06	22.09	22.08	
10	QPSK	50	0	22.03	21.99	22.02	
10	16QAM	1	0	22.41	22.41	22.41	23
10	16QAM	1	25	22.36	22.41	22.38	
10	16QAM	1	49	22.37	22.41	22.32	
10	16QAM	25	0	20.95	20.93	21.00	22
10	16QAM	25	12	21.13	21.07	21.10	
10	16QAM	25	25	21.07	21.07	21.06	
10	16QAM	50	0	21.08	20.99	20.98	
10	64QAM	1	0	21.20	21.26	21.24	22
10	64QAM	1	25	21.30	21.34	21.30	
10	64QAM	1	49	21.30	21.31	21.24	
10	64QAM	25	0	19.98	19.99	20.04	21
10	64QAM	25	12	20.17	20.14	20.15	
10	64QAM	25	25	20.10	20.13	20.14	
10	64QAM	50	0	20.08	19.99	20.04	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.91	23.03	22.99	24
5	QPSK	1	12	23.05	23.08	23.02	
5	QPSK	1	24	23.02	23.11	22.96	
5	QPSK	12	0	22.06	22.06	22.04	23
5	QPSK	12	7	22.18	22.17	22.14	
5	QPSK	12	13	22.14	22.12	22.08	
5	QPSK	25	0	22.14	22.06	22.03	
5	16QAM	1	0	22.23	22.31	22.28	23
5	16QAM	1	12	22.41	22.32	22.24	
5	16QAM	1	24	22.37	22.39	22.37	
5	16QAM	12	0	21.07	21.06	21.06	22
5	16QAM	12	7	21.19	21.18	21.17	
5	16QAM	12	13	21.17	21.13	21.10	
5	16QAM	25	0	21.15	21.07	21.05	
5	64QAM	1	0	21.15	21.24	21.23	22
5	64QAM	1	12	21.30	21.28	21.19	
5	64QAM	1	24	21.28	21.30	21.18	
5	64QAM	12	0	20.10	20.12	20.11	21
5	64QAM	12	7	20.24	20.25	20.22	
5	64QAM	12	13	20.21	20.19	20.14	
5	64QAM	25	0	20.17	20.09	20.07	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.98	23.01	23.02	24
3	QPSK	1	8	23.11	23.13	23.02	
3	QPSK	1	14	23.04	23.09	22.98	
3	QPSK	8	0	22.06	22.07	22.08	23
3	QPSK	8	4	22.19	22.17	22.13	
3	QPSK	8	7	22.16	22.15	22.07	
3	QPSK	15	0	22.13	22.08	22.08	
3	16QAM	1	0	22.27	22.35	22.36	23
3	16QAM	1	8	22.36	22.36	22.30	
3	16QAM	1	14	22.33	22.40	22.29	
3	16QAM	8	0	21.12	21.13	21.13	22
3	16QAM	8	4	21.24	21.22	21.18	
3	16QAM	8	7	21.18	21.18	21.13	
3	16QAM	15	0	21.16	21.11	21.12	
3	64QAM	1	0	21.20	21.21	21.23	22
3	64QAM	1	8	21.35	21.34	21.24	
3	64QAM	1	14	21.27	21.30	21.17	
3	64QAM	8	0	20.14	20.14	20.17	21
3	64QAM	8	4	20.25	20.25	20.20	
3	64QAM	8	7	20.21	20.20	20.16	
3	64QAM	15	0	20.17	20.12	20.12	
Channel				26997	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.96	22.93	22.85	24
1.4	QPSK	1	3	23.08	23.05	22.91	
1.4	QPSK	1	5	22.97	23.00	22.87	
1.4	QPSK	3	0	22.85	22.95	22.88	23
1.4	QPSK	3	1	23.05	23.00	22.94	
1.4	QPSK	3	3	23.00	23.01	22.87	
1.4	QPSK	6	0	22.08	22.03	21.98	
1.4	16QAM	1	0	22.23	22.25	22.23	23
1.4	16QAM	1	3	22.41	22.36	22.27	
1.4	16QAM	1	5	22.31	22.33	22.17	
1.4	16QAM	3	0	22.05	22.00	21.96	22
1.4	16QAM	3	1	22.13	22.08	21.97	
1.4	16QAM	3	3	22.04	22.06	21.91	
1.4	16QAM	6	0	21.17	21.11	21.09	21
1.4	64QAM	1	0	21.14	21.15	21.13	
1.4	64QAM	1	3	21.25	21.28	21.16	
1.4	64QAM	1	5	21.22	21.22	21.10	22
1.4	64QAM	3	0	21.20	21.16	21.11	
1.4	64QAM	3	1	21.27	21.23	21.15	
1.4	64QAM	3	3	21.21	21.21	21.09	
1.4	64QAM	6	0	20.08	20.04	20.00	21



Band 66_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	limit (dBm)
Frequency (MHz)				132072	132322	132572	
20	QPSK	1	0	23.01	23.01	23.33	24
20	QPSK	1	49	23.20	23.19	23.23	
20	QPSK	1	99	22.94	22.99	23.14	
20	QPSK	50	0	22.28	22.30	22.29	23
20	QPSK	50	24	22.37	22.31	22.40	
20	QPSK	50	50	22.27	22.27	22.28	
20	QPSK	100	0	22.29	22.32	22.34	23
20	16QAM	1	0	22.34	22.40	22.87	
20	16QAM	1	49	22.60	22.59	22.82	
20	16QAM	1	99	22.35	22.30	22.54	22
20	16QAM	50	0	21.28	21.31	21.32	
20	16QAM	50	24	21.39	21.33	21.42	
20	16QAM	50	50	21.26	21.29	21.29	22
20	16QAM	100	0	21.30	21.31	21.34	
20	16QAM	1	0	21.23	21.22	21.44	
20	64QAM	1	49	21.45	21.45	21.40	22
20	64QAM	1	99	21.21	21.18	21.38	
20	64QAM	50	0	20.30	20.32	20.21	
20	64QAM	50	24	20.40	20.36	20.26	21
20	64QAM	50	50	20.30	20.34	20.18	
20	64QAM	100	0	20.33	20.33	20.15	
Channel				132047	132322	132692	Tune-up
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.18	23.16	23.32	24
15	QPSK	1	37	23.18	23.24	23.21	
15	QPSK	1	74	23.07	23.10	23.17	
15	QPSK	36	0	22.29	22.30	22.33	23
15	QPSK	36	20	22.38	22.37	22.31	
15	QPSK	36	39	22.28	22.31	22.31	
15	QPSK	75	0	22.33	22.34	22.27	23
15	16QAM	1	0	22.48	22.49	22.87	
15	16QAM	1	37	22.67	22.51	22.59	
15	16QAM	1	74	22.44	22.41	22.51	22
15	16QAM	36	0	21.30	21.32	21.34	
15	16QAM	36	20	21.38	21.39	21.31	
15	16QAM	36	39	21.31	21.31	21.32	22
15	16QAM	75	0	21.33	21.34	21.29	
15	64QAM	1	0	21.34	21.38	21.47	
15	64QAM	1	37	21.45	21.46	21.43	22
15	64QAM	1	74	21.29	21.29	21.35	
15	64QAM	36	0	20.34	20.39	20.33	
15	64QAM	36	20	20.38	20.42	20.26	21
15	64QAM	36	39	20.33	20.34	20.23	
15	64QAM	75	0	20.34	20.36	20.17	
Channel				132022	132322	132692	Tune-up
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.76	22.79	22.83	24
10	QPSK	1	25	23.03	23.04	23.02	
10	QPSK	1	49	22.89	22.79	22.83	
10	QPSK	25	0	22.06	22.07	22.06	23
10	QPSK	25	12	22.17	22.11	22.19	
10	QPSK	25	25	22.09	22.08	22.07	
10	QPSK	50	0	22.12	22.13	22.13	23
10	16QAM	1	0	22.19	22.18	22.17	
10	16QAM	1	25	22.40	22.41	22.41	
10	16QAM	1	49	22.16	22.19	22.19	22
10	16QAM	25	0	21.08	21.07	21.05	
10	16QAM	25	12	21.20	21.10	21.23	
10	16QAM	25	25	21.05	21.07	21.06	22
10	16QAM	50	0	21.13	21.14	21.12	
10	64QAM	1	0	21.01	21.04	21.01	
10	64QAM	1	25	21.38	21.35	21.32	22
10	64QAM	1	49	21.11	21.13	21.09	
10	64QAM	25	0	20.09	20.11	20.09	
10	64QAM	25	12	20.22	20.15	20.25	21
10	64QAM	25	25	20.09	20.11	20.13	
10	64QAM	50	0	20.16	20.14	20.16	
Channel				131997	132322	132692	Tune-up
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.03	23.05	23.03	24
5	QPSK	1	12	23.09	23.10	23.09	
5	QPSK	1	24	22.89	22.97	22.87	
5	QPSK	12	0	22.17	22.18	22.16	23
5	QPSK	12	7	22.19	22.22	22.18	
5	QPSK	12	13	22.11	22.12	22.10	
5	QPSK	25	0	22.14	22.14	22.10	23
5	16QAM	1	0	22.37	22.37	22.37	
5	16QAM	1	12	22.31	22.40	22.40	
5	16QAM	1	24	22.30	22.32	22.32	22
5	16QAM	12	0	21.22	21.21	21.19	
5	16QAM	12	7	21.20	21.23	21.15	
5	16QAM	12	13	21.12	21.15	21.16	22
5	16QAM	25	0	21.18	21.18	21.09	
5	64QAM	1	0	21.29	21.31	21.31	
5	64QAM	1	12	21.28	21.29	21.28	22
5	64QAM	1	24	21.19	21.26	21.22	
5	64QAM	12	0	20.26	20.25	20.23	
5	64QAM	12	7	20.26	20.29	20.18	21
5	64QAM	12	13	20.19	20.20	20.13	
5	64QAM	25	0	20.17	20.20	20.16	
Channel				131979	132322	132692	Tune-up
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.09	23.14	23.11	24
1.4	QPSK	1	8	23.17	23.18	23.17	
1.4	QPSK	1	14	23.09	23.04	23.04	
1.4	QPSK	3	0	22.25	22.18	22.18	23
1.4	QPSK	3	4	22.23	22.26	22.17	
1.4	QPSK	3	7	22.18	22.17	22.21	
1.4	QPSK	15	0	22.22	22.19	22.15	23
1.4	16QAM	1	0	22.40	22.43	22.43	
1.4	16QAM	1	8	22.44	22.52	22.51	
1.4	16QAM	1	14	22.40	22.38	22.41	22
1.4	16QAM	3	0	21.28	21.25	21.30	
1.4	16QAM	3	4	21.27	21.27	21.26	
1.4	16QAM	3	7	21.20	21.23	21.27	22
1.4	16QAM	15	0	21.25	21.23	21.20	
1.4	64QAM	1	0	21.37	21.35	21.36	
1.4	64QAM	1	8	21.39	21.42	21.40	22
1.4	64QAM	1	14	21.27	21.33	21.29	
1.4	64QAM	3	0	20.29	20.28	20.29	
1.4	64QAM	3	4	20.32	20.33	20.26	21
1.4	64QAM	3	7	20.24	20.25	20.27	
1.4	64QAM	15	0	20.24	20.23	20.21	
Channel				131979	132322	132692	Tune-up
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.99	23.07	23.10	24
1.4	QPSK	1	3	23.10	23.12	23.12	
1.4	QPSK	1	5	22.89	23.04	23.04	
1.4	QPSK	3	0	23.07	23.10	23.11	23
1.4	QPSK	3	1	23.08	23.11	23.13	
1.4	QPSK	3	3	23.03	23.08	23.07	
1.4	QPSK	6	0	22.10	22.15	22.17	23
1.4	16QAM	1	0	22.33	22.42	22.42	
1.4	16QAM	1	3	22.43	22.43	22.42	
1.4	16QAM	1	5	22.33	22.37	22.36	22
1.4	16QAM	3	0	22.12	22.19	22.19	
1.4	16QAM	3	1	22.17	22.21	22.24	
1.4	16QAM	3	3	22.08	22.13	22.14	22
1.4	16QAM	6	0	21.21	21.23	21.24	
1.4	64QAM	1	0	21.27	21.32	21.35	
1.4	64QAM	1	3	21.31	21.34	21.33	22
1.4	64QAM	1	5	21.22	21.26	21.26	
1.4	64QAM	3	0	21.27	21.29	21.29	
1.4	64QAM	3	1	21.31	21.32	21.32	21
1.4	64QAM	3	3	21.23	21.26	21.24	
1.4	64QAM	6	0	20.13	20.15	20.17	



Band 2_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq. 18700	Power Middle Ch./Freq. 18900	Power High Ch./Freq. 19100	Tune-up limit (dBm)
Channel				1860	1880	1900	
Frequency (MHz)							
20	QPSK	1	0	21.72	21.69	21.71	22.5
20	QPSK	1	49	21.59	21.60	21.68	
20	QPSK	1	99	21.53	21.58	21.61	
20	QPSK	50	0	21.70	21.61	21.67	22.5
20	QPSK	50	24	21.77	21.78	21.75	
20	QPSK	50	50	21.70	21.74	21.78	
20	QPSK	100	0	21.70	21.70	21.70	22.5
20	16QAM	1	0	22.06	22.00	22.03	
20	16QAM	1	49	21.96	21.96	22.00	
20	16QAM	1	99	21.91	21.95	21.95	22
20	16QAM	50	0	21.24	21.14	21.17	
20	16QAM	50	24	21.29	21.29	21.28	
20	16QAM	50	50	21.24	21.27	21.29	22
20	16QAM	100	0	21.22	21.24	21.18	
20	64QAM	1	0	21.49	21.32	21.40	
20	64QAM	1	49	21.32	21.35	21.39	22
20	64QAM	1	99	21.31	21.35	21.31	
20	64QAM	50	0	20.23	20.16	20.17	
20	64QAM	50	24	20.31	20.33	20.27	21
20	64QAM	50	50	20.26	20.28	20.29	
20	64QAM	100	0	20.25	20.26	20.21	
Channel				1867.5	18900	1912.5	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	21.52	21.65	21.69	22.5
15	QPSK	1	37	21.57	21.62	21.63	
15	QPSK	1	74	21.46	21.65	21.62	
15	QPSK	36	0	21.69	21.65	21.66	22.5
15	QPSK	36	20	21.73	21.79	21.78	
15	QPSK	36	39	21.70	21.76	21.76	
15	QPSK	75	0	21.70	21.72	21.68	22.5
15	16QAM	1	0	21.88	21.97	21.96	
15	16QAM	1	37	21.92	21.93	21.90	
15	16QAM	1	74	21.84	21.92	21.93	22
15	16QAM	36	0	21.22	21.13	21.17	
15	16QAM	36	20	21.25	21.28	21.29	
15	16QAM	36	39	21.22	21.25	21.26	22
15	16QAM	75	0	21.22	21.24	21.18	
15	64QAM	1	0	21.24	21.32	21.38	
15	64QAM	1	37	21.35	21.38	21.39	22
15	64QAM	1	74	21.24	21.31	21.26	
15	64QAM	36	0	20.26	20.17	20.20	
15	64QAM	36	20	20.28	20.32	20.33	21
15	64QAM	36	39	20.25	20.28	20.27	
15	64QAM	75	0	20.23	20.23	20.18	
Channel				1865	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	21.26	21.20	21.58	22.5
10	QPSK	1	25	21.50	21.49	21.51	
10	QPSK	1	49	21.23	21.22	21.48	
10	QPSK	25	0	21.57	21.47	21.48	22.5
10	QPSK	25	12	21.63	21.64	21.57	
10	QPSK	25	25	21.50	21.50	21.53	
10	QPSK	50	0	21.54	21.55	21.48	22.5
10	16QAM	1	0	21.58	21.50	21.53	
10	16QAM	1	25	21.85	21.87	21.90	
10	16QAM	1	49	21.56	21.59	21.83	22
10	16QAM	25	0	21.05	20.95	20.97	
10	16QAM	25	12	21.12	21.13	21.07	
10	16QAM	25	25	20.99	20.99	21.01	22
10	16QAM	50	0	21.02	21.03	20.98	
10	64QAM	1	0	20.95	20.94	21.26	
10	64QAM	1	25	21.31	21.28	21.32	22
10	64QAM	1	49	21.02	20.97	21.25	
10	64QAM	25	0	20.08	19.99	20.03	
10	64QAM	25	12	20.15	20.17	20.12	21
10	64QAM	25	25	20.01	20.03	20.05	
10	64QAM	50	0	20.03	20.05	20.00	
Channel				1862.5	18900	1917.5	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	21.56	21.46	21.44	22.5
5	QPSK	1	12	21.59	21.56	21.55	
5	QPSK	1	24	21.41	21.43	21.39	
5	QPSK	12	0	21.67	21.57	21.59	22.5
5	QPSK	12	7	21.69	21.65	21.58	
5	QPSK	12	13	21.57	21.56	21.56	
5	QPSK	25	0	21.62	21.58	21.55	22.5
5	16QAM	1	0	21.81	21.72	21.73	
5	16QAM	1	12	21.85	21.81	21.80	
5	16QAM	1	24	21.75	21.74	21.70	22
5	16QAM	12	0	21.15	21.06	21.09	
5	16QAM	12	7	21.17	21.13	21.08	
5	16QAM	12	13	21.05	21.04	21.04	22
5	16QAM	25	0	21.14	21.09	21.04	
5	64QAM	1	0	21.23	21.14	21.19	
5	64QAM	1	12	21.20	21.25	21.24	22
5	64QAM	1	24	21.11	21.13	21.09	
5	64QAM	12	0	20.24	20.15	20.16	
5	64QAM	12	7	20.21	20.20	20.14	21
5	64QAM	12	13	20.15	20.11	20.13	
5	64QAM	25	0	20.13	20.10	20.08	
Channel				1861.5	18900	1918.5	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	21.63	21.62	21.59	22.5
3	QPSK	1	8	21.60	21.59	21.58	
3	QPSK	1	14	21.48	21.47	21.46	
3	QPSK	8	0	21.65	21.60	21.64	22.5
3	QPSK	8	4	21.66	21.65	21.64	
3	QPSK	8	7	21.63	21.60	21.60	
3	QPSK	15	0	21.63	21.62	21.61	22.5
3	16QAM	1	0	21.87	21.81	21.90	
3	16QAM	1	8	21.93	21.91	21.86	
3	16QAM	1	14	21.74	21.73	21.77	22
3	16QAM	8	0	21.21	21.14	21.19	
3	16QAM	8	4	21.23	21.18	21.21	
3	16QAM	8	7	21.13	21.14	21.12	22
3	16QAM	15	0	21.17	21.14	21.15	
3	64QAM	1	0	21.29	21.19	21.29	
3	64QAM	1	8	21.34	21.27	21.31	22
3	64QAM	1	14	21.20	21.18	21.15	
3	64QAM	8	0	20.22	20.14	20.20	
3	64QAM	8	4	20.24	20.19	20.20	21
3	64QAM	8	7	20.17	20.15	20.15	
3	64QAM	15	0	20.17	20.12	20.15	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.51	21.49	21.49	22.5
1.4	QPSK	1	3	21.55	21.54	21.49	
1.4	QPSK	1	5	21.47	21.41	21.44	
1.4	QPSK	3	0	21.53	21.50	21.48	22.5
1.4	QPSK	3	1	21.56	21.51	21.49	
1.4	QPSK	3	3	21.48	21.47	21.48	
1.4	QPSK	6	0	21.59	21.54	21.55	22.5
1.4	16QAM	1	0	21.81	21.78	21.79	
1.4	16QAM	1	3	21.85	21.84	21.82	
1.4	16QAM	1	5	21.78	21.74	21.68	22.5
1.4	16QAM	3	0	21.58	21.56	21.56	
1.4	16QAM	3	1	21.62	21.59	21.60	
1.4	16QAM	3	3	21.56	21.53	21.51	22
1.4	64QAM	6	0	21.17	21.14	21.12	
1.4	64QAM	1	0	21.28	21.19	21.21	
1.4	64QAM	1	3	21.27	21.24	21.25	22
1.4	64QAM	1	5	21.13	21.13	21.14	
1.4	64QAM	3	0	21.21	21.17	21.19	
1.4	64QAM	3	1	21.22	21.23	21.21	21
1.4	64QAM	3	3	21.16	21.16	21.14	
1.4	64QAM	6	0	20.09	20.06	20.04	



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20450	Power Middle Ch. Freq. 20525	Power High Ch. Freq. 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)				23.55	23.54	23.57	
10	QPSK	1	0	23.55	23.54	23.57	24.5
10	QPSK	1	25	23.52	23.52	23.55	
10	QPSK	1	49	23.53	23.53	23.47	
10	QPSK	25	0	23.11	23.11	23.12	23.5
10	QPSK	25	12	23.17	23.17	23.15	
10	QPSK	25	25	23.14	23.14	23.14	
10	QPSK	50	0	23.10	23.11	23.04	
10	16QAM	1	0	23.39	23.42	23.42	23.5
10	16QAM	1	25	23.39	23.37	23.43	
10	16QAM	1	49	23.37	23.40	23.35	
10	16QAM	25	0	22.12	22.13	22.14	23
10	16QAM	25	12	22.19	22.19	22.14	
10	16QAM	25	25	22.18	22.16	22.16	
10	16QAM	50	0	22.10	22.11	22.03	
10	64QAM	1	0	22.24	22.24	22.31	23
10	64QAM	1	25	22.31	22.31	22.34	
10	64QAM	1	49	22.26	22.27	22.27	
10	64QAM	25	0	21.13	21.14	21.16	22
10	64QAM	25	12	21.24	21.24	21.19	
10	64QAM	25	25	21.18	21.19	21.18	
10	64QAM	50	0	21.13	21.13	21.08	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.45	23.46	23.47	24.5
5	QPSK	1	12	23.55	23.56	23.56	
5	QPSK	1	24	23.54	23.53	23.46	
5	QPSK	12	0	23.08	23.09	23.08	23.5
5	QPSK	12	7	23.18	23.19	23.20	
5	QPSK	12	13	23.17	23.18	23.14	
5	QPSK	25	0	23.16	23.15	23.14	
5	16QAM	1	0	23.23	23.28	23.32	23.5
5	16QAM	1	12	23.32	23.40	23.36	
5	16QAM	1	24	23.35	23.36	23.31	
5	16QAM	12	0	22.11	22.12	22.12	23
5	16QAM	12	7	22.20	22.20	22.21	
5	16QAM	12	13	22.17	22.18	22.16	
5	16QAM	25	0	22.16	22.18	22.15	
5	64QAM	1	0	22.22	22.19	22.20	23
5	64QAM	1	12	22.24	22.31	22.27	
5	64QAM	1	24	22.23	22.27	22.20	
5	64QAM	12	0	21.16	21.17	21.18	22
5	64QAM	12	7	21.26	21.29	21.26	
5	64QAM	12	13	21.24	21.24	21.21	
5	64QAM	25	0	21.17	21.19	21.17	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.45	23.50	23.49	24.5
3	QPSK	1	8	23.55	23.56	23.53	
3	QPSK	1	14	23.56	23.56	23.50	
3	QPSK	8	0	23.09	23.09	23.08	23.5
3	QPSK	8	4	23.22	23.18	23.17	
3	QPSK	8	7	23.19	23.16	23.13	
3	QPSK	15	0	23.17	23.16	23.10	
3	16QAM	1	0	23.30	23.30	23.30	23.5
3	16QAM	1	8	23.41	23.45	23.45	
3	16QAM	1	14	23.38	23.37	23.35	
3	16QAM	8	0	22.15	22.16	22.14	23
3	16QAM	8	4	22.24	22.25	22.25	
3	16QAM	8	7	22.22	22.23	22.21	
3	16QAM	15	0	22.20	22.20	22.12	
3	64QAM	1	0	22.17	22.20	22.21	23
3	64QAM	1	8	22.33	22.37	22.33	
3	64QAM	1	14	22.27	22.31	22.25	
3	64QAM	8	0	21.17	21.19	21.18	22
3	64QAM	8	4	21.26	21.28	21.24	
3	64QAM	8	7	21.23	21.24	21.22	
3	64QAM	15	0	21.20	21.20	21.15	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.42	23.45	23.49	24.5
1.4	QPSK	1	3	23.55	23.56	23.51	
1.4	QPSK	1	5	23.51	23.46	23.43	
1.4	QPSK	3	0	23.46	23.48	23.49	
1.4	QPSK	3	1	23.52	23.54	23.52	23.5
1.4	QPSK	3	3	23.48	23.51	23.47	
1.4	QPSK	6	0	23.10	23.11	23.07	
1.4	16QAM	1	0	23.21	23.28	23.27	23.5
1.4	16QAM	1	3	23.37	23.38	23.36	
1.4	16QAM	1	5	23.27	23.29	23.23	
1.4	16QAM	3	0	23.04	23.09	23.06	
1.4	16QAM	3	1	23.12	23.13	23.09	
1.4	16QAM	3	3	23.04	23.10	23.05	
1.4	16QAM	6	0	22.20	22.17	22.15	23
1.4	64QAM	1	0	22.17	22.22	22.23	
1.4	64QAM	1	3	22.26	22.28	22.24	23
1.4	64QAM	1	5	22.20	22.19	22.15	
1.4	64QAM	3	0	22.20	22.19	22.19	
1.4	64QAM	3	1	22.25	22.26	22.22	
1.4	64QAM	3	3	22.21	22.21	22.17	
1.4	64QAM	6	0	21.11	21.12	21.08	22



Band 7_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	
				Low Ch. / Freq. 20850	Middle Ch. / Freq. 21100	High Ch. / Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)				20.34	20.28	20.33	
20	QPSK	1	0	20.34	20.28	20.33	21
20	QPSK	1	49	20.37	20.36	20.41	
20	QPSK	1	99	20.40	20.41	20.45	
20	QPSK	50	0	20.41	20.45	20.48	21
20	QPSK	50	24	20.52	20.47	20.49	
20	QPSK	50	50	20.49	20.52	20.58	
20	QPSK	100	0	20.41	20.36	20.39	21
20	16QAM	1	0	20.68	20.65	20.69	
20	16QAM	1	49	20.67	20.69	20.74	
20	16QAM	1	99	20.75	20.75	20.78	21
20	16QAM	50	0	20.41	20.42	20.48	
20	16QAM	50	24	20.52	20.43	20.49	
20	16QAM	50	50	20.52	20.54	20.57	21
20	16QAM	100	0	20.43	20.34	20.42	
20	64QAM	1	0	20.49	20.51	20.58	
20	64QAM	1	49	20.58	20.57	20.63	21
20	64QAM	1	99	20.64	20.67	20.71	
20	64QAM	50	0	20.44	20.45	20.48	
20	64QAM	50	24	20.55	20.50	20.53	21
20	64QAM	50	50	20.52	20.56	20.59	
20	64QAM	100	0	20.45	20.39	20.44	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.32	20.31	20.38	21
15	QPSK	1	37	20.36	20.33	20.41	
15	QPSK	1	74	20.40	20.38	20.46	
15	QPSK	36	0	20.41	20.38	20.44	21
15	QPSK	36	20	20.50	20.43	20.54	
15	QPSK	36	39	20.50	20.52	20.55	
15	QPSK	75	0	20.44	20.36	20.43	21
15	16QAM	1	0	20.67	20.62	20.71	
15	16QAM	1	37	20.69	20.71	20.74	
15	16QAM	1	74	20.69	20.71	20.78	21
15	16QAM	36	0	20.41	20.41	20.46	
15	16QAM	36	20	20.50	20.42	20.55	
15	16QAM	36	39	20.51	20.51	20.54	21
15	16QAM	75	0	20.44	20.37	20.45	
15	64QAM	1	0	20.53	20.51	20.58	
15	64QAM	1	37	20.58	20.66	20.65	21
15	64QAM	1	74	20.66	20.68	20.67	
15	64QAM	36	0	20.44	20.46	20.51	
15	64QAM	36	20	20.55	20.48	20.60	21
15	64QAM	36	39	20.55	20.56	20.59	
15	64QAM	75	0	20.47	20.41	20.48	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.14	20.12	20.15	21
10	QPSK	1	25	20.14	20.15	20.19	
10	QPSK	1	49	20.16	20.21	20.21	
10	QPSK	25	0	20.15	20.18	20.18	21
10	QPSK	25	12	20.28	20.20	20.32	
10	QPSK	25	25	20.25	20.29	20.32	
10	QPSK	50	0	20.21	20.16	20.25	21
10	16QAM	1	0	20.48	20.54	20.53	
10	16QAM	1	25	20.52	20.57	20.58	
10	16QAM	1	49	20.55	20.60	20.63	21
10	16QAM	25	0	20.17	20.19	20.23	
10	16QAM	25	12	20.28	20.25	20.33	
10	16QAM	25	25	20.24	20.32	20.31	21
10	16QAM	50	0	20.21	20.17	20.23	
10	64QAM	1	0	20.35	20.39	20.38	
10	64QAM	1	25	20.45	20.48	20.53	21
10	64QAM	1	49	20.47	20.53	20.53	
10	64QAM	25	0	20.22	20.22	20.24	
10	64QAM	25	12	20.32	20.26	20.41	21
10	64QAM	25	25	20.29	20.34	20.37	
10	64QAM	50	0	20.23	20.17	20.31	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.10	20.13	20.22	21
5	QPSK	1	12	20.16	20.22	20.23	
5	QPSK	1	24	20.16	20.26	20.23	
5	QPSK	12	0	20.22	20.20	20.26	21
5	QPSK	12	7	20.31	20.23	20.33	
5	QPSK	12	13	20.27	20.28	20.30	
5	QPSK	25	0	20.23	20.23	20.28	21
5	16QAM	1	0	20.42	20.47	20.59	
5	16QAM	1	12	20.40	20.56	20.59	
5	16QAM	1	24	20.51	20.55	20.58	21
5	16QAM	12	0	20.23	20.28	20.32	
5	16QAM	12	7	20.29	20.29	20.35	
5	16QAM	12	13	20.26	20.28	20.32	21
5	16QAM	25	0	20.25	20.24	20.33	
5	64QAM	1	0	20.35	20.46	20.53	
5	64QAM	1	12	20.37	20.50	20.44	21
5	64QAM	1	24	20.42	20.49	20.50	
5	64QAM	12	0	20.31	20.29	20.38	
5	64QAM	12	7	20.38	20.33	20.41	21
5	64QAM	12	13	20.29	20.33	20.39	
5	64QAM	25	0	20.29	20.26	20.33	



Band 25_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				26140	26340	26590	
20	QPSK	1	0	21.88	21.83	21.85	22.5
20	QPSK	1	49	21.74	21.77	21.79	
20	QPSK	1	99	21.71	21.76	21.77	
20	QPSK	50	0	21.92	21.84	21.89	22.5
20	QPSK	50	24	21.90	21.92	21.86	
20	QPSK	50	50	21.83	21.84	21.87	
20	QPSK	100	0	21.81	21.82	21.88	22.5
20	16QAM	1	0	22.22	22.14	22.24	
20	16QAM	1	49	22.10	22.13	22.18	
20	16QAM	1	99	22.04	22.08	22.11	22
20	16QAM	50	0	21.42	21.35	21.40	
20	16QAM	50	24	21.39	21.41	21.37	
20	16QAM	50	50	21.36	21.37	21.39	22
20	16QAM	100	0	21.30	21.32	21.38	
20	64QAM	1	0	21.65	21.52	21.60	
20	64QAM	1	49	21.50	21.52	21.53	22
20	64QAM	1	99	21.47	21.50	21.51	
20	64QAM	50	0	20.44	20.36	20.42	
20	64QAM	50	24	20.42	20.43	20.40	21
20	64QAM	50	50	20.34	20.38	20.39	
20	64QAM	100	0	20.32	20.33	20.40	
Channel				26115	26340	26615	Tune-up
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	21.61	21.80	21.85	22.5
15	QPSK	1	37	21.74	21.76	21.78	
15	QPSK	1	74	21.59	21.76	21.77	
15	QPSK	36	0	21.83	21.74	21.77	22.5
15	QPSK	36	20	21.89	21.92	21.94	
15	QPSK	36	39	21.83	21.84	21.85	
15	QPSK	75	0	21.85	21.81	21.88	22.5
15	16QAM	1	0	21.90	22.10	22.16	
15	16QAM	1	37	22.00	22.10	22.18	
15	16QAM	1	74	21.95	22.09	22.12	22
15	16QAM	36	0	21.33	21.25	21.28	
15	16QAM	36	20	21.39	21.40	21.42	
15	16QAM	36	39	21.33	21.35	21.37	22
15	16QAM	75	0	21.34	21.34	21.38	
15	64QAM	1	0	21.30	21.50	21.54	
15	64QAM	1	37	21.49	21.53	21.55	22
15	64QAM	1	74	21.37	21.50	21.38	
15	64QAM	36	0	20.37	20.28	20.35	
15	64QAM	36	20	20.41	20.41	20.45	21
15	64QAM	36	39	20.35	20.37	20.41	
15	64QAM	75	0	20.34	20.35	20.39	
Channel				26090	26340	26640	Tune-up
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	21.34	21.29	21.56	22.5
10	QPSK	1	25	21.51	21.51	21.51	
10	QPSK	1	49	21.54	21.36	21.50	
10	QPSK	25	0	21.59	21.49	21.54	22.5
10	QPSK	25	12	21.66	21.68	21.70	
10	QPSK	25	25	21.58	21.59	21.62	
10	QPSK	50	0	21.80	21.58	21.62	22.5
10	16QAM	1	0	21.72	21.69	21.97	
10	16QAM	1	25	21.90	21.92	21.92	
10	16QAM	1	49	21.66	21.67	21.92	22
10	16QAM	25	0	21.09	21.00	21.03	
10	16QAM	25	12	21.18	21.16	21.18	
10	16QAM	25	25	21.09	21.10	21.10	22
10	16QAM	50	0	21.09	21.09	21.13	
10	64QAM	1	0	21.00	20.97	21.26	
10	64QAM	1	25	21.31	21.31	21.33	22
10	64QAM	1	49	21.00	21.04	21.15	
10	64QAM	25	0	20.11	20.00	20.05	
10	64QAM	25	12	20.19	20.19	20.24	21
10	64QAM	25	25	20.11	20.11	20.14	
10	64QAM	50	0	20.15	20.12	20.15	
Channel				26005	26340	26605	Tune-up
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	21.56	21.43	21.51	22.5
5	QPSK	1	12	21.55	21.50	21.59	
5	QPSK	1	24	21.55	21.57	21.58	
5	QPSK	12	0	21.66	21.55	21.68	22.5
5	QPSK	12	7	21.65	21.63	21.67	
5	QPSK	12	13	21.64	21.68	21.66	
5	QPSK	25	0	21.85	21.61	21.65	22.5
5	16QAM	1	0	21.88	21.80	21.85	
5	16QAM	1	12	21.87	21.94	21.89	
5	16QAM	1	24	21.89	21.90	21.90	22
5	16QAM	12	0	21.15	21.05	21.10	
5	16QAM	12	7	21.19	21.15	21.16	
5	16QAM	12	13	21.15	21.13	21.17	22
5	16QAM	25	0	21.16	21.11	21.15	
5	64QAM	1	0	21.32	21.21	21.22	
5	64QAM	1	12	21.28	21.27	21.28	22
5	64QAM	1	24	21.30	21.28	21.31	
5	64QAM	12	0	20.23	20.11	20.14	
5	64QAM	12	7	20.25	20.23	20.22	21
5	64QAM	12	13	20.20	20.21	20.23	
5	64QAM	25	0	20.18	20.15	20.17	
Channel				26005	26340	26605	Tune-up
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	21.52	21.43	21.50	22.5
3	QPSK	1	8	21.63	21.58	21.57	
3	QPSK	1	14	21.59	21.55	21.57	
3	QPSK	8	0	21.66	21.55	21.66	22.5
3	QPSK	8	4	21.65	21.67	21.61	
3	QPSK	8	7	21.64	21.60	21.65	
3	QPSK	15	0	21.63	21.59	21.58	22.5
3	16QAM	1	0	21.93	21.77	21.79	
3	16QAM	1	8	22.01	21.93	21.85	
3	16QAM	1	14	21.93	21.93	21.93	22
3	16QAM	8	0	21.20	21.10	21.12	
3	16QAM	8	4	21.21	21.19	21.16	
3	16QAM	8	7	21.21	21.19	21.22	22
3	16QAM	15	0	21.17	21.11	21.69	
3	64QAM	1	0	21.26	21.20	21.20	
3	64QAM	1	8	21.40	21.31	21.34	22
3	64QAM	1	14	21.32	21.34	21.32	
3	64QAM	8	0	20.21	20.09	20.13	
3	64QAM	8	4	20.20	20.19	20.17	21
3	64QAM	8	7	20.19	20.16	20.20	
3	64QAM	15	0	20.19	20.13	20.11	
Channel				26047	26340	26683	Tune-up
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	21.46	21.40	21.41	22.5
1.4	QPSK	1	3	21.54	21.51	21.54	
1.4	QPSK	1	5	21.59	21.44	21.45	
1.4	QPSK	3	0	21.50	21.46	21.46	22.5
1.4	QPSK	3	1	21.54	21.52	21.44	
1.4	QPSK	3	3	21.52	21.49	21.50	
1.4	QPSK	6	0	21.57	21.52	21.50	22.5
1.4	16QAM	1	0	21.86	21.76	21.74	
1.4	16QAM	1	3	21.90	21.85	21.89	
1.4	16QAM	1	5	21.85	21.77	21.80	22.5
1.4	16QAM	3	0	21.63	21.59	21.54	
1.4	16QAM	3	1	21.68	21.64	21.58	
1.4	16QAM	3	3	21.62	21.58	21.61	22
1.4	16QAM	6	0	21.16	21.11	21.08	
1.4	64QAM	1	0	21.23	21.18	21.13	
1.4	64QAM	1	3	21.28	21.27	21.28	22
1.4	64QAM	1	5	21.24	21.22	21.23	
1.4	64QAM	3	0	21.20	21.18	21.14	
1.4	64QAM	3	1	21.27	21.21	21.18	22
1.4	64QAM	3	3	21.22	21.19	21.22	
1.4	64QAM	6	0	20.07	20.07	20.02	



Band 66_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low	Middle	High	
Channel				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	
Frequency (MHz)				132072	132322	132572	
20	QPSK	1	0	21.07	21.07	21.36	22
20	QPSK	1	49	21.23	21.26	21.28	
20	QPSK	1	99	20.95	20.99	21.14	
20	QPSK	50	0	21.32	21.34	21.35	22
20	QPSK	50	24	21.43	21.36	21.45	
20	QPSK	50	50	21.29	21.31	21.31	
20	QPSK	100	0	21.35	21.36	21.37	22
20	16QAM	1	0	21.40	21.46	21.74	
20	16QAM	1	49	21.65	21.66	21.66	
20	16QAM	1	99	21.36	21.36	21.57	22
20	16QAM	50	0	21.35	21.37	21.37	
20	16QAM	50	24	21.44	21.37	21.46	
20	16QAM	50	50	21.31	21.32	21.33	22
20	16QAM	100	0	21.36	21.37	21.38	
20	64QAM	1	0	21.28	21.30	21.57	
20	64QAM	1	49	21.49	21.49	21.52	22
20	64QAM	1	99	21.23	21.22	21.39	
20	64QAM	50	0	20.37	20.40	20.37	
20	64QAM	50	24	20.45	20.40	20.47	21
20	64QAM	50	50	20.35	20.35	20.35	
20	64QAM	100	0	20.38	20.40	20.33	
Channel				132047	132322	132692	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.18	21.21	21.36	22
15	QPSK	1	37	21.22	21.24	21.27	
15	QPSK	1	74	21.07	21.11	21.22	
15	QPSK	36	0	21.33	21.34	21.37	22
15	QPSK	36	20	21.38	21.40	21.36	
15	QPSK	36	39	21.30	21.31	21.34	
15	QPSK	75	0	21.35	21.37	21.32	22
15	16QAM	1	0	21.52	21.53	21.73	
15	16QAM	1	37	21.63	21.64	21.67	
15	16QAM	1	74	21.45	21.45	21.59	22
15	16QAM	36	0	21.35	21.36	21.40	
15	16QAM	36	20	21.41	21.42	21.37	
15	16QAM	36	39	21.32	21.35	21.34	22
15	16QAM	75	0	21.36	21.41	21.38	
15	64QAM	1	0	21.38	21.42	21.51	
15	64QAM	1	37	21.48	21.52	21.48	22
15	64QAM	1	74	21.31	21.32	21.36	
15	64QAM	36	0	20.38	20.44	20.40	
15	64QAM	36	20	20.43	20.49	20.34	21
15	64QAM	36	39	20.35	20.41	20.24	
15	64QAM	75	0	20.38	20.41	20.20	
Channel				132022	132322	132692	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	20.82	20.87	20.84	22
10	QPSK	1	25	21.06	21.06	21.10	
10	QPSK	1	49	20.82	20.81	20.83	
10	QPSK	25	0	21.07	21.09	21.10	22
10	QPSK	25	12	21.19	21.14	21.23	
10	QPSK	25	25	21.10	21.11	21.11	
10	QPSK	50	0	21.14	21.15	21.16	22
10	16QAM	1	0	21.18	21.21	21.22	
10	16QAM	1	25	21.44	21.44	21.51	
10	16QAM	1	49	21.18	21.19	21.22	22
10	16QAM	25	0	21.08	21.11	21.13	
10	16QAM	25	12	21.23	21.16	21.28	
10	16QAM	25	25	21.09	21.11	21.13	22
10	16QAM	50	0	21.15	21.16	21.18	
10	64QAM	1	0	21.08	21.05	21.00	
10	64QAM	1	25	21.38	21.37	21.38	22
10	64QAM	1	49	21.06	21.15	21.10	
10	64QAM	25	0	20.12	20.14	20.14	
10	64QAM	25	12	20.24	20.18	20.24	21
10	64QAM	25	25	20.13	20.14	20.10	
10	64QAM	50	0	20.17	20.20	20.10	
Channel				131997	132322	132692	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.04	21.09	21.09	22
5	QPSK	1	12	21.09	21.13	21.11	
5	QPSK	1	24	21.02	20.99	21.03	
5	QPSK	12	0	21.21	21.19	21.21	22
5	QPSK	12	7	21.21	21.23	21.15	
5	QPSK	12	13	21.11	21.14	21.14	
5	QPSK	25	0	21.16	21.15	21.14	22
5	16QAM	1	0	21.35	21.41	21.40	
5	16QAM	1	12	21.36	21.42	21.43	
5	16QAM	1	24	21.32	21.36	21.36	22
5	16QAM	12	0	21.24	21.23	21.21	
5	16QAM	12	7	21.22	21.28	21.20	
5	16QAM	12	13	21.14	21.20	21.19	22
5	16QAM	25	0	21.20	21.21	21.17	
5	64QAM	1	0	21.35	21.32	21.17	
5	64QAM	1	12	21.32	21.38	21.29	22
5	64QAM	1	24	21.20	21.31	21.16	
5	64QAM	12	0	20.30	20.25	20.21	
5	64QAM	12	7	20.27	20.28	20.15	21
5	64QAM	12	13	20.20	20.23	20.11	
5	64QAM	25	0	20.21	20.24	20.07	
Channel				131979	132322	132695	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	20.94	21.04	21.08	22
1.4	QPSK	1	3	21.05	21.09	21.11	
1.4	QPSK	1	5	20.95	21.00	21.04	
1.4	QPSK	3	0	21.01	21.05	21.08	22
1.4	QPSK	3	1	21.05	21.08	21.10	
1.4	QPSK	3	3	21.00	21.02	21.05	
1.4	QPSK	6	0	21.08	21.11	21.13	22
1.4	16QAM	1	0	21.31	21.39	21.42	
1.4	16QAM	1	3	21.41	21.42	21.47	
1.4	16QAM	1	5	21.29	21.31	21.37	22
1.4	16QAM	3	0	21.13	21.16	21.20	
1.4	16QAM	3	1	21.16	21.18	21.21	
1.4	16QAM	3	3	21.10	21.11	21.16	22
1.4	16QAM	6	0	21.20	21.24	21.22	
1.4	64QAM	1	0	21.27	21.33	21.12	
1.4	64QAM	1	3	21.31	21.36	21.13	22
1.4	64QAM	1	5	21.21	21.23	21.05	
1.4	64QAM	3	0	21.24	21.30	21.11	
1.4	64QAM	3	1	21.30	21.34	21.09	22
1.4	64QAM	3	3	21.10	21.20	21.04	
1.4	64QAM	6	0	20.09	20.14	19.98	



Band 2_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 18700	Power Middle Ch. Freq. 18900	Power High Ch. Freq. 19100	Tune-up limit (GHz)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	19.69	19.82	19.68	20.5
20	QPSK	1	49	19.36	19.59	19.61	
20	QPSK	1	99	19.51	19.58	19.56	
20	QPSK	50	0	19.87	19.80	19.63	20.5
20	QPSK	50	24	19.74	19.77	19.74	
20	QPSK	50	50	19.88	19.72	19.75	
20	QPSK	100	0	19.68	19.71	19.66	20.5
20	16QAM	1	0	20.05	19.97	20.01	
20	16QAM	1	49	19.93	19.96	20.01	
20	16QAM	1	99	19.90	19.93	19.96	20.5
20	16QAM	50	0	19.69	19.82	19.64	
20	16QAM	50	24	19.75	19.78	19.75	
20	16QAM	50	50	19.70	19.74	19.77	20.5
20	16QAM	100	0	19.68	19.71	19.67	
20	64QAM	1	0	19.95	19.84	19.92	
20	64QAM	1	49	19.80	19.83	19.88	20.5
20	64QAM	1	99	19.78	19.83	19.83	
20	64QAM	50	0	19.68	19.82	19.69	
20	64QAM	50	24	19.75	19.77	19.78	20.5
20	64QAM	50	50	19.69	19.73	19.81	
20	64QAM	100	0	19.69	19.71	19.72	
Channel				18875	18900	19125	Tune-up
Frequency (MHz)				187.5	1880	1902.5	limit
15	QPSK	1	0	19.54	19.66	19.71	20.5
15	QPSK	1	37	19.58	19.61	19.66	
15	QPSK	1	74	19.53	19.63	19.63	
15	QPSK	36	0	19.71	19.64	19.68	20.5
15	QPSK	36	20	19.78	19.79	19.83	
15	QPSK	36	39	19.72	19.76	19.78	
15	QPSK	75	0	19.73	19.74	19.69	20.5
15	16QAM	1	0	19.87	20.00	20.03	
15	16QAM	1	37	19.95	19.96	20.00	
15	16QAM	1	74	19.87	19.97	19.98	20.5
15	16QAM	36	0	19.73	19.84	19.70	
15	16QAM	36	20	19.78	19.79	19.82	
15	16QAM	36	39	19.72	19.77	19.80	20.5
15	16QAM	75	0	19.74	19.75	19.75	
15	64QAM	1	0	19.77	19.80	19.80	
15	64QAM	1	37	19.83	19.87	19.85	20.5
15	64QAM	1	74	19.75	19.85	19.87	
15	64QAM	36	0	19.74	19.88	19.74	
15	64QAM	36	20	19.80	19.79	19.88	20.5
15	64QAM	36	39	19.75	19.73	19.85	
15	64QAM	75	0	19.73	19.73	19.74	
Channel				1885	1890	1905	Tune-up
Frequency (MHz)				1855	1880	1905	limit
10	QPSK	1	0	19.22	19.20	19.59	20.5
10	QPSK	1	25	19.50	19.51	19.51	
10	QPSK	1	49	19.22	19.24	19.48	
10	QPSK	25	0	19.55	19.47	19.50	20.5
10	QPSK	25	12	19.62	19.62	19.60	
10	QPSK	25	25	19.50	19.51	19.53	
10	QPSK	50	0	19.53	19.54	19.50	20.5
10	16QAM	1	0	19.60	19.54	19.96	
10	16QAM	1	25	19.86	19.90	19.91	
10	16QAM	1	49	19.60	19.62	19.86	20.5
10	16QAM	25	0	19.55	19.47	19.50	
10	16QAM	25	12	19.63	19.65	19.59	
10	16QAM	25	25	19.50	19.53	19.53	20.5
10	16QAM	50	0	19.56	19.54	19.50	
10	64QAM	1	0	19.49	19.39	19.82	
10	64QAM	1	25	19.82	19.83	19.81	20.5
10	64QAM	1	49	19.51	19.54	19.78	
10	64QAM	25	0	19.61	19.51	19.56	
10	64QAM	25	12	19.70	19.69	19.64	20.5
10	64QAM	25	25	19.55	19.55	19.65	
10	64QAM	50	0	19.59	19.56	19.53	
Channel				18825	18900	19175	Tune-up
Frequency (MHz)				1852.5	1880	1907.5	limit
5	QPSK	1	0	19.53	19.45	19.49	20.5
5	QPSK	1	12	19.60	19.57	19.59	
5	QPSK	1	24	19.44	19.44	19.47	
5	QPSK	12	0	19.67	19.57	19.64	20.5
5	QPSK	12	7	19.71	19.67	19.65	
5	QPSK	12	13	19.58	19.57	19.59	
5	QPSK	25	0	19.61	19.62	19.58	20.5
5	16QAM	1	0	19.88	19.77	19.80	
5	16QAM	1	12	19.67	19.62	19.85	
5	16QAM	1	24	19.79	19.77	19.75	20.5
5	16QAM	12	0	19.68	19.81	19.62	
5	16QAM	12	7	19.69	19.68	19.63	
5	16QAM	12	13	19.60	19.58	19.59	20.5
5	16QAM	25	0	19.64	19.63	19.59	
5	64QAM	1	0	19.81	19.69	19.73	
5	64QAM	1	12	19.79	19.77	19.73	20.5
5	64QAM	1	24	19.70	19.67	19.63	
5	64QAM	12	0	19.74	19.67	19.69	
5	64QAM	12	7	19.76	19.74	19.71	20.5
5	64QAM	12	13	19.67	19.65	19.65	
5	64QAM	25	0	19.68	19.65	19.59	
Channel				18615	18900	19185	Tune-up
Frequency (MHz)				1851.5	1880	1908.5	limit
3	QPSK	1	0	19.49	19.40	19.42	20.5
3	QPSK	1	8	19.51	19.55	19.59	
3	QPSK	1	14	19.35	19.44	19.41	
3	QPSK	8	0	19.69	19.51	19.67	20.5
3	QPSK	8	4	19.81	19.76	19.72	
3	QPSK	8	7	19.59	19.67	19.53	
3	QPSK	15	0	19.65	19.54	19.65	20.5
3	16QAM	1	0	19.94	19.83	19.87	
3	16QAM	1	8	19.97	19.81	19.84	
3	16QAM	1	14	19.80	19.82	19.78	20.5
3	16QAM	8	0	19.75	19.68	19.54	
3	16QAM	8	4	19.73	19.59	19.58	
3	16QAM	8	7	19.68	19.56	19.53	20.5
3	16QAM	15	0	19.69	19.63	19.59	
3	64QAM	1	0	19.75	19.74	19.73	
3	64QAM	1	8	19.86	19.83	19.71	20.5
3	64QAM	1	14	19.68	19.75	19.71	
3	64QAM	8	0	19.64	19.63	19.71	
3	64QAM	8	4	19.72	19.75	19.75	20.5
3	64QAM	8	7	19.70	19.69	19.62	
3	64QAM	15	0	19.62	19.75	19.64	
Channel				18607	18900	19193	Tune-up
Frequency (MHz)				1850.7	1880	1909.3	limit
1.4	QPSK	1	0	19.51	19.49	19.49	20.5
1.4	QPSK	1	3	19.56	19.53	19.52	
1.4	QPSK	1	5	19.45	19.45	19.40	
1.4	QPSK	3	0	19.53	19.52	19.46	20.5
1.4	QPSK	3	1	19.56	19.54	19.49	
1.4	QPSK	3	3	19.51	19.48	19.48	
1.4	QPSK	6	0	19.59	19.57	19.58	20.5
1.4	16QAM	1	0	19.85	19.81	19.80	
1.4	16QAM	1	3	19.88	19.87	19.85	
1.4	16QAM	1	5	19.79	19.75	19.74	20.5
1.4	16QAM	3	0	19.64	19.60	19.58	
1.4	16QAM	3	1	19.64	19.64	19.58	
1.4	16QAM	3	3	19.58	19.54	19.50	20.5
1.4	16QAM	6	0	19.72	19.68	19.66	
1.4	64QAM	1	0	19.78	19.77	19.71	
1.4	64QAM	1	3	19.81	19.77	19.74	20.5
1.4	64QAM	1	5	19.71	19.67	19.67	
1.4	64QAM	3	0	19.77	19.73	19.68	
1.4	64QAM	3	1	19.80	19.78	19.75	20.5
1.4	64QAM	3	3	19.73	19.69	19.67	
1.4	64QAM	6	0	19.64	19.61	19.57	



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20450	Power Middle Ch. Freq. 20525	Power High Ch. Freq. 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	21.05	21.08	21.10	22
10	QPSK	1	25	21.01	21.04	21.05	
10	QPSK	1	49	20.99	21.04	20.99	
10	QPSK	25	0	21.08	21.10	21.11	22
10	QPSK	25	12	21.18	21.17	21.12	
10	QPSK	25	25	21.13	21.12	21.14	
10	QPSK	50	0	21.10	21.10	21.02	22
10	16QAM	1	0	21.29	21.40	21.45	
10	16QAM	1	25	21.40	21.41	21.43	
10	16QAM	1	49	21.37	21.38	21.37	22
10	16QAM	25	0	21.08	21.10	21.10	
10	16QAM	25	12	21.18	21.19	21.12	
10	16QAM	25	25	21.14	21.12	21.13	22
10	16QAM	50	0	21.08	21.09	21.01	
10	64QAM	1	0	21.26	21.27	21.31	
10	64QAM	1	25	21.35	21.32	21.37	22
10	64QAM	1	49	21.29	21.28	21.26	
10	64QAM	25	0	21.14	21.14	21.15	
10	64QAM	25	12	21.23	21.23	21.18	22
10	64QAM	25	25	21.20	21.17	21.17	
10	64QAM	50	0	21.12	21.12	21.04	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	20.98	20.99	20.95	22
5	QPSK	1	12	21.09	21.12	21.12	
5	QPSK	1	24	21.04	21.03	20.97	
5	QPSK	12	0	21.10	21.07	21.08	22
5	QPSK	12	7	21.19	21.18	21.18	
5	QPSK	12	13	21.15	21.16	21.13	
5	QPSK	25	0	21.14	21.15	21.14	22
5	16QAM	1	0	21.26	21.30	21.26	
5	16QAM	1	12	21.30	21.37	21.34	
5	16QAM	1	24	21.35	21.35	21.29	22
5	16QAM	12	0	21.07	21.09	21.08	
5	16QAM	12	7	21.18	21.17	21.18	
5	16QAM	12	13	21.14	21.16	21.12	22
5	16QAM	25	0	21.14	21.15	21.12	
5	64QAM	1	0	21.22	21.21	21.20	
5	64QAM	1	12	21.26	21.30	21.28	22
5	64QAM	1	24	21.23	21.28	21.20	
5	64QAM	12	0	21.15	21.16	21.16	
5	64QAM	12	7	21.26	21.27	21.25	22
5	64QAM	12	13	21.23	21.22	21.20	
5	64QAM	25	0	21.18	21.18	21.16	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	20.98	21.01	21.00	22
3	QPSK	1	8	21.11	21.14	21.13	
3	QPSK	1	14	21.04	21.06	21.02	
3	QPSK	8	0	21.08	21.09	21.08	22
3	QPSK	8	4	21.18	21.17	21.18	
3	QPSK	8	7	21.14	21.15	21.13	
3	QPSK	15	0	21.15	21.16	21.09	22
3	16QAM	1	0	21.32	21.30	21.33	
3	16QAM	1	8	21.30	21.44	21.42	
3	16QAM	1	14	21.36	21.37	21.33	22
3	16QAM	8	0	21.13	21.13	21.12	
3	16QAM	8	4	21.23	21.25	21.20	
3	16QAM	8	7	21.19	21.20	21.16	22
3	16QAM	15	0	21.19	21.17	21.08	
3	64QAM	1	0	21.18	21.22	21.21	
3	64QAM	1	8	21.32	21.37	21.33	22
3	64QAM	1	14	21.24	21.32	21.24	
3	64QAM	8	0	21.16	21.18	21.18	
3	64QAM	8	4	21.24	21.25	21.25	22
3	64QAM	8	7	21.21	21.25	21.20	
3	64QAM	15	0	21.19	21.18	21.11	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	20.92	20.99	20.97	22
1.4	QPSK	1	3	21.05	21.08	21.04	
1.4	QPSK	1	5	20.99	20.98	20.96	
1.4	QPSK	3	0	20.96	21.03	20.95	22
1.4	QPSK	3	1	21.02	21.04	20.99	
1.4	QPSK	3	3	20.99	21.01	20.99	
1.4	QPSK	6	0	21.08	21.07	21.04	22
1.4	16QAM	1	0	21.21	21.32	21.28	
1.4	16QAM	1	3	21.35	21.37	21.34	
1.4	16QAM	1	5	21.30	21.29	21.23	22
1.4	16QAM	3	0	21.08	21.09	21.06	
1.4	16QAM	3	1	21.11	21.12	21.10	
1.4	16QAM	3	3	21.05	21.10	21.04	22
1.4	16QAM	6	0	21.14	21.16	21.12	
1.4	64QAM	1	0	21.18	21.22	21.19	
1.4	64QAM	1	3	21.24	21.28	21.21	22
1.4	64QAM	1	5	21.19	21.23	21.18	
1.4	64QAM	3	0	21.19	21.22	21.17	
1.4	64QAM	3	1	21.25	21.26	21.25	22
1.4	64QAM	3	3	21.19	21.22	21.18	
1.4	64QAM	6	0	21.10	21.10	21.07	



Band 7_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch / Freq. 20850	Middle Ch / Freq. 21100	High Ch / Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	17.80	17.77	17.85	18.5
20	QPSK	1	49	17.83	17.84	17.89	
20	QPSK	1	99	17.91	17.91	17.96	
20	QPSK	50	0	17.93	17.89	17.97	18.5
20	QPSK	50	24	18.03	17.99	18.04	
20	QPSK	50	50	18.02	18.04	18.12	
20	QPSK	100	0	17.93	17.86	17.88	18.5
20	16QAM	1	0	18.16	18.10	18.19	
20	16QAM	1	49	18.21	18.17	18.22	
20	16QAM	1	99	18.25	18.20	18.28	18.5
20	16QAM	50	0	17.88	17.93	17.95	
20	16QAM	50	24	18.02	17.96	17.99	
20	16QAM	50	50	18.03	18.03	18.07	18.5
20	16QAM	100	0	17.93	17.82	17.89	
20	64QAM	1	0	18.01	18.00	18.06	
20	64QAM	1	49	18.11	18.12	18.12	18.5
20	64QAM	1	99	18.14	18.13	18.18	
20	64QAM	50	0	17.96	17.98	17.97	
20	64QAM	50	24	18.03	17.99	18.06	18.5
20	64QAM	50	50	18.05	18.07	18.09	
20	64QAM	100	0	17.96	17.88	17.93	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.83	17.83	17.92	18.5
15	QPSK	1	37	17.85	17.88	17.89	
15	QPSK	1	74	17.91	17.94	17.97	
15	QPSK	36	0	17.94	17.93	17.99	18.5
15	QPSK	36	20	18.01	17.96	18.09	
15	QPSK	36	39	18.05	18.02	18.11	
15	QPSK	75	0	17.95	17.88	17.95	18.5
15	16QAM	1	0	18.15	18.15	18.17	
15	16QAM	1	37	18.11	18.16	18.18	
15	16QAM	1	74	18.19	18.21	18.24	18.5
15	16QAM	36	0	17.91	17.92	17.98	
15	16QAM	36	20	18.04	17.95	18.07	
15	16QAM	36	39	18.01	18.02	18.05	18.5
15	16QAM	75	0	17.96	17.91	17.93	
15	64QAM	1	0	18.08	18.02	18.09	
15	64QAM	1	37	18.10	18.11	18.16	18.5
15	64QAM	1	74	18.13	18.17	18.23	
15	64QAM	36	0	17.98	17.97	18.00	
15	64QAM	36	20	18.11	18.01	18.06	18.5
15	64QAM	36	39	18.11	18.08	18.13	
15	64QAM	75	0	18.00	17.93	17.95	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	17.64	17.83	17.85	18.5
10	QPSK	1	25	17.61	17.66	17.71	
10	QPSK	1	49	17.66	17.71	17.73	
10	QPSK	25	0	17.73	17.74	17.72	18.5
10	QPSK	25	12	17.78	17.74	17.84	
10	QPSK	25	25	17.80	17.84	17.86	
10	QPSK	50	0	17.71	17.88	17.77	18.5
10	16QAM	1	0	17.96	18.02	18.01	
10	16QAM	1	25	18.03	18.04	18.04	
10	16QAM	1	49	18.04	18.13	18.11	18.5
10	16QAM	25	0	17.69	17.72	17.74	
10	16QAM	25	12	17.79	17.74	17.83	
10	16QAM	25	25	17.78	17.82	17.82	18.5
10	16QAM	50	0	17.66	17.62	17.72	
10	64QAM	1	0	17.83	17.89	17.93	
10	64QAM	1	25	17.99	18.01	18.03	18.5
10	64QAM	1	49	17.94	18.01	18.00	
10	64QAM	25	0	17.73	17.77	17.76	
10	64QAM	25	12	17.83	17.77	17.85	18.5
10	64QAM	25	25	17.82	17.84	17.89	
10	64QAM	50	0	17.76	17.67	17.77	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	17.64	17.88	17.75	18.5
5	QPSK	1	12	17.72	17.80	17.82	
5	QPSK	1	24	17.73	17.78	17.78	
5	QPSK	12	0	17.76	17.74	17.84	18.5
5	QPSK	12	7	17.82	17.78	17.88	
5	QPSK	12	13	17.79	17.79	17.82	
5	QPSK	25	0	17.76	17.74	17.81	18.5
5	16QAM	1	0	17.98	18.01	18.12	
5	16QAM	1	12	18.07	18.13	18.17	
5	16QAM	1	24	18.05	18.12	18.13	18.5
5	16QAM	12	0	17.79	17.76	17.84	
5	16QAM	12	7	17.81	17.81	17.89	
5	16QAM	12	13	17.79	17.81	17.84	18.5
5	16QAM	25	0	17.75	17.75	17.80	
5	64QAM	1	0	17.95	18.00	18.10	
5	64QAM	1	12	18.02	18.00	18.01	18.5
5	64QAM	1	24	18.03	18.06	18.05	
5	64QAM	12	0	17.83	17.82	17.88	
5	64QAM	12	7	17.89	17.85	17.92	18.5
5	64QAM	12	13	17.86	17.86	17.84	
5	64QAM	25	0	17.80	17.78	17.84	

Band 26_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 26765	Power Middle Ch. / Freq. 26865	Power High Ch. / Freq. 26965	Tune-up limit (dBm)
Channel				821.5	831.5	841.5	
Frequency (MHz)							
15	QPSK	1	0	21.29	21.27	21.25	22
15	QPSK	1	37	21.17	21.26	21.24	22
15	QPSK	1	74	21.19	21.25	21.13	22
15	QPSK	36	0	21.24	21.24	21.21	22
15	QPSK	36	20	21.29	21.30	21.34	22
15	QPSK	36	39	21.29	21.24	21.26	22
15	QPSK	75	0	21.25	21.26	21.20	22
15	16QAM	1	0	21.60	21.58	21.55	22
15	16QAM	1	37	21.44	21.58	21.49	22
15	16QAM	1	74	21.47	21.55	21.42	22
15	16QAM	36	0	21.21	21.18	21.21	22
15	16QAM	36	20	21.34	21.19	21.32	22
15	16QAM	36	39	21.20	21.30	21.24	22
15	16QAM	75	0	21.28	21.23	21.22	22
15	64QAM	1	0	21.47	21.37	21.53	22
15	64QAM	1	37	21.40	21.46	21.56	22
15	64QAM	1	74	21.46	21.43	21.31	22
15	64QAM	36	0	20.28	20.26	20.25	21
15	64QAM	36	20	20.34	20.26	20.37	21
15	64QAM	36	39	20.25	20.31	20.28	21
15	64QAM	75	0	20.29	20.22	20.11	21
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	21.03	21.06	21.05	22
10	QPSK	1	25	20.93	21.00	20.96	22
10	QPSK	1	49	20.95	20.95	20.92	22
10	QPSK	25	0	20.90	20.89	20.89	22
10	QPSK	25	12	21.08	21.09	21.04	22
10	QPSK	25	25	21.01	21.11	20.99	22
10	QPSK	50	0	21.01	20.98	20.94	22
10	16QAM	1	0	21.36	21.44	21.39	22
10	16QAM	1	25	21.35	21.31	21.49	22
10	16QAM	1	49	21.31	21.38	21.30	22
10	16QAM	25	0	20.94	20.92	20.94	22
10	16QAM	25	12	21.12	21.03	21.10	22
10	16QAM	25	25	20.98	21.00	21.08	22
10	16QAM	50	0	21.01	20.99	20.97	22
10	64QAM	1	0	21.34	21.25	21.22	22
10	64QAM	1	25	21.18	21.35	21.19	22
10	64QAM	1	49	21.14	21.26	21.06	22
10	64QAM	25	0	19.95	19.95	19.99	21
10	64QAM	25	12	20.17	20.08	20.09	21
10	64QAM	25	25	20.01	20.10	20.09	21
10	64QAM	50	0	20.04	19.95	19.99	21
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	20.88	21.03	21.03	22
5	QPSK	1	12	21.09	21.09	21.05	22
5	QPSK	1	24	20.97	21.05	20.95	22
5	QPSK	12	0	21.04	21.03	21.00	22
5	QPSK	12	7	21.17	21.17	21.11	22
5	QPSK	12	13	21.11	21.13	21.02	22
5	QPSK	25	0	21.09	21.10	20.99	22
5	16QAM	1	0	21.16	21.30	21.26	22
5	16QAM	1	12	21.36	21.29	21.29	22
5	16QAM	1	24	21.28	21.40	21.28	22
5	16QAM	12	0	21.05	21.02	21.06	22
5	16QAM	12	7	21.15	21.16	21.14	22
5	16QAM	12	13	21.11	21.09	21.06	22
5	16QAM	25	0	21.12	21.03	21.04	22
5	64QAM	1	0	21.18	21.22	21.15	22
5	64QAM	1	12	21.19	21.22	21.22	22
5	64QAM	1	24	21.21	21.30	21.18	22
5	64QAM	12	0	20.09	20.08	20.11	21
5	64QAM	12	7	20.20	20.19	20.16	21
5	64QAM	12	13	20.14	20.11	20.19	21
5	64QAM	25	0	20.11	20.05	20.05	21
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	20.95	21.00	20.98	22
3	QPSK	1	8	21.06	21.09	21.03	22
3	QPSK	1	14	20.97	21.07	20.95	22
3	QPSK	8	0	21.06	21.09	21.02	22
3	QPSK	8	4	21.11	21.14	21.02	22
3	QPSK	8	7	21.08	21.15	21.02	22
3	QPSK	15	0	21.05	21.05	21.04	22
3	16QAM	1	0	21.26	21.31	21.33	22
3	16QAM	1	8	21.37	21.36	21.33	22
3	16QAM	1	14	21.23	21.38	21.25	22
3	16QAM	8	0	21.05	21.07	21.12	22
3	16QAM	8	4	21.19	21.16	21.15	22
3	16QAM	8	7	21.14	21.13	21.07	22
3	16QAM	15	0	21.14	21.05	21.05	22
3	64QAM	1	0	21.07	21.42	21.23	22
3	64QAM	1	8	21.27	21.32	21.22	22
3	64QAM	1	14	21.20	21.27	21.17	22
3	64QAM	8	0	20.06	20.11	20.11	21
3	64QAM	8	4	20.20	20.21	20.12	21
3	64QAM	8	7	20.15	20.12	20.13	21
3	64QAM	15	0	20.10	20.06	20.06	21
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	20.87	20.92	20.81	22
1.4	QPSK	1	3	21.01	21.04	20.94	22
1.4	QPSK	1	5	20.97	20.96	20.89	22
1.4	QPSK	3	0	20.93	20.83	20.94	22
1.4	QPSK	3	1	20.95	20.95	20.89	22
1.4	QPSK	3	3	20.98	20.96	20.86	22
1.4	QPSK	6	0	21.04	20.99	20.95	22
1.4	16QAM	1	0	21.13	21.19	21.20	22
1.4	16QAM	1	3	21.36	21.32	21.19	22
1.4	16QAM	1	5	21.24	21.28	21.12	22
1.4	16QAM	3	0	21.00	21.02	20.91	22
1.4	16QAM	3	1	21.13	20.99	21.04	22
1.4	16QAM	3	3	20.96	21.02	20.90	22
1.4	16QAM	6	0	21.09	21.10	21.09	22
1.4	64QAM	1	0	21.12	21.16	21.08	22
1.4	64QAM	1	3	21.24	21.23	21.03	22
1.4	64QAM	1	5	21.17	21.26	21.06	22
1.4	64QAM	3	0	21.09	21.05	21.07	22
1.4	64QAM	3	1	21.16	21.15	21.07	22
1.4	64QAM	3	3	21.15	21.15	21.05	22
1.4	64QAM	6	0	20.00	19.96	20.01	21



Band 66_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq. 132072	Middle Ch. / Freq. 132322	High Ch. / Freq. 132572	
Channel				1720	1745	1770	
Frequency (MHz)				18.06	19.15	19.36	
20	QPSK	1	0	18.06	19.15	19.36	
20	QPSK	1	49	19.26	19.25	19.24	20
20	QPSK	1	99	18.95	19.37	19.17	
20	QPSK	50	0	19.35	19.34	19.34	
20	QPSK	50	24	19.44	19.37	19.45	20
20	QPSK	50	50	19.29	19.31	19.31	
20	QPSK	100	0	19.35	19.38	19.37	
20	16QAM	1	0	19.40	19.42	19.77	20
20	16QAM	1	49	19.62	19.68	19.66	
20	16QAM	1	99	19.34	19.33	19.54	
20	16QAM	50	0	19.32	19.35	19.34	
20	16QAM	50	24	19.40	19.36	19.46	20
20	16QAM	50	50	19.26	19.31	19.32	
20	16QAM	100	0	19.33	19.36	19.37	
20	64QAM	1	0	19.23	19.26	19.58	20
20	64QAM	1	49	19.47	19.50	19.50	
20	64QAM	1	99	19.16	19.21	19.40	
20	64QAM	50	0	19.34	19.35	19.38	
20	64QAM	50	24	19.47	19.38	19.48	20
20	64QAM	50	50	19.32	19.34	19.33	
20	64QAM	100	0	19.36	19.38	19.39	
Channel				132047	132322	132697	Tune-up
Frequency (MHz)				1717.5	1745	1772.5	limit (dBm)
15	QPSK	1	0	18.19	19.22	19.36	20
15	QPSK	1	37	19.23	19.26	19.28	
15	QPSK	1	74	19.09	19.11	19.22	
15	QPSK	36	0	19.36	19.36	19.38	
15	QPSK	36	20	19.43	19.41	19.34	20
15	QPSK	36	39	19.33	19.34	19.35	
15	QPSK	75	0	19.36	19.40	19.32	
15	16QAM	1	0	19.20	19.53	19.70	20
15	16QAM	1	37	19.60	19.48	19.47	
15	16QAM	1	74	19.43	19.42	19.55	
15	16QAM	36	0	19.38	19.37	19.39	
15	16QAM	36	20	19.40	19.43	19.34	20
15	16QAM	36	39	19.31	19.34	19.34	
15	16QAM	75	0	19.36	19.37	19.32	
15	64QAM	1	0	19.36	19.42	19.56	20
15	64QAM	1	37	19.52	19.52	19.54	
15	64QAM	1	74	19.33	19.31	19.42	
15	64QAM	36	0	19.40	19.40	19.43	
15	64QAM	36	20	19.47	19.47	19.40	20
15	64QAM	36	39	19.35	19.34	19.38	
15	64QAM	75	0	19.37	19.40	19.33	
Channel				132022	132322	132622	Tune-up
Frequency (MHz)				1715	1745	1775	limit (dBm)
10	QPSK	1	0	18.84	18.88	18.88	20
10	QPSK	1	25	19.09	19.06	19.09	
10	QPSK	1	49	18.93	19.03	18.85	
10	QPSK	25	0	19.09	19.09	19.11	
10	QPSK	25	12	19.21	19.15	19.24	20
10	QPSK	25	25	19.10	19.13	19.12	
10	QPSK	50	0	19.16	19.18	19.18	
10	16QAM	1	0	19.21	19.20	19.23	20
10	16QAM	1	25	19.45	19.48	19.47	
10	16QAM	1	49	19.22	19.22	19.23	
10	16QAM	25	0	19.13	19.11	19.14	
10	16QAM	25	12	19.22	19.18	19.27	20
10	16QAM	25	25	19.12	19.09	19.13	
10	16QAM	50	0	19.15	19.18	19.20	
10	64QAM	1	0	19.06	19.08	19.11	20
10	64QAM	1	25	19.39	19.39	19.42	
10	64QAM	1	49	19.11	19.14	19.12	
10	64QAM	25	0	19.13	19.15	19.17	
10	64QAM	25	12	19.26	19.20	19.32	20
10	64QAM	25	25	19.15	19.15	19.17	
10	64QAM	50	0	19.26	19.21	19.25	
Channel				131997	132322	132657	Tune-up
Frequency (MHz)				1712.5	1745	1777.5	limit (dBm)
5	QPSK	1	0	19.06	19.07	19.12	20
5	QPSK	1	12	19.13	19.15	19.15	
5	QPSK	1	24	19.03	19.03	19.07	
5	QPSK	12	0	19.25	19.18	19.19	
5	QPSK	12	7	19.27	19.23	19.18	20
5	QPSK	12	13	19.17	19.17	19.17	
5	QPSK	25	0	19.20	19.22	19.18	
5	16QAM	1	0	19.40	19.39	19.41	20
5	16QAM	1	12	19.36	19.40	19.45	
5	16QAM	1	24	19.36	19.37	19.36	
5	16QAM	12	0	19.27	19.22	19.23	
5	16QAM	12	7	19.25	19.27	19.20	20
5	16QAM	12	13	19.17	19.16	19.20	
5	16QAM	25	0	19.23	19.22	19.20	
5	64QAM	1	0	19.39	19.36	19.40	20
5	64QAM	1	12	19.36	19.39	19.38	
5	64QAM	1	24	19.24	19.31	19.28	
5	64QAM	12	0	19.31	19.30	19.29	
5	64QAM	12	7	19.32	19.32	19.28	20
5	64QAM	12	13	19.23	19.26	19.27	
5	64QAM	25	0	19.23	19.21	19.22	
Channel				131979	132322	132655	Tune-up
Frequency (MHz)				1710.7	1745	1779.3	limit (dBm)
1.4	QPSK	1	0	19.04	19.07	19.11	20
1.4	QPSK	1	8	19.18	19.08	19.16	
1.4	QPSK	1	14	19.05	19.01	19.11	
1.4	QPSK	8	0	19.33	19.18	19.23	
1.4	QPSK	8	4	19.17	19.16	19.09	20
1.4	QPSK	8	7	19.11	19.24	19.17	
1.4	QPSK	15	0	19.30	19.17	19.17	
1.4	16QAM	1	0	19.40	19.37	19.45	20
1.4	16QAM	1	8	19.30	19.50	19.38	
1.4	16QAM	1	14	19.46	19.38	19.27	
1.4	16QAM	8	0	19.17	19.14	19.30	
1.4	16QAM	8	4	19.28	19.33	19.10	20
1.4	16QAM	8	7	19.14	19.14	19.11	
1.4	16QAM	15	0	19.21	19.30	19.23	
1.4	64QAM	1	0	19.32	19.31	19.33	
1.4	64QAM	1	8	19.29	19.39	19.46	20
1.4	64QAM	1	14	19.31	19.24	19.30	
1.4	64QAM	8	0	19.22	19.25	19.34	
1.4	64QAM	8	4	19.41	19.24	19.22	20
1.4	64QAM	8	7	19.15	19.21	19.29	
1.4	64QAM	15	0	19.13	19.15	19.27	
Channel				131979	132322	132655	Tune-up
Frequency (MHz)				1710.7	1745	1779.3	limit (dBm)
1.4	QPSK	1	0	18.99	19.05	19.07	20
1.4	QPSK	1	3	19.13	19.10	19.15	
1.4	QPSK	1	5	19.05	19.06	19.03	
1.4	QPSK	3	0	19.06	19.07	19.07	
1.4	QPSK	3	1	19.09	19.10	19.12	
1.4	QPSK	3	3	19.05	19.02	19.06	20
1.4	QPSK	6	0	19.13	19.14	19.16	
1.4	16QAM	1	0	19.29	19.39	19.42	
1.4	16QAM	1	3	19.42	19.43	19.45	20
1.4	16QAM	1	5	19.33	19.33	19.35	
1.4	16QAM	3	0	19.15	19.18	19.19	
1.4	16QAM	3	1	19.21	19.20	19.20	
1.4	16QAM	3	3	19.09	19.12	19.14	
1.4	16QAM	6	0	19.22	19.24	19.24	20
1.4	64QAM	1	0	19.24	19.35	19.36	
1.4	64QAM	1	3	19.31	19.37	19.39	
1.4	64QAM	1	5	19.21	19.31	19.29	20
1.4	64QAM	3	0	19.28	19.29	19.32	
1.4	64QAM	3	1	19.31	19.30	19.37	
1.4	64QAM	3	3	19.21	19.29	19.28	
1.4	64QAM	6	0	19.13	19.13	19.17	20



Band 2_Ant 3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	19.69	19.62	19.68	21	
20	QPSK	1	49	19.36	19.59	19.61		
20	QPSK	1	99	19.51	19.58	19.56		
20	QPSK	50	0	19.67	19.60	19.63		
20	QPSK	50	24	19.74	19.77	19.74		
20	QPSK	50	50	19.88	19.72	19.75		
20	QPSK	100	0	19.68	19.71	19.66		
20	16QAM	1	0	20.05	19.97	20.01	21	
20	16QAM	1	49	19.93	19.96	20.01		
20	16QAM	1	99	19.90	19.93	19.96		
20	16QAM	50	0	19.69	19.62	19.64		
20	16QAM	50	24	19.75	19.78	19.75		
20	16QAM	50	50	19.70	19.74	19.77		
20	64QAM	100	0	19.68	19.71	19.67	21	
20	64QAM	1	0	19.95	19.84	19.92		
20	64QAM	1	49	19.80	19.83	19.88		
20	64QAM	1	99	19.78	19.83	19.83		
20	64QAM	50	0	19.68	19.62	19.69		
20	64QAM	50	24	19.75	19.77	19.78		
20	64QAM	50	50	19.69	19.73	19.81		
20	64QAM	100	0	19.69	19.71	19.72		
Channel				18675	18900	19125		Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	19.54	19.66	19.71	21	
15	QPSK	1	37	19.58	19.61	19.66		
15	QPSK	1	74	19.53	19.63	19.63		
15	QPSK	36	0	19.71	19.64	19.68		
15	QPSK	36	20	19.78	19.79	19.83		
15	QPSK	36	39	19.72	19.76	19.78		
15	QPSK	75	0	19.73	19.74	19.69	21	
15	16QAM	1	0	19.87	20.00	20.03		
15	16QAM	1	37	19.95	19.98	20.00		
15	16QAM	1	74	19.87	19.97	19.98		
15	16QAM	36	0	19.73	19.84	19.70		
15	16QAM	36	20	19.78	19.79	19.82		
15	16QAM	36	39	19.72	19.77	19.80		
15	16QAM	75	0	19.74	19.75	19.70		
15	64QAM	1	0	19.77	19.80	19.80		
15	64QAM	1	37	19.83	19.87	19.85		
15	64QAM	1	74	19.75	19.85	19.87		
15	64QAM	36	0	19.74	19.68	19.74	21	
15	64QAM	36	20	19.80	19.79	19.88		
15	64QAM	36	39	19.75	19.73	19.85		
15	64QAM	75	0	19.73	19.73	19.74		
Channel				18650	18900	19150		Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	19.22	19.20	19.59	21	
10	QPSK	1	25	19.50	19.51	19.51		
10	QPSK	1	49	19.22	19.24	19.48		
10	QPSK	25	0	19.55	19.47	19.50		
10	QPSK	25	12	19.62	19.62	19.60		
10	QPSK	25	25	19.50	19.51	19.53		
10	QPSK	50	0	19.53	19.54	19.50	21	
10	16QAM	1	0	19.60	19.54	19.86		
10	16QAM	1	25	19.86	19.90	19.91		
10	16QAM	1	49	19.60	19.62	19.86		
10	16QAM	25	0	19.55	19.47	19.50		
10	16QAM	25	12	19.63	19.65	19.59		
10	16QAM	25	25	19.50	19.53	19.53		
10	16QAM	50	0	19.55	19.54	19.50		
10	64QAM	1	0	19.49	19.39	19.82		
10	64QAM	1	25	19.82	19.83	19.81		
10	64QAM	1	49	19.51	19.54	19.78		
10	64QAM	25	0	19.61	19.51	19.56	21	
10	64QAM	25	12	19.70	19.69	19.64		
10	64QAM	25	25	19.55	19.55	19.65		
10	64QAM	50	0	19.59	19.56	19.53		
Channel				18625	18900	19175		Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	19.53	19.45	19.49	21	
5	QPSK	1	12	19.60	19.57	19.59		
5	QPSK	1	24	19.44	19.44	19.47		
5	QPSK	12	0	19.67	19.57	19.64		
5	QPSK	12	7	19.71	19.67	19.65		
5	QPSK	12	13	19.58	19.57	19.59		
5	QPSK	25	0	19.61	19.62	19.58	21	
5	16QAM	1	0	19.88	19.77	19.80		
5	16QAM	1	12	19.87	19.82	19.85		
5	16QAM	1	24	19.79	19.77	19.75		
5	16QAM	12	0	19.68	19.61	19.62		
5	16QAM	12	7	19.69	19.68	19.63		
5	16QAM	12	13	19.60	19.58	19.59		
5	16QAM	25	0	19.64	19.63	19.58		
5	64QAM	1	0	19.81	19.69	19.73		
5	64QAM	1	12	19.79	19.77	19.73		
5	64QAM	1	24	19.70	19.67	19.63		
5	64QAM	12	0	19.74	19.67	19.69	21	
5	64QAM	12	7	19.78	19.74	19.71		
5	64QAM	12	13	19.67	19.65	19.66		
5	64QAM	25	0	19.68	19.65	19.59		
Channel				18615	18900	19185		Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	19.49	19.40	19.42	21	
3	QPSK	1	8	19.51	19.55	19.59		
3	QPSK	1	14	19.35	19.44	19.41		
3	QPSK	8	0	19.69	19.51	19.67		
3	QPSK	8	4	19.81	19.76	19.72		
3	QPSK	8	7	19.59	19.67	19.53	21	
3	QPSK	15	0	19.65	19.54	19.65		
3	16QAM	1	0	19.94	19.83	19.87		
3	16QAM	1	8	19.97	19.81	19.84		
3	16QAM	1	14	19.80	19.82	19.78		
3	16QAM	8	0	19.75	19.68	19.54		
3	16QAM	8	4	19.73	19.69	19.58		
3	16QAM	8	7	19.68	19.56	19.53		
3	16QAM	15	0	19.69	19.63	19.59		
3	64QAM	1	0	19.75	19.74	19.73		
3	64QAM	1	8	19.86	19.83	19.71	21	
3	64QAM	1	14	19.68	19.75	19.71		
3	64QAM	8	0	19.64	19.63	19.71		
3	64QAM	8	4	19.72	19.75	19.75		
3	64QAM	8	7	19.70	19.69	19.62		
3	64QAM	15	0	19.62	19.75	19.64	Tune-up limit (dBm)	
Channel				18607	18900	19193		
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	19.51	19.49	19.49	21	
1.4	QPSK	1	3	19.56	19.53	19.52		
1.4	QPSK	1	5	19.45	19.45	19.40		
1.4	QPSK	3	0	19.53	19.52	19.46		
1.4	QPSK	3	1	19.56	19.54	19.49		
1.4	QPSK	3	3	19.51	19.48	19.48		
1.4	QPSK	6	0	19.59	19.57	19.58	21	
1.4	16QAM	1	0	19.85	19.81	19.80		
1.4	16QAM	1	3	19.88	19.87	19.85		
1.4	16QAM	1	5	19.79	19.75	19.74		
1.4	16QAM	3	0	19.64	19.60	19.58		
1.4	16QAM	3	1	19.64	19.64	19.58		
1.4	16QAM	3	3	19.58	19.54	19.50		
1.4	64QAM	6	0	19.72	19.66	19.66		
1.4	64QAM	1	0	19.78	19.77	19.71		
1.4	64QAM	1	3	19.81	19.77	19.74		
1.4	64QAM	1	5	19.71	19.67	19.67	21	
1.4	64QAM	3	0	19.77	19.73	19.68		
1.4	64QAM	3	1	19.80	19.78	19.75		
1.4	64QAM	3	3	19.73	19.69	19.67		
1.4	64QAM	6	0	19.64	19.61	19.57	21	



Band 4_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch / Freq. 20050	Middle Ch / Freq. 20175	High Ch / Freq. 20300	
Channel				1720	1732.5	1745	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	19.55	19.52	19.54	21
20	QPSK	1	49	19.71	19.73	19.72	
20	QPSK	1	99	19.47	19.47	19.41	
20	QPSK	50	0	19.76	19.76	19.74	21
20	QPSK	50	24	19.90	19.80	19.80	
20	QPSK	50	50	19.79	19.78	19.76	
20	QPSK	100	0	19.81	19.72	19.70	21
20	16QAM	1	0	19.88	19.88	19.87	
20	16QAM	1	49	20.05	20.11	20.08	
20	16QAM	1	99	19.82	19.78	19.76	21
20	16QAM	50	0	19.78	19.77	19.75	
20	16QAM	50	24	19.89	19.82	19.79	
20	16QAM	50	50	19.79	19.78	19.81	21
20	16QAM	100	0	19.80	19.72	19.71	
20	64QAM	1	0	19.72	19.73	19.74	
20	64QAM	1	49	19.92	19.97	19.97	21
20	64QAM	1	99	19.71	19.70	19.66	
20	64QAM	50	0	19.79	19.79	19.78	
20	64QAM	50	24	19.82	19.84	19.81	21
20	64QAM	50	50	19.82	19.80	19.79	
20	64QAM	100	0	19.83	19.76	19.75	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	19.64	19.62	19.61	21
15	QPSK	1	37	19.69	19.72	19.71	
15	QPSK	1	74	19.69	19.62	19.59	
15	QPSK	36	0	19.76	19.78	19.76	21
15	QPSK	36	20	19.90	19.81	19.87	
15	QPSK	36	39	19.85	19.82	19.80	
15	QPSK	75	0	19.83	19.78	19.81	21
15	16QAM	1	0	19.90	19.96	19.94	
15	16QAM	1	37	20.10	20.08	20.07	
15	16QAM	1	74	19.99	19.93	19.93	21
15	16QAM	36	0	19.78	19.78	19.76	
15	16QAM	36	20	19.89	19.82	19.86	
15	16QAM	36	39	19.83	19.82	19.80	21
15	16QAM	75	0	19.86	19.76	19.83	
15	64QAM	1	0	19.79	19.80	19.83	
15	64QAM	1	37	19.97	19.99	19.98	21
15	64QAM	1	74	19.81	19.83	19.80	
15	64QAM	36	0	19.80	19.83	19.82	
15	64QAM	36	20	19.82	19.84	19.89	21
15	64QAM	36	39	19.82	19.86	19.88	
15	64QAM	75	0	19.84	19.77	19.83	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	19.32	19.31	19.31	21
10	QPSK	1	25	19.62	19.59	19.59	
10	QPSK	1	49	19.29	19.26	19.24	
10	QPSK	25	0	19.58	19.55	19.55	21
10	QPSK	25	12	19.70	19.64	19.61	
10	QPSK	25	25	19.59	19.56	19.56	
10	QPSK	50	0	19.83	19.56	19.52	21
10	16QAM	1	0	19.66	19.70	19.65	
10	16QAM	1	25	19.97	19.97	19.97	
10	16QAM	1	49	19.65	19.67	19.62	21
10	16QAM	25	0	19.58	19.58	19.57	
10	16QAM	25	12	19.74	19.64	19.64	
10	16QAM	25	25	19.61	19.58	19.58	21
10	16QAM	50	0	19.65	19.54	19.55	
10	64QAM	1	0	19.56	19.56	19.54	
10	64QAM	1	25	19.91	19.90	19.91	21
10	64QAM	1	49	19.52	19.55	19.53	
10	64QAM	25	0	19.61	19.60	19.60	
10	64QAM	25	12	19.75	19.71	19.68	21
10	64QAM	25	25	19.62	19.61	19.61	
10	64QAM	50	0	19.66	19.59	19.58	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	19.52	19.53	19.53	21
5	QPSK	1	12	19.66	19.65	19.61	
5	QPSK	1	24	19.53	19.51	19.52	
5	QPSK	12	0	19.76	19.69	19.64	21
5	QPSK	12	7	19.77	19.75	19.71	
5	QPSK	12	13	19.69	19.68	19.65	
5	QPSK	25	0	19.69	19.63	19.65	21
5	16QAM	1	0	19.85	19.88	19.84	
5	16QAM	1	12	19.90	19.92	19.87	
5	16QAM	1	24	19.83	19.82	19.79	21
5	16QAM	12	0	19.78	19.71	19.67	
5	16QAM	12	7	19.76	19.79	19.73	
5	16QAM	12	13	19.69	19.68	19.64	21
5	16QAM	25	0	19.72	19.66	19.73	
5	64QAM	1	0	19.85	19.83	19.80	
5	64QAM	1	12	19.84	19.90	19.79	21
5	64QAM	1	24	19.70	19.78	19.72	
5	64QAM	12	0	19.83	19.77	19.74	
5	64QAM	12	7	19.87	19.81	19.79	21
5	64QAM	12	13	19.76	19.74	19.73	
5	64QAM	25	0	19.75	19.68	19.75	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	19.50	19.44	19.58	21
3	QPSK	1	8	19.58	19.74	19.71	
3	QPSK	1	14	19.46	19.58	19.46	
3	QPSK	8	0	19.74	19.29	19.72	21
3	QPSK	8	4	19.74	19.72	19.78	
3	QPSK	8	7	19.59	19.70	19.75	
3	QPSK	15	0	19.71	19.68	19.74	21
3	16QAM	1	0	19.90	19.83	19.83	
3	16QAM	1	8	19.84	19.88	19.91	
3	16QAM	1	14	19.77	19.77	19.75	21
3	16QAM	8	0	19.85	19.81	19.89	
3	16QAM	8	4	19.68	19.80	19.70	
3	16QAM	8	7	19.69	19.58	19.63	21
3	16QAM	15	0	19.66	19.69	19.63	
3	64QAM	1	0	19.87	19.85	19.79	
3	64QAM	1	8	19.74	19.87	19.87	21
3	64QAM	1	14	19.65	19.78	19.76	
3	64QAM	8	0	19.83	19.70	19.74	
3	64QAM	8	4	19.97	19.86	19.83	21
3	64QAM	8	7	19.84	19.74	19.77	
3	64QAM	15	0	19.80	19.58	19.75	
Channel				19967	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	19.47	19.55	19.46	21
1.4	QPSK	1	3	19.61	19.60	19.60	
1.4	QPSK	1	5	19.52	19.53	19.48	
1.4	QPSK	3	0	19.57	19.29	19.48	21
1.4	QPSK	3	1	19.61	19.61	19.50	
1.4	QPSK	3	3	19.57	19.56	19.53	
1.4	QPSK	6	0	19.62	19.65	19.55	21
1.4	16QAM	1	0	19.63	19.90	19.81	
1.4	16QAM	1	3	19.95	19.93	19.93	
1.4	16QAM	1	5	19.83	19.87	19.84	21
1.4	16QAM	3	0	19.68	19.66	19.58	
1.4	16QAM	3	1	19.70	19.71	19.58	
1.4	16QAM	3	3	19.64	19.64	19.59	21
1.4	16QAM	6	0	19.73	19.74	19.66	
1.4	64QAM	1	0	19.76	19.80	19.71	
1.4	64QAM	1	3	19.83	19.87	19.81	21
1.4	64QAM	1	5	19.78	19.78	19.72	
1.4	64QAM	3	0	19.77	19.80	19.71	
1.4	64QAM	3	1	19.82	19.84	19.76	21
1.4	64QAM	3	3	19.76	19.77	19.75	
1.4	64QAM	6	0	19.65	19.66	19.59	



Band 5_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20450	Power Middle Ch. Freq. 20525	Power High Ch. Freq. 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	21.05	21.08	21.10	22.5
10	QPSK	1	25	21.01	21.04	21.05	
10	QPSK	1	49	20.99	21.04	20.99	
10	QPSK	25	0	21.08	21.10	21.11	22.5
10	QPSK	25	12	21.18	21.17	21.12	
10	QPSK	25	25	21.13	21.12	21.14	
10	QPSK	50	0	21.10	21.10	21.02	22.5
10	16QAM	1	0	21.29	21.40	21.45	
10	16QAM	1	25	21.40	21.41	21.43	
10	16QAM	1	49	21.37	21.38	21.37	22.5
10	16QAM	25	0	21.08	21.10	21.10	
10	16QAM	25	12	21.18	21.19	21.12	
10	16QAM	25	25	21.14	21.12	21.13	22.5
10	16QAM	50	0	21.08	21.09	21.01	
10	64QAM	1	0	21.26	21.27	21.31	
10	64QAM	1	25	21.35	21.32	21.37	22.5
10	64QAM	1	49	21.29	21.28	21.26	
10	64QAM	25	0	21.14	21.14	21.15	
10	64QAM	25	12	21.23	21.23	21.18	22
10	64QAM	25	25	21.20	21.17	21.17	
10	64QAM	50	0	21.12	21.12	21.04	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	20.98	20.99	20.95	22.5
5	QPSK	1	12	21.09	21.12	21.12	
5	QPSK	1	24	21.04	21.03	20.97	
5	QPSK	12	0	21.10	21.07	21.08	22.5
5	QPSK	12	7	21.19	21.18	21.18	
5	QPSK	12	13	21.15	21.16	21.13	
5	QPSK	25	0	21.14	21.15	21.14	22.5
5	16QAM	1	0	21.26	21.30	21.26	
5	16QAM	1	12	21.30	21.37	21.34	
5	16QAM	1	24	21.35	21.35	21.29	22.5
5	16QAM	12	0	21.07	21.09	21.08	
5	16QAM	12	7	21.18	21.17	21.18	
5	16QAM	12	13	21.14	21.16	21.12	22.5
5	16QAM	25	0	21.14	21.15	21.12	
5	64QAM	1	0	21.22	21.21	21.20	
5	64QAM	1	12	21.26	21.30	21.28	22.5
5	64QAM	1	24	21.23	21.28	21.20	
5	64QAM	12	0	21.15	21.16	21.16	
5	64QAM	12	7	21.26	21.27	21.25	22
5	64QAM	12	13	21.23	21.22	21.20	
5	64QAM	25	0	21.18	21.18	21.16	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	20.98	21.01	21.00	22.5
3	QPSK	1	8	21.11	21.14	21.13	
3	QPSK	1	14	21.04	21.06	21.02	
3	QPSK	8	0	21.08	21.09	21.08	22.5
3	QPSK	8	4	21.18	21.17	21.18	
3	QPSK	8	7	21.14	21.15	21.13	
3	QPSK	15	0	21.15	21.16	21.09	22.5
3	16QAM	1	0	21.32	21.30	21.33	
3	16QAM	1	8	21.30	21.44	21.42	
3	16QAM	1	14	21.36	21.37	21.33	22.5
3	16QAM	8	0	21.13	21.13	21.12	
3	16QAM	8	4	21.23	21.25	21.20	
3	16QAM	8	7	21.19	21.20	21.16	22.5
3	16QAM	15	0	21.19	21.17	21.08	
3	64QAM	1	0	21.18	21.22	21.21	
3	64QAM	1	8	21.32	21.37	21.33	22.5
3	64QAM	1	14	21.24	21.32	21.24	
3	64QAM	8	0	21.16	21.18	21.18	
3	64QAM	8	4	21.24	21.25	21.25	22
3	64QAM	8	7	21.21	21.25	21.20	
3	64QAM	15	0	21.19	21.18	21.11	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	20.92	20.99	20.97	22.5
1.4	QPSK	1	3	21.05	21.08	21.04	
1.4	QPSK	1	5	20.99	20.98	20.96	
1.4	QPSK	3	0	20.96	21.03	20.95	22.5
1.4	QPSK	3	1	21.02	21.04	20.99	
1.4	QPSK	3	3	20.99	21.01	20.99	
1.4	QPSK	6	0	21.08	21.07	21.04	22.5
1.4	16QAM	1	0	21.21	21.32	21.28	
1.4	16QAM	1	3	21.35	21.37	21.34	
1.4	16QAM	1	5	21.30	21.29	21.23	22.5
1.4	16QAM	3	0	21.08	21.09	21.06	
1.4	16QAM	3	1	21.11	21.12	21.10	
1.4	16QAM	3	3	21.05	21.10	21.04	22.5
1.4	16QAM	6	0	21.14	21.16	21.12	
1.4	64QAM	1	0	21.18	21.22	21.19	
1.4	64QAM	1	3	21.24	21.28	21.21	22.5
1.4	64QAM	1	5	21.19	21.23	21.18	
1.4	64QAM	3	0	21.19	21.22	21.17	
1.4	64QAM	3	1	21.25	21.26	21.25	22.5
1.4	64QAM	3	3	21.19	21.22	21.18	
1.4	64QAM	6	0	21.10	21.10	21.07	



Band 7_Ant 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq. 20850	Middle Ch. / Freq. 21100	High Ch. / Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	17.80	17.77	17.85	19
20	QPSK	1	49	17.83	17.84	17.89	
20	QPSK	1	99	17.91	17.91	17.96	
20	QPSK	50	0	17.93	17.89	17.97	19
20	QPSK	50	24	18.03	17.99	18.04	
20	QPSK	50	50	18.02	18.04	18.12	
20	QPSK	100	0	17.93	17.86	17.88	19
20	16QAM	1	0	18.16	18.10	18.19	
20	16QAM	1	49	18.21	18.17	18.22	
20	16QAM	1	99	18.25	18.20	18.28	19
20	16QAM	50	0	17.88	17.93	17.95	
20	16QAM	50	24	18.02	17.96	17.99	
20	16QAM	50	50	18.03	18.03	18.07	19
20	16QAM	100	0	17.93	17.82	17.89	
20	64QAM	1	0	18.01	18.00	18.06	
20	64QAM	1	49	18.11	18.12	18.12	19
20	64QAM	1	99	18.14	18.13	18.18	
20	64QAM	50	0	17.96	17.98	17.97	
20	64QAM	50	24	18.03	17.99	18.06	19
20	64QAM	50	50	18.05	18.07	18.09	
20	64QAM	100	0	17.96	17.88	17.93	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.83	17.83	17.92	19
15	QPSK	1	37	17.85	17.88	17.89	
15	QPSK	1	74	17.91	17.94	17.97	
15	QPSK	36	0	17.94	17.93	17.99	19
15	QPSK	36	20	18.01	17.96	18.09	
15	QPSK	36	39	18.05	18.02	18.11	
15	QPSK	75	0	17.95	17.88	17.95	19
15	16QAM	1	0	18.15	18.15	18.17	
15	16QAM	1	37	18.11	18.16	18.18	
15	16QAM	1	74	18.19	18.21	18.24	19
15	16QAM	36	0	17.91	17.92	17.98	
15	16QAM	36	20	18.04	17.95	18.07	
15	16QAM	36	39	18.01	18.02	18.05	19
15	16QAM	75	0	17.96	17.91	17.93	
15	64QAM	1	0	18.08	18.02	18.09	
15	64QAM	1	37	18.10	18.11	18.16	19
15	64QAM	1	74	18.13	18.17	18.23	
15	64QAM	36	0	17.98	17.97	18.00	
15	64QAM	36	20	18.11	18.01	18.06	19
15	64QAM	36	39	18.11	18.08	18.13	
15	64QAM	75	0	18.00	17.93	17.95	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	17.64	17.83	17.85	19
10	QPSK	1	25	17.61	17.66	17.71	
10	QPSK	1	49	17.66	17.71	17.73	
10	QPSK	25	0	17.73	17.74	17.72	19
10	QPSK	25	12	17.78	17.74	17.84	
10	QPSK	25	25	17.80	17.84	17.86	
10	QPSK	50	0	17.71	17.88	17.77	19
10	16QAM	1	0	17.96	18.02	18.01	
10	16QAM	1	25	18.03	18.04	18.04	
10	16QAM	1	49	18.04	18.13	18.11	19
10	16QAM	25	0	17.69	17.72	17.74	
10	16QAM	25	12	17.79	17.74	17.83	
10	16QAM	25	25	17.78	17.82	17.82	19
10	16QAM	50	0	17.66	17.62	17.72	
10	64QAM	1	0	17.83	17.89	17.93	
10	64QAM	1	25	17.99	18.01	18.03	19
10	64QAM	1	49	17.94	18.01	18.00	
10	64QAM	25	0	17.73	17.77	17.76	
10	64QAM	25	12	17.83	17.77	17.85	19
10	64QAM	25	25	17.82	17.84	17.89	
10	64QAM	50	0	17.76	17.67	17.77	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	17.64	17.88	17.75	19
5	QPSK	1	12	17.72	17.80	17.82	
5	QPSK	1	24	17.73	17.76	17.78	
5	QPSK	12	0	17.76	17.74	17.84	19
5	QPSK	12	7	17.82	17.78	17.88	
5	QPSK	12	13	17.79	17.79	17.82	
5	QPSK	25	0	17.76	17.74	17.81	19
5	16QAM	1	0	17.96	18.01	18.12	
5	16QAM	1	12	18.07	18.13	18.17	
5	16QAM	1	24	18.05	18.12	18.13	19
5	16QAM	12	0	17.79	17.76	17.84	
5	16QAM	12	7	17.81	17.81	17.89	
5	16QAM	12	13	17.79	17.81	17.84	19
5	16QAM	25	0	17.75	17.75	17.80	
5	64QAM	1	0	17.95	18.00	18.10	
5	64QAM	1	12	18.02	18.00	18.01	19
5	64QAM	1	24	18.03	18.06	18.05	
5	64QAM	12	0	17.83	17.82	17.88	
5	64QAM	12	7	17.89	17.85	17.92	19
5	64QAM	12	13	17.86	17.86	17.84	
5	64QAM	25	0	17.80	17.78	17.84	



Band 26_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq. 26765	Power Middle Ch / Freq. 26865	Power High Ch / Freq. 26965	Tune-up limit (dBm)
Channel				821.5	831.5	841.5	
Frequency (MHz)							
15	QPSK	1	0	21.29	21.27	21.25	22.5
15	QPSK	1	37	21.17	21.26	21.24	
15	QPSK	1	74	21.19	21.25	21.13	
15	QPSK	36	0	21.24	21.24	21.21	22.5
15	QPSK	36	20	21.29	21.30	21.34	
15	QPSK	36	39	21.29	21.24	21.26	
15	QPSK	75	0	21.25	21.26	21.20	22.5
15	16QAM	1	0	21.60	21.58	21.55	
15	16QAM	1	37	21.44	21.58	21.49	
15	16QAM	1	74	21.47	21.55	21.42	22
15	16QAM	36	0	21.21	21.18	21.21	
15	16QAM	36	20	21.34	21.19	21.32	
15	16QAM	36	39	21.20	21.30	21.24	22
15	16QAM	75	0	21.28	21.23	21.22	
15	64QAM	1	0	21.47	21.37	21.53	
15	64QAM	1	37	21.40	21.46	21.56	22
15	64QAM	1	74	21.46	21.43	21.31	
15	64QAM	36	0	20.28	20.26	20.25	
15	64QAM	36	20	20.34	20.26	20.37	21
15	64QAM	36	39	20.25	20.31	20.28	
15	64QAM	75	0	20.29	20.22	20.11	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	21.03	21.06	21.05	22.5
10	QPSK	1	25	20.93	21.00	20.96	
10	QPSK	1	49	20.95	20.95	20.92	
10	QPSK	25	0	20.90	20.89	20.89	22.5
10	QPSK	25	12	21.08	21.09	21.04	
10	QPSK	25	25	21.01	21.11	20.99	
10	QPSK	50	0	21.01	20.98	20.94	22.5
10	16QAM	1	0	21.36	21.44	21.39	
10	16QAM	1	25	21.35	21.31	21.38	
10	16QAM	1	49	21.31	21.38	21.30	22
10	16QAM	25	0	20.94	20.92	20.94	
10	16QAM	25	12	21.12	21.03	21.10	
10	16QAM	25	25	20.98	21.00	21.08	22
10	16QAM	50	0	21.01	20.99	20.97	
10	64QAM	1	0	21.34	21.25	21.22	
10	64QAM	1	25	21.18	21.35	21.19	22
10	64QAM	1	49	21.14	21.26	21.06	
10	64QAM	25	0	19.95	19.95	19.99	
10	64QAM	25	12	20.17	20.08	20.09	21
10	64QAM	25	25	20.01	20.10	20.08	
10	64QAM	50	0	20.04	19.95	19.99	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	20.88	21.03	21.03	22.5
5	QPSK	1	12	21.09	21.09	21.05	
5	QPSK	1	24	20.97	21.05	20.95	
5	QPSK	12	0	21.04	21.03	21.00	22.5
5	QPSK	12	7	21.17	21.17	21.11	
5	QPSK	12	13	21.11	21.13	21.02	
5	QPSK	25	0	21.09	21.10	20.99	22.5
5	16QAM	1	0	21.16	21.30	21.26	
5	16QAM	1	12	21.36	21.29	21.29	
5	16QAM	1	24	21.28	21.40	21.28	22
5	16QAM	12	0	21.05	21.02	21.06	
5	16QAM	12	7	21.15	21.16	21.14	
5	16QAM	12	13	21.11	21.09	21.06	22
5	16QAM	25	0	21.12	21.03	21.04	
5	64QAM	1	0	21.18	21.22	21.15	
5	64QAM	1	12	21.19	21.22	21.22	22
5	64QAM	1	24	21.21	21.30	21.16	
5	64QAM	12	0	20.09	20.08	20.11	
5	64QAM	12	7	20.20	20.19	20.16	21
5	64QAM	12	13	20.14	20.11	20.19	
5	64QAM	25	0	20.11	20.05	20.05	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	20.96	21.00	20.98	22.5
3	QPSK	1	8	21.06	21.09	21.03	
3	QPSK	1	14	20.97	21.07	20.95	
3	QPSK	8	0	21.06	21.09	21.02	22.5
3	QPSK	8	4	21.11	21.14	21.02	
3	QPSK	8	7	21.08	21.15	21.02	
3	QPSK	15	0	21.05	21.05	21.04	22.5
3	16QAM	1	0	21.26	21.31	21.33	
3	16QAM	1	8	21.37	21.36	21.33	
3	16QAM	1	14	21.23	21.38	21.25	22
3	16QAM	8	0	21.05	21.07	21.12	
3	16QAM	8	4	21.19	21.16	21.15	
3	16QAM	8	7	21.14	21.13	21.07	22
3	16QAM	15	0	21.14	21.05	21.05	
3	64QAM	1	0	21.07	21.42	21.23	
3	64QAM	1	8	21.27	21.32	21.22	22
3	64QAM	1	14	21.20	21.27	21.17	
3	64QAM	8	0	20.06	20.11	20.11	
3	64QAM	8	4	20.20	20.21	20.12	21
3	64QAM	8	7	20.15	20.12	20.13	
3	64QAM	15	0	20.10	20.06	20.06	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	20.87	20.92	20.81	22.5
1.4	QPSK	1	3	21.01	21.04	20.94	
1.4	QPSK	1	5	20.97	20.96	20.89	
1.4	QPSK	3	0	20.93	20.83	20.94	22.5
1.4	QPSK	3	1	20.95	20.95	20.89	
1.4	QPSK	3	3	20.98	20.96	20.86	
1.4	QPSK	6	0	21.04	20.99	20.95	22.5
1.4	16QAM	1	0	21.13	21.19	21.20	
1.4	16QAM	1	3	21.36	21.32	21.19	
1.4	16QAM	1	5	21.24	21.28	21.12	22.5
1.4	16QAM	3	0	21.00	21.02	20.91	
1.4	16QAM	3	1	21.13	20.99	21.04	
1.4	16QAM	3	3	20.96	21.02	20.90	22
1.4	16QAM	6	0	21.09	21.10	21.09	
1.4	64QAM	1	0	21.12	21.16	21.08	
1.4	64QAM	1	3	21.24	21.23	21.03	22
1.4	64QAM	1	5	21.17	21.26	21.06	
1.4	64QAM	3	0	21.09	21.05	21.07	
1.4	64QAM	3	1	21.16	21.15	21.07	22
1.4	64QAM	3	3	21.15	21.15	21.05	
1.4	64QAM	6	0	20.00	19.96	20.01	



Band 66_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq. 132072	Middle Ch. / Freq. 132322	High Ch. / Freq. 132572	
Channel				1720	1745	1770	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	19.06	19.15	19.36	20.5
20	QPSK	1	49	19.26	19.25	19.24	
20	QPSK	1	99	19.95	19.97	19.17	
20	QPSK	50	0	19.35	19.34	19.34	20.5
20	QPSK	50	24	19.44	19.37	19.45	
20	QPSK	50	50	19.29	19.31	19.31	
20	QPSK	100	0	19.35	19.38	19.37	
20	16QAM	1	0	19.40	19.42	19.77	20.5
20	16QAM	1	49	19.62	19.66	19.66	
20	16QAM	1	99	19.34	19.33	19.54	
20	16QAM	50	0	19.32	19.35	19.34	20.5
20	16QAM	50	24	19.40	19.36	19.46	
20	16QAM	50	50	19.26	19.31	19.32	
20	16QAM	100	0	19.33	19.36	19.37	
20	64QAM	1	0	19.23	19.20	19.58	20.5
20	64QAM	1	49	19.47	19.50	19.50	
20	64QAM	1	99	19.16	19.21	19.40	
20	64QAM	50	0	19.34	19.35	19.38	20.5
20	64QAM	50	24	19.47	19.38	19.48	
20	64QAM	50	50	19.32	19.34	19.33	
20	64QAM	100	0	19.36	19.38	19.39	
Channel				132047	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	19.19	19.22	19.36	20.5
15	QPSK	1	37	19.23	19.26	19.28	
15	QPSK	1	74	19.09	19.11	19.22	
15	QPSK	36	0	19.36	19.36	19.38	20.5
15	QPSK	36	20	19.43	19.41	19.34	
15	QPSK	36	39	19.33	19.34	19.35	
15	QPSK	75	0	19.36	19.40	19.32	
15	16QAM	1	0	19.20	19.53	19.70	20.5
15	16QAM	1	37	19.60	19.49	19.47	
15	16QAM	1	74	19.43	19.42	19.55	
15	16QAM	36	0	19.38	19.37	19.39	20.5
15	16QAM	36	20	19.40	19.43	19.34	
15	16QAM	36	39	19.31	19.34	19.34	
15	16QAM	75	0	19.36	19.37	19.32	
15	64QAM	1	0	19.36	19.42	19.56	20.5
15	64QAM	1	37	19.52	19.52	19.54	
15	64QAM	1	74	19.33	19.31	19.42	
15	64QAM	36	0	19.40	19.40	19.43	20.5
15	64QAM	36	20	19.47	19.47	19.40	
15	64QAM	36	39	19.36	19.34	19.33	
15	64QAM	75	0	19.37	19.40	19.33	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.84	18.88	18.88	20.5
10	QPSK	1	25	19.09	19.06	19.09	
10	QPSK	1	49	19.03	19.05	19.05	
10	QPSK	25	0	19.09	19.09	19.11	20.5
10	QPSK	25	12	19.21	19.15	19.24	
10	QPSK	25	25	19.10	19.13	19.12	
10	QPSK	50	0	19.16	19.18	19.18	
10	16QAM	1	0	19.21	19.20	19.23	20.5
10	16QAM	1	25	19.45	19.48	19.47	
10	16QAM	1	49	19.22	19.22	19.23	
10	16QAM	25	0	19.13	19.11	19.14	20.5
10	16QAM	25	12	19.22	19.18	19.27	
10	16QAM	25	25	19.12	19.09	19.13	
10	16QAM	50	0	19.15	19.16	19.20	
10	64QAM	1	0	19.06	19.08	19.11	20.5
10	64QAM	1	25	19.39	19.39	19.42	
10	64QAM	1	49	19.11	19.14	19.12	
10	64QAM	25	0	19.13	19.15	19.17	20.5
10	64QAM	25	12	19.26	19.20	19.32	
10	64QAM	25	25	19.15	19.15	19.17	
10	64QAM	50	0	19.26	19.21	19.25	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	19.06	19.07	19.12	20.5
5	QPSK	1	12	19.13	19.15	19.15	
5	QPSK	1	24	19.03	19.03	19.07	
5	QPSK	12	0	19.25	19.18	19.19	20.5
5	QPSK	12	7	19.27	19.23	19.18	
5	QPSK	12	13	19.17	19.17	19.17	
5	QPSK	25	0	19.20	19.22	19.18	
5	16QAM	1	0	19.40	19.39	19.41	20.5
5	16QAM	1	12	19.36	19.40	19.45	
5	16QAM	1	24	19.36	19.37	19.36	
5	16QAM	12	0	19.27	19.22	19.23	20.5
5	16QAM	12	7	19.25	19.27	19.20	
5	16QAM	12	13	19.17	19.16	19.20	
5	16QAM	25	0	19.23	19.22	19.20	
5	64QAM	1	0	19.39	19.36	19.40	20.5
5	64QAM	1	12	19.36	19.39	19.38	
5	64QAM	1	24	19.24	19.31	19.28	
5	64QAM	12	0	19.31	19.30	19.29	20.5
5	64QAM	12	7	19.32	19.32	19.28	
5	64QAM	12	13	19.23	19.26	19.27	
5	64QAM	25	0	19.23	19.21	19.22	
Channel				131997	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1779.5	
3	QPSK	1	0	19.04	19.07	19.11	20.5
3	QPSK	1	8	19.18	19.08	19.16	
3	QPSK	1	14	19.05	19.01	19.11	
3	QPSK	8	0	19.33	19.18	19.23	20.5
3	QPSK	8	4	19.17	19.16	19.09	
3	QPSK	8	7	19.11	19.24	19.17	
3	QPSK	15	0	19.30	19.17	19.17	
3	16QAM	1	0	19.40	19.37	19.45	20.5
3	16QAM	1	8	19.30	19.50	19.38	
3	16QAM	1	14	19.46	19.38	19.27	
3	16QAM	8	0	19.17	19.14	19.30	20.5
3	16QAM	8	4	19.28	19.33	19.10	
3	16QAM	8	7	19.14	19.14	19.11	
3	16QAM	15	0	19.21	19.30	19.23	
3	64QAM	1	0	19.32	19.31	19.33	20.5
3	64QAM	1	8	19.29	19.39	19.46	
3	64QAM	1	14	19.31	19.24	19.30	
3	64QAM	8	0	19.22	19.25	19.34	20.5
3	64QAM	8	4	19.41	19.24	19.22	
3	64QAM	8	7	19.15	19.21	19.26	
3	64QAM	15	0	19.13	19.15	19.27	
Channel				131979	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.99	19.05	19.07	20.5
1.4	QPSK	1	3	19.13	19.10	19.15	
1.4	QPSK	1	5	19.05	19.06	19.03	
1.4	QPSK	3	0	19.06	19.07	19.07	20.5
1.4	QPSK	3	1	19.09	19.10	19.12	
1.4	QPSK	3	3	19.05	19.02	19.06	
1.4	QPSK	6	0	19.13	19.14	19.16	
1.4	16QAM	1	0	19.29	19.39	19.42	20.5
1.4	16QAM	1	3	19.42	19.43	19.45	
1.4	16QAM	1	5	19.33	19.33	19.35	
1.4	16QAM	3	0	19.15	19.18	19.19	20.5
1.4	16QAM	3	1	19.21	19.20	19.20	
1.4	16QAM	3	3	19.09	19.12	19.14	
1.4	16QAM	6	0	19.22	19.24	19.24	20.5
1.4	64QAM	1	0	19.24	19.35	19.36	
1.4	64QAM	1	3	19.31	19.37	19.39	
1.4	64QAM	1	5	19.21	19.31	19.29	20.5
1.4	64QAM	3	0	19.28	19.29	19.32	
1.4	64QAM	3	1	19.31	19.30	19.37	
1.4	64QAM	3	3	19.21	19.29	19.28	20.5
1.4	64QAM	6	0	19.13	19.13	19.17	



Band 2_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	15.54	15.51	15.53	16.5
20	QPSK	1	49	15.44	15.44	15.45	
20	QPSK	1	99	15.38	15.42	15.37	
20	QPSK	50	0	15.54	15.50	15.48	16.5
20	QPSK	50	24	15.59	15.65	15.54	
20	QPSK	50	50	15.52	15.58	15.58	
20	QPSK	100	0	15.53	15.56	15.49	16.5
20	16QAM	1	0	15.91	15.84	15.88	
20	16QAM	1	49	15.80	15.82	15.81	
20	16QAM	1	99	15.72	15.77	15.76	16.5
20	16QAM	50	0	15.55	15.46	15.48	
20	16QAM	50	24	15.61	15.63	15.54	
20	16QAM	50	50	15.55	15.57	15.56	16.5
20	16QAM	100	0	15.54	15.53	15.48	
20	64QAM	1	0	15.84	15.66	15.70	
20	64QAM	1	49	15.69	15.67	15.69	16.5
20	64QAM	1	99	15.63	15.64	15.64	
20	64QAM	50	0	15.57	15.47	15.50	
20	64QAM	50	24	15.63	15.62	15.56	16.5
20	64QAM	50	50	15.58	15.57	15.57	
20	64QAM	100	0	15.56	15.55	15.51	
Channel				18675	18900	19125	Tune-up
Frequency (MHz)				1857.5	1880	1902.5	limit
15	QPSK	1	0	15.43	15.54	15.55	16.5
15	QPSK	1	37	15.48	15.50	15.48	
15	QPSK	1	74	15.38	15.50	15.46	
15	QPSK	36	0	15.61	15.51	15.52	16.5
15	QPSK	36	20	15.63	15.66	15.63	
15	QPSK	36	39	15.60	15.63	15.61	
15	QPSK	75	0	15.59	15.60	15.52	16.5
15	16QAM	1	0	15.76	15.84	15.84	
15	16QAM	1	37	15.84	15.82	15.81	
15	16QAM	1	74	15.69	15.80	15.80	16.5
15	16QAM	36	0	15.61	15.45	15.49	
15	16QAM	36	20	15.65	15.64	15.63	
15	16QAM	36	39	15.60	15.60	15.60	16.5
15	16QAM	75	0	15.60	15.61	15.51	
15	64QAM	1	0	15.70	15.71	15.72	
15	64QAM	1	37	15.76	15.74	15.78	16.5
15	64QAM	1	74	15.61	15.70	15.67	
15	64QAM	36	0	15.67	15.53	15.54	
15	64QAM	36	20	15.65	15.66	15.69	16.5
15	64QAM	36	39	15.63	15.63	15.67	
15	64QAM	75	0	15.62	15.60	15.50	
Channel				18650	18900	19150	Tune-up
Frequency (MHz)				1855	1880	1905	limit
10	QPSK	1	0	15.14	15.03	15.38	16.5
10	QPSK	1	25	15.38	15.33	15.35	
10	QPSK	1	49	15.10	15.11	15.30	
10	QPSK	25	0	15.46	15.32	15.33	16.5
10	QPSK	25	12	15.50	15.47	15.40	
10	QPSK	25	25	15.40	15.37	15.36	
10	QPSK	50	0	15.42	15.41	15.31	16.5
10	16QAM	1	0	15.46	15.39	15.75	
10	16QAM	1	25	15.76	15.70	15.72	
10	16QAM	1	49	15.46	15.44	15.66	16.5
10	16QAM	25	0	15.42	15.31	15.31	
10	16QAM	25	12	15.52	15.48	15.38	
10	16QAM	25	25	15.36	15.37	15.36	16.5
10	16QAM	50	0	15.38	15.39	15.26	
10	64QAM	1	0	15.36	15.22	15.62	
10	64QAM	1	25	15.68	15.66	15.65	16.5
10	64QAM	1	49	15.37	15.34	15.55	
10	64QAM	25	0	15.44	15.32	15.36	
10	64QAM	25	12	15.55	15.52	15.44	16.5
10	64QAM	25	25	15.40	15.39	15.57	
10	64QAM	50	0	15.44	15.40	15.33	
Channel				18625	18900	19175	Tune-up
Frequency (MHz)				1852.5	1880	1907.5	limit
5	QPSK	1	0	15.40	15.29	15.27	16.5
5	QPSK	1	12	15.48	15.42	15.40	
5	QPSK	1	24	15.31	15.28	15.21	
5	QPSK	12	0	15.55	15.42	15.42	16.5
5	QPSK	12	7	15.53	15.50	15.43	
5	QPSK	12	13	15.48	15.41	15.37	
5	QPSK	25	0	15.51	15.47	15.37	16.5
5	16QAM	1	0	15.74	15.62	15.58	
5	16QAM	1	12	15.77	15.65	15.62	
5	16QAM	1	24	15.64	15.57	15.55	16.5
5	16QAM	12	0	15.55	15.44	15.42	
5	16QAM	12	7	15.57	15.47	15.42	
5	16QAM	12	13	15.42	15.42	15.38	16.5
5	16QAM	25	0	15.48	15.47	15.37	
5	64QAM	1	0	15.65	15.53	15.53	
5	64QAM	1	12	15.62	15.58	15.56	16.5
5	64QAM	1	24	15.49	15.47	15.48	
5	64QAM	12	0	15.61	15.49	15.51	
5	64QAM	12	7	15.61	15.53	15.47	16.5
5	64QAM	12	13	15.50	15.45	15.45	
5	64QAM	25	0	15.53	15.43	15.40	
Channel				18615	18900	19185	Tune-up
Frequency (MHz)				1851.5	1880	1908.5	limit
3	QPSK	1	0	15.49	15.35	15.40	16.5
3	QPSK	1	8	15.50	15.44	15.42	
3	QPSK	1	14	15.46	15.33	15.26	
3	QPSK	8	0	15.59	15.43	15.48	16.5
3	QPSK	8	4	15.58	15.47	15.52	
3	QPSK	8	7	15.46	15.44	15.42	
3	QPSK	15	0	15.54	15.45	15.48	16.5
3	16QAM	1	0	15.81	15.67	15.71	
3	16QAM	1	8	15.81	15.72	15.70	
3	16QAM	1	14	15.70	15.61	15.57	16.5
3	16QAM	8	0	15.59	15.47	15.48	
3	16QAM	8	4	15.63	15.52	15.53	
3	16QAM	8	7	15.52	15.48	15.43	16.5
3	16QAM	15	0	15.57	15.46	15.46	
3	64QAM	1	0	15.72	15.59	15.65	
3	64QAM	1	8	15.72	15.66	15.66	16.5
3	64QAM	1	14	15.59	15.51	15.51	
3	64QAM	8	0	15.80	15.49	15.54	
3	64QAM	8	4	15.62	15.56	15.56	16.5
3	64QAM	8	7	15.56	15.50	15.46	
3	64QAM	15	0	15.53	15.49	15.50	
Channel				18607	18900	19193	Tune-up
Frequency (MHz)				1850.7	1880	1909.3	limit
1.4	QPSK	1	0	15.35	15.32	15.31	16.5
1.4	QPSK	1	3	15.38	15.38	15.33	
1.4	QPSK	1	5	15.26	15.27	15.25	
1.4	QPSK	3	0	15.31	15.33	15.29	16.5
1.4	QPSK	3	1	15.36	15.38	15.32	
1.4	QPSK	3	3	15.34	15.32	15.24	
1.4	QPSK	6	0	15.40	15.42	15.36	16.5
1.4	16QAM	1	0	15.62	15.64	15.58	
1.4	16QAM	1	3	15.73	15.68	15.67	
1.4	16QAM	1	5	15.56	15.59	15.53	16.5
1.4	16QAM	3	0	15.40	15.41	15.35	
1.4	16QAM	3	1	15.45	15.45	15.40	
1.4	16QAM	3	3	15.38	15.36	15.33	16.5
1.4	16QAM	6	0	15.47	15.47	15.46	
1.4	64QAM	1	0	15.52	15.57	15.51	
1.4	64QAM	1	3	15.56	15.57	15.55	16.5
1.4	64QAM	1	5	15.48	15.49	15.44	
1.4	64QAM	3	0	15.54	15.53	15.52	
1.4	64QAM	3	1	15.54	15.58	15.54	16.5
1.4	64QAM	3	3	15.49	15.52	15.46	
1.4	64QAM	6	0	15.37	15.42	15.37	



Band 5_Ant 0								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20450	Power Middle Ch. Freq. 20525	Power High Ch. Freq. 20600	Tune-up limit (dBm)	
Channel								
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	24.02	24.02	24.06	25	
10	QPSK	1	25	24.02	24.01	24.02		
10	QPSK	1	49	24.04	24.13	24.01		
10	QPSK	25	0	23.10	23.09	23.10		
10	QPSK	25	12	23.19	23.18	23.15		
10	QPSK	25	25	23.19	23.15	23.14	24	
10	QPSK	50	0	23.12	23.10	23.03		
10	16QAM	1	0	23.39	23.37	23.46		
10	16QAM	1	25	23.39	23.41	23.39		
10	16QAM	1	49	23.42	23.41	23.39		
10	16QAM	25	0	22.11	22.09	22.11	23	
10	16QAM	25	12	22.21	22.19	22.13		
10	16QAM	25	25	22.19	22.16	22.16		
10	16QAM	50	0	22.10	22.11	22.01		
10	64QAM	1	0	22.22	22.20	22.23		
10	64QAM	1	25	22.33	22.30	22.33	23	
10	64QAM	1	49	22.32	22.28	22.28		
10	64QAM	25	0	21.13	21.13	21.14		
10	64QAM	25	12	21.26	21.25	21.17		
10	64QAM	25	25	21.20	21.19	21.19		
10	64QAM	50	0	21.12	21.15	21.06	22	
Channel								
Frequency (MHz)				20425	20525	20625		Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	23.93	23.93	23.91		25
5	QPSK	1	12	24.04	24.06	24.09		
5	QPSK	1	24	24.06	24.02	23.97		
5	QPSK	12	0	23.06	23.09	23.06		
5	QPSK	12	7	23.16	23.17	23.16		
5	QPSK	12	13	23.16	23.16	23.12	24	
5	QPSK	25	0	23.15	23.14	23.14		
5	16QAM	1	0	23.29	23.29	23.26		
5	16QAM	1	12	23.30	23.40	23.34		
5	16QAM	1	24	23.31	23.39	23.29		
5	16QAM	12	0	22.09	22.11	22.10	23	
5	16QAM	12	7	22.19	22.21	22.17		
5	16QAM	12	13	22.16	22.18	22.13		
5	16QAM	25	0	22.16	22.16	22.14		
5	64QAM	1	0	22.17	22.18	22.16		
5	64QAM	1	12	22.23	22.29	22.25	23	
5	64QAM	1	24	22.24	22.26	22.20		
5	64QAM	12	0	21.15	21.17	21.15		
5	64QAM	12	7	21.26	21.27	21.23		
5	64QAM	12	13	21.21	21.25	21.16		
5	64QAM	25	0	21.19	21.16	21.16	22	
Channel								
Frequency (MHz)				20415	20525	20635		Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	23.98	23.98	23.94		25
3	QPSK	1	8	24.12	24.10	24.07		
3	QPSK	1	14	24.06	24.04	23.99		
3	QPSK	8	0	23.08	23.09	23.06		
3	QPSK	8	4	23.18	23.18	23.15		
3	QPSK	8	7	23.16	23.15	23.11	24	
3	QPSK	15	0	23.16	23.13	23.08		
3	16QAM	1	0	23.25	23.31	23.30		
3	16QAM	1	8	23.30	23.45	23.39		
3	16QAM	1	14	23.34	23.41	23.34		
3	16QAM	8	0	22.14	22.15	22.11	23	
3	16QAM	8	4	22.24	22.25	22.22		
3	16QAM	8	7	22.22	22.22	22.18		
3	16QAM	15	0	22.17	22.19	22.08		
3	64QAM	1	0	22.19	22.19	22.17		
3	64QAM	1	8	22.34	22.35	22.32	23	
3	64QAM	1	14	22.26	22.32	22.21		
3	64QAM	8	0	21.17	21.17	21.14		
3	64QAM	8	4	21.25	21.25	21.22		
3	64QAM	8	7	21.22	21.23	21.16		
3	64QAM	15	0	21.19	21.19	21.10	22	
Channel								
Frequency (MHz)				20407	20525	20643		Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	23.90	24.00	23.94		25
1.4	QPSK	1	3	24.03	24.03	23.99		
1.4	QPSK	1	5	23.94	23.98	23.90		
1.4	QPSK	3	0	23.97	23.99	23.96		
1.4	QPSK	3	1	24.01	24.03	24.01		
1.4	QPSK	3	3	23.98	23.99	23.95	24	
1.4	QPSK	6	0	23.08	23.09	23.05		
1.4	16QAM	1	0	23.21	23.28	23.24		
1.4	16QAM	1	3	23.35	23.36	23.31		
1.4	16QAM	1	5	23.30	23.31	23.27		
1.4	16QAM	3	0	23.03	23.08	23.04	24	
1.4	16QAM	3	1	23.10	23.13	23.09		
1.4	16QAM	3	3	23.04	23.10	23.03		
1.4	16QAM	6	0	22.19	22.17	22.14		
1.4	64QAM	1	0	22.15	22.21	22.22		
1.4	64QAM	1	3	22.25	22.29	22.22	23	
1.4	64QAM	1	5	22.17	22.20	22.15		
1.4	64QAM	3	0	22.18	22.19	22.17		
1.4	64QAM	3	1	22.23	22.26	22.20		
1.4	64QAM	3	3	22.19	22.21	22.14		
1.4	64QAM	6	0	21.08	21.09	21.06	22	



Band 7_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq. 20850	Middle Ch. / Freq. 21100	High Ch. / Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	14.49	14.47	14.54	15.5
20	QPSK	1	49	14.48	14.54	14.59	
20	QPSK	1	99	14.55	14.52	14.65	
20	QPSK	50	0	14.60	14.86	14.84	15.5
20	QPSK	50	24	14.85	14.87	14.89	
20	QPSK	50	50	14.68	14.74	14.76	
20	QPSK	100	0	14.58	14.58	14.59	15.5
20	16QAM	1	0	14.89	14.85	14.96	
20	16QAM	1	49	14.93	14.97	14.98	
20	16QAM	1	99	14.99	15.00	15.08	15.5
20	16QAM	50	0	14.62	14.66	14.72	
20	16QAM	50	24	14.75	14.71	14.77	
20	16QAM	50	50	14.75	14.81	14.84	15.5
20	16QAM	100	0	14.65	14.80	14.88	
20	64QAM	1	0	14.71	14.71	14.82	
20	64QAM	1	49	14.82	14.79	14.82	15.5
20	64QAM	1	99	14.85	14.93	14.96	
20	64QAM	50	0	14.72	14.72	14.76	
20	64QAM	50	24	14.76	14.78	14.84	15.5
20	64QAM	50	50	14.75	14.82	14.87	
20	64QAM	100	0	14.70	14.62	14.74	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	14.54	14.54	14.58	15.5
15	QPSK	1	37	14.52	14.57	14.59	
15	QPSK	1	74	14.57	14.52	14.65	
15	QPSK	36	0	14.59	14.84	14.83	15.5
15	QPSK	36	20	14.70	14.87	14.70	
15	QPSK	36	39	14.71	14.76	14.78	
15	QPSK	75	0	14.61	14.59	14.60	15.5
15	16QAM	1	0	14.93	14.87	14.97	
15	16QAM	1	37	14.92	14.96	15.01	
15	16QAM	1	74	14.95	15.01	15.05	15.5
15	16QAM	36	0	14.67	14.67	14.75	
15	16QAM	36	20	14.73	14.70	14.86	
15	16QAM	36	39	14.75	14.78	14.86	15.5
15	64QAM	75	0	14.70	14.84	14.71	
15	64QAM	1	0	14.72	14.78	14.85	
15	64QAM	1	37	14.85	14.89	14.95	15.5
15	64QAM	1	74	14.86	14.90	15.00	
15	64QAM	36	0	14.74	14.72	14.82	
15	64QAM	36	20	14.80	14.77	14.90	15.5
15	64QAM	36	39	14.82	14.84	14.97	
15	64QAM	75	0	14.71	14.69	14.74	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	14.30	14.34	14.32	15.5
10	QPSK	1	25	14.30	14.39	14.36	
10	QPSK	1	49	14.35	14.44	14.44	
10	QPSK	25	0	14.38	14.42	14.44	15.5
10	QPSK	25	12	14.40	14.45	14.46	
10	QPSK	25	25	14.47	14.48	14.55	
10	QPSK	50	0	14.40	14.36	14.36	15.5
10	16QAM	1	0	14.73	14.78	14.82	
10	16QAM	1	25	14.75	14.81	14.82	
10	16QAM	1	49	14.78	14.86	14.91	15.5
10	16QAM	25	0	14.43	14.51	14.56	
10	16QAM	25	12	14.55	14.53	14.61	
10	16QAM	25	25	14.52	14.60	14.62	15.5
10	16QAM	50	0	14.43	14.40	14.53	
10	64QAM	1	0	14.67	14.65	14.67	
10	64QAM	1	25	14.71	14.78	14.79	15.5
10	64QAM	1	49	14.69	14.79	14.79	
10	64QAM	25	0	14.46	14.51	14.54	
10	64QAM	25	12	14.57	14.55	14.66	15.5
10	64QAM	25	25	14.55	14.62	14.65	
10	64QAM	50	0	14.47	14.44	14.55	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	14.31	14.38	14.40	15.5
5	QPSK	1	12	14.38	14.39	14.44	
5	QPSK	1	24	14.39	14.44	14.44	
5	QPSK	12	0	14.38	14.30	14.43	15.5
5	QPSK	12	7	14.51	14.45	14.51	
5	QPSK	12	13	14.45	14.50	14.50	
5	QPSK	25	0	14.41	14.42	14.50	15.5
5	16QAM	1	0	14.69	14.74	14.86	
5	16QAM	1	12	14.70	14.72	14.90	
5	16QAM	1	24	14.77	14.79	14.86	15.5
5	16QAM	12	0	14.50	14.52	14.60	
5	16QAM	12	7	14.58	14.56	14.63	
5	16QAM	12	13	14.51	14.58	14.59	15.5
5	64QAM	25	0	14.48	14.48	14.59	
5	64QAM	1	0	14.67	14.71	14.83	
5	64QAM	1	12	14.70	14.73	14.82	15.5
5	64QAM	1	24	14.73	14.76	14.86	
5	64QAM	12	0	14.56	14.55	14.63	
5	64QAM	12	7	14.62	14.62	14.66	15.5
5	64QAM	12	13	14.55	14.59	14.66	
5	64QAM	25	0	14.51	14.54	14.61	



Band 12_Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 23060	Power Middle Ch. Freq. 23095	Power High Ch. Freq. 23130
Channel				704	707.5	711
Frequency (MHz)				23.00	23.07	23.06
10	QPSK	1	0	23.03	23.03	23.03
10	QPSK	1	25	23.19	23.10	23.11
10	QPSK	25	0	22.05	22.06	22.08
10	QPSK	25	12	22.25	22.23	22.20
10	QPSK	25	25	22.21	22.19	22.22
10	QPSK	50	0	22.18	22.18	22.11
10	16QAM	1	0	22.38	22.40	22.42
10	16QAM	1	25	22.41	22.43	22.46
10	16QAM	1	49	22.51	22.49	22.49
10	16QAM	25	0	21.08	21.07	21.07
10	16QAM	25	12	21.27	21.25	21.20
10	16QAM	25	25	21.21	21.18	21.18
10	16QAM	50	0	21.18	21.19	21.10
10	64QAM	1	0	21.25	21.27	21.30
10	64QAM	1	25	21.38	21.38	21.37
10	64QAM	1	49	21.44	21.38	21.39
10	64QAM	25	0	20.09	20.11	20.11
10	64QAM	25	12	20.28	20.30	20.23
10	64QAM	25	25	20.25	20.22	20.28
10	64QAM	50	0	20.18	20.20	20.15
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	23.01	23.03	23.03
5	QPSK	1	12	23.09	23.10	23.15
5	QPSK	1	24	23.08	23.11	23.14
5	QPSK	12	0	22.16	22.18	22.17
5	QPSK	12	7	22.24	22.22	22.22
5	QPSK	12	13	22.20	22.22	22.22
5	QPSK	25	0	22.20	22.21	22.21
5	16QAM	1	0	22.38	22.38	22.36
5	16QAM	1	12	22.41	22.48	22.51
5	16QAM	1	24	22.41	22.44	22.49
5	16QAM	12	0	21.18	21.18	21.18
5	16QAM	12	7	21.24	21.28	21.28
5	16QAM	12	13	21.23	21.24	21.22
5	16QAM	25	0	21.22	21.24	21.19
5	64QAM	1	0	21.24	21.25	21.31
5	64QAM	1	12	21.30	21.35	21.33
5	64QAM	1	24	21.34	21.37	21.38
5	64QAM	12	0	20.20	20.21	20.23
5	64QAM	12	7	20.31	20.32	20.30
5	64QAM	12	13	20.25	20.27	20.27
5	64QAM	25	0	20.23	20.24	20.25
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	23.04	23.06	23.08
3	QPSK	1	8	23.14	23.16	23.14
3	QPSK	1	14	23.08	23.09	23.10
3	QPSK	8	0	22.13	22.14	22.13
3	QPSK	8	4	22.19	22.24	22.15
3	QPSK	8	7	22.18	22.21	22.18
3	QPSK	15	0	22.19	22.20	22.12
3	16QAM	1	0	22.37	22.39	22.41
3	16QAM	1	8	22.51	22.48	22.51
3	16QAM	1	14	22.47	22.44	22.44
3	16QAM	8	0	21.19	21.23	21.21
3	16QAM	8	4	21.28	21.28	21.23
3	16QAM	8	7	21.27	21.27	21.25
3	16QAM	15	0	21.25	21.23	21.17
3	64QAM	1	0	21.31	21.31	21.32
3	64QAM	1	8	21.42	21.42	21.40
3	64QAM	1	14	21.35	21.40	21.33
3	64QAM	8	0	20.21	20.22	20.22
3	64QAM	8	4	20.29	20.29	20.21
3	64QAM	8	7	20.25	20.28	20.28
3	64QAM	15	0	20.24	20.24	20.16
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	23.02	22.94	22.82
1.4	QPSK	1	3	23.08	23.09	23.06
1.4	QPSK	1	5	22.99	23.01	23.03
1.4	QPSK	3	0	23.04	23.05	22.94
1.4	QPSK	3	1	23.07	23.08	23.06
1.4	QPSK	3	3	23.02	23.03	23.00
1.4	QPSK	6	0	22.12	22.12	22.11
1.4	16QAM	1	0	22.32	22.31	22.29
1.4	16QAM	1	3	22.42	22.40	22.42
1.4	16QAM	1	5	22.31	22.33	22.33
1.4	16QAM	3	0	22.13	22.11	22.06
1.4	16QAM	3	1	22.18	22.15	22.17
1.4	16QAM	3	3	22.14	22.09	22.13
1.4	16QAM	6	0	21.20	21.22	21.18
1.4	64QAM	1	0	21.27	21.21	21.18
1.4	64QAM	1	3	21.34	21.31	21.29
1.4	64QAM	1	5	21.26	21.29	21.29
1.4	64QAM	3	0	21.23	21.24	21.17
1.4	64QAM	3	1	21.30	21.28	21.26
1.4	64QAM	3	3	21.25	21.25	21.22
1.4	64QAM	6	0	20.13	20.13	20.11



Band 13_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dB)
Channel				782			
Frequency (MHz)							
10	QPSK	1	0		23.12		24
10	QPSK	1	25		23.04		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.12		23
10	QPSK	25	12		22.12		
10	QPSK	25	25		22.17		
10	QPSK	50	0		22.06		23
10	16QAM	1	0		22.42		
10	16QAM	1	25		22.42		
10	16QAM	1	49		22.41		22
10	16QAM	25	0		21.13		
10	16QAM	25	12		21.16		
10	16QAM	25	25		21.13		22
10	16QAM	50	0		21.04		
10	64QAM	1	0		21.28		
10	64QAM	1	25		21.35		22
10	64QAM	1	49		21.33		
10	64QAM	25	0		20.15		
10	64QAM	25	12		20.16		21
10	64QAM	25	25		20.21		
10	64QAM	50	0		20.04		
Channel				23205	23230	23255	
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.00	23.06	23.05	24
5	QPSK	1	12	23.08	23.10	23.09	
5	QPSK	1	24	23.09	23.11	23.09	
5	QPSK	12	0	22.08	22.08	22.08	23
5	QPSK	12	7	22.20	22.13	22.18	
5	QPSK	12	13	22.17	22.15	22.17	
5	QPSK	25	0	22.14	22.11	22.16	23
5	16QAM	1	0	22.37	22.35	22.38	
5	16QAM	1	12	22.36	22.35	22.36	
5	16QAM	1	24	22.41	22.42	22.44	22
5	16QAM	12	0	21.12	21.11	21.09	
5	16QAM	12	7	21.21	21.14	21.19	
5	16QAM	12	13	21.20	21.17	21.17	22
5	16QAM	25	0	21.16	21.14	21.17	
5	64QAM	1	0	21.27	21.31	21.31	
5	64QAM	1	12	21.30	21.27	21.24	22
5	64QAM	1	24	21.34	21.29	21.26	
5	64QAM	12	0	20.19	20.15	20.15	
5	64QAM	12	7	20.25	20.22	20.27	21
5	64QAM	12	13	20.25	20.24	20.24	
5	64QAM	25	0	20.19	20.16	20.20	



Band 17_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low Ch. Freq. 23740	Middle Ch. Freq. 23790	High Ch. Freq. 23800	
Channel				706	710	711	
Frequency (MHz)							
10	QPSK	1	0	22.97	22.95	22.95	24
10	QPSK	1	25	23.03	23.01	23.04	
10	QPSK	1	49	23.09	23.11	23.07	
10	QPSK	25	0	22.07	22.05	22.07	23
10	QPSK	25	12	22.11	22.11	22.11	
10	QPSK	25	25	22.21	22.21	22.20	
10	QPSK	50	0	22.10	22.12	22.11	23
10	16QAM	1	0	22.28	22.27	22.30	
10	16QAM	1	25	22.35	22.39	22.42	
10	16QAM	1	49	22.45	22.45	22.43	22
10	16QAM	25	0	21.08	21.07	21.08	
10	16QAM	25	12	21.12	21.11	21.10	
10	16QAM	25	25	21.20	21.15	21.22	22
10	16QAM	50	0	21.08	21.09	21.11	
10	64QAM	1	0	21.19	21.12	21.24	
10	64QAM	1	25	21.32	21.32	21.35	22
10	64QAM	1	49	21.34	21.35	21.35	
10	64QAM	25	0	20.08	20.11	20.13	
10	64QAM	25	12	20.15	20.16	20.16	21
10	64QAM	25	25	20.21	20.23	20.24	
10	64QAM	50	0	20.13	20.13	20.13	
Channel				23755	23790	23825	Tune-up
Frequency (MHz)				706.5	710	713.5	limit (dBm)
5	QPSK	1	0	22.93	22.95	22.88	24
5	QPSK	1	12	23.04	23.07	23.09	
5	QPSK	1	24	23.10	23.08	23.07	
5	QPSK	12	0	22.06	22.06	22.09	23
5	QPSK	12	7	22.15	22.16	22.19	
5	QPSK	12	13	22.16	22.16	22.17	
5	QPSK	25	0	22.14	22.16	22.11	23
5	16QAM	1	0	22.24	22.26	22.27	
5	16QAM	1	12	22.31	22.31	22.40	
5	16QAM	1	24	22.38	22.43	22.37	22
5	16QAM	12	0	21.07	21.10	21.09	
5	16QAM	12	7	21.17	21.18	21.18	
5	16QAM	12	13	21.17	21.16	21.18	22
5	16QAM	25	0	21.14	21.17	21.10	
5	64QAM	1	0	21.18	21.23	21.21	
5	64QAM	1	12	21.20	21.23	21.26	22
5	64QAM	1	24	21.31	21.31	21.29	
5	64QAM	12	0	20.14	20.16	20.17	
5	64QAM	12	7	20.22	20.25	20.27	21
5	64QAM	12	13	20.22	20.24	20.25	
5	64QAM	25	0	20.19	20.20	20.13	



Band 26_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. Freq. 26765	Middle Ch. Freq. 26865	High Ch. Freq. 26965	
Channel				821.5	831.5	841.5	
Frequency (MHz)				23.16	23.12	23.11	
15	QPSK	1	0	23.17	23.12	23.13	24
15	QPSK	1	37	23.29	23.24	23.14	
15	QPSK	36	0	22.12	22.12	22.09	23
15	QPSK	36	20	22.28	22.22	22.26	
15	QPSK	36	39	22.20	22.22	22.18	
15	QPSK	75	0	22.22	22.14	22.12	
15	16QAM	1	0	22.50	22.43	22.42	23
15	16QAM	1	37	22.47	22.50	22.47	
15	16QAM	1	74	22.49	22.49	22.43	
15	16QAM	36	0	21.13	21.14	21.14	22
15	16QAM	36	20	21.29	21.22	21.26	
15	16QAM	36	39	21.24	21.23	21.19	
15	16QAM	75	0	21.22	21.15	21.13	
15	64QAM	1	0	21.31	21.30	21.35	22
15	64QAM	1	37	21.44	21.42	21.38	
15	64QAM	1	74	21.46	21.46	21.28	
15	64QAM	36	0	20.17	20.21	20.15	21
15	64QAM	36	20	20.31	20.24	20.31	
15	64QAM	36	39	20.30	20.28	20.28	
15	64QAM	75	0	20.24	20.15	20.14	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.04	22.98	22.99	24
10	QPSK	1	25	22.94	22.99	22.96	
10	QPSK	1	49	22.99	23.02	22.96	
10	QPSK	25	0	21.91	21.97	21.94	23
10	QPSK	25	12	22.10	22.09	22.05	
10	QPSK	25	25	22.02	22.09	22.04	
10	QPSK	50	0	22.00	21.99	21.97	
10	16QAM	1	0	22.38	22.35	22.37	23
10	16QAM	1	25	22.35	22.35	22.34	
10	16QAM	1	49	22.38	22.35	22.28	
10	16QAM	25	0	20.89	20.97	20.97	22
10	16QAM	25	12	21.10	21.12	21.09	
10	16QAM	25	25	21.04	21.10	21.03	
10	16QAM	50	0	21.02	21.01	20.97	
10	64QAM	1	0	21.23	21.21	21.20	22
10	64QAM	1	25	21.22	21.30	21.27	
10	64QAM	1	49	21.27	21.29	21.21	
10	64QAM	25	0	19.95	19.99	20.00	21
10	64QAM	25	12	20.14	20.15	20.13	
10	64QAM	25	25	20.06	20.13	20.08	
10	64QAM	50	0	20.05	20.03	19.97	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.88	22.95	22.95	24
5	QPSK	1	12	23.03	23.04	22.99	
5	QPSK	1	24	23.09	23.02	22.94	
5	QPSK	12	0	22.02	22.06	22.01	23
5	QPSK	12	7	22.15	22.18	22.09	
5	QPSK	12	13	22.10	22.14	22.04	
5	QPSK	25	0	22.11	22.06	22.01	
5	16QAM	1	0	22.18	22.28	22.32	23
5	16QAM	1	12	22.35	22.36	22.34	
5	16QAM	1	24	22.30	22.32	22.23	
5	16QAM	12	0	21.03	21.07	21.02	22
5	16QAM	12	7	21.17	21.20	21.11	
5	16QAM	12	13	21.12	21.16	21.04	
5	16QAM	25	0	21.11	21.08	21.02	
5	64QAM	1	0	21.11	21.25	21.17	22
5	64QAM	1	12	21.26	21.26	21.16	
5	64QAM	1	24	21.25	21.29	21.14	
5	64QAM	12	0	20.07	20.12	20.08	21
5	64QAM	12	7	20.21	20.27	20.16	
5	64QAM	12	13	20.15	20.22	20.12	
5	64QAM	25	0	20.12	20.11	20.04	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.95	22.98	22.99	24
3	QPSK	1	8	23.10	23.11	22.98	
3	QPSK	1	14	22.99	23.07	22.89	
3	QPSK	8	0	22.02	22.06	22.04	23
3	QPSK	8	4	22.14	22.21	22.09	
3	QPSK	8	7	22.13	22.18	22.04	
3	QPSK	15	0	22.10	22.07	22.03	
3	16QAM	1	0	22.27	22.27	22.27	23
3	16QAM	1	8	22.30	22.36	22.33	
3	16QAM	1	14	22.31	22.36	22.19	
3	16QAM	8	0	21.08	21.13	21.11	22
3	16QAM	8	4	21.19	21.23	21.12	
3	16QAM	8	7	21.16	21.16	21.08	
3	16QAM	15	0	21.12	21.11	21.06	
3	64QAM	1	0	21.13	21.19	21.21	22
3	64QAM	1	8	21.32	21.31	21.19	
3	64QAM	1	14	21.23	21.25	21.12	
3	64QAM	8	0	20.10	20.14	20.12	21
3	64QAM	8	4	20.22	20.26	20.16	
3	64QAM	8	7	20.15	20.21	20.11	
3	64QAM	15	0	20.15	20.12	20.08	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.90	22.88	22.83	24
1.4	QPSK	1	3	23.02	22.99	22.88	
1.4	QPSK	1	5	22.99	22.96	22.81	
1.4	QPSK	3	0	22.96	22.89	22.83	23
1.4	QPSK	3	1	22.98	22.94	22.88	
1.4	QPSK	3	3	22.98	22.95	22.85	
1.4	QPSK	6	0	22.04	21.96	21.95	
1.4	16QAM	1	0	22.23	22.18	22.15	23
1.4	16QAM	1	3	22.31	22.33	22.26	
1.4	16QAM	1	5	22.28	22.25	22.14	
1.4	16QAM	3	0	22.01	21.95	21.89	22
1.4	16QAM	3	1	22.08	22.02	21.93	
1.4	16QAM	3	3	22.01	22.00	21.89	
1.4	16QAM	6	0	21.13	21.12	21.06	22
1.4	64QAM	1	0	21.13	21.10	21.08	
1.4	64QAM	1	3	21.24	21.23	21.08	22
1.4	64QAM	1	5	21.18	21.17	21.07	
1.4	64QAM	3	0	21.17	21.10	21.06	
1.4	64QAM	3	1	21.24	21.16	21.10	
1.4	64QAM	3	3	21.17	21.18	21.05	21
1.4	64QAM	6	0	20.07	20.04	19.97	



Band 66_Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)		
				Low Ch. / Freq. 132072	Middle Ch. / Freq. 132322	High Ch. / Freq. 132572			
Channel				1720	1745	1770			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	15.35	15.40	15.68	16.5		
20	QPSK	1	49	15.56	15.63	15.68			
20	QPSK	1	99	15.27	15.28	15.54			
20	QPSK	50	0	15.65	15.69	15.71	16.5		
20	QPSK	50	24	15.75	15.70	15.81			
20	QPSK	50	50	15.58	15.65	15.64			
20	QPSK	100	0	15.67	15.70	15.74	16.5		
20	16QAM	1	0	15.71	15.68	16.08			
20	16QAM	1	49	15.85	15.92	16.01			
20	16QAM	1	99	15.54	15.59	15.82	16.5		
20	16QAM	50	0	15.68	15.68	15.72			
20	16QAM	50	24	15.75	15.70	15.84			
20	16QAM	50	50	15.61	15.68	15.70	16.5		
20	16QAM	100	0	15.68	15.70	15.75			
20	64QAM	1	0	15.57	15.58	15.85			
20	64QAM	1	49	15.79	15.81	15.91	16.5		
20	64QAM	1	99	15.48	15.58	15.78			
20	64QAM	50	0	15.70	15.72	15.74			
20	64QAM	50	24	15.76	15.72	15.83	16.5		
20	64QAM	50	50	15.65	15.67	15.71			
20	64QAM	100	0	15.70	15.71	15.75			
Channel				132047	132322	132697	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	15.54	15.52	15.78	16.5		
15	QPSK	1	37	15.68	15.63	15.64			
15	QPSK	1	74	15.41	15.43	15.59			
15	QPSK	36	0	15.65	15.70	15.73	16.5		
15	QPSK	36	20	15.71	15.75	15.71			
15	QPSK	36	39	15.67	15.67	15.73			
15	QPSK	75	0	15.71	15.71	15.72	16.5		
15	16QAM	1	0	15.83	15.83	16.03			
15	16QAM	1	37	15.81	15.91	15.95			
15	16QAM	1	74	15.68	15.71	15.86	16.5		
15	16QAM	36	0	15.65	15.71	15.76			
15	16QAM	36	20	15.73	15.74	15.74			
15	16QAM	36	39	15.66	15.69	15.72	16.5		
15	16QAM	75	0	15.70	15.73	15.72			
15	64QAM	1	0	15.72	15.72	15.92			
15	64QAM	1	37	15.83	15.83	15.90	16.5		
15	64QAM	1	74	15.64	15.64	15.79			
15	64QAM	36	0	15.68	15.75	15.78			
15	64QAM	36	20	15.75	15.78	15.79	16.5		
15	64QAM	36	39	15.70	15.70	15.77			
15	64QAM	75	0	15.71	15.75	15.72			
Channel				132022	132322	132622	Tune-up limit (dBm)		
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	15.17	15.15	15.22	16.5		
10	QPSK	1	25	15.36	15.38	15.39			
10	QPSK	1	49	15.38	15.13	15.11			
10	QPSK	25	0	15.39	15.44	15.48	16.5		
10	QPSK	25	12	15.52	15.49	15.60			
10	QPSK	25	25	15.42	15.47	15.53			
10	QPSK	50	0	15.51	15.47	15.52	16.5		
10	16QAM	1	0	15.63	15.52	15.67			
10	16QAM	1	25	15.82	15.92	15.95			
10	16QAM	1	49	15.53	15.62	15.64	16.5		
10	16QAM	25	0	15.38	15.44	15.49			
10	16QAM	25	12	15.57	15.48	15.56			
10	16QAM	25	25	15.40	15.46	15.49	16.5		
10	16QAM	50	0	15.46	15.48	15.52			
10	64QAM	1	0	15.37	15.37	15.44			
10	64QAM	1	25	15.68	15.69	15.76	16.5		
10	64QAM	1	49	15.43	15.45	15.49			
10	64QAM	25	0	15.41	15.45	15.50			
10	64QAM	25	12	15.56	15.52	15.64	16.5		
10	64QAM	25	25	15.46	15.45	15.52			
10	64QAM	50	0	15.50	15.50	15.52			
Channel				131997	132322	132657	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	15.33	15.42	15.42	16.5		
5	QPSK	1	12	15.51	15.53	15.54			
5	QPSK	1	24	15.39	15.37	15.33			
5	QPSK	12	0	15.57	15.51	15.56	16.5		
5	QPSK	12	7	15.55	15.57	15.54			
5	QPSK	12	13	15.50	15.49	15.53			
5	QPSK	25	0	15.54	15.54	15.54	16.5		
5	16QAM	1	0	15.89	15.80	15.84			
5	16QAM	1	12	15.65	16.01	16.07			
5	16QAM	1	24	15.78	15.77	15.85	16.5		
5	16QAM	12	0	15.59	15.55	15.59			
5	16QAM	12	7	15.59	15.60	15.58			
5	16QAM	12	13	15.48	15.50	15.55	16.5		
5	16QAM	25	0	15.52	15.56	15.52			
5	64QAM	1	0	15.69	15.67	15.65			
5	64QAM	1	12	15.70	15.69	15.65	16.5		
5	64QAM	1	24	15.59	15.62	15.61			
5	64QAM	12	0	15.65	15.58	15.65			
5	64QAM	12	7	15.64	15.66	15.62	16.5		
5	64QAM	12	13	15.55	15.58	15.55			
5	64QAM	25	0	15.54	15.53	15.56			
Channel				131997	132322	132657	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1745	1779.5			
3	QPSK	1	0	15.35	15.43	15.40	16.5		
3	QPSK	1	8	15.48	15.45	15.60			
3	QPSK	1	14	15.38	15.34	15.38			
3	QPSK	8	0	15.50	15.46	15.49	16.5		
3	QPSK	8	4	15.49	15.50	15.49			
3	QPSK	8	7	15.40	15.44	15.50			
3	QPSK	15	0	15.53	15.55	15.55	16.5		
3	16QAM	1	0	15.86	15.73	15.88			
3	16QAM	1	8	16.07	16.06	16.05			
3	16QAM	1	14	15.72	15.75	15.81	16.5		
3	16QAM	8	0	15.61	15.55	15.62			
3	16QAM	8	4	15.60	15.63	15.60			
3	16QAM	8	7	15.56	15.57	15.62	16.5		
3	16QAM	15	0	15.57	15.58	15.56			
3	64QAM	1	0	15.72	15.71	15.65			
3	64QAM	1	8	15.72	15.72	15.73	16.5		
3	64QAM	1	14	15.63	15.63	15.63			
3	64QAM	8	0	15.61	15.58	15.65			
3	64QAM	8	4	15.62	15.64	15.62	16.5		
3	64QAM	8	7	15.53	15.57	15.61			
3	64QAM	15	0	15.52	15.56	15.56			
Channel				131979	132322	132665	Tune-up limit (dBm)		
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	15.31	15.39	15.43	16.5		
1.4	QPSK	1	3	15.42	15.38	15.42			
1.4	QPSK	1	5	15.38	15.31	15.38			
1.4	QPSK	3	0	15.40	15.42	15.52	16.5		
1.4	QPSK	3	1	15.58	15.53	15.60			
1.4	QPSK	3	3	15.44	15.39	15.49			
1.4	QPSK	6	0	15.47	15.46	15.52	16.5		
1.4	16QAM	1	0	15.66	15.75	15.74			
1.4	16QAM	1	3	15.83	15.73	15.72			
1.4	16QAM	1	5	15.69	15.56	15.74	16.5		
1.4	16QAM	3	0	15.62	15.59	15.63			
1.4	16QAM	3	1	15.70	15.64	15.74			
1.4	16QAM	3	3	15.62	15.54	15.62	16.5		
1.4	16QAM	6	0	15.52	15.57	15.62			
1.4	64QAM	1	0	15.60	15.64	15.66			
1.4	64QAM	1	3	15.68	15.68	15.69	16.5		
1.4	64QAM	1	5	15.57	15.58	15.61			
1.4	64QAM	3	0	15.57	15.59	15.67			
1.4	64QAM	3	1	15.65	15.66	15.72	16.5		
1.4	64QAM	3	3	15.57	15.58	15.66			
1.4	64QAM	6	0	15.46	15.50	15.55			



Band 2_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 18700	Power Middle Ch. Freq. 18900	Power High Ch. Freq. 19100	Tune-up limit (dBm)
Channel				1860	1880	1900	
Frequency (MHz)							
20	QPSK	1	0	12.56	12.50	12.53	13.5
20	QPSK	1	49	12.45	12.48	12.45	
20	QPSK	1	99	12.38	12.48	12.41	
20	QPSK	50	0	12.54	12.48	12.48	13.5
20	QPSK	50	24	12.63	12.56	12.62	
20	QPSK	50	50	12.50	12.55	12.52	
20	QPSK	100	0	12.51	12.44	12.53	13.5
20	16QAM	1	0	12.91	12.85	12.87	
20	16QAM	1	49	12.79	12.82	12.82	
20	16QAM	1	99	12.73	12.80	12.75	13.5
20	16QAM	50	0	12.55	12.48	12.48	
20	16QAM	50	24	12.61	12.55	12.63	
20	16QAM	50	50	12.52	12.54	12.55	13.5
20	16QAM	100	0	12.52	12.45	12.56	
20	64QAM	1	0	12.84	12.71	12.75	
20	64QAM	1	49	12.68	12.70	12.69	13.5
20	64QAM	1	99	12.64	12.70	12.67	
20	64QAM	50	0	12.56	12.49	12.52	
20	64QAM	50	24	12.64	12.57	12.68	13.5
20	64QAM	50	50	12.52	12.57	12.57	
20	64QAM	100	0	12.54	12.47	12.57	
Channel				1867.5	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	12.43	12.53	12.54	13.5
15	QPSK	1	37	12.45	12.46	12.48	
15	QPSK	1	74	12.31	12.49	12.46	
15	QPSK	36	0	12.35	12.49	12.51	13.5
15	QPSK	36	20	12.64	12.63	12.55	
15	QPSK	36	39	12.58	12.61	12.57	
15	QPSK	75	0	12.57	12.51	12.49	13.5
15	16QAM	1	0	12.79	12.85	12.87	
15	16QAM	1	37	12.82	12.85	12.85	
15	16QAM	1	74	12.64	12.82	12.79	13.5
15	16QAM	36	0	12.58	12.50	12.51	
15	16QAM	36	20	12.60	12.66	12.58	
15	16QAM	36	39	12.57	12.60	12.58	13.5
15	16QAM	75	0	12.58	12.52	12.54	
15	64QAM	1	0	12.64	12.72	12.74	
15	64QAM	1	37	12.73	12.72	12.75	13.5
15	64QAM	1	74	12.53	12.73	12.67	
15	64QAM	36	0	12.62	12.54	12.54	
15	64QAM	36	20	12.64	12.68	12.61	13.5
15	64QAM	36	39	12.62	12.64	12.65	
15	64QAM	75	0	12.60	12.53	12.56	
Channel				1865	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	12.10	12.03	12.38	13.5
10	QPSK	1	25	12.33	12.33	12.33	
10	QPSK	1	49	12.01	12.03	12.32	
10	QPSK	25	0	12.34	12.26	12.26	13.5
10	QPSK	25	12	12.45	12.37	12.42	
10	QPSK	25	25	12.34	12.34	12.33	
10	QPSK	50	0	12.37	12.30	12.37	13.5
10	16QAM	1	0	12.48	12.44	12.79	
10	16QAM	1	25	12.70	12.72	12.75	
10	16QAM	1	49	12.36	12.41	12.68	13.5
10	16QAM	25	0	12.37	12.31	12.32	
10	16QAM	25	12	12.45	12.36	12.48	
10	16QAM	25	25	12.33	12.35	12.32	13.5
10	16QAM	50	0	12.36	12.30	12.38	
10	64QAM	1	0	12.38	12.31	12.67	
10	64QAM	1	25	12.67	12.66	12.65	13.5
10	64QAM	1	49	12.29	12.33	12.64	
10	64QAM	25	0	12.41	12.34	12.32	
10	64QAM	25	12	12.52	12.43	12.49	13.5
10	64QAM	25	25	12.38	12.39	12.65	
10	64QAM	50	0	12.40	12.32	12.42	
Channel				1862.5	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	12.30	12.22	12.22	13.5
5	QPSK	1	12	12.39	12.40	12.33	
5	QPSK	1	24	12.27	12.25	12.21	
5	QPSK	12	0	12.45	12.37	12.33	13.5
5	QPSK	12	7	12.49	12.46	12.42	
5	QPSK	12	13	12.44	12.38	12.40	
5	QPSK	25	0	12.40	12.37	12.32	13.5
5	16QAM	1	0	12.64	12.55	12.52	
5	16QAM	1	12	12.66	12.65	12.61	
5	16QAM	1	24	12.57	12.58	12.54	13.5
5	16QAM	12	0	12.45	12.35	12.37	
5	16QAM	12	7	12.51	12.47	12.43	
5	16QAM	12	13	12.40	12.44	12.36	13.5
5	16QAM	25	0	12.44	12.44	12.38	
5	64QAM	1	0	12.57	12.48	12.48	
5	64QAM	1	12	12.62	12.61	12.60	13.5
5	64QAM	1	24	12.52	12.48	12.45	
5	64QAM	12	0	12.54	12.46	12.42	
5	64QAM	12	7	12.57	12.58	12.46	13.5
5	64QAM	12	13	12.51	12.48	12.46	
5	64QAM	25	0	12.44	12.46	12.41	
Channel				1861.5	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	12.37	12.28	12.31	13.5
3	QPSK	1	8	12.44	12.42	12.41	
3	QPSK	1	14	12.33	12.33	12.26	
3	QPSK	8	0	12.46	12.42	12.45	13.5
3	QPSK	8	4	12.52	12.51	12.44	
3	QPSK	8	7	12.48	12.41	12.42	
3	QPSK	15	0	12.48	12.46	12.44	13.5
3	16QAM	1	0	12.68	12.60	12.63	
3	16QAM	1	8	12.78	12.79	12.73	
3	16QAM	1	14	12.66	12.64	12.59	13.5
3	16QAM	8	0	12.55	12.44	12.48	
3	16QAM	8	4	12.53	12.55	12.47	
3	16QAM	8	7	12.51	12.45	12.48	13.5
3	16QAM	15	0	12.51	12.45	12.47	
3	64QAM	1	0	12.63	12.56	12.57	
3	64QAM	1	8	12.75	12.69	12.64	13.5
3	64QAM	1	14	12.62	12.58	12.50	
3	64QAM	8	0	12.53	12.45	12.50	
3	64QAM	8	4	12.60	12.55	12.54	13.5
3	64QAM	8	7	12.50	12.49	12.46	
3	64QAM	15	0	12.53	12.45	12.48	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	12.28	12.29	12.22	13.5
1.4	QPSK	1	3	12.35	12.34	12.31	
1.4	QPSK	1	5	12.29	12.25	12.20	
1.4	QPSK	3	0	12.35	12.33	12.22	13.5
1.4	QPSK	3	1	12.33	12.30	12.25	
1.4	QPSK	3	3	12.31	12.27	12.26	
1.4	QPSK	6	0	12.38	12.36	12.34	13.5
1.4	16QAM	1	0	12.64	12.62	12.56	
1.4	16QAM	1	3	12.73	12.68	12.66	
1.4	16QAM	1	5	12.67	12.62	12.55	13.5
1.4	16QAM	3	0	12.40	12.38	12.33	
1.4	16QAM	3	1	12.45	12.43	12.40	
1.4	16QAM	3	3	12.39	12.39	12.34	13.5
1.4	16QAM	6	0	12.46	12.50	12.44	
1.4	64QAM	1	0	12.58	12.52	12.53	
1.4	64QAM	1	3	12.66	12.59	12.55	13.5
1.4	64QAM	1	5	12.54	12.54	12.49	
1.4	64QAM	3	0	12.58	12.51	12.46	
1.4	64QAM	3	1	12.61	12.58	12.50	13.5
1.4	64QAM	3	3	12.53	12.52	12.46	
1.4	64QAM	6	0	12.41	12.41	12.37	



Band 4_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch / Freq. 20050	Middle Ch / Freq. 20175	High Ch / Freq. 20300	
Channel				1720	1732.5	1745	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	12.38	12.41	12.41	13.5
20	QPSK	1	49	12.53	12.55	12.54	
20	QPSK	1	99	12.22	12.16	12.14	
20	QPSK	50	0	12.63	12.80	12.82	13.5
20	QPSK	50	24	12.73	12.66	12.63	
20	QPSK	50	50	12.58	12.62	12.58	
20	QPSK	100	0	12.62	12.54	12.62	13.5
20	16QAM	1	0	12.72	12.75	12.76	
20	16QAM	1	49	12.87	12.91	12.90	
20	16QAM	1	99	12.55	12.53	12.51	13.5
20	16QAM	50	0	12.57	12.61	12.60	
20	16QAM	50	24	12.68	12.64	12.61	
20	16QAM	50	50	12.58	12.58	12.57	13.5
20	16QAM	100	0	12.60	12.52	12.60	
20	64QAM	1	0	12.52	12.58	12.54	
20	64QAM	1	49	12.72	12.78	12.71	13.5
20	64QAM	1	99	12.41	12.38	12.35	
20	64QAM	50	0	12.59	12.62	12.60	
20	64QAM	50	24	12.72	12.67	12.64	13.5
20	64QAM	50	50	12.60	12.59	12.58	
20	64QAM	100	0	12.63	12.56	12.62	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	12.50	12.50	12.49	13.5
15	QPSK	1	37	12.56	12.57	12.53	
15	QPSK	1	74	12.36	12.38	12.35	
15	QPSK	36	0	12.60	12.82	12.58	13.5
15	QPSK	36	20	12.72	12.65	12.70	
15	QPSK	36	39	12.65	12.63	12.63	
15	QPSK	75	0	12.64	12.60	12.65	13.5
15	16QAM	1	0	12.80	12.84	12.82	
15	16QAM	1	37	12.89	12.90	12.87	
15	16QAM	1	74	12.69	12.71	12.68	13.5
15	16QAM	36	0	12.60	12.62	12.57	
15	16QAM	36	20	12.72	12.64	12.70	
15	16QAM	36	39	12.63	12.64	12.61	13.5
15	16QAM	75	0	12.66	12.57	12.62	
15	64QAM	1	0	12.65	12.67	12.62	
15	64QAM	1	37	12.77	12.81	12.75	13.5
15	64QAM	1	74	12.54	12.55	12.55	
15	64QAM	36	0	12.61	12.65	12.62	
15	64QAM	36	20	12.70	12.67	12.73	13.5
15	64QAM	36	39	12.65	12.67	12.68	
15	64QAM	75	0	12.66	12.61	12.64	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	12.16	12.16	12.17	13.5
10	QPSK	1	25	12.38	12.40	12.36	
10	QPSK	1	49	12.11	12.12	12.07	
10	QPSK	25	0	12.33	12.35	12.31	13.5
10	QPSK	25	12	12.49	12.42	12.44	
10	QPSK	25	25	12.42	12.42	12.41	
10	QPSK	50	0	12.47	12.36	12.35	13.5
10	16QAM	1	0	12.53	12.52	12.51	
10	16QAM	1	25	12.71	12.75	12.73	
10	16QAM	1	49	12.43	12.46	12.44	13.5
10	16QAM	25	0	12.33	12.34	12.32	
10	16QAM	25	12	12.49	12.43	12.43	
10	16QAM	25	25	12.41	12.41	12.42	13.5
10	16QAM	50	0	12.44	12.36	12.31	
10	64QAM	1	0	12.33	12.39	12.38	
10	64QAM	1	25	12.65	12.70	12.66	13.5
10	64QAM	1	49	12.35	12.38	12.36	
10	64QAM	25	0	12.35	12.39	12.35	
10	64QAM	25	12	12.52	12.50	12.50	13.5
10	64QAM	25	25	12.45	12.45	12.45	
10	64QAM	50	0	12.45	12.38	12.34	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	12.28	12.31	12.27	13.5
5	QPSK	1	12	12.40	12.45	12.37	
5	QPSK	1	24	12.37	12.46	12.33	
5	QPSK	12	0	12.42	12.42	12.38	13.5
5	QPSK	12	7	12.52	12.50	12.45	
5	QPSK	12	13	12.48	12.51	12.45	
5	QPSK	25	0	12.47	12.42	12.40	13.5
5	16QAM	1	0	12.57	12.62	12.56	
5	16QAM	1	12	12.66	12.57	12.60	
5	16QAM	1	24	12.66	12.66	12.65	13.5
5	16QAM	12	0	12.42	12.43	12.39	
5	16QAM	12	7	12.51	12.48	12.41	
5	16QAM	12	13	12.48	12.49	12.42	13.5
5	16QAM	25	0	12.45	12.40	12.41	
5	64QAM	1	0	12.45	12.50	12.44	
5	64QAM	1	12	12.55	12.58	12.53	13.5
5	64QAM	1	24	12.51	12.56	12.53	
5	64QAM	12	0	12.50	12.50	12.48	
5	64QAM	12	7	12.59	12.56	12.50	13.5
5	64QAM	12	13	12.55	12.57	12.54	
5	64QAM	25	0	12.46	12.44	12.39	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	12.32	12.37	12.39	13.5
3	QPSK	1	8	12.46	12.48	12.46	
3	QPSK	1	14	12.39	12.46	12.38	
3	QPSK	8	0	12.46	12.49	12.49	13.5
3	QPSK	8	4	12.52	12.51	12.52	
3	QPSK	8	7	12.50	12.51	12.46	
3	QPSK	15	0	12.46	12.46	12.49	13.5
3	16QAM	1	0	12.63	12.65	12.69	
3	16QAM	1	8	12.70	12.77	12.73	
3	16QAM	1	14	12.70	12.73	12.68	13.5
3	16QAM	8	0	12.43	12.49	12.48	
3	16QAM	8	4	12.56	12.52	12.55	
3	16QAM	8	7	12.49	12.52	12.48	13.5
3	16QAM	15	0	12.51	12.46	12.48	
3	64QAM	1	0	12.50	12.53	12.56	
3	64QAM	1	8	12.65	12.69	12.66	13.5
3	64QAM	1	14	12.58	12.61	12.57	
3	64QAM	8	0	12.50	12.54	12.55	
3	64QAM	8	4	12.57	12.55	12.57	13.5
3	64QAM	8	7	12.55	12.58	12.55	
3	64QAM	15	0	12.53	12.49	12.48	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	12.24	12.33	12.24	13.5
1.4	QPSK	1	3	12.39	12.40	12.37	
1.4	QPSK	1	5	12.31	12.34	12.31	
1.4	QPSK	3	0	12.32	12.36	12.22	13.5
1.4	QPSK	3	1	12.35	12.36	12.34	
1.4	QPSK	3	3	12.33	12.33	12.30	
1.4	QPSK	6	0	12.39	12.43	12.34	13.5
1.4	16QAM	1	0	12.58	12.64	12.57	
1.4	16QAM	1	3	12.71	12.77	12.73	
1.4	16QAM	1	5	12.63	12.63	12.62	13.5
1.4	16QAM	3	0	12.40	12.41	12.32	
1.4	16QAM	3	1	12.44	12.47	12.42	
1.4	16QAM	3	3	12.40	12.40	12.37	13.5
1.4	16QAM	6	0	12.46	12.55	12.45	
1.4	64QAM	1	0	12.46	12.54	12.44	
1.4	64QAM	1	3	12.59	12.61	12.55	13.5
1.4	64QAM	1	5	12.51	12.51	12.51	
1.4	64QAM	3	0	12.51	12.55	12.47	
1.4	64QAM	3	1	12.59	12.61	12.56	13.5
1.4	64QAM	3	3	12.50	12.56	12.53	
1.4	64QAM	6	0	12.37	12.43	12.33	



Band 5_Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20450	Power Middle Ch. / Freq. 20525	Power High Ch. / Freq. 20600
Channel				829	836.5	844
Frequency (MHz)						
10	QPSK	1	0	22.47	22.48	22.56
10	QPSK	1	25	22.43	22.45	22.56
10	QPSK	1	49	22.47	22.46	22.46
10	QPSK	25	0	22.53	22.53	22.62
10	QPSK	25	12	22.62	22.61	22.59
10	QPSK	25	25	22.56	22.56	22.62
10	QPSK	50	0	22.53	22.53	22.52
10	16QAM	1	0	22.85	22.86	22.92
10	16QAM	1	25	22.81	22.85	22.88
10	16QAM	1	49	22.85	22.84	22.82
10	16QAM	25	0	22.05	22.06	22.09
10	16QAM	25	12	22.16	22.14	22.08
10	16QAM	25	25	22.11	22.12	22.09
10	16QAM	50	0	22.04	22.07	21.97
10	64QAM	1	0	22.20	22.22	22.27
10	64QAM	1	25	22.26	22.29	22.30
10	64QAM	1	49	22.23	22.25	22.21
10	64QAM	25	0	21.09	21.08	21.12
10	64QAM	25	12	21.20	21.18	21.14
10	64QAM	25	25	21.14	21.13	21.12
10	64QAM	50	0	21.09	21.10	21.03
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.37	22.40	22.45
5	QPSK	1	12	22.51	22.53	22.57
5	QPSK	1	24	22.44	22.46	22.45
5	QPSK	12	0	22.52	22.50	22.56
5	QPSK	12	7	22.62	22.61	22.68
5	QPSK	12	13	22.59	22.58	22.60
5	QPSK	25	0	22.59	22.57	22.62
5	16QAM	1	0	22.73	22.72	22.73
5	16QAM	1	12	22.75	22.76	22.84
5	16QAM	1	24	22.76	22.80	22.80
5	16QAM	12	0	22.05	22.07	22.05
5	16QAM	12	7	22.14	22.18	22.13
5	16QAM	12	13	22.11	22.13	22.10
5	16QAM	25	0	22.09	22.11	22.09
5	64QAM	1	0	22.13	22.14	22.13
5	64QAM	1	12	22.20	22.22	22.21
5	64QAM	1	24	22.16	22.19	22.14
5	64QAM	12	0	21.09	21.12	21.11
5	64QAM	12	7	21.20	21.23	21.20
5	64QAM	12	13	21.17	21.19	21.15
5	64QAM	25	0	21.15	21.14	21.12
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	22.41	22.40	22.44
3	QPSK	1	8	22.55	22.57	22.57
3	QPSK	1	14	22.59	22.47	22.55
3	QPSK	8	0	22.52	22.53	22.55
3	QPSK	8	4	22.62	22.62	22.65
3	QPSK	8	7	22.58	22.61	22.59
3	QPSK	15	0	22.59	22.58	22.54
3	16QAM	1	0	22.71	22.77	22.77
3	16QAM	1	8	22.81	22.86	22.87
3	16QAM	1	14	22.85	22.82	22.83
3	16QAM	8	0	22.10	22.12	22.10
3	16QAM	8	4	22.18	22.20	22.19
3	16QAM	8	7	22.16	22.17	22.15
3	16QAM	15	0	22.14	22.17	22.07
3	64QAM	1	0	22.16	22.14	22.15
3	64QAM	1	8	22.25	22.32	22.27
3	64QAM	1	14	22.21	22.23	22.19
3	64QAM	8	0	21.13	21.14	21.12
3	64QAM	8	4	21.21	21.20	21.20
3	64QAM	8	7	21.20	21.18	21.18
3	64QAM	15	0	21.14	21.15	21.07
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	22.36	22.41	22.47
1.4	QPSK	1	3	22.49	22.51	22.52
1.4	QPSK	1	5	22.41	22.46	22.45
1.4	QPSK	3	0	22.45	22.44	22.46
1.4	QPSK	3	1	22.47	22.49	22.49
1.4	QPSK	3	3	22.46	22.46	22.47
1.4	QPSK	6	0	22.53	22.54	22.53
1.4	16QAM	1	0	22.70	22.89	22.74
1.4	16QAM	1	3	22.81	22.85	22.78
1.4	16QAM	1	5	22.75	22.79	22.71
1.4	16QAM	3	0	22.53	22.49	22.54
1.4	16QAM	3	1	22.56	22.57	22.57
1.4	16QAM	3	3	22.53	22.49	22.52
1.4	16QAM	6	0	22.13	22.14	22.11
1.4	64QAM	1	0	22.12	22.17	22.13
1.4	64QAM	1	3	22.22	22.22	22.19
1.4	64QAM	1	5	22.14	22.18	22.14
1.4	64QAM	3	0	22.15	22.17	22.13
1.4	64QAM	3	1	22.21	22.22	22.18
1.4	64QAM	3	3	22.16	22.17	22.12
1.4	64QAM	6	0	21.07	21.06	21.03



Band 7_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dB)
				Low Ch. / Freq. 20850	Middle Ch. / Freq. 21100	High Ch. / Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	11.50	11.55	11.58	12.5
20	QPSK	1	49	11.51	11.81	11.81	
20	QPSK	1	99	11.59	11.85	11.87	
20	QPSK	50	0	11.62	11.70	11.88	12.5
20	QPSK	50	24	11.70	11.75	11.72	
20	QPSK	50	50	11.70	11.77	11.78	
20	QPSK	100	0	11.81	11.80	11.82	12.5
20	16QAM	1	0	11.86	11.91	11.96	
20	16QAM	1	49	11.89	12.02	12.01	
20	16QAM	1	99	11.94	12.05	12.02	12.5
20	16QAM	50	0	11.83	11.69	11.70	
20	16QAM	50	24	11.72	11.71	11.73	
20	16QAM	50	50	11.75	11.84	11.80	12.5
20	16QAM	100	0	11.82	11.82	11.83	
20	64QAM	1	0	11.70	11.89	11.78	
20	64QAM	1	49	11.72	11.85	11.88	12.5
20	64QAM	1	99	11.84	11.91	11.84	
20	64QAM	50	0	11.84	11.73	11.70	
20	64QAM	50	24	11.76	11.75	11.79	12.5
20	64QAM	50	50	11.76	11.82	11.86	
20	64QAM	100	0	11.83	11.84	11.82	
Channel				20825	21100	21375	Tune-up limit (dB)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	11.52	11.56	11.59	12.5
15	QPSK	1	37	11.52	11.57	11.60	
15	QPSK	1	74	11.62	11.85	11.87	
15	QPSK	36	0	11.62	11.86	11.89	12.5
15	QPSK	36	20	11.73	11.71	11.72	
15	QPSK	36	39	11.75	11.81	11.79	
15	QPSK	75	0	11.84	11.81	11.82	12.5
15	16QAM	1	0	11.88	11.95	11.93	
15	16QAM	1	37	11.95	12.04	11.97	
15	16QAM	1	74	11.98	12.03	12.01	12.5
15	16QAM	36	0	11.85	11.72	11.72	
15	16QAM	36	20	11.73	11.74	11.73	
15	16QAM	36	39	11.72	11.79	11.76	12.5
15	64QAM	1	0	11.86	11.86	11.85	
15	64QAM	1	0	11.72	11.79	11.76	
15	64QAM	1	37	11.79	11.90	11.87	12.5
15	64QAM	1	74	11.86	11.93	11.90	
15	64QAM	36	0	11.85	11.73	11.71	
15	64QAM	36	20	11.77	11.75	11.76	12.5
15	64QAM	36	39	11.81	11.84	11.85	
15	64QAM	75	0	11.87	11.88	11.87	
Channel				20800	21100	21400	Tune-up limit (dB)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	11.33	11.45	11.41	12.5
10	QPSK	1	25	11.38	11.50	11.44	
10	QPSK	1	49	11.42	11.56	11.48	
10	QPSK	25	0	11.39	11.45	11.48	12.5
10	QPSK	25	12	11.52	11.51	11.52	
10	QPSK	25	25	11.51	11.57	11.58	
10	QPSK	50	0	11.43	11.40	11.40	12.5
10	16QAM	1	0	11.74	11.77	11.80	
10	16QAM	1	25	11.79	11.84	11.84	
10	16QAM	1	49	11.82	11.89	11.88	12.5
10	16QAM	25	0	11.47	11.55	11.53	
10	16QAM	25	12	11.56	11.59	11.54	
10	16QAM	25	25	11.53	11.80	11.62	12.5
10	16QAM	50	0	11.41	11.44	11.39	
10	64QAM	1	0	11.59	11.82	11.85	
10	64QAM	1	25	11.71	11.77	11.79	12.5
10	64QAM	1	49	11.70	11.81	11.76	
10	64QAM	25	0	11.45	11.50	11.52	
10	64QAM	25	12	11.58	11.57	11.56	12.5
10	64QAM	25	25	11.55	11.81	11.85	
10	64QAM	50	0	11.48	11.42	11.42	
Channel				20775	21100	21425	Tune-up limit (dB)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	11.33	11.46	11.44	12.5
5	QPSK	1	12	11.41	11.45	11.50	
5	QPSK	1	24	11.42	11.52	11.48	
5	QPSK	12	0	11.41	11.47	11.50	12.5
5	QPSK	12	7	11.55	11.55	11.58	
5	QPSK	12	13	11.51	11.54	11.55	
5	QPSK	25	0	11.48	11.44	11.54	12.5
5	16QAM	1	0	11.69	11.87	11.80	
5	16QAM	1	12	11.73	11.85	11.77	
5	16QAM	1	24	11.77	11.83	11.87	12.5
5	16QAM	12	0	11.43	11.48	11.54	
5	16QAM	12	7	11.56	11.55	11.59	
5	16QAM	12	13	11.52	11.58	11.55	12.5
5	16QAM	25	0	11.48	11.51	11.58	
5	64QAM	1	0	11.63	11.85	11.79	
5	64QAM	1	12	11.67	11.87	11.73	12.5
5	64QAM	1	24	11.75	11.71	11.80	
5	64QAM	12	0	11.49	11.53	11.59	
5	64QAM	12	7	11.65	11.58	11.63	12.5
5	64QAM	12	13	11.61	11.81	11.59	
5	64QAM	25	0	11.52	11.50	11.58	



Band 25_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch / Freq. 29140	Middle Ch / Freq. 29340	High Ch / Freq. 29590	
Channel				1860	1880	1905	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	12.62	12.55	12.60	13.5
20	QPSK	1	49	12.48	12.48	12.52	
20	QPSK	1	99	12.41	12.45	12.48	
20	QPSK	50	0	12.71	12.81	12.83	13.5
20	QPSK	50	24	12.70	12.87	12.83	
20	QPSK	50	50	12.65	12.85	12.82	
20	QPSK	100	0	12.58	12.55	12.54	13.5
20	16QAM	1	0	12.98	12.89	12.97	
20	16QAM	1	49	12.89	12.87	12.89	
20	16QAM	1	99	12.80	12.83	12.81	13.5
20	16QAM	50	0	12.73	12.64	12.83	
20	16QAM	50	24	12.68	12.87	12.83	
20	16QAM	50	50	12.62	12.85	12.88	13.5
20	16QAM	100	0	12.58	12.58	12.53	
20	64QAM	1	0	12.88	12.75	12.78	
20	64QAM	1	49	12.78	12.74	12.77	13.5
20	64QAM	1	99	12.68	12.68	12.72	
20	64QAM	50	0	12.75	12.68	12.68	
20	64QAM	50	24	12.70	12.71	12.71	13.5
20	64QAM	50	50	12.65	12.68	12.67	
20	64QAM	100	0	12.61	12.61	12.59	
Channel				28115	28340	28615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	12.49	12.54	12.58	13.5
15	QPSK	1	37	12.50	12.47	12.52	
15	QPSK	1	74	12.38	12.51	12.48	
15	QPSK	36	0	12.68	12.54	12.58	13.5
15	QPSK	36	20	12.65	12.65	12.58	
15	QPSK	36	39	12.58	12.59	12.62	
15	QPSK	75	0	12.61	12.60	12.54	13.5
15	16QAM	1	0	12.85	12.89	12.93	
15	16QAM	1	37	12.89	12.89	12.89	
15	16QAM	1	74	12.68	12.84	12.83	13.5
15	16QAM	36	0	12.68	12.57	12.58	
15	16QAM	36	20	12.69	12.64	12.59	
15	16QAM	36	39	12.60	12.57	12.59	13.5
15	16QAM	75	0	12.62	12.61	12.58	
15	64QAM	1	0	12.75	12.77	12.80	
15	64QAM	1	37	12.78	12.78	12.79	13.5
15	64QAM	1	74	12.54	12.74	12.75	
15	64QAM	36	0	12.70	12.58	12.63	
15	64QAM	36	20	12.69	12.69	12.68	13.5
15	64QAM	36	39	12.65	12.62	12.67	
15	64QAM	75	0	12.64	12.62	12.57	
Channel				28090	28340	28640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	12.22	12.13	12.33	13.5
10	QPSK	1	25	12.35	12.32	12.32	
10	QPSK	1	49	12.38	12.38	12.37	
10	QPSK	25	0	12.38	12.28	12.29	13.5
10	QPSK	25	12	12.49	12.44	12.47	
10	QPSK	25	25	12.38	12.38	12.41	
10	QPSK	50	0	12.43	12.40	12.38	13.5
10	16QAM	1	0	12.58	12.50	12.75	
10	16QAM	1	25	12.71	12.70	12.69	
10	16QAM	1	49	12.43	12.44	12.69	13.5
10	16QAM	25	0	12.42	12.30	12.33	
10	16QAM	25	12	12.48	12.48	12.47	
10	16QAM	25	25	12.42	12.39	12.43	13.5
10	16QAM	50	0	12.42	12.38	12.40	
10	64QAM	1	0	12.46	12.35	12.61	
10	64QAM	1	25	12.69	12.61	12.68	13.5
10	64QAM	1	49	12.34	12.34	12.63	
10	64QAM	25	0	12.46	12.34	12.38	
10	64QAM	25	12	12.55	12.53	12.54	13.5
10	64QAM	25	25	12.43	12.43	12.43	
10	64QAM	50	0	12.48	12.44	12.44	
Channel				28065	28340	28665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	12.35	12.24	12.32	13.5
5	QPSK	1	12	12.43	12.38	12.37	
5	QPSK	1	24	12.38	12.32	12.37	
5	QPSK	12	0	12.47	12.35	12.34	13.5
5	QPSK	12	7	12.50	12.51	12.46	
5	QPSK	12	13	12.47	12.43	12.41	
5	QPSK	25	0	12.48	12.42	12.39	13.5
5	16QAM	1	0	12.68	12.57	12.62	
5	16QAM	1	12	12.67	12.63	12.65	
5	16QAM	1	24	12.66	12.65	12.70	13.5
5	16QAM	12	0	12.51	12.40	12.34	
5	16QAM	12	7	12.58	12.47	12.44	
5	16QAM	12	13	12.51	12.46	12.45	13.5
5	16QAM	25	0	12.48	12.47	12.43	
5	64QAM	1	0	12.65	12.48	12.56	
5	64QAM	1	12	12.64	12.60	12.59	13.5
5	64QAM	1	24	12.62	12.59	12.63	
5	64QAM	12	0	12.53	12.43	12.44	
5	64QAM	12	7	12.57	12.59	12.52	13.5
5	64QAM	12	13	12.54	12.54	12.49	
5	64QAM	25	0	12.53	12.45	12.49	
Channel				28065	28340	28675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	12.37	12.25	12.27	13.5
3	QPSK	1	8	12.48	12.39	12.38	
3	QPSK	1	14	12.38	12.38	12.35	
3	QPSK	8	0	12.50	12.39	12.38	13.5
3	QPSK	8	4	12.50	12.48	12.48	
3	QPSK	8	7	12.48	12.46	12.44	
3	QPSK	15	0	12.50	12.43	12.45	13.5
3	16QAM	1	0	12.72	12.60	12.58	
3	16QAM	1	8	12.76	12.72	12.71	
3	16QAM	1	14	12.74	12.70	12.69	13.5
3	16QAM	8	0	12.50	12.38	12.39	
3	16QAM	8	4	12.58	12.51	12.51	
3	16QAM	8	7	12.56	12.46	12.50	13.5
3	16QAM	15	0	12.50	12.47	12.45	
3	64QAM	1	0	12.66	12.50	12.51	
3	64QAM	1	8	12.76	12.69	12.65	13.5
3	64QAM	1	14	12.67	12.63	12.64	
3	64QAM	8	0	12.55	12.46	12.46	
3	64QAM	8	4	12.62	12.54	12.51	13.5
3	64QAM	8	7	12.57	12.51	12.49	
3	64QAM	15	0	12.54	12.46	12.48	
Channel				28047	28340	28683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	12.33	12.28	12.18	13.5
1.4	QPSK	1	3	12.41	12.35	12.34	
1.4	QPSK	1	5	12.33	12.27	12.29	
1.4	QPSK	3	0	12.33	12.27	12.29	13.5
1.4	QPSK	3	1	12.38	12.32	12.25	
1.4	QPSK	3	3	12.38	12.30	12.26	
1.4	QPSK	6	0	12.44	12.38	12.29	13.5
1.4	16QAM	1	0	12.65	12.61	12.52	
1.4	16QAM	1	3	12.75	12.68	12.68	
1.4	16QAM	1	5	12.70	12.60	12.61	13.5
1.4	16QAM	3	0	12.44	12.37	12.30	
1.4	16QAM	3	1	12.50	12.41	12.34	
1.4	16QAM	3	3	12.44	12.35	12.35	13.5
1.4	16QAM	6	0	12.54	12.47	12.38	
1.4	64QAM	1	0	12.60	12.51	12.49	
1.4	64QAM	1	3	12.67	12.59	12.59	13.5
1.4	64QAM	1	5	12.58	12.54	12.55	
1.4	64QAM	3	0	12.56	12.53	12.45	
1.4	64QAM	3	1	12.61	12.56	12.48	13.5
1.4	64QAM	3	3	12.56	12.49	12.49	
1.4	64QAM	6	0	12.43	12.37	12.34	



Band 26_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. Freq. 26745	Middle Ch. Freq. 26865	High Ch. Freq. 26985	
Channel				821.5	831.5	841.5	
Frequency (MHz)				23.16	23.12	23.11	
15	QPSK	1	0	23.17	23.12	23.13	23.5
15	QPSK	1	37	23.23	23.24	23.14	
15	QPSK	36	0	22.12	22.12	22.09	
15	QPSK	36	20	22.28	22.22	22.26	23
15	QPSK	36	39	22.20	22.22	22.18	
15	QPSK	75	0	22.22	22.14	22.12	
15	16QAM	1	0	22.20	22.43	22.42	23
15	16QAM	1	37	22.47	22.50	22.47	
15	16QAM	1	74	22.49	22.49	22.43	
15	16QAM	36	0	21.13	21.14	21.14	22
15	16QAM	36	20	21.29	21.22	21.26	
15	16QAM	36	39	21.24	21.23	21.19	
15	16QAM	75	0	21.22	21.15	21.13	22
15	64QAM	1	0	21.31	21.30	21.35	
15	64QAM	1	37	21.44	21.42	21.38	
15	64QAM	1	74	21.46	21.46	21.28	21
15	64QAM	36	0	20.17	20.21	20.15	
15	64QAM	36	20	20.31	20.24	20.31	
15	64QAM	36	39	20.30	20.28	20.28	21
15	64QAM	75	0	20.24	20.15	20.14	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.04	22.98	22.99	23.5
10	QPSK	1	25	22.94	22.99	22.96	
10	QPSK	1	49	22.99	23.02	22.96	
10	QPSK	25	0	21.91	21.97	21.94	23
10	QPSK	25	12	22.10	22.09	22.05	
10	QPSK	25	25	22.02	22.09	22.04	
10	QPSK	50	0	22.00	21.99	21.97	23
10	16QAM	1	0	22.38	22.35	22.37	
10	16QAM	1	25	22.35	22.35	22.34	
10	16QAM	1	49	22.38	22.35	22.28	22
10	16QAM	25	0	20.89	20.97	20.97	
10	16QAM	25	12	21.10	21.12	21.09	
10	16QAM	25	25	21.04	21.10	21.03	22
10	16QAM	50	0	21.02	21.01	20.97	
10	64QAM	1	0	21.23	21.21	21.20	
10	64QAM	1	25	21.22	21.30	21.27	22
10	64QAM	1	49	21.27	21.29	21.21	
10	64QAM	25	0	19.95	19.99	20.00	
10	64QAM	25	12	20.14	20.15	20.13	21
10	64QAM	25	25	20.06	20.13	20.08	
10	64QAM	50	0	20.05	20.03	19.97	
Channel				26745	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.88	22.95	22.95	23.5
5	QPSK	1	12	23.03	23.04	22.99	
5	QPSK	1	24	23.09	23.02	22.94	
5	QPSK	12	0	22.02	22.06	22.01	23
5	QPSK	12	7	22.15	22.18	22.09	
5	QPSK	12	13	22.10	22.14	22.04	
5	QPSK	25	0	22.11	22.06	22.01	23
5	16QAM	1	0	22.18	22.28	22.32	
5	16QAM	1	12	22.35	22.36	22.34	
5	16QAM	1	24	22.30	22.32	22.23	22
5	16QAM	12	0	21.03	21.07	21.02	
5	16QAM	12	7	21.17	21.20	21.11	
5	16QAM	12	13	21.12	21.16	21.04	22
5	16QAM	25	0	21.11	21.08	21.02	
5	64QAM	1	0	21.11	21.25	21.17	
5	64QAM	1	12	21.26	21.26	21.16	22
5	64QAM	1	24	21.25	21.29	21.14	
5	64QAM	12	0	20.07	20.12	20.08	
5	64QAM	12	7	20.21	20.27	20.16	21
5	64QAM	12	13	20.15	20.22	20.12	
5	64QAM	25	0	20.12	20.11	20.04	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.95	22.98	22.99	23.5
3	QPSK	1	8	23.10	23.11	22.98	
3	QPSK	1	14	22.99	23.07	22.89	
3	QPSK	8	0	22.02	22.06	22.04	23
3	QPSK	8	4	22.14	22.21	22.09	
3	QPSK	8	7	22.13	22.18	22.04	
3	QPSK	15	0	22.10	22.07	22.03	23
3	16QAM	1	0	22.27	22.27	22.27	
3	16QAM	1	8	22.30	22.36	22.33	
3	16QAM	1	14	22.31	22.36	22.19	22
3	16QAM	8	0	21.08	21.13	21.11	
3	16QAM	8	4	21.19	21.23	21.12	
3	16QAM	8	7	21.16	21.16	21.08	22
3	16QAM	15	0	21.12	21.11	21.06	
3	64QAM	1	0	21.13	21.19	21.21	
3	64QAM	1	8	21.32	21.31	21.19	22
3	64QAM	1	14	21.23	21.25	21.12	
3	64QAM	8	0	20.10	20.14	20.12	
3	64QAM	8	4	20.22	20.26	20.16	21
3	64QAM	8	7	20.15	20.21	20.11	
3	64QAM	15	0	20.15	20.12	20.08	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.90	22.88	22.83	23.5
1.4	QPSK	1	3	23.02	22.99	22.88	
1.4	QPSK	1	5	22.89	22.96	22.81	
1.4	QPSK	3	0	22.96	22.89	22.83	23
1.4	QPSK	3	1	22.98	22.94	22.88	
1.4	QPSK	3	3	22.98	22.95	22.85	
1.4	QPSK	6	0	22.04	21.96	21.95	23
1.4	16QAM	1	0	22.23	22.18	22.15	
1.4	16QAM	1	3	22.31	22.33	22.26	
1.4	16QAM	1	5	22.28	22.25	22.14	23
1.4	16QAM	3	0	22.01	21.95	21.89	
1.4	16QAM	3	1	22.08	22.02	21.93	
1.4	16QAM	3	3	22.01	22.00	21.89	22
1.4	16QAM	6	0	21.13	21.12	21.06	
1.4	64QAM	1	0	21.13	21.10	21.08	
1.4	64QAM	1	3	21.24	21.23	21.08	22
1.4	64QAM	1	5	21.18	21.17	21.07	
1.4	64QAM	3	0	21.17	21.10	21.06	
1.4	64QAM	3	1	21.24	21.16	21.10	21
1.4	64QAM	3	3	21.17	21.18	21.05	
1.4	64QAM	6	0	20.07	20.04	19.97	



Band 66_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low	Middle	High	
Channel				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	
Frequency (MHz)				132072	132322	132572	
20	QPSK	1	0	12.32	12.34	12.51	13.5
20	QPSK	1	49	12.44	12.48	12.52	
20	QPSK	1	99	12.17	12.19	12.44	
20	QPSK	50	0	12.60	12.61	12.61	13.5
20	QPSK	50	24	12.67	12.61	12.69	
20	QPSK	50	50	12.49	12.53	12.53	
20	QPSK	100	0	12.59	12.50	12.60	13.5
20	16QAM	1	0	12.64	12.64	12.52	
20	16QAM	1	49	12.75	12.80	12.84	
20	16QAM	1	99	12.47	12.48	12.72	13.5
20	16QAM	50	0	12.53	12.58	12.58	
20	16QAM	50	24	12.65	12.56	12.64	
20	16QAM	50	50	12.51	12.51	12.52	13.5
20	16QAM	100	0	12.54	12.47	12.60	
20	64QAM	1	0	12.59	12.59	12.82	
20	64QAM	1	49	12.78	12.78	12.76	13.5
20	64QAM	1	99	12.48	12.49	12.68	
20	64QAM	50	0	12.62	12.63	12.62	
20	64QAM	50	24	12.64	12.61	12.71	13.5
20	64QAM	50	50	12.56	12.54	12.54	
20	64QAM	100	0	12.60	12.52	12.60	
Channel				132047	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	12.51	12.51	12.58	13.5
15	QPSK	1	37	12.54	12.54	12.53	
15	QPSK	1	74	12.29	12.34	12.49	
15	QPSK	36	0	12.57	12.60	12.61	13.5
15	QPSK	36	20	12.64	12.65	12.68	
15	QPSK	36	39	12.52	12.56	12.58	
15	QPSK	75	0	12.60	12.54	12.64	13.5
15	16QAM	1	0	12.76	12.73	12.86	
15	16QAM	1	37	12.75	12.79	12.75	
15	16QAM	1	74	12.56	12.59	12.71	13.5
15	16QAM	36	0	12.58	12.57	12.61	
15	16QAM	36	20	12.63	12.64	12.67	
15	16QAM	36	39	12.51	12.53	12.53	13.5
15	16QAM	75	0	12.59	12.51	12.60	
15	64QAM	1	0	12.70	12.70	12.82	
15	64QAM	1	37	12.71	12.78	12.78	13.5
15	64QAM	1	74	12.51	12.56	12.77	
15	64QAM	36	0	12.51	12.60	12.58	
15	64QAM	36	20	12.55	12.64	12.66	13.5
15	64QAM	36	39	12.56	12.54	12.56	
15	64QAM	75	0	12.56	12.53	12.63	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	12.20	12.22	12.22	13.5
10	QPSK	1	25	12.29	12.33	12.33	
10	QPSK	1	49	12.07	12.01	12.46	
10	QPSK	25	0	12.30	12.35	12.38	13.5
10	QPSK	25	12	12.48	12.39	12.53	
10	QPSK	25	25	12.37	12.39	12.45	
10	QPSK	50	0	12.41	12.34	12.44	13.5
10	16QAM	1	0	12.55	12.58	12.61	
10	16QAM	1	25	12.66	12.72	12.70	
10	16QAM	1	49	12.45	12.44	12.44	13.5
10	16QAM	25	0	12.32	12.27	12.30	
10	16QAM	25	12	12.45	12.34	12.46	
10	16QAM	25	25	12.36	12.33	12.38	13.5
10	16QAM	50	0	12.34	12.25	12.37	
10	64QAM	1	0	12.45	12.47	12.46	
10	64QAM	1	25	12.61	12.60	12.57	13.5
10	64QAM	1	49	12.33	12.30	12.34	
10	64QAM	25	0	12.33	12.33	12.38	
10	64QAM	25	12	12.50	12.41	12.54	13.5
10	64QAM	25	25	12.41	12.40	12.41	
10	64QAM	50	0	12.45	12.34	12.43	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	12.27	12.22	12.30	13.5
5	QPSK	1	12	12.46	12.36	12.41	
5	QPSK	1	24	12.26	12.30	12.34	
5	QPSK	12	0	12.48	12.35	12.38	13.5
5	QPSK	12	7	12.49	12.47	12.48	
5	QPSK	12	13	12.46	12.43	12.47	
5	QPSK	25	0	12.44	12.43	12.49	13.5
5	16QAM	1	0	12.63	12.65	12.64	
5	16QAM	1	12	12.67	12.62	12.67	
5	16QAM	1	24	12.69	12.70	12.67	13.5
5	16QAM	12	0	12.50	12.40	12.41	
5	16QAM	12	7	12.56	12.53	12.52	
5	16QAM	12	13	12.51	12.48	12.50	13.5
5	16QAM	25	0	12.43	12.43	12.46	
5	64QAM	1	0	12.68	12.72	12.69	
5	64QAM	1	12	12.84	12.79	12.87	13.5
5	64QAM	1	24	12.85	12.71	12.75	
5	64QAM	12	0	12.50	12.40	12.42	
5	64QAM	12	7	12.57	12.52	12.56	13.5
5	64QAM	12	13	12.51	12.49	12.50	
5	64QAM	25	0	12.48	12.48	12.50	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	12.19	12.24	12.27	13.5
3	QPSK	1	8	12.39	12.42	12.47	
3	QPSK	1	14	12.26	12.36	12.35	
3	QPSK	8	0	12.33	12.36	12.34	13.5
3	QPSK	8	4	12.41	12.45	12.39	
3	QPSK	8	7	12.38	12.42	12.44	
3	QPSK	15	0	12.44	12.46	12.41	13.5
3	16QAM	1	0	12.62	12.54	12.64	
3	16QAM	1	8	12.66	12.77	12.69	
3	16QAM	1	14	12.74	12.65	12.71	13.5
3	16QAM	8	0	12.56	12.47	12.46	
3	16QAM	8	4	12.62	12.57	12.55	
3	16QAM	8	7	12.59	12.56	12.59	13.5
3	16QAM	15	0	12.49	12.46	12.45	
3	64QAM	1	0	12.89	12.53	12.77	
3	64QAM	1	8	12.91	12.86	12.89	13.5
3	64QAM	1	14	12.83	12.72	12.86	
3	64QAM	8	0	12.42	12.31	12.34	
3	64QAM	8	4	12.54	12.46	12.47	13.5
3	64QAM	8	7	12.46	12.43	12.40	
3	64QAM	15	0	12.49	12.48	12.41	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	12.14	12.28	12.24	13.5
1.4	QPSK	1	3	12.26	12.32	12.39	
1.4	QPSK	1	5	12.26	12.27	12.36	
1.4	QPSK	3	0	12.33	12.31	12.29	13.5
1.4	QPSK	3	1	12.44	12.36	12.39	
1.4	QPSK	3	3	12.33	12.33	12.39	
1.4	QPSK	6	0	12.39	12.38	12.31	13.5
1.4	16QAM	1	0	12.61	12.59	12.63	
1.4	16QAM	1	3	12.69	12.65	12.71	
1.4	16QAM	1	5	12.53	12.59	12.55	13.5
1.4	16QAM	3	0	12.52	12.42	12.38	
1.4	16QAM	3	1	12.60	12.44	12.48	
1.4	16QAM	3	3	12.52	12.40	12.53	13.5
1.4	16QAM	6	0	12.31	12.40	12.33	
1.4	64QAM	1	0	12.82	12.65	12.58	
1.4	64QAM	1	3	12.89	12.74	12.77	13.5
1.4	64QAM	1	5	12.75	12.63	12.78	
1.4	64QAM	3	0	12.51	12.48	12.50	
1.4	64QAM	3	1	12.60	12.60	12.54	13.5
1.4	64QAM	3	3	12.55	12.54	12.57	
1.4	64QAM	6	0	12.51	12.40	12.38	



Band 2_Ant 2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 18700	Power Middle Ch. Freq. 18900	Power High Ch. Freq. 19100	Tune-up limit (dBm)	
Channel				1860	1880	1900		
Frequency (MHz)								
20	QPSK	1	0	12.56	12.50	12.53	14	
20	QPSK	1	49	12.45	12.48	12.45		
20	QPSK	1	99	12.38	12.48	12.41		
20	QPSK	50	0	12.54	12.48	12.48		
20	QPSK	50	24	12.63	12.56	12.62	14	
20	QPSK	50	50	12.50	12.55	12.52		
20	QPSK	100	0	12.51	12.44	12.53		
20	16QAM	1	0	12.91	12.85	12.87		
20	16QAM	1	49	12.79	12.82	12.82	14	
20	16QAM	1	99	12.73	12.80	12.75		
20	16QAM	50	0	12.55	12.48	12.48		
20	16QAM	50	24	12.61	12.55	12.63		
20	16QAM	50	50	12.52	12.54	12.55	14	
20	16QAM	100	0	12.52	12.45	12.56		
20	64QAM	1	0	12.84	12.71	12.75		
20	64QAM	1	49	12.68	12.70	12.69		
20	64QAM	1	99	12.64	12.70	12.67	14	
20	64QAM	50	0	12.58	12.49	12.52		
20	64QAM	50	24	12.64	12.57	12.68		
20	64QAM	50	50	12.52	12.57	12.57		
20	64QAM	100	0	12.54	12.47	12.57	14	
Channel				1867.5	18900	1912.5		
Frequency (MHz)								
15	QPSK	1	0	12.43	12.53	12.54		14
15	QPSK	1	37	12.45	12.46	12.48		
15	QPSK	1	74	12.31	12.49	12.46		
15	QPSK	36	0	12.35	12.49	12.51		
15	QPSK	36	20	12.64	12.63	12.55	14	
15	QPSK	36	39	12.58	12.61	12.57		
15	QPSK	75	0	12.57	12.51	12.49		
15	16QAM	1	0	12.79	12.85	12.87		
15	16QAM	1	37	12.82	12.85	12.85	14	
15	16QAM	1	74	12.64	12.82	12.79		
15	16QAM	36	0	12.58	12.50	12.51		
15	16QAM	36	20	12.60	12.66	12.58		
15	16QAM	36	39	12.57	12.60	12.58	14	
15	16QAM	75	0	12.58	12.52	12.54		
15	64QAM	1	0	12.64	12.72	12.74		
15	64QAM	1	37	12.73	12.72	12.75		
15	64QAM	1	74	12.63	12.73	12.67	14	
15	64QAM	36	0	12.62	12.54	12.54		
15	64QAM	36	20	12.64	12.68	12.61		
15	64QAM	36	39	12.62	12.64	12.65		
15	64QAM	75	0	12.60	12.53	12.56	14	
Channel				1865	18900	19150		
Frequency (MHz)								
10	QPSK	1	0	12.10	12.03	12.38		14
10	QPSK	1	25	12.33	12.33	12.33		
10	QPSK	1	49	12.01	12.03	12.32		
10	QPSK	25	0	12.34	12.26	12.26		
10	QPSK	25	12	12.45	12.37	12.42	14	
10	QPSK	25	25	12.34	12.34	12.33		
10	QPSK	50	0	12.37	12.30	12.37		
10	16QAM	1	0	12.46	12.44	12.79		
10	16QAM	1	25	12.70	12.72	12.75	14	
10	16QAM	1	49	12.36	12.41	12.68		
10	16QAM	25	0	12.37	12.31	12.32		
10	16QAM	25	12	12.45	12.36	12.46		
10	16QAM	25	25	12.33	12.35	12.32	14	
10	16QAM	50	0	12.36	12.30	12.38		
10	64QAM	1	0	12.38	12.31	12.67		
10	64QAM	1	25	12.67	12.66	12.65		
10	64QAM	1	49	12.29	12.33	12.64	14	
10	64QAM	25	0	12.41	12.34	12.32		
10	64QAM	25	12	12.52	12.43	12.49		
10	64QAM	25	25	12.38	12.39	12.39		
10	64QAM	50	0	12.40	12.32	12.42	14	
Channel				1862.5	18900	19175		
Frequency (MHz)								
5	QPSK	1	0	12.30	12.22	12.22		14
5	QPSK	1	12	12.39	12.40	12.33		
5	QPSK	1	24	12.27	12.25	12.21		
5	QPSK	12	0	12.45	12.37	12.33		
5	QPSK	12	7	12.49	12.46	12.42	14	
5	QPSK	12	13	12.44	12.38	12.40		
5	QPSK	25	0	12.40	12.37	12.32		
5	16QAM	1	0	12.64	12.55	12.52		
5	16QAM	1	12	12.66	12.65	12.61	14	
5	16QAM	1	24	12.57	12.58	12.54		
5	16QAM	12	0	12.45	12.35	12.37		
5	16QAM	12	7	12.51	12.47	12.43		
5	16QAM	12	13	12.40	12.44	12.36	14	
5	16QAM	25	0	12.44	12.44	12.38		
5	64QAM	1	0	12.57	12.48	12.48		
5	64QAM	1	12	12.62	12.61	12.60		
5	64QAM	1	24	12.52	12.48	12.45	14	
5	64QAM	12	0	12.54	12.46	12.42		
5	64QAM	12	7	12.57	12.58	12.46		
5	64QAM	12	13	12.51	12.48	12.49		
5	64QAM	25	0	12.44	12.46	12.41	14	
Channel				1861.5	18900	19185		
Frequency (MHz)								
3	QPSK	1	0	12.37	12.28	12.31		14
3	QPSK	1	8	12.44	12.42	12.41		
3	QPSK	1	14	12.33	12.33	12.26		
3	QPSK	8	0	12.46	12.42	12.45		
3	QPSK	8	4	12.52	12.51	12.44	14	
3	QPSK	8	7	12.48	12.41	12.42		
3	QPSK	15	0	12.48	12.46	12.44		
3	16QAM	1	0	12.88	12.60	12.63		
3	16QAM	1	8	12.78	12.79	12.73	14	
3	16QAM	1	14	12.66	12.64	12.59		
3	16QAM	8	0	12.55	12.44	12.48		
3	16QAM	8	4	12.53	12.55	12.47		
3	16QAM	8	7	12.51	12.45	12.48	14	
3	16QAM	15	0	12.51	12.45	12.47		
3	64QAM	1	0	12.63	12.56	12.57		
3	64QAM	1	8	12.75	12.69	12.64		
3	64QAM	1	14	12.62	12.58	12.50	14	
3	64QAM	8	0	12.53	12.45	12.50		
3	64QAM	8	4	12.60	12.55	12.54		
3	64QAM	8	7	12.50	12.49	12.49		
3	64QAM	15	0	12.53	12.45	12.48	14	
Channel				18607	18900	19193		
Frequency (MHz)								
1.4	QPSK	1	0	12.28	12.29	12.22		14
1.4	QPSK	1	3	12.35	12.34	12.31		
1.4	QPSK	1	5	12.29	12.25	12.20		
1.4	QPSK	3	0	12.35	12.33	12.22		
1.4	QPSK	3	1	12.33	12.30	12.25	14	
1.4	QPSK	3	3	12.31	12.27	12.26		
1.4	QPSK	6	0	12.38	12.36	12.34		
1.4	16QAM	1	0	12.84	12.62	12.56		
1.4	16QAM	1	3	12.73	12.68	12.66	14	
1.4	16QAM	1	5	12.67	12.62	12.55		
1.4	16QAM	3	0	12.40	12.38	12.33		
1.4	16QAM	3	1	12.45	12.43	12.40		
1.4	16QAM	3	3	12.39	12.39	12.34	14	
1.4	16QAM	6	0	12.46	12.50	12.44		
1.4	64QAM	1	0	12.58	12.52	12.53		
1.4	64QAM	1	3	12.66	12.59	12.55		
1.4	64QAM	1	5	12.54	12.54	12.49	14	
1.4	64QAM	3	0	12.58	12.51	12.46		
1.4	64QAM	3	1	12.61	12.58	12.50		
1.4	64QAM	3	3	12.53	12.52	12.46		
1.4	64QAM	6	0	12.41	12.41	12.37	14	



Band 4_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	limit (dBm)
Frequency (MHz)				20050	20175	20300	
20	QPSK	1	0	12.38	12.41	12.41	14
20	QPSK	1	49	12.53	12.55	12.54	
20	QPSK	1	99	12.22	12.18	12.14	
20	QPSK	50	0	12.63	12.80	12.82	14
20	QPSK	50	24	12.73	12.66	12.63	
20	QPSK	50	50	12.58	12.62	12.58	
20	QPSK	100	0	12.62	12.54	12.62	14
20	16QAM	1	0	12.72	12.75	12.76	
20	16QAM	1	49	12.87	12.91	12.90	
20	16QAM	1	99	12.55	12.53	12.51	14
20	16QAM	50	0	12.57	12.61	12.60	
20	16QAM	50	24	12.68	12.64	12.61	
20	16QAM	50	50	12.58	12.58	12.57	14
20	16QAM	100	0	12.60	12.52	12.60	
20	64QAM	1	0	12.52	12.58	12.54	
20	64QAM	1	49	12.72	12.78	12.71	14
20	64QAM	1	99	12.41	12.38	12.35	
20	64QAM	50	0	12.59	12.62	12.60	
20	64QAM	50	24	12.72	12.67	12.64	14
20	64QAM	50	50	12.60	12.59	12.58	
20	64QAM	100	0	12.63	12.56	12.62	
Channel				20025	20175	20325	Tune-up
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	12.50	12.50	12.49	14
15	QPSK	1	37	12.56	12.57	12.53	
15	QPSK	1	74	12.36	12.38	12.35	
15	QPSK	36	0	12.60	12.62	12.58	14
15	QPSK	36	20	12.72	12.65	12.70	
15	QPSK	36	39	12.65	12.63	12.63	
15	QPSK	75	0	12.64	12.60	12.65	14
15	16QAM	1	0	12.60	12.64	12.62	
15	16QAM	1	37	12.69	12.90	12.87	
15	16QAM	1	74	12.69	12.71	12.68	14
15	16QAM	36	0	12.60	12.62	12.57	
15	16QAM	36	20	12.72	12.64	12.70	
15	16QAM	36	39	12.63	12.64	12.61	14
15	16QAM	75	0	12.66	12.57	12.62	
15	64QAM	1	0	12.65	12.67	12.62	
15	64QAM	1	37	12.77	12.81	12.75	14
15	64QAM	1	74	12.54	12.55	12.55	
15	64QAM	36	0	12.61	12.65	12.62	
15	64QAM	36	20	12.70	12.67	12.73	14
15	64QAM	36	39	12.65	12.67	12.68	
15	64QAM	75	0	12.66	12.61	12.64	
Channel				20000	20175	20350	Tune-up
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	12.16	12.16	12.17	14
10	QPSK	1	25	12.38	12.40	12.36	
10	QPSK	1	49	12.11	12.12	12.07	
10	QPSK	25	0	12.33	12.35	12.31	14
10	QPSK	25	12	12.49	12.42	12.44	
10	QPSK	25	25	12.42	12.42	12.41	
10	QPSK	50	0	12.47	12.38	12.35	14
10	16QAM	1	0	12.53	12.52	12.51	
10	16QAM	1	25	12.71	12.75	12.73	
10	16QAM	1	49	12.43	12.46	12.44	14
10	16QAM	25	0	12.33	12.34	12.32	
10	16QAM	25	12	12.49	12.43	12.43	
10	16QAM	25	25	12.41	12.41	12.42	14
10	16QAM	50	0	12.44	12.36	12.31	
10	64QAM	1	0	12.33	12.39	12.38	
10	64QAM	1	25	12.65	12.70	12.66	14
10	64QAM	1	49	12.35	12.38	12.36	
10	64QAM	25	0	12.35	12.39	12.35	
10	64QAM	25	12	12.52	12.50	12.50	14
10	64QAM	25	25	12.45	12.45	12.45	
10	64QAM	50	0	12.45	12.38	12.34	
Channel				19975	20175	20375	Tune-up
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	12.28	12.31	12.27	14
5	QPSK	1	12	12.40	12.45	12.37	
5	QPSK	1	24	12.37	12.40	12.33	
5	QPSK	12	0	12.42	12.42	12.38	14
5	QPSK	12	7	12.52	12.50	12.45	
5	QPSK	12	13	12.48	12.51	12.45	
5	QPSK	25	0	12.47	12.42	12.40	14
5	16QAM	1	0	12.57	12.62	12.58	
5	16QAM	1	12	12.66	12.57	12.60	
5	16QAM	1	24	12.66	12.68	12.65	14
5	16QAM	12	0	12.42	12.43	12.39	
5	16QAM	12	7	12.51	12.48	12.41	
5	16QAM	12	13	12.48	12.49	12.42	14
5	16QAM	25	0	12.45	12.40	12.41	
5	64QAM	1	0	12.45	12.50	12.44	
5	64QAM	1	12	12.55	12.58	12.53	14
5	64QAM	1	24	12.51	12.56	12.53	
5	64QAM	12	0	12.50	12.50	12.48	
5	64QAM	12	7	12.59	12.56	12.50	14
5	64QAM	12	13	12.55	12.57	12.54	
5	64QAM	25	0	12.46	12.44	12.39	
Channel				19965	20175	20385	Tune-up
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	12.32	12.37	12.39	14
3	QPSK	1	8	12.46	12.48	12.46	
3	QPSK	1	14	12.39	12.46	12.38	
3	QPSK	8	0	12.48	12.49	12.48	14
3	QPSK	8	4	12.52	12.51	12.52	
3	QPSK	8	7	12.50	12.51	12.46	
3	QPSK	15	0	12.46	12.46	12.49	14
3	16QAM	1	0	12.63	12.65	12.69	
3	16QAM	1	8	12.70	12.77	12.72	
3	16QAM	1	14	12.70	12.73	12.68	14
3	16QAM	8	0	12.43	12.49	12.48	
3	16QAM	8	4	12.56	12.52	12.55	
3	16QAM	8	7	12.49	12.52	12.48	14
3	16QAM	15	0	12.51	12.46	12.48	
3	64QAM	1	0	12.50	12.53	12.56	
3	64QAM	1	8	12.65	12.69	12.66	14
3	64QAM	1	14	12.58	12.61	12.57	
3	64QAM	8	0	12.50	12.54	12.55	
3	64QAM	8	4	12.57	12.55	12.57	14
3	64QAM	8	7	12.55	12.58	12.55	
3	64QAM	15	0	12.53	12.49	12.48	
Channel				19957	20175	20393	Tune-up
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	12.24	12.33	12.24	14
1.4	QPSK	1	3	12.39	12.40	12.37	
1.4	QPSK	1	5	12.31	12.34	12.31	
1.4	QPSK	3	0	12.32	12.36	12.22	14
1.4	QPSK	3	1	12.35	12.36	12.34	
1.4	QPSK	3	3	12.33	12.33	12.30	
1.4	QPSK	6	0	12.39	12.43	12.34	14
1.4	16QAM	1	0	12.58	12.64	12.57	
1.4	16QAM	1	3	12.71	12.77	12.73	
1.4	16QAM	1	5	12.63	12.63	12.62	14
1.4	16QAM	3	0	12.40	12.41	12.32	
1.4	16QAM	3	1	12.44	12.47	12.42	
1.4	16QAM	3	3	12.40	12.40	12.37	14
1.4	16QAM	6	0	12.46	12.55	12.45	
1.4	64QAM	1	0	12.46	12.54	12.44	
1.4	64QAM	1	3	12.59	12.61	12.55	14
1.4	64QAM	1	5	12.51	12.51	12.51	
1.4	64QAM	3	0	12.51	12.55	12.47	
1.4	64QAM	3	1	12.59	12.61	12.58	14
1.4	64QAM	3	3	12.50	12.56	12.53	
1.4	64QAM	6	0	12.37	12.43	12.33	



Band 5_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20450	Power Middle Ch. / Freq. 20525	Power High Ch. / Freq. 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	22.47	22.48	22.56	24
10	QPSK	1	25	22.43	22.45	22.56	
10	QPSK	1	49	22.47	22.46	22.46	
10	QPSK	25	0	22.53	22.53	22.62	24
10	QPSK	25	12	22.62	22.61	22.59	
10	QPSK	25	25	22.56	22.56	22.62	
10	QPSK	50	0	22.53	22.53	22.52	24
10	16QAM	1	0	22.85	22.86	22.92	
10	16QAM	1	25	22.81	22.85	22.88	
10	16QAM	1	49	22.85	22.84	22.82	23
10	16QAM	25	0	22.05	22.06	22.09	
10	16QAM	25	12	22.16	22.14	22.08	
10	16QAM	25	25	22.11	22.12	22.09	23
10	16QAM	50	0	22.04	22.07	21.97	
10	64QAM	1	0	22.20	22.22	22.27	
10	64QAM	1	25	22.26	22.29	22.30	23
10	64QAM	1	49	22.23	22.25	22.21	
10	64QAM	25	0	21.09	21.08	21.12	
10	64QAM	25	12	21.20	21.18	21.14	22
10	64QAM	25	25	21.14	21.13	21.12	
10	64QAM	50	0	21.09	21.10	21.03	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.37	22.40	22.45	24
5	QPSK	1	12	22.51	22.53	22.57	
5	QPSK	1	24	22.44	22.46	22.45	
5	QPSK	12	0	22.52	22.50	22.56	24
5	QPSK	12	7	22.62	22.61	22.68	
5	QPSK	12	13	22.59	22.58	22.60	
5	QPSK	25	0	22.59	22.57	22.62	24
5	16QAM	1	0	22.73	22.72	22.73	
5	16QAM	1	12	22.75	22.76	22.84	
5	16QAM	1	24	22.76	22.80	22.80	23
5	16QAM	12	0	22.05	22.07	22.05	
5	16QAM	12	7	22.14	22.18	22.13	
5	16QAM	12	13	22.11	22.13	22.10	23
5	16QAM	25	0	22.09	22.11	22.09	
5	64QAM	1	0	22.13	22.14	22.13	
5	64QAM	1	12	22.20	22.22	22.21	23
5	64QAM	1	24	22.16	22.19	22.14	
5	64QAM	12	0	21.09	21.12	21.11	
5	64QAM	12	7	21.20	21.23	21.20	22
5	64QAM	12	13	21.17	21.19	21.15	
5	64QAM	25	0	21.15	21.14	21.12	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.41	22.40	22.44	24
3	QPSK	1	8	22.55	22.57	22.57	
3	QPSK	1	14	22.59	22.47	22.55	
3	QPSK	8	0	22.52	22.53	22.55	24
3	QPSK	8	4	22.62	22.62	22.65	
3	QPSK	8	7	22.58	22.61	22.59	
3	QPSK	15	0	22.59	22.58	22.54	24
3	16QAM	1	0	22.71	22.77	22.77	
3	16QAM	1	8	22.81	22.86	22.87	
3	16QAM	1	14	22.85	22.82	22.83	23
3	16QAM	8	0	22.10	22.12	22.10	
3	16QAM	8	4	22.18	22.20	22.19	
3	16QAM	8	7	22.16	22.17	22.15	23
3	16QAM	15	0	22.14	22.17	22.07	
3	64QAM	1	0	22.16	22.14	22.15	
3	64QAM	1	8	22.25	22.32	22.27	23
3	64QAM	1	14	22.21	22.23	22.19	
3	64QAM	8	0	21.13	21.14	21.12	
3	64QAM	8	4	21.21	21.20	21.20	22
3	64QAM	8	7	21.20	21.18	21.18	
3	64QAM	15	0	21.14	21.15	21.07	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.36	22.41	22.47	24
1.4	QPSK	1	3	22.49	22.51	22.52	
1.4	QPSK	1	5	22.41	22.46	22.45	
1.4	QPSK	3	0	22.45	22.44	22.46	24
1.4	QPSK	3	1	22.47	22.49	22.49	
1.4	QPSK	3	3	22.46	22.46	22.47	
1.4	QPSK	6	0	22.53	22.54	22.53	24
1.4	16QAM	1	0	22.70	22.89	22.74	
1.4	16QAM	1	3	22.81	22.85	22.78	
1.4	16QAM	1	5	22.75	22.79	22.71	24
1.4	16QAM	3	0	22.53	22.49	22.54	
1.4	16QAM	3	1	22.56	22.57	22.57	
1.4	16QAM	3	3	22.53	22.49	22.52	23
1.4	16QAM	6	0	22.13	22.14	22.11	
1.4	64QAM	1	0	22.12	22.17	22.13	
1.4	64QAM	1	3	22.22	22.22	22.19	23
1.4	64QAM	1	5	22.14	22.18	22.14	
1.4	64QAM	3	0	22.15	22.17	22.13	
1.4	64QAM	3	1	22.21	22.22	22.18	22
1.4	64QAM	3	3	22.16	22.17	22.12	
1.4	64QAM	6	0	21.07	21.06	21.03	



Band 7_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20850	Power Middle Ch. / Freq. 21100	Power High Ch. / Freq. 21350	Tune-up limit (dBm)
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	11.50	11.55	11.58	13
20	QPSK	1	49	11.51	11.81	11.81	
20	QPSK	1	99	11.59	11.85	11.87	
20	QPSK	50	0	11.62	11.70	11.88	13
20	QPSK	50	24	11.70	11.75	11.72	
20	QPSK	50	50	11.70	11.77	11.78	
20	QPSK	100	0	11.81	11.80	11.82	13
20	16QAM	1	0	11.86	11.91	11.96	
20	16QAM	1	49	11.89	12.02	12.01	
20	16QAM	1	99	11.94	12.05	12.02	13
20	16QAM	50	0	11.83	11.69	11.70	
20	16QAM	50	24	11.72	11.71	11.73	
20	16QAM	50	50	11.75	11.84	11.80	13
20	16QAM	100	0	11.82	11.82	11.83	
20	64QAM	1	0	11.70	11.89	11.78	
20	64QAM	1	49	11.72	11.85	11.88	13
20	64QAM	1	99	11.84	11.91	11.84	
20	64QAM	50	0	11.84	11.73	11.70	
20	64QAM	50	24	11.76	11.75	11.79	13
20	64QAM	50	50	11.76	11.82	11.86	
20	64QAM	100	0	11.83	11.84	11.82	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	11.52	11.56	11.59	13
15	QPSK	1	37	11.52	11.57	11.60	
15	QPSK	1	74	11.62	11.85	11.87	
15	QPSK	36	0	11.62	11.86	11.89	13
15	QPSK	36	20	11.73	11.71	11.72	
15	QPSK	36	39	11.75	11.81	11.79	
15	QPSK	75	0	11.84	11.81	11.82	13
15	16QAM	1	0	11.86	11.95	11.93	
15	16QAM	1	37	11.95	12.04	11.97	
15	16QAM	1	74	11.98	12.03	12.01	13
15	16QAM	36	0	11.65	11.72	11.72	
15	16QAM	36	20	11.73	11.74	11.73	
15	16QAM	36	39	11.72	11.79	11.76	13
15	16QAM	75	0	11.86	11.86	11.85	
15	64QAM	1	0	11.72	11.79	11.78	
15	64QAM	1	37	11.79	11.90	11.87	13
15	64QAM	1	74	11.86	11.93	11.90	
15	64QAM	36	0	11.85	11.73	11.71	
15	64QAM	36	20	11.77	11.75	11.76	13
15	64QAM	36	39	11.81	11.84	11.85	
15	64QAM	75	0	11.87	11.88	11.87	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	11.33	11.45	11.41	13
10	QPSK	1	25	11.38	11.50	11.44	
10	QPSK	1	49	11.42	11.56	11.48	
10	QPSK	25	0	11.39	11.45	11.48	13
10	QPSK	25	12	11.52	11.51	11.52	
10	QPSK	25	25	11.51	11.57	11.58	
10	QPSK	50	0	11.43	11.40	11.40	13
10	16QAM	1	0	11.74	11.77	11.80	
10	16QAM	1	25	11.79	11.84	11.84	
10	16QAM	1	49	11.82	11.89	11.88	13
10	16QAM	25	0	11.47	11.55	11.53	
10	16QAM	25	12	11.56	11.59	11.54	
10	16QAM	25	25	11.53	11.80	11.62	13
10	16QAM	50	0	11.41	11.44	11.39	
10	64QAM	1	0	11.59	11.82	11.85	
10	64QAM	1	25	11.71	11.77	11.79	13
10	64QAM	1	49	11.70	11.81	11.78	
10	64QAM	25	0	11.45	11.50	11.52	
10	64QAM	25	12	11.58	11.57	11.58	13
10	64QAM	25	25	11.55	11.81	11.85	
10	64QAM	50	0	11.48	11.42	11.42	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	11.33	11.46	11.44	13
5	QPSK	1	12	11.41	11.45	11.50	
5	QPSK	1	24	11.42	11.52	11.48	
5	QPSK	12	0	11.41	11.47	11.50	13
5	QPSK	12	7	11.55	11.55	11.58	
5	QPSK	12	13	11.51	11.54	11.55	
5	QPSK	25	0	11.48	11.44	11.54	13
5	16QAM	1	0	11.69	11.87	11.80	
5	16QAM	1	12	11.73	11.85	11.77	
5	16QAM	1	24	11.77	11.83	11.87	13
5	16QAM	12	0	11.43	11.48	11.54	
5	16QAM	12	7	11.56	11.55	11.59	
5	16QAM	12	13	11.52	11.58	11.55	13
5	16QAM	25	0	11.48	11.51	11.58	
5	64QAM	1	0	11.63	11.85	11.79	
5	64QAM	1	12	11.67	11.87	11.73	13
5	64QAM	1	24	11.75	11.71	11.80	
5	64QAM	12	0	11.49	11.53	11.59	
5	64QAM	12	7	11.65	11.58	11.63	13
5	64QAM	12	13	11.61	11.81	11.59	
5	64QAM	25	0	11.52	11.50	11.58	



Band 66_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq. 132072	Middle Ch. / Freq. 132322	High Ch. / Freq. 132572	
Channel				1720	1745	1770	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	12.32	12.34	12.54	14
20	QPSK	1	49	12.44	12.48	12.50	
20	QPSK	1	99	12.17	12.19	12.44	
20	QPSK	50	0	12.60	12.61	12.61	14
20	QPSK	50	24	12.67	12.61	12.69	
20	QPSK	50	50	12.49	12.53	12.53	
20	QPSK	100	0	12.59	12.50	12.60	
20	16QAM	1	0	12.64	12.64	12.52	14
20	16QAM	1	49	12.75	12.80	12.84	
20	16QAM	1	99	12.47	12.48	12.72	
20	16QAM	50	0	12.53	12.58	12.58	14
20	16QAM	50	24	12.65	12.56	12.64	
20	16QAM	50	50	12.51	12.51	12.52	
20	16QAM	100	0	12.54	12.47	12.60	
20	64QAM	1	0	12.59	12.59	12.82	14
20	64QAM	1	49	12.78	12.78	12.76	
20	64QAM	1	99	12.48	12.49	12.68	
20	64QAM	50	0	12.62	12.63	12.62	14
20	64QAM	50	24	12.64	12.61	12.71	
20	64QAM	50	50	12.56	12.54	12.54	
20	64QAM	100	0	12.60	12.52	12.60	
Channel				132047	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	12.51	12.51	12.58	14
15	QPSK	1	37	12.54	12.54	12.53	
15	QPSK	1	74	12.29	12.34	12.49	
15	QPSK	36	0	12.57	12.60	12.61	14
15	QPSK	36	20	12.64	12.65	12.68	
15	QPSK	36	39	12.52	12.56	12.58	
15	QPSK	75	0	12.60	12.54	12.64	
15	16QAM	1	0	12.76	12.73	12.86	14
15	16QAM	1	37	12.75	12.79	12.75	
15	16QAM	1	74	12.56	12.59	12.71	
15	16QAM	36	0	12.58	12.57	12.61	14
15	16QAM	36	20	12.63	12.64	12.67	
15	16QAM	36	39	12.51	12.53	12.53	
15	16QAM	75	0	12.56	12.51	12.60	
15	64QAM	1	0	12.70	12.70	12.82	14
15	64QAM	1	37	12.71	12.76	12.78	
15	64QAM	1	74	12.51	12.56	12.77	
15	64QAM	36	0	12.51	12.60	12.58	14
15	64QAM	36	20	12.55	12.64	12.66	
15	64QAM	36	39	12.56	12.52	12.56	
15	64QAM	75	0	12.56	12.53	12.63	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	12.20	12.22	12.22	14
10	QPSK	1	25	12.29	12.33	12.33	
10	QPSK	1	49	12.07	12.01	12.46	
10	QPSK	25	0	12.30	12.35	12.38	14
10	QPSK	25	12	12.48	12.39	12.53	
10	QPSK	25	25	12.37	12.39	12.45	
10	QPSK	50	0	12.41	12.34	12.44	
10	16QAM	1	0	12.55	12.58	12.61	14
10	16QAM	1	25	12.66	12.72	12.76	
10	16QAM	1	49	12.45	12.44	12.44	
10	16QAM	25	0	12.32	12.27	12.30	14
10	16QAM	25	12	12.45	12.34	12.46	
10	16QAM	25	25	12.36	12.33	12.38	
10	16QAM	50	0	12.34	12.25	12.37	
10	64QAM	1	0	12.45	12.47	12.46	14
10	64QAM	1	25	12.61	12.60	12.57	
10	64QAM	1	49	12.33	12.30	12.34	
10	64QAM	25	0	12.33	12.33	12.38	14
10	64QAM	25	12	12.29	12.41	12.54	
10	64QAM	25	25	12.41	12.40	12.41	
10	64QAM	50	0	12.45	12.34	12.43	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	12.27	12.22	12.30	14
5	QPSK	1	12	12.46	12.36	12.41	
5	QPSK	1	24	12.26	12.36	12.34	
5	QPSK	12	0	12.48	12.35	12.38	14
5	QPSK	12	7	12.49	12.47	12.48	
5	QPSK	12	13	12.46	12.43	12.47	
5	QPSK	25	0	12.44	12.43	12.49	
5	16QAM	1	0	12.63	12.65	12.64	14
5	16QAM	1	12	12.67	12.62	12.67	
5	16QAM	1	24	12.69	12.70	12.67	
5	16QAM	12	0	12.50	12.40	12.41	14
5	16QAM	12	7	12.56	12.53	12.52	
5	16QAM	12	13	12.51	12.48	12.50	
5	16QAM	25	0	12.43	12.43	12.46	
5	64QAM	1	0	12.68	12.72	12.69	14
5	64QAM	1	12	12.84	12.79	12.87	
5	64QAM	1	24	12.85	12.71	12.75	
5	64QAM	12	0	12.50	12.40	12.42	14
5	64QAM	12	7	12.57	12.52	12.56	
5	64QAM	12	13	12.51	12.49	12.50	
5	64QAM	25	0	12.48	12.48	12.50	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	12.19	12.24	12.27	14
3	QPSK	1	8	12.39	12.42	12.47	
3	QPSK	1	14	12.26	12.36	12.35	
3	QPSK	8	0	12.33	12.36	12.34	14
3	QPSK	8	4	12.41	12.45	12.39	
3	QPSK	8	7	12.38	12.42	12.44	
3	QPSK	15	0	12.44	12.46	12.41	
3	16QAM	1	0	12.62	12.54	12.64	14
3	16QAM	1	8	12.66	12.77	12.89	
3	16QAM	1	14	12.74	12.65	12.71	
3	16QAM	8	0	12.56	12.47	12.46	14
3	16QAM	8	4	12.62	12.57	12.55	
3	16QAM	8	7	12.59	12.56	12.59	
3	16QAM	15	0	12.49	12.46	12.45	
3	64QAM	1	0	12.89	12.53	12.77	14
3	64QAM	1	8	12.91	12.86	12.89	
3	64QAM	1	14	12.83	12.72	12.86	
3	64QAM	8	0	12.42	12.31	12.34	14
3	64QAM	8	4	12.54	12.46	12.47	
3	64QAM	8	7	12.46	12.43	12.40	
3	64QAM	15	0	12.49	12.48	12.41	
Channel				131979	132322	132655	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	12.14	12.28	12.24	14
1.4	QPSK	1	3	12.26	12.32	12.39	
1.4	QPSK	1	5	12.26	12.27	12.36	
1.4	QPSK	3	0	12.33	12.31	12.29	14
1.4	QPSK	3	1	12.44	12.36	12.39	
1.4	QPSK	3	3	12.33	12.33	12.39	
1.4	QPSK	6	0	12.39	12.38	12.31	
1.4	16QAM	1	0	12.61	12.59	12.63	14
1.4	16QAM	1	3	12.69	12.65	12.71	
1.4	16QAM	1	5	12.53	12.59	12.55	
1.4	16QAM	3	0	12.52	12.42	12.38	14
1.4	16QAM	3	1	12.60	12.44	12.48	
1.4	16QAM	3	3	12.52	12.40	12.53	
1.4	16QAM	6	0	12.31	12.40	12.33	14
1.4	64QAM	1	0	12.82	12.65	12.58	
1.4	64QAM	1	3	12.89	12.74	12.77	
1.4	64QAM	1	5	12.75	12.63	12.78	14
1.4	64QAM	3	0	12.51	12.48	12.50	
1.4	64QAM	3	1	12.60	12.60	12.54	
1.4	64QAM	3	3	12.55	12.54	12.57	
1.4	64QAM	6	0	12.51	12.40	12.38	



Band 2_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	Channel	
								18700	18800
18600									
18800									
19000									
19200									
19400									
19600									
19800									
20000									
20200									
20400									
20600									
20800									
21000									
21200									
21400									
21600									
21800									
22000									
22200									
22400									
22600									
22800									
23000									
23200									
23400									
23600									
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41600									
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50800									
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51600									
51800									
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61000									
61200									
61400									
61600									
61800									
62000									
62200									
62400									
62600									
62800									
63000									
63200									
63400									
63600									
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64400									
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66200									
66400									
66600									
66800									
67000									
67200									
67400									
67600									
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98400									
98600									
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99000									
99200									
99400									
99600									
99800									
100000									



Band 4_Ant 2										
Band (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20950	Power Middle Ch. / Freq. 20175	Power High Ch. / Freq. 20300	Tune-up (dBm)			
Channel										
Frequency (MHz)										
20	QPSK	1	0	19.34	19.34	19.32	20.5			
20	QPSK	1	49	19.49	19.50	19.52				
20	QPSK	1	99	19.22	19.22	19.21	20.5			
20	QPSK	50	0	19.57	19.55	19.56				
20	QPSK	50	24	19.69	19.69	19.60	20.5			
20	QPSK	50	50	19.80	19.58	19.57				
20	16QAM	1	0	19.66	19.66	19.66	20.5			
20	16QAM	1	49	19.87	19.91	19.92				
20	16QAM	1	99	19.61	19.56	19.58	20.5			
20	16QAM	50	0	19.57	19.55	19.55				
20	16QAM	50	24	19.71	19.62	19.59	20.5			
20	16QAM	50	50	19.80	19.58	19.59				
20	16QAM	100	0	19.61	19.55	19.52	20.5			
20	64QAM	1	0	19.54	19.54	19.49				
20	64QAM	1	49	19.69	19.73	19.76	20.5			
20	64QAM	1	99	19.49	19.43	19.50				
20	64QAM	50	0	19.59	19.59	19.57	20.5			
20	64QAM	50	24	19.72	19.63	19.66				
20	64QAM	50	50	19.61	19.60	19.61	20.5			
20	64QAM	100	0	19.64	19.57	19.52				
Channel										
Frequency (MHz)										
15	QPSK	1	0	19.44	19.43	19.41	20.5			
15	QPSK	1	37	19.53	19.51	19.51				
15	QPSK	1	74	19.41	19.38	19.40	20.5			
15	QPSK	36	0	19.56	19.57	19.57				
15	QPSK	36	20	19.67	19.61	19.66	20.5			
15	QPSK	36	39	19.82	19.62	19.61				
15	QPSK	75	0	19.64	19.56	19.61	20.5			
15	16QAM	1	0	19.74	19.73	19.73				
15	16QAM	1	37	19.60	19.66	19.70	20.5			
15	16QAM	1	74	19.73	19.74	19.71				
15	16QAM	36	0	19.59	19.58	19.57	20.5			
15	16QAM	36	20	19.84	19.60	19.67				
15	16QAM	36	39	19.62	19.62	19.62	20.5			
15	16QAM	75	0	19.53	19.55	19.61				
15	64QAM	1	0	19.60	19.63	19.62	20.5			
15	64QAM	1	37	19.78	19.81	19.74				
15	64QAM	1	74	19.70	19.61	19.62	20.5			
15	64QAM	36	0	19.59	19.61	19.62				
15	64QAM	36	20	19.72	19.64	19.72	20.5			
15	64QAM	36	39	19.67	19.64	19.66				
15	64QAM	75	0	19.66	19.57	19.63	20.5			
Channel										
Frequency (MHz)										
10	QPSK	1	0	19.11	19.13	19.13	20.5			
10	QPSK	1	25	19.38	19.38	19.38				
10	QPSK	1	49	19.06	19.08	19.05	20.5			
10	QPSK	25	0	19.37	19.38	19.36				
10	QPSK	25	12	19.51	19.41	19.43	20.5			
10	QPSK	25	25	19.37	19.35	19.37				
10	QPSK	50	0	19.42	19.35	19.33	20.5			
10	16QAM	1	0	19.49	19.47	19.46				
10	16QAM	1	25	19.75	19.76	19.76	20.5			
10	16QAM	1	49	19.44	19.42	19.43				
10	16QAM	25	0	19.40	19.38	19.36	20.5			
10	16QAM	25	12	19.53	19.44	19.44				
10	16QAM	25	25	19.39	19.37	19.37	20.5			
10	16QAM	50	0	19.44	19.35	19.36				
10	64QAM	1	0	19.36	19.34	19.35	20.5			
10	64QAM	1	25	19.73	19.69	19.68				
10	64QAM	1	49	19.36	19.35	19.35	20.5			
10	64QAM	25	0	19.41	19.40	19.41				
10	64QAM	25	12	19.56	19.51	19.51	20.5			
10	64QAM	25	25	19.41	19.41	19.43				
10	64QAM	50	0	19.46	19.39	19.37	20.5			
Channel										
Frequency (MHz)										
5	QPSK	1	0	19.33	19.36	19.31	20.5			
5	QPSK	1	12	19.42	19.45	19.43				
5	QPSK	1	24	19.31	19.27	19.25	20.5			
5	QPSK	12	0	19.51	19.46	19.46				
5	QPSK	12	7	19.53	19.55	19.51	20.5			
5	QPSK	12	13	19.46	19.46	19.46				
5	QPSK	25	0	19.48	19.42	19.46	20.5			
5	16QAM	1	0	19.66	19.67	19.63				
5	16QAM	1	12	19.72	19.70	19.66	20.5			
5	16QAM	1	24	19.62	19.63	19.58				
5	16QAM	12	0	19.54	19.49	19.46	20.5			
5	16QAM	12	7	19.55	19.55	19.52				
5	16QAM	12	13	19.48	19.48	19.47	20.5			
5	16QAM	25	0	19.52	19.45	19.49				
5	64QAM	1	0	19.66	19.62	19.56	20.5			
5	64QAM	1	12	19.64	19.65	19.60				
5	64QAM	1	24	19.47	19.55	19.54	20.5			
5	64QAM	12	0	19.60	19.54	19.50				
5	64QAM	12	7	19.61	19.62	19.63	20.5			
5	64QAM	12	13	19.56	19.56	19.50				
5	64QAM	25	0	19.54	19.46	19.52	20.5			
Channel										
Frequency (MHz)										
3	QPSK	1	0	19.42	19.40	19.40	20.5			
3	QPSK	1	8	19.46	19.46	19.46				
3	QPSK	1	14	19.40	19.37	19.35	20.5			
3	QPSK	8	0	19.53	19.47	19.44				
3	QPSK	8	4	19.56	19.55	19.53	20.5			
3	QPSK	8	7	19.50	19.46	19.46				
3	QPSK	15	0	19.50	19.45	19.48	20.5			
3	16QAM	1	0	19.72	19.72	19.67				
3	16QAM	1	8	19.79	19.63	19.75	20.5			
3	16QAM	1	14	19.71	19.69	19.69				
3	16QAM	8	0	19.58	19.53	19.50	20.5			
3	16QAM	8	4	19.59	19.58	19.58				
3	16QAM	8	7	19.52	19.54	19.51	20.5			
3	16QAM	15	0	19.54	19.49	19.53				
3	64QAM	1	0	19.66	19.62	19.56	20.5			
3	64QAM	1	8	19.73	19.72	19.70				
3	64QAM	1	14	19.59	19.63	19.56	20.5			
3	64QAM	8	0	19.62	19.56	19.54				
3	64QAM	8	7	19.61	19.62	19.60	20.5			
3	64QAM	8	7	19.56	19.57	19.56				
3	64QAM	15	0	19.56	19.49	19.55	20.5			
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	19.28	19.35	19.28	20.5			
1.4	QPSK	1	3	19.38	19.38	19.36				
1.4	QPSK	1	5	19.30	19.30	19.31	20.5			
1.4	QPSK	3	0	19.37	19.37	19.27				
1.4	QPSK	3	1	19.39	19.38	19.31	20.5			
1.4	QPSK	3	3	19.34	19.35	19.31				
1.4	QPSK	6	0	19.41	19.40	19.35	20.5			
1.4	16QAM	1	0	19.62	19.67	19.57				
1.4	16QAM	1	3	19.73	19.72	19.73	20.5			
1.4	16QAM	1	5	19.64	19.64	19.63				
1.4	16QAM	3	0	19.45	19.45	19.35	20.5			
1.4	16QAM	3	1	19.48	19.48	19.42				
1.4	16QAM	3	3	19.41	19.42	19.40	20.5			
1.4	16QAM	6	0	19.52	19.62	19.45				
1.4	64QAM	1	0	19.57	19.58	19.51	20.5			
1.4	64QAM	1	3	19.63	19.63	19.63				
1.4	64QAM	1	5	19.52	19.54	19.54	20.5			
1.4	64QAM	3	0	19.56	19.57	19.52				
1.4	64QAM	3	1	19.62	19.65	19.55	20.5			
1.4	64QAM	3	3	19.56	19.55	19.57				
1.4	64QAM	6	0	19.43	19.46	19.40	20.5			



Band 7_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 29850	Power Middle Ch. Freq. 21100	Power High Ch. Freq. 21350	Tune-up limit (dBm)
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	17.11	17.08	17.18	18
20	QPSK	1	49	17.13	17.17	17.21	
20	QPSK	1	99	17.21	17.22	17.25	
20	QPSK	50	0	17.21	17.28	17.29	18
20	QPSK	50	24	17.31	17.31	17.34	
20	QPSK	50	50	17.31	17.35	17.39	
20	QPSK	100	0	17.25	17.16	17.22	18
20	16QAM	1	0	17.47	17.43	17.52	
20	16QAM	1	49	17.48	17.47	17.56	
20	16QAM	1	99	17.55	17.55	17.58	18
20	16QAM	50	0	17.24	17.25	17.29	
20	16QAM	50	24	17.33	17.29	17.32	
20	16QAM	50	50	17.36	17.37	17.38	18
20	16QAM	100	0	17.23	17.16	17.21	
20	64QAM	1	0	17.30	17.25	17.39	
20	64QAM	1	49	17.38	17.37	17.50	18
20	64QAM	1	99	17.43	17.42	17.54	
20	64QAM	50	0	17.22	17.25	17.31	
20	64QAM	50	24	17.31	17.28	17.38	18
20	64QAM	50	50	17.35	17.38	17.45	
20	64QAM	100	0	17.22	17.18	17.29	
Channel				26825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.16	17.16	17.23	18
15	QPSK	1	37	17.16	17.17	17.24	
15	QPSK	1	74	17.21	17.25	17.29	
15	QPSK	36	0	17.24	17.23	17.29	18
15	QPSK	36	20	17.31	17.29	17.39	
15	QPSK	36	39	17.34	17.37	17.39	
15	QPSK	75	0	17.25	17.21	17.24	18
15	16QAM	1	0	17.47	17.47	17.51	
15	16QAM	1	37	17.47	17.48	17.50	
15	16QAM	1	74	17.51	17.54	17.57	18
15	16QAM	36	0	17.23	17.26	17.33	
15	16QAM	36	20	17.31	17.29	17.39	
15	16QAM	36	39	17.37	17.33	17.37	18
15	16QAM	75	0	17.27	17.22	17.24	
15	64QAM	1	0	17.32	17.28	17.44	
15	64QAM	1	37	17.40	17.38	17.49	18
15	64QAM	1	74	17.42	17.44	17.56	
15	64QAM	36	0	17.28	17.25	17.37	
15	64QAM	36	20	17.34	17.30	17.46	18
15	64QAM	36	39	17.36	17.35	17.46	
15	64QAM	75	0	17.27	17.21	17.29	
Channel				26800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	16.90	17.00	17.00	18
10	QPSK	1	25	16.90	17.02	17.02	
10	QPSK	1	49	16.96	17.07	17.06	
10	QPSK	25	0	17.01	17.03	17.08	18
10	QPSK	25	12	17.06	17.06	17.16	
10	QPSK	25	25	17.12	17.13	17.15	
10	QPSK	50	0	17.02	16.88	17.08	18
10	16QAM	1	0	17.31	17.34	17.37	
10	16QAM	1	25	17.33	17.38	17.41	
10	16QAM	1	49	17.35	17.43	17.43	18
10	16QAM	25	0	17.01	17.06	17.09	
10	16QAM	25	12	17.10	17.07	17.16	
10	16QAM	25	25	17.13	17.14	17.15	18
10	16QAM	50	0	17.01	16.88	17.07	
10	64QAM	1	0	17.12	17.25	17.22	
10	64QAM	1	25	17.26	17.32	17.32	18
10	64QAM	1	49	17.26	17.33	17.38	
10	64QAM	25	0	17.01	17.06	17.08	
10	64QAM	25	12	17.11	17.10	17.22	18
10	64QAM	25	25	17.13	17.16	17.22	
10	64QAM	50	0	17.03	17.01	17.09	
Channel				26775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	16.92	16.97	17.04	18
5	QPSK	1	12	17.02	17.06	17.11	
5	QPSK	1	24	17.06	17.06	17.06	
5	QPSK	12	0	17.04	17.02	17.13	18
5	QPSK	12	7	17.12	17.07	17.14	
5	QPSK	12	13	17.07	17.13	17.14	
5	QPSK	25	0	17.06	17.06	17.13	18
5	16QAM	1	0	17.27	17.33	17.42	
5	16QAM	1	12	17.37	17.45	17.47	
5	16QAM	1	24	17.35	17.42	17.42	18
5	16QAM	12	0	17.09	17.08	17.13	
5	16QAM	12	7	17.12	17.11	17.18	
5	16QAM	12	13	17.10	17.14	17.13	18
5	16QAM	25	0	17.09	17.06	17.12	
5	64QAM	1	0	17.19	17.27	17.39	
5	64QAM	1	12	17.26	17.36	17.34	18
5	64QAM	1	24	17.27	17.37	17.38	
5	64QAM	12	0	17.09	17.14	17.17	
5	64QAM	12	7	17.15	17.18	17.24	18
5	64QAM	12	13	17.12	17.20	17.15	
5	64QAM	25	0	17.04	17.06	17.15	



Band 25_Ant 2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.		
Channel				26140	26340	26590		
Frequency (MHz)				1860	1880	1905		
20	QPSK	1	0	19.26	19.18	19.24	20	
20	QPSK	1	49	19.11	19.11	19.13		
20	QPSK	1	99	19.04	19.07	19.08		
20	QPSK	60	0	19.28	19.24	19.23		
20	QPSK	60	24	19.25	19.24	19.20	20	
20	QPSK	60	50	19.22	19.21	19.19		
20	QPSK	100	0	19.17	19.17	19.23		
20	16QAM	1	0	19.85	19.53	19.55		20
20	16QAM	1	49	19.49	19.51	19.51		
20	16QAM	1	99	19.39	19.49	19.41		
20	16QAM	60	0	19.31	19.22	19.25	20	
20	16QAM	60	24	19.28	19.28	19.22		
20	16QAM	60	50	19.21	19.23	19.22		
20	16QAM	100	0	19.16	19.19	19.24		20
20	64QAM	1	0	19.54	19.41	19.41		
20	64QAM	1	49	19.38	19.40	19.38		
20	64QAM	1	99	19.37	19.36	19.35	20	
20	64QAM	60	0	19.34	19.24	19.27		
20	64QAM	60	24	19.31	19.31	19.26		
20	64QAM	60	50	19.24	19.26	19.25		20
20	64QAM	100	0	19.21	19.22	19.27		
Channel				26115	26340	26615	Tune-up (dBm)	
Frequency (MHz)				1857.5	1880	1907.5		
15	QPSK	1	0	19.00	19.21	19.23	20	
15	QPSK	1	37	19.13	19.14	19.13		
15	QPSK	1	74	18.99	19.11	19.10		
15	QPSK	36	0	19.21	19.11	19.12		20
15	QPSK	36	20	19.30	19.29	19.30		
15	QPSK	36	39	19.22	19.22	19.22		
15	QPSK	75	0	19.23	19.19	19.23	20	
15	16QAM	1	0	19.34	19.54	19.55		
15	16QAM	1	37	19.51	19.52	19.54		
15	16QAM	1	74	19.32	19.50	19.43		20
15	16QAM	36	0	19.24	19.12	19.15		
15	16QAM	36	20	19.31	19.29	19.30		
15	16QAM	36	39	19.22	19.23	19.24	20	
15	16QAM	75	0	19.26	19.22	19.27		
15	64QAM	1	0	19.27	19.39	19.43		
15	64QAM	1	37	19.41	19.44	19.40		20
15	64QAM	1	74	19.23	19.33	19.34		
15	64QAM	36	0	19.29	19.19	19.21		
15	64QAM	36	20	19.37	19.33	19.34	20	
15	64QAM	36	39	19.26	19.26	19.26		
15	64QAM	75	0	19.26	19.23	19.25		
Channel				26090	26340	26640		Tune-up (dBm)
Frequency (MHz)				1855	1880	1910		
10	QPSK	1	0	18.72	18.88	18.93	20	
10	QPSK	1	25	18.90	18.87	18.89		
10	QPSK	1	49	18.60	18.86	18.89		
10	QPSK	25	0	18.99	18.86	18.90		20
10	QPSK	25	12	19.05	19.01	19.06		
10	QPSK	25	25	18.96	18.97	18.99		
10	QPSK	50	0	19.00	19.99	18.99	20	
10	16QAM	1	0	19.13	19.04	19.35		
10	16QAM	1	25	19.27	19.26	19.27		
10	16QAM	1	49	19.02	19.03	19.27		20
10	16QAM	25	0	19.01	18.88	18.91		
10	16QAM	25	12	19.09	19.04	19.09		
10	16QAM	25	25	18.97	18.99	19.00	20	
10	16QAM	50	0	19.01	19.98	19.99		
10	64QAM	1	0	19.08	18.91	19.18		
10	64QAM	1	25	19.25	19.21	19.17		20
10	64QAM	1	49	18.94	18.94	19.17		
10	64QAM	25	0	19.02	18.93	18.94		
10	64QAM	25	12	19.13	19.12	19.12	20	
10	64QAM	25	25	19.03	19.03	19.04		
10	64QAM	50	0	19.06	19.02	19.04		
Channel				26065	26340	26665		Tune-up (dBm)
Frequency (MHz)				1852.5	1880	1912.5		
5	QPSK	1	0	18.93	18.81	18.88	20	
5	QPSK	1	12	18.96	18.94	18.90		
5	QPSK	1	24	18.84	18.93	18.89		
5	QPSK	12	0	19.04	18.90	18.92		20
5	QPSK	12	7	19.10	19.01	19.02		
5	QPSK	12	13	19.07	19.00	19.02		
5	QPSK	25	0	19.05	19.98	18.99	20	
5	16QAM	1	0	19.25	19.17	19.17		
5	16QAM	1	12	19.29	19.22	19.19		
5	16QAM	1	24	19.27	19.29	19.26		20
5	16QAM	12	0	19.08	18.96	18.95		
5	16QAM	12	7	19.09	19.07	19.04		
5	16QAM	12	13	19.07	19.04	19.04	20	
5	16QAM	25	0	19.07	19.01	19.03		
5	64QAM	1	0	19.27	19.08	19.09		
5	64QAM	1	12	19.21	19.17	19.14		20
5	64QAM	1	24	19.22	19.15	19.19		
5	64QAM	12	0	19.14	19.02	19.01		
5	64QAM	12	7	19.16	19.10	19.11	20	
5	64QAM	12	13	19.14	19.10	19.09		
5	64QAM	25	0	19.08	19.06	19.04		
Channel				26040	26340	26683		Tune-up (dBm)
Frequency (MHz)				1851.5	1880	1913.5		
3	QPSK	1	0	18.94	18.85	18.88	20	
3	QPSK	1	8	19.01	18.97	18.97		
3	QPSK	1	14	19.01	18.96	18.95		
3	QPSK	8	0	19.07	18.95	18.92		20
3	QPSK	8	4	19.10	19.01	18.96		
3	QPSK	8	7	19.04	19.01	19.03		
3	QPSK	15	0	19.09	19.01	18.94	20	
3	16QAM	1	0	19.23	19.18	19.16		
3	16QAM	1	8	19.26	19.23	19.29		
3	16QAM	1	14	19.32	19.29	19.29		20
3	16QAM	8	0	19.11	18.99	18.99		
3	16QAM	8	4	19.15	19.10	19.03		
3	16QAM	8	7	19.14	19.10	19.09	20	
3	16QAM	15	0	19.10	19.04	19.01		
3	64QAM	1	0	19.25	19.13	19.08		
3	64QAM	1	8	19.32	19.26	19.26		20
3	64QAM	1	14	19.24	19.22	19.23		
3	64QAM	8	0	19.13	19.00	19.00		
3	64QAM	8	4	19.16	19.08	19.05	20	
3	64QAM	8	7	19.15	19.08	19.11		
3	64QAM	15	0	19.12	19.06	18.98		
Channel				26017	26340	26693		Tune-up (dBm)
Frequency (MHz)				1850.7	1880	1914.3		
1.4	QPSK	1	0	18.90	18.84	18.75	20	
1.4	QPSK	1	3	18.95	18.89	18.89		
1.4	QPSK	1	5	18.89	18.91	18.84		
1.4	QPSK	3	0	18.93	18.84	18.75		20
1.4	QPSK	3	1	18.94	18.88	18.82		
1.4	QPSK	3	3	18.95	18.85	18.85		
1.4	QPSK	6	0	19.00	19.92	18.85	20	
1.4	16QAM	1	0	19.23	19.17	19.06		
1.4	16QAM	1	3	19.32	19.24	19.21		
1.4	16QAM	1	5	19.24	19.19	19.20		20
1.4	16QAM	3	0	19.03	18.94	18.85		
1.4	16QAM	3	1	19.06	19.00	18.92		
1.4	16QAM	3	3	19.03	18.94	18.93	20	
1.4	16QAM	6	0	19.10	19.04	18.95		
1.4	64QAM	1	0	19.16	19.10	19.02		
1.4	64QAM	1	3	19.22	19.15	19.15		20
1.4	64QAM	1	5	19.14	19.10	19.08		
1.4	64QAM	3	0	19.14	19.07	18.97		
1.4	64QAM	3	1	19.20	19.14	19.06	20	
1.4	64QAM	3	3	19.14	19.08	19.08		
1.4	64QAM	6	0	19.02	18.95	18.89		



Band 66_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	19.36	19.36	19.66	20.5
20	QPSK	1	49	19.50	19.53	19.67	
20	QPSK	1	99	19.25	19.27	19.48	
20	QPSK	50	0	19.61	19.65	19.69	20.5
20	QPSK	50	24	19.73	19.66	19.77	
20	QPSK	50	50	19.58	19.59	19.62	
20	QPSK	100	0	19.64	19.66	19.70	20.5
20	16QAM	1	0	19.67	19.72	20.08	
20	16QAM	1	49	19.89	19.83	20.02	
20	16QAM	1	99	19.62	19.65	19.92	20.5
20	16QAM	50	0	19.65	19.65	19.69	
20	16QAM	50	24	19.73	19.68	19.80	
20	16QAM	50	50	19.59	19.63	19.66	20.5
20	16QAM	100	0	19.63	19.65	19.69	
20	64QAM	1	0	19.53	19.55	19.91	
20	64QAM	1	49	19.77	19.78	19.84	20.5
20	64QAM	1	99	19.48	19.60	19.77	
20	64QAM	50	0	19.65	19.67	19.72	
20	64QAM	50	24	19.74	19.69	19.80	20.5
20	64QAM	50	50	19.61	19.64	19.69	
20	64QAM	100	0	19.66	19.70	19.74	
Channel				132047	132322	132697	Tune-up (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	19.51	19.54	19.69	20.5
15	QPSK	1	37	19.53	19.55	19.59	
15	QPSK	1	74	19.37	19.41	19.56	
15	QPSK	36	0	19.64	19.67	19.71	20.5
15	QPSK	36	20	19.69	19.74	19.89	
15	QPSK	36	39	19.60	19.64	19.68	
15	QPSK	75	0	19.67	19.69	19.64	20.5
15	16QAM	1	0	19.79	19.86	20.04	
15	16QAM	1	37	19.94	19.82	20.01	
15	16QAM	1	74	19.72	19.73	19.91	20.5
15	16QAM	36	0	19.64	19.67	19.72	
15	16QAM	36	20	19.72	19.73	19.70	
15	16QAM	36	39	19.62	19.64	19.70	20.5
15	16QAM	75	0	19.67	19.71	19.69	
15	64QAM	1	0	19.69	19.72	19.92	
15	64QAM	1	37	19.80	19.82	19.89	20.5
15	64QAM	1	74	19.60	19.64	19.81	
15	64QAM	36	0	19.69	19.75	19.80	
15	64QAM	36	20	19.74	19.77	19.76	20.5
15	64QAM	36	39	19.70	19.71	19.75	
15	64QAM	75	0	19.72	19.73	19.71	
Channel				132022	132322	132622	Tune-up (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	19.13	19.16	19.19	20.5
10	QPSK	1	25	19.36	19.37	19.43	
10	QPSK	1	49	19.12	19.15	19.19	
10	QPSK	25	0	19.38	19.40	19.45	20.5
10	QPSK	25	12	19.51	19.44	19.56	
10	QPSK	25	25	19.39	19.43	19.46	
10	QPSK	50	0	19.45	19.45	19.52	20.5
10	16QAM	1	0	19.49	19.52	19.58	
10	16QAM	1	25	19.74	19.79	19.82	
10	16QAM	1	49	19.47	19.53	19.58	20.5
10	16QAM	25	0	19.39	19.41	19.46	
10	16QAM	25	12	19.53	19.45	19.60	
10	16QAM	25	25	19.41	19.44	19.51	20.5
10	16QAM	50	0	19.46	19.47	19.52	
10	64QAM	1	0	19.38	19.39	19.44	
10	64QAM	1	25	19.68	19.70	19.77	20.5
10	64QAM	1	49	19.43	19.43	19.48	
10	64QAM	25	0	19.43	19.47	19.53	
10	64QAM	25	12	19.56	19.52	19.63	20.5
10	64QAM	25	25	19.43	19.46	19.53	
10	64QAM	50	0	19.49	19.49	19.55	
Channel				131997	132322	132647	Tune-up (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	19.32	19.39	19.42	20.5
5	QPSK	1	12	19.39	19.42	19.48	
5	QPSK	1	24	19.32	19.33	19.38	
5	QPSK	12	0	19.52	19.48	19.52	20.5
5	QPSK	12	7	19.50	19.52	19.52	
5	QPSK	12	13	19.44	19.46	19.49	
5	QPSK	25	0	19.46	19.47	19.49	20.5
5	16QAM	1	0	19.65	19.74	19.77	
5	16QAM	1	12	19.65	19.71	19.78	
5	16QAM	1	24	19.62	19.66	19.72	20.5
5	16QAM	12	0	19.56	19.51	19.53	
5	16QAM	12	7	19.55	19.54	19.55	
5	16QAM	12	13	19.48	19.46	19.53	20.5
5	16QAM	25	0	19.50	19.53	19.52	
5	64QAM	1	0	19.69	19.65	19.69	
5	64QAM	1	12	19.61	19.69	19.72	20.5
5	64QAM	1	24	19.52	19.57	19.67	
5	64QAM	12	0	19.60	19.55	19.64	
5	64QAM	12	7	19.61	19.61	19.63	20.5
5	64QAM	12	13	19.52	19.54	19.60	
5	64QAM	25	0	19.52	19.51	19.55	
Channel				131972	132322	132667	Tune-up (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	19.28	19.37	19.42	20.5
1.4	QPSK	1	3	19.37	19.39	19.44	
1.4	QPSK	1	6	19.28	19.31	19.37	
1.4	QPSK	3	0	19.34	19.36	19.42	20.5
1.4	QPSK	3	1	19.40	19.39	19.45	
1.4	QPSK	3	3	19.34	19.33	19.39	
1.4	QPSK	6	0	19.39	19.41	19.48	20.5
1.4	16QAM	1	0	19.60	19.68	19.76	
1.4	16QAM	1	3	19.71	19.74	19.91	
1.4	16QAM	1	5	19.62	19.63	19.69	20.5
1.4	16QAM	3	0	19.44	19.47	19.56	
1.4	16QAM	3	1	19.47	19.50	19.58	
1.4	16QAM	3	3	19.38	19.43	19.49	20.5
1.4	16QAM	6	0	19.48	19.53	19.59	
1.4	64QAM	1	0	19.54	19.63	19.69	
1.4	64QAM	1	3	19.65	19.65	19.73	20.5
1.4	64QAM	1	5	19.52	19.53	19.65	
1.4	64QAM	3	0	19.58	19.59	19.65	
1.4	64QAM	3	1	19.60	19.61	19.69	20.5
1.4	64QAM	3	3	19.53	19.55	19.63	
1.4	64QAM	6	0	19.43	19.47	19.53	



Band 2_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				1860	1880	1900	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	17.12	17.02	17.03	18
20	QPSK	1	49	16.94	16.97	17.01	
20	QPSK	1	99	16.94	16.96	16.93	
20	QPSK	50	0	17.07	16.99	17.01	18
20	QPSK	50	24	17.13	17.13	17.09	
20	QPSK	50	50	17.08	17.10	17.10	
20	QPSK	100	0	17.08	17.05	17.05	18
20	16QAM	1	0	17.49	17.35	17.28	
20	16QAM	1	49	17.39	17.37	17.41	
20	16QAM	1	99	17.32	17.34	17.34	18
20	16QAM	50	0	17.09	17.00	17.02	
20	16QAM	50	24	17.16	17.16	17.11	
20	16QAM	50	50	17.11	17.12	17.13	18
20	16QAM	100	0	17.09	17.08	17.05	
20	64QAM	1	0	17.38	17.28	17.31	
20	64QAM	1	49	17.26	17.23	17.26	18
20	64QAM	1	99	17.21	17.21	17.19	
20	64QAM	50	0	17.13	17.03	17.06	
20	64QAM	50	24	17.19	17.18	17.12	18
20	64QAM	50	50	17.12	17.15	17.16	
20	64QAM	100	0	17.11	17.13	17.07	
Channel				1867.5	1890.0	1912.5	
Frequency (MHz)				1867.5	1890	1902.5	
15	QPSK	1	0	16.97	17.01	17.08	18
15	QPSK	1	37	16.98	16.88	16.97	
15	QPSK	1	74	16.92	17.01	16.97	
15	QPSK	36	0	17.13	17.00	17.04	18
15	QPSK	36	20	17.14	17.12	17.18	
15	QPSK	36	39	17.12	17.11	17.12	
15	QPSK	75	0	17.10	17.11	17.04	18
15	16QAM	1	0	17.32	17.37	17.40	
15	16QAM	1	37	17.39	17.36	17.40	
15	16QAM	1	74	17.22	17.34	17.32	18
15	16QAM	36	0	17.12	17.03	17.04	
15	16QAM	36	20	17.16	17.14	17.18	
15	16QAM	36	39	17.11	17.14	17.14	18
15	16QAM	75	0	17.14	17.12	17.05	
15	64QAM	1	0	17.21	17.25	17.30	
15	64QAM	1	37	17.26	17.23	17.28	18
15	64QAM	1	74	17.18	17.23	17.22	
15	64QAM	36	0	17.18	17.04	17.09	
15	64QAM	36	20	17.20	17.19	17.23	18
15	64QAM	36	39	17.17	17.17	17.16	
15	64QAM	75	0	17.15	17.13	17.07	
Channel				1865.0	1890.0	1915.0	
Frequency (MHz)				1865	1890	1905	
10	QPSK	1	0	16.99	16.83	16.92	18
10	QPSK	1	25	16.89	16.86	16.88	
10	QPSK	1	49	16.94	16.80	16.84	
10	QPSK	25	0	16.97	16.83	16.84	18
10	QPSK	25	12	17.00	16.98	16.93	
10	QPSK	25	25	16.88	16.88	16.88	
10	QPSK	50	0	16.94	16.91	16.85	18
10	16QAM	1	0	17.02	16.91	17.30	
10	16QAM	1	25	17.27	17.25	17.25	
10	16QAM	1	49	16.97	16.96	17.22	18
10	16QAM	25	0	16.98	16.83	16.87	
10	16QAM	25	12	17.06	17.02	16.95	
10	16QAM	25	25	16.90	16.90	16.90	18
10	16QAM	50	0	16.96	16.93	16.83	
10	64QAM	1	0	16.94	16.90	17.17	
10	64QAM	1	25	17.23	17.18	17.20	18
10	64QAM	1	49	16.90	16.89	17.15	
10	64QAM	25	0	17.01	16.89	16.90	
10	64QAM	25	12	17.09	17.06	17.00	18
10	64QAM	25	25	16.95	16.93	16.82	
10	64QAM	50	0	16.97	16.96	16.91	
Channel				1862.5	1890.0	1917.5	
Frequency (MHz)				1862.5	1890	1907.5	
5	QPSK	1	0	16.81	16.58	16.89	18
5	QPSK	1	12	16.85	16.81	16.94	
5	QPSK	1	24	16.50	16.51	16.77	
5	QPSK	12	0	16.95	16.74	16.80	18
5	QPSK	12	7	17.01	17.02	16.88	
5	QPSK	12	13	16.83	16.83	16.78	
5	QPSK	25	0	16.86	16.83	16.91	18
5	16QAM	1	0	16.94	16.84	17.39	
5	16QAM	1	12	17.22	17.26	17.45	
5	16QAM	1	24	17.07	16.89	17.15	18
5	16QAM	12	0	16.99	16.90	16.92	
5	16QAM	12	7	17.12	16.97	16.91	
5	16QAM	12	13	16.86	16.99	16.81	18
5	16QAM	25	0	16.93	16.90	16.84	
5	64QAM	1	0	16.92	16.90	17.10	
5	64QAM	1	12	17.14	17.10	17.30	18
5	64QAM	1	24	16.90	16.79	17.08	
5	64QAM	12	0	17.10	16.88	17.00	
5	64QAM	12	7	17.07	17.16	16.99	18
5	64QAM	12	13	16.85	16.94	16.82	
5	64QAM	25	0	16.88	16.92	16.98	
Channel				1861.5	1890.0	1918.5	
Frequency (MHz)				1861.5	1890	1908.5	
3	QPSK	1	0	16.86	16.57	16.85	18
3	QPSK	1	8	16.82	16.90	16.89	
3	QPSK	1	14	16.50	16.51	16.76	
3	QPSK	8	0	16.87	16.73	16.82	18
3	QPSK	8	4	17.03	16.90	17.02	
3	QPSK	8	7	16.87	16.93	16.94	
3	QPSK	15	0	16.99	16.97	16.84	18
3	16QAM	1	0	16.94	16.83	17.38	
3	16QAM	1	8	17.30	17.28	17.25	
3	16QAM	1	14	17.02	16.89	17.32	18
3	16QAM	8	0	16.91	16.84	16.77	
3	16QAM	8	4	17.13	16.92	16.86	
3	16QAM	8	7	16.89	16.97	16.95	18
3	16QAM	15	0	16.98	16.86	16.84	
3	64QAM	1	0	16.89	16.72	17.14	
3	64QAM	1	8	17.16	17.12	17.15	18
3	64QAM	1	14	16.86	16.99	17.20	
3	64QAM	8	0	17.10	16.81	16.86	
3	64QAM	8	4	17.14	17.02	16.96	18
3	64QAM	8	7	16.96	16.96	16.96	
3	64QAM	15	0	17.06	17.05	16.94	
Channel				1860.7	1890.0	1919.3	
Frequency (MHz)				1860.7	1890	1909.3	
1.4	QPSK	1	0	16.90	16.84	16.80	18
1.4	QPSK	1	3	16.92	16.89	16.87	
1.4	QPSK	1	5	16.84	16.79	16.74	
1.4	QPSK	3	0	16.93	16.84	16.83	18
1.4	QPSK	3	1	16.94	16.86	16.84	
1.4	QPSK	3	3	16.87	16.81	16.77	
1.4	QPSK	6	0	16.99	16.89	16.87	18
1.4	16QAM	1	0	17.23	17.19	17.13	
1.4	16QAM	1	3	17.27	17.23	17.20	
1.4	16QAM	1	5	17.16	17.12	17.09	18
1.4	16QAM	3	0	16.98	16.96	16.91	
1.4	16QAM	3	1	17.05	16.97	16.94	
1.4	16QAM	3	3	16.94	16.90	16.87	18
1.4	16QAM	6	0	17.05	17.02	16.96	
1.4	64QAM	1	0	17.16	17.12	17.05	
1.4	64QAM	1	3	17.21	17.13	17.09	18
1.4	64QAM	1	5	17.12	17.03	16.98	
1.4	64QAM	3	0	17.13	17.06	17.05	
1.4	64QAM	3	1	17.20	17.11	17.10	18
1.4	64QAM	3	3	17.13	17.06	17.00	
1.4	64QAM	6	0	17.01	16.94	16.93	



Band 4_Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up		
				Low	Middle	High			
Channel				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	limit (dBm)		
Frequency (MHz)				20050	20175	20300			
20	QPSK	1	0	17.38	17.39	17.38	18.5		
20	QPSK	1	49	17.56	17.57	17.55			
20	QPSK	1	99	17.26	17.27	17.26			
20	QPSK	50	0	17.61	17.59	17.59	18.5		
20	QPSK	50	24	17.75	17.67	17.66			
20	QPSK	50	50	17.64	17.63	17.63			
20	QPSK	100	0	17.65	17.56	17.56	18.5		
20	16QAM	1	0	17.71	17.69	17.69			
20	16QAM	1	49	17.91	17.97	17.91			
20	16QAM	1	99	17.68	17.63	17.61	18.5		
20	16QAM	50	0	17.59	17.60	17.60			
20	16QAM	50	24	17.75	17.66	17.65			
20	16QAM	50	50	17.62	17.62	17.62	18.5		
20	16QAM	100	0	17.64	17.53	17.54			
20	64QAM	1	0	17.59	17.57	17.55			
20	64QAM	1	49	17.73	17.84	17.78	18.5		
20	64QAM	1	99	17.54	17.49	17.54			
20	64QAM	50	0	17.63	17.62	17.61			
20	64QAM	50	24	17.76	17.68	17.66	18.5		
20	64QAM	50	50	17.65	17.65	17.65			
20	64QAM	100	0	17.67	17.58	17.57			
Channel				20025	20175	20325	Tune-up		
Frequency (MHz)				1717.5	1732.5	1747.5		limit (dBm)	
15	QPSK	1	0	17.45	17.46	17.45	18.5		
15	QPSK	1	37	17.55	17.58	17.55			
15	QPSK	1	74	17.42	17.45	17.44			
15	QPSK	36	0	17.62	17.63	17.61	18.5		
15	QPSK	36	20	17.74	17.65	17.74			
15	QPSK	36	39	17.66	17.66	17.66			
15	QPSK	75	0	17.66	17.60	17.65	18.5		
15	16QAM	1	0	17.77	17.76	17.77			
15	16QAM	1	37	17.96	17.92	17.92			
15	16QAM	1	74	17.81	17.76	17.75	18.5		
15	16QAM	36	0	17.60	17.61	17.58			
15	16QAM	36	20	17.72	17.64	17.72			
15	16QAM	36	39	17.66	17.65	17.64	18.5		
15	16QAM	75	0	17.66	17.59	17.67			
15	64QAM	1	0	17.66	17.67	17.67			
15	64QAM	1	37	17.82	17.82	17.83	18.5		
15	64QAM	1	74	17.67	17.67	17.65			
15	64QAM	36	0	17.63	17.65	17.65			
15	64QAM	36	20	17.77	17.68	17.74	18.5		
15	64QAM	36	39	17.62	17.69	17.71			
15	64QAM	75	0	17.69	17.60	17.69			
Channel				20000	20175	20350	Tune-up		
Frequency (MHz)				1715	1732.5	1750		limit (dBm)	
10	QPSK	1	0	17.14	17.15	17.18	18.5		
10	QPSK	1	25	17.42	17.43	17.41			
10	QPSK	1	49	17.11	17.05	17.08			
10	QPSK	25	0	17.43	17.40	17.39	18.5		
10	QPSK	25	12	17.57	17.48	17.47			
10	QPSK	25	25	17.43	17.43	17.42			
10	QPSK	50	0	17.50	17.39	17.38	18.5		
10	16QAM	1	0	17.53	17.55	17.53			
10	16QAM	1	25	17.81	17.92	17.80			
10	16QAM	1	49	17.48	17.46	17.48	18.5		
10	16QAM	25	0	17.44	17.47	17.43			
10	16QAM	25	12	17.57	17.51	17.49			
10	16QAM	25	25	17.43	17.44	17.46	18.5		
10	16QAM	50	0	17.47	17.42	17.40			
10	64QAM	1	0	17.39	17.37	17.36			
10	64QAM	1	25	17.73	17.73	17.71	18.5		
10	64QAM	1	49	17.38	17.39	17.37			
10	64QAM	25	0	17.42	17.42	17.44			
10	64QAM	25	12	17.59	17.51	17.50	18.5		
10	64QAM	25	25	17.46	17.43	17.44			
10	64QAM	50	0	17.50	17.41	17.38			
Channel				19975	20175	20375	Tune-up		
Frequency (MHz)				1712.5	1732.5	1752.5		limit (dBm)	
5	QPSK	1	0	17.15	17.25	17.21	18.5		
5	QPSK	1	12	17.46	17.37	17.49			
5	QPSK	1	24	17.21	17.06	17.04			
5	QPSK	12	0	17.52	17.33	17.33	18.5		
5	QPSK	12	7	17.67	17.45	17.46			
5	QPSK	12	13	17.41	17.39	17.40			
5	QPSK	25	0	17.47	17.42	17.30	18.5		
5	16QAM	1	0	17.45	17.46	17.57			
5	16QAM	1	12	17.90	17.97	17.80			
5	16QAM	1	24	17.58	17.41	17.49	18.5		
5	16QAM	12	0	17.38	17.52	17.34			
5	16QAM	12	7	17.65	17.58	17.58			
5	16QAM	12	13	17.41	17.53	17.42	18.5		
5	16QAM	25	0	17.54	17.32	17.43			
5	64QAM	1	0	17.48	17.46	17.30			
5	64QAM	1	12	17.63	17.77	17.70	18.5		
5	64QAM	1	24	17.28	17.48	17.47			
5	64QAM	12	0	17.45	17.47	17.45			
5	64QAM	12	7	17.66	17.48	17.43	18.5		
5	64QAM	12	13	17.42	17.33	17.40			
5	64QAM	25	0	17.57	17.38	17.42			
Channel				19965	20175	20385	Tune-up		
Frequency (MHz)				1711.5	1732.5	1753.5		limit (dBm)	
3	QPSK	1	0	17.24	17.06	17.21	18.5		
3	QPSK	1	8	17.45	17.40	17.37			
3	QPSK	1	14	17.16	17.06	17.07			
3	QPSK	8	0	17.47	17.35	17.45	18.5		
3	QPSK	8	4	17.57	17.52	17.52			
3	QPSK	8	7	17.44	17.35	17.42			
3	QPSK	15	0	17.40	17.45	17.43	18.5		
3	16QAM	1	0	17.62	17.53	17.44			
3	16QAM	1	8	17.77	17.90	17.83			
3	16QAM	1	14	17.43	17.53	17.41	18.5		
3	16QAM	8	0	17.54	17.48	17.38			
3	16QAM	8	4	17.62	17.54	17.59			
3	16QAM	8	7	17.36	17.36	17.47	18.5		
3	16QAM	15	0	17.51	17.48	17.37			
3	64QAM	1	0	17.40	17.39	17.26			
3	64QAM	1	8	17.82	17.77	17.76	18.5		
3	64QAM	1	14	17.42	17.37	17.41			
3	64QAM	8	0	17.33	17.37	17.50			
3	64QAM	8	4	17.65	17.61	17.44	18.5		
3	64QAM	8	7	17.53	17.52	17.48			
3	64QAM	15	0	17.45	17.50	17.41			
Channel				19957	20175	20393	Tune-up		
Frequency (MHz)				1710.7	1732.5	1754.3		limit (dBm)	
1.4	QPSK	1	0	17.32	17.38	17.35	18.5		
1.4	QPSK	1	3	17.42	17.42	17.42			
1.4	QPSK	1	5	17.36	17.35	17.35			
1.4	QPSK	3	0	17.44	17.41	17.32	18.5		
1.4	QPSK	3	1	17.50	17.46	17.31			
1.4	QPSK	3	3	17.43	17.37	17.36			
1.4	QPSK	6	0	17.45	17.48	17.39	18.5		
1.4	16QAM	1	0	17.66	17.75	17.68			
1.4	16QAM	1	3	17.77	17.81	17.86			
1.4	16QAM	1	5	17.67	17.88	17.71	18.5		
1.4	16QAM	3	0	17.47	17.49	17.45			
1.4	16QAM	3	1	17.52	17.56	17.46			
1.4	16QAM	3	3	17.44	17.45	17.45	18.5		
1.4	16QAM	6	0	17.54	17.62	17.51			
1.4	64QAM	1	0	17.55	17.54	17.53			
1.4	64QAM	1	3	17.69	17.65	17.63	18.5		
1.4	64QAM	1	5	17.58	17.57	17.54			
1.4	64QAM	3	0	17.62	17.60	17.53			
1.4	64QAM	3	1	17.65	17.63	17.57	18.5		
1.4	64QAM	3	3	17.57	17.59	17.66			
1.4	64QAM	6	0	17.47	17.45	17.37			



Band 5_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20450	Power Middle Ch. / Freq. 20525	Power High Ch. / Freq. 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	21.99	21.99	22.03	23
10	QPSK	1	25	21.94	21.96	21.96	
10	QPSK	1	49	21.97	21.93	21.91	
10	QPSK	25	0	22.03	22.02	22.03	23
10	QPSK	25	12	22.11	22.09	22.05	
10	QPSK	25	25	22.07	22.06	22.05	
10	QPSK	50	0	22.02	22.01	21.95	23
10	16QAM	1	0	22.36	22.37	22.36	
10	16QAM	1	25	22.35	22.36	22.33	
10	16QAM	1	49	22.33	22.30	22.31	23
10	16QAM	25	0	22.00	22.04	22.04	
10	16QAM	25	12	22.12	22.14	22.05	
10	16QAM	25	25	22.05	22.09	22.07	23
10	16QAM	50	0	22.02	22.04	21.96	
10	64QAM	1	0	22.18	22.20	22.23	
10	64QAM	1	25	22.23	22.25	22.26	23
10	64QAM	1	49	22.24	22.21	22.18	
10	64QAM	25	0	21.09	21.07	21.10	
10	64QAM	25	12	21.18	21.16	21.12	22
10	64QAM	25	25	21.10	21.11	21.11	
10	64QAM	50	0	21.07	21.06	21.01	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	21.87	21.90	21.85	23
5	QPSK	1	12	22.00	22.02	22.00	
5	QPSK	1	24	21.96	21.96	21.91	
5	QPSK	12	0	22.00	22.02	22.00	23
5	QPSK	12	7	22.10	22.10	22.10	
5	QPSK	12	13	22.07	22.08	22.04	
5	QPSK	25	0	22.07	22.06	22.06	23
5	16QAM	1	0	22.22	22.23	22.21	
5	16QAM	1	12	22.32	22.31	22.25	
5	16QAM	1	24	22.29	22.29	22.25	23
5	16QAM	12	0	22.03	22.02	22.05	
5	16QAM	12	7	22.12	22.14	22.13	
5	16QAM	12	13	22.10	22.10	22.07	23
5	16QAM	25	0	22.12	22.11	22.07	
5	64QAM	1	0	22.14	22.12	22.12	
5	64QAM	1	12	22.19	22.22	22.17	23
5	64QAM	1	24	22.14	22.20	22.12	
5	64QAM	12	0	21.09	21.10	21.09	
5	64QAM	12	7	21.20	21.19	21.19	22
5	64QAM	12	13	21.17	21.18	21.13	
5	64QAM	25	0	21.11	21.10	21.09	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	21.88	21.92	21.89	23
3	QPSK	1	8	22.04	22.05	22.01	
3	QPSK	1	14	21.99	21.97	21.92	
3	QPSK	8	0	22.00	22.00	22.02	23
3	QPSK	8	4	22.10	22.09	22.11	
3	QPSK	8	7	22.07	22.09	22.06	
3	QPSK	15	0	22.07	22.07	22.00	23
3	16QAM	1	0	22.20	22.30	22.28	
3	16QAM	1	8	22.30	22.34	22.32	
3	16QAM	1	14	22.33	22.36	22.27	23
3	16QAM	8	0	22.08	22.08	22.06	
3	16QAM	8	4	22.18	22.18	22.16	
3	16QAM	8	7	22.15	22.14	22.10	23
3	16QAM	15	0	22.12	22.14	22.03	
3	64QAM	1	0	22.09	22.12	22.12	
3	64QAM	1	8	22.24	22.27	22.25	23
3	64QAM	1	14	22.16	22.23	22.16	
3	64QAM	8	0	21.10	21.10	21.09	
3	64QAM	8	4	21.17	21.17	21.16	22
3	64QAM	8	7	21.15	21.17	21.15	
3	64QAM	15	0	21.12	21.11	21.04	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	21.87	21.94	21.89	23
1.4	QPSK	1	3	21.98	21.98	21.97	
1.4	QPSK	1	5	21.99	21.98	21.85	
1.4	QPSK	3	0	21.90	21.94	21.90	23
1.4	QPSK	3	1	21.93	21.96	21.94	
1.4	QPSK	3	3	21.94	21.94	21.89	
1.4	QPSK	6	0	22.01	22.01	21.98	23
1.4	16QAM	1	0	22.17	22.27	22.19	
1.4	16QAM	1	3	22.30	22.31	22.30	
1.4	16QAM	1	5	22.24	22.25	22.18	23
1.4	16QAM	3	0	22.03	22.01	21.98	
1.4	16QAM	3	1	22.07	22.08	22.00	
1.4	16QAM	3	3	22.04	22.01	21.94	23
1.4	16QAM	6	0	22.12	22.10	22.08	
1.4	64QAM	1	0	22.07	22.16	22.14	
1.4	64QAM	1	3	22.18	22.22	22.17	23
1.4	64QAM	1	5	22.13	22.13	22.08	
1.4	64QAM	3	0	22.12	22.12	22.11	
1.4	64QAM	3	1	22.18	22.17	22.16	23
1.4	64QAM	3	3	22.12	22.13	22.10	
1.4	64QAM	6	0	21.03	21.02	21.00	



Band_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq. 20850	Middle Ch. / Freq. 21100	High Ch. / Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	15.60	15.80	15.86	16.5
20	QPSK	1	49	15.61	15.85	15.73	
20	QPSK	1	99	15.70	15.71	15.74	
20	QPSK	50	0	15.69	15.78	15.80	16.5
20	QPSK	50	24	15.78	15.78	15.84	
20	QPSK	50	50	15.81	15.83	15.88	
20	QPSK	100	0	15.74	15.68	15.73	16.5
20	16QAM	1	0	15.97	15.94	16.07	
20	16QAM	1	49	15.97	16.05	16.10	
20	16QAM	1	99	16.05	16.08	16.09	16.5
20	16QAM	50	0	15.74	15.76	15.83	
20	16QAM	50	24	15.83	15.82	15.86	
20	16QAM	50	50	15.87	15.87	15.90	16.5
20	16QAM	100	0	15.71	15.86	15.74	
20	64QAM	1	0	15.80	15.79	15.88	
20	64QAM	1	49	15.89	15.95	15.97	16.5
20	64QAM	1	99	15.95	15.88	16.02	
20	64QAM	50	0	15.79	15.82	15.86	
20	64QAM	50	24	15.87	15.87	15.89	16.5
20	64QAM	50	50	15.86	15.93	15.94	
20	64QAM	100	0	15.74	15.71	15.80	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	15.64	15.64	15.74	16.5
15	QPSK	1	37	15.64	15.63	15.74	
15	QPSK	1	74	15.71	15.75	15.79	
15	QPSK	36	0	15.74	15.73	15.80	16.5
15	QPSK	36	20	15.80	15.75	15.88	
15	QPSK	36	39	15.82	15.85	15.90	
15	QPSK	75	0	15.73	15.69	15.75	16.5
15	16QAM	1	0	15.97	15.96	16.01	
15	16QAM	1	37	15.96	16.04	16.08	
15	16QAM	1	74	16.04	16.08	16.09	16.5
15	16QAM	36	0	15.76	15.75	15.81	
15	16QAM	36	20	15.84	15.80	15.90	
15	16QAM	36	39	15.84	15.86	15.90	16.5
15	16QAM	75	0	15.76	15.74	15.78	
15	64QAM	1	0	15.81	15.80	15.92	
15	64QAM	1	37	15.88	15.94	15.99	16.5
15	64QAM	1	74	15.94	15.88	16.03	
15	64QAM	36	0	15.75	15.79	15.85	
15	64QAM	36	20	15.89	15.84	15.94	16.5
15	64QAM	36	39	15.86	15.92	15.94	
15	64QAM	75	0	15.78	15.74	15.80	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	15.41	15.46	15.47	16.5
10	QPSK	1	25	15.41	15.53	15.52	
10	QPSK	1	49	15.46	15.54	15.66	
10	QPSK	25	0	15.45	15.55	15.58	16.5
10	QPSK	25	12	15.57	15.56	15.68	
10	QPSK	25	25	15.56	15.65	15.65	
10	QPSK	50	0	15.49	15.50	15.59	16.5
10	16QAM	1	0	15.82	15.85	15.90	
10	16QAM	1	25	15.80	15.94	15.92	
10	16QAM	1	49	15.85	15.95	15.96	16.5
10	16QAM	25	0	15.49	15.57	15.61	
10	16QAM	25	12	15.58	15.59	15.67	
10	16QAM	25	25	15.62	15.66	15.68	16.5
10	16QAM	50	0	15.48	15.47	15.57	
10	64QAM	1	0	15.65	15.70	15.72	
10	64QAM	1	25	15.72	15.80	15.83	16.5
10	64QAM	1	49	15.75	15.82	15.85	
10	64QAM	25	0	15.54	15.59	15.63	
10	64QAM	25	12	15.59	15.64	15.71	16.5
10	64QAM	25	25	15.61	15.70	15.70	
10	64QAM	50	0	15.53	15.51	15.60	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	15.32	15.36	15.53	16.5
5	QPSK	1	12	15.40	15.51	15.48	
5	QPSK	1	24	15.56	15.61	15.62	
5	QPSK	12	0	15.37	15.48	15.50	16.5
5	QPSK	12	7	15.50	15.58	15.61	
5	QPSK	12	13	15.64	15.61	15.62	
5	QPSK	25	0	15.54	15.54	15.61	16.5
5	16QAM	1	0	15.90	15.79	15.85	
5	16QAM	1	12	15.90	15.89	15.94	
5	16QAM	1	24	15.90	16.04	15.87	16.5
5	16QAM	12	0	15.42	15.67	15.70	
5	16QAM	12	7	15.64	15.59	15.74	
5	16QAM	12	13	15.62	15.77	15.75	16.5
5	16QAM	25	0	15.42	15.44	15.67	
5	64QAM	1	0	15.55	15.67	15.82	
5	64QAM	1	12	15.80	15.77	15.90	16.5
5	64QAM	1	24	15.67	15.83	15.79	
5	64QAM	12	0	15.62	15.58	15.72	
5	64QAM	12	7	15.55	15.70	15.79	16.5
5	64QAM	12	13	15.61	15.62	15.68	
5	64QAM	25	0	15.51	15.53	15.58	



Band 25_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				20140	20340	20590	
20	QPSK	1	0	17.29	17.21	17.25	18
20	QPSK	1	49	17.15	17.13	17.19	
20	QPSK	1	99	17.10	17.14	17.10	
20	QPSK	50	0	17.30	17.20	17.28	18
20	QPSK	50	24	17.35	17.29	17.27	
20	QPSK	50	50	17.29	17.26	17.29	
20	QPSK	100	0	17.21	17.20	17.24	18
20	16QAM	1	0	17.64	17.53	17.60	
20	16QAM	1	49	17.54	17.53	17.54	
20	16QAM	1	99	17.41	17.47	17.43	18
20	16QAM	50	0	17.38	17.22	17.26	
20	16QAM	50	24	17.27	17.29	17.29	
20	16QAM	50	50	17.27	17.26	17.28	18
20	16QAM	100	0	17.17	17.18	17.25	
20	64QAM	1	0	17.51	17.37	17.44	
20	64QAM	1	49	17.37	17.37	17.43	18
20	64QAM	1	99	17.34	17.38	17.34	
20	64QAM	50	0	17.32	17.28	17.28	
20	64QAM	50	24	17.32	17.29	17.29	18
20	64QAM	50	50	17.24	17.31	17.28	
20	64QAM	100	0	17.20	17.21	17.29	
Channel				20115	20340	20615	Tune-up
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	17.05	17.20	17.22	18
15	QPSK	1	37	17.16	17.14	17.15	
15	QPSK	1	74	17.03	17.14	17.12	
15	QPSK	36	0	17.26	17.12	17.15	18
15	QPSK	36	20	17.29	17.29	17.32	
15	QPSK	36	39	17.24	17.24	17.25	
15	QPSK	75	0	17.24	17.21	17.23	18
15	16QAM	1	0	17.31	17.53	17.58	
15	16QAM	1	37	17.46	17.51	17.54	
15	16QAM	1	74	17.31	17.49	17.45	18
15	16QAM	36	0	17.24	17.12	17.15	
15	16QAM	36	20	17.28	17.29	17.31	
15	16QAM	36	39	17.21	17.25	17.24	18
15	16QAM	75	0	17.22	17.21	17.25	
15	64QAM	1	0	17.28	17.38	17.41	
15	64QAM	1	37	17.40	17.40	17.44	18
15	64QAM	1	74	17.23	17.36	17.34	
15	64QAM	36	0	17.29	17.14	17.19	
15	64QAM	36	20	17.33	17.30	17.35	18
15	64QAM	36	39	17.25	17.31	17.28	
15	64QAM	75	0	17.25	17.24	17.24	
Channel				20090	20340	20640	Tune-up
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	16.74	16.66	16.83	18
10	QPSK	1	25	16.82	16.89	16.86	
10	QPSK	1	49	16.65	16.67	16.87	
10	QPSK	25	0	16.98	16.86	16.88	18
10	QPSK	25	12	17.08	17.03	17.05	
10	QPSK	25	25	16.99	16.98	16.98	
10	QPSK	50	0	17.01	16.98	16.98	18
10	16QAM	1	0	17.11	17.00	17.28	
10	16QAM	1	25	17.27	17.25	17.26	
10	16QAM	1	49	16.99	16.98	17.22	18
10	16QAM	25	0	17.00	16.87	16.88	
10	16QAM	25	12	17.07	17.03	17.04	
10	16QAM	25	25	16.97	16.99	16.97	18
10	16QAM	50	0	16.99	16.96	16.88	
10	64QAM	1	0	17.01	16.91	17.14	
10	64QAM	1	25	17.19	17.19	17.19	18
10	64QAM	1	49	16.91	16.91	17.13	
10	64QAM	25	0	17.02	16.91	16.90	
10	64QAM	25	12	17.09	17.09	17.08	18
10	64QAM	25	25	16.99	16.98	17.02	
10	64QAM	50	0	17.04	17.01	17.01	
Channel				20065	20340	20665	Tune-up
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	16.72	16.74	16.86	18
5	QPSK	1	12	16.89	16.97	16.80	
5	QPSK	1	24	16.65	16.69	16.76	
5	QPSK	12	0	16.93	16.88	16.98	18
5	QPSK	12	7	17.18	17.08	16.97	
5	QPSK	12	13	16.91	16.99	16.93	
5	QPSK	25	0	16.95	16.97	16.99	18
5	16QAM	1	0	17.11	17.00	17.38	
5	16QAM	1	12	17.24	17.23	17.19	
5	16QAM	1	24	17.05	16.95	17.13	18
5	16QAM	12	0	16.94	16.77	16.84	
5	16QAM	12	7	17.00	16.95	17.02	
5	16QAM	12	13	17.05	17.02	16.87	18
5	16QAM	25	0	17.04	16.96	16.88	
5	64QAM	1	0	16.92	16.91	17.10	
5	64QAM	1	12	17.22	17.14	17.11	18
5	64QAM	1	24	17.00	16.95	17.09	
5	64QAM	12	0	16.95	16.81	16.84	
5	64QAM	12	7	17.17	17.05	17.12	18
5	64QAM	12	13	17.00	17.02	17.06	
5	64QAM	25	0	16.97	17.01	17.02	
Channel				20040	20340	20680	Tune-up
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	16.88	16.82	16.77	18
1.4	QPSK	1	3	16.96	16.89	16.92	
1.4	QPSK	1	5	16.80	16.83	16.93	
1.4	QPSK	3	0	16.91	16.85	16.74	18
1.4	QPSK	3	1	16.92	16.89	16.77	
1.4	QPSK	3	3	16.90	16.86	16.83	
1.4	QPSK	6	0	16.99	16.92	16.86	18
1.4	16QAM	1	0	17.20	17.13	17.06	
1.4	16QAM	1	3	17.27	17.21	17.24	
1.4	16QAM	1	5	17.18	17.13	17.18	18
1.4	16QAM	3	0	16.98	16.89	16.83	
1.4	16QAM	3	1	17.01	16.94	16.88	
1.4	16QAM	3	3	16.97	16.89	16.89	18
1.4	16QAM	6	0	17.07	17.00	16.96	
1.4	64QAM	1	0	17.16	17.09	16.96	
1.4	64QAM	1	3	17.20	17.13	17.09	18
1.4	64QAM	1	5	17.17	17.06	17.05	
1.4	64QAM	3	0	17.14	17.04	16.97	
1.4	64QAM	3	1	17.16	17.09	17.02	18
1.4	64QAM	3	3	17.14	17.05	17.05	
1.4	64QAM	6	0	17.01	16.91	16.94	



Band 26_Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power
				Low Ch. Freq. 28745	Middle Ch. Freq. 28865	High Ch. Freq. 28985
Channel				Tune-up limit (dBm)		
Frequency (MHz)				821.5	831.5	841.5
15	QPSK	1	0	22.15	22.16	22.14
15	QPSK	1	37	22.12	22.15	22.13
15	QPSK	1	74	22.17	22.14	22.02
15	QPSK	36	0	22.15	22.13	22.13
15	QPSK	36	20	22.25	22.20	22.24
15	QPSK	36	39	22.17	22.19	22.15
15	QPSK	75	0	22.18	22.10	22.08
15	16QAM	1	0	22.24	22.41	22.44
15	16QAM	1	37	22.47	22.50	22.32
15	16QAM	1	74	22.42	22.45	22.28
15	16QAM	36	0	21.11	21.11	21.12
15	16QAM	36	20	21.25	21.15	21.24
15	16QAM	36	39	21.18	21.15	21.12
15	16QAM	75	0	21.16	21.14	21.10
15	64QAM	1	0	21.38	21.30	21.40
15	64QAM	1	37	21.39	21.36	21.40
15	64QAM	1	74	21.36	21.33	21.19
15	64QAM	36	0	20.14	20.18	20.11
15	64QAM	36	20	20.26	20.22	20.28
15	64QAM	36	39	20.21	20.24	20.18
15	64QAM	75	0	20.20	20.12	20.12
Channel				28740	28865	28990
Frequency (MHz)				819	831.5	844
10	QPSK	1	0	22.04	22.12	22.08
10	QPSK	1	25	21.95	22.03	22.01
10	QPSK	1	49	21.94	22.10	21.86
10	QPSK	25	0	21.98	21.97	21.95
10	QPSK	25	12	22.10	22.07	22.10
10	QPSK	25	25	22.01	22.14	22.04
10	QPSK	50	0	21.99	22.04	21.99
10	16QAM	1	0	22.42	22.48	22.38
10	16QAM	1	25	22.41	22.38	22.34
10	16QAM	1	49	22.28	22.33	22.29
10	16QAM	25	0	20.92	20.99	20.86
10	16QAM	25	12	21.10	21.09	21.11
10	16QAM	25	25	21.03	21.10	21.07
10	16QAM	50	0	21.03	21.02	20.98
10	64QAM	1	0	21.35	21.32	21.28
10	64QAM	1	25	21.29	21.35	21.31
10	64QAM	1	49	21.19	21.24	21.09
10	64QAM	25	0	20.00	20.00	20.04
10	64QAM	25	12	20.14	20.16	20.12
10	64QAM	25	25	19.99	20.11	20.12
10	64QAM	50	0	20.09	20.03	20.01
Channel				28745	28865	27015
Frequency (MHz)				816.5	831.5	846.5
5	QPSK	1	0	21.87	21.96	22.00
5	QPSK	1	12	22.05	22.04	22.06
5	QPSK	1	24	21.94	22.03	21.84
5	QPSK	12	0	22.03	22.07	22.05
5	QPSK	12	7	22.16	22.11	22.13
5	QPSK	12	13	22.10	22.10	22.10
5	QPSK	25	0	22.09	22.05	22.02
5	16QAM	1	0	22.21	22.33	22.27
5	16QAM	1	12	22.41	22.35	22.27
5	16QAM	1	24	22.25	22.32	22.22
5	16QAM	12	0	21.04	21.03	21.06
5	16QAM	12	7	21.13	21.12	21.16
5	16QAM	12	13	21.15	21.10	21.10
5	16QAM	25	0	21.12	21.07	21.03
5	64QAM	1	0	21.16	21.23	21.21
5	64QAM	1	12	21.27	21.32	21.29
5	64QAM	1	24	21.25	21.28	21.16
5	64QAM	12	0	20.12	20.13	20.08
5	64QAM	12	7	20.21	20.20	20.20
5	64QAM	12	13	20.15	20.19	20.12
5	64QAM	25	0	20.13	20.10	20.04
Channel				28705	28865	27025
Frequency (MHz)				815.5	831.5	847.5
3	QPSK	1	0	21.92	21.99	22.03
3	QPSK	1	8	22.10	22.12	22.04
3	QPSK	1	14	21.94	22.08	21.85
3	QPSK	8	0	22.03	22.06	22.08
3	QPSK	8	4	22.12	22.14	22.12
3	QPSK	8	7	22.11	22.11	22.06
3	QPSK	15	0	22.11	22.05	22.08
3	16QAM	1	0	22.25	22.25	22.31
3	16QAM	1	8	22.31	22.36	22.27
3	16QAM	1	14	22.39	22.35	22.21
3	16QAM	8	0	21.09	21.08	21.11
3	16QAM	8	4	21.15	21.17	21.15
3	16QAM	8	7	21.17	21.12	21.10
3	16QAM	15	0	21.09	21.08	21.08
3	64QAM	1	0	21.11	21.15	21.19
3	64QAM	1	8	21.30	21.34	21.22
3	64QAM	1	14	21.21	21.21	21.10
3	64QAM	8	0	20.08	20.08	20.14
3	64QAM	8	4	20.19	20.20	20.17
3	64QAM	8	7	20.15	20.17	20.12
3	64QAM	15	0	20.13	20.08	20.07
Channel				28697	28865	27033
Frequency (MHz)				814.7	831.5	848.3
1.4	QPSK	1	0	21.86	21.86	21.89
1.4	QPSK	1	3	21.99	21.98	21.96
1.4	QPSK	1	5	21.89	21.95	21.87
1.4	QPSK	3	0	21.92	21.84	21.89
1.4	QPSK	3	1	21.96	21.92	21.84
1.4	QPSK	3	3	21.94	21.92	21.90
1.4	QPSK	6	0	22.03	21.96	22.01
1.4	16QAM	1	0	22.23	22.16	22.12
1.4	16QAM	1	3	22.36	22.31	22.27
1.4	16QAM	1	5	22.30	22.30	22.12
1.4	16QAM	3	0	21.96	21.92	21.92
1.4	16QAM	3	1	22.02	21.98	21.93
1.4	16QAM	3	3	21.93	22.05	21.91
1.4	16QAM	6	0	21.10	21.06	21.07
1.4	64QAM	1	0	21.15	21.11	21.06
1.4	64QAM	1	3	21.23	21.15	21.12
1.4	64QAM	1	5	21.13	21.13	21.08
1.4	64QAM	3	0	21.13	21.08	21.09
1.4	64QAM	3	1	21.15	21.10	21.06
1.4	64QAM	3	3	21.14	21.17	21.06
1.4	64QAM	6	0	19.99	19.95	19.99



Band 66_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low	Middle	High	
Channel				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	
Frequency (MHz)				132072	132322	132572	
20	QPSK	1	0	17.42	17.42	17.68	18.5
20	QPSK	1	49	17.60	17.80	17.69	
20	QPSK	1	99	17.28	17.34	17.58	
20	QPSK	50	0	17.67	17.70	17.73	18.5
20	QPSK	50	24	17.79	17.71	17.84	
20	QPSK	50	50	17.64	17.65	17.70	
20	QPSK	100	0	17.69	17.70	17.76	18.5
20	16QAM	1	0	17.74	17.80	18.14	
20	16QAM	1	49	17.57	18.04	18.09	
20	16QAM	1	99	17.84	17.69	17.98	18.5
20	16QAM	50	0	17.68	17.73	17.75	
20	16QAM	50	24	17.78	17.74	17.89	
20	16QAM	50	50	17.65	17.70	17.73	18.5
20	16QAM	100	0	17.67	17.74	17.77	
20	64QAM	1	0	17.60	17.80	17.84	
20	64QAM	1	49	17.80	17.87	17.88	18.5
20	64QAM	1	99	17.53	17.59	17.80	
20	64QAM	50	0	17.68	17.70	17.75	
20	64QAM	50	24	17.77	17.71	17.83	18.5
20	64QAM	50	50	17.66	17.68	17.71	
20	64QAM	100	0	17.71	17.72	17.76	
Channel				132047	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	17.58	17.56	17.73	18.5
15	QPSK	1	37	17.58	17.59	17.66	
15	QPSK	1	74	17.41	17.46	17.59	
15	QPSK	36	0	17.69	17.71	17.76	18.5
15	QPSK	36	20	17.74	17.77	17.75	
15	QPSK	36	39	17.67	17.68	17.74	
15	QPSK	75	0	17.71	17.71	17.70	18.5
15	16QAM	1	0	17.85	17.95	18.13	
15	16QAM	1	37	18.00	18.03	18.05	
15	16QAM	1	74	17.76	17.81	17.97	18.5
15	16QAM	36	0	17.68	17.74	17.78	
15	16QAM	36	20	17.73	17.79	17.75	
15	16QAM	36	39	17.64	17.71	17.75	18.5
15	16QAM	75	0	17.71	17.71	17.74	
15	64QAM	1	0	17.75	17.72	17.92	
15	64QAM	1	37	17.85	17.85	17.93	18.5
15	64QAM	1	74	17.65	17.67	17.83	
15	64QAM	36	0	17.73	17.72	17.79	
15	64QAM	36	20	17.76	17.78	17.76	18.5
15	64QAM	36	39	17.66	17.72	17.77	
15	64QAM	75	0	17.73	17.76	17.71	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	17.15	17.18	17.24	18.5
10	QPSK	1	25	17.44	17.43	17.47	
10	QPSK	1	49	17.18	17.18	17.20	
10	QPSK	25	0	17.42	17.43	17.48	18.5
10	QPSK	25	12	17.58	17.47	17.63	
10	QPSK	25	25	17.45	17.45	17.52	
10	QPSK	50	0	17.49	17.49	17.55	18.5
10	16QAM	1	0	17.56	17.56	17.60	
10	16QAM	1	25	17.81	17.79	17.84	
10	16QAM	1	49	17.58	17.55	17.61	18.5
10	16QAM	25	0	17.48	17.44	17.51	
10	16QAM	25	12	17.61	17.53	17.64	
10	16QAM	25	25	17.49	17.44	17.53	18.5
10	16QAM	50	0	17.52	17.50	17.55	
10	64QAM	1	0	17.40	17.42	17.46	
10	64QAM	1	25	17.71	17.70	17.74	18.5
10	64QAM	1	49	17.44	17.47	17.48	
10	64QAM	25	0	17.45	17.45	17.52	
10	64QAM	25	12	17.58	17.51	17.67	18.5
10	64QAM	25	25	17.46	17.47	17.54	
10	64QAM	50	0	17.51	17.50	17.55	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	17.24	17.24	17.27	18.5
5	QPSK	1	12	17.49	17.47	17.51	
5	QPSK	1	24	17.28	17.27	17.22	
5	QPSK	12	0	17.32	17.49	17.51	18.5
5	QPSK	12	7	17.53	17.55	17.68	
5	QPSK	12	13	17.54	17.36	17.61	
5	QPSK	25	0	17.40	17.53	17.48	18.5
5	16QAM	1	0	17.57	17.56	17.69	
5	16QAM	1	12	17.80	17.82	17.78	
5	16QAM	1	24	17.63	17.61	17.66	18.5
5	16QAM	12	0	17.40	17.45	17.45	
5	16QAM	12	7	17.58	17.56	17.59	
5	16QAM	12	13	17.54	17.54	17.53	18.5
5	16QAM	25	0	17.52	17.48	17.50	
5	64QAM	1	0	17.39	17.52	17.50	
5	64QAM	1	12	17.81	17.61	17.66	18.5
5	64QAM	1	24	17.48	17.54	17.51	
5	64QAM	12	0	17.39	17.55	17.44	
5	64QAM	12	7	17.49	17.56	17.69	18.5
5	64QAM	12	13	17.46	17.56	17.52	
5	64QAM	25	0	17.53	17.42	17.55	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	17.21	17.17	17.17	18.5
3	QPSK	1	8	17.54	17.44	17.56	
3	QPSK	1	14	17.16	17.24	17.11	
3	QPSK	8	0	17.44	17.39	17.49	18.5
3	QPSK	8	4	17.52	17.54	17.57	
3	QPSK	8	7	17.38	17.40	17.61	
3	QPSK	15	0	17.59	17.47	17.46	18.5
3	16QAM	1	0	17.63	17.56	17.59	
3	16QAM	1	8	17.84	17.78	17.78	
3	16QAM	1	14	17.48	17.56	17.58	18.5
3	16QAM	8	0	17.51	17.44	17.51	
3	16QAM	8	4	17.61	17.45	17.67	
3	16QAM	8	7	17.46	17.49	17.48	18.5
3	16QAM	15	0	17.58	17.53	17.61	
3	64QAM	1	0	17.37	17.33	17.42	
3	64QAM	1	8	17.73	17.67	17.79	18.5
3	64QAM	1	14	17.49	17.49	17.46	
3	64QAM	8	0	17.38	17.36	17.45	
3	64QAM	8	4	17.53	17.54	17.68	18.5
3	64QAM	8	7	17.50	17.48	17.54	
3	64QAM	15	0	17.44	17.51	17.48	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	17.30	17.39	17.46	18.5
1.4	QPSK	1	3	17.41	17.42	17.53	
1.4	QPSK	1	5	17.33	17.35	17.42	
1.4	QPSK	3	0	17.42	17.39	17.46	18.5
1.4	QPSK	3	1	17.42	17.41	17.47	
1.4	QPSK	3	3	17.35	17.36	17.46	
1.4	QPSK	6	0	17.43	17.45	17.52	18.5
1.4	16QAM	1	0	17.67	17.74	17.82	
1.4	16QAM	1	3	17.76	17.78	17.84	
1.4	16QAM	1	5	17.68	17.65	17.75	18.5
1.4	16QAM	3	0	17.52	17.50	17.54	
1.4	16QAM	3	1	17.53	17.55	17.57	
1.4	16QAM	3	3	17.45	17.46	17.53	18.5
1.4	16QAM	6	0	17.56	17.56	17.62	
1.4	64QAM	1	0	17.57	17.61	17.68	
1.4	64QAM	1	3	17.85	17.66	17.71	18.5
1.4	64QAM	1	5	17.55	17.56	17.62	
1.4	64QAM	3	0	17.62	17.61	17.69	
1.4	64QAM	3	1	17.63	17.65	17.71	18.5
1.4	64QAM	3	3	17.55	17.56	17.63	
1.4	64QAM	6	0	17.45	17.48	17.53	



Band 2_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Middle Ch / Freq. 18900	Power High Ch / Freq. 19100	Tune-up (dBm)	
Channel							
Frequency (MHz)				1880	1900		
20	QPSK	1	0	17.02	17.03	18.5	
20	QPSK	1	49	16.97	17.01		
20	QPSK	1	99	16.96	16.93		
20	QPSK	50	0	16.99	17.01		
20	QPSK	50	24	17.13	17.09		
20	QPSK	50	50	17.10	17.10	18.5	
20	QPSK	100	0	17.05	17.05		
20	16QAM	1	0	17.35	17.38		
20	16QAM	1	49	17.37	17.41		
20	16QAM	1	99	17.34	17.34		
20	16QAM	50	0	17.00	17.02	18.5	
20	16QAM	50	24	17.16	17.11		
20	16QAM	50	50	17.12	17.13		
20	16QAM	100	0	17.06	17.03		
20	64QAM	1	0	17.28	17.31		
20	64QAM	1	49	17.23	17.28	18.5	
20	64QAM	1	99	17.21	17.19		
20	64QAM	50	0	17.03	17.06		
20	64QAM	50	24	17.16	17.12		
20	64QAM	50	50	17.15	17.16		
20	64QAM	100	0	17.13	17.07	18.5	
Channel				18900	19125		Tune-up (dBm)
Frequency (MHz)				1880	1902.5		
15	QPSK	1	0	17.01	17.06		18.5
15	QPSK	1	37	16.98	16.97		
15	QPSK	1	74	17.01	16.97		
15	QPSK	36	0	17.00	17.04		
15	QPSK	36	20	17.12	17.18		
15	QPSK	36	39	17.11	17.12	18.5	
15	QPSK	75	0	17.11	17.04		
15	16QAM	1	0	17.37	17.40		
15	16QAM	1	37	17.36	17.40		
15	16QAM	1	74	17.34	17.32		
15	16QAM	36	0	17.03	17.04	18.5	
15	16QAM	36	20	17.14	17.18		
15	16QAM	36	39	17.14	17.14		
15	16QAM	75	0	17.12	17.05		
15	64QAM	1	0	17.25	17.30		
15	64QAM	1	37	17.23	17.28	18.5	
15	64QAM	1	74	17.23	17.22		
15	64QAM	36	0	17.04	17.09		
15	64QAM	36	20	17.16	17.23		
15	64QAM	36	39	17.17	17.18		
15	64QAM	75	0	17.13	17.07	18.5	
Channel				18900	19150		Tune-up (dBm)
Frequency (MHz)				1880	1905		
10	QPSK	1	0	16.53	16.92		18.5
10	QPSK	1	25	16.86	16.88		
10	QPSK	1	49	16.89	16.84		
10	QPSK	25	0	16.83	16.84		
10	QPSK	25	12	16.98	16.93		
10	QPSK	25	25	16.88	16.88	18.5	
10	QPSK	50	0	16.91	16.85		
10	16QAM	1	0	16.91	17.30		
10	16QAM	1	25	17.25	17.25		
10	16QAM	1	49	16.96	17.22		
10	16QAM	25	0	16.83	16.87	18.5	
10	16QAM	25	12	17.02	16.95		
10	16QAM	25	25	16.99	16.90		
10	16QAM	50	0	16.93	16.83		
10	64QAM	1	0	16.80	17.17		
10	64QAM	1	25	17.18	17.20	18.5	
10	64QAM	1	49	16.86	17.15		
10	64QAM	25	0	16.89	16.90		
10	64QAM	25	12	17.06	17.00		
10	64QAM	25	25	16.90	16.92		
10	64QAM	50	0	16.96	16.91	18.5	
Channel				18900	19175		Tune-up (dBm)
Frequency (MHz)				1880	1907.5		
5	QPSK	1	0	16.58	16.89		18.5
5	QPSK	1	12	16.81	16.94		
5	QPSK	1	24	16.51	16.77		
5	QPSK	12	0	16.74	16.80		
5	QPSK	12	7	17.02	16.88		
5	QPSK	12	13	16.83	16.78	18.5	
5	QPSK	25	0	16.83	16.91		
5	16QAM	1	0	16.84	17.39		
5	16QAM	1	12	17.26	17.16		
5	16QAM	1	24	16.89	17.15		
5	16QAM	12	0	16.90	16.92	18.5	
5	16QAM	12	7	16.97	16.91		
5	16QAM	12	13	16.99	16.81		
5	16QAM	25	0	16.90	16.84		
5	64QAM	1	0	16.90	17.10		
5	64QAM	1	12	17.10	17.30	18.5	
5	64QAM	1	24	16.79	17.08		
5	64QAM	12	0	16.88	17.00		
5	64QAM	12	7	17.16	16.99		
5	64QAM	12	13	16.94	16.92		
5	64QAM	25	0	16.92	16.98	18.5	
Channel				18900	19185		Tune-up (dBm)
Frequency (MHz)				1880	1908.5		
3	QPSK	1	0	16.57	16.85		18.5
3	QPSK	1	8	16.90	16.89		
3	QPSK	1	14	16.51	16.76		
3	QPSK	8	0	16.73	16.82		
3	QPSK	8	4	16.90	17.02		
3	QPSK	8	7	16.93	16.94	18.5	
3	QPSK	15	0	16.97	16.84		
3	16QAM	1	0	16.83	17.38		
3	16QAM	1	8	17.25	17.25		
3	16QAM	1	14	16.89	17.32		
3	16QAM	8	0	16.84	16.77	18.5	
3	16QAM	8	4	16.92	16.86		
3	16QAM	8	7	16.97	16.95		
3	16QAM	15	0	16.96	16.84		
3	64QAM	1	0	16.72	17.14		
3	64QAM	1	8	17.12	17.15	18.5	
3	64QAM	1	14	16.99	17.20		
3	64QAM	8	0	16.81	16.86		
3	64QAM	8	4	17.02	16.96		
3	64QAM	8	7	16.96	16.96		
3	64QAM	15	0	17.05	16.94	18.5	
Channel				18900	19193		Tune-up (dBm)
Frequency (MHz)				1880	1909.3		
1.4	QPSK	1	0	16.84	16.80		18.5
1.4	QPSK	1	3	16.89	16.87		
1.4	QPSK	1	5	16.79	16.74		
1.4	QPSK	3	0	16.84	16.83		
1.4	QPSK	3	1	16.86	16.84		
1.4	QPSK	3	3	16.81	16.77	18.5	
1.4	QPSK	6	0	16.89	16.87		
1.4	16QAM	1	0	17.19	17.13		
1.4	16QAM	1	3	17.25	17.20		
1.4	16QAM	1	5	17.12	17.09		
1.4	16QAM	3	0	16.96	16.91	18.5	
1.4	16QAM	3	1	16.97	16.94		
1.4	16QAM	3	3	16.90	16.87		
1.4	16QAM	6	0	17.02	16.96		
1.4	64QAM	1	0	17.12	17.05		
1.4	64QAM	1	3	17.13	17.09	18.5	
1.4	64QAM	1	5	17.03	16.98		
1.4	64QAM	3	0	17.06	17.05		
1.4	64QAM	3	1	17.11	17.10		
1.4	64QAM	3	3	17.06	17.03		
1.4	64QAM	6	0	16.94	16.93	18.5	



Band 5_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 20450	Power Middle Ch. / Freq. 20525	Power High Ch. / Freq. 20600	
Channel				829	836.5	844	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	21.99	21.99	22.03	23.5
10	QPSK	1	25	21.94	21.96	21.96	
10	QPSK	1	49	21.97	21.93	21.91	
10	QPSK	25	0	22.03	22.02	22.03	23.5
10	QPSK	25	12	22.11	22.09	22.05	
10	QPSK	25	25	22.07	22.06	22.05	
10	QPSK	50	0	22.02	22.01	21.95	23.5
10	16QAM	1	0	22.36	22.37	22.36	
10	16QAM	1	25	22.35	22.36	22.33	
10	16QAM	1	49	22.33	22.30	22.31	23
10	16QAM	25	0	22.00	22.04	22.04	
10	16QAM	25	12	22.12	22.14	22.05	
10	16QAM	25	25	22.05	22.09	22.07	23
10	16QAM	50	0	22.02	22.04	21.96	
10	64QAM	1	0	22.18	22.20	22.23	
10	64QAM	1	25	22.23	22.25	22.26	23
10	64QAM	1	49	22.24	22.21	22.18	
10	64QAM	25	0	21.09	21.07	21.10	
10	64QAM	25	12	21.18	21.16	21.12	22
10	64QAM	25	25	21.10	21.11	21.11	
10	64QAM	50	0	21.07	21.06	21.01	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	21.87	21.90	21.85	23.5
5	QPSK	1	12	22.00	22.02	22.00	
5	QPSK	1	24	21.96	21.96	21.91	
5	QPSK	12	0	22.00	22.02	22.00	23.5
5	QPSK	12	7	22.10	22.10	22.10	
5	QPSK	12	13	22.07	22.08	22.04	
5	QPSK	25	0	22.07	22.06	22.06	23.5
5	16QAM	1	0	22.22	22.23	22.21	
5	16QAM	1	12	22.32	22.31	22.25	
5	16QAM	1	24	22.29	22.29	22.25	23
5	16QAM	12	0	22.03	22.02	22.05	
5	16QAM	12	7	22.12	22.14	22.13	
5	16QAM	12	13	22.10	22.10	22.07	23
5	16QAM	25	0	22.12	22.11	22.07	
5	64QAM	1	0	22.14	22.12	22.12	
5	64QAM	1	12	22.19	22.22	22.17	23
5	64QAM	1	24	22.14	22.20	22.12	
5	64QAM	12	0	21.09	21.10	21.09	
5	64QAM	12	7	21.20	21.19	21.19	22
5	64QAM	12	13	21.17	21.18	21.13	
5	64QAM	25	0	21.11	21.10	21.09	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	21.88	21.92	21.89	23.5
3	QPSK	1	8	22.04	22.05	22.01	
3	QPSK	1	14	21.99	21.97	21.92	
3	QPSK	8	0	22.00	22.00	22.02	23.5
3	QPSK	8	4	22.10	22.09	22.11	
3	QPSK	8	7	22.07	22.09	22.06	
3	QPSK	15	0	22.07	22.07	22.00	23.5
3	16QAM	1	0	22.20	22.30	22.28	
3	16QAM	1	8	22.30	22.34	22.32	
3	16QAM	1	14	22.33	22.36	22.27	23
3	16QAM	8	0	22.08	22.08	22.06	
3	16QAM	8	4	22.18	22.18	22.16	
3	16QAM	8	7	22.15	22.14	22.10	23
3	16QAM	15	0	22.12	22.14	22.03	
3	64QAM	1	0	22.09	22.12	22.12	
3	64QAM	1	8	22.24	22.27	22.25	23
3	64QAM	1	14	22.16	22.23	22.16	
3	64QAM	8	0	21.10	21.10	21.09	
3	64QAM	8	4	21.17	21.17	21.16	22
3	64QAM	8	7	21.15	21.17	21.15	
3	64QAM	15	0	21.12	21.11	21.04	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	21.87	21.94	21.89	23.5
1.4	QPSK	1	3	21.98	21.98	21.97	
1.4	QPSK	1	5	21.99	21.98	21.85	
1.4	QPSK	3	0	21.90	21.94	21.89	23.5
1.4	QPSK	3	1	21.93	21.96	21.94	
1.4	QPSK	3	3	21.94	21.94	21.89	
1.4	QPSK	6	0	22.01	22.01	21.98	23.5
1.4	16QAM	1	0	22.17	22.27	22.19	
1.4	16QAM	1	3	22.30	22.31	22.30	
1.4	16QAM	1	5	22.24	22.25	22.18	23.5
1.4	16QAM	3	0	22.03	22.01	21.98	
1.4	16QAM	3	1	22.07	22.08	22.00	
1.4	16QAM	3	3	22.04	22.01	21.94	23
1.4	16QAM	6	0	22.12	22.10	22.08	
1.4	64QAM	1	0	22.07	22.16	22.14	
1.4	64QAM	1	3	22.18	22.22	22.17	23
1.4	64QAM	1	5	22.13	22.13	22.08	
1.4	64QAM	3	0	22.12	22.12	22.11	
1.4	64QAM	3	1	22.18	22.17	22.16	22
1.4	64QAM	3	3	22.12	22.13	22.10	
1.4	64QAM	6	0	21.03	21.02	21.00	



Band 7_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. / Freq. 20850	Middle Ch. / Freq. 21100	High Ch. / Freq. 21350	
Channel				2510	2535	2560	
Frequency (MHz)							
20	QPSK	1	0	15.60	15.80	15.86	17
20	QPSK	1	49	15.61	15.85	15.74	
20	QPSK	1	99	15.70	15.71	15.74	
20	QPSK	50	0	15.69	15.78	15.80	17
20	QPSK	50	24	15.78	15.78	15.84	
20	QPSK	50	50	15.81	15.83	15.88	
20	QPSK	100	0	15.74	15.68	15.73	17
20	16QAM	1	0	15.97	15.94	16.07	
20	16QAM	1	49	15.97	16.05	16.10	
20	16QAM	1	99	16.05	16.08	16.09	17
20	16QAM	50	0	15.74	15.76	15.83	
20	16QAM	50	24	15.83	15.82	15.86	
20	16QAM	50	50	15.87	15.87	15.90	17
20	16QAM	100	0	15.71	15.86	15.74	
20	64QAM	1	0	15.80	15.79	15.88	
20	64QAM	1	49	15.89	15.95	15.97	17
20	64QAM	1	99	15.95	15.88	16.02	
20	64QAM	50	0	15.79	15.82	15.86	
20	64QAM	50	24	15.87	15.87	15.89	17
20	64QAM	50	50	15.86	15.93	15.94	
20	64QAM	100	0	15.74	15.71	15.80	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	15.64	15.64	15.74	17
15	QPSK	1	37	15.64	15.63	15.74	
15	QPSK	1	74	15.71	15.75	15.79	
15	QPSK	36	0	15.74	15.73	15.80	17
15	QPSK	36	20	15.80	15.75	15.88	
15	QPSK	36	39	15.82	15.85	15.90	
15	QPSK	75	0	15.73	15.69	15.75	17
15	16QAM	1	0	15.97	15.96	16.01	
15	16QAM	1	37	15.96	16.04	16.09	
15	16QAM	1	74	16.04	16.08	16.09	17
15	16QAM	36	0	15.76	15.75	15.81	
15	16QAM	36	20	15.84	15.80	15.90	
15	16QAM	36	39	15.84	15.86	15.90	17
15	16QAM	75	0	15.76	15.74	15.78	
15	64QAM	1	0	15.81	15.80	15.92	
15	64QAM	1	37	15.88	15.94	15.99	17
15	64QAM	1	74	15.94	15.88	16.03	
15	64QAM	36	0	15.75	15.79	15.85	
15	64QAM	36	20	15.89	15.84	15.94	17
15	64QAM	36	39	15.86	15.92	15.95	
15	64QAM	75	0	15.78	15.74	15.80	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	15.41	15.46	15.47	17
10	QPSK	1	25	15.41	15.53	15.52	
10	QPSK	1	49	15.46	15.54	15.58	
10	QPSK	25	0	15.45	15.55	15.58	17
10	QPSK	25	12	15.57	15.56	15.68	
10	QPSK	25	25	15.56	15.65	15.65	
10	QPSK	50	0	15.49	15.50	15.59	17
10	16QAM	1	0	15.82	15.85	15.90	
10	16QAM	1	25	15.80	15.94	15.92	
10	16QAM	1	49	15.85	15.95	15.96	17
10	16QAM	25	0	15.49	15.57	15.61	
10	16QAM	25	12	15.58	15.59	15.67	
10	16QAM	25	25	15.62	15.66	15.68	17
10	16QAM	50	0	15.48	15.47	15.57	
10	64QAM	1	0	15.65	15.70	15.72	
10	64QAM	1	25	15.72	15.80	15.83	17
10	64QAM	1	49	15.75	15.82	15.85	
10	64QAM	25	0	15.54	15.59	15.63	
10	64QAM	25	12	15.59	15.64	15.71	17
10	64QAM	25	25	15.61	15.70	15.70	
10	64QAM	50	0	15.53	15.51	15.60	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	15.32	15.36	15.53	17
5	QPSK	1	12	15.40	15.51	15.48	
5	QPSK	1	24	15.56	15.61	15.62	
5	QPSK	12	0	15.37	15.48	15.50	17
5	QPSK	12	7	15.50	15.58	15.61	
5	QPSK	12	13	15.64	15.61	15.62	
5	QPSK	25	0	15.54	15.54	15.61	17
5	16QAM	1	0	15.90	15.79	15.85	
5	16QAM	1	12	15.90	15.89	15.94	
5	16QAM	1	24	15.90	16.04	15.87	17
5	16QAM	12	0	15.42	15.67	15.70	
5	16QAM	12	7	15.64	15.59	15.74	
5	16QAM	12	13	15.62	15.77	15.75	17
5	16QAM	25	0	15.42	15.44	15.67	
5	64QAM	1	0	15.55	15.67	15.82	
5	64QAM	1	12	15.80	15.77	15.90	17
5	64QAM	1	24	15.67	15.83	15.79	
5	64QAM	12	0	15.62	15.58	15.72	
5	64QAM	12	7	15.55	15.70	15.79	17
5	64QAM	12	13	15.61	15.62	15.68	
5	64QAM	25	0	15.51	15.53	15.58	



Band 25_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch./Freq. 20140	Middle Ch./Freq. 20340	High Ch./Freq. 20590	
Channel				1860	1880	1905	
Frequency (MHz)							
20	QPSK	1	0	17.29	17.21	17.25	18.5
20	QPSK	1	49	17.15	17.13	17.19	
20	QPSK	1	99	17.10	17.14	17.10	
20	QPSK	50	0	17.32	17.26	17.28	18.5
20	QPSK	50	24	17.35	17.29	17.27	
20	QPSK	50	50	17.29	17.26	17.29	
20	QPSK	100	0	17.21	17.20	17.24	18.5
20	16QAM	1	0	17.64	17.53	17.60	
20	16QAM	1	49	17.54	17.53	17.54	
20	16QAM	1	99	17.41	17.47	17.43	18.5
20	16QAM	50	0	17.38	17.22	17.26	
20	16QAM	50	24	17.27	17.29	17.29	
20	16QAM	50	50	17.27	17.26	17.28	18.5
20	16QAM	100	0	17.17	17.18	17.25	
20	64QAM	1	0	17.51	17.37	17.44	
20	64QAM	1	49	17.37	17.37	17.43	18.5
20	64QAM	1	99	17.34	17.38	17.34	
20	64QAM	50	0	17.32	17.28	17.28	
20	64QAM	50	24	17.32	17.29	17.29	18.5
20	64QAM	50	50	17.24	17.31	17.28	
20	64QAM	100	0	17.20	17.21	17.29	
Channel				20115	20340	20615	
Frequency (MHz)							
15	QPSK	1	0	17.05	17.20	17.22	18.5
15	QPSK	1	37	17.16	17.14	17.15	
15	QPSK	1	74	17.03	17.14	17.12	
15	QPSK	36	0	17.26	17.12	17.15	18.5
15	QPSK	36	20	17.29	17.29	17.32	
15	QPSK	36	39	17.24	17.24	17.25	
15	QPSK	75	0	17.24	17.21	17.23	18.5
15	16QAM	1	0	17.31	17.53	17.58	
15	16QAM	1	37	17.46	17.51	17.54	
15	16QAM	1	74	17.31	17.49	17.45	18.5
15	16QAM	36	0	17.24	17.12	17.15	
15	16QAM	36	20	17.28	17.29	17.31	
15	16QAM	36	39	17.21	17.25	17.24	18.5
15	16QAM	75	0	17.22	17.21	17.25	
15	64QAM	1	0	17.28	17.38	17.41	
15	64QAM	1	37	17.40	17.40	17.44	18.5
15	64QAM	1	74	17.23	17.36	17.34	
15	64QAM	36	0	17.29	17.14	17.19	
15	64QAM	36	20	17.33	17.30	17.35	18.5
15	64QAM	36	39	17.25	17.31	17.28	
15	64QAM	75	0	17.25	17.24	17.24	
Channel				20690	20340	20640	
Frequency (MHz)							
10	QPSK	1	0	16.74	16.66	16.93	18.5
10	QPSK	1	25	16.92	16.89	16.86	
10	QPSK	1	49	16.95	16.97	16.97	
10	QPSK	25	0	16.98	16.86	16.88	18.5
10	QPSK	25	12	17.08	17.03	17.05	
10	QPSK	25	25	16.99	16.98	16.98	
10	QPSK	50	0	17.01	16.98	16.98	18.5
10	16QAM	1	0	17.11	17.00	17.28	
10	16QAM	1	25	17.27	17.25	17.26	
10	16QAM	1	49	16.99	16.98	17.22	18.5
10	16QAM	25	0	17.00	16.87	16.88	
10	16QAM	25	12	17.07	17.03	17.04	
10	16QAM	25	25	16.97	16.99	16.97	18.5
10	16QAM	50	0	16.99	16.96	16.98	
10	64QAM	1	0	17.01	16.91	17.14	
10	64QAM	1	25	17.19	17.19	17.19	18.5
10	64QAM	1	49	16.91	16.91	17.13	
10	64QAM	25	0	17.02	16.91	16.90	
10	64QAM	25	12	17.08	17.09	17.08	18.5
10	64QAM	25	25	17.05	16.98	17.02	
10	64QAM	50	0	17.04	17.01	17.01	
Channel				20905	20340	20695	
Frequency (MHz)							
5	QPSK	1	0	16.72	16.74	16.86	18.5
5	QPSK	1	12	16.89	16.97	16.80	
5	QPSK	1	24	16.95	16.99	16.78	
5	QPSK	12	0	16.93	16.88	16.98	18.5
5	QPSK	12	7	17.18	17.08	16.97	
5	QPSK	12	13	16.91	16.99	16.93	
5	QPSK	25	0	16.95	16.97	16.99	18.5
5	16QAM	1	0	17.11	17.00	17.38	
5	16QAM	1	12	17.24	17.23	17.19	
5	16QAM	1	24	17.05	16.95	17.13	18.5
5	16QAM	12	0	16.94	16.77	16.84	
5	16QAM	12	7	17.00	16.95	17.02	
5	16QAM	12	13	17.05	17.02	16.87	18.5
5	16QAM	25	0	17.04	16.98	16.88	
5	64QAM	1	0	16.92	16.91	17.10	
5	64QAM	1	12	17.22	17.14	17.11	18.5
5	64QAM	1	24	17.00	16.95	17.09	
5	64QAM	12	0	16.95	16.81	16.84	
5	64QAM	12	7	17.17	17.05	17.12	18.5
5	64QAM	12	13	17.00	17.02	17.06	
5	64QAM	25	0	16.97	17.01	17.02	
Channel				20905	20340	20695	
Frequency (MHz)							
3	QPSK	1	0	16.69	16.58	16.97	18.5
3	QPSK	1	8	16.99	16.80	16.95	
3	QPSK	1	14	16.95	16.73	16.92	
3	QPSK	8	0	17.04	16.77	16.76	18.5
3	QPSK	8	4	17.18	17.11	17.05	
3	QPSK	8	7	17.00	16.97	16.94	
3	QPSK	15	0	16.94	16.90	17.01	18.5
3	16QAM	1	0	17.13	17.08	17.23	
3	16QAM	1	8	17.20	17.23	17.18	
3	16QAM	1	14	17.08	17.07	17.28	18.5
3	16QAM	8	0	16.93	16.93	16.79	
3	16QAM	8	4	17.02	17.07	17.07	
3	16QAM	8	7	16.91	16.96	17.06	18.5
3	16QAM	15	0	16.99	16.88	17.00	
3	64QAM	1	0	17.10	16.93	17.20	
3	64QAM	1	8	17.17	17.13	17.11	18.5
3	64QAM	1	14	16.94	16.93	17.12	
3	64QAM	8	0	17.09	17.00	16.93	
3	64QAM	8	4	17.17	17.19	17.06	18.5
3	64QAM	8	7	16.91	17.02	17.06	
3	64QAM	15	0	17.06	17.11	17.10	
Channel				20947	20340	20683	
Frequency (MHz)							
1.4	QPSK	1	0	16.88	16.82	16.77	18.5
1.4	QPSK	1	3	16.96	16.89	16.92	
1.4	QPSK	1	5	16.90	16.83	16.93	
1.4	QPSK	3	0	16.91	16.85	16.74	18.5
1.4	QPSK	3	1	16.92	16.89	16.77	
1.4	QPSK	3	3	16.90	16.86	16.83	
1.4	QPSK	6	0	16.99	16.92	16.86	18.5
1.4	16QAM	1	0	17.20	17.13	17.06	
1.4	16QAM	1	3	17.27	17.21	17.24	
1.4	16QAM	1	5	17.18	17.13	17.18	18.5
1.4	16QAM	3	0	16.98	16.89	16.83	
1.4	16QAM	3	1	17.01	16.94	16.88	
1.4	16QAM	3	3	16.97	16.89	16.89	18.5
1.4	16QAM	6	0	17.07	17.00	16.96	
1.4	64QAM	1	0	17.16	17.09	16.96	
1.4	64QAM	1	3	17.20	17.13	17.09	18.5
1.4	64QAM	1	5	17.17	17.06	17.05	
1.4	64QAM	3	1	17.16	17.09	17.02	
1.4	64QAM	3	3	17.14	17.05	17.05	18.5
1.4	64QAM	6	0	17.01	16.91	16.94	



Band 26_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low Ch. Freq. 26765	Middle Ch. Freq. 26865	High Ch. Freq. 26965	
Channel				821.5	831.5	841.5	
Frequency (MHz)							
15	QPSK	1	0	22.19	22.16	22.17	23.5
15	QPSK	1	37	22.12	22.16	22.17	
15	QPSK	1	74	22.12	22.14	22.02	
15	QPSK	36	0	22.15	22.13	22.13	
15	QPSK	36	20	22.25	22.20	22.24	23
15	QPSK	36	39	22.17	22.19	22.15	
15	QPSK	75	0	22.18	22.10	22.08	
15	16QAM	1	0	22.24	22.41	22.44	
15	16QAM	1	37	22.47	22.50	22.32	23
15	16QAM	1	74	22.42	22.45	22.28	
15	16QAM	36	0	21.11	21.11	21.12	
15	16QAM	36	20	21.25	21.15	21.24	
15	16QAM	36	39	21.18	21.15	21.12	22
15	16QAM	75	0	21.16	21.14	21.10	
15	64QAM	1	0	21.38	21.30	21.40	
15	64QAM	1	37	21.39	21.36	21.40	
15	64QAM	1	74	21.36	21.33	21.19	22
15	64QAM	36	0	20.14	20.18	20.11	
15	64QAM	36	20	20.26	20.22	20.28	
15	64QAM	36	39	20.21	20.24	20.18	
15	64QAM	75	0	20.20	20.12	20.12	21
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
Frequency (MHz)							
10	QPSK	1	0	22.04	22.12	22.08	23.5
10	QPSK	1	25	21.95	22.03	22.01	
10	QPSK	1	49	21.94	22.10	21.96	
10	QPSK	25	0	21.98	21.97	21.95	
10	QPSK	25	12	22.10	22.07	22.10	23
10	QPSK	25	25	22.01	22.14	22.04	
10	QPSK	50	0	21.99	22.04	21.99	
10	16QAM	1	0	22.42	22.48	22.38	
10	16QAM	1	25	22.41	22.38	22.34	23
10	16QAM	1	49	22.28	22.33	22.29	
10	16QAM	25	0	20.92	20.99	20.96	
10	16QAM	25	12	21.10	21.09	21.11	
10	16QAM	25	25	21.03	21.10	21.07	22
10	16QAM	50	0	21.03	21.02	20.98	
10	64QAM	1	0	21.35	21.32	21.28	
10	64QAM	1	25	21.29	21.35	21.31	
10	64QAM	1	49	21.19	21.24	21.09	22
10	64QAM	25	0	20.00	20.00	20.04	
10	64QAM	25	12	20.14	20.16	20.12	
10	64QAM	25	25	19.99	20.11	20.12	
10	64QAM	50	0	20.09	20.03	20.01	21
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
Frequency (MHz)							
5	QPSK	1	0	21.87	21.96	22.00	23.5
5	QPSK	1	12	22.05	22.04	22.06	
5	QPSK	1	24	21.94	22.03	21.94	
5	QPSK	12	0	22.03	22.07	22.05	
5	QPSK	12	7	22.16	22.11	22.13	23
5	QPSK	12	13	22.10	22.10	22.10	
5	QPSK	25	0	22.09	22.05	22.02	
5	16QAM	1	0	22.21	22.33	22.27	
5	16QAM	1	12	22.41	22.28	22.27	23
5	16QAM	1	24	22.25	22.32	22.22	
5	16QAM	12	0	21.04	21.03	21.06	
5	16QAM	12	7	21.13	21.12	21.16	
5	16QAM	12	13	21.15	21.10	21.10	22
5	16QAM	25	0	21.12	21.07	21.03	
5	64QAM	1	0	21.16	21.23	21.21	
5	64QAM	1	12	21.27	21.32	21.29	
5	64QAM	1	24	21.25	21.28	21.16	22
5	64QAM	12	0	20.12	20.13	20.08	
5	64QAM	12	7	20.21	20.20	20.20	
5	64QAM	12	13	20.15	20.19	20.12	
5	64QAM	25	0	20.13	20.10	20.04	21
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
Frequency (MHz)							
3	QPSK	1	0	21.92	21.99	22.03	23.5
3	QPSK	1	8	22.10	22.12	22.04	
3	QPSK	1	14	21.94	22.08	21.95	
3	QPSK	8	0	22.03	22.06	22.08	
3	QPSK	8	4	22.12	22.14	22.12	23
3	QPSK	8	7	22.11	22.11	22.06	
3	QPSK	15	0	22.11	22.05	22.08	
3	16QAM	1	0	22.25	22.25	22.31	
3	16QAM	1	8	22.31	22.36	22.27	23
3	16QAM	1	14	22.39	22.35	22.21	
3	16QAM	8	0	21.09	21.08	21.11	
3	16QAM	8	4	21.15	21.17	21.15	
3	16QAM	8	7	21.17	21.12	21.10	22
3	16QAM	15	0	21.09	21.08	21.08	
3	64QAM	1	0	21.11	21.15	21.19	
3	64QAM	1	8	21.30	21.34	21.22	
3	64QAM	1	14	21.21	21.21	21.10	22
3	64QAM	8	0	20.08	20.08	20.14	
3	64QAM	8	4	20.19	20.20	20.17	
3	64QAM	8	7	20.15	20.17	20.12	
3	64QAM	15	0	20.13	20.08	20.07	21
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
Frequency (MHz)							
1.4	QPSK	1	0	21.86	21.86	21.89	23.5
1.4	QPSK	1	3	21.99	21.98	21.96	
1.4	QPSK	1	5	21.93	21.95	21.87	
1.4	QPSK	3	0	21.92	21.84	21.90	
1.4	QPSK	3	1	21.98	21.92	21.94	23
1.4	QPSK	3	3	21.94	21.92	21.90	
1.4	QPSK	6	0	22.03	21.96	22.01	
1.4	16QAM	1	0	22.23	22.16	22.12	
1.4	16QAM	1	3	22.36	22.31	22.27	23
1.4	16QAM	1	5	22.30	22.30	22.12	
1.4	16QAM	3	0	21.98	21.92	21.92	
1.4	16QAM	3	1	22.02	21.98	21.93	
1.4	16QAM	3	3	21.93	22.05	21.91	22
1.4	16QAM	6	0	21.10	21.08	21.07	
1.4	64QAM	1	0	21.15	21.11	21.06	
1.4	64QAM	1	3	21.23	21.15	21.12	
1.4	64QAM	1	5	21.13	21.13	21.08	22
1.4	64QAM	3	0	21.13	21.08	21.09	
1.4	64QAM	3	1	21.15	21.10	21.06	
1.4	64QAM	3	3	21.14	21.17	21.06	
1.4	64QAM	6	0	19.99	19.95	19.99	21



Band 66_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)
				Low	Middle	High	
Channel				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	
Frequency (MHz)				132072	132322	132572	
20	QPSK	1	0	17.42	17.42	17.69	19
20	QPSK	1	49	17.60	17.80	17.69	
20	QPSK	1	99	17.28	17.34	17.58	
20	QPSK	50	0	17.67	17.70	17.73	19
20	QPSK	50	24	17.79	17.71	17.84	
20	QPSK	50	50	17.64	17.65	17.70	
20	QPSK	100	0	17.69	17.70	17.76	19
20	16QAM	1	0	17.74	17.80	18.14	
20	16QAM	1	49	17.57	18.04	18.09	
20	16QAM	1	99	17.84	17.69	17.98	19
20	16QAM	50	0	17.68	17.73	17.75	
20	16QAM	50	24	17.78	17.74	17.89	
20	16QAM	50	50	17.65	17.70	17.73	19
20	16QAM	100	0	17.67	17.74	17.77	
20	64QAM	1	0	17.60	17.80	17.84	
20	64QAM	1	49	17.80	17.87	17.88	19
20	64QAM	1	99	17.53	17.59	17.80	
20	64QAM	50	0	17.68	17.70	17.75	
20	64QAM	50	24	17.77	17.71	17.83	19
20	64QAM	50	50	17.66	17.68	17.71	
20	64QAM	100	0	17.71	17.72	17.76	
Channel				132047	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	17.58	17.56	17.73	19
15	QPSK	1	37	17.58	17.59	17.66	
15	QPSK	1	74	17.41	17.46	17.59	
15	QPSK	36	0	17.69	17.71	17.76	19
15	QPSK	36	20	17.74	17.77	17.75	
15	QPSK	36	39	17.67	17.68	17.74	
15	QPSK	75	0	17.71	17.71	17.70	19
15	16QAM	1	0	17.85	17.95	18.13	
15	16QAM	1	37	18.00	18.03	18.06	
15	16QAM	1	74	17.76	17.81	17.97	19
15	16QAM	36	0	17.68	17.74	17.76	
15	16QAM	36	20	17.73	17.79	17.75	
15	16QAM	36	39	17.64	17.71	17.75	19
15	16QAM	75	0	17.71	17.71	17.74	
15	64QAM	1	0	17.75	17.72	17.92	
15	64QAM	1	37	17.85	17.85	17.93	19
15	64QAM	1	74	17.65	17.67	17.83	
15	64QAM	36	0	17.73	17.72	17.79	
15	64QAM	36	20	17.76	17.78	17.76	19
15	64QAM	36	39	17.66	17.72	17.77	
15	64QAM	75	0	17.73	17.76	17.71	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	17.15	17.18	17.24	19
10	QPSK	1	25	17.44	17.43	17.47	
10	QPSK	1	49	17.18	17.18	17.20	
10	QPSK	25	0	17.42	17.43	17.48	19
10	QPSK	25	12	17.58	17.47	17.63	
10	QPSK	25	25	17.45	17.45	17.52	
10	QPSK	50	0	17.49	17.49	17.55	19
10	16QAM	1	0	17.56	17.56	17.60	
10	16QAM	1	25	17.81	17.79	17.84	
10	16QAM	1	49	17.58	17.55	17.61	19
10	16QAM	25	0	17.48	17.44	17.51	
10	16QAM	25	12	17.61	17.53	17.64	
10	16QAM	25	25	17.49	17.44	17.53	19
10	16QAM	50	0	17.52	17.50	17.55	
10	64QAM	1	0	17.40	17.42	17.46	
10	64QAM	1	25	17.71	17.70	17.74	19
10	64QAM	1	49	17.44	17.47	17.48	
10	64QAM	25	0	17.45	17.45	17.52	
10	64QAM	25	12	17.58	17.51	17.67	19
10	64QAM	25	25	17.46	17.47	17.54	
10	64QAM	50	0	17.51	17.50	17.55	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	17.24	17.24	17.27	19
5	QPSK	1	12	17.49	17.47	17.51	
5	QPSK	1	24	17.28	17.27	17.22	
5	QPSK	12	0	17.32	17.49	17.51	19
5	QPSK	12	7	17.53	17.55	17.68	
5	QPSK	12	13	17.54	17.36	17.61	
5	QPSK	25	0	17.40	17.53	17.48	19
5	16QAM	1	0	17.57	17.56	17.69	
5	16QAM	1	12	17.80	17.82	17.84	
5	16QAM	1	24	17.63	17.61	17.66	19
5	16QAM	12	0	17.40	17.45	17.45	
5	16QAM	12	7	17.58	17.56	17.59	
5	16QAM	12	13	17.54	17.54	17.53	19
5	16QAM	25	0	17.52	17.48	17.50	
5	64QAM	1	0	17.39	17.52	17.50	
5	64QAM	1	12	17.81	17.61	17.66	19
5	64QAM	1	24	17.48	17.54	17.51	
5	64QAM	12	0	17.39	17.55	17.44	
5	64QAM	12	7	17.49	17.56	17.69	19
5	64QAM	12	13	17.46	17.56	17.62	
5	64QAM	25	0	17.53	17.42	17.55	
Channel				131997	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	17.21	17.17	17.17	19
3	QPSK	1	8	17.54	17.44	17.56	
3	QPSK	1	14	17.19	17.24	17.11	
3	QPSK	8	0	17.44	17.39	17.43	19
3	QPSK	8	4	17.52	17.54	17.57	
3	QPSK	8	7	17.38	17.40	17.61	
3	QPSK	15	0	17.59	17.47	17.46	19
3	16QAM	1	0	17.63	17.56	17.59	
3	16QAM	1	8	17.84	17.78	17.78	
3	16QAM	1	14	17.48	17.56	17.58	19
3	16QAM	8	0	17.51	17.44	17.51	
3	16QAM	8	4	17.61	17.45	17.67	
3	16QAM	8	7	17.46	17.49	17.48	19
3	16QAM	15	0	17.58	17.53	17.61	
3	64QAM	1	0	17.37	17.33	17.42	
3	64QAM	1	8	17.73	17.67	17.79	19
3	64QAM	1	14	17.49	17.49	17.46	
3	64QAM	8	0	17.38	17.36	17.45	
3	64QAM	8	4	17.53	17.54	17.68	19
3	64QAM	8	7	17.50	17.48	17.54	
3	64QAM	15	0	17.44	17.51	17.48	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	17.30	17.39	17.46	19
1.4	QPSK	1	3	17.41	17.42	17.53	
1.4	QPSK	1	5	17.33	17.35	17.42	
1.4	QPSK	3	0	17.42	17.39	17.46	19
1.4	QPSK	3	1	17.42	17.41	17.47	
1.4	QPSK	3	3	17.35	17.36	17.46	
1.4	QPSK	6	0	17.43	17.45	17.52	19
1.4	16QAM	1	0	17.67	17.74	17.82	
1.4	16QAM	1	3	17.76	17.78	17.84	
1.4	16QAM	1	5	17.68	17.65	17.75	19
1.4	16QAM	3	0	17.52	17.50	17.54	
1.4	16QAM	3	1	17.53	17.55	17.57	
1.4	16QAM	3	3	17.45	17.46	17.53	19
1.4	16QAM	6	0	17.56	17.56	17.62	
1.4	64QAM	1	0	17.57	17.61	17.68	
1.4	64QAM	1	3	17.85	17.66	17.71	19
1.4	64QAM	1	5	17.55	17.56	17.62	
1.4	64QAM	3	0	17.62	17.61	17.69	
1.4	64QAM	3	1	17.63	17.65	17.71	19
1.4	64QAM	3	3	17.55	17.56	17.63	
1.4	64QAM	6	0	17.45	17.48	17.53	



Band 7_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				20850	21100	21350	
20	QPSK	1	0	17.22	17.21	17.22	18.5
20	QPSK	1	49	17.25	17.24	17.27	
20	QPSK	1	99	17.31	17.31	17.29	
20	QPSK	50	0	17.33	17.42	17.35	18.5
20	QPSK	50	24	17.43	17.40	17.40	
20	QPSK	50	50	17.44	17.45	17.43	
20	QPSK	100	0	17.35	17.27	17.28	18.5
20	16QAM	1	0	17.58	17.54	17.57	
20	16QAM	1	49	17.61	17.57	17.59	
20	16QAM	1	99	17.62	17.66	17.62	18.5
20	16QAM	50	0	17.31	17.35	17.38	
20	16QAM	50	24	17.44	17.39	17.38	
20	16QAM	50	50	17.46	17.46	17.42	18.5
20	16QAM	100	0	17.34	17.28	17.29	
20	64QAM	1	0	17.44	17.38	17.41	
20	64QAM	1	49	17.51	17.49	17.50	18.5
20	64QAM	1	99	17.56	17.57	17.55	
20	64QAM	50	0	17.38	17.40	17.38	
20	64QAM	50	24	17.47	17.45	17.44	18.5
20	64QAM	50	50	17.48	17.48	17.45	
20	64QAM	100	0	17.39	17.36	17.32	
Channel				20825	21100	21375	Tune-up
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.27	17.24	17.28	18.5
15	QPSK	1	37	17.28	17.28	17.29	
15	QPSK	1	74	17.32	17.31	17.30	
15	QPSK	36	0	17.33	17.33	17.36	18.5
15	QPSK	36	20	17.40	17.39	17.46	
15	QPSK	36	39	17.46	17.45	17.46	
15	QPSK	75	0	17.37	17.29	17.32	18.5
15	16QAM	1	0	17.57	17.58	17.57	
15	16QAM	1	37	17.56	17.58	17.55	
15	16QAM	1	74	17.65	17.59	17.60	18.5
15	16QAM	36	0	17.34	17.35	17.37	
15	16QAM	36	20	17.40	17.38	17.45	
15	16QAM	36	39	17.46	17.43	17.45	18.5
15	16QAM	75	0	17.36	17.33	17.45	
15	64QAM	1	0	17.48	17.45	17.48	
15	64QAM	1	37	17.52	17.53	17.52	18.5
15	64QAM	1	74	17.55	17.54	17.55	
15	64QAM	36	0	17.40	17.38	17.38	
15	64QAM	36	20	17.48	17.41	17.47	18.5
15	64QAM	36	39	17.52	17.48	17.50	
15	64QAM	75	0	17.39	17.33	17.33	
Channel				20800	21100	21400	Tune-up
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	17.02	17.08	17.02	18.5
10	QPSK	1	25	17.01	17.06	17.07	
10	QPSK	1	49	17.07	17.10	17.07	
10	QPSK	25	0	17.13	17.11	17.10	18.5
10	QPSK	25	12	17.19	17.19	17.21	
10	QPSK	25	25	17.22	17.26	17.19	
10	QPSK	50	0	17.12	17.10	17.16	18.5
10	16QAM	1	0	17.41	17.43	17.39	
10	16QAM	1	25	17.45	17.51	17.42	
10	16QAM	1	49	17.47	17.54	17.48	18.5
10	16QAM	25	0	17.11	17.14	17.11	
10	16QAM	25	12	17.19	17.17	17.19	
10	16QAM	25	25	17.21	17.22	17.20	18.5
10	16QAM	50	0	17.10	17.04	17.08	
10	64QAM	1	0	17.25	17.31	17.29	
10	64QAM	1	25	17.36	17.39	17.41	18.5
10	64QAM	1	49	17.41	17.41	17.39	
10	64QAM	25	0	17.14	17.13	17.14	
10	64QAM	25	12	17.23	17.19	17.20	18.5
10	64QAM	25	25	17.22	17.24	17.23	
10	64QAM	50	0	17.17	17.09	17.13	
Channel				20775	21100	21425	Tune-up
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	17.00	17.06	17.07	18.5
5	QPSK	1	12	17.11	17.13	17.10	
5	QPSK	1	24	17.08	17.14	17.12	
5	QPSK	12	0	17.15	17.13	17.16	18.5
5	QPSK	12	7	17.19	17.18	17.18	
5	QPSK	12	13	17.18	17.17	17.13	
5	QPSK	25	0	17.18	17.14	17.15	18.5
5	16QAM	1	0	17.36	17.39	17.42	
5	16QAM	1	12	17.42	17.47	17.45	
5	16QAM	1	24	17.43	17.48	17.43	18.5
5	16QAM	12	0	17.18	17.13	17.18	
5	16QAM	12	7	17.23	17.20	17.19	
5	16QAM	12	13	17.19	17.18	17.15	18.5
5	16QAM	25	0	17.15	17.12	17.15	
5	64QAM	1	0	17.27	17.37	17.37	
5	64QAM	1	12	17.37	17.41	17.35	18.5
5	64QAM	1	24	17.30	17.41	17.35	
5	64QAM	12	0	17.21	17.19	17.21	
5	64QAM	12	7	17.27	17.24	17.20	18.5
5	64QAM	12	13	17.22	17.20	17.16	
5	64QAM	25	0	17.17	17.13	17.18	



Band 7_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				29850	21100	21350	
20	QPSK	1	0	14.17	14.17	14.18	15.5
20	QPSK	1	49	14.18	14.26	14.24	
20	QPSK	1	99	14.22	14.28	14.27	
20	QPSK	50	0	14.32	14.35	14.27	15.5
20	QPSK	50	24	14.39	14.38	14.35	
20	QPSK	50	50	14.38	14.41	14.41	
20	QPSK	100	0	14.30	14.22	14.21	15.5
20	16QAM	1	0	14.38	14.36	14.64	
20	16QAM	1	49	14.63	14.65	14.64	
20	16QAM	1	99	14.67	14.70	14.68	15.5
20	16QAM	50	0	14.34	14.37	14.40	
20	16QAM	50	24	14.46	14.43	14.42	
20	16QAM	50	50	14.48	14.50	14.50	15.5
20	16QAM	100	0	14.36	14.28	14.28	
20	64QAM	1	0	14.43	14.45	14.49	
20	64QAM	1	49	14.52	14.56	14.56	15.5
20	64QAM	1	99	14.59	14.55	14.56	
20	64QAM	50	0	14.39	14.44	14.43	
20	64QAM	50	24	14.47	14.48	14.47	15.5
20	64QAM	50	50	14.51	14.51	14.51	
20	64QAM	100	0	14.39	14.37	14.36	
Channel				29825	21100	21375	Tune-up
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	14.25	14.22	14.19	15.5
15	QPSK	1	37	14.23	14.22	14.20	
15	QPSK	1	74	14.30	14.28	14.28	
15	QPSK	36	0	14.28	14.33	14.27	15.5
15	QPSK	36	20	14.36	14.36	14.31	
15	QPSK	36	39	14.42	14.43	14.38	
15	QPSK	75	0	14.33	14.25	14.25	15.5
15	16QAM	1	0	14.60	14.60	14.63	
15	16QAM	1	37	14.63	14.63	14.62	
15	16QAM	1	74	14.67	14.68	14.68	15.5
15	16QAM	36	0	14.38	14.39	14.40	
15	16QAM	36	20	14.43	14.39	14.49	
15	16QAM	36	39	14.46	14.48	14.47	15.5
15	16QAM	75	0	14.38	14.38	14.34	
15	64QAM	1	0	14.48	14.46	14.50	
15	64QAM	1	37	14.52	14.55	14.59	15.5
15	64QAM	1	74	14.59	14.55	14.59	
15	64QAM	36	0	14.41	14.41	14.45	
15	64QAM	36	20	14.52	14.44	14.54	15.5
15	64QAM	36	39	14.53	14.54	14.55	
15	64QAM	75	0	14.42	14.33	14.39	
Channel				29800	21100	21400	Tune-up
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	14.01	14.05	14.01	15.5
10	QPSK	1	25	14.04	14.15	14.00	
10	QPSK	1	49	14.10	14.17	14.08	
10	QPSK	25	0	14.08	14.12	14.08	15.5
10	QPSK	25	12	14.19	14.12	14.13	
10	QPSK	25	25	14.18	14.21	14.20	
10	QPSK	50	0	14.11	14.06	13.99	15.5
10	16QAM	1	0	14.47	14.46	14.48	
10	16QAM	1	25	14.45	14.54	14.50	
10	16QAM	1	49	14.51	14.54	14.54	15.5
10	16QAM	25	0	14.16	14.17	14.19	
10	16QAM	25	12	14.25	14.21	14.28	
10	16QAM	25	25	14.22	14.29	14.27	15.5
10	16QAM	50	0	14.16	14.12	14.16	
10	64QAM	1	0	14.31	14.35	14.34	
10	64QAM	1	25	14.39	14.45	14.44	15.5
10	64QAM	1	49	14.42	14.49	14.43	
10	64QAM	25	0	14.19	14.21	14.21	
10	64QAM	25	12	14.26	14.25	14.28	15.5
10	64QAM	25	25	14.26	14.32	14.29	
10	64QAM	50	0	14.21	14.15	14.20	
Channel				29775	21100	21425	Tune-up
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	14.00	14.06	14.04	15.5
5	QPSK	1	12	14.09	14.14	14.11	
5	QPSK	1	24	14.11	14.21	14.07	
5	QPSK	12	0	14.07	14.06	14.09	15.5
5	QPSK	12	7	14.20	14.18	14.18	
5	QPSK	12	13	14.16	14.18	14.13	
5	QPSK	25	0	14.15	14.08	14.12	15.5
5	16QAM	1	0	14.39	14.41	14.49	
5	16QAM	1	12	14.46	14.43	14.50	
5	16QAM	1	24	14.52	14.51	14.51	15.5
5	16QAM	12	0	14.20	14.18	14.23	
5	16QAM	12	7	14.25	14.23	14.27	
5	16QAM	12	13	14.25	14.23	14.21	15.5
5	16QAM	25	0	14.18	14.18	14.24	
5	64QAM	1	0	14.37	14.40	14.47	
5	64QAM	1	12	14.40	14.46	14.43	15.5
5	64QAM	1	24	14.44	14.43	14.48	
5	64QAM	12	0	14.25	14.26	14.29	
5	64QAM	12	7	14.31	14.29	14.33	15.5
5	64QAM	12	13	14.31	14.31	14.26	
5	64QAM	25	0	14.21	14.19	14.26	



Band 7_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				29850	21100	21350	
20	QPSK	1	0	14.17	14.17	14.18	16
20	QPSK	1	49	14.18	14.26	14.24	
20	QPSK	1	99	14.22	14.28	14.27	
20	QPSK	50	0	14.32	14.35	14.27	16
20	QPSK	50	24	14.39	14.38	14.35	
20	QPSK	50	50	14.38	14.41	14.41	
20	QPSK	100	0	14.30	14.22	14.21	16
20	16QAM	1	0	14.38	14.36	14.64	
20	16QAM	1	49	14.63	14.65	14.64	
20	16QAM	1	99	14.67	14.70	14.68	16
20	16QAM	50	0	14.34	14.37	14.40	
20	16QAM	50	24	14.46	14.43	14.42	
20	16QAM	50	50	14.48	14.50	14.50	16
20	16QAM	100	0	14.36	14.28	14.28	
20	64QAM	1	0	14.43	14.45	14.49	
20	64QAM	1	49	14.52	14.56	14.56	16
20	64QAM	1	99	14.59	14.55	14.56	
20	64QAM	50	0	14.39	14.44	14.43	
20	64QAM	50	24	14.47	14.48	14.47	16
20	64QAM	50	50	14.51	14.51	14.51	
20	64QAM	100	0	14.39	14.37	14.36	
Channel				29825	21100	21375	Tune-up
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	14.25	14.22	14.19	16
15	QPSK	1	37	14.23	14.22	14.20	
15	QPSK	1	74	14.30	14.29	14.28	
15	QPSK	36	0	14.28	14.33	14.27	16
15	QPSK	36	20	14.36	14.36	14.31	
15	QPSK	36	39	14.42	14.43	14.38	
15	QPSK	75	0	14.33	14.25	14.25	16
15	16QAM	1	0	14.60	14.60	14.63	
15	16QAM	1	37	14.63	14.63	14.62	
15	16QAM	1	74	14.67	14.68	14.68	16
15	16QAM	36	0	14.38	14.39	14.40	
15	16QAM	36	20	14.43	14.39	14.49	
15	16QAM	36	39	14.46	14.48	14.47	16
15	16QAM	75	0	14.36	14.36	14.34	
15	64QAM	1	0	14.48	14.46	14.50	
15	64QAM	1	37	14.52	14.55	14.59	16
15	64QAM	1	74	14.59	14.55	14.59	
15	64QAM	36	0	14.41	14.41	14.45	
15	64QAM	36	20	14.52	14.44	14.54	16
15	64QAM	36	39	14.53	14.54	14.55	
15	64QAM	75	0	14.42	14.33	14.39	
Channel				29800	21100	21400	Tune-up
Frequency (MHz)				2505	2535	2555	
10	QPSK	1	0	14.01	14.05	14.01	16
10	QPSK	1	25	14.04	14.15	14.00	
10	QPSK	1	49	14.10	14.17	14.08	
10	QPSK	25	0	14.08	14.12	14.08	16
10	QPSK	25	12	14.19	14.12	14.13	
10	QPSK	25	25	14.18	14.21	14.20	
10	QPSK	50	0	14.11	14.06	13.99	16
10	16QAM	1	0	14.47	14.46	14.48	
10	16QAM	1	25	14.45	14.54	14.50	
10	16QAM	1	49	14.51	14.54	14.54	16
10	16QAM	25	0	14.16	14.17	14.19	
10	16QAM	25	12	14.25	14.21	14.28	
10	16QAM	25	25	14.22	14.29	14.27	16
10	16QAM	50	0	14.16	14.12	14.16	
10	64QAM	1	0	14.31	14.35	14.34	
10	64QAM	1	25	14.39	14.45	14.44	16
10	64QAM	1	49	14.42	14.49	14.45	
10	64QAM	25	0	14.19	14.21	14.21	
10	64QAM	25	12	14.26	14.25	14.28	16
10	64QAM	25	25	14.26	14.32	14.29	
10	64QAM	50	0	14.21	14.15	14.20	
Channel				29775	21100	21425	Tune-up
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	14.00	14.06	14.04	16
5	QPSK	1	12	14.09	14.14	14.11	
5	QPSK	1	24	14.11	14.21	14.07	
5	QPSK	12	0	14.07	14.06	14.09	16
5	QPSK	12	7	14.20	14.18	14.18	
5	QPSK	12	13	14.16	14.18	14.13	
5	QPSK	25	0	14.15	14.08	14.12	16
5	16QAM	1	0	14.39	14.41	14.49	
5	16QAM	1	12	14.46	14.43	14.50	
5	16QAM	1	24	14.52	14.51	14.51	16
5	16QAM	12	0	14.20	14.18	14.23	
5	16QAM	12	7	14.25	14.23	14.27	
5	16QAM	12	13	14.25	14.23	14.21	16
5	16QAM	25	0	14.18	14.18	14.24	
5	64QAM	1	0	14.37	14.40	14.47	
5	64QAM	1	12	14.40	14.46	14.43	16
5	64QAM	1	24	14.44	14.43	14.48	
5	64QAM	12	0	14.25	14.26	14.29	
5	64QAM	12	7	14.31	14.29	14.33	16
5	64QAM	12	13	14.31	14.31	14.26	
5	64QAM	25	0	14.21	14.19	14.26	



Band 7_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				20850	21100	21350	
20	QPSK	1	0	18.72	18.71	18.71	20
20	QPSK	1	49	18.76	18.73	18.72	
20	QPSK	1	99	18.80	18.80	18.77	
20	QPSK	50	0	18.82	18.83	18.81	
20	QPSK	50	24	18.90	18.86	18.85	
20	QPSK	50	50	18.90	18.91	18.90	
20	QPSK	100	0	18.87	18.76	18.74	
20	16QAM	1	0	19.03	19.02	19.08	20
20	16QAM	1	49	19.08	19.08	19.08	
20	16QAM	1	99	19.12	19.14	19.10	
20	16QAM	50	0	18.81	18.81	18.80	20
20	16QAM	50	24	18.93	18.84	18.85	
20	16QAM	50	50	18.88	18.91	18.91	
20	16QAM	100	0	18.84	18.76	18.76	20
20	64QAM	1	0	19.93	19.90	19.95	
20	64QAM	1	49	19.96	19.03	19.99	
20	64QAM	1	99	19.07	19.02	19.02	20
20	64QAM	50	0	18.84	18.84	18.84	
20	64QAM	50	24	18.93	18.87	18.87	
20	64QAM	50	50	18.92	18.92	18.93	20
20	64QAM	100	0	18.86	18.82	18.78	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	18.76	18.73	18.82	20
15	QPSK	1	37	18.79	18.77	18.82	
15	QPSK	1	74	18.81	18.82	18.82	
15	QPSK	36	0	18.78	18.78	18.86	20
15	QPSK	36	20	18.89	18.83	18.92	
15	QPSK	36	39	18.93	18.91	18.97	
15	QPSK	75	0	18.85	18.78	18.79	20
15	16QAM	1	0	19.10	19.06	19.08	
15	16QAM	1	37	19.09	19.07	19.10	
15	16QAM	1	74	19.12	19.08	19.12	20
15	16QAM	36	0	18.82	18.80	18.82	
15	16QAM	36	20	18.91	18.84	18.92	
15	16QAM	36	39	18.91	18.91	18.88	20
15	16QAM	75	0	18.88	18.80	18.80	
15	64QAM	1	0	19.96	19.91	19.95	
15	64QAM	1	37	19.98	19.02	19.03	20
15	64QAM	1	74	19.02	19.03	19.02	
15	64QAM	36	0	18.83	18.82	18.84	
15	64QAM	36	20	18.94	18.83	18.98	20
15	64QAM	36	39	18.95	18.94	18.93	
15	64QAM	75	0	18.88	18.81	18.83	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	18.50	18.58	18.57	20
10	QPSK	1	25	18.50	18.59	18.57	
10	QPSK	1	49	18.57	18.63	18.58	
10	QPSK	25	0	18.57	18.62	18.60	20
10	QPSK	25	12	18.66	18.65	18.71	
10	QPSK	25	25	18.64	18.75	18.71	
10	QPSK	50	0	18.61	18.61	18.66	20
10	16QAM	1	0	18.87	18.94	18.90	
10	16QAM	1	25	18.91	18.96	18.92	
10	16QAM	1	49	18.95	18.98	18.99	20
10	16QAM	25	0	18.55	18.58	18.57	
10	16QAM	25	12	18.68	18.63	18.70	
10	16QAM	25	25	18.66	18.70	18.67	20
10	16QAM	50	0	18.59	18.56	18.60	
10	64QAM	1	0	19.75	18.79	18.75	
10	64QAM	1	25	18.83	18.86	18.86	20
10	64QAM	1	49	18.84	18.93	18.86	
10	64QAM	25	0	18.62	18.60	18.62	
10	64QAM	25	12	18.71	18.66	18.73	20
10	64QAM	25	25	18.70	18.72	18.72	
10	64QAM	50	0	18.64	18.59	18.63	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	18.48	18.67	18.59	20
5	QPSK	1	12	18.59	18.67	18.67	
5	QPSK	1	24	18.59	18.66	18.61	
5	QPSK	12	0	18.65	18.64	18.69	20
5	QPSK	12	7	18.72	18.68	18.74	
5	QPSK	12	13	18.66	18.73	18.67	
5	QPSK	25	0	18.62	18.65	18.67	20
5	16QAM	1	0	18.86	18.90	18.92	
5	16QAM	1	12	18.97	18.97	18.86	
5	16QAM	1	24	18.93	18.98	18.91	20
5	16QAM	12	0	18.65	18.66	18.66	
5	16QAM	12	7	18.73	18.73	18.72	
5	16QAM	12	13	18.68	18.72	18.67	20
5	16QAM	25	0	18.66	18.62	18.66	
5	64QAM	1	0	19.78	18.89	18.89	
5	64QAM	1	12	18.79	18.91	18.87	20
5	64QAM	1	24	18.79	18.93	18.90	
5	64QAM	12	0	18.70	18.69	18.72	
5	64QAM	12	7	18.77	18.74	18.78	20
5	64QAM	12	13	18.70	18.73	18.71	
5	64QAM	25	0	18.67	18.65	18.66	



Band 7_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				20850	21100	21350	
20	QPSK	1	0	17.25	17.25	17.25	18.5
20	QPSK	1	49	17.25	17.30	17.31	
20	QPSK	1	99	17.37	17.33	17.36	
20	QPSK	50	0	17.35	17.42	17.40	18.5
20	QPSK	50	24	17.46	17.46	17.48	
20	QPSK	50	50	17.52	17.50	17.49	
20	QPSK	100	0	17.39	17.34	17.29	18.5
20	16QAM	1	0	17.61	17.60	17.64	
20	16QAM	1	49	17.65	17.62	17.64	
20	16QAM	1	99	17.69	17.67	17.67	18.5
20	16QAM	50	0	17.36	17.40	17.39	
20	16QAM	50	24	17.46	17.42	17.42	
20	16QAM	50	50	17.49	17.49	17.49	18.5
20	16QAM	100	0	17.36	17.33	17.31	
20	64QAM	1	0	17.45	17.44	17.45	
20	64QAM	1	49	17.54	17.50	17.58	18.5
20	64QAM	1	99	17.56	17.60	17.60	
20	64QAM	50	0	17.40	17.45	17.44	
20	64QAM	50	24	17.49	17.46	17.46	18.5
20	64QAM	50	50	17.51	17.52	17.50	
20	64QAM	100	0	17.42	17.37	17.33	
Channel				20825	21100	21375	Tune-up
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.30	17.29	17.34	18.5
15	QPSK	1	37	17.30	17.32	17.31	
15	QPSK	1	74	17.36	17.38	17.40	
15	QPSK	36	0	17.37	17.38	17.42	18.5
15	QPSK	36	20	17.49	17.43	17.48	
15	QPSK	36	39	17.50	17.48	17.53	
15	QPSK	75	0	17.39	17.32	17.37	18.5
15	16QAM	1	0	17.63	17.61	17.61	
15	16QAM	1	37	17.62	17.63	17.62	
15	16QAM	1	74	17.65	17.67	17.64	18.5
15	16QAM	36	0	17.42	17.40	17.43	
15	16QAM	36	20	17.48	17.41	17.49	
15	16QAM	36	39	17.47	17.47	17.50	18.5
15	16QAM	75	0	17.41	17.32	17.38	
15	64QAM	1	0	17.48	17.46	17.48	
15	64QAM	1	37	17.55	17.55	17.58	18.5
15	64QAM	1	74	17.57	17.58	17.59	
15	64QAM	36	0	17.43	17.42	17.43	
15	64QAM	36	20	17.53	17.46	17.52	18.5
15	64QAM	36	39	17.53	17.52	17.54	
15	64QAM	75	0	17.43	17.37	17.37	
Channel				20800	21100	21400	Tune-up
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	17.10	17.11	17.11	18.5
10	QPSK	1	25	17.07	17.16	17.10	
10	QPSK	1	49	17.12	17.17	17.12	
10	QPSK	25	0	17.15	17.18	17.14	18.5
10	QPSK	25	12	17.23	17.23	17.23	
10	QPSK	25	25	17.21	17.24	17.27	
10	QPSK	50	0	17.17	17.13	17.19	18.5
10	16QAM	1	0	17.47	17.48	17.44	
10	16QAM	1	25	17.47	17.47	17.50	
10	16QAM	1	49	17.50	17.58	17.52	18.5
10	16QAM	25	0	17.16	17.18	17.17	
10	16QAM	25	12	17.22	17.20	17.22	
10	16QAM	25	25	17.22	17.27	17.27	18.5
10	16QAM	50	0	17.14	17.08	17.13	
10	64QAM	1	0	17.26	17.29	17.29	
10	64QAM	1	25	17.43	17.42	17.45	18.5
10	64QAM	1	49	17.40	17.46	17.44	
10	64QAM	25	0	17.17	17.20	17.18	
10	64QAM	25	12	17.27	17.23	17.29	18.5
10	64QAM	25	25	17.26	17.29	17.29	
10	64QAM	50	0	17.20	17.12	17.17	
Channel				20775	21100	21425	Tune-up
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	17.04	17.10	17.16	18.5
5	QPSK	1	12	17.15	17.19	17.20	
5	QPSK	1	24	17.15	17.19	17.16	
5	QPSK	12	0	17.20	17.19	17.23	18.5
5	QPSK	12	7	17.25	17.23	17.24	
5	QPSK	12	13	17.21	17.24	17.20	
5	QPSK	25	0	17.21	17.18	17.22	18.5
5	16QAM	1	0	17.39	17.44	17.47	
5	16QAM	1	12	17.50	17.56	17.52	
5	16QAM	1	24	17.50	17.53	17.49	18.5
5	16QAM	12	0	17.22	17.22	17.24	
5	16QAM	12	7	17.28	17.24	17.28	
5	16QAM	12	13	17.21	17.24	17.21	18.5
5	16QAM	25	0	17.21	17.16	17.22	
5	64QAM	1	0	17.35	17.41	17.46	
5	64QAM	1	12	17.43	17.46	17.43	18.5
5	64QAM	1	24	17.34	17.48	17.47	
5	64QAM	12	0	17.26	17.23	17.27	
5	64QAM	12	7	17.31	17.30	17.28	18.5
5	64QAM	12	13	17.25	17.28	17.23	
5	64QAM	25	0	17.21	17.18	17.23	



Band 7_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up
				Low	Middle	High	
Channel				Ch. Freq.	Ch. Freq.	Ch. Freq.	limit (dBm)
Frequency (MHz)				20850	21100	21350	
20	QPSK	1	0	17.25	17.25	17.25	19
20	QPSK	1	49	17.25	17.30	17.31	
20	QPSK	1	99	17.37	17.33	17.36	
20	QPSK	50	0	17.35	17.42	17.40	19
20	QPSK	50	24	17.46	17.46	17.48	
20	QPSK	50	50	17.45	17.50	17.52	
20	QPSK	100	0	17.39	17.34	17.29	19
20	16QAM	1	0	17.61	17.60	17.64	
20	16QAM	1	49	17.65	17.62	17.64	
20	16QAM	1	99	17.69	17.67	17.67	19
20	16QAM	50	0	17.36	17.40	17.39	
20	16QAM	50	24	17.46	17.42	17.42	
20	16QAM	50	50	17.49	17.49	17.49	19
20	16QAM	100	0	17.36	17.33	17.31	
20	64QAM	1	0	17.45	17.44	17.45	
20	64QAM	1	49	17.54	17.50	17.58	19
20	64QAM	1	99	17.56	17.60	17.60	
20	64QAM	50	0	17.40	17.45	17.44	
20	64QAM	50	24	17.49	17.46	17.46	19
20	64QAM	50	50	17.51	17.52	17.50	
20	64QAM	100	0	17.42	17.37	17.33	
Channel				20825	21100	21375	Tune-up
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.30	17.29	17.34	19
15	QPSK	1	37	17.30	17.32	17.31	
15	QPSK	1	74	17.36	17.38	17.40	
15	QPSK	36	0	17.37	17.38	17.42	19
15	QPSK	36	20	17.49	17.43	17.48	
15	QPSK	36	39	17.50	17.48	17.53	
15	QPSK	75	0	17.39	17.32	17.37	19
15	16QAM	1	0	17.63	17.61	17.61	
15	16QAM	1	37	17.62	17.63	17.62	
15	16QAM	1	74	17.65	17.67	17.64	19
15	16QAM	36	0	17.42	17.40	17.43	
15	16QAM	36	20	17.48	17.41	17.49	
15	16QAM	36	39	17.47	17.47	17.50	19
15	16QAM	75	0	17.41	17.32	17.36	
15	64QAM	1	0	17.48	17.46	17.48	
15	64QAM	1	37	17.55	17.55	17.58	19
15	64QAM	1	74	17.57	17.58	17.59	
15	64QAM	36	0	17.43	17.42	17.43	
15	64QAM	36	20	17.53	17.46	17.52	19
15	64QAM	36	39	17.53	17.52	17.54	
15	64QAM	75	0	17.43	17.37	17.37	
Channel				20800	21100	21400	Tune-up
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	17.10	17.11	17.11	19
10	QPSK	1	25	17.07	17.16	17.10	
10	QPSK	1	49	17.12	17.17	17.12	
10	QPSK	25	0	17.15	17.18	17.14	19
10	QPSK	25	12	17.23	17.23	17.23	
10	QPSK	25	25	17.21	17.24	17.27	
10	QPSK	50	0	17.17	17.13	17.19	19
10	16QAM	1	0	17.47	17.48	17.44	
10	16QAM	1	25	17.47	17.47	17.50	
10	16QAM	1	49	17.50	17.58	17.52	19
10	16QAM	25	0	17.16	17.18	17.17	
10	16QAM	25	12	17.22	17.20	17.22	
10	16QAM	25	25	17.22	17.27	17.27	19
10	16QAM	50	0	17.14	17.08	17.13	
10	64QAM	1	0	17.26	17.29	17.29	
10	64QAM	1	25	17.43	17.42	17.45	19
10	64QAM	1	49	17.40	17.46	17.44	
10	64QAM	25	0	17.17	17.20	17.18	
10	64QAM	25	12	17.27	17.23	17.29	19
10	64QAM	25	25	17.26	17.29	17.29	
10	64QAM	50	0	17.20	17.12	17.17	
Channel				20775	21100	21425	Tune-up
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	17.04	17.10	17.16	19
5	QPSK	1	12	17.15	17.19	17.20	
5	QPSK	1	24	17.15	17.19	17.16	
5	QPSK	12	0	17.20	17.19	17.23	19
5	QPSK	12	7	17.25	17.23	17.24	
5	QPSK	12	13	17.21	17.24	17.20	
5	QPSK	25	0	17.21	17.18	17.22	19
5	16QAM	1	0	17.39	17.44	17.47	
5	16QAM	1	12	17.50	17.56	17.52	
5	16QAM	1	24	17.50	17.53	17.49	19
5	16QAM	12	0	17.22	17.22	17.24	
5	16QAM	12	7	17.28	17.24	17.28	
5	16QAM	12	13	17.21	17.24	17.21	19
5	16QAM	25	0	17.21	17.16	17.22	
5	64QAM	1	0	17.35	17.41	17.46	
5	64QAM	1	12	17.43	17.46	17.43	19
5	64QAM	1	24	17.34	17.48	17.47	
5	64QAM	12	0	17.26	17.23	17.27	
5	64QAM	12	7	17.31	17.30	17.28	19
5	64QAM	12	13	17.25	17.28	17.23	
5	64QAM	25	0	17.21	17.18	17.23	

<TDD LTE SAR Measurement>

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

- a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
- b. "special subframe S" contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS
- c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

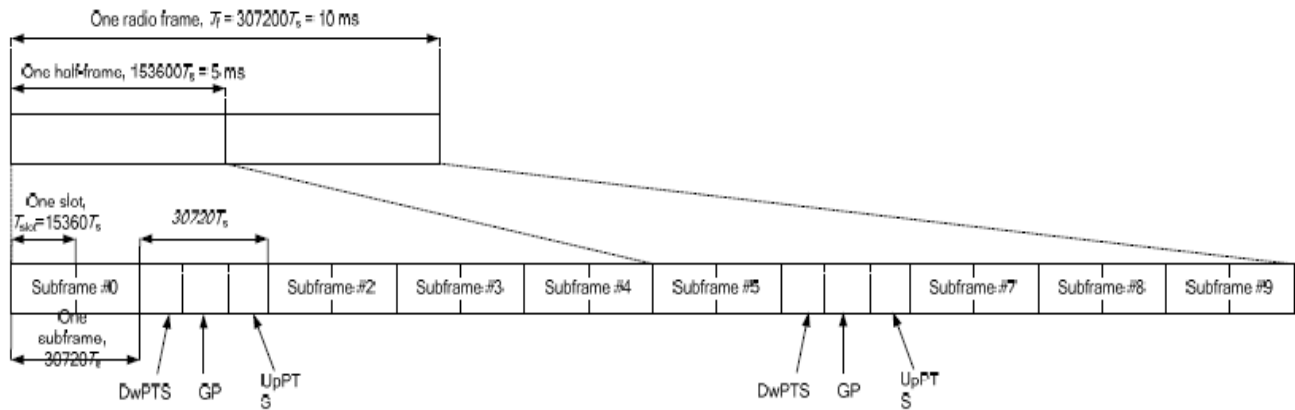


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	6592 · Ts	2192 · Ts	2560 · Ts	7680 · Ts	2192 · Ts	2560 · Ts
1	19760 · Ts			20480 · Ts		
2	21952 · Ts			23040 · Ts		
3	24144 · Ts			25600 · Ts		
4	26336 · Ts	4384 · Ts	5120 · Ts	7680 · Ts	4384 · Ts	5120 · Ts
5	6592 · Ts			20480 · Ts		
6	19760 · Ts			23040 · Ts		
7	21952 · Ts			12800 · Ts		
8	24144 · Ts			-		
9	13168 · Ts	-	-	-	-	-



Special subframe (30720·T _s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
Uplink duty factor in one special subframe	0~4	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T _s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
Uplink duty factor in one special subframe	0~3	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

- i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, uplink operation is in 3 uplink subframes and 1 special subframe.
- ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.167)/5 = 63.3\%$
- iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.143)/5 = 62.9\%$
- v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The
- vi. The device supports Power Class 3 uplink-downlink configurations 0 and 6, and Power Class 2 uplink-downlink configurations 1 to 5 operations for LTE Band 41.
- vii. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1, for Power Class 3 operation is 63.3% using UL-DL configuration 0. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR among all exposure condition.



Band 38_Ant 3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				37650	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	24.37	24.38	24.38	25	
20	QPSK	1	49	24.36	24.34	24.35		
20	QPSK	1	99	24.33	24.38	24.31		
20	QPSK	1	0	23.24	23.25	23.23		
20	QPSK	50	24	23.41	23.42	23.32	24	
20	QPSK	50	0	23.33	23.34	23.30		
20	QPSK	100	0	23.33	23.35	23.23		
20	16QAM	1	0	23.48	23.49	23.45		
20	16QAM	1	49	23.44	23.42	23.42	24	
20	16QAM	1	99	23.43	23.46	23.47		
20	16QAM	50	0	22.27	22.28	22.28		
20	16QAM	50	24	22.45	22.45	22.37		
20	16QAM	50	50	22.36	22.35	22.33	23	
20	16QAM	100	0	22.35	22.35	22.28		
20	64QAM	1	0	22.22	22.27	22.25		
20	64QAM	1	49	22.26	22.22	22.25		
20	64QAM	1	99	22.24	22.26	22.31	23	
20	64QAM	50	0	21.27	21.29	21.28		
20	64QAM	50	24	21.43	21.46	21.38		
20	64QAM	50	50	21.36	21.37	21.33		
20	64QAM	100	0	21.35	21.38	21.28	22	
Channel				37625	38000	38175		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	24.37	24.35	24.32		25
15	QPSK	1	37	24.33	24.33	24.27		
15	QPSK	1	74	24.32	24.32	24.30		
15	QPSK	36	0	23.28	23.29	23.27		
15	QPSK	36	20	23.45	23.44	23.32	24	
15	QPSK	36	39	23.37	23.36	23.33		
15	QPSK	75	0	23.39	23.37	23.28		
15	16QAM	1	0	23.47	23.46	23.46		
15	16QAM	1	37	23.37	23.34	23.39	24	
15	16QAM	1	74	23.45	23.50	23.46		
15	16QAM	36	0	22.26	22.26	22.24		
15	16QAM	36	20	22.41	22.40	22.30		
15	16QAM	36	39	22.33	22.34	22.31	23	
15	16QAM	75	0	22.40	22.40	22.29		
15	64QAM	1	0	22.18	22.23	22.19		
15	64QAM	1	37	22.20	22.22	22.24		
15	64QAM	1	74	22.24	22.24	22.26	23	
15	64QAM	36	0	21.31	21.32	21.30		
15	64QAM	36	20	21.46	21.48	21.34		
15	64QAM	36	39	21.38	21.38	21.34		
15	64QAM	75	0	21.39	21.40	21.28	22	
Channel				37690	38000	38210		
Frequency (MHz)				2572.5	2595	2617.5		
10	QPSK	1	0	23.61	23.99	23.96		25
10	QPSK	1	25	23.93	23.98	23.97		
10	QPSK	1	49	23.76	24.07	24.06		
10	QPSK	25	0	22.98	23.02	22.98		
10	QPSK	25	12	23.16	23.22	23.09	24	
10	QPSK	25	25	23.10	23.13	23.05		
10	QPSK	50	0	23.07	23.12	22.98		
10	16QAM	1	0	23.06	23.39	23.37		
10	16QAM	1	25	23.35	23.36	23.30	24	
10	16QAM	1	49	23.07	23.38	23.34		
10	16QAM	25	0	22.00	22.05	22.01		
10	16QAM	25	12	22.21	22.22	22.15		
10	16QAM	25	25	22.14	22.13	22.11	23	
10	16QAM	50	0	22.15	22.14	22.05		
10	64QAM	1	0	21.91	22.24	22.24		
10	64QAM	1	25	22.28	22.32	22.34		
10	64QAM	1	49	22.02	22.28	22.29	23	
10	64QAM	25	0	21.09	21.12	21.07		
10	64QAM	25	12	21.38	21.29	21.18		
10	64QAM	25	25	21.17	21.21	21.17		
10	64QAM	50	0	21.15	21.14	21.05	22	
Channel				37775	38000	38225		
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	23.95	24.00	24.00		25
5	QPSK	1	12	24.03	24.11	24.05		
5	QPSK	1	24	24.02	24.04	24.04		
5	QPSK	12	0	23.15	23.14	23.05		
5	QPSK	12	7	23.21	23.23	23.20	24	
5	QPSK	12	13	23.16	23.21	23.15		
5	QPSK	25	0	23.15	23.19	23.14		
5	16QAM	1	0	23.08	23.16	23.09		
5	16QAM	1	12	23.25	23.27	23.25	24	
5	16QAM	1	24	23.21	23.26	23.21		
5	16QAM	12	0	22.13	22.12	22.06		
5	16QAM	12	7	22.10	22.23	22.17		
5	16QAM	12	13	22.15	22.20	22.13	23	
5	16QAM	25	0	22.20	22.21	22.18		
5	64QAM	1	0	21.85	21.88	21.87		
5	64QAM	1	12	21.96	22.01	21.99		
5	64QAM	1	24	21.97	22.00	21.98	23	
5	64QAM	12	0	21.20	21.14	21.13		
5	64QAM	12	7	21.25	21.28	21.21		
5	64QAM	12	13	21.23	21.24	21.20		
5	64QAM	25	0	21.23	21.27	21.20	22	



Band 41_Ant 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				39750	40185	40620	41055	41490		
Frequency (MHz)				2386	2543.5	2593	2637.5	2690		
20	QPSK	1	0	23.90	23.85	23.85	23.73	23.53	24.5	
20	QPSK	1	49	23.90	23.86	23.99	23.93	23.85		
20	QPSK	1	99	23.81	23.84	23.73	23.50	23.75		
20	QPSK	50	0	22.95	22.89	22.93	22.93	22.79		
20	QPSK	50	24	22.96	22.97	23.13	22.97	22.92	23.5	
20	QPSK	50	50	22.90	22.95	23.06	22.99	22.91		
20	QPSK	100	0	22.87	22.86	23.04	22.86	22.83		
20	16QAM	1	0	23.06	23.04	22.77	22.87	22.64		
20	16QAM	1	49	22.93	22.91	23.09	23.05	22.92	23.5	
20	16QAM	1	99	22.83	23.03	22.80	22.61	22.85		
20	16QAM	50	0	22.00	21.92	21.97	21.97	21.92		
20	16QAM	50	24	22.00	22.02	22.14	22.02	21.94		
20	16QAM	50	50	21.91	21.88	22.09	21.93	22.00	22.5	
20	16QAM	100	0	21.90	21.80	22.07	21.90	21.86		
20	64QAM	1	0	21.85	21.79	21.49	21.61	21.34		
20	64QAM	1	49	21.71	21.69	21.86	21.80	21.71		
20	64QAM	1	99	21.71	21.85	21.57	21.42	21.64	22.5	
20	64QAM	50	0	21.01	20.91	20.98	20.98	20.82		
20	64QAM	50	24	20.99	21.00	21.16	21.01	20.94		
20	64QAM	50	50	20.94	20.98	21.09	20.93	20.99		
20	64QAM	100	0	20.91	20.90	21.07	20.91	20.97	21.5	
Channel				39725	40173	40620	41055	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.93	23.87	23.80	23.87	23.82		24.5
15	QPSK	1	37	23.87	23.78	23.95	23.87	23.83		
15	QPSK	1	74	23.83	23.81	23.84	23.66	23.78		
15	QPSK	36	0	22.97	22.84	22.96	22.94	22.82		
15	QPSK	36	20	22.87	22.98	23.13	23.05	23.00	23.5	
15	QPSK	36	39	22.93	22.87	23.07	22.93	22.96		
15	QPSK	75	0	22.91	22.90	23.07	22.97	22.88		
15	16QAM	1	0	23.08	22.84	22.92	22.97	22.75		
15	16QAM	1	37	22.90	22.92	23.06	23.06	22.91	23.5	
15	16QAM	1	74	22.85	22.80	22.97	22.83	22.92		
15	16QAM	36	0	21.98	21.82	21.93	21.94	21.79		
15	16QAM	36	20	21.93	21.95	22.10	22.02	21.95		
15	16QAM	36	39	21.91	21.88	22.06	21.92	21.95	22.5	
15	16QAM	75	0	21.94	21.93	22.10	22.02	21.89		
15	64QAM	1	0	21.85	21.57	21.65	21.74	21.52		
15	64QAM	1	37	21.74	21.77	21.87	21.85	21.76		
15	64QAM	1	74	21.71	21.82	21.71	21.60	21.76	22.5	
15	64QAM	36	0	20.99	20.96	21.00	20.97	20.85		
15	64QAM	36	20	21.00	21.00	21.16	21.08	21.02		
15	64QAM	36	39	20.95	20.89	21.10	20.95	20.98		
15	64QAM	75	0	20.95	20.93	21.07	21.02	20.89	21.5	
Channel				39700	40160	40620	41050	41540		
Frequency (MHz)				2591	2547	2593	2639	2685		
10	QPSK	1	0	23.86	23.68	23.85	23.92	23.71		24.5
10	QPSK	1	25	23.87	23.87	23.90	23.80	23.80		
10	QPSK	1	49	23.89	23.51	23.93	23.74	23.72		
10	QPSK	25	0	23.04	22.81	23.06	22.90	22.74		
10	QPSK	25	13	22.95	23.02	23.04	23.03	22.93	23.5	
10	QPSK	25	25	22.85	22.81	23.10	22.93	22.90		
10	QPSK	50	0	22.86	22.91	22.98	23.03	22.88		
10	16QAM	1	0	23.05	22.84	22.99	22.97	22.65		
10	16QAM	1	25	22.90	22.94	23.11	23.11	22.92	23.5	
10	16QAM	1	49	22.85	22.94	22.95	22.90	22.87		
10	16QAM	25	0	22.04	21.73	21.85	22.01	21.72		
10	16QAM	25	12	21.89	22.01	22.10	22.08	22.02		
10	16QAM	25	25	21.92	21.93	22.09	21.94	21.90	22.5	
10	16QAM	50	0	22.02	21.95	22.00	21.92	21.93		
10	64QAM	1	0	21.85	21.65	21.72	21.71	21.54		
10	64QAM	1	25	21.87	21.75	21.89	21.87	21.77		
10	64QAM	1	49	21.66	21.62	21.72	21.66	21.70	22.5	
10	64QAM	25	0	21.08	20.85	20.97	20.96	20.84		
10	64QAM	25	12	21.05	20.96	21.16	21.07	21.02		
10	64QAM	25	25	20.99	20.94	21.14	20.92	21.07		
10	64QAM	50	0	20.87	20.88	21.03	20.99	20.79	21.5	
Channel				38675	40146	40620	41053	41565		
Frequency (MHz)				2488.5	2545.8	2593	2640.38	2687.5		
5	QPSK	1	0	23.76	23.63	23.75	23.70	23.72		24.5
5	QPSK	1	12	23.64	23.56	23.80	23.71	23.70		
5	QPSK	1	24	23.66	23.63	23.75	23.70	23.65		
5	QPSK	12	0	22.85	22.75	22.87	22.79	22.82		
5	QPSK	12	7	22.88	22.81	22.95	22.82	22.83	23.5	
5	QPSK	12	13	22.84	22.79	22.91	22.82	22.78		
5	QPSK	25	0	22.82	22.78	22.90	22.78	22.76		
5	16QAM	1	0	22.89	22.75	22.92	22.81	22.89		
5	16QAM	1	12	22.87	22.80	22.99	22.90	22.86	23.5	
5	16QAM	1	24	22.92	22.76	22.98	22.86	22.85		
5	16QAM	12	0	21.84	21.75	21.88	21.78	21.79		
5	16QAM	12	7	21.86	21.80	21.91	21.80	21.76		
5	16QAM	12	13	21.83	21.79	21.89	21.83	21.77	22.5	
5	16QAM	25	0	21.88	21.83	21.96	21.82	21.83		
5	64QAM	1	0	21.68	21.59	21.65	21.66	21.67		
5	64QAM	1	12	21.59	21.68	21.73	21.71	21.62		
5	64QAM	1	24	21.63	21.66	21.73	21.69	21.59	22.5	
5	64QAM	12	0	20.89	20.80	20.92	20.86	20.83		
5	64QAM	12	7	20.91	20.87	21.01	20.86	20.89		
5	64QAM	12	13	20.88	20.84	20.96	20.90	20.82		
5	64QAM	25	0	20.87	20.84	21.00	20.85	20.84	21.5	



Band 41_Ant 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	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490
Frequency (MHz)				2500	2543.5	2587	2630.5	2674
20	QPSK	1	0	25.13	25.05	24.83	24.84	24.73
20	QPSK	1	49	25.08	25.05	25.21	25.08	25.12
20	QPSK	1	99	25.10	25.11	24.87	24.70	25.09
20	QPSK	50	0	24.27	24.17	24.16	24.17	24.13
20	QPSK	50	24	24.26	24.27	24.36	24.22	24.29
20	QPSK	50	50	24.22	24.24	24.30	24.16	24.36
20	QPSK	100	0	24.18	24.17	24.25	24.12	24.23
20	16QAM	1	0	24.83	24.82	24.15	24.23	24.12
20	16QAM	1	49	24.40	24.45	24.53	24.45	24.56
20	16QAM	1	99	24.45	24.46	24.22	24.09	24.44
20	16QAM	50	0	23.38	23.20	23.19	23.21	23.16
20	16QAM	50	24	23.31	23.30	23.38	23.27	23.34
20	16QAM	50	50	23.26	23.30	23.33	23.20	23.40
20	16QAM	100	0	23.22	23.20	23.30	23.16	23.25
20	64QAM	1	0	23.20	23.32	22.99	23.04	22.92
20	64QAM	1	49	23.28	23.24	23.11	23.30	23.03
20	64QAM	1	99	23.31	23.43	22.91	22.97	22.98
20	64QAM	50	0	22.31	22.20	22.18	22.22	22.09
20	64QAM	50	24	22.33	22.30	22.13	22.28	22.11
20	64QAM	50	50	22.28	22.29	22.11	22.20	22.18
20	64QAM	100	0	22.21	22.21	22.11	22.17	22.10
Channel				39725	40173	40620	41058	41492
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5
15	QPSK	1	0	25.18	24.83	25.00	25.05	24.94
15	QPSK	1	37	25.15	25.14	25.20	25.16	25.21
15	QPSK	1	74	25.17	24.94	25.13	24.97	25.21
15	QPSK	38	0	24.29	24.13	24.19	24.19	24.19
15	QPSK	38	20	24.28	24.29	24.40	24.33	24.38
15	QPSK	38	39	24.26	24.19	24.33	24.22	24.35
15	QPSK	75	0	24.23	24.20	24.31	24.25	24.24
15	16QAM	1	0	24.60	24.29	24.34	24.37	24.28
15	16QAM	1	37	24.44	24.47	24.54	24.46	24.55
15	16QAM	1	74	24.46	24.28	24.38	24.31	24.53
15	16QAM	38	0	23.27	23.13	23.18	23.18	23.17
15	16QAM	38	20	23.28	23.27	23.37	23.29	23.36
15	16QAM	38	39	23.25	23.20	23.33	23.21	23.35
15	16QAM	75	0	23.26	23.23	23.33	23.27	23.25
15	64QAM	1	0	23.07	23.10	23.15	23.19	23.00
15	64QAM	1	37	23.34	23.40	22.98	23.37	23.00
15	64QAM	1	74	23.32	23.22	22.90	23.17	23.06
15	64QAM	38	0	22.24	22.16	22.08	22.22	22.03
15	64QAM	38	20	22.31	22.30	22.03	22.34	22.10
15	64QAM	38	39	22.27	22.22	22.03	22.24	22.12
15	64QAM	75	0	22.29	22.22	22.08	22.26	22.07
Channel				39700	40180	40620	41080	41540
Frequency (MHz)				2501	2547	2593	2639	2685
10	QPSK	1	0	24.94	24.65	24.78	24.67	24.74
10	QPSK	1	25	24.91	24.93	25.01	24.92	24.98
10	QPSK	1	49	24.97	24.75	24.82	24.79	24.83
10	QPSK	25	0	24.13	23.96	24.04	23.99	24.07
10	QPSK	25	13	24.15	24.15	24.20	24.09	24.22
10	QPSK	25	25	24.12	24.03	24.12	24.04	24.11
10	QPSK	50	0	24.06	24.06	24.12	24.00	24.14
10	16QAM	1	0	24.36	24.05	24.09	24.04	24.15
10	16QAM	1	25	24.30	24.27	24.35	24.32	24.36
10	16QAM	1	49	24.29	24.05	24.11	24.05	24.10
10	16QAM	25	0	23.13	23.03	23.10	23.02	23.09
10	16QAM	25	12	23.19	23.21	23.26	23.14	23.26
10	16QAM	25	25	23.15	23.05	23.15	23.07	23.15
10	16QAM	50	0	23.10	23.11	23.16	23.03	23.18
10	64QAM	1	0	23.02	22.93	23.01	22.95	23.02
10	64QAM	1	25	23.19	23.29	23.01	23.28	23.10
10	64QAM	1	49	23.18	23.02	22.91	23.02	23.04
10	64QAM	25	0	22.20	22.09	22.12	22.10	22.14
10	64QAM	25	12	22.23	22.27	22.11	22.18	22.21
10	64QAM	25	25	22.20	22.14	22.06	22.15	22.16
10	64QAM	50	0	22.08	22.11	22.00	22.03	22.06
Channel				39675	40146	40620	41063	41565
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5
5	QPSK	1	0	24.86	24.62	24.97	24.91	25.07
5	QPSK	1	12	24.97	24.95	25.04	24.96	25.07
5	QPSK	1	24	24.94	24.95	24.98	24.95	25.01
5	QPSK	12	0	24.14	24.07	24.12	24.10	24.20
5	QPSK	12	7	24.19	24.16	24.23	24.11	24.23
5	QPSK	12	13	24.13	24.14	24.21	24.15	24.22
5	QPSK	25	0	24.09	24.10	24.16	24.07	24.20
5	16QAM	1	0	24.32	24.19	24.27	24.21	24.35
5	16QAM	1	12	24.27	24.24	24.35	24.28	24.35
5	16QAM	1	24	24.29	24.28	24.35	24.28	24.33
5	16QAM	12	0	23.17	23.12	23.15	23.13	23.24
5	16QAM	12	7	23.22	23.18	23.27	23.12	23.25
5	16QAM	12	13	23.15	23.17	23.24	23.15	23.22
5	16QAM	25	0	23.18	23.19	23.23	23.14	23.26
5	64QAM	1	0	23.09	23.14	23.12	23.11	23.15
5	64QAM	1	12	23.19	23.22	23.09	23.21	23.14
5	64QAM	1	24	23.20	23.19	23.06	23.21	23.13
5	64QAM	12	0	22.22	22.14	22.15	22.13	22.19
5	64QAM	12	7	22.20	22.26	22.15	22.17	22.20
5	64QAM	12	13	22.20	22.22	22.10	22.19	22.16
5	64QAM	25	0	22.26	22.22	22.07	22.15	22.17



Band 38_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2560	2595	2630	
20	QPSK	1	0	22.81	22.86	22.85	23.5
20	QPSK	1	49	22.92	22.93	22.91	
20	QPSK	1	99	22.90	22.91	22.85	
20	QPSK	50	0	22.81	22.79	22.74	23.5
20	QPSK	50	24	22.97	22.98	22.87	
20	QPSK	50	50	22.92	22.90	22.85	
20	QPSK	100	0	22.89	22.88	22.75	23.5
20	16QAM	1	0	23.01	23.04	22.98	
20	16QAM	1	49	23.01	23.00	22.96	
20	16QAM	1	99	23.05	23.04	23.02	23
20	16QAM	50	0	22.92	22.92	22.7	
20	16QAM	50	24	22.51	22.51	22.39	
20	16QAM	50	50	22.43	22.42	22.38	23
20	16QAM	100	0	22.40	22.40	22.28	
20	64QAM	1	0	22.25	22.27	22.24	
20	64QAM	1	49	22.30	22.28	22.29	22
20	64QAM	1	99	22.31	22.32	22.34	
20	64QAM	50	0	21.32	21.30	21.26	
20	64QAM	50	24	21.53	21.53	21.39	22
20	64QAM	50	50	21.44	21.43	21.37	
20	64QAM	100	0	21.40	21.38	21.25	
Channel				37625	38000	38175	limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.85	22.86	22.80	23.5
15	QPSK	1	37	22.87	22.89	22.82	
15	QPSK	1	74	22.90	22.92	22.86	
15	QPSK	36	0	22.81	22.83	22.79	23.5
15	QPSK	36	20	22.99	23.00	22.88	
15	QPSK	36	39	22.94	22.92	22.87	
15	QPSK	75	0	22.93	22.94	22.80	23.5
15	16QAM	1	0	22.99	23.01	22.89	
15	16QAM	1	37	22.92	22.94	22.97	
15	16QAM	1	74	23.04	23.04	23.04	23
15	16QAM	36	0	22.29	22.30	22.24	
15	16QAM	36	20	22.46	22.46	22.34	
15	16QAM	36	39	22.41	22.40	22.36	23
15	16QAM	75	0	22.46	22.45	22.33	
15	64QAM	1	0	22.19	22.23	22.19	
15	64QAM	1	37	22.25	22.26	22.30	22
15	64QAM	1	74	22.28	22.28	22.29	
15	64QAM	36	0	21.35	21.35	21.31	
15	64QAM	36	20	21.51	21.51	21.38	22
15	64QAM	36	39	21.45	21.44	21.39	
15	64QAM	75	0	21.43	21.44	21.32	
Channel				37600	38000	38000	limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.92	22.91	22.74	23.5
10	QPSK	1	25	22.78	22.96	22.90	
10	QPSK	1	49	22.82	22.89	22.86	
10	QPSK	25	0	22.89	22.93	22.80	23.5
10	QPSK	25	12	23.01	23.00	22.83	
10	QPSK	25	25	22.94	22.90	22.84	
10	QPSK	50	0	22.94	22.87	22.76	23.5
10	16QAM	1	0	23.01	23.04	23.03	
10	16QAM	1	25	22.93	22.88	23.01	
10	16QAM	1	49	23.01	23.04	22.99	23
10	16QAM	25	0	22.30	22.34	22.15	
10	16QAM	25	12	22.41	22.36	22.32	
10	16QAM	25	25	22.42	22.49	22.43	23
10	16QAM	50	0	22.45	22.46	22.34	
10	64QAM	1	0	22.24	22.16	22.25	
10	64QAM	1	25	22.15	22.26	22.25	22
10	64QAM	1	49	22.37	22.22	22.23	
10	64QAM	25	0	21.39	21.43	21.28	
10	64QAM	25	12	21.44	21.46	21.30	22
10	64QAM	25	25	21.42	21.45	21.45	
10	64QAM	50	0	21.39	21.40	21.23	
Channel				37775	38000	38225	limit (dBm)
Frequency (MHz)				2272.5	2295	2317.5	
5	QPSK	1	0	22.52	22.56	22.54	23.5
5	QPSK	1	12	22.61	22.66	22.63	
5	QPSK	1	24	22.62	22.62	22.61	
5	QPSK	12	0	22.70	22.68	22.63	23.5
5	QPSK	12	7	22.78	22.81	22.76	
5	QPSK	12	13	22.74	22.77	22.69	
5	QPSK	25	0	22.74	22.76	22.69	23.5
5	16QAM	1	0	22.65	22.69	22.64	
5	16QAM	1	12	22.81	22.91	22.82	
5	16QAM	1	24	22.78	22.83	22.75	23
5	16QAM	12	0	22.16	22.16	22.11	
5	16QAM	12	7	22.27	22.28	22.24	
5	16QAM	12	13	22.21	22.24	22.21	23
5	16QAM	25	0	22.27	22.30	22.26	
5	64QAM	1	0	21.94	21.99	21.91	
5	64QAM	1	12	22.05	22.10	22.08	23
5	64QAM	1	24	22.06	22.08	22.08	
5	64QAM	12	0	21.26	21.24	21.20	
5	64QAM	12	7	21.31	21.34	21.27	22
5	64QAM	12	13	21.29	21.28	21.26	
5	64QAM	25	0	21.29	21.31	21.26	



Band 41_Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	for IC Power Low Ch. / Freq.	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	39790	40185	40680	41055	41490	
Frequency (MHz)				2510	2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	21.40	21.46	21.30	21.17	21.22	20.98	22
20	QPSK	1	49	21.42	21.46	21.47	21.57	21.46	21.37	22
20	QPSK	1	99	21.39	21.40	21.45	21.31	21.05	21.27	22
20	QPSK	50	0	21.51	21.52	21.41	21.45	21.43	21.28	22
20	QPSK	50	24	21.50	21.51	21.51	21.68	21.48	21.39	22
20	QPSK	50	50	21.47	21.47	21.48	21.61	21.40	21.47	22
20	QPSK	100	0	21.41	21.43	21.38	21.55	21.38	21.32	22
20	16QAM	1	0	21.60	21.64	21.55	21.30	21.38	21.11	22
20	16QAM	1	49	21.50	21.53	21.52	21.66	21.61	21.47	22
20	16QAM	1	99	21.48	21.50	21.59	21.42	21.15	21.42	22
20	16QAM	50	0	21.52	21.55	21.41	21.46	21.48	21.30	22
20	16QAM	50	24	21.51	21.54	21.53	21.67	21.53	21.44	22
20	16QAM	50	50	21.48	21.49	21.51	21.62	21.45	21.51	22
20	16QAM	100	0	21.44	21.45	21.41	21.57	21.41	21.36	22
20	64QAM	1	0	21.37	21.38	21.31	21.02	21.04	20.81	22
20	64QAM	1	49	21.26	21.28	21.27	21.45	21.30	21.20	22
20	64QAM	1	99	21.25	21.23	21.44	21.18	20.94	21.13	22
20	64QAM	50	0	21.02	21.04	20.94	20.99	20.95	20.79	21.5
20	64QAM	50	24	21.00	21.03	21.06	21.22	21.00	20.93	21.5
20	64QAM	50	50	20.98	20.99	21.04	21.16	20.93	20.99	21.5
20	64QAM	100	0	20.92	20.96	20.95	21.10	20.91	20.85	21.5
Channel				39785	39725	40173	40620	41063	41515	Line-up limit (dBm)
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	21.45	21.47	21.16	21.34	21.28	21.08	22
15	QPSK	1	37	21.42	21.43	21.38	21.57	21.41	21.35	22
15	QPSK	1	74	21.40	21.43	21.16	21.45	21.22	21.31	22
15	QPSK	36	0	21.53	21.55	21.38	21.51	21.47	21.30	22
15	QPSK	36	20	21.54	21.57	21.52	21.67	21.58	21.47	22
15	QPSK	36	39	21.49	21.51	21.43	21.64	21.46	21.47	22
15	QPSK	75	0	21.46	21.49	21.43	21.61	21.51	21.35	22
15	16QAM	1	0	21.61	21.63	21.35	21.47	21.54	21.28	22
15	16QAM	1	37	21.50	21.50	21.51	21.68	21.62	21.50	22
15	16QAM	1	74	21.55	21.56	21.43	21.57	21.39	21.50	22
15	16QAM	36	0	21.48	21.52	21.34	21.45	21.45	21.28	22
15	16QAM	36	20	21.50	21.50	21.47	21.64	21.55	21.47	22
15	16QAM	36	39	21.45	21.46	21.41	21.61	21.49	21.47	22
15	16QAM	75	0	21.49	21.51	21.47	21.63	21.55	21.38	22
15	64QAM	1	0	21.34	21.41	21.10	21.17	21.24	20.98	21.5
15	64QAM	1	37	21.30	21.31	21.36	21.46	21.38	21.28	21.5
15	64QAM	1	74	21.32	21.30	21.24	21.32	21.17	21.25	21.5
15	64QAM	36	0	21.00	21.04	20.92	21.03	20.98	20.82	21.5
15	64QAM	36	20	21.03	21.04	21.08	21.22	21.10	21.03	21.5
15	64QAM	36	39	20.97	21.03	20.98	21.20	20.98	20.99	21.5
15	64QAM	75	0	20.98	20.98	21.00	21.14	21.04	20.87	21.5
Channel				39740	39700	40160	40610	41060	41540	Line-up limit (dBm)
Frequency (MHz)				24925	24931	25451	2593	2639	2685	
10	QPSK	1	0	21.51	21.53	21.08	21.26	21.29	21.11	22
10	QPSK	1	25	21.36	21.53	21.35	21.57	21.43	21.39	22
10	QPSK	1	49	21.47	21.39	21.11	21.41	21.18	21.29	22
10	QPSK	25	0	21.48	21.48	21.40	21.50	21.39	21.38	22
10	QPSK	25	12	21.45	21.50	21.52	21.61	21.55	21.35	22
10	QPSK	25	25	21.43	21.59	21.49	21.65	21.40	21.43	22
10	QPSK	50	0	21.38	21.49	21.50	21.54	21.48	21.28	22
10	16QAM	1	0	21.63	21.61	21.25	21.46	21.63	21.24	22
10	16QAM	1	25	21.52	21.40	21.61	21.65	21.59	21.55	22
10	16QAM	1	49	21.65	21.46	21.52	21.64	21.41	21.43	22
10	16QAM	25	0	21.52	21.57	21.28	21.42	21.40	21.37	22
10	16QAM	25	12	21.60	21.54	21.56	21.57	21.51	21.50	22
10	16QAM	25	25	21.50	21.49	21.44	21.64	21.49	21.47	22
10	16QAM	50	0	21.44	21.41	21.52	21.65	21.55	21.32	22
10	64QAM	1	0	21.26	21.47	21.07	21.27	21.24	21.01	22
10	64QAM	1	25	21.38	21.35	21.32	21.54	21.41	21.33	22
10	64QAM	1	49	21.29	21.21	21.18	21.26	21.24	21.23	22
10	64QAM	25	0	21.01	21.11	20.89	20.94	21.04	20.78	21.5
10	64QAM	25	12	21.07	21.08	21.16	21.24	21.14	20.98	21.5
10	64QAM	25	25	21.01	20.93	20.94	21.25	20.90	21.03	21.5
10	64QAM	50	0	20.88	21.07	21.03	21.17	20.98	20.86	21.5
Channel				38715	38675	40148	40610	41063	41565	Line-up limit (dBm)
Frequency (MHz)				2492.5	2488.5	2545.8	2593	2640.3	2697.5	
5	QPSK	1	0	21.30	21.31	21.22	21.32	21.25	21.19	22
5	QPSK	1	12	21.24	21.22	21.16	21.36	21.28	21.21	22
5	QPSK	1	24	21.26	21.22	21.25	21.33	21.27	21.14	22
5	QPSK	12	0	21.35	21.37	21.30	21.43	21.31	21.32	22
5	QPSK	12	7	21.38	21.39	21.37	21.50	21.34	21.33	22
5	QPSK	12	13	21.35	21.40	21.37	21.49	21.35	21.28	22
5	QPSK	25	0	21.33	21.35	21.33	21.48	21.29	21.27	22
5	16QAM	1	0	21.39	21.39	21.31	21.45	21.33	21.32	22
5	16QAM	1	12	21.44	21.42	21.36	21.58	21.46	21.41	22
5	16QAM	1	24	21.38	21.43	21.37	21.53	21.40	21.29	22
5	16QAM	12	0	21.34	21.37	21.30	21.44	21.29	21.27	22
5	16QAM	12	7	21.36	21.37	21.35	21.50	21.32	21.31	22
5	16QAM	12	13	21.30	21.37	21.30	21.46	21.33	21.28	22
5	16QAM	25	0	21.36	21.38	21.36	21.53	21.36	21.32	22
5	64QAM	1	0	21.17	21.18	21.14	21.25	21.13	21.10	22
5	64QAM	1	12	21.13	21.16	21.27	21.32	21.25	21.14	22
5	64QAM	1	24	21.16	21.18	21.23	21.32	21.23	21.08	22
5	64QAM	12	0	20.91	20.97	20.85	20.97	20.88	20.85	21.5
5	64QAM	12	7	20.94	20.96	20.93	21.03	20.86	20.84	21.5
5	64QAM	12	13	20.88	20.90	20.91	21.03	20.92	20.79	21.5
5	64QAM	25	0	20.94	20.94	20.93	21.02	20.86	20.85	21.5



Band 41_Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	for IC Power Low Ch / Freq	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	39790	40185	40620	41055	41490	
Frequency (MHz)				2510	2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	21.35	21.37	21.33	21.39	21.10	20.82	22
20	QPSK	1	49	21.26	21.32	21.30	21.45	21.32	21.23	
20	QPSK	1	99	21.27	21.26	21.35	21.17	20.92	21.14	22
20	QPSK	50	0	21.50	21.54	21.39	21.43	21.41	21.23	
20	QPSK	50	24	21.50	21.53	21.50	21.63	21.48	21.38	22
20	QPSK	50	50	21.44	21.48	21.47	21.61	21.39	21.43	
20	QPSK	100	0	21.42	21.44	21.39	21.56	21.38	21.29	22
20	16QAM	1	0	21.73	21.75	21.71	21.41	21.51	21.22	
20	16QAM	1	49	21.62	21.64	21.72	21.79	21.76	21.62	22
20	16QAM	1	99	21.66	21.65	21.76	21.52	21.34	21.56	
20	16QAM	50	0	21.51	21.55	21.38	21.46	21.46	21.29	22
20	16QAM	50	24	21.51	21.53	21.49	21.68	21.51	21.43	
20	16QAM	50	50	21.49	21.48	21.51	21.61	21.44	21.51	22
20	16QAM	100	0	21.44	21.43	21.39	21.57	21.42	21.33	
20	64QAM	1	0	21.62	21.61	21.56	21.23	21.32	21.03	22
20	64QAM	1	49	21.50	21.54	21.61	21.68	21.62	21.43	
20	64QAM	1	99	21.54	21.49	21.68	21.40	21.15	21.38	22
20	64QAM	50	0	21.55	21.55	21.42	21.47	21.43	21.27	
20	64QAM	50	24	21.54	21.57	21.53	21.70	21.48	21.43	22
20	64QAM	50	50	21.51	21.54	21.51	21.62	21.42	21.47	
20	64QAM	100	0	21.47	21.47	21.44	21.59	21.39	21.33	
Channel				39785	39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	21.39	21.40	21.09	21.25	21.24	21.00	22
15	QPSK	1	37	21.32	21.37	21.28	21.46	21.34	21.28	
15	QPSK	1	74	21.33	21.33	21.10	21.37	21.10	21.25	22
15	QPSK	36	0	21.48	21.55	21.34	21.45	21.42	21.26	
15	QPSK	36	20	21.49	21.50	21.49	21.63	21.52	21.48	22
15	QPSK	36	39	21.46	21.48	21.41	21.61	21.42	21.42	
15	QPSK	75	0	21.45	21.45	21.43	21.57	21.45	21.30	22
15	16QAM	1	0	21.84	21.86	21.46	21.54	21.62	21.43	
15	16QAM	1	37	21.62	21.67	21.71	21.78	21.74	21.62	22
15	16QAM	1	74	21.66	21.65	21.51	21.70	21.52	21.58	
15	16QAM	36	0	21.46	21.50	21.31	21.42	21.44	21.26	22
15	16QAM	36	20	21.46	21.49	21.44	21.61	21.55	21.45	
15	16QAM	36	39	21.45	21.46	21.40	21.58	21.43	21.45	22
15	16QAM	75	0	21.48	21.49	21.42	21.58	21.49	21.34	
15	64QAM	1	0	21.57	21.58	21.33	21.39	21.41	21.17	22
15	64QAM	1	37	21.55	21.60	21.63	21.64	21.58	21.50	
15	64QAM	1	74	21.51	21.52	21.44	21.51	21.34	21.46	22
15	64QAM	36	0	21.53	21.53	21.36	21.47	21.44	21.29	
15	64QAM	36	20	21.53	21.55	21.50	21.67	21.55	21.46	22
15	64QAM	36	39	21.52	21.53	21.42	21.62	21.42	21.44	
15	64QAM	75	0	21.48	21.51	21.43	21.60	21.48	21.32	
Channel				39740	39700	40160	40620	41060	41540	Tune-up limit (dBm)
Frequency (MHz)				2626	2624	2647	2693	2639	2685	
10	QPSK	1	0	21.19	21.21	20.87	20.97	20.89	20.81	22
10	QPSK	1	25	21.07	21.10	21.10	21.22	21.15	21.03	
10	QPSK	1	49	21.17	21.15	20.89	20.99	20.98	20.83	22
10	QPSK	25	0	21.29	21.30	21.15	21.30	21.20	21.13	
10	QPSK	25	12	21.29	21.36	21.33	21.46	21.46	21.29	22
10	QPSK	25	25	21.27	21.30	21.21	21.37	21.25	21.17	
10	QPSK	50	0	21.22	21.27	21.24	21.36	21.22	21.19	22
10	16QAM	1	0	21.51	21.54	21.18	21.39	21.32	21.19	
10	16QAM	1	25	21.41	21.45	21.46	21.62	21.54	21.42	22
10	16QAM	1	49	21.46	21.47	21.29	21.57	21.27	21.17	
10	16QAM	25	0	21.31	21.35	21.31	21.34	21.25	21.17	22
10	16QAM	25	12	21.35	21.38	21.37	21.52	21.34	21.35	
10	16QAM	25	25	21.29	21.31	21.25	21.42	21.32	21.20	22
10	16QAM	50	0	21.26	21.30	21.28	21.45	21.28	21.25	
10	64QAM	1	0	21.39	21.45	21.11	21.23	21.16	21.08	22
10	64QAM	1	25	21.43	21.41	21.47	21.55	21.50	21.35	
10	64QAM	1	49	21.38	21.38	21.22	21.29	21.19	21.10	22
10	64QAM	25	0	21.37	21.40	21.28	21.37	21.30	21.21	
10	64QAM	25	12	21.37	21.44	21.42	21.54	21.38	21.37	22
10	64QAM	25	25	21.36	21.40	21.31	21.46	21.36	21.26	
10	64QAM	50	0	21.25	21.30	21.28	21.42	21.24	21.24	
Channel				38715	38676	40148	40620	41093	41665	Tune-up limit (dBm)
Frequency (MHz)				2602.5	2488.5	2545.8	2593	2640.30	2697.5	
5	QPSK	1	0	21.19	21.22	21.15	21.20	21.10	21.08	22
5	QPSK	1	12	21.15	21.14	21.12	21.28	21.18	21.10	
5	QPSK	1	24	21.14	21.15	21.16	21.24	21.14	21.03	22
5	QPSK	12	0	21.33	21.37	21.26	21.40	21.28	21.28	
5	QPSK	12	7	21.36	21.38	21.34	21.48	21.31	21.26	22
5	QPSK	12	13	21.34	21.33	21.33	21.46	21.34	21.23	
5	QPSK	25	0	21.32	21.32	21.27	21.44	21.24	21.24	22
5	16QAM	1	0	21.48	21.49	21.31	21.54	21.39	21.40	
5	16QAM	1	12	21.47	21.47	21.33	21.60	21.45	21.39	22
5	16QAM	1	24	21.47	21.51	21.37	21.60	21.44	21.37	
5	16QAM	12	0	21.36	21.37	21.32	21.44	21.34	21.33	22
5	16QAM	12	7	21.37	21.43	21.35	21.51	21.35	21.32	
5	16QAM	12	13	21.35	21.39	21.33	21.49	21.38	21.27	22
5	16QAM	25	0	21.36	21.38	21.35	21.53	21.35	21.33	
5	64QAM	1	0	21.38	21.38	21.30	21.41	21.29	21.27	22
5	64QAM	1	12	21.38	21.39	21.39	21.48	21.37	21.31	
5	64QAM	1	24	21.36	21.39	21.35	21.49	21.37	21.29	22
5	64QAM	12	0	21.39	21.40	21.31	21.44	21.34	21.32	
5	64QAM	12	7	21.40	21.42	21.39	21.51	21.39	21.37	22
5	64QAM	12	13	21.35	21.40	21.37	21.50	21.38	21.30	
5	64QAM	25	0	21.36	21.38	21.36	21.49	21.34	21.31	



Band 38_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2560	2595	2630	
20	QPSK	1	0	20.38	20.41	20.39	21
20	QPSK	1	49	20.43	20.47	20.43	
20	QPSK	1	99	20.46	20.45	20.41	
20	QPSK	50	0	20.32	20.30	20.28	
20	QPSK	50	24	20.49	20.49	20.40	21
20	QPSK	50	50	20.43	20.41	20.37	
20	QPSK	100	0	20.41	20.39	20.28	
20	16QAM	1	0	20.56	20.55	20.56	
20	16QAM	1	49	20.57	20.55	20.56	21
20	16QAM	1	99	20.57	20.58	20.59	
20	16QAM	50	0	20.33	20.32	20.30	
20	16QAM	50	24	20.54	20.52	20.41	
20	16QAM	50	50	20.46	20.45	20.40	21
20	16QAM	100	0	20.43	20.42	20.31	
20	64QAM	1	0	20.29	20.29	20.28	
20	64QAM	1	49	20.32	20.29	20.27	
20	64QAM	1	99	20.34	20.37	20.40	21
20	64QAM	50	0	20.34	20.34	20.33	
20	64QAM	50	24	20.53	20.54	20.43	
20	64QAM	50	50	20.49	20.47	20.42	
20	64QAM	100	0	20.44	20.45	20.33	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	20.34	20.36	20.32	21
15	QPSK	1	37	20.38	20.40	20.33	
15	QPSK	1	74	20.43	20.41	20.34	
15	QPSK	36	0	20.35	20.34	20.30	
15	QPSK	36	20	20.53	20.49	20.38	21
15	QPSK	36	39	20.44	20.41	20.38	
15	QPSK	75	0	20.43	20.42	20.31	
15	16QAM	1	0	20.53	20.54	20.49	
15	16QAM	1	37	20.49	20.48	20.49	21
15	16QAM	1	74	20.58	20.57	20.54	
15	16QAM	36	0	20.30	20.29	20.27	
15	16QAM	36	20	20.45	20.47	20.36	
15	16QAM	36	39	20.42	20.39	20.36	21
15	16QAM	75	0	20.47	20.44	20.33	
15	64QAM	1	0	20.25	20.20	20.18	
15	64QAM	1	37	20.31	20.29	20.29	
15	64QAM	1	74	20.31	20.30	20.34	21
15	64QAM	36	0	20.38	20.38	20.33	
15	64QAM	36	20	20.56	20.54	20.41	
15	64QAM	36	39	20.46	20.47	20.43	
15	64QAM	75	0	20.46	20.45	20.33	
Channel				37950	38000	38200	
Frequency (MHz)				2572.5	2595	2615	
10	QPSK	1	0	20.41	20.34	20.42	21
10	QPSK	1	25	20.31	20.43	20.26	
10	QPSK	1	49	20.37	20.43	20.32	
10	QPSK	25	0	20.31	20.24	20.26	
10	QPSK	25	12	20.50	20.43	20.41	21
10	QPSK	25	25	20.47	20.37	20.35	
10	QPSK	50	0	20.36	20.42	20.30	
10	16QAM	1	0	20.51	20.45	20.40	
10	16QAM	1	25	20.53	20.43	20.47	21
10	16QAM	1	49	20.52	20.53	20.51	
10	16QAM	25	0	20.32	20.37	20.17	
10	16QAM	25	12	20.47	20.42	20.33	
10	16QAM	25	25	20.34	20.49	20.37	21
10	16QAM	50	0	20.56	20.54	20.40	
10	64QAM	1	0	20.17	20.21	20.18	
10	64QAM	1	25	20.25	20.39	20.30	
10	64QAM	1	49	20.23	20.27	20.39	21
10	64QAM	25	0	20.30	20.30	20.28	
10	64QAM	25	12	20.55	20.44	20.37	
10	64QAM	25	25	20.45	20.44	20.37	
10	64QAM	50	0	20.46	20.49	20.33	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	20.35	20.37	20.27	21
5	QPSK	1	12	20.41	20.47	20.30	
5	QPSK	1	24	20.47	20.44	20.39	
5	QPSK	12	0	20.39	20.34	20.32	
5	QPSK	12	7	20.54	20.49	20.35	21
5	QPSK	12	13	20.46	20.49	20.38	
5	QPSK	25	0	20.30	20.46	20.40	
5	16QAM	1	0	20.55	20.50	20.57	
5	16QAM	1	12	20.55	20.57	20.44	21
5	16QAM	1	24	20.53	20.52	20.55	
5	16QAM	12	0	20.30	20.21	20.34	
5	16QAM	12	7	20.54	20.37	20.44	
5	16QAM	12	13	20.41	20.38	20.37	21
5	16QAM	25	0	20.56	20.51	20.33	
5	64QAM	1	0	20.35	20.13	20.13	
5	64QAM	1	12	20.22	20.25	20.25	
5	64QAM	1	24	20.37	20.35	20.37	21
5	64QAM	12	0	20.37	20.40	20.24	
5	64QAM	12	7	20.52	20.57	20.38	
5	64QAM	12	13	20.58	20.45	20.44	
5	64QAM	25	0	20.55	20.38	20.43	



Band 41_Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	39790	40185	40630	41055	41490	
Frequency (MHz)				2510	2506	25455	2593	26345	2680	
20	QPSK	1	0	19.91	19.92	19.91	19.88	19.73	19.49	20.5
20	QPSK	1	49	19.95	19.94	19.97	20.08	19.99	19.90	
20	QPSK	1	99	19.89	19.88	19.97	19.81	19.55	19.79	
20	QPSK	50	0	20.00	20.02	19.91	19.98	19.95	19.78	
20	QPSK	50	24	20.00	20.02	20.00	20.17	20.00	19.92	20.5
20	QPSK	50	50	19.96	19.97	20.01	20.10	19.93	19.98	
20	QPSK	100	0	19.91	19.93	19.90	20.07	19.88	19.84	
20	16QAM	1	0	20.07	20.10	20.08	19.81	19.86	19.62	
20	16QAM	1	49	19.99	20.02	20.04	20.14	20.12	19.96	20.5
20	16QAM	1	99	20.00	20.00	20.12	19.88	19.70	19.92	
20	16QAM	50	0	20.02	20.07	19.93	20.20	19.97	19.83	
20	16QAM	50	24	20.05	20.04	20.03	20.20	20.03	19.96	
20	16QAM	50	50	20.00	19.99	20.02	20.14	19.95	20.01	20.5
20	16QAM	100	0	19.96	19.97	19.93	20.10	19.93	19.87	
20	64QAM	1	0	19.88	19.93	19.81	19.49	19.55	19.30	
20	64QAM	1	49	19.77	19.78	19.70	19.84	19.89	19.73	
20	64QAM	1	99	19.76	19.73	20.03	19.84	19.47	19.68	20.5
20	64QAM	50	0	20.03	20.06	19.93	19.88	19.97	19.78	
20	64QAM	50	24	20.05	20.07	20.03	20.19	20.02	19.94	
20	64QAM	50	50	20.00	20.02	20.01	20.14	19.94	19.99	
20	64QAM	100	0	19.95	19.98	19.93	20.11	19.92	19.85	
Channel				39765	39725	40173	40620	41063	41515	
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	19.89	19.95	19.81	19.78	19.80	19.56	20.5
15	QPSK	1	37	19.87	19.91	19.76	19.99	19.90	19.83	
15	QPSK	1	74	19.87	19.86	19.56	19.82	19.68	19.81	
15	QPSK	36	0	19.99	20.04	19.84	19.98	19.95	19.81	
15	QPSK	36	20	19.99	20.01	20.01	20.15	20.05	19.99	20.5
15	QPSK	36	39	19.95	19.98	19.91	20.11	19.95	19.97	
15	QPSK	75	0	19.94	19.98	19.91	20.09	19.98	19.86	
15	16QAM	1	0	20.06	20.13	19.91	19.92	19.68	19.75	
15	16QAM	1	37	19.97	19.96	20.06	20.15	20.12	20.00	20.5
15	16QAM	1	74	20.00	20.01	19.94	20.02	19.89	20.03	
15	16QAM	36	0	19.98	20.02	19.83	19.95	19.94	19.76	
15	16QAM	36	20	19.96	20.00	19.98	20.12	20.02	19.95	
15	16QAM	36	39	19.94	19.96	19.90	20.10	19.93	19.95	20.5
15	16QAM	75	0	19.97	19.99	19.95	20.12	20.03	19.90	
15	64QAM	1	0	19.85	19.87	19.56	19.68	19.70	19.48	
15	64QAM	1	37	19.78	19.80	19.85	19.92	19.87	19.75	
15	64QAM	1	74	19.75	19.76	19.74	19.81	19.62	19.77	20.5
15	64QAM	36	0	20.02	20.05	19.85	19.89	19.86	19.81	
15	64QAM	36	20	20.03	20.05	19.99	20.18	20.06	20.01	
15	64QAM	36	39	20.01	20.02	19.91	20.14	19.96	19.97	
15	64QAM	75	0	19.99	20.02	19.94	20.10	20.00	19.85	
Channel				39740	39700	40160	40610	41060	41510	
Frequency (MHz)				2505	2501	25457	2593	2639	2685	
10	QPSK	1	0	19.81	20.04	19.67	19.88	19.75	19.58	20.5
10	QPSK	1	25	19.82	19.94	19.70	20.01	19.93	19.84	
10	QPSK	1	49	19.81	19.84	19.54	19.84	19.72	19.90	
10	QPSK	25	0	19.91	20.02	19.80	19.93	20.05	19.75	
10	QPSK	25	12	19.95	20.04	19.89	20.20	19.97	19.91	20.5
10	QPSK	25	25	19.99	19.94	19.84	20.04	19.92	19.89	
10	QPSK	50	0	19.89	20.08	19.93	20.03	19.99	19.87	
10	16QAM	1	0	20.07	20.07	19.86	19.87	20.05	19.77	
10	16QAM	1	25	19.98	19.96	20.00	20.07	20.11	20.03	20.5
10	16QAM	1	49	19.92	20.07	19.93	20.05	19.94	20.09	
10	16QAM	25	0	20.02	20.05	19.88	19.92	19.99	19.83	
10	16QAM	25	12	19.99	19.92	20.01	20.07	19.97	19.93	
10	16QAM	25	25	19.96	19.95	19.97	20.12	19.87	20.04	20.5
10	16QAM	50	0	19.90	20.04	20.05	20.19	20.03	19.98	
10	64QAM	1	0	19.81	19.88	19.52	19.65	19.71	19.42	
10	64QAM	1	25	19.76	19.89	19.92	19.96	19.95	19.83	
10	64QAM	1	49	19.82	19.67	19.70	19.89	19.58	19.81	20.5
10	64QAM	25	0	19.94	20.03	19.75	20.04	19.96	19.86	
10	64QAM	25	12	20.12	20.12	20.06	20.19	20.15	19.95	
10	64QAM	25	25	19.92	19.96	19.96	20.10	19.90	19.91	
10	64QAM	50	0	20.05	19.92	19.99	20.00	20.04	19.87	
Channel				38715	38675	40148	40600	41093	41565	
Frequency (MHz)				2502.5	2498.5	25448	2593	2640.30	2687.5	
5	QPSK	1	0	19.84	19.86	19.66	19.74	19.67	19.48	20.5
5	QPSK	1	12	19.91	19.87	19.75	20.03	19.94	19.86	
5	QPSK	1	24	19.78	19.87	19.49	19.95	19.71	19.87	
5	QPSK	12	0	19.91	20.02	19.67	19.96	20.04	19.90	
5	QPSK	12	7	19.94	20.05	20.05	20.12	20.03	20.04	20.5
5	QPSK	12	13	19.87	20.06	19.63	20.11	19.91	19.97	
5	QPSK	25	0	20.04	19.94	19.95	20.15	19.94	19.83	
5	16QAM	1	0	20.16	20.12	19.97	19.86	19.94	19.67	
5	16QAM	1	12	19.89	20.01	20.00	20.12	20.10	20.00	20.5
5	16QAM	1	24	20.04	20.02	20.00	20.03	19.81	19.98	
5	16QAM	12	0	20.06	19.95	19.69	19.97	20.01	19.84	
5	16QAM	12	7	19.94	20.03	19.94	20.14	19.92	19.98	
5	16QAM	12	13	19.97	20.06	19.92	20.07	20.00	19.88	20.5
5	16QAM	25	0	19.94	19.96	19.95	20.19	19.97	19.95	
5	64QAM	1	0	19.85	19.92	19.66	19.71	19.70	19.52	
5	64QAM	1	12	19.81	19.78	19.77	19.84	19.94	19.70	
5	64QAM	1	24	19.70	19.74	19.69	19.72	19.64	19.75	20.5
5	64QAM	12	0	20.02	19.95	19.79	20.02	20.06	19.74	
5	64QAM	12	7	20.08	20.11	19.92	20.15	20.03	19.92	
5	64QAM	12	13	20.03	20.09	19.86	20.05	19.95	20.07	
5	64QAM	25	0	19.91	20.06	19.91	20.12	19.91	19.78	



Band 41_Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	for IC Power Low Ch./Freq.	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	39790	40185	40680	41055	41490	
Frequency (MHz)				2510	2506	25495	2593	26365	2680	
20	QPSK	1	0	19.24	19.21	19.23	19.80	19.83	19.28	20.5
20	QPSK	1	49	19.76	19.80	19.87	19.95	19.87	19.77	
20	QPSK	1	99	19.81	19.79	19.89	19.69	19.44	19.69	
20	QPSK	50	0	20.02	20.04	19.91	19.95	19.93	19.78	



Band 38_Ant 3							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2560	2595	2630	
20	QPSK	1	0	20.38	20.41	20.39	21.5
20	QPSK	1	49	20.43	20.47	20.43	
20	QPSK	1	99	20.46	20.45	20.41	
20	QPSK	50	0	20.32	20.30	20.28	21.5
20	QPSK	50	24	20.50	20.49	20.40	
20	QPSK	50	50	20.43	20.41	20.37	
20	QPSK	100	0	20.41	20.39	20.28	21.5
20	16QAM	1	0	20.56	20.55	20.56	
20	16QAM	1	49	20.57	20.55	20.56	
20	16QAM	50	0	20.33	20.32	20.30	21.5
20	16QAM	50	24	20.54	20.52	20.41	
20	16QAM	50	50	20.46	20.45	20.40	
20	16QAM	100	0	20.43	20.42	20.31	21.5
20	64QAM	1	0	20.29	20.29	20.28	
20	64QAM	1	49	20.32	20.29	20.27	
20	64QAM	1	99	20.34	20.37	20.40	21.5
20	64QAM	50	0	20.34	20.34	20.33	
20	64QAM	50	24	20.53	20.54	20.43	
20	64QAM	50	50	20.49	20.47	20.42	21.5
20	64QAM	100	0	20.44	20.45	20.33	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	20.34	20.36	20.32	21.5
15	QPSK	1	37	20.38	20.40	20.33	
15	QPSK	1	74	20.43	20.41	20.34	
15	QPSK	36	0	20.35	20.34	20.30	21.5
15	QPSK	36	20	20.53	20.49	20.38	
15	QPSK	36	39	20.44	20.41	20.38	
15	QPSK	75	0	20.43	20.42	20.31	21.5
15	16QAM	1	0	20.53	20.54	20.49	
15	16QAM	1	37	20.49	20.48	20.49	
15	16QAM	1	74	20.58	20.57	20.54	21.5
15	16QAM	36	0	20.30	20.29	20.27	
15	16QAM	36	20	20.45	20.47	20.36	
15	16QAM	36	39	20.42	20.39	20.36	21.5
15	16QAM	75	0	20.47	20.44	20.33	
15	64QAM	1	0	20.25	20.20	20.18	
15	64QAM	1	37	20.31	20.29	20.29	21.5
15	64QAM	1	74	20.31	20.30	20.34	
15	64QAM	36	0	20.38	20.38	20.33	
15	64QAM	36	20	20.56	20.54	20.41	21.5
15	64QAM	36	39	20.46	20.47	20.43	
15	64QAM	75	0	20.46	20.45	20.33	
Channel				37600	38000	38200	
Frequency (MHz)				2572.5	2595	2615	
10	QPSK	1	0	20.41	20.34	20.42	21.5
10	QPSK	1	25	20.31	20.43	20.26	
10	QPSK	1	49	20.37	20.43	20.32	
10	QPSK	25	0	20.31	20.24	20.26	21.5
10	QPSK	25	12	20.50	20.43	20.41	
10	QPSK	25	25	20.47	20.37	20.35	
10	QPSK	50	0	20.36	20.42	20.30	21.5
10	16QAM	1	0	20.51	20.45	20.40	
10	16QAM	1	25	20.53	20.43	20.47	
10	16QAM	1	49	20.52	20.53	20.51	21.5
10	16QAM	25	0	20.32	20.37	20.17	
10	16QAM	25	12	20.47	20.42	20.33	
10	16QAM	25	25	20.34	20.49	20.37	21.5
10	16QAM	50	0	20.26	20.34	20.40	
10	64QAM	1	0	20.17	20.21	20.18	
10	64QAM	1	25	20.25	20.39	20.30	21.5
10	64QAM	1	49	20.23	20.27	20.39	
10	64QAM	25	0	20.30	20.30	20.28	
10	64QAM	25	12	20.55	20.44	20.37	21.5
10	64QAM	25	25	20.45	20.44	20.37	
10	64QAM	50	0	20.46	20.49	20.33	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	20.35	20.37	20.27	21.5
5	QPSK	1	12	20.41	20.47	20.30	
5	QPSK	1	24	20.47	20.44	20.39	
5	QPSK	12	0	20.39	20.34	20.32	21.5
5	QPSK	12	7	20.54	20.49	20.35	
5	QPSK	12	13	20.46	20.49	20.38	
5	QPSK	25	0	20.30	20.46	20.40	21.5
5	16QAM	1	0	20.55	20.50	20.57	
5	16QAM	1	12	20.55	20.57	20.44	
5	16QAM	1	24	20.53	20.52	20.55	21.5
5	16QAM	12	0	20.30	20.21	20.34	
5	16QAM	12	7	20.54	20.37	20.44	
5	16QAM	12	13	20.41	20.38	20.37	21.5
5	16QAM	25	0	20.56	20.51	20.33	
5	64QAM	1	0	20.35	20.13	20.13	
5	64QAM	1	12	20.22	20.25	20.25	21.5
5	64QAM	1	24	20.37	20.35	20.37	
5	64QAM	12	0	20.37	20.40	20.24	
5	64QAM	12	7	20.52	20.57	20.38	21.5
5	64QAM	12	13	20.58	20.45	20.44	
5	64QAM	25	0	20.55	20.38	20.43	



Band 41_Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	for IC Power Low Ch. / Freq.	Power Low / 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	39790	40185	40620	41055	41490	
Frequency (MHz)				2510	2506	25495	2593	26365	2680	
20	QPSK	1	0	19.91	19.92	19.91	19.88	19.73	19.49	21
20	QPSK	1	49	19.95	19.94	19.97	20.08	19.99	19.90	
20	QPSK	1	99	19.89	19.88	19.97	19.81	19.55	19.79	
20	QPSK	50	0	20.00	20.02	19.91	19.98	19.95	19.78	
20	QPSK	50	24	20.00	20.02	20.00	20.17	20.00	19.92	21
20	QPSK	50	50	19.96	19.97	20.01	20.10	19.93	19.98	
20	QPSK	100	0	19.91	19.93	19.90	20.07	19.88	19.84	
20	16QAM	1	0	20.07	20.10	20.08	19.81	19.86	19.62	
20	16QAM	1	49	19.99	20.02	20.04	20.14	20.12	19.96	21
20	16QAM	1	99	20.00	20.00	20.12	19.88	19.70	19.92	
20	16QAM	50	0	20.02	20.07	19.93	20.20	19.97	19.83	
20	16QAM	50	24	20.05	20.04	20.03	20.20	20.03	19.96	
20	16QAM	50	50	20.00	19.99	20.02	20.14	19.95	20.01	21
20	16QAM	100	0	19.96	19.97	19.93	20.10	19.93	19.87	
20	64QAM	1	0	19.88	19.93	19.81	19.49	19.55	19.30	
20	64QAM	1	49	19.77	19.78	19.79	19.64	19.69	19.73	
20	64QAM	1	99	19.76	19.73	20.03	19.64	19.47	19.68	21
20	64QAM	50	0	20.03	20.06	19.93	19.88	19.97	19.78	
20	64QAM	50	24	20.05	20.07	20.03	20.19	20.02	19.94	
20	64QAM	50	50	20.00	20.02	20.01	20.14	19.94	19.99	
20	64QAM	100	0	19.95	19.98	19.93	20.11	19.92	19.85	
Channel				39785	39725	40173	40620	41063	41515	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	19.89	19.95	19.81	19.78	19.80	19.56	21
15	QPSK	1	37	19.87	19.91	19.76	19.99	19.90	19.83	
15	QPSK	1	74	19.87	19.86	19.56	19.82	19.66	19.81	
15	QPSK	36	0	19.99	20.04	19.84	19.98	19.95	19.81	
15	QPSK	36	20	19.99	20.01	20.01	20.15	20.05	19.99	21
15	QPSK	36	39	19.95	19.98	19.91	20.11	19.95	19.97	
15	QPSK	75	0	19.94	19.98	19.91	20.09	19.98	19.86	
15	16QAM	1	0	20.06	20.13	19.91	19.92	19.89	19.75	
15	16QAM	1	37	19.97	19.96	20.08	20.15	20.12	20.00	21
15	16QAM	1	74	20.00	20.01	19.94	20.02	19.89	20.03	
15	16QAM	36	0	19.98	20.02	19.83	19.95	19.94	19.76	
15	16QAM	36	20	19.96	20.00	19.98	20.12	20.02	19.95	
15	16QAM	36	39	19.94	19.96	19.90	20.10	19.93	19.95	21
15	16QAM	75	0	19.97	19.99	19.95	20.12	20.03	19.90	
15	64QAM	1	0	19.85	19.87	19.56	19.68	19.70	19.48	
15	64QAM	1	37	19.78	19.80	19.85	19.92	19.87	19.75	
15	64QAM	1	74	19.75	19.76	19.74	19.81	19.62	19.77	21
15	64QAM	36	0	20.02	20.05	19.85	19.89	19.96	19.81	
15	64QAM	36	20	20.03	20.05	19.99	20.18	20.06	20.01	
15	64QAM	36	39	20.01	20.02	19.91	20.14	19.96	19.97	
15	64QAM	75	0	19.99	20.02	19.94	20.10	20.00	19.85	
Channel				39740	39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2526	2521	2567	2593	2639	2685	
10	QPSK	1	0	19.81	20.04	19.67	19.88	19.75	19.58	21
10	QPSK	1	25	19.82	19.94	19.70	20.01	19.93	19.84	
10	QPSK	1	49	19.81	19.84	19.54	19.84	19.72	19.90	
10	QPSK	25	0	19.91	20.02	19.80	19.93	20.05	19.75	
10	QPSK	25	12	19.95	20.04	19.99	20.20	19.97	19.91	21
10	QPSK	25	25	19.99	19.94	19.84	20.04	19.92	19.89	
10	QPSK	50	0	19.89	20.08	19.93	20.03	19.99	19.87	
10	16QAM	1	0	20.07	20.07	19.86	19.87	20.05	19.77	
10	16QAM	1	25	19.98	19.96	20.00	20.07	20.11	20.03	21
10	16QAM	1	49	19.92	20.07	19.93	20.05	19.94	20.09	
10	16QAM	25	0	20.02	20.05	19.88	19.92	19.99	19.83	
10	16QAM	25	12	19.99	19.92	20.01	20.07	19.97	19.93	
10	16QAM	25	25	19.96	19.95	19.97	20.12	19.87	20.04	21
10	16QAM	50	0	19.96	20.04	20.05	20.19	20.03	19.96	
10	64QAM	1	0	19.81	19.88	19.52	19.65	19.71	19.42	
10	64QAM	1	25	19.76	19.89	19.92	19.96	19.95	19.83	
10	64QAM	1	49	19.82	19.67	19.70	19.89	19.58	19.81	21
10	64QAM	25	0	19.94	20.03	19.75	20.04	19.96	19.86	
10	64QAM	25	12	20.12	20.12	20.08	20.19	20.15	19.95	
10	64QAM	25	25	19.92	19.96	19.98	20.10	19.90	19.91	
10	64QAM	50	0	20.05	19.92	19.99	20.00	20.04	19.87	
Channel				39715	39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2498.5	2543.8	2593	2640.30	2687.5	
5	QPSK	1	0	19.84	19.86	19.66	19.74	19.67	19.46	21
5	QPSK	1	12	19.91	19.87	19.76	20.03	19.94	19.86	
5	QPSK	1	24	19.78	19.87	19.49	19.95	19.71	19.87	
5	QPSK	12	0	19.91	20.02	19.67	19.96	20.04	19.90	
5	QPSK	12	7	19.94	20.05	20.05	20.12	20.03	20.04	21
5	QPSK	12	13	19.87	20.06	19.63	20.11	19.91	19.97	
5	QPSK	25	0	20.04	19.94	19.95	20.15	19.94	19.83	
5	16QAM	1	0	20.16	20.12	19.97	19.86	19.94	19.67	
5	16QAM	1	12	19.89	20.01	20.00	20.12	20.10	20.00	21
5	16QAM	1	24	20.04	20.02	20.00	20.03	19.81	19.98	
5	16QAM	12	0	20.06	19.95	19.69	19.97	20.01	19.84	
5	16QAM	12	7	19.94	20.03	19.84	20.14	19.92	19.98	
5	16QAM	12	13	19.97	20.06	19.92	20.07	20.00	19.88	21
5	16QAM	25	0	19.94	19.96	19.95	20.19	19.97	19.95	
5	64QAM	1	0	19.85	19.92	19.66	19.71	19.70	19.52	
5	64QAM	1	12	19.81	19.76	19.77	19.84	19.94	19.70	
5	64QAM	1	24	19.70	19.74	19.69	19.72	19.64	19.75	21
5	64QAM	12	0	20.02	19.95	19.79	20.02	20.06	19.74	
5	64QAM	12	7	20.08	20.11	19.92	20.15	20.03	19.92	
5	64QAM	12	13	20.03	20.09	19.86	20.05	19.95	20.07	
5	64QAM	25	0	19.91	20.06	19.91	20.12	19.91	19.76	



Band 41_Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	for IC Power Low Ch / Freq	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	39790	40185	40630	41055	41490	
Frequency (MHz)				2510	2506	25495	2593	26365	2680	
20	QPSK	1	0	19.24	19.27	19.23	19.80	19.83	19.38	21
20	QPSK	1	49	19.76	19.80	19.87	19.95	19.87	19.77	
20	QPSK	1	99	19.81	19.79	19.89	19.69	19.44	19.69	
20	QPSK	50	0	20.02	20.04	19.91	19.95	19.93	19.78	21
20	QPSK	50	24	20.01	20.02	20.03	20.15	20.00	19.92	
20	QPSK	50	50	19.96	19.97	20.00	20.09	19.91	19.97	
20	QPSK	100	0	19.92	19.95	19.90	20.06	19.89	19.83	21
20	16QAM	1	0	20.24	20.36	20.41	19.93	20.01	19.76	
20	16QAM	1	49	20.16	20.26	20.18	20.35	20.22	20.13	21
20	16QAM	1	99	20.11	20.16	20.24	20.06	19.84	20.03	
20	16QAM	50	0	20.05	20.08	19.94	19.59	19.07	19.30	21
20	16QAM	50	24	20.03	20.06	20.05	20.18	20.04	19.95	
20	16QAM	50	50	20.00	20.02	20.03	20.12	19.94	20.02	
20	16QAM	100	0	19.96	19.97	19.95	20.10	19.93	19.86	21
20	64QAM	1	0	20.14	20.15	20.07	19.78	19.80	19.55	
20	64QAM	1	49	20.03	20.07	20.01	20.18	20.09	19.86	21
20	64QAM	1	99	20.00	20.00	20.40	19.90	19.68	19.91	
20	64QAM	50	0	20.03	20.06	19.92	20.00	19.98	19.78	21
20	64QAM	50	24	20.06	20.07	20.05	20.22	20.02	19.93	
20	64QAM	50	50	20.00	20.01	20.03	20.13	19.93	20.00	21
20	64QAM	100	0	19.96	19.99	19.94	20.08	19.92	19.84	
Channel				39765	39725	40173	40620	41063	41515	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	19.90	19.91	19.56	19.79	19.76	19.55	21
15	QPSK	1	37	19.87	19.88	19.75	19.97	19.87	19.80	
15	QPSK	1	74	19.85	19.87	19.60	19.85	19.63	19.79	21
15	QPSK	36	0	20.01	20.02	19.85	19.98	19.93	19.80	
15	QPSK	36	20	20.03	20.03	19.98	20.17	20.07	19.97	21
15	QPSK	36	39	19.98	19.96	19.93	20.11	19.95	19.97	
15	QPSK	75	0	19.96	19.99	19.91	20.12	19.99	19.87	21
15	16QAM	1	0	20.26	20.31	20.03	20.10	20.14	19.95	
15	16QAM	1	37	20.22	20.22	20.40	20.38	20.26	20.15	21
15	16QAM	1	74	20.14	20.17	20.11	20.17	20.03	20.15	
15	16QAM	36	0	20.00	20.05	19.87	19.96	19.94	19.79	21
15	16QAM	36	20	19.99	20.03	19.98	20.15	20.05	19.96	
15	16QAM	36	39	19.98	19.98	19.92	20.12	19.96	19.97	21
15	16QAM	75	0	20.01	20.01	19.96	20.13	20.04	19.88	
15	64QAM	1	0	20.11	20.13	19.82	19.92	19.96	19.69	21
15	64QAM	1	37	20.07	20.09	20.14	20.19	20.11	20.02	
15	64QAM	1	74	20.01	20.04	20.00	20.02	19.88	20.00	21
15	64QAM	36	0	20.04	20.05	19.88	20.01	19.82	19.91	
15	64QAM	36	20	20.06	20.07	20.02	20.18	20.08	20.00	21
15	64QAM	36	39	20.03	20.05	19.94	20.13	19.97	19.95	
15	64QAM	75	0	20.00	20.01	19.94	20.12	19.99	19.86	21
Channel				39740	39700	40160	40610	41060	41510	Tune-up limit (dBm)
Frequency (MHz)				2505	2501	25457	2593	2639	2685	
10	QPSK	1	0	19.71	19.65	19.39	19.50	19.42	19.35	21
10	QPSK	1	25	19.61	19.62	19.66	19.75	19.67	19.61	
10	QPSK	1	49	19.67	19.69	19.54	19.54	19.50	19.42	21
10	QPSK	25	0	19.84	19.85	19.67	19.63	19.74	19.67	
10	QPSK	25	12	19.84	19.86	19.84	20.00	19.84	19.83	21
10	QPSK	25	25	19.81	19.82	19.73	19.89	19.79	19.70	
10	QPSK	50	0	19.77	19.78	19.79	19.89	19.75	19.75	21
10	16QAM	1	0	20.06	20.09	19.74	19.86	19.81	19.74	
10	16QAM	1	25	20.01	20.02	20.04	20.12	20.01	19.96	21
10	16QAM	1	49	19.97	20.03	19.76	19.89	19.79	19.70	
10	16QAM	25	0	19.87	19.91	19.73	19.84	19.83	19.69	21
10	16QAM	25	12	19.88	19.91	19.92	20.04	19.90	19.88	
10	16QAM	25	25	19.85	19.83	19.80	19.91	19.85	19.74	21
10	16QAM	50	0	19.82	19.85	19.83	19.85	19.79	19.78	
10	64QAM	1	0	19.96	20.02	19.66	19.72	19.67	19.62	21
10	64QAM	1	25	19.96	19.97	20.05	20.12	20.04	19.93	
10	64QAM	1	49	19.89	19.92	19.76	19.80	19.71	19.67	21
10	64QAM	25	0	19.93	19.94	19.79	19.92	19.79	19.76	
10	64QAM	25	12	19.96	19.96	19.95	20.07	19.91	19.96	21
10	64QAM	25	25	19.89	19.92	19.83	19.96	19.88	19.83	
10	64QAM	50	0	19.83	19.84	19.81	19.92	19.76	19.80	21
Channel				39715	39675	40148	40600	41063	41565	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2498.5	25438	2593	26400	2697.5	
5	QPSK	1	0	19.75	19.71	19.66	19.76	19.66	19.67	21
5	QPSK	1	12	19.68	19.69	19.66	19.80	19.71	19.67	
5	QPSK	1	24	19.67	19.69	19.72	19.78	19.71	19.60	21
5	QPSK	12	0	19.85	19.86	19.60	19.90	19.84	19.82	
5	QPSK	12	7	19.88	19.91	19.88	20.03	19.84	19.83	21
5	QPSK	12	13	19.87	19.86	19.86	19.88	19.85	19.77	
5	QPSK	25	0	19.84	19.83	19.81	19.95	19.79	19.78	21
5	16QAM	1	0	20.01	20.07	19.84	20.02	19.92	19.90	
5	16QAM	1	12	19.95	19.95	19.84	20.07	19.97	19.85	21
5	16QAM	1	24	20.02	20.04	19.89	20.09	19.96	19.84	
5	16QAM	12	0	19.92	19.93	19.86	19.94	19.86	19.85	21
5	16QAM	12	7	19.93	19.94	19.92	20.03	19.86	19.87	
5	16QAM	12	13	19.92	19.92	19.88	20.02	19.91	19.84	21
5	16QAM	25	0	19.92	19.90	19.92	20.04	19.88	19.86	
5	64QAM	1	0	19.95	19.93	19.81	19.92	19.86	19.85	21
5	64QAM	1	12	19.91	19.92	19.95	20.02	19.92	19.89	
5	64QAM	1	24	19.93	19.96	19.89	20.00	19.93	19.82	21
5	64QAM	12	0	19.95	19.95	19.89	19.95	19.86	19.86	
5	64QAM	12	7	19.94	19.96	19.93	20.05	19.92	19.90	21
5	64QAM	12	13	19.89	19.94	19.92	20.04	19.89	19.85	
5	64QAM	25	0	19.90	19.90	19.92	20.02	19.88	19.87	21



Band 38_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2550	2595	2610	
20	QPSK	1	0	18.87	18.82	18.58	17.5
20	QPSK	1	49	18.70	18.64	18.60	
20	QPSK	1	99	18.67	18.62	18.57	
20	QPSK	50	0	18.57	18.53	18.48	17.5
20	QPSK	50	24	18.78	18.75	18.60	
20	QPSK	50	50	18.70	18.65	18.58	
20	QPSK	100	0	18.68	18.65	18.50	17.5
20	16QAM	1	0	18.80	18.81	18.78	
20	16QAM	1	49	18.82	18.78	18.73	
20	16QAM	1	99	18.82	18.78	18.71	17.5
20	16QAM	50	0	18.80	18.58	18.51	
20	16QAM	50	24	18.80	18.74	18.63	
20	16QAM	50	50	18.70	18.68	18.61	17.5
20	16QAM	100	0	18.68	18.65	18.51	
20	64QAM	1	0	18.51	18.54	18.48	
20	64QAM	1	49	18.57	18.50	18.48	17.5
20	64QAM	1	99	18.65	18.51	18.47	
20	64QAM	50	0	18.61	18.58	18.53	
20	64QAM	50	24	18.81	18.78	18.65	17.5
20	64QAM	50	50	18.72	18.69	18.61	
20	64QAM	100	0	18.68	18.65	18.53	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	18.33	18.80	18.53	17.5
15	QPSK	1	37	18.64	18.59	18.57	
15	QPSK	1	74	18.65	18.62	18.58	
15	QPSK	36	0	18.46	18.58	18.50	17.5
15	QPSK	36	20	18.63	18.72	18.58	
15	QPSK	36	39	18.73	18.84	18.59	
15	QPSK	75	0	18.55	18.67	18.51	17.5
15	16QAM	1	0	18.78	18.70	18.71	
15	16QAM	1	37	18.78	18.71	18.69	
15	16QAM	1	74	18.79	18.77	18.69	17.5
15	16QAM	36	0	18.41	18.52	18.48	
15	16QAM	36	20	18.58	18.70	18.55	
15	16QAM	36	39	18.69	18.83	18.55	17.5
15	16QAM	75	0	18.57	18.68	18.53	
15	64QAM	1	0	18.64	18.57	18.40	
15	64QAM	1	37	18.53	18.49	18.48	17.5
15	64QAM	1	74	18.53	18.49	18.44	
15	64QAM	36	0	18.45	18.58	18.53	
15	64QAM	36	20	18.63	18.72	18.62	17.5
15	64QAM	36	39	18.71	18.84	18.61	
15	64QAM	75	0	18.58	18.69	18.55	
Channel				37950	38000	38200	
Frequency (MHz)				2572.5	2595	2615	
10	QPSK	1	0	18.97	18.28	18.19	17.5
10	QPSK	1	25	18.30	18.29	18.22	
10	QPSK	1	49	18.11	18.37	18.24	
10	QPSK	25	0	18.35	18.34	18.29	17.5
10	QPSK	25	12	18.56	18.53	18.37	
10	QPSK	25	25	18.47	18.45	18.38	
10	QPSK	50	0	18.47	18.44	18.29	17.5
10	16QAM	1	0	18.40	18.70	18.64	
10	16QAM	1	25	18.71	18.68	18.63	
10	16QAM	1	49	18.49	18.71	18.66	17.5
10	16QAM	25	0	18.37	18.34	18.30	
10	16QAM	25	12	18.55	18.56	18.38	
10	16QAM	25	25	18.48	18.45	18.40	17.5
10	16QAM	50	0	18.49	18.47	18.30	
10	64QAM	1	0	18.25	18.54	18.51	
10	64QAM	1	25	18.63	18.57	18.58	17.5
10	64QAM	1	49	18.38	18.59	18.53	
10	64QAM	25	0	18.42	18.43	18.38	
10	64QAM	25	12	18.63	18.60	18.47	17.5
10	64QAM	25	25	18.56	18.54	18.46	
10	64QAM	50	0	18.49	18.50	18.32	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	18.23	18.25	18.14	17.5
5	QPSK	1	12	18.38	18.37	18.31	
5	QPSK	1	24	18.29	18.30	18.21	
5	QPSK	12	0	18.51	18.41	18.37	17.5
5	QPSK	12	7	18.57	18.54	18.48	
5	QPSK	12	13	18.54	18.54	18.43	
5	QPSK	25	0	18.52	18.48	18.43	17.5
5	16QAM	1	0	18.54	18.56	18.48	
5	16QAM	1	12	18.64	18.66	18.60	
5	16QAM	1	24	18.65	18.68	18.61	17.5
5	16QAM	12	0	18.52	18.47	18.40	
5	16QAM	12	7	18.58	18.58	18.52	
5	16QAM	12	13	18.54	18.52	18.47	17.5
5	16QAM	25	0	18.55	18.56	18.47	
5	64QAM	1	0	18.49	18.47	18.41	
5	64QAM	1	12	18.59	18.59	18.51	17.5
5	64QAM	1	24	18.58	18.57	18.52	
5	64QAM	12	0	18.53	18.47	18.40	
5	64QAM	12	7	18.62	18.59	18.54	17.5
5	64QAM	12	13	18.60	18.57	18.50	
5	64QAM	25	0	18.59	18.56	18.52	

Band 41_Ant 2											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit [dBm]		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2500	2543.5	2587	2630.5	2674			
20	QPSK	1	0	17.67	17.68	17.69	17.70	17.71	18.5		
20	QPSK	1	49	17.84	17.69	17.85	17.86	17.70			
20	QPSK	1	99	17.85	17.83	17.85	17.29	17.59			
20	QPSK	50	0	17.93	17.70	17.71	17.86	17.58			
20	QPSK	50	24	17.79	17.79	17.95	17.72	17.74	18.5		
20	QPSK	50	50	17.78	17.84	17.86	17.84	17.81			
20	QPSK	100	0	17.70	17.67	17.97	17.80	17.67			
20	16QAM	1	0	17.86	17.72	17.80	17.46	17.43			
20	16QAM	1	49	17.78	17.72	17.93	17.73	17.82	18.5		
20	16QAM	1	99	17.71	17.83	17.80	17.35	17.72			
20	16QAM	50	0	17.82	17.76	17.74	17.72	17.83			
20	16QAM	50	24	17.81	17.79	17.93	17.80	17.78			
20	16QAM	50	50	17.76	17.84	17.88	17.72	17.84	18.5		
20	16QAM	100	0	17.70	17.68	17.84	17.67	17.70			
20	64QAM	1	0	17.84	17.55	17.27	17.44	17.18			
20	64QAM	1	49	17.65	17.86	17.74	17.70	17.56			
20	64QAM	1	99	17.82	17.91	17.98	17.30	17.53	18.5		
20	64QAM	50	0	17.85	17.74	17.76	17.72	17.63			
20	64QAM	50	24	17.82	17.86	17.98	17.79	17.80			
20	64QAM	50	50	17.77	17.84	17.91	17.72	17.87			
20	64QAM	100	0	17.74	17.73	17.86	17.68	17.71	18.5		
Channel				39725	40173	40620	41068	41515			
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5			
15	QPSK	1	0	17.72	17.47	17.56	17.55	17.36		18.5	
15	QPSK	1	37	17.86	17.71	17.76	17.70	17.85			
15	QPSK	1	74	17.65	17.51	17.67	17.43	17.61			
15	QPSK	36	0	17.80	17.61	17.74	17.67	17.61			
15	QPSK	36	20	17.77	17.78	17.89	17.79	17.82	18.5		
15	QPSK	36	39	17.78	17.70	17.88	17.88	17.80			
15	QPSK	75	0	17.74	17.73	17.82	17.72	17.87			
15	16QAM	1	0	17.80	17.54	17.74	17.53	17.60			
15	16QAM	1	37	17.72	17.65	17.92	17.75	17.87	18.5		
15	16QAM	1	74	17.75	17.61	17.78	17.57	17.84			
15	16QAM	36	0	17.77	17.59	17.72	17.66	17.80			
15	16QAM	36	20	17.74	17.72	17.89	17.78	17.91			
15	16QAM	36	39	17.76	17.65	17.84	17.68	17.79	18.5		
15	16QAM	75	0	17.75	17.69	17.88	17.78	17.70			
15	64QAM	1	0	17.69	17.12	17.45	17.47	17.34			
15	64QAM	1	37	17.67	17.74	17.70	17.66	17.65			
15	64QAM	1	74	17.65	17.62	17.55	17.46	17.66	18.5		
15	64QAM	36	0	17.83	17.68	17.78	17.73	17.68			
15	64QAM	36	20	17.84	17.78	17.96	17.84	17.85			
15	64QAM	36	39	17.76	17.72	17.91	17.73	17.86			
15	64QAM	75	0	17.75	17.73	17.91	17.79	17.72	18.5		
Channel				39700	40180	40620	41080	41540			
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	17.49	17.13	17.31	17.15	17.19		18.5	
10	QPSK	1	25	17.36	17.35	17.51	17.40	17.44			
10	QPSK	1	49	17.38	17.15	17.26	17.22	17.19			
10	QPSK	25	0	17.64	17.50	17.58	17.47	17.51			
10	QPSK	25	13	17.63	17.62	17.76	17.54	17.66	18.5		
10	QPSK	25	25	17.61	17.55	17.62	17.53	17.56			
10	QPSK	50	0	17.65	17.54	17.65	17.45	17.57			
10	16QAM	1	0	17.83	17.55	17.69	17.58	17.57			
10	16QAM	1	25	17.73	17.78	17.91	17.76	17.82	18.5		
10	16QAM	1	49	17.76	17.55	17.67	17.54	17.55			
10	16QAM	25	0	17.85	17.46	17.62	17.55	17.55			
10	16QAM	25	12	17.66	17.64	17.79	17.65	17.72			
10	16QAM	25	25	17.62	17.53	17.66	17.62	17.60	18.5		
10	16QAM	50	0	17.66	17.59	17.66	17.54	17.62			
10	64QAM	1	0	17.78	17.29	17.55	17.48	17.47			
10	64QAM	1	25	17.70	17.97	17.87	17.88	17.79			
10	64QAM	1	49	17.70	17.61	17.53	17.50	17.53	18.5		
10	64QAM	25	0	17.71	17.62	17.67	17.57	17.64			
10	64QAM	25	12	17.74	17.74	17.86	17.86	17.81			
10	64QAM	25	25	17.72	17.65	17.74	17.64	17.66			
10	64QAM	50	0	17.65	17.61	17.71	17.53	17.60	18.5		
Channel				38675	40146	40620	41063	41565			
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5			
5	QPSK	1	0	17.69	17.33	17.48	17.36	17.48		18.5	
5	QPSK	1	12	17.43	17.40	17.57	17.45	17.50			
5	QPSK	1	24	17.43	17.39	17.51	17.41	17.43			
5	QPSK	12	0	17.62	17.67	17.65	17.54	17.65			
5	QPSK	12	7	17.67	17.65	17.71	17.58	17.65	18.5		
5	QPSK	12	13	17.63	17.84	17.70	17.57	17.61			
5	QPSK	25	0	17.58	17.61	17.68	17.55	17.59			
5	16QAM	1	0	17.79	17.77	17.78	17.69	17.79			
5	16QAM	1	12	17.69	17.84	17.79	17.74	17.69	18.5		
5	16QAM	1	24	17.72	17.80	17.79	17.74	17.68			
5	16QAM	12	0	17.66	17.63	17.72	17.59	17.70			
5	16QAM	12	7	17.70	17.70	17.76	17.60	17.70			
5	16QAM	12	13	17.62	17.68	17.76	17.62	17.65	18.5		
5	16QAM	25	0	17.64	17.64	17.76	17.63	17.70			
5	64QAM	1	0	17.72	17.64	17.73	17.61	17.73			
5	64QAM	1	12	17.68	17.72	17.78	17.72	17.71			
5	64QAM	1	24	17.69	17.75	17.77	17.69	17.69	18.5		
5	64QAM	12	0	17.69	17.66	17.71	17.64	17.70			
5	64QAM	12	7	17.70	17.71	17.82	17.65	17.73			
5	64QAM	12	13	17.68	17.70	17.78	17.68	17.69			
5	64QAM	25	0	17.65	17.76	17.81	17.64	17.70			



Band 41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	for IC Power Low Ch./Freq.	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	Frequency (MHz)			38790	39750	40185	40620	41055	41490	
20	QPSK	1	0	17.80	17.83	17.57	17.85	17.83	17.81	18.5
20	QPSK	1	49	17.53	17.56	17.55	17.71	17.56	17.59	18.5
20	QPSK	1	99	17.54	17.53	17.82	17.44	17.16	17.54	18.5
20	QPSK	50	0	17.76	17.78	17.66	17.71	17.64	17.58	18.5
20	QPSK	50	24	17.76	17.75	17.78	17.91	17.71	17.74	18.5
20	QPSK	50	50	17.85	17.74	17.82	17.85	17.62	17.81	18.5
20	QPSK	100	0	17.70	17.70	17.65	17.81	17.60	17.66	18.5
20	16QAM	1	0	17.96	17.98	17.90	17.77	17.65	17.65	18.5
20	16QAM	1	49	17.88	17.93	17.91	18.12	17.94	18.04	18.5
20	16QAM	1	99	17.84	17.87	18.01	17.76	17.51	17.91	18.5
20	16QAM	50	0	17.79	17.81	17.71	17.72	17.72	17.63	18.5
20	16QAM	50	24	17.79	17.79	17.78	17.94	17.79	17.79	18.5
20	16QAM	50	50	17.78	17.77	17.84	17.90	17.72	17.85	18.5
20	16QAM	100	0	17.69	17.70	17.68	17.83	17.67	17.70	18.5
20	64QAM	1	0	17.88	17.89	17.95	17.56	17.64	17.43	18.5
20	64QAM	1	49	17.75	17.83	17.86	17.86	17.66	17.85	18.5
20	64QAM	1	99	17.67	17.76	18.11	17.62	17.53	17.78	18.5
20	64QAM	50	0	17.80	17.80	17.71	17.78	17.72	17.63	18.5
20	64QAM	50	24	17.81	17.83	17.85	17.95	17.78	17.80	18.5
20	64QAM	50	50	17.76	17.78	17.83	17.89	17.70	17.86	18.5
20	64QAM	100	0	17.70	17.74	17.73	17.87	17.69	17.71	18.5
Channel	Frequency (MHz)			38785	39725	40173	40620	41063	41515	Tune-up limit (dBm)
				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	17.68	17.68	17.47	17.52	17.50	17.33	18.5
15	QPSK	1	37	17.61	17.63	17.64	17.75	17.65	17.63	18.5
15	QPSK	1	74	17.44	17.61	17.47	17.63	17.39	17.69	18.5
15	QPSK	36	0	17.61	17.80	17.61	17.72	17.65	17.62	18.5
15	QPSK	36	20	17.76	17.78	17.77	17.90	17.78	17.81	18.5
15	QPSK	36	39	17.77	17.79	17.68	17.86	17.68	17.79	18.5
15	QPSK	75	0	17.74	17.74	17.73	17.83	17.69	17.66	18.5
15	16QAM	1	0	17.96	18.00	17.67	17.89	17.63	17.75	18.5
15	16QAM	1	37	17.93	17.94	17.85	18.08	17.92	17.99	18.5
15	16QAM	1	74	17.86	17.89	17.72	17.95	17.69	17.99	18.5
15	16QAM	36	0	17.76	17.77	17.57	17.71	17.67	17.62	18.5
15	16QAM	36	20	17.76	17.79	17.70	17.88	17.78	17.84	18.5
15	16QAM	36	39	17.66	17.65	17.66	17.79	17.71	17.68	18.5
15	16QAM	75	0	17.73	17.75	17.73	17.87	17.75	17.68	18.5
15	64QAM	1	0	17.82	17.85	17.70	17.66	17.70	17.57	18.5
15	64QAM	1	37	17.82	17.86	17.97	17.96	17.89	17.85	18.5
15	64QAM	1	74	17.77	17.82	17.81	17.76	17.70	17.69	18.5
15	64QAM	36	0	17.82	17.81	17.66	17.85	17.71	17.81	18.5
15	64QAM	36	20	17.81	17.81	17.82	17.96	17.83	17.84	18.5
15	64QAM	36	39	17.80	17.80	17.72	17.91	17.73	17.85	18.5
15	64QAM	75	0	17.74	17.77	17.73	17.89	17.78	17.70	18.5
Channel	Frequency (MHz)			39740	39700	40160	40620	41060	41540	Tune-up limit (dBm)
				2626	2693	2547	2593	2639	2685	
10	QPSK	1	0	17.45	17.49	17.08	17.21	17.08	17.18	18.5
10	QPSK	1	25	17.33	17.35	17.36	17.49	17.36	17.43	18.5
10	QPSK	1	49	17.41	17.36	17.15	17.31	17.12	17.27	18.5
10	QPSK	25	0	17.57	17.61	17.48	17.57	17.45	17.48	18.5
10	QPSK	25	12	17.59	17.61	17.64	17.70	17.59	17.65	18.5
10	QPSK	25	25	17.59	17.59	17.53	17.62	17.51	17.52	18.5
10	QPSK	50	0	17.52	17.51	17.52	17.63	17.43	17.56	18.5
10	16QAM	1	0	17.82	17.80	17.49	17.62	17.52	17.55	18.5
10	16QAM	1	25	17.70	17.74	17.77	17.87	17.77	17.75	18.5
10	16QAM	1	49	17.21	17.21	17.52	17.63	17.50	17.52	18.5
10	16QAM	25	0	17.65	17.63	17.47	17.59	17.53	17.54	18.5
10	16QAM	25	12	17.65	17.64	17.64	17.76	17.62	17.71	18.5
10	16QAM	25	25	17.59	17.61	17.51	17.65	17.60	17.58	18.5
10	16QAM	50	0	17.55	17.56	17.56	17.67	17.53	17.62	18.5
10	64QAM	1	0	17.73	17.75	17.47	17.50	17.46	17.44	18.5
10	64QAM	1	25	17.66	17.74	17.95	17.81	17.84	17.81	18.5
10	64QAM	1	49	17.66	17.68	17.59	17.54	17.51	17.49	18.5
10	64QAM	25	0	17.70	17.73	17.53	17.68	17.57	17.61	18.5
10	64QAM	25	12	17.71	17.74	17.75	17.86	17.66	17.74	18.5
10	64QAM	25	25	17.66	17.70	17.60	17.73	17.61	17.64	18.5
10	64QAM	50	0	17.56	17.57	17.58	17.68	17.50	17.61	18.5
Channel	Frequency (MHz)			38715	38675	40148	40620	41093	41565	Tune-up limit (dBm)
				2502.5	2488.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	17.43	17.45	17.26	17.50	17.54	17.47	18.5
5	QPSK	1	12	17.41	17.42	17.39	17.57	17.42	17.46	18.5
5	QPSK	1	24	17.38	17.41	17.37	17.53	17.37	17.43	18.5
5	QPSK	12	0	17.59	17.63	17.55	17.66	17.51	17.65	18.5
5	QPSK	12	7	17.65	17.64	17.63	17.74	17.54	17.67	18.5
5	QPSK	12	13	17.56	17.57	17.61	17.73	17.58	17.64	18.5
5	QPSK	25	0	17.59	17.56	17.59	17.66	17.51	17.61	18.5
5	16QAM	1	0	17.74	17.80	17.75	17.76	17.70	17.70	18.5
5	16QAM	1	12	17.71	17.69	17.82	17.78	17.75	17.67	18.5
5	16QAM	1	24	17.75	17.74	17.82	17.83	17.72	17.68	18.5
5	16QAM	12	0	17.64	17.63	17.59	17.72	17.56	17.68	18.5
5	16QAM	12	7	17.67	17.68	17.71	17.80	17.58	17.67	18.5
5	16QAM	12	13	17.62	17.63	17.64	17.70	17.63	17.65	18.5
5	16QAM	25	0	17.60	17.65	17.63	17.77	17.60	17.70	18.5
5	64QAM	1	0	17.65	17.66	17.61	17.70	17.64	17.70	18.5
5	64QAM	1	12	17.67	17.65	17.72	17.78	17.70	17.71	18.5
5	64QAM	1	24	17.66	17.66	17.67	17.78	17.72	17.65	18.5
5	64QAM	12	0	17.64	17.70	17.60	17.71	17.62	17.72	18.5
5	64QAM	12	7	17.67	17.70	17.71	17.82	17.66	17.75	18.5
5	64QAM	12	13	17.63	17.64	17.67	17.79	17.67	17.72	18.5
5	64QAM	25	0	17.65	17.66	17.66	17.78	17.63	17.71	18.5



Band 38_Ant 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)				2560	2595	2610
20	QPSK	1	0	13.54	13.60	13.58
20	QPSK	1	49	13.62	13.61	13.58
20	QPSK	1	99	13.63	13.63	13.57
20	QPSK	50	0	13.60	13.61	13.58
20	QPSK	50	24	13.71	13.65	13.60
20	QPSK	50	50	13.61	13.58	13.55
20	QPSK	100	0	13.66	13.58	13.53
20	16QAM	1	0	13.66	13.68	13.63
20	16QAM	1	49	13.67	13.66	13.64
20	16QAM	1	99	13.69	13.69	13.63
20	16QAM	50	0	13.60	13.57	13.57
20	16QAM	50	24	13.70	13.61	13.60
20	16QAM	50	50	13.61	13.60	13.58
20	16QAM	100	0	13.63	13.56	13.52
20	64QAM	1	0	13.44	13.46	13.42
20	64QAM	1	49	13.50	13.51	13.43
20	64QAM	1	99	13.53	13.49	13.45
20	64QAM	50	0	13.61	13.59	13.55
20	64QAM	50	24	13.85	13.80	13.64
20	64QAM	50	50	13.72	13.68	13.62
20	64QAM	100	0	13.70	13.66	13.54
Channel				37625	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	13.55	13.56	13.53
15	QPSK	1	37	13.58	13.58	13.53
15	QPSK	1	74	13.60	13.60	13.58
15	QPSK	36	0	13.64	13.63	13.58
15	QPSK	36	20	13.77	13.64	13.69
15	QPSK	36	39	13.66	13.64	13.60
15	QPSK	75	0	13.69	13.61	13.68
15	16QAM	1	0	13.68	13.69	13.68
15	16QAM	1	37	13.70	13.72	13.68
15	16QAM	1	74	13.74	13.71	13.69
15	16QAM	36	0	13.59	13.57	13.55
15	16QAM	36	20	13.66	13.59	13.62
15	16QAM	36	39	13.61	13.61	13.56
15	16QAM	75	0	13.70	13.62	13.64
15	64QAM	1	0	13.47	13.47	13.44
15	64QAM	1	37	13.57	13.54	13.48
15	64QAM	1	74	13.58	13.53	13.45
15	64QAM	36	0	13.68	13.66	13.56
15	64QAM	36	20	13.84	13.81	13.67
15	64QAM	36	39	13.77	13.73	13.64
15	64QAM	75	0	13.77	13.73	13.58
Channel				37950	38000	38050
Frequency (MHz)				2627.5	2595	2615
10	QPSK	1	0	13.14	13.35	13.34
10	QPSK	1	25	13.35	13.34	13.33
10	QPSK	1	49	13.10	13.34	13.32
10	QPSK	25	0	13.40	13.40	13.36
10	QPSK	25	12	13.61	13.42	13.46
10	QPSK	25	25	13.43	13.40	13.35
10	QPSK	50	0	13.46	13.36	13.43
10	16QAM	1	0	13.33	13.51	13.51
10	16QAM	1	25	13.48	13.49	13.45
10	16QAM	1	49	13.25	13.51	13.47
10	16QAM	25	0	13.32	13.36	13.32
10	16QAM	25	12	13.49	13.42	13.47
10	16QAM	25	25	13.37	13.37	13.31
10	16QAM	50	0	13.45	13.46	13.46
10	64QAM	1	0	12.90	13.25	13.17
10	64QAM	1	25	13.33	13.32	13.25
10	64QAM	1	49	13.00	13.27	13.22
10	64QAM	25	0	13.44	13.47	13.39
10	64QAM	25	12	13.68	13.68	13.51
10	64QAM	25	25	13.55	13.53	13.48
10	64QAM	50	0	13.51	13.53	13.35
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	13.36	13.39	13.34
5	QPSK	1	12	13.38	13.42	13.35
5	QPSK	1	24	13.32	13.32	13.22
5	QPSK	12	0	13.47	13.47	13.44
5	QPSK	12	7	13.50	13.46	13.42
5	QPSK	12	13	13.45	13.45	13.39
5	QPSK	25	0	13.46	13.42	13.36
5	16QAM	1	0	13.45	13.48	13.44
5	16QAM	1	12	13.57	13.58	13.59
5	16QAM	1	24	13.45	13.45	13.41
5	16QAM	12	0	13.41	13.43	13.41
5	16QAM	12	7	13.40	13.42	13.39
5	16QAM	12	13	13.39	13.44	13.36
5	16QAM	25	0	13.52	13.44	13.39
5	64QAM	1	0	13.20	13.23	13.18
5	64QAM	1	12	13.29	13.37	13.26
5	64QAM	1	24	13.33	13.36	13.26
5	64QAM	12	0	13.56	13.52	13.45
5	64QAM	12	7	13.65	13.64	13.58
5	64QAM	12	13	13.60	13.59	13.53
5	64QAM	25	0	13.63	13.66	13.57



Band 41_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Low Middle Ch / Freq.	Power Middle Ch / Freq.	Power High Middle Ch / Freq.	Power High Ch / Freq.	Tune-up limit [dBm]
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2500	2543.3	2587	2630.5	2675	
20	QPSK	1	0	14.72	14.68	14.58	14.38	14.38	15.5
20	QPSK	1	49	14.68	14.69	15.00	14.80	14.83	
20	QPSK	1	99	14.85	14.75	14.39	14.37	14.25	
20	QPSK	50	0	14.80	14.78	14.78	14.55	14.57	
20	QPSK	50	24	14.78	14.82	15.05	14.87	14.74	
20	QPSK	50	50	14.74	14.85	14.73	14.70	14.80	
20	QPSK	100	0	14.68	14.77	14.71	14.87	14.54	
20	16QAM	1	0	14.88	14.83	14.81	14.57	14.44	
20	16QAM	1	49	14.83	14.83	14.85	14.81	14.82	
20	16QAM	1	99	14.78	14.87	14.87	14.41	14.72	
20	16QAM	50	0	14.84	14.76	14.77	14.72	14.84	
20	16QAM	50	24	14.85	14.86	14.88	14.79	14.81	15.5
20	16QAM	50	50	14.80	14.90	14.93	14.71	14.86	
20	16QAM	100	0	14.78	14.73	14.89	14.70	14.74	
20	64QAM	1	0	14.64	14.42	14.29	14.19	14.12	
20	64QAM	1	49	14.63	14.43	14.74	14.45	14.55	
20	64QAM	1	99	14.49	14.59	14.40	14.09	14.48	
20	64QAM	50	0	14.82	14.80	14.79	14.74	14.67	
20	64QAM	50	24	14.85	14.87	15.01	14.79	14.82	
20	64QAM	50	50	14.79	14.90	14.93	14.72	14.92	
20	64QAM	100	0	14.75	14.78	14.89	14.70	14.76	
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	14.70	14.54	14.68	14.47	14.43	15.5
15	QPSK	1	37	14.69	14.71	14.77	14.64	14.59	
15	QPSK	1	74	14.69	14.66	14.53	14.54	14.45	
15	QPSK	36	0	14.79	14.63	14.80	14.57	14.61	
15	QPSK	36	20	14.78	14.86	14.81	14.67	14.75	
15	QPSK	36	39	14.75	14.84	14.78	14.73	14.83	
15	QPSK	75	0	14.73	14.82	14.77	14.62	14.68	
15	16QAM	1	0	14.93	14.84	14.76	14.73	14.59	
15	16QAM	1	37	14.83	14.78	14.86	14.81	14.82	
15	16QAM	1	74	14.85	14.66	14.85	14.64	14.83	
15	16QAM	36	0	14.87	14.65	14.76	14.68	14.84	15.5
15	16QAM	36	20	14.84	14.79	14.92	14.79	14.83	
15	16QAM	36	39	14.81	14.72	14.91	14.71	14.81	
15	16QAM	75	0	14.83	14.78	14.94	14.81	14.76	
15	64QAM	1	0	14.64	14.25	14.50	14.40	14.32	
15	64QAM	1	37	14.69	14.56	14.76	14.55	14.83	
15	64QAM	1	74	14.67	14.61	14.58	14.33	14.63	
15	64QAM	36	0	14.89	14.72	14.85	14.75	14.70	
15	64QAM	36	20	14.86	14.86	15.00	14.85	14.89	
15	64QAM	36	39	14.86	14.80	14.96	14.75	14.89	
15	64QAM	75	0	14.81	14.81	14.93	14.82	14.76	Tune-up limit [dBm]
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	14.54	14.28	14.28	14.21	14.26	15.5
10	QPSK	1	25	14.49	14.57	14.55	14.42	14.38	
10	QPSK	1	49	14.56	14.22	14.25	14.24	14.22	
10	QPSK	25	0	14.59	14.45	14.64	14.40	14.41	
10	QPSK	25	12	14.60	14.62	14.58	14.55	14.47	
10	QPSK	25	25	14.63	14.52	14.58	14.45	14.44	
10	QPSK	50	0	14.62	14.57	14.51	14.48	14.41	
10	16QAM	1	0	14.74	14.46	14.54	14.56	14.52	
10	16QAM	1	25	14.68	14.87	14.76	14.67	14.70	
10	16QAM	1	49	14.64	14.42	14.51	14.46	14.45	
10	16QAM	25	0	14.74	14.51	14.61	14.48	14.57	15.5
10	16QAM	25	12	14.73	14.72	14.82	14.84	14.78	
10	16QAM	25	25	14.70	14.59	14.67	14.61	14.65	
10	16QAM	50	0	14.81	14.84	14.71	14.54	14.68	
10	64QAM	1	0	14.44	14.13	14.27	14.11	14.16	
10	64QAM	1	25	14.40	14.31	14.55	14.36	14.43	
10	64QAM	1	49	14.36	14.03	14.20	14.05	14.12	
10	64QAM	25	0	14.75	14.57	14.64	14.54	14.60	
10	64QAM	25	12	14.77	14.77	14.85	14.68	14.77	
10	64QAM	25	25	14.73	14.65	14.72	14.62	14.62	
10	64QAM	50	0	14.66	14.66	14.72	14.53	14.65	Tune-up limit [dBm]
Channel				39675	40146	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5	
5	QPSK	1	0	14.60	14.38	14.49	14.33	14.38	15.5
5	QPSK	1	12	14.51	14.53	14.58	14.46	14.46	
5	QPSK	1	24	14.54	14.37	14.47	14.31	14.32	
5	QPSK	12	0	14.64	14.62	14.81	14.49	14.56	
5	QPSK	12	7	14.65	14.66	14.68	14.54	14.59	
5	QPSK	12	13	14.63	14.60	14.67	14.55	14.52	
5	QPSK	25	0	14.58	14.60	14.63	14.40	14.51	
5	16QAM	1	0	14.74	14.64	14.75	14.67	14.72	
5	16QAM	1	12	14.79	14.82	14.85	14.82	14.81	
5	16QAM	1	24	14.74	14.71	14.77	14.71	14.74	
5	16QAM	12	0	14.66	14.65	14.69	14.63	14.71	15.5
5	16QAM	12	7	14.70	14.69	14.77	14.65	14.75	
5	16QAM	12	13	14.67	14.69	14.76	14.66	14.68	
5	16QAM	25	0	14.70	14.69	14.78	14.68	14.76	
5	64QAM	1	0	14.50	14.26	14.52	14.28	14.47	
5	64QAM	1	12	14.44	14.35	14.55	14.36	14.45	
5	64QAM	1	24	14.47	14.34	14.54	14.37	14.43	
5	64QAM	12	0	14.75	14.65	14.73	14.64	14.73	
5	64QAM	12	7	14.77	14.76	14.81	14.64	14.75	
5	64QAM	12	13	14.72	14.71	14.82	14.67	14.71	
5	64QAM	25	0	14.75	14.74	14.81	14.64	14.75	



Band 41_Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Channel	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel					39750	40185	40620	41055	41490		
Frequency (MHz)					2590	2543.5	2503	2538.5	2590		
20	QPSK	1	0		14.64	14.55	14.47	14.22	14.21	15.5	
20	QPSK	1	49		14.56	14.68	14.67	14.48	14.49		
20	QPSK	1	99		14.66	14.85	14.26	14.26	14.12		
20	QPSK	50	0		14.81	14.78	14.77	14.55	14.55		
20	QPSK	50	24		14.76	14.84	14.81	14.85	14.74		
20	QPSK	50	50		14.74	14.86	14.75	14.86	14.59		
20	QPSK	100	0		14.68	14.75	14.72	14.66	14.52	15.5	
20	16QAM	1	0		15.04	14.84	14.72	14.68	14.57		
20	16QAM	1	49		15.02	14.93	15.09	14.93	15.01		
20	16QAM	1	99		14.87	14.88	14.82	14.54	14.87		
20	16QAM	50	0		14.87	14.78	14.78	14.70	14.84		
20	16QAM	50	24		14.88	14.89	14.88	14.78	14.79		
20	16QAM	50	50		14.82	14.87	14.91	14.89	14.87	15.5	
20	16QAM	100	0		14.79	14.75	14.86	14.89	14.70		
20	64QAM	1	0		14.92	14.71	14.57	14.48	14.38		
20	64QAM	1	49		14.81	14.71	15.00	14.74	14.77		
20	64QAM	1	99		14.79	14.88	14.66	14.39	14.74		
20	64QAM	50	0		14.85	14.78	14.80	14.72	14.67		
20	64QAM	50	24		14.88	14.87	15.01	14.79	14.80	15.5	
20	64QAM	50	50		14.80	14.89	14.94	14.70	14.80		
20	64QAM	100	0		14.75	14.79	14.90	14.89	14.73		
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		14.67	14.49	14.61	14.46	14.37		
15	QPSK	1	37		14.64	14.65	14.67	14.55	14.61		
15	QPSK	1	74		14.64	14.60	14.47	14.47	14.39		
15	QPSK	36	0		14.83	14.64	14.78	14.54	14.59		
15	QPSK	36	20		14.76	14.83	14.78	14.63	14.74		
15	QPSK	36	39		14.74	14.81	14.75	14.71	14.61		
15	QPSK	75	0		14.71	14.79	14.72	14.59	14.65	15.5	
15	16QAM	1	0		15.02	14.71	14.88	14.85	14.72		
15	16QAM	1	37		14.97	14.94	15.08	14.96	14.99		
15	16QAM	1	74		14.88	14.78	14.96	14.75	14.99		
15	16QAM	36	0		14.84	14.65	14.77	14.67	14.84		
15	16QAM	36	20		14.88	14.80	14.91	14.78	14.84		
15	16QAM	36	39		14.85	14.73	14.89	14.59	14.81	15.5	
15	16QAM	75	0		14.82	14.78	14.90	14.78	14.72		
15	64QAM	1	0		14.89	14.52	14.75	14.63	14.56		
15	64QAM	1	37		14.88	14.80	15.04	14.82	14.89		
15	64QAM	1	74		14.82	14.86	14.88	14.81	14.88		
15	64QAM	36	0		14.87	14.48	14.50	14.39	14.40		
15	64QAM	36	20		14.87	14.86	15.00	14.83	14.87	15.5	
15	64QAM	36	39		14.84	14.78	14.95	14.73	14.85		
15	64QAM	75	0		14.80	14.81	14.91	14.79	14.73		
Channel					39700	40180	40620	41080	41540		Tune-up limit (dBm)
Frequency (MHz)					2591	2547	2593	2639	2685		
10	QPSK	1	0		14.44	14.18	14.21	14.06	14.15		
10	QPSK	1	25		14.43	14.41	14.46	14.32	14.36		
10	QPSK	1	49		14.42	14.20	14.20	14.03	14.10		
10	QPSK	25	0		14.61	14.48	14.50	14.39	14.40		
10	QPSK	25	12		14.62	14.64	14.59	14.53	14.49		
10	QPSK	25	25		14.57	14.52	14.55	14.41	14.43		
10	QPSK	50	0		14.63	14.52	14.49	14.48	14.39	15.5	
10	16QAM	1	0		14.87	14.56	14.66	14.58	14.63		
10	16QAM	1	25		14.82	14.79	14.82	14.83	14.82		
10	16QAM	1	49		14.81	14.57	14.67	14.60	14.59		
10	16QAM	25	0		14.75	14.52	14.64	14.55	14.56		
10	16QAM	25	12		14.71	14.70	14.82	14.68	14.77		
10	16QAM	25	25		14.72	14.59	14.68	14.61	14.62	15.5	
10	16QAM	50	0		14.63	14.62	14.72	14.57	14.66		
10	64QAM	1	0		14.90	14.37	14.57	14.40	14.46		
10	64QAM	1	25		14.72	14.65	14.90	14.69	14.76		
10	64QAM	1	49		14.74	14.45	14.60	14.46	14.50		
10	64QAM	25	0		14.78	14.61	14.69	14.56	14.64		
10	64QAM	25	12		14.80	14.76	14.88	14.86	14.61	15.5	
10	64QAM	25	25		14.77	14.68	14.77	14.64	14.68		
10	64QAM	50	0		14.67	14.63	14.75	14.54	14.63		
Channel					39675	40146	40620	41093	41565		Tune-up limit (dBm)
Frequency (MHz)					2486.5	2545.8	2593	2640.39	2697.5		
5	QPSK	1	0		14.68	14.30	14.39	14.22	14.30		
5	QPSK	1	12		14.46	14.49	14.49	14.36	14.41		
5	QPSK	1	24		14.44	14.30	14.40	14.24	14.23		
5	QPSK	12	0		14.64	14.59	14.61	14.48	14.52		
5	QPSK	12	7		14.66	14.63	14.59	14.50	14.54		
5	QPSK	12	13		14.60	14.58	14.60	14.51	14.51		
5	QPSK	25	0		14.59	14.57	14.54	14.44	14.48	15.5	
5	16QAM	1	0		14.88	14.81	14.83	14.77	14.82		
5	16QAM	1	12		14.82	14.91	14.89	14.86	14.84		
5	16QAM	1	24		14.84	14.86	14.87	14.83	14.78		
5	16QAM	12	0		14.72	14.64	14.74	14.65	14.73		
5	16QAM	12	7		14.73	14.75	14.81	14.69	14.76		
5	16QAM	12	13		14.71	14.70	14.74	14.68	14.74	15.5	
5	16QAM	25	0		14.68	14.70	14.79	14.68	14.74		
5	64QAM	1	0		14.78	14.63	14.74	14.63	14.72		
5	64QAM	1	12		14.75	14.71	14.81	14.69	14.73		
5	64QAM	1	24		14.76	14.69	14.84	14.71	14.68		
5	64QAM	12	0		14.72	14.68	14.75	14.60	14.74		
5	64QAM	12	7		14.78	14.74	14.83	14.64	14.75	15.5	
5	64QAM	12	13		14.76	14.73	14.79	14.69	14.68		
5	64QAM	25	0		14.71	14.71	14.80	14.62	14.75		



Band 38_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2560	2595	2610	
20	QPSK	1	0	13.54	13.60	13.58	15
20	QPSK	1	49	13.62	13.61	13.58	
20	QPSK	1	99	13.63	13.63	13.57	
20	QPSK	50	0	13.60	13.61	13.58	15
20	QPSK	50	24	13.71	13.65	13.60	
20	QPSK	50	50	13.61	13.58	13.55	
20	QPSK	100	0	13.66	13.58	13.53	15
20	16QAM	1	0	13.66	13.68	13.63	
20	16QAM	1	49	13.67	13.68	13.64	
20	16QAM	1	99	13.69	13.69	13.63	15
20	16QAM	50	0	13.60	13.57	13.57	
20	16QAM	50	24	13.70	13.61	13.60	
20	16QAM	50	50	13.61	13.60	13.58	15
20	16QAM	100	0	13.63	13.56	13.52	
20	64QAM	1	0	13.44	13.46	13.42	
20	64QAM	1	49	13.50	13.51	13.43	15
20	64QAM	1	99	13.53	13.49	13.45	
20	64QAM	50	0	13.61	13.59	13.55	
20	64QAM	50	24	13.85	13.80	13.64	15
20	64QAM	50	50	13.72	13.68	13.62	
20	64QAM	100	0	13.70	13.66	13.54	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	13.55	13.56	13.53	15
15	QPSK	1	37	13.58	13.58	13.53	
15	QPSK	1	74	13.60	13.60	13.58	
15	QPSK	36	0	13.64	13.63	13.58	15
15	QPSK	36	20	13.77	13.64	13.69	
15	QPSK	36	39	13.66	13.64	13.60	
15	QPSK	75	0	13.69	13.61	13.68	15
15	16QAM	1	0	13.68	13.69	13.68	
15	16QAM	1	37	13.70	13.72	13.68	
15	16QAM	1	74	13.74	13.71	13.69	15
15	16QAM	36	0	13.59	13.57	13.55	
15	16QAM	36	20	13.66	13.59	13.62	
15	16QAM	36	39	13.61	13.61	13.56	15
15	16QAM	75	0	13.70	13.62	13.64	
15	64QAM	1	0	13.47	13.47	13.44	
15	64QAM	1	37	13.57	13.54	13.48	15
15	64QAM	1	74	13.58	13.53	13.45	
15	64QAM	36	0	13.68	13.66	13.56	
15	64QAM	36	20	13.84	13.81	13.67	15
15	64QAM	36	39	13.77	13.73	13.64	
15	64QAM	75	0	13.77	13.73	13.58	
Channel				37890	38000	38210	
Frequency (MHz)				2627.5	2595	2615	
10	QPSK	1	0	13.14	13.35	13.34	15
10	QPSK	1	25	13.35	13.34	13.33	
10	QPSK	1	49	13.10	13.34	13.32	
10	QPSK	25	0	13.40	13.40	13.36	15
10	QPSK	25	12	13.61	13.42	13.46	
10	QPSK	25	25	13.43	13.40	13.35	
10	QPSK	50	0	13.46	13.36	13.43	15
10	16QAM	1	0	13.33	13.51	13.51	
10	16QAM	1	25	13.48	13.49	13.45	
10	16QAM	1	49	13.25	13.51	13.47	15
10	16QAM	25	0	13.32	13.36	13.32	
10	16QAM	25	12	13.49	13.42	13.47	
10	16QAM	25	25	13.37	13.37	13.31	15
10	16QAM	50	0	13.45	13.40	13.49	
10	64QAM	1	0	12.90	13.25	13.17	
10	64QAM	1	25	13.33	13.32	13.25	15
10	64QAM	1	49	13.00	13.27	13.22	
10	64QAM	25	0	13.44	13.47	13.39	
10	64QAM	25	12	13.68	13.68	13.51	15
10	64QAM	25	25	13.55	13.53	13.48	
10	64QAM	50	0	13.51	13.53	13.35	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	13.36	13.39	13.34	15
5	QPSK	1	12	13.38	13.42	13.35	
5	QPSK	1	24	13.32	13.32	13.22	
5	QPSK	12	0	13.47	13.47	13.44	15
5	QPSK	12	7	13.50	13.46	13.42	
5	QPSK	12	13	13.45	13.45	13.39	
5	QPSK	25	0	13.40	13.42	13.36	15
5	16QAM	1	0	13.45	13.48	13.44	
5	16QAM	1	12	13.57	13.58	13.59	
5	16QAM	1	24	13.45	13.45	13.41	15
5	16QAM	12	0	13.41	13.43	13.41	
5	16QAM	12	7	13.40	13.42	13.39	
5	16QAM	12	13	13.39	13.44	13.36	15
5	16QAM	25	0	13.52	13.44	13.39	
5	64QAM	1	0	13.20	13.23	13.18	
5	64QAM	1	12	13.29	13.37	13.28	15
5	64QAM	1	24	13.33	13.36	13.26	
5	64QAM	12	0	13.56	13.52	13.45	
5	64QAM	12	7	13.65	13.64	13.58	15
5	64QAM	12	13	13.60	13.59	13.53	
5	64QAM	25	0	13.63	13.66	13.57	



Band 41_Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2568	2593.5	2593	2593.5	2593			
20	QPSK	1	0	14.72	14.68	14.59	14.38	14.38	16		
20	QPSK	1	49	14.68	14.69	15.00	14.80	14.83			
20	QPSK	1	99	14.85	14.75	14.39	14.37	14.25			
20	QPSK	50	0	14.80	14.78	14.78	14.55	14.57			
20	QPSK	50	24	14.78	14.82	15.05	14.87	14.74	16		
20	QPSK	50	50	14.74	14.85	14.73	14.70	14.93			
20	QPSK	100	0	14.68	14.77	14.71	14.67	14.54			
20	16QAM	1	0	14.88	14.83	14.81	14.57	14.44			
20	16QAM	1	49	14.83	14.83	14.95	14.81	14.82	16		
20	16QAM	1	99	14.78	14.87	14.87	14.41	14.72			
20	16QAM	50	0	14.84	14.78	14.77	14.72	14.84			
20	16QAM	50	24	14.85	14.86	14.98	14.79	14.81			
20	16QAM	50	50	14.80	14.90	14.93	14.71	14.86	16		
20	16QAM	100	0	14.78	14.73	14.89	14.70	14.74			
20	64QAM	1	0	14.64	14.42	14.29	14.19	14.12			
20	64QAM	1	49	14.63	14.43	14.74	14.45	14.56			
20	64QAM	1	99	14.49	14.59	14.40	14.09	14.48	16		
20	64QAM	50	0	14.82	14.80	14.79	14.74	14.67			
20	64QAM	50	24	14.85	14.87	15.01	14.79	14.82			
20	64QAM	50	50	14.79	14.90	14.93	14.72	14.92			
20	64QAM	100	0	14.75	14.78	14.99	14.70	14.78	16		
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	14.70	14.54	14.68	14.47	14.43		16	
15	QPSK	1	37	14.69	14.71	14.77	14.64	14.59			
15	QPSK	1	74	14.69	14.68	14.53	14.54	14.45			
15	QPSK	36	0	14.79	14.63	14.80	14.57	14.61			
15	QPSK	36	20	14.78	14.86	14.81	14.67	14.75	16		
15	QPSK	36	39	14.75	14.84	14.78	14.73	14.83			
15	QPSK	75	0	14.73	14.82	14.77	14.62	14.68			
15	16QAM	1	0	14.93	14.64	14.75	14.73	14.59			
15	16QAM	1	37	14.83	14.78	14.96	14.81	14.82	16		
15	16QAM	1	74	14.85	14.66	14.85	14.64	14.83			
15	16QAM	36	0	14.87	14.65	14.78	14.68	14.64			
15	16QAM	36	20	14.84	14.79	14.92	14.79	14.83			
15	16QAM	36	39	14.81	14.72	14.91	14.71	14.81	16		
15	16QAM	75	0	14.83	14.78	14.94	14.81	14.76			
15	64QAM	1	0	14.64	14.25	14.50	14.40	14.32			
15	64QAM	1	37	14.59	14.56	14.76	14.55	14.63			
15	64QAM	1	74	14.57	14.41	14.58	14.33	14.63	16		
15	64QAM	36	0	14.68	14.72	14.85	14.75	14.70			
15	64QAM	36	20	14.86	14.86	15.00	14.85	14.89			
15	64QAM	36	39	14.86	14.80	14.96	14.75	14.89			
15	64QAM	75	0	14.81	14.81	14.93	14.82	14.78	16		
Channel				39700	40160	40620	41080	41540		Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	14.54	14.28	14.28	14.21	14.26		16	
10	QPSK	1	25	14.49	14.57	14.55	14.42	14.38			
10	QPSK	1	49	14.56	14.22	14.25	14.24	14.22			
10	QPSK	25	0	14.59	14.45	14.54	14.40	14.41			
10	QPSK	25	12	14.60	14.62	14.58	14.55	14.47	16		
10	QPSK	25	25	14.63	14.62	14.58	14.45	14.44			
10	QPSK	50	0	14.62	14.57	14.51	14.48	14.41			
10	16QAM	1	0	14.74	14.46	14.54	14.56	14.52			
10	16QAM	1	25	14.68	14.67	14.76	14.67	14.70	16		
10	16QAM	1	49	14.64	14.42	14.51	14.46	14.45			
10	16QAM	25	0	14.74	14.51	14.61	14.48	14.57			
10	16QAM	25	12	14.73	14.72	14.82	14.64	14.78			
10	16QAM	25	25	14.70	14.59	14.67	14.61	14.65	16		
10	16QAM	50	0	14.61	14.64	14.71	14.54	14.68			
10	64QAM	1	0	14.44	14.13	14.27	14.11	14.16			
10	64QAM	1	25	14.40	14.31	14.55	14.36	14.43			
10	64QAM	1	49	14.38	14.03	14.20	14.05	14.12	16		
10	64QAM	25	0	14.75	14.57	14.64	14.54	14.60			
10	64QAM	25	12	14.77	14.77	14.85	14.68	14.77			
10	64QAM	25	25	14.73	14.65	14.72	14.62	14.62			
10	64QAM	50	0	14.66	14.66	14.72	14.53	14.65	16		
Channel				39675	40146	40620	41093	41565		Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.38	2687.5			
5	QPSK	1	0	14.60	14.38	14.49	14.33	14.38		16	
5	QPSK	1	12	14.51	14.53	14.58	14.46	14.46			
5	QPSK	1	24	14.54	14.37	14.47	14.31	14.32			
5	QPSK	12	0	14.64	14.62	14.61	14.49	14.56			
5	QPSK	12	7	14.65	14.66	14.68	14.54	14.59	16		
5	QPSK	12	13	14.63	14.60	14.67	14.55	14.52			
5	QPSK	25	0	14.58	14.60	14.63	14.40	14.51			
5	16QAM	1	0	14.74	14.64	14.75	14.67	14.72			
5	16QAM	1	12	14.79	14.62	14.85	14.82	14.81	16		
5	16QAM	1	24	14.74	14.71	14.77	14.71	14.74			
5	16QAM	12	0	14.66	14.65	14.69	14.63	14.71			
5	16QAM	12	7	14.70	14.69	14.77	14.65	14.75			
5	16QAM	12	13	14.67	14.69	14.78	14.66	14.68	16		
5	16QAM	25	0	14.70	14.69	14.78	14.68	14.78			
5	64QAM	1	0	14.50	14.26	14.52	14.28	14.47			
5	64QAM	1	12	14.44	14.35	14.55	14.36	14.45			
5	64QAM	1	24	14.47	14.34	14.54	14.37	14.43	16		
5	64QAM	12	0	14.75	14.65	14.73	14.64	14.73			
5	64QAM	12	7	14.77	14.76	14.81	14.64	14.75			
5	64QAM	12	13	14.72	14.71	14.82	14.67	14.71			
5	64QAM	25	0	14.75	14.74	14.81	14.64	14.75	16		

Band 41_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit [dBm]
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2200	2549.5	2203	2638.5	2300	
20	QPSK	1	0	14.64	14.55	14.47	14.22	14.21	16
20	QPSK	1	49	14.56	14.68	14.67	14.48	14.49	
20	QPSK	1	99	14.66	14.85	14.26	14.26	14.12	
20	QPSK	50	0	14.81	14.78	14.77	14.55	14.55	
20	QPSK	50	24	14.76	14.84	14.81	14.65	14.74	16
20	QPSK	50	50	14.74	14.86	14.75	14.86	14.59	
20	QPSK	100	0	14.68	14.75	14.72	14.66	14.52	
20	16QAM	1	0	15.04	14.84	14.72	14.68	14.57	
20	16QAM	1	49	15.02	14.93	15.09	14.93	15.01	16
20	16QAM	1	99	14.97	14.98	14.82	14.54	14.87	
20	16QAM	50	0	14.87	14.78	14.76	14.70	14.84	
20	16QAM	50	24	14.88	14.89	14.68	14.78	14.79	
20	16QAM	50	50	14.82	14.87	14.91	14.69	14.87	16
20	16QAM	100	0	14.79	14.75	14.86	14.69	14.70	
20	64QAM	1	0	14.92	14.71	14.57	14.48	14.38	
20	64QAM	1	49	14.81	14.71	15.00	14.74	14.77	
20	64QAM	1	99	14.79	14.88	14.66	14.36	14.74	16
20	64QAM	50	0	14.85	14.78	14.80	14.72	14.67	
20	64QAM	50	24	14.88	14.87	15.01	14.79	14.80	
20	64QAM	50	50	14.80	14.89	14.94	14.70	14.90	
20	64QAM	100	0	14.75	14.79	14.90	14.69	14.73	
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	14.67	14.49	14.61	14.46	14.37	16
15	QPSK	1	37	14.64	14.65	14.67	14.55	14.61	
15	QPSK	1	74	14.64	14.60	14.47	14.47	14.39	
15	QPSK	36	0	14.83	14.64	14.78	14.54	14.59	
15	QPSK	36	20	14.76	14.83	14.78	14.63	14.74	16
15	QPSK	36	39	14.74	14.81	14.75	14.71	14.61	
15	QPSK	75	0	14.71	14.79	14.72	14.59	14.65	
15	16QAM	1	0	15.02	14.71	14.68	14.85	14.72	
15	16QAM	1	37	14.97	14.94	15.08	14.96	14.99	16
15	16QAM	1	74	14.98	14.78	14.96	14.75	14.99	
15	16QAM	36	0	14.84	14.65	14.77	14.67	14.84	
15	16QAM	36	20	14.88	14.80	14.91	14.76	14.84	
15	16QAM	36	39	14.85	14.73	14.89	14.59	14.81	16
15	16QAM	75	0	14.82	14.78	14.90	14.78	14.72	
15	64QAM	1	0	14.89	14.52	14.75	14.63	14.56	
15	64QAM	1	37	14.88	14.80	15.04	14.82	14.89	
15	64QAM	1	74	14.82	14.89	14.86	14.61	14.88	16
15	64QAM	36	0	14.87	14.48	14.50	14.39	14.40	
15	64QAM	36	20	14.87	14.86	15.00	14.83	14.87	
15	64QAM	36	39	14.84	14.78	14.95	14.73	14.85	
15	64QAM	75	0	14.80	14.81	14.91	14.79	14.73	
Channel				39700	40160	40620	41080	41540	Tune-up limit [dBm]
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	14.44	14.18	14.21	14.06	14.15	16
10	QPSK	1	25	14.43	14.41	14.46	14.32	14.36	
10	QPSK	1	49	14.42	14.20	14.20	14.03	14.10	
10	QPSK	25	0	14.61	14.48	14.50	14.39	14.40	
10	QPSK	25	13	14.62	14.64	14.59	14.53	14.49	16
10	QPSK	25	25	14.57	14.52	14.55	14.41	14.43	
10	QPSK	50	0	14.63	14.52	14.49	14.48	14.39	
10	16QAM	1	0	14.87	14.56	14.66	14.58	14.63	
10	16QAM	1	25	14.62	14.79	14.62	14.83	14.62	16
10	16QAM	1	49	14.61	14.57	14.67	14.60	14.59	
10	16QAM	25	0	14.75	14.52	14.64	14.55	14.56	
10	16QAM	25	12	14.71	14.70	14.82	14.68	14.77	
10	16QAM	25	25	14.72	14.59	14.68	14.61	14.62	16
10	16QAM	50	0	14.65	14.62	14.72	14.57	14.66	
10	64QAM	1	0	14.90	14.37	14.57	14.40	14.46	
10	64QAM	1	25	14.72	14.65	14.90	14.69	14.76	
10	64QAM	1	49	14.74	14.45	14.60	14.46	14.50	16
10	64QAM	25	0	14.78	14.61	14.69	14.56	14.64	
10	64QAM	25	12	14.80	14.76	14.86	14.68	14.61	
10	64QAM	25	25	14.77	14.68	14.77	14.64	14.68	
10	64QAM	50	0	14.67	14.63	14.75	14.54	14.63	
Channel				39675	40146	40620	41093	41565	Tune-up limit [dBm]
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5	
5	QPSK	1	0	14.68	14.30	14.39	14.22	14.30	16
5	QPSK	1	12	14.46	14.49	14.49	14.36	14.41	
5	QPSK	1	24	14.44	14.30	14.40	14.24	14.23	
5	QPSK	12	0	14.64	14.59	14.61	14.48	14.52	
5	QPSK	12	7	14.68	14.63	14.59	14.50	14.54	16
5	QPSK	12	13	14.60	14.56	14.60	14.51	14.51	
5	QPSK	25	0	14.59	14.57	14.54	14.44	14.48	
5	16QAM	1	0	14.88	14.81	14.83	14.77	14.82	
5	16QAM	1	12	14.82	14.91	14.89	14.86	14.84	16
5	16QAM	1	24	14.84	14.86	14.87	14.83	14.78	
5	16QAM	12	0	14.72	14.84	14.74	14.65	14.73	
5	16QAM	12	7	14.73	14.75	14.81	14.69	14.76	
5	16QAM	12	13	14.71	14.70	14.74	14.68	14.74	16
5	16QAM	25	0	14.68	14.70	14.79	14.68	14.74	
5	64QAM	1	0	14.78	14.63	14.74	14.63	14.72	
5	64QAM	1	12	14.75	14.71	14.81	14.69	14.73	
5	64QAM	1	24	14.76	14.69	14.84	14.71	14.68	16
5	64QAM	12	0	14.72	14.68	14.75	14.60	14.74	
5	64QAM	12	7	14.78	14.74	14.83	14.64	14.75	
5	64QAM	12	13	14.76	14.73	14.79	14.69	14.68	
5	64QAM	25	0	14.71	14.71	14.80	14.62	14.75	



Band 38_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2550	2555	2510	
20	QPSK	1	0	19.73	19.90	19.63	20.5
20	QPSK	1	49	19.76	19.71	19.67	
20	QPSK	1	99	19.76	19.70	19.63	
20	QPSK	50	0	19.63	19.58	19.52	20.5
20	QPSK	50	24	19.83	19.75	19.61	
20	QPSK	50	50	19.72	19.68	19.60	
20	QPSK	100	0	19.70	19.67	19.52	20.5
20	16QAM	1	0	19.87	19.86	19.78	
20	16QAM	1	49	19.86	19.81	19.77	
20	16QAM	1	99	19.90	19.83	19.78	20.5
20	16QAM	50	0	19.65	19.62	19.56	
20	16QAM	50	24	19.83	19.80	19.68	
20	16QAM	50	50	19.75	19.70	19.63	20.5
20	16QAM	100	0	19.74	19.69	19.54	
20	64QAM	1	0	19.58	19.57	19.49	
20	64QAM	1	49	19.62	19.53	19.51	20.5
20	64QAM	1	99	19.64	19.56	19.53	
20	64QAM	50	0	19.64	19.59	19.52	
20	64QAM	50	24	19.83	19.76	19.63	20.5
20	64QAM	50	50	19.74	19.69	19.62	
20	64QAM	100	0	19.71	19.66	19.52	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.68	19.65	19.56	20.5
15	QPSK	1	37	19.67	19.66	19.57	
15	QPSK	1	74	19.70	19.69	19.60	
15	QPSK	36	0	19.65	19.60	19.55	20.5
15	QPSK	36	20	19.82	19.76	19.62	
15	QPSK	36	39	19.74	19.69	19.61	
15	QPSK	75	0	19.74	19.70	19.54	20.5
15	16QAM	1	0	19.87	19.84	19.75	
15	16QAM	1	37	19.77	19.78	19.75	
15	16QAM	1	74	19.91	19.84	19.77	20.5
15	16QAM	36	0	19.61	19.59	19.51	
15	16QAM	36	20	19.79	19.75	19.61	
15	16QAM	36	39	19.72	19.68	19.60	20.5
15	16QAM	75	0	19.78	19.73	19.58	
15	64QAM	1	0	19.54	19.53	19.43	
15	64QAM	1	37	19.59	19.52	19.51	20.5
15	64QAM	1	74	19.64	19.54	19.51	
15	64QAM	36	0	19.66	19.63	19.56	
15	64QAM	36	20	19.83	19.79	19.62	20.5
15	64QAM	36	39	19.76	19.71	19.65	
15	64QAM	75	0	19.75	19.72	19.58	
Channel				37690	38000	38210	
Frequency (MHz)				2572	2595	2615	
10	QPSK	1	0	19.04	19.34	19.26	20.5
10	QPSK	1	25	19.37	19.32	19.27	
10	QPSK	1	49	19.14	19.42	19.32	
10	QPSK	25	0	19.40	19.37	19.29	20.5
10	QPSK	25	12	19.50	19.53	19.37	
10	QPSK	25	25	19.50	19.47	19.38	
10	QPSK	50	0	19.46	19.46	19.30	20.5
10	16QAM	1	0	19.40	19.70	19.64	
10	16QAM	1	25	19.75	19.74	19.61	
10	16QAM	1	49	19.47	19.70	19.64	20.5
10	16QAM	25	0	19.42	19.39	19.30	
10	16QAM	25	12	19.64	19.58	19.42	
10	16QAM	25	25	19.52	19.50	19.42	20.5
10	16QAM	50	0	19.54	19.50	19.34	
10	64QAM	1	0	19.26	19.62	19.50	
10	64QAM	1	25	19.68	19.67	19.60	20.5
10	64QAM	1	49	19.41	19.68	19.60	
10	64QAM	25	0	19.48	19.48	19.40	
10	64QAM	25	12	19.67	19.66	19.51	20.5
10	64QAM	25	25	19.57	19.56	19.50	
10	64QAM	50	0	19.53	19.53	19.38	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.27	19.22	19.19	20.5
5	QPSK	1	12	19.36	19.36	19.30	
5	QPSK	1	24	19.35	19.30	19.24	
5	QPSK	12	0	19.52	19.45	19.35	20.5
5	QPSK	12	7	19.57	19.57	19.46	
5	QPSK	12	13	19.54	19.52	19.43	
5	QPSK	25	0	19.51	19.46	19.41	20.5
5	16QAM	1	0	19.57	19.55	19.44	
5	16QAM	1	12	19.66	19.67	19.57	
5	16QAM	1	24	19.67	19.64	19.56	20.5
5	16QAM	12	0	19.55	19.48	19.40	
5	16QAM	12	7	19.80	19.58	19.51	
5	16QAM	12	13	19.59	19.52	19.47	20.5
5	16QAM	25	0	19.59	19.57	19.45	
5	64QAM	1	0	19.42	19.49	19.37	
5	64QAM	1	12	19.58	19.62	19.53	20.5
5	64QAM	1	24	19.58	19.60	19.48	
5	64QAM	12	0	19.53	19.54	19.44	
5	64QAM	12	7	19.63	19.62	19.54	20.5
5	64QAM	12	13	19.61	19.60	19.50	
5	64QAM	25	0	19.59	19.62	19.51	



Band 41_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.3	2593	2636.5	2680	
20	QPSK	1	0	19.73	19.74	19.75	19.47	19.31	20.5
20	QPSK	1	49	19.78	19.80	19.83	19.76	19.74	
20	QPSK	1	99	19.71	19.79	19.86	19.34	19.84	
20	QPSK	50	0	19.81	19.73	19.74	19.68	19.80	
20	QPSK	50	24	19.82	19.84	19.95	19.73	19.79	20.5
20	QPSK	50	50	19.78	19.83	19.86	19.86	19.78	
20	QPSK	100	0	19.75	19.75	19.85	19.82	19.87	
20	16QAM	1	0	19.93	19.92	19.80	19.59	19.42	
20	16QAM	1	49	19.84	19.89	19.91	19.87	19.85	20.5
20	16QAM	1	99	19.83	19.89	19.85	19.45	19.74	
20	16QAM	50	0	19.88	19.77	19.76	19.72	19.84	
20	16QAM	50	24	19.87	19.88	19.95	19.78	19.79	
20	16QAM	50	50	19.83	19.87	19.91	19.71	19.84	20.5
20	16QAM	100	0	19.79	19.77	19.87	19.85	19.89	
20	64QAM	1	0	19.72	19.70	19.32	19.32	19.13	
20	64QAM	1	49	19.62	19.69	19.73	19.80	19.58	
20	64QAM	1	99	19.60	19.95	19.42	19.20	19.52	20.5
20	64QAM	50	0	19.87	19.77	19.76	19.70	19.60	
20	64QAM	50	24	19.86	19.87	19.95	19.76	19.78	
20	64QAM	50	50	19.83	19.88	19.90	19.70	19.84	
20	64QAM	100	0	19.79	19.78	19.86	19.85	19.89	
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	19.76	19.47	19.58	19.51	19.49	20.5
15	QPSK	1	37	19.73	19.83	19.81	19.66	19.88	
15	QPSK	1	74	19.71	19.46	19.70	19.41	19.84	
15	QPSK	36	0	19.84	19.69	19.76	19.66	19.65	
15	QPSK	36	20	19.84	19.84	19.94	19.81	19.83	20.5
15	QPSK	36	39	19.80	19.75	19.90	19.71	19.83	
15	QPSK	75	0	19.80	19.77	19.87	19.74	19.89	
15	16QAM	1	0	19.93	19.72	19.77	19.77	19.58	
15	16QAM	1	37	19.79	19.90	19.96	19.88	19.86	20.5
15	16QAM	1	74	19.85	19.79	19.84	19.65	19.88	
15	16QAM	36	0	19.83	19.67	19.76	19.68	19.61	
15	16QAM	36	20	19.80	19.83	19.91	19.80	19.82	
15	16QAM	36	39	19.79	19.74	19.89	19.71	19.80	20.5
15	16QAM	75	0	19.85	19.79	19.91	19.78	19.72	
15	64QAM	1	0	19.67	19.43	19.44	19.51	19.31	
15	64QAM	1	37	19.65	19.72	19.72	19.65	19.61	
15	64QAM	1	74	19.62	19.82	19.55	19.44	19.83	20.5
15	64QAM	36	0	19.87	19.49	19.81	19.71	19.84	
15	64QAM	36	20	19.88	19.88	19.98	19.83	19.87	
15	64QAM	36	39	19.85	19.76	19.92	19.71	19.84	
15	64QAM	75	0	19.84	19.80	19.90	19.76	19.71	
Channel				39700	40180	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2638	2683	
10	QPSK	1	0	19.45	19.20	19.28	19.16	19.19	20.5
10	QPSK	1	25	19.44	19.47	19.54	19.43	19.44	
10	QPSK	1	49	19.50	19.27	19.34	19.27	19.19	
10	QPSK	25	0	19.64	19.49	19.58	19.46	19.50	
10	QPSK	25	13	19.65	19.64	19.73	19.53	19.65	20.5
10	QPSK	25	25	19.62	19.55	19.65	19.52	19.54	
10	QPSK	50	0	19.59	19.59	19.64	19.48	19.58	
10	16QAM	1	0	19.85	19.57	19.67	19.54	19.52	
10	16QAM	1	25	19.81	19.86	19.87	19.80	19.79	20.5
10	16QAM	1	49	19.80	19.58	19.64	19.55	19.54	
10	16QAM	25	0	19.69	19.56	19.62	19.52	19.52	
10	16QAM	25	12	19.72	19.77	19.80	19.62	19.71	
10	16QAM	25	25	19.67	19.63	19.67	19.57	19.61	20.5
10	16QAM	50	0	19.63	19.67	19.69	19.52	19.62	
10	64QAM	1	0	19.78	19.47	19.69	19.40	19.46	
10	64QAM	1	25	19.79	19.84	19.83	19.82	19.78	
10	64QAM	1	49	19.75	19.60	19.57	19.46	19.50	20.5
10	64QAM	25	0	19.76	19.58	19.67	19.53	19.60	
10	64QAM	25	12	19.77	19.76	19.80	19.64	19.76	
10	64QAM	25	25	19.73	19.66	19.72	19.58	19.67	
10	64QAM	50	0	19.61	19.65	19.68	19.49	19.64	
Channel				38675	40146	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.38	2687.5	
5	QPSK	1	0	19.83	19.44	19.50	19.38	19.47	20.5
5	QPSK	1	12	19.43	19.48	19.57	19.47	19.40	
5	QPSK	1	24	19.46	19.54	19.53	19.43	19.43	
5	QPSK	12	0	19.64	19.61	19.65	19.53	19.84	
5	QPSK	12	7	19.71	19.67	19.74	19.59	19.66	20.5
5	QPSK	12	13	19.66	19.66	19.73	19.60	19.61	
5	QPSK	25	0	19.60	19.60	19.68	19.51	19.60	
5	16QAM	1	0	19.78	19.61	19.79	19.63	19.73	
5	16QAM	1	12	19.76	19.66	19.84	19.67	19.70	20.5
5	16QAM	1	24	19.77	19.64	19.84	19.68	19.69	
5	16QAM	12	0	19.71	19.65	19.72	19.55	19.67	
5	16QAM	12	7	19.74	19.72	19.80	19.59	19.70	
5	16QAM	12	13	19.67	19.68	19.75	19.63	19.66	20.5
5	16QAM	25	0	19.68	19.70	19.78	19.59	19.67	
5	64QAM	1	0	19.73	19.63	19.67	19.55	19.66	
5	64QAM	1	12	19.70	19.76	19.77	19.64	19.71	
5	64QAM	1	24	19.73	19.71	19.75	19.62	19.66	20.5
5	64QAM	12	0	19.73	19.65	19.71	19.56	19.69	
5	64QAM	12	7	19.74	19.72	19.79	19.64	19.72	
5	64QAM	12	13	19.69	19.72	19.78	19.64	19.69	
5	64QAM	25	0	19.74	19.71	19.77	19.60	19.69	



Band 41_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2500	2543.3	2587	2630.5	2675	
20	QPSK	1	0	19.86	19.65	19.38	19.38	19.19	20.5
20	QPSK	1	49	19.82	19.63	19.71	19.81	19.58	
20	QPSK	1	99	19.83	19.89	19.44	19.21	19.53	
20	QPSK	50	0	19.83	19.74	19.73	19.68	19.60	
20	QPSK	50	24	19.83	19.85	19.83	19.73	19.75	20.5
20	QPSK	50	50	19.78	19.84	19.85	19.85	19.82	
20	QPSK	100	0	19.77	19.74	19.84	19.85	19.87	
20	16QAM	1	0	20.13	20.12	19.76	19.74	19.60	
20	16QAM	1	49	20.00	20.08	20.12	19.97	19.94	20.5
20	16QAM	1	99	19.87	20.16	19.84	19.59	19.85	
20	16QAM	50	0	19.86	19.77	19.77	19.71	19.82	
20	16QAM	50	24	19.88	19.88	19.88	19.78	19.79	
20	16QAM	50	50	19.82	19.87	19.91	19.71	19.87	20.5
20	16QAM	100	0	19.79	19.76	19.87	19.66	19.70	
20	64QAM	1	0	19.85	19.80	19.58	19.55	19.36	
20	64QAM	1	49	19.84	19.84	19.87	19.83	19.78	
20	64QAM	1	99	19.83	20.02	19.67	19.44	19.75	20.5
20	64QAM	50	0	19.88	19.75	19.77	19.71	19.61	
20	64QAM	50	24	19.89	19.86	19.87	19.74	19.80	
20	64QAM	50	50	19.84	19.88	19.88	19.68	19.82	
20	64QAM	100	0	19.80	19.79	19.84	19.85	19.87	
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	19.73	19.43	19.54	19.49	19.37	20.5
15	QPSK	1	37	19.89	19.63	19.76	19.60	19.86	
15	QPSK	1	74	19.88	19.44	19.63	19.37	19.65	
15	QPSK	36	0	19.86	19.68	19.75	19.68	19.64	
15	QPSK	36	20	19.83	19.85	19.91	19.78	19.85	20.5
15	QPSK	36	39	19.81	19.77	19.89	19.71	19.83	
15	QPSK	75	0	19.81	19.76	19.87	19.71	19.87	
15	16QAM	1	0	20.03	19.84	19.87	19.86	19.74	
15	16QAM	1	37	20.06	20.18	20.10	19.99	20.00	20.5
15	16QAM	1	74	19.89	19.91	19.99	19.81	19.96	
15	16QAM	36	0	19.86	19.69	19.76	19.69	19.62	
15	16QAM	36	20	19.83	19.84	19.91	19.80	19.82	
15	16QAM	36	39	19.81	19.77	19.89	19.71	19.82	20.5
15	16QAM	75	0	19.84	19.82	19.88	19.77	19.72	
15	64QAM	1	0	19.85	19.68	19.72	19.71	19.57	
15	64QAM	1	37	19.83	20.03	19.94	19.85	19.86	
15	64QAM	1	74	19.80	19.85	19.81	19.65	19.84	20.5
15	64QAM	36	0	19.87	19.72	19.79	19.71	19.64	
15	64QAM	36	20	19.89	19.86	19.85	19.80	19.83	
15	64QAM	36	39	19.87	19.79	19.91	19.72	19.83	
15	64QAM	75	0	19.84	19.80	19.90	19.77	19.69	
Channel				39700	40180	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	19.53	19.21	19.28	19.14	19.20	20.5
10	QPSK	1	25	19.44	19.51	19.54	19.44	19.45	
10	QPSK	1	49	19.46	19.33	19.35	19.27	19.27	
10	QPSK	25	0	19.65	19.52	19.61	19.45	19.53	
10	QPSK	25	12	19.67	19.68	19.77	19.55	19.67	20.5
10	QPSK	25	25	19.66	19.56	19.67	19.52	19.57	
10	QPSK	50	0	19.60	19.62	19.68	19.48	19.59	
10	16QAM	1	0	19.91	19.59	19.69	19.52	19.57	
10	16QAM	1	25	19.84	19.86	19.88	19.78	19.80	20.5
10	16QAM	1	49	19.82	19.60	19.69	19.56	19.54	
10	16QAM	25	0	19.89	19.56	19.64	19.53	19.53	
10	16QAM	25	12	19.72	19.74	19.81	19.83	19.71	
10	16QAM	25	25	19.86	19.63	19.68	19.57	19.60	20.5
10	16QAM	50	0	19.85	19.66	19.71	19.54	19.64	
10	64QAM	1	0	19.83	19.50	19.52	19.42	19.48	
10	64QAM	1	25	19.75	19.99	19.84	19.78	19.77	
10	64QAM	1	49	19.71	19.62	19.54	19.45	19.53	20.5
10	64QAM	25	0	19.76	19.62	19.65	19.55	19.62	
10	64QAM	25	12	19.78	19.79	19.86	19.83	19.79	
10	64QAM	25	25	19.74	19.67	19.73	19.61	19.68	
10	64QAM	50	0	19.82	19.63	19.69	19.50	19.63	
Channel				38675	40146	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5	
5	QPSK	1	0	19.50	19.50	19.50	19.42	19.48	20.5
5	QPSK	1	12	19.46	19.47	19.56	19.48	19.48	
5	QPSK	1	24	19.50	19.52	19.50	19.45	19.44	
5	QPSK	12	0	19.68	19.60	19.70	19.54	19.84	
5	QPSK	12	7	19.73	19.69	19.77	19.55	19.66	20.5
5	QPSK	12	13	19.66	19.66	19.73	19.61	19.63	
5	QPSK	25	0	19.83	19.60	19.72	19.52	19.61	
5	16QAM	1	0	19.83	19.61	19.79	19.63	19.70	
5	16QAM	1	12	19.75	19.67	19.86	19.69	19.69	20.5
5	16QAM	1	24	19.83	19.71	19.87	19.68	19.70	
5	16QAM	12	0	19.71	19.66	19.72	19.57	19.68	
5	16QAM	12	7	19.74	19.71	19.77	19.58	19.67	
5	16QAM	12	13	19.70	19.72	19.76	19.65	19.62	20.5
5	16QAM	25	0	19.72	19.71	19.78	19.59	19.68	
5	64QAM	1	0	19.73	19.65	19.68	19.56	19.69	
5	64QAM	1	12	19.73	19.75	19.77	19.69	19.69	
5	64QAM	1	24	19.72	19.73	19.76	19.66	19.68	20.5
5	64QAM	12	0	19.73	19.67	19.74	19.61	19.72	
5	64QAM	12	7	19.75	19.73	19.80	19.61	19.75	
5	64QAM	12	13	19.72	19.73	19.77	19.64	19.69	
5	64QAM	25	0	19.73	19.71	19.80	19.58	19.70	



Band 38_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2550	2595	2610	
20	QPSK	1	0	18.15	18.14	18.11	19
20	QPSK	1	49	18.19	18.18	18.12	
20	QPSK	1	99	18.19	18.14	18.08	
20	QPSK	50	0	18.03	18.02	17.97	19
20	QPSK	50	24	18.24	18.21	18.08	
20	QPSK	50	50	18.15	18.12	18.07	
20	QPSK	100	0	18.14	18.11	18.00	19
20	16QAM	1	0	18.35	18.34	18.25	
20	16QAM	1	49	18.29	18.22	18.22	
20	16QAM	1	99	18.31	18.27	18.23	19
20	16QAM	50	0	18.08	18.07	18.02	
20	16QAM	50	24	18.28	18.27	18.13	
20	16QAM	50	50	18.20	18.18	18.12	19
20	16QAM	100	0	18.18	18.14	18.02	
20	64QAM	1	0	18.03	18.10	18.03	
20	64QAM	1	49	18.08	18.03	18.05	19
20	64QAM	1	99	18.14	18.07	18.05	
20	64QAM	50	0	18.10	18.07	18.03	
20	64QAM	50	24	18.32	18.28	18.14	19
20	64QAM	50	50	18.21	18.18	18.13	
20	64QAM	100	0	18.19	18.15	18.03	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	18.15	18.13	18.08	19
15	QPSK	1	37	18.15	18.10	17.88	
15	QPSK	1	74	18.15	18.13	18.03	
15	QPSK	36	0	18.10	18.07	18.01	19
15	QPSK	36	20	18.27	18.21	18.11	
15	QPSK	36	39	18.17	18.15	18.09	
15	QPSK	75	0	18.10	18.16	18.01	19
15	16QAM	1	0	18.30	18.29	18.21	
15	16QAM	1	37	18.23	18.20	18.19	
15	16QAM	1	74	18.34	18.26	18.20	19
15	16QAM	36	0	18.11	18.06	17.96	
15	16QAM	36	20	18.24	18.20	18.04	
15	16QAM	36	39	18.20	18.12	18.05	19
15	16QAM	75	0	18.24	18.19	18.04	
15	64QAM	1	0	17.99	18.01	17.95	
15	64QAM	1	37	18.08	18.01	18.04	19
15	64QAM	1	74	18.11	17.97	18.00	
15	64QAM	36	0	18.16	18.10	18.05	
15	64QAM	36	20	18.32	18.28	18.15	19
15	64QAM	36	39	18.24	18.19	18.15	
15	64QAM	75	0	18.23	18.19	18.08	
Channel				37690	38000	38210	
Frequency (MHz)				2572.5	2595	2615	
10	QPSK	1	0	18.15	18.11	18.08	19
10	QPSK	1	25	18.10	18.15	17.91	
10	QPSK	1	49	18.24	18.22	18.04	
10	QPSK	25	0	18.08	17.97	17.95	19
10	QPSK	25	12	18.29	18.11	18.18	
10	QPSK	25	25	18.27	18.23	18.08	
10	QPSK	50	0	18.24	18.18	18.10	19
10	16QAM	1	0	18.21	18.34	18.23	
10	16QAM	1	25	18.25	18.24	18.12	
10	16QAM	1	49	18.32	18.31	18.27	19
10	16QAM	25	0	18.04	18.01	17.99	
10	16QAM	25	12	18.26	18.20	18.08	
10	16QAM	25	25	18.10	18.09	18.03	19
10	16QAM	50	0	18.34	18.11	17.96	
10	64QAM	1	0	18.09	18.08	17.98	
10	64QAM	1	25	18.02	17.92	18.11	19
10	64QAM	1	49	18.20	17.91	17.98	
10	64QAM	25	0	18.07	18.02	18.00	
10	64QAM	25	12	18.27	18.27	18.08	19
10	64QAM	25	25	18.26	18.12	18.12	
10	64QAM	50	0	18.21	18.20	18.09	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	18.25	18.03	18.07	19
5	QPSK	1	12	18.10	18.04	17.92	
5	QPSK	1	24	18.09	18.16	17.95	
5	QPSK	12	0	18.10	18.06	17.97	19
5	QPSK	12	7	18.26	18.13	18.06	
5	QPSK	12	13	18.16	18.18	18.13	
5	QPSK	25	0	18.20	18.06	18.05	19
5	16QAM	1	0	18.28	18.21	18.28	
5	16QAM	1	12	18.31	18.28	18.23	
5	16QAM	1	24	18.35	18.24	18.17	19
5	16QAM	12	0	18.06	17.96	17.94	
5	16QAM	12	7	18.17	18.17	18.10	
5	16QAM	12	13	18.16	18.06	18.12	19
5	16QAM	25	0	18.34	18.14	18.01	
5	64QAM	1	0	18.00	18.02	17.89	
5	64QAM	1	12	18.12	18.08	18.13	19
5	64QAM	1	24	18.13	17.96	17.96	
5	64QAM	12	0	18.19	18.14	18.16	
5	64QAM	12	7	18.32	18.23	18.14	19
5	64QAM	12	13	18.34	18.20	18.09	
5	64QAM	25	0	18.14	18.23	18.10	



Band 41_Ant 2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2500	2543.5	2593	2636.5	2690	
20	QPSK	1	0	18.71	18.65	18.48	18.45	18.32	19.5
20	QPSK	1	49	18.73	18.70	18.82	18.76	18.70	
20	QPSK	1	99	18.86	18.70	18.83	18.34	18.83	
20	QPSK	50	0	18.77	18.88	18.71	18.87	18.59	
20	QPSK	50	24	18.77	18.80	18.92	18.72	18.75	19.5
20	QPSK	50	50	18.72	18.76	18.85	18.85	18.81	
20	QPSK	100	0	18.69	18.68	18.81	18.83	18.86	
20	16QAM	1	0	18.83	18.75	18.80	18.83	18.44	
20	16QAM	1	49	18.79	18.72	18.84	18.92	18.82	19.5
20	16QAM	1	99	18.77	18.85	18.68	18.51	18.75	
20	16QAM	50	0	18.81	18.75	18.74	18.71	18.84	
20	16QAM	50	24	18.82	18.86	18.97	18.78	18.79	
20	16QAM	50	50	18.77	18.85	18.89	18.72	18.83	19.5
20	16QAM	100	0	18.71	18.74	18.85	18.85	18.71	
20	64QAM	1	0	18.65	18.73	18.29	18.43	18.13	
20	64QAM	1	49	18.67	18.64	18.71	18.85	18.57	
20	64QAM	1	99	18.53	18.87	18.37	18.29	18.51	19.5
20	64QAM	50	0	18.83	18.74	18.77	18.72	18.64	
20	64QAM	50	24	18.83	18.83	18.95	18.78	18.80	
20	64QAM	50	50	18.78	18.82	18.90	18.89	18.85	
20	64QAM	100	0	18.73	18.74	18.86	18.89	18.70	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	18.72	18.49	18.55	18.50	18.39	19.5
15	QPSK	1	37	18.64	18.71	18.76	18.56	18.66	
15	QPSK	1	74	18.65	18.49	18.63	18.38	18.65	
15	QPSK	36	0	18.79	18.63	18.74	18.69	18.62	
15	QPSK	36	20	18.80	18.76	18.93	18.82	18.84	19.5
15	QPSK	36	39	18.74	18.72	18.86	18.71	18.81	
15	QPSK	75	0	18.75	18.72	18.89	18.73	18.69	
15	16QAM	1	0	18.69	18.54	18.77	18.80	18.52	
15	16QAM	1	37	18.78	18.65	18.93	18.91	18.85	19.5
15	16QAM	1	74	18.84	18.60	18.82	18.70	18.89	
15	16QAM	36	0	18.77	18.65	18.72	18.69	18.60	
15	16QAM	36	20	18.77	18.79	18.90	18.79	18.81	
15	16QAM	36	39	18.73	18.70	18.85	18.72	18.81	19.5
15	16QAM	75	0	18.76	18.77	18.88	18.77	18.73	
15	64QAM	1	0	18.64	18.49	18.43	18.44	18.32	
15	64QAM	1	37	18.69	18.71	18.73	18.67	18.62	
15	64QAM	1	74	18.58	18.54	18.58	18.45	18.63	19.5
15	64QAM	36	0	18.83	18.67	18.79	18.73	18.68	
15	64QAM	36	20	18.83	18.85	18.95	18.85	18.85	
15	64QAM	36	39	18.78	18.74	18.93	18.74	18.84	
15	64QAM	75	0	18.77	18.77	18.91	18.75	18.72	
Channel				39700	40180	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	18.80	18.44	18.46	18.48	18.34	19.5
10	QPSK	1	25	18.61	18.71	18.80	18.59	18.72	
10	QPSK	1	49	18.69	18.41	18.54	18.47	18.56	
10	QPSK	25	0	18.69	18.58	18.76	18.75	18.66	
10	QPSK	25	13	18.75	18.72	18.87	18.89	18.81	19.5
10	QPSK	25	25	18.67	18.82	18.84	18.81	18.87	
10	QPSK	50	0	18.68	18.62	18.95	18.71	18.66	
10	16QAM	1	0	18.84	18.54	18.77	18.87	18.58	
10	16QAM	1	25	18.94	18.70	18.85	18.81	18.84	19.5
10	16QAM	1	49	18.78	18.57	18.92	18.87	18.84	
10	16QAM	25	0	18.77	18.63	18.63	18.69	18.53	
10	16QAM	25	12	18.76	18.71	18.93	18.81	18.78	
10	16QAM	25	25	18.88	18.76	18.91	18.88	18.74	19.5
10	16QAM	50	0	18.81	18.67	18.81	18.82	18.76	
10	64QAM	1	0	18.55	18.49	18.48	18.42	18.22	
10	64QAM	1	25	18.55	18.66	18.66	18.75	18.56	
10	64QAM	1	49	18.48	18.58	18.60	18.51	18.86	19.5
10	64QAM	25	0	18.73	18.65	18.81	18.72	18.58	
10	64QAM	25	12	18.86	18.76	18.85	18.85	18.84	
10	64QAM	25	25	18.89	18.80	18.87	18.73	18.74	
10	64QAM	50	0	18.86	18.80	18.90	18.69	18.66	
Channel				39675	40146	40620	41063	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5	
5	QPSK	1	0	18.67	18.56	18.56	18.48	18.41	19.5
5	QPSK	1	12	18.58	18.78	18.69	18.65	18.62	
5	QPSK	1	24	18.71	18.42	18.54	18.41	18.56	
5	QPSK	12	0	18.75	18.63	18.78	18.74	18.54	
5	QPSK	12	7	18.83	18.73	18.85	18.78	18.91	19.5
5	QPSK	12	13	18.67	18.66	18.87	18.79	18.79	
5	QPSK	25	0	18.77	18.62	18.95	18.83	18.73	
5	16QAM	1	0	18.80	18.56	18.80	18.85	18.68	
5	16QAM	1	12	18.68	18.63	18.95	18.92	18.79	19.5
5	16QAM	1	24	18.94	18.56	18.81	18.63	18.86	
5	16QAM	12	0	18.73	18.66	18.74	18.72	18.55	
5	16QAM	12	7	18.79	18.82	18.93	18.75	18.72	
5	16QAM	12	13	18.75	18.65	18.80	18.70	18.72	19.5
5	16QAM	25	0	18.78	18.71	18.86	18.81	18.82	
5	64QAM	1	0	18.62	18.57	18.47	18.36	18.27	
5	64QAM	1	12	18.63	18.64	18.81	18.71	18.62	
5	64QAM	1	24	18.59	18.52	18.68	18.50	18.53	19.5
5	64QAM	12	0	18.89	18.73	18.88	18.65	18.65	
5	64QAM	12	7	18.78	18.93	18.89	18.85	18.80	
5	64QAM	12	13	18.79	18.67	18.90	18.77	18.87	
5	64QAM	25	0	18.75	18.75	18.84	18.77	18.70	



Band 41 (2.6G Band)_Ant 2												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39790	39790	40185	40620	41055	41490			
Frequency (MHz)				2510	2506	25495	2593	26365	2680			
20	QPSK	1	0	18.80	18.81	18.50	18.38	18.38	18.21			
20	QPSK	1	49	18.56	18.62	18.57	18.73	18.63	18.61			19.5
20	QPSK	1	99	18.55	18.61	18.60	18.43	18.21	18.53			
20	QPSK	50	0	18.77	18.79	18.68	18.71	18.68	18.60			
20	QPSK	50	24	18.76	18.77	18.78	18.93	18.74	18.75			19.5
20	QPSK	50	50	18.73	18.74	18.78	18.85	18.68	18.82			
20	QPSK	100	0	18.69	18.70	18.68	18.81	18.64	18.66			
20	16QAM	1	0	19.03	19.06	18.89	18.70	18.93	18.57			
20	16QAM	1	49	18.94	19.00	18.95	19.10	19.07	19.01			19.5
20	16QAM	1	99	18.93	18.90	18.98	18.75	18.65	18.91			
20	16QAM	50	0	18.80	18.84	18.75	18.78	18.72	18.84			
20	16QAM	50	24	18.82	18.82	18.88	18.98	18.78	18.79			19.5
20	16QAM	50	50	18.78	18.78	18.87	18.88	18.73	18.86			
20	16QAM	100	0	18.73	18.74	18.75	18.84	18.66	18.72			
20	64QAM	1	0	18.91	18.92	18.93	18.53	18.70	18.40			
20	64QAM	1	49	18.90	18.85	18.85	18.86	18.86	18.83			19.5
20	64QAM	1	99	18.77	18.81	19.08	18.64	18.49	18.79			
20	64QAM	50	0	18.81	18.85	18.75	18.77	18.71	18.64			
20	64QAM	50	24	18.82	18.84	18.87	18.97	18.76	18.80			19.5
20	64QAM	50	50	18.78	18.78	18.84	18.90	18.69	18.86			
20	64QAM	100	0	18.73	18.78	18.75	18.86	18.70	18.70			
Channel				39765	39725	40173	40620	41063	41515			
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5			
15	QPSK	1	0	18.63	18.67	18.44	18.53	18.45	18.35			
15	QPSK	1	37	18.58	18.61	18.65	18.70	18.59	18.61			19.5
15	QPSK	1	74	18.56	18.61	18.43	18.64	18.23	18.61			
15	QPSK	36	0	18.75	18.79	18.63	18.73	18.68	18.61			
15	QPSK	36	20	18.75	18.76	18.77	18.92	18.80	18.80			19.5
15	QPSK	36	39	18.73	18.73	18.67	18.86	18.69	18.79			
15	QPSK	75	0	18.70	18.75	18.72	18.84	18.69	18.67			
15	16QAM	1	0	19.00	19.00	18.75	18.84	18.91	18.72			
15	16QAM	1	37	18.94	18.96	18.90	19.08	19.09	18.98			19.5
15	16QAM	1	74	18.92	18.96	18.73	18.97	18.79	19.00			
15	16QAM	36	0	18.77	18.78	18.67	18.73	18.69	18.61			
15	16QAM	36	20	18.74	18.77	18.82	18.90	18.78	18.80			19.5
15	16QAM	36	39	18.72	18.74	18.74	18.85	18.71	18.80			
15	16QAM	75	0	18.73	18.77	18.78	18.88	18.76	18.72			
15	64QAM	1	0	18.88	18.89	18.70	18.69	18.74	18.54			
15	64QAM	1	37	18.88	18.90	18.97	18.95	18.87	18.83			19.5
15	64QAM	1	74	18.78	18.83	18.81	18.80	18.56	18.84			
15	64QAM	36	0	18.78	18.82	18.66	18.77	18.70	18.65			
15	64QAM	36	20	18.81	18.84	18.83	18.98	18.84	18.84			19.5
15	64QAM	36	39	18.77	18.80	18.75	18.90	18.71	18.84			
15	64QAM	75	0	18.73	18.77	18.74	18.88	18.76	18.69			
Channel				39740	39700	40160	40620	41060	41540			
Frequency (MHz)				24926	24901	25447	2593	2639	2685			
10	QPSK	1	0	18.45	18.49	18.13	18.29	18.11	18.18			
10	QPSK	1	25	18.36	18.38	18.36	18.50	18.39	18.42			19.5
10	QPSK	1	49	18.44	18.46	18.21	18.28	18.19	18.26			
10	QPSK	25	0	18.57	18.60	18.48	18.57	18.46	18.69			
10	QPSK	25	12	18.57	18.58	18.63	18.73	18.63	18.65			19.5
10	QPSK	25	25	18.54	18.55	18.53	18.64	18.50	18.52			
10	QPSK	50	0	18.48	18.51	18.54	18.65	18.47	18.56			
10	16QAM	1	0	18.82	18.85	18.54	18.61	18.55	18.58			
10	16QAM	1	25	18.74	18.75	18.80	18.89	18.78	18.78			19.5
10	16QAM	1	49	18.71	18.76	18.57	18.66	18.53	18.56			
10	16QAM	25	0	18.61	18.65	18.56	18.60	18.51	18.53			
10	16QAM	25	12	18.64	18.67	18.75	18.78	18.63	18.73			19.5
10	16QAM	25	25	18.60	18.60	18.62	18.68	18.56	18.59			
10	16QAM	50	0	18.57	18.59	18.64	18.70	18.51	18.62			
10	64QAM	1	0	18.74	18.74	18.56	18.50	18.42	18.44			
10	64QAM	1	25	18.79	18.77	18.91	18.88	18.62	18.73			19.5
10	64QAM	1	49	18.70	18.71	18.64	18.56	18.51	18.49			
10	64QAM	25	0	18.71	18.70	18.60	18.70	18.56	18.57			
10	64QAM	25	12	18.71	18.73	18.77	18.83	18.64	18.76			19.5
10	64QAM	25	25	18.64	18.69	18.65	18.71	18.61	18.65			
10	64QAM	50	0	18.54	18.61	18.63	18.71	18.51	18.61			
Channel				39715	39675	40148	40620	41063	41565			
Frequency (MHz)				24902.5	24885	25458	2593	2640.30	2697.5			
5	QPSK	1	0	18.54	18.45	18.12	18.38	18.01	18.27			
5	QPSK	1	12	18.31	18.29	18.29	18.55	18.30	18.37			19.5
5	QPSK	1	24	18.51	18.45	18.25	18.29	18.27	18.33			
5	QPSK	12	0	18.61	18.66	18.45	18.66	18.48	18.45			
5	QPSK	12	7	18.61	18.60	18.56	18.67	18.48	18.56			19.5
5	QPSK	12	13	18.63	18.55	18.54	18.64	18.40	18.50			
5	QPSK	25	0	18.40	18.40	18.52	18.75	18.52	18.65			
5	16QAM	1	0	18.88	18.84	18.50	18.67	18.55	18.57			
5	16QAM	1	12	18.84	18.74	18.71	18.92	18.74	18.72			19.5
5	16QAM	1	24	18.78	18.79	18.56	18.76	18.54	18.54			
5	16QAM	12	0	18.68	18.74	18.56	18.69	18.52	18.43			
5	16QAM	12	7	18.58	18.62	18.67	18.73	18.55	18.69			19.5
5	16QAM	12	13	18.57	18.50	18.62	18.76	18.50	18.61			
5	16QAM	25	0	18.65	18.65	18.74	18.79	18.43	18.68			
5	64QAM	1	0	18.81	18.84	18.65	18.44	18.51	18.44			19.5
5	64QAM	1	12	18.80	18.75	18.83	18.80	18.84	18.78			
5	64QAM	1	24	18.67	18.66	18.63	18.55	18.61	18.38			
5	64QAM	12	0	18.81	18.77	18.58	18.64	18.54	18.49			19.5
5	64QAM	12	7	18.79	18.76	18.67	18.67	18.58	18.81			
5	64QAM	12	13	18.64	18.60	18.63	18.63	18.64	18.74			
5	64QAM	25	0	18.53	18.59	18.64	18.81	18.41	18.60			



Band 38_Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2550	2595	2610	
20	QPSK	1	0	18.15	18.14	18.11	19.5
20	QPSK	1	49	18.19	18.18	18.12	
20	QPSK	1	99	18.19	18.14	18.08	
20	QPSK	50	0	18.03	18.02	17.97	19.5
20	QPSK	50	24	18.24	18.21	18.08	
20	QPSK	50	50	18.15	18.12	18.07	
20	QPSK	100	0	18.14	18.11	18.00	19.5
20	16QAM	1	0	18.35	18.34	18.25	
20	16QAM	1	49	18.29	18.22	18.22	
20	16QAM	1	99	18.31	18.27	18.23	19.5
20	16QAM	50	0	18.05	18.07	18.02	
20	16QAM	50	24	18.28	18.27	18.13	
20	16QAM	50	50	18.20	18.18	18.12	19.5
20	16QAM	100	0	18.18	18.14	18.02	
20	64QAM	1	0	18.03	18.10	18.03	
20	64QAM	1	49	18.08	18.03	18.05	19.5
20	64QAM	1	99	18.14	18.07	18.05	
20	64QAM	50	0	18.10	18.07	18.03	
20	64QAM	50	24	18.32	18.28	18.14	19.5
20	64QAM	50	50	18.21	18.18	18.13	
20	64QAM	100	0	18.19	18.15	18.03	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	18.15	18.13	18.08	19.5
15	QPSK	1	37	18.15	18.10	17.88	
15	QPSK	1	74	18.15	18.13	18.03	
15	QPSK	36	0	18.10	18.07	18.01	19.5
15	QPSK	36	20	18.27	18.21	18.11	
15	QPSK	36	39	18.17	18.15	18.09	
15	QPSK	75	0	18.10	18.16	18.01	19.5
15	16QAM	1	0	18.30	18.29	18.21	
15	16QAM	1	37	18.23	18.20	18.19	
15	16QAM	1	74	18.34	18.26	18.20	19.5
15	16QAM	36	0	18.11	18.06	17.96	
15	16QAM	36	20	18.24	18.20	18.04	
15	16QAM	36	39	18.20	18.12	18.05	19.5
15	16QAM	75	0	18.24	18.19	18.04	
15	64QAM	1	0	17.99	18.01	17.95	
15	64QAM	1	37	18.08	18.01	18.04	19.5
15	64QAM	1	74	18.11	17.97	18.00	
15	64QAM	36	0	18.16	18.10	18.05	
15	64QAM	36	20	18.32	18.28	18.15	19.5
15	64QAM	36	39	18.24	18.19	18.15	
15	64QAM	75	0	18.23	18.19	18.08	
Channel				37690	38000	38210	
Frequency (MHz)				2572.5	2595	2615	
10	QPSK	1	0	18.15	18.11	18.08	19.5
10	QPSK	1	25	18.10	18.15	17.91	
10	QPSK	1	49	18.24	18.22	18.04	
10	QPSK	25	0	18.06	17.97	17.95	19.5
10	QPSK	25	12	18.29	18.11	18.18	
10	QPSK	25	25	18.27	18.23	18.08	
10	QPSK	50	0	18.24	18.18	18.10	19.5
10	16QAM	1	0	18.21	18.34	18.23	
10	16QAM	1	25	18.25	18.24	18.12	
10	16QAM	1	49	18.32	18.31	18.27	19.5
10	16QAM	25	0	18.04	18.01	17.99	
10	16QAM	25	12	18.26	18.20	18.08	
10	16QAM	25	25	18.10	18.09	18.03	19.5
10	16QAM	50	0	18.34	18.11	17.96	
10	64QAM	1	0	18.09	18.08	17.98	
10	64QAM	1	25	18.02	17.92	18.11	19.5
10	64QAM	1	49	18.20	17.91	17.98	
10	64QAM	25	0	18.07	18.02	18.00	
10	64QAM	25	12	18.27	18.27	18.08	19.5
10	64QAM	25	25	18.26	18.12	18.12	
10	64QAM	50	0	18.21	18.20	18.09	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	18.25	18.03	18.07	19.5
5	QPSK	1	12	18.10	18.04	17.92	
5	QPSK	1	24	18.09	18.16	17.95	
5	QPSK	12	0	18.10	18.06	17.97	19.5
5	QPSK	12	7	18.26	18.13	18.06	
5	QPSK	12	13	18.16	18.18	18.13	
5	QPSK	25	0	18.20	18.06	18.05	19.5
5	16QAM	1	0	18.28	18.21	18.28	
5	16QAM	1	12	18.31	18.28	18.23	
5	16QAM	1	24	18.35	18.24	18.17	19.5
5	16QAM	12	0	18.06	17.96	17.94	
5	16QAM	12	7	18.17	18.17	18.10	
5	16QAM	12	13	18.16	18.06	18.12	19.5
5	16QAM	25	0	18.34	18.14	18.01	
5	64QAM	1	0	18.00	18.02	17.89	
5	64QAM	1	12	18.12	18.08	18.13	19.5
5	64QAM	1	24	18.13	17.96	17.96	
5	64QAM	12	0	18.19	18.14	18.16	
5	64QAM	12	7	18.32	18.23	18.14	19.5
5	64QAM	12	13	18.34	18.20	18.09	
5	64QAM	25	0	18.14	18.23	18.10	



4G TDD Body_Ant 0,2_Table 6

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Band 41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	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	39790	40185	40680	41055	41490	
Frequency (MHz)				2510	2506	2549.5	2593	2634.5	2690	
20	QPSK	1	0	18.89	18.71	18.85	18.46	18.45	18.82	20
20	QPSK	1	49	18.71	18.73	18.70	18.82	18.78	18.70	
20	QPSK	1	99	18.67	18.66	18.70	18.53	18.34	18.63	
20	QPSK	50	0	18.75	18.77	18.88	18.71	18.67	18.99	
20	QPSK	50	24	18.75	18.77	18.80	18.92	18.72	18.75	20
20	QPSK	50	50	18.71	18.72	18.78	18.85	18.65	18.81	
20	QPSK	100	0	18.69	18.69	18.68	18.81	18.63	18.66	
20	16QAM	1	0	18.89	18.93	18.75	18.60	18.63	18.44	
20	16QAM	1	49	18.79	18.79	18.72	18.94	18.92	18.82	20
20	16QAM	1	99	18.74	18.77	18.85	18.66	18.51	18.75	
20	16QAM	50	0	18.78	18.81	18.75	18.74	18.71	18.64	
20	16QAM	50	24	18.78	18.82	18.86	18.97	18.78	18.78	
20	16QAM	50	50	18.73	18.77	18.85	18.89	18.72	18.83	20
20	16QAM	100	0	18.69	18.71	18.74	18.85	18.65	18.71	
20	64QAM	1	0	18.67	18.65	18.73	18.29	18.43	18.13	
20	64QAM	1	49	18.54	18.57	18.64	18.71	18.65	18.27	
20	64QAM	1	99	18.49	18.53	18.87	18.37	18.29	18.51	20
20	64QAM	50	0	18.81	18.83	18.74	18.77	18.72	18.64	
20	64QAM	50	24	18.79	18.83	18.83	18.95	18.78	18.80	
20	64QAM	50	50	18.76	18.76	18.82	18.90	18.69	18.85	
20	64QAM	100	0	18.73	18.73	18.74	18.86	18.69	18.70	
Channel				39785	39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2692.5	
15	QPSK	1	0	18.66	18.72	18.49	18.55	18.50	18.39	20
15	QPSK	1	37	18.61	18.64	18.71	18.76	18.58	18.66	
15	QPSK	1	74	18.61	18.65	18.49	18.63	18.29	18.65	
15	QPSK	36	0	18.74	18.79	18.63	18.74	18.69	18.62	
15	QPSK	36	20	18.75	18.80	18.76	18.93	18.82	18.84	20
15	QPSK	36	39	18.71	18.74	18.72	18.86	18.71	18.81	
15	QPSK	75	0	18.70	18.75	18.72	18.86	18.73	18.69	
15	16QAM	1	0	18.86	18.88	18.54	18.77	18.60	18.62	
15	16QAM	1	37	18.79	18.78	18.65	18.93	18.91	18.85	20
15	16QAM	1	74	18.78	18.84	18.60	18.82	18.70	18.89	
15	16QAM	36	0	18.73	18.77	18.85	18.72	18.69	18.60	
15	16QAM	36	20	18.74	18.77	18.79	18.90	18.79	18.81	
15	16QAM	36	39	18.70	18.73	18.70	18.85	18.72	18.81	20
15	16QAM	75	0	18.74	18.76	18.77	18.88	18.77	18.73	
15	64QAM	1	0	18.63	18.64	18.49	18.43	18.44	18.32	
15	64QAM	1	37	18.58	18.59	18.71	18.73	18.67	18.62	
15	64QAM	1	74	18.55	18.58	18.54	18.58	18.45	18.63	20
15	64QAM	36	0	18.80	18.83	18.67	18.79	18.73	18.68	
15	64QAM	36	20	18.80	18.83	18.85	18.95	18.85	18.85	
15	64QAM	36	39	18.79	18.78	18.74	18.93	18.74	18.84	
15	64QAM	75	0	18.77	18.77	18.77	18.91	18.75	18.72	
Channel				39740	39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				25026	25093	25487	2593	2639	2685	
10	QPSK	1	0	18.64	18.80	18.44	18.46	18.48	18.34	20
10	QPSK	1	25	18.59	18.61	18.71	18.80	18.59	18.72	
10	QPSK	1	49	18.56	18.69	18.41	18.54	18.47	18.56	
10	QPSK	25	0	18.71	18.68	18.96	18.78	18.75	18.86	
10	QPSK	25	12	18.84	18.75	18.72	18.87	18.84	18.81	20
10	QPSK	25	25	18.62	18.67	18.82	18.84	18.81	18.87	
10	QPSK	50	0	18.78	18.68	18.62	18.95	18.71	18.66	
10	16QAM	1	0	18.76	18.84	18.54	18.77	18.87	18.58	
10	16QAM	1	25	18.80	18.84	18.70	18.95	18.81	18.84	20
10	16QAM	1	49	18.78	18.76	18.57	18.92	18.67	18.84	
10	16QAM	25	0	18.79	18.77	18.63	18.63	18.69	18.53	
10	16QAM	25	12	18.76	18.76	18.71	18.93	18.81	18.79	
10	16QAM	25	25	18.72	18.68	18.76	18.91	18.68	18.74	20
10	16QAM	50	0	18.80	18.81	18.67	18.81	18.82	18.78	
10	64QAM	1	0	18.70	18.65	18.49	18.48	18.42	18.22	
10	64QAM	1	25	18.65	18.55	18.66	18.66	18.75	18.56	
10	64QAM	1	49	18.55	18.48	18.58	18.60	18.51	18.69	20
10	64QAM	25	0	18.82	18.73	18.85	18.81	18.72	18.58	
10	64QAM	25	12	18.85	18.66	18.76	18.85	18.85	18.84	
10	64QAM	25	25	18.82	18.88	18.80	18.87	18.73	18.74	
10	64QAM	50	0	18.72	18.86	18.80	18.90	18.69	18.66	
Channel				38715	38676	40148	40620	41093	41665	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2498.5	2543.8	2593	2640.30	2697.5	
5	QPSK	1	0	18.57	18.67	18.56	18.56	18.48	18.41	20
5	QPSK	1	12	18.63	18.56	18.78	18.69	18.65	18.62	
5	QPSK	1	24	18.67	18.71	18.42	18.54	18.41	18.56	
5	QPSK	12	0	18.67	18.75	18.63	18.78	18.74	18.54	
5	QPSK	12	7	18.67	18.83	18.73	18.85	18.78	18.91	20
5	QPSK	12	13	18.78	18.67	18.66	18.87	18.79	18.79	
5	QPSK	25	0	18.69	18.77	18.62	18.95	18.83	18.73	
5	16QAM	1	0	18.82	18.80	18.56	18.80	18.85	18.68	
5	16QAM	1	12	18.79	18.86	18.63	18.95	18.92	18.79	20
5	16QAM	1	24	18.69	18.94	18.56	18.81	18.63	18.86	
5	16QAM	12	0	18.68	18.73	18.66	18.74	18.72	18.85	
5	16QAM	12	7	18.83	18.78	18.82	18.93	18.75	18.72	
5	16QAM	12	13	18.64	18.75	18.65	18.80	18.70	18.72	20
5	16QAM	25	0	18.64	18.76	18.71	18.86	18.81	18.82	
5	64QAM	1	0	18.56	18.62	18.57	18.47	18.36	18.27	
5	64QAM	1	12	18.58	18.63	18.64	18.81	18.71	18.62	
5	64QAM	1	24	18.53	18.59	18.52	18.68	18.50	18.53	20
5	64QAM	12	0	18.76	18.88	18.73	18.88	18.65	18.65	
5	64QAM	12	7	18.82	18.76	18.93	18.89	18.85	18.80	
5	64QAM	12	13	18.88	18.79	18.67	18.90	18.77	18.87	
5	64QAM	25	0	18.86	18.73	18.75	18.84	18.77	18.70	

Band 41_Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	for IC Power Low Ch / Freq	Power Low / 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	39790	40185	40630	41055	41490	
Frequency (MHz)				2510	2506	2549.5	2593	2634.5	2670	
20	QPSK	1	0	18.80	18.81	18.50	18.38	18.30	18.21	20
20	QPSK	1	49	18.56	18.62	18.57	18.73	18.63	18.61	
20	QPSK	1	99	18.55	18.61	18.60	18.43	18.21	18.53	
20	QPSK	50	0	18.77	18.79	18.68	18.71	18.68	18.60	
20	QPSK	50	24	18.76	18.77	18.78	18.53	18.74	18.75	20
20	QPSK	50	50	18.73	18.74	18.76	18.85	18.68	18.82	
20	QPSK	100	0	18.69	18.70	18.68	18.81	18.64	18.66	
20	16QAM	1	0	19.03	19.06	18.89	18.70	18.93	18.57	
20	16QAM	1	49	18.94	19.00	18.95	19.10	19.07	19.01	20
20	16QAM	1	99	18.95	18.90	18.98	18.75	18.65	18.91	
20	16QAM	50	0	18.90	18.85	18.75	18.76	18.72	18.84	
20	16QAM	50	24	18.82	18.82	18.88	18.98	18.78	18.79	
20	16QAM	50	50	18.78	18.78	18.87	18.88	18.73	18.86	20
20	16QAM	100	0	18.73	18.74	18.75	18.84	18.66	18.72	
20	64QAM	1	0	18.91	18.92	18.93	18.53	18.70	18.40	
20	64QAM	1	49	18.86	18.85	18.85	18.88	18.88	18.83	
20	64QAM	1	99	18.77	18.81	19.08	18.64	18.49	18.79	20
20	64QAM	50	0	18.81	18.85	18.75	18.77	18.71	18.84	
20	64QAM	50	24	18.82	18.84	18.87	18.97	18.76	18.80	
20	64QAM	50	50	18.78	18.78	18.84	18.90	18.69	18.86	
20	64QAM	100	0	18.73	18.78	18.75	18.86	18.70	18.70	20
Channel				39765	39725	40173	40620	41063	41515	
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	18.63	18.67	18.44	18.53	18.45	18.35	
15	QPSK	1	37	18.58	18.61	18.65	18.70	18.59	18.61	
15	QPSK	1	74	18.56	18.61	18.43	18.64	18.23	18.61	
15	QPSK	36	20	18.75	18.79	18.63	18.73	18.68	18.61	
15	QPSK	36	20	18.75	18.76	18.77	18.52	18.80	18.80	20
15	QPSK	36	39	18.73	18.73	18.67	18.86	18.69	18.79	
15	QPSK	75	0	18.70	18.75	18.72	18.84	18.69	18.67	
15	16QAM	1	0	19.00	19.00	18.75	18.84	18.91	18.72	
15	16QAM	1	37	18.94	18.96	18.90	19.08	19.09	18.98	20
15	16QAM	1	74	18.92	18.96	18.73	18.97	18.79	19.00	
15	16QAM	36	0	18.77	18.78	18.67	18.73	18.69	18.61	
15	16QAM	36	20	18.74	18.77	18.82	18.90	18.78	18.80	
15	16QAM	36	39	18.72	18.74	18.74	18.85	18.71	18.80	20
15	16QAM	75	0	18.73	18.77	18.76	18.88	18.78	18.72	
15	64QAM	1	0	18.88	18.89	18.70	18.69	18.74	18.54	
15	64QAM	1	37	18.88	18.90	18.97	18.55	18.87	18.63	
15	64QAM	1	74	18.78	18.83	18.81	18.80	18.58	18.84	20
15	64QAM	36	0	18.79	18.82	18.66	18.77	18.70	18.65	
15	64QAM	36	20	18.81	18.84	18.83	18.98	18.84	18.84	
15	64QAM	36	39	18.77	18.80	18.75	18.90	18.71	18.84	
15	64QAM	75	0	18.73	18.77	18.74	18.88	18.78	18.69	20
Channel				39740	39700	40160	40610	41060	41540	
Frequency (MHz)				25026	2501	2547	2593	2639	2685	
10	QPSK	1	0	18.45	18.49	18.13	18.29	18.11	18.18	
10	QPSK	1	25	18.36	18.38	18.36	18.50	18.39	18.42	
10	QPSK	1	49	18.44	18.46	18.21	18.28	18.19	18.26	
10	QPSK	25	0	18.57	18.60	18.48	18.57	18.46	18.49	
10	QPSK	25	12	18.57	18.58	18.63	18.73	18.53	18.65	20
10	QPSK	25	25	18.54	18.55	18.53	18.64	18.50	18.52	
10	QPSK	50	0	18.48	18.51	18.54	18.65	18.47	18.56	
10	16QAM	1	0	18.82	18.85	18.54	18.61	18.55	18.58	
10	16QAM	1	25	18.74	18.75	18.80	18.89	18.78	18.78	20
10	16QAM	1	49	18.71	18.76	18.57	18.66	18.53	18.56	
10	16QAM	25	0	18.61	18.65	18.55	18.60	18.51	18.53	
10	16QAM	25	12	18.64	18.67	18.75	18.78	18.63	18.73	
10	16QAM	25	25	18.60	18.60	18.62	18.68	18.56	18.59	20
10	16QAM	50	0	18.57	18.58	18.64	18.70	18.51	18.62	
10	64QAM	1	0	18.74	18.74	18.56	18.50	18.42	18.44	
10	64QAM	1	25	18.79	18.77	18.91	18.88	18.82	18.73	
10	64QAM	1	49	18.70	18.71	18.64	18.58	18.51	18.48	20
10	64QAM	25	0	18.71	18.70	18.60	18.70	18.56	18.57	
10	64QAM	25	12	18.71	18.73	18.77	18.83	18.64	18.76	
10	64QAM	25	25	18.64	18.68	18.65	18.71	18.61	18.65	
10	64QAM	50	0	18.54	18.61	18.63	18.71	18.51	18.61	20
Channel				38715	38675	40148	40600	41063	41565	
Frequency (MHz)				2502.5	2498.5	2545.8	2593	2640.30	2697.5	
5	QPSK	1	0	18.54	18.45	18.12	18.38	18.61	18.27	
5	QPSK	1	12	18.31	18.29	18.29	18.55	18.30	18.37	
5	QPSK	1	24	18.51	18.45	18.25	18.29	18.27	18.33	
5	QPSK	12	0	18.61	18.66	18.45	18.66	18.48	18.45	
5	QPSK	12	7	18.61	18.60	18.56	18.67	18.48	18.56	20
5	QPSK	12	13	18.63	18.50	18.54	18.64	18.40	18.50	
5	QPSK	25	0	18.40	18.40	18.52	18.75	18.52	18.65	
5	16QAM	1	0	18.89	18.84	18.50	18.67	18.55	18.57	
5	16QAM	1	12	18.84	18.74	18.71	18.92	18.74	18.72	20
5	16QAM	1	24	18.78	18.79	18.58	18.76	18.54	18.54	
5	16QAM	12	0	18.68	18.74	18.56	18.69	18.52	18.43	
5	16QAM	12	7	18.58	18.62	18.67	18.73	18.55	18.69	
5	16QAM	12	13	18.57	18.50	18.62	18.76	18.50	18.61	20
5	16QAM	25	0	18.65	18.65	18.74	18.79	18.43	18.68	
5	64QAM	1	0	18.81	18.84	18.65	18.44	18.51	18.44	
5	64QAM	1	12	18.80	18.75	18.83	18.80	18.84	18.78	
5	64QAM	1	24	18.67	18.86	18.83	18.55	18.61	18.38	20
5	64QAM	12	0	18.81	18.77	18.58	18.64	18.54	18.49	
5	64QAM	12	7	18.79	18.76	18.67	18.67	18.58	18.81	
5	64QAM	12	13	18.64	18.60	18.63	18.63	18.64	18.74	
5	64QAM	25	0	18.53	18.59	18.64	18.81	18.41	18.60	20



Band 38_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2560	2595	2630	
20	QPSK	1	0	19.22	19.20	19.18	20.5
20	QPSK	1	49	19.28	19.23	19.18	
20	QPSK	1	99	19.27	19.20	19.14	
20	QPSK	50	0	19.13	19.08	19.02	20.5
20	QPSK	50	24	19.32	19.25	19.14	
20	QPSK	50	50	19.22	19.20	19.12	
20	QPSK	100	0	19.20	19.17	19.03	20.5
20	16QAM	1	0	19.38	19.36	19.28	
20	16QAM	1	49	19.40	19.35	19.30	
20	16QAM	1	99	19.30	19.36	19.32	20.5
20	16QAM	50	0	19.16	19.13	19.05	
20	16QAM	50	24	19.34	19.32	19.18	
20	16QAM	50	50	19.27	19.20	19.15	20.5
20	16QAM	100	0	19.23	19.20	19.08	
20	64QAM	1	0	19.11	19.04	19.00	
20	64QAM	1	49	19.15	19.08	19.03	20.5
20	64QAM	1	99	19.21	19.11	19.08	
20	64QAM	50	0	19.14	19.11	19.04	
20	64QAM	50	24	19.34	19.29	19.16	20.5
20	64QAM	50	50	19.25	19.20	19.15	
20	64QAM	100	0	19.21	19.18	19.04	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.19	19.19	19.08	20.5
15	QPSK	1	37	19.20	19.17	19.10	
15	QPSK	1	74	19.20	19.20	19.11	
15	QPSK	36	0	19.17	19.14	19.08	20.5
15	QPSK	36	20	19.34	19.28	19.14	
15	QPSK	36	39	19.26	19.21	19.16	
15	QPSK	75	0	19.27	19.20	19.07	20.5
15	16QAM	1	0	19.36	19.34	19.26	
15	16QAM	1	37	19.27	19.30	19.23	
15	16QAM	1	74	19.30	19.35	19.29	20.5
15	16QAM	36	0	19.12	19.10	19.02	
15	16QAM	36	20	19.31	19.26	19.12	
15	16QAM	36	39	19.25	19.20	19.13	20.5
15	16QAM	75	0	19.29	19.25	19.09	
15	64QAM	1	0	19.02	19.02	18.96	
15	64QAM	1	37	19.12	19.07	19.05	20.5
15	64QAM	1	74	19.17	19.10	19.05	
15	64QAM	36	0	19.18	19.08	19.08	
15	64QAM	36	20	19.35	19.31	19.17	20.5
15	64QAM	36	39	19.28	19.24	19.16	
15	64QAM	75	0	19.27	19.23	19.09	
Channel				37690	38000	38210	
Frequency (MHz)				2572.5	2595	2615	
10	QPSK	1	0	18.57	18.83	18.76	20.5
10	QPSK	1	25	18.91	18.85	18.78	
10	QPSK	1	49	18.75	18.97	18.89	
10	QPSK	25	0	18.93	18.90	18.82	20.5
10	QPSK	25	12	19.12	19.06	18.92	
10	QPSK	25	25	19.03	19.01	18.92	
10	QPSK	50	0	19.05	19.00	18.85	20.5
10	16QAM	1	0	19.01	19.28	19.19	
10	16QAM	1	25	19.30	19.25	19.13	
10	16QAM	1	49	18.99	19.27	19.19	20.5
10	16QAM	25	0	18.95	18.92	18.83	
10	16QAM	25	12	19.15	19.09	18.98	
10	16QAM	25	25	19.06	19.02	18.94	20.5
10	16QAM	50	0	19.08	19.05	18.88	
10	64QAM	1	0	18.83	19.16	19.04	
10	64QAM	1	25	19.33	19.21	19.18	20.5
10	64QAM	1	49	18.96	19.20	19.10	
10	64QAM	25	0	19.03	18.98	18.95	
10	64QAM	25	12	19.15	19.22	19.05	20.5
10	64QAM	25	25	19.12	19.11	19.02	
10	64QAM	50	0	19.03	19.04	18.90	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	18.85	18.80	18.73	20.5
5	QPSK	1	12	18.92	18.93	18.85	
5	QPSK	1	24	18.93	18.84	18.76	
5	QPSK	12	0	19.03	18.98	18.92	20.5
5	QPSK	12	7	19.10	19.10	19.05	
5	QPSK	12	13	19.08	19.07	19.01	
5	QPSK	25	0	19.07	19.02	18.98	20.5
5	16QAM	1	0	19.12	19.10	19.01	
5	16QAM	1	12	19.16	19.19	19.14	
5	16QAM	1	24	19.20	19.22	19.15	20.5
5	16QAM	12	0	19.09	19.99	18.96	
5	16QAM	12	7	19.15	19.13	19.07	
5	16QAM	12	13	19.13	19.10	19.02	20.5
5	16QAM	25	0	19.15	19.10	19.01	
5	64QAM	1	0	19.02	19.02	18.94	
5	64QAM	1	12	19.14	19.15	19.07	20.5
5	64QAM	1	24	19.12	19.15	19.09	
5	64QAM	12	0	19.12	19.09	18.99	
5	64QAM	12	7	19.19	19.20	19.09	20.5
5	64QAM	12	13	19.13	19.14	19.07	
5	64QAM	25	0	19.12	19.14	19.08	



Band 41_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2500	2543.3	2586.7	2630	2673.3	
20	QPSK	1	0	19.85	19.72	19.48	19.46	19.38	20.5
20	QPSK	1	49	19.88	19.88	19.86	19.78	19.80	
20	QPSK	1	99	19.78	19.83	19.58	19.38	19.70	
20	QPSK	50	0	19.90	19.78	19.75	19.83	19.87	
20	QPSK	50	24	19.90	19.87	19.95	19.78	19.81	20.5
20	QPSK	50	50	19.87	19.87	19.89	19.72	19.89	
20	QPSK	100	0	19.82	19.79	19.86	19.68	19.74	
20	16QAM	1	0	20.04	20.00	19.59	19.64	19.43	
20	16QAM	1	49	19.91	19.89	19.99	19.86	19.88	20.5
20	16QAM	1	99	19.93	19.95	19.70	19.47	19.85	
20	16QAM	50	0	19.93	19.83	19.79	19.76	19.58	
20	16QAM	50	24	19.95	19.92	19.98	19.83	19.83	
20	16QAM	50	50	19.89	19.90	19.92	19.75	19.91	20.5
20	16QAM	100	0	19.86	19.81	19.88	19.70	19.75	
20	64QAM	1	0	19.80	19.73	19.29	19.36	19.21	
20	64QAM	1	49	19.70	19.62	19.74	19.66	19.66	
20	64QAM	1	99	19.73	19.73	19.48	19.27	19.62	20.5
20	64QAM	50	0	19.84	19.80	19.78	19.77	19.68	
20	64QAM	50	24	19.92	19.82	19.86	19.84	19.85	
20	64QAM	50	50	19.91	19.89	19.90	19.77	19.93	
20	64QAM	100	0	19.87	19.79	19.87	19.75	19.78	
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	19.87	19.52	19.82	19.57	19.46	20.5
15	QPSK	1	37	19.82	19.74	19.80	19.70	19.75	
15	QPSK	1	74	19.79	19.53	19.70	19.53	19.74	
15	QPSK	36	0	19.93	19.74	19.79	19.75	19.68	
15	QPSK	36	20	19.91	19.88	19.94	19.86	19.89	20.5
15	QPSK	36	39	19.90	19.80	19.91	19.77	19.88	
15	QPSK	75	0	19.87	19.82	19.92	19.79	19.75	
15	16QAM	1	0	20.03	19.78	19.75	19.77	19.62	
15	16QAM	1	37	19.93	19.90	19.94	19.90	19.91	20.5
15	16QAM	1	74	19.93	19.78	19.89	19.70	19.93	
15	16QAM	36	0	19.92	19.71	19.76	19.73	19.67	
15	16QAM	36	20	19.90	19.87	19.94	19.84	19.88	
15	16QAM	36	39	19.87	19.80	19.91	19.78	19.86	20.5
15	16QAM	75	0	19.92	19.86	19.93	19.85	19.78	
15	64QAM	1	0	19.76	19.52	19.44	19.54	19.39	
15	64QAM	1	37	19.71	19.69	19.73	19.70	19.71	
15	64QAM	1	74	19.73	19.52	19.61	19.49	19.69	20.5
15	64QAM	36	0	19.94	19.75	19.80	19.78	19.74	
15	64QAM	36	20	19.94	19.89	19.98	19.91	19.93	
15	64QAM	36	39	19.91	19.79	19.92	19.80	19.91	
15	64QAM	75	0	19.91	19.84	19.91	19.84	19.78	
Channel				39700	40180	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	19.56	19.38	19.31	19.22	19.27	20.5
10	QPSK	1	25	19.52	19.54	19.57	19.48	19.52	
10	QPSK	1	49	19.58	19.34	19.38	19.33	19.35	
10	QPSK	25	0	19.73	19.80	19.63	19.52	19.58	
10	QPSK	25	13	19.79	19.73	19.79	19.63	19.73	20.5
10	QPSK	25	25	19.74	19.64	19.70	19.60	19.63	
10	QPSK	50	0	19.70	19.67	19.69	19.55	19.67	
10	16QAM	1	0	19.96	19.70	19.65	19.56	19.63	
10	16QAM	1	25	19.90	19.95	19.83	19.84	19.82	20.5
10	16QAM	1	49	19.90	19.66	19.68	19.61	19.61	
10	16QAM	25	0	19.81	19.63	19.65	19.55	19.61	
10	16QAM	25	12	19.83	19.81	19.82	19.67	19.78	
10	16QAM	25	25	19.78	19.69	19.72	19.61	19.64	20.5
10	16QAM	50	0	19.75	19.72	19.72	19.58	19.67	
10	64QAM	1	0	19.93	19.53	19.53	19.50	19.52	
10	64QAM	1	25	19.83	19.97	19.90	19.82	19.84	
10	64QAM	1	49	19.83	19.56	19.63	19.55	19.55	20.5
10	64QAM	25	0	19.83	19.67	19.73	19.64	19.66	
10	64QAM	25	12	19.86	19.84	19.86	19.73	19.84	
10	64QAM	25	25	19.81	19.72	19.78	19.69	19.71	
10	64QAM	50	0	19.72	19.70	19.76	19.57	19.68	
Channel				38675	40146	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5	
5	QPSK	1	0	19.66	19.54	19.52	19.45	19.57	20.5
5	QPSK	1	12	19.59	19.54	19.63	19.54	19.61	
5	QPSK	1	24	19.56	19.57	19.57	19.52	19.52	
5	QPSK	12	0	19.76	19.69	19.70	19.64	19.71	
5	QPSK	12	7	19.78	19.77	19.78	19.64	19.74	20.5
5	QPSK	12	13	19.76	19.75	19.79	19.67	19.68	
5	QPSK	25	0	19.75	19.71	19.77	19.58	19.70	
5	16QAM	1	0	19.94	19.73	19.84	19.67	19.82	
5	16QAM	1	12	19.91	19.78	19.89	19.71	19.82	20.5
5	16QAM	1	24	19.94	19.82	19.89	19.73	19.80	
5	16QAM	12	0	19.81	19.74	19.75	19.64	19.71	
5	16QAM	12	7	19.87	19.80	19.82	19.65	19.73	
5	16QAM	12	13	19.81	19.76	19.79	19.73	19.71	20.5
5	16QAM	25	0	19.81	19.78	19.81	19.67	19.75	
5	64QAM	1	0	19.81	19.72	19.75	19.66	19.75	
5	64QAM	1	12	19.82	19.82	19.83	19.74	19.75	
5	64QAM	1	24	19.83	19.76	19.82	19.75	19.74	20.5
5	64QAM	12	0	19.86	19.74	19.77	19.68	19.80	
5	64QAM	12	7	19.83	19.80	19.87	19.74	19.80	
5	64QAM	12	13	19.81	19.79	19.84	19.74	19.77	
5	64QAM	25	0	19.83	19.78	19.84	19.68	19.77	



Band 41_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2500	2543.3	2583	2633	2683.5	
20	QPSK	1	0	19.78	19.73	19.41	19.44	19.27	20.5
20	QPSK	1	49	19.73	19.71	19.76	19.66	19.68	
20	QPSK	1	99	19.69	19.74	19.49	19.26	19.63	
20	QPSK	50	0	19.90	19.79	19.77	19.73	19.87	
20	QPSK	50	24	19.91	19.89	19.95	19.80	19.82	20.5
20	QPSK	50	50	19.89	19.87	19.89	19.73	19.90	
20	QPSK	100	0	19.85	19.77	19.85	19.68	19.74	
20	16QAM	1	0	20.17	20.10	19.75	19.75	19.66	
20	16QAM	1	49	20.07	20.08	20.11	20.05	20.02	20.5
20	16QAM	1	99	20.09	20.13	19.85	19.82	19.96	
20	16QAM	50	0	19.95	19.82	19.79	19.74	19.71	
20	16QAM	50	24	19.95	19.94	20.00	19.79	19.88	
20	16QAM	50	50	19.91	19.92	19.92	19.75	19.93	20.5
20	16QAM	100	0	19.88	19.81	19.90	19.73	19.76	
20	64QAM	1	0	20.07	19.96	19.92	19.84	19.43	
20	64QAM	1	49	19.92	19.86	20.00	19.90	19.86	
20	64QAM	1	99	19.97	19.98	19.71	19.52	19.90	20.5
20	64QAM	50	0	19.96	19.81	19.77	19.80	19.70	
20	64QAM	50	24	19.95	19.91	19.98	19.83	19.88	
20	64QAM	50	50	19.90	19.89	19.91	19.79	19.95	
20	64QAM	100	0	19.87	19.83	19.86	19.75	19.78	
Channel				39725	40173	40620	41068	41519	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	19.82	19.49	19.57	19.55	19.44	20.5
15	QPSK	1	37	19.77	19.72	19.62	19.68	19.73	
15	QPSK	1	74	19.74	19.49	19.63	19.44	19.72	
15	QPSK	36	0	19.92	19.75	19.77	19.74	19.70	
15	QPSK	36	20	19.84	19.88	19.97	19.83	19.88	20.5
15	QPSK	36	39	19.87	19.78	19.91	19.76	19.87	
15	QPSK	75	0	19.87	19.81	19.88	19.78	19.77	
15	16QAM	1	0	20.16	19.89	19.90	19.90	19.78	
15	16QAM	1	37	20.08	20.12	20.11	20.05	20.11	20.5
15	16QAM	1	74	20.10	19.90	19.97	19.79	20.08	
15	16QAM	36	0	19.93	19.75	19.75	19.72	19.68	
15	16QAM	36	20	19.90	19.89	19.94	19.87	19.88	
15	16QAM	36	39	19.89	19.81	19.91	19.74	19.87	20.5
15	16QAM	75	0	19.90	19.83	19.90	19.80	19.78	
15	64QAM	1	0	20.02	19.71	19.70	19.80	19.61	
15	64QAM	1	37	19.96	20.00	19.97	19.95	19.94	
15	64QAM	1	74	19.98	19.75	19.62	19.71	19.95	20.5
15	64QAM	36	0	19.93	19.75	19.78	19.79	19.74	
15	64QAM	36	20	19.96	19.93	19.95	19.90	19.96	
15	64QAM	36	39	19.92	19.80	19.90	19.81	19.92	
15	64QAM	75	0	19.89	19.81	19.87	19.85	19.80	
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	19.65	19.27	19.29	19.23	19.24	20.5
10	QPSK	1	25	19.61	19.52	19.53	19.46	19.53	
10	QPSK	1	49	19.51	19.33	19.37	19.32	19.27	
10	QPSK	25	0	19.74	19.56	19.62	19.52	19.54	
10	QPSK	25	13	19.74	19.74	19.78	19.61	19.72	20.5
10	QPSK	25	25	19.71	19.62	19.66	19.58	19.61	
10	QPSK	50	0	19.69	19.64	19.68	19.54	19.66	
10	16QAM	1	0	19.97	19.64	19.67	19.60	19.58	
10	16QAM	1	25	19.86	19.89	19.94	19.83	19.86	20.5
10	16QAM	1	49	19.91	19.64	19.67	19.59	19.63	
10	16QAM	25	0	19.75	19.62	19.63	19.55	19.59	
10	16QAM	25	12	19.81	19.81	19.84	19.65	19.76	
10	16QAM	25	25	19.75	19.68	19.70	19.62	19.64	20.5
10	16QAM	50	0	19.72	19.70	19.74	19.57	19.66	
10	64QAM	1	0	19.91	19.55	19.92	19.49	19.48	
10	64QAM	1	25	19.91	19.96	19.88	19.82	19.85	
10	64QAM	1	49	19.84	19.56	19.63	19.55	19.57	20.5
10	64QAM	25	0	19.82	19.65	19.71	19.63	19.67	
10	64QAM	25	12	19.86	19.81	19.86	19.70	19.84	
10	64QAM	25	25	19.81	19.71	19.76	19.67	19.72	
10	64QAM	50	0	19.72	19.67	19.74	19.58	19.71	
Channel				38675	40146	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5	
5	QPSK	1	0	19.63	19.55	19.51	19.47	19.57	20.5
5	QPSK	1	12	19.52	19.52	19.60	19.52	19.60	
5	QPSK	1	24	19.59	19.56	19.55	19.47	19.50	
5	QPSK	12	0	19.75	19.65	19.71	19.62	19.71	
5	QPSK	12	7	19.77	19.73	19.80	19.62	19.74	20.5
5	QPSK	12	13	19.71	19.70	19.76	19.65	19.70	
5	QPSK	25	0	19.70	19.67	19.71	19.57	19.68	
5	16QAM	1	0	19.93	19.73	19.83	19.66	19.81	
5	16QAM	1	12	19.85	19.79	19.88	19.72	19.82	20.5
5	16QAM	1	24	19.90	19.80	19.87	19.69	19.80	
5	16QAM	12	0	19.79	19.69	19.74	19.63	19.72	
5	16QAM	12	7	19.82	19.75	19.80	19.66	19.73	
5	16QAM	12	13	19.77	19.73	19.74	19.69	19.73	20.5
5	16QAM	25	0	19.78	19.78	19.79	19.65	19.74	
5	64QAM	1	0	19.82	19.65	19.75	19.63	19.78	
5	64QAM	1	12	19.77	19.77	19.81	19.72	19.77	
5	64QAM	1	24	19.82	19.71	19.81	19.70	19.72	20.5
5	64QAM	12	0	19.78	19.71	19.76	19.66	19.77	
5	64QAM	12	7	19.81	19.79	19.86	19.71	19.77	
5	64QAM	12	13	19.81	19.74	19.81	19.71	19.75	
5	64QAM	25	0	19.80	19.77	19.83	19.67	19.77	



Band 38_Ant 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)				2555	2595	2635
20	QPSK	1	0	16.87	16.85	16.84
20	QPSK	1	49	16.79	16.76	16.72
20	QPSK	1	99	16.75	16.65	16.61
20	QPSK	50	0	16.71	16.71	16.68
20	QPSK	50	24	16.95	16.87	16.72
20	QPSK	50	50	16.74	16.70	16.66
20	QPSK	100	0	16.79	16.74	16.61
20	16QAM	1	0	17.02	17.03	17.04
20	16QAM	1	49	16.95	16.91	16.85
20	16QAM	1	99	16.90	16.84	16.83
20	16QAM	50	0	16.76	16.72	16.70
20	16QAM	50	24	16.94	16.88	16.76
20	16QAM	50	50	16.80	16.76	16.70
20	16QAM	100	0	16.82	16.75	16.64
20	64QAM	1	0	16.62	16.64	16.58
20	64QAM	1	49	16.63	16.52	16.55
20	64QAM	1	99	16.61	16.51	16.49
20	64QAM	50	0	16.78	16.74	16.71
20	64QAM	50	24	16.92	16.90	16.78
20	64QAM	50	50	16.81	16.75	16.71
20	64QAM	100	0	16.81	16.77	16.65
Channel				37625	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	16.84	16.84	16.75
15	QPSK	1	37	16.80	16.77	16.70
15	QPSK	1	74	16.77	16.72	16.66
15	QPSK	36	0	16.74	16.73	16.68
15	QPSK	36	20	16.88	16.86	16.72
15	QPSK	36	39	16.80	16.74	16.67
15	QPSK	75	0	16.81	16.76	16.65
15	16QAM	1	0	16.97	17.02	16.97
15	16QAM	1	37	16.88	16.90	16.80
15	16QAM	1	74	16.95	16.85	16.79
15	16QAM	36	0	16.74	16.70	16.63
15	16QAM	36	20	16.86	16.86	16.70
15	16QAM	36	39	16.78	16.74	16.65
15	16QAM	75	0	16.85	16.83	16.68
15	64QAM	1	0	16.56	16.53	16.49
15	64QAM	1	37	16.59	16.54	16.54
15	64QAM	1	74	16.55	16.49	16.41
15	64QAM	36	0	16.80	16.77	16.72
15	64QAM	36	20	16.95	16.90	16.76
15	64QAM	36	39	16.83	16.79	16.72
15	64QAM	75	0	16.86	16.85	16.70
Channel				37625	38000	38250
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	16.85	16.80	16.84
10	QPSK	1	25	16.76	16.75	16.70
10	QPSK	1	49	16.75	16.61	16.52
10	QPSK	25	0	16.69	16.67	16.58
10	QPSK	25	12	16.89	16.80	16.62
10	QPSK	25	25	16.73	16.60	16.62
10	QPSK	50	0	16.72	16.66	16.59
10	16QAM	1	0	16.93	16.95	16.99
10	16QAM	1	25	16.86	16.85	16.81
10	16QAM	1	49	16.85	16.81	16.73
10	16QAM	25	0	16.68	16.67	16.70
10	16QAM	25	12	16.88	16.84	16.73
10	16QAM	25	25	16.72	16.74	16.66
10	16QAM	50	0	16.77	16.66	16.56
10	64QAM	1	0	16.53	16.64	16.53
10	64QAM	1	25	16.59	16.50	16.45
10	64QAM	1	49	16.53	16.47	16.45
10	64QAM	25	0	16.73	16.64	16.66
10	64QAM	25	12	16.85	16.86	16.74
10	64QAM	25	25	16.76	16.73	16.69
10	64QAM	50	0	16.72	16.74	16.63
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	16.40	16.44	16.31
5	QPSK	1	12	16.53	16.52	16.42
5	QPSK	1	24	16.46	16.44	16.33
5	QPSK	12	0	16.62	16.54	16.45
5	QPSK	12	7	16.66	16.66	16.59
5	QPSK	12	13	16.64	16.59	16.51
5	QPSK	25	0	16.61	16.61	16.51
5	16QAM	1	0	16.57	16.56	16.49
5	16QAM	1	12	16.74	16.71	16.64
5	16QAM	1	24	16.66	16.65	16.58
5	16QAM	12	0	16.61	16.52	16.43
5	16QAM	12	7	16.63	16.60	16.55
5	16QAM	12	13	16.61	16.57	16.47
5	64QAM	1	0	16.24	16.19	16.12
5	64QAM	1	12	16.33	16.27	16.20
5	64QAM	1	24	16.37	16.25	16.17
5	64QAM	12	0	16.66	16.59	16.53
5	64QAM	12	7	16.72	16.70	16.64
5	64QAM	12	13	16.67	16.66	16.57
5	64QAM	25	0	16.70	16.70	16.60



Band 41_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2500	2543.3	2593	2637.5	2687.5	
20	QPSK	1	0	16.94	16.83	16.58	16.56	16.43	17.5
20	QPSK	1	49	16.85	16.83	16.92	16.81	16.87	
20	QPSK	1	99	16.85	16.88	16.83	16.40	16.80	
20	QPSK	50	0	17.03	16.88	16.83	16.80	16.74	17.5
20	QPSK	50	24	17.04	16.97	17.03	16.87	16.98	
20	QPSK	50	50	16.97	16.95	16.98	16.79	16.95	
20	QPSK	100	0	16.89	16.85	16.95	16.75	16.80	17.5
20	16QAM	1	0	16.99	16.92	16.65	16.84	16.54	
20	16QAM	1	49	16.92	16.87	17.02	16.90	16.92	
20	16QAM	1	99	16.91	16.96	16.72	16.50	16.85	17.5
20	16QAM	50	0	17.00	16.87	16.85	16.84	16.79	
20	16QAM	50	24	16.88	16.96	17.06	16.93	16.92	
20	16QAM	50	50	16.96	16.97	16.99	16.84	16.99	17.5
20	16QAM	100	0	16.81	16.86	16.95	16.79	16.86	
20	84QAM	1	0	16.92	16.58	16.34	16.58	16.28	
20	84QAM	1	49	16.72	16.80	16.85	16.80	16.73	17.5
20	84QAM	1	99	16.78	16.99	16.54	16.36	16.74	
20	84QAM	50	0	17.02	16.82	16.87	16.85	16.80	
20	84QAM	50	24	16.99	17.00	17.08	16.91	16.94	17.5
20	84QAM	50	50	16.94	17.03	17.01	16.85	17.02	
20	84QAM	100	0	16.93	16.89	16.97	16.82	16.85	
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	16.95	16.84	16.66	16.74	16.58	17.5
15	QPSK	1	37	16.93	16.88	16.89	16.85	16.79	
15	QPSK	1	74	16.87	16.66	16.80	16.59	16.78	
15	QPSK	36	0	17.05	16.82	16.87	16.81	16.76	17.5
15	QPSK	36	20	17.03	16.95	17.01	16.94	16.96	
15	QPSK	36	39	16.98	16.86	16.99	16.84	16.94	
15	QPSK	72	0	16.98	16.89	16.97	16.99	16.92	17.5
15	16QAM	1	0	16.98	16.74	16.84	16.82	16.74	
15	16QAM	1	37	16.85	16.85	17.00	16.90	17.00	
15	16QAM	1	74	16.95	16.73	16.92	16.71	16.98	17.5
15	16QAM	36	0	16.97	16.72	16.81	16.80	16.73	
15	16QAM	36	20	16.97	16.87	17.00	16.90	16.95	
15	16QAM	36	39	16.94	16.80	16.95	16.82	16.95	17.5
15	16QAM	72	0	16.86	16.89	17.00	16.91	16.86	
15	84QAM	1	0	16.84	16.36	16.54	16.60	16.47	
15	84QAM	1	37	16.75	16.87	16.83	16.76	16.78	17.5
15	84QAM	1	74	16.74	16.72	16.72	16.52	16.80	
15	84QAM	36	0	17.01	16.84	16.88	16.86	16.81	
15	84QAM	36	20	17.02	16.97	17.07	16.97	17.02	17.5
15	84QAM	36	39	16.88	16.90	17.03	16.86	17.02	
15	84QAM	72	0	16.96	16.91	16.99	16.94	16.86	
Channel				39700	40160	40620	41060	41500	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	16.86	16.81	16.81	16.66	16.50	17.5
10	QPSK	1	25	16.90	16.85	16.86	16.80	16.71	
10	QPSK	1	49	16.85	16.84	16.76	16.53	16.71	
10	QPSK	25	0	16.98	16.82	16.87	16.79	16.71	17.5
10	QPSK	25	12	16.98	16.90	16.91	16.88	16.91	
10	QPSK	25	25	16.81	16.80	16.92	16.77	16.90	
10	QPSK	50	0	16.86	16.81	16.96	16.78	16.80	17.5
10	16QAM	1	0	16.98	16.94	16.80	16.76	16.84	
10	16QAM	1	25	16.79	16.76	16.95	16.88	16.92	
10	16QAM	1	49	16.85	16.67	16.86	16.71	16.92	17.5
10	16QAM	25	0	16.84	16.66	16.76	16.72	16.70	
10	16QAM	25	12	16.87	16.82	16.92	16.86	16.91	
10	16QAM	25	25	16.86	16.76	16.89	16.75	16.86	17.5
10	16QAM	50	0	16.96	16.86	16.96	16.90	16.80	
10	84QAM	1	0	16.84	16.35	16.51	16.59	16.43	
10	84QAM	1	25	16.73	16.78	16.73	16.70	16.71	17.5
10	84QAM	1	49	16.70	16.67	16.72	16.43	16.77	
10	84QAM	25	0	16.97	16.84	16.86	16.85	16.78	
10	84QAM	25	12	16.96	16.88	16.90	16.90	16.82	17.5
10	84QAM	25	25	16.89	16.86	16.95	16.79	16.93	
10	84QAM	50	0	16.86	16.82	16.96	16.88	16.77	
Channel				39675	40148	40620	41093	41569	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2543.3	2593	2638.0	2682.7	
5	QPSK	1	0	16.75	16.57	16.65	16.56	16.71	17.5
5	QPSK	1	12	16.66	16.84	16.72	16.64	16.71	
5	QPSK	1	24	16.64	16.58	16.67	16.56	16.65	
5	QPSK	12	0	16.83	16.74	16.75	16.67	16.77	17.5
5	QPSK	12	7	16.85	16.82	16.82	16.70	16.77	
5	QPSK	12	13	16.78	16.78	16.82	16.74	16.76	
5	QPSK	25	0	16.78	16.80	16.81	16.66	16.75	17.5
5	16QAM	1	0	16.89	16.71	16.80	16.71	16.79	
5	16QAM	1	12	16.85	16.86	16.88	16.86	16.83	
5	16QAM	1	24	16.98	16.79	16.85	16.75	16.85	17.5
5	16QAM	12	0	16.80	16.71	16.76	16.67	16.76	
5	16QAM	12	7	16.79	16.78	16.85	16.67	16.80	
5	16QAM	12	13	16.78	16.77	16.82	16.71	16.73	17.5
5	16QAM	25	0	16.83	16.79	16.83	16.71	16.78	
5	84QAM	1	0	16.67	16.39	16.50	16.64	16.60	
5	84QAM	1	12	16.57	16.77	16.67	16.68	16.66	17.5
5	84QAM	1	24	16.59	16.75	16.69	16.66	16.64	
5	84QAM	12	0	16.84	16.78	16.83	16.77	16.83	
5	84QAM	12	7	16.85	16.89	16.90	16.74	16.84	17.5
5	84QAM	12	13	16.81	16.85	16.85	16.79	16.81	
5	84QAM	25	0	16.83	16.86	16.91	16.75	16.84	



Band 41_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2500	2543.3	2593	2636.5	2685	
20	QPSK	1	0	16.83	16.72	16.42	16.44	16.31	17.5
20	QPSK	1	49	16.77	16.70	16.79	16.66	16.69	
20	QPSK	1	99	16.74	16.78	16.49	16.30	16.84	
20	QPSK	50	0	16.99	16.85	16.80	16.76	16.70	
20	QPSK	50	24	16.98	16.94	17.04	16.84	16.85	17.5
20	QPSK	50	50	16.94	16.92	16.93	16.76	16.92	
20	QPSK	100	0	16.89	16.79	16.91	16.71	16.77	
20	16QAM	1	0	17.17	17.01	16.77	16.84	16.87	
20	16QAM	1	49	17.07	17.01	17.20	17.02	17.10	17.5
20	16QAM	1	99	17.10	17.06	16.86	16.81	17.04	
20	16QAM	50	0	17.01	16.85	16.84	16.81	16.73	
20	16QAM	50	24	16.97	16.95	17.06	16.89	16.89	
20	16QAM	50	50	16.98	16.96	16.96	16.82	16.97	17.5
20	16QAM	100	0	16.88	16.83	16.94	16.77	16.80	
20	64QAM	1	0	17.11	16.85	16.80	16.73	16.49	
20	64QAM	1	49	16.95	17.03	17.10	17.01	16.98	
20	64QAM	1	99	16.99	17.18	16.80	16.57	16.94	17.5
20	64QAM	50	0	17.01	16.91	16.85	16.83	16.76	
20	64QAM	50	24	16.98	17.01	17.04	16.90	16.92	
20	64QAM	50	50	16.92	17.01	16.98	16.83	16.97	
20	64QAM	100	0	16.91	16.89	16.93	16.79	16.83	
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	16.87	16.80	16.62	16.61	16.46	17.5
15	QPSK	1	37	16.86	16.81	16.82	16.75	16.74	
15	QPSK	1	74	16.84	16.58	16.67	16.52	16.72	
15	QPSK	36	0	16.99	16.78	16.85	16.80	16.72	
15	QPSK	36	20	16.97	16.91	17.00	16.87	16.95	17.5
15	QPSK	36	39	16.92	16.89	16.97	16.81	16.93	
15	QPSK	72	0	16.92	16.87	16.98	16.86	16.80	
15	16QAM	1	0	17.18	16.89	16.92	16.97	16.86	
15	16QAM	1	37	17.12	17.00	17.17	17.07	17.17	17.5
15	16QAM	1	74	17.08	16.83	17.05	16.81	17.14	
15	16QAM	36	0	16.94	16.71	16.82	16.79	16.76	
15	16QAM	36	20	16.94	16.85	16.97	16.90	16.92	
15	16QAM	36	39	16.95	16.77	16.95	16.80	16.91	17.5
15	16QAM	72	0	16.92	16.84	16.96	16.88	16.80	
15	64QAM	1	0	17.06	16.84	16.75	16.82	16.66	
15	64QAM	1	37	17.01	17.15	17.07	16.97	16.99	
15	64QAM	1	74	16.95	16.92	16.91	16.73	17.01	17.5
15	64QAM	36	0	17.03	16.84	16.87	16.84	16.79	
15	64QAM	36	20	16.99	16.95	17.05	16.95	16.96	
15	64QAM	36	39	17.00	16.89	16.98	16.85	16.97	
15	64QAM	72	0	16.94	16.89	16.98	16.90	16.83	
Channel				39700	40150	40620	41060	41500	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	16.80	16.67	16.37	16.34	16.27	17.5
10	QPSK	1	25	16.73	16.62	16.77	16.58	16.59	
10	QPSK	1	49	16.89	16.89	16.44	16.25	16.58	
10	QPSK	25	0	16.94	16.90	16.75	16.75	16.70	
10	QPSK	25	12	16.90	16.85	16.95	16.81	16.81	17.5
10	QPSK	25	25	16.87	16.83	16.87	16.75	16.82	
10	QPSK	50	0	16.84	16.74	16.90	16.61	16.72	
10	16QAM	1	0	17.10	17.00	16.89	16.81	16.58	
10	16QAM	1	25	17.02	17.01	17.17	16.93	17.03	17.5
10	16QAM	1	49	17.08	17.02	16.83	16.82	17.01	
10	16QAM	25	0	16.99	16.85	16.78	16.73	16.87	
10	16QAM	25	12	16.93	16.89	16.97	16.79	16.79	
10	16QAM	25	25	16.96	16.94	16.96	16.74	16.96	17.5
10	16QAM	50	0	16.78	16.77	16.90	16.73	16.71	
10	64QAM	1	0	17.07	16.81	16.59	16.64	16.44	
10	64QAM	1	25	16.91	16.93	17.02	16.98	16.93	
10	64QAM	1	49	16.92	17.14	16.79	16.53	16.90	17.5
10	64QAM	25	0	16.96	16.90	16.80	16.76	16.76	
10	64QAM	25	12	16.94	17.01	16.94	16.85	16.85	
10	64QAM	25	25	16.89	16.94	16.90	16.75	16.88	
10	64QAM	50	0	16.82	16.81	16.91	16.79	16.81	
Channel				39675	40148	40620	41093	41599	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.3	2593	2640.0	2697.5	
5	QPSK	1	0	16.66	16.48	16.59	16.46	16.58	17.5
5	QPSK	1	12	16.59	16.57	16.64	16.55	16.60	
5	QPSK	1	24	16.61	16.50	16.61	16.50	16.55	
5	QPSK	12	0	16.82	16.70	16.75	16.65	16.77	
5	QPSK	12	7	16.85	16.76	16.85	16.68	16.78	17.5
5	QPSK	12	13	16.79	16.77	16.77	16.69	16.72	
5	QPSK	25	0	16.78	16.76	16.80	16.65	16.73	
5	16QAM	1	0	16.84	16.89	16.86	16.79	16.84	
5	16QAM	1	12	16.91	16.91	16.89	16.86	16.85	17.5
5	16QAM	1	24	16.93	16.94	16.90	16.84	16.79	
5	16QAM	12	0	16.82	16.74	16.81	16.73	16.81	
5	16QAM	12	7	16.87	16.85	16.86	16.71	16.80	
5	16QAM	12	13	16.80	16.81	16.82	16.77	16.79	17.5
5	16QAM	25	0	16.82	16.81	16.86	16.69	16.79	
5	64QAM	1	0	16.87	16.75	16.82	16.71	16.79	
5	64QAM	1	12	16.85	16.87	16.88	16.79	16.82	
5	64QAM	1	24	16.85	16.84	16.87	16.80	16.78	17.5
5	64QAM	12	0	16.87	16.77	16.81	16.75	16.84	
5	64QAM	12	7	16.86	16.87	16.93	16.76	16.85	
5	64QAM	12	13	16.83	16.86	16.86	16.81	16.81	
5	64QAM	25	0	16.81	16.85	16.90	16.73	16.81	



Band 38_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Tune-up limit (dBm)
Channel				37650	38000	38150	
Frequency (MHz)				2550	2595	2610	
20	QPSK	1	0	18.87	18.86	18.84	18
20	QPSK	1	49	18.78	18.78	18.72	
20	QPSK	1	99	18.75	18.65	18.61	
20	QPSK	50	0	18.71	18.71	18.68	18
20	QPSK	50	24	18.89	18.87	18.72	
20	QPSK	50	50	18.74	18.70	18.66	
20	QPSK	100	0	18.78	18.74	18.61	18
20	16QAM	1	0	17.02	17.03	17.04	
20	16QAM	1	49	18.95	18.91	18.85	
20	16QAM	1	99	18.90	18.84	18.83	18
20	16QAM	50	0	18.78	18.72	18.70	
20	16QAM	50	24	18.94	18.88	18.78	
20	16QAM	50	50	18.80	18.78	18.70	18
20	16QAM	100	0	18.82	18.75	18.64	
20	64QAM	1	0	18.62	18.64	18.58	
20	64QAM	1	49	18.63	18.62	18.55	18
20	64QAM	1	99	18.61	18.51	18.49	
20	64QAM	50	0	18.78	18.74	18.71	
20	64QAM	50	24	18.92	18.90	18.78	18
20	64QAM	50	50	18.81	18.75	18.71	
20	64QAM	100	0	18.81	18.77	18.65	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	18.84	18.84	18.75	18
15	QPSK	1	37	18.80	18.77	18.70	
15	QPSK	1	74	18.77	18.72	18.66	
15	QPSK	36	0	18.74	18.73	18.68	18
15	QPSK	36	20	18.88	18.86	18.72	
15	QPSK	36	39	18.80	18.74	18.67	
15	QPSK	75	0	18.81	18.78	18.65	18
15	16QAM	1	0	18.97	17.02	18.97	
15	16QAM	1	37	18.88	18.90	18.80	
15	16QAM	1	74	18.95	18.85	18.79	18
15	16QAM	36	0	18.74	18.70	18.63	
15	16QAM	36	20	18.86	18.85	18.70	
15	16QAM	36	39	18.78	18.74	18.65	18
15	16QAM	75	0	18.85	18.83	18.68	
15	64QAM	1	0	18.56	18.53	18.49	
15	64QAM	1	37	18.59	18.54	18.54	18
15	64QAM	1	74	18.58	18.49	18.44	
15	64QAM	36	0	18.80	18.77	18.72	
15	64QAM	36	20	18.93	18.90	18.78	18
15	64QAM	36	39	18.83	18.79	18.72	
15	64QAM	75	0	18.86	18.85	18.70	
Channel				37950	38000	38200	
Frequency (MHz)				2672.5	2595	2615	
10	QPSK	1	0	18.85	18.80	18.84	18
10	QPSK	1	25	18.78	18.75	18.70	
10	QPSK	1	49	18.75	18.61	18.52	
10	QPSK	25	0	18.68	18.67	18.58	18
10	QPSK	25	12	18.89	18.80	18.62	
10	QPSK	25	25	18.73	18.60	18.62	
10	QPSK	50	0	18.72	18.66	18.59	18
10	16QAM	1	0	18.93	18.95	18.99	
10	16QAM	1	25	18.86	18.85	18.81	
10	16QAM	1	49	18.85	18.81	18.73	18
10	16QAM	25	0	18.68	18.67	18.70	
10	16QAM	25	12	18.88	18.84	18.73	
10	16QAM	25	25	18.72	18.74	18.66	18
10	16QAM	50	0	18.77	18.66	18.59	
10	64QAM	1	0	18.53	18.64	18.53	
10	64QAM	1	25	18.59	18.50	18.45	18
10	64QAM	1	49	18.53	18.47	18.45	
10	64QAM	25	0	18.73	18.64	18.68	
10	64QAM	25	12	18.85	18.88	18.74	18
10	64QAM	25	25	18.78	18.73	18.68	
10	64QAM	50	0	18.72	18.74	18.63	
Channel				37775	38000	38225	
Frequency (MHz)				2772.5	2595	2617.5	
5	QPSK	1	0	18.40	18.44	18.31	18
5	QPSK	1	12	18.53	18.52	18.42	
5	QPSK	1	24	18.46	18.44	18.33	
5	QPSK	12	0	18.62	18.54	18.45	18
5	QPSK	12	7	18.66	18.66	18.56	
5	QPSK	12	13	18.64	18.59	18.51	
5	QPSK	25	0	18.81	18.81	18.51	18
5	16QAM	1	0	18.57	18.56	18.49	
5	16QAM	1	12	18.74	18.71	18.64	
5	16QAM	1	24	18.66	18.65	18.56	18
5	16QAM	12	0	18.61	18.52	18.43	
5	16QAM	12	7	18.83	18.60	18.55	
5	16QAM	12	13	18.61	18.57	18.47	18
5	16QAM	25	0	18.64	18.63	18.50	
5	64QAM	1	0	18.24	18.19	18.12	
5	64QAM	1	12	18.33	18.27	18.20	18
5	64QAM	1	24	18.37	18.25	18.17	
5	64QAM	12	0	18.66	18.59	18.53	
5	64QAM	12	7	18.72	18.70	18.64	18
5	64QAM	12	13	18.67	18.66	18.57	
5	64QAM	25	0	18.70	18.70	18.60	



Band 41_Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2500	2543.3	2593	2636.5	2690		
20	QPSK	1	0	16.94	16.83	16.58	16.58	16.43	18	
20	QPSK	1	49	16.85	16.83	16.92	16.81	16.87		
20	QPSK	1	99	16.85	16.88	16.83	16.40	16.80		
20	QPSK	50	0	17.03	16.88	16.83	16.80	16.74		
20	QPSK	50	24	17.01	16.97	17.06	16.87	16.88	18	
20	QPSK	50	50	16.97	16.95	16.98	16.79	16.95		
20	QPSK	100	0	16.89	16.85	16.95	16.75	16.80		
20	16QAM	1	0	16.99	16.92	16.85	16.64	16.54		
20	16QAM	1	49	16.92	16.87	17.02	16.90	16.92	18	
20	16QAM	1	99	16.91	16.96	16.72	16.50	16.85		
20	16QAM	50	0	17.00	16.87	16.85	16.84	16.79		
20	16QAM	50	24	16.98	16.96	17.06	16.93	16.92		
20	16QAM	50	50	16.86	16.97	16.99	16.84	16.99	18	
20	16QAM	100	0	16.91	16.86	16.95	16.79	16.86		
20	64QAM	1	0	16.92	16.58	16.34	16.58	16.28		
20	64QAM	1	49	16.72	16.80	16.85	16.80	16.73		
20	64QAM	1	99	16.78	16.99	16.54	16.36	16.74	18	
20	64QAM	50	0	17.02	16.92	16.87	16.85	16.80		
20	64QAM	50	24	16.99	17.00	17.08	16.91	16.94		
20	64QAM	50	50	16.84	17.03	17.01	16.85	17.02		
20	64QAM	100	0	16.93	16.99	16.97	16.82	16.95		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2692.5		
15	QPSK	1	0	16.95	16.84	16.66	16.74	16.58	18	
15	QPSK	1	37	16.93	16.88	16.89	16.85	16.79		
15	QPSK	1	74	16.87	16.66	16.80	16.59	16.79		
15	QPSK	36	0	17.05	16.82	16.87	16.81	16.76		
15	QPSK	36	20	17.03	16.95	17.01	16.94	16.96	18	
15	QPSK	36	39	16.98	16.86	16.99	16.84	16.94		
15	QPSK	75	0	16.96	16.89	16.97	16.88	16.82		
15	16QAM	1	0	16.98	16.74	16.84	16.82	16.74		
15	16QAM	1	37	16.85	16.85	17.00	16.90	17.00	18	
15	16QAM	1	74	16.85	16.73	16.92	16.71	16.98		
15	16QAM	36	0	16.97	16.72	16.81	16.80	16.73		
15	16QAM	36	20	16.97	16.87	17.00	16.90	16.95		
15	16QAM	36	39	16.94	16.90	16.95	16.82	16.95	18	
15	16QAM	75	0	16.96	16.89	17.00	16.91	16.86		
15	64QAM	1	0	16.84	16.36	16.54	16.60	16.47		
15	64QAM	1	37	16.75	16.87	16.83	16.76	16.78		
15	64QAM	1	74	16.74	16.72	16.72	16.52	16.80	18	
15	64QAM	36	0	17.01	16.84	16.88	16.86	16.81		
15	64QAM	36	20	17.02	16.97	17.07	16.97	17.02		
15	64QAM	36	39	16.88	16.90	17.03	16.86	17.02		
15	64QAM	75	0	16.96	16.91	16.99	16.94	16.86		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2695		
10	QPSK	1	0	16.86	16.81	16.61	16.66	16.50	18	
10	QPSK	1	25	16.80	16.85	16.86	16.80	16.71		
10	QPSK	1	49	16.85	16.84	16.76	16.53	16.71		
10	QPSK	25	0	16.96	16.82	16.87	16.79	16.71		
10	QPSK	25	12	16.98	16.90	16.91	16.88	16.91	18	
10	QPSK	25	25	16.91	16.80	16.92	16.77	16.90		
10	QPSK	50	0	16.86	16.81	16.96	16.78	16.80		
10	16QAM	1	0	16.89	16.84	16.80	16.78	16.64		
10	16QAM	1	25	16.79	16.76	16.95	16.88	16.92	18	
10	16QAM	1	49	16.85	16.67	16.96	16.71	16.92		
10	16QAM	25	0	16.94	16.66	16.76	16.72	16.70		
10	16QAM	25	12	16.87	16.82	16.92	16.86	16.91		
10	16QAM	25	25	16.86	16.76	16.89	16.75	16.86	18	
10	16QAM	50	0	16.96	16.86	16.96	16.90	16.86		
10	64QAM	1	0	16.84	16.35	16.51	16.59	16.43		
10	64QAM	1	25	16.73	16.78	16.73	16.70	16.71		
10	64QAM	1	49	16.70	16.67	16.72	16.43	16.77	18	
10	64QAM	25	0	16.97	16.84	16.86	16.85	16.78		
10	64QAM	25	12	16.96	16.86	16.99	16.90	16.99		
10	64QAM	25	25	16.89	16.86	16.95	16.79	16.93		
10	64QAM	50	0	16.96	16.82	16.96	16.88	16.77		
Channel				39675	40146	40620	41093	41565		
Frequency (MHz)				2496.5	2545.8	2593	2640.39	2697.5		
5	QPSK	1	0	16.75	16.57	16.65	16.55	16.71	18	
5	QPSK	1	12	16.66	16.84	16.72	16.64	16.71		
5	QPSK	1	24	16.84	16.58	16.67	16.56	16.65		
5	QPSK	12	0	16.83	16.74	16.75	16.87	16.77		
5	QPSK	12	7	16.85	16.82	16.82	16.70	16.77	18	
5	QPSK	12	13	16.78	16.78	16.82	16.74	16.76		
5	QPSK	25	0	16.78	16.80	16.81	16.68	16.75		
5	16QAM	1	0	16.89	16.71	16.80	16.71	16.79		
5	16QAM	1	12	16.85	16.88	16.88	16.86	16.83	18	
5	16QAM	1	24	16.88	16.79	16.85	16.75	16.85		
5	16QAM	12	0	16.80	16.71	16.76	16.67	16.76		
5	16QAM	12	7	16.79	16.78	16.85	16.67	16.80		
5	16QAM	12	13	16.78	16.77	16.82	16.71	16.73	18	
5	16QAM	25	0	16.83	16.79	16.83	16.71	16.78		
5	64QAM	1	0	16.67	16.39	16.60	16.64	16.60		
5	64QAM	1	12	16.67	16.77	16.67	16.66	16.66		
5	64QAM	1	24	16.59	16.75	16.69	16.66	16.64	18	
5	64QAM	12	0	16.84	16.78	16.83	16.77	16.83		
5	64QAM	12	7	16.85	16.89	16.90	16.74	16.84		
5	64QAM	12	13	16.81	16.85	16.85	16.79	16.81		
5	64QAM	25	0	16.83	16.86	16.91	16.75	16.84		



Band 41_Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Channel	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
				Channel	39750	40185	40620	41055	41490	
				Frequency (MHz)	2500	2543.3	2593	2636.5	2690	
20	QPSK	1	0		16.83	16.72	16.42	16.44	16.31	18
20	QPSK	1	49		16.77	16.70	16.79	16.66	16.69	
20	QPSK	1	99		16.74	16.76	16.49	16.30	16.64	
20	QPSK	50	0		16.99	16.85	16.80	16.76	16.70	
20	QPSK	50	24		16.88	16.84	17.04	16.84	16.85	18
20	QPSK	50	50		16.94	16.92	16.93	16.76	16.92	
20	QPSK	100	0		16.89	16.79	16.91	16.71	16.77	
20	16QAM	1	0		17.17	17.01	16.77	16.84	16.67	
20	16QAM	1	49		17.07	17.01	17.20	17.02	17.10	18
20	16QAM	1	99		17.10	17.06	16.86	16.61	17.04	
20	16QAM	50	0		17.01	16.85	16.84	16.81	16.73	
20	16QAM	50	24		16.97	16.95	17.06	16.89	16.89	
20	16QAM	50	50		16.88	16.86	16.96	16.82	16.97	18
20	16QAM	100	0		16.88	16.83	16.84	16.77	16.80	
20	64QAM	1	0		17.11	16.85	16.60	16.73	16.49	
20	64QAM	1	49		16.95	17.03	17.10	17.01	16.96	
20	64QAM	1	99		16.99	17.18	16.80	16.57	16.94	18
20	64QAM	50	0		17.01	16.91	16.85	16.83	16.76	
20	64QAM	50	24		16.98	17.01	17.04	16.90	16.92	
20	64QAM	50	50		16.92	17.01	16.98	16.83	16.97	
20	64QAM	100	0		16.91	16.89	16.93	16.79	16.93	
				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		16.87	16.60	16.62	16.61	16.48	18
15	QPSK	1	37		16.86	16.81	16.62	16.75	16.74	
15	QPSK	1	74		16.84	16.58	16.67	16.52	16.72	
15	QPSK	36	0		16.99	16.78	16.85	16.80	16.72	
15	QPSK	36	20		16.87	16.91	17.00	16.87	16.95	18
15	QPSK	36	39		16.92	16.85	16.97	16.81	16.93	
15	QPSK	75	0		16.92	16.87	16.96	16.86	16.80	
15	16QAM	1	0		17.18	16.89	16.92	16.97	16.96	
15	16QAM	1	37		17.12	17.00	17.17	17.07	17.17	18
15	16QAM	1	74		17.06	16.83	17.05	16.81	17.14	
15	16QAM	36	0		16.94	16.71	16.82	16.79	16.76	
15	16QAM	36	20		16.94	16.85	16.97	16.90	16.92	
15	16QAM	36	39		16.95	16.77	16.95	16.90	16.91	18
15	16QAM	75	0		16.92	16.84	16.96	16.88	16.80	
15	64QAM	1	0		17.06	16.64	16.75	16.82	16.66	
15	64QAM	1	37		17.01	17.15	17.07	16.97	16.99	
15	64QAM	1	74		16.95	16.92	16.91	16.73	17.01	18
15	64QAM	36	0		17.03	16.84	16.87	16.84	16.79	
15	64QAM	36	20		16.99	16.95	17.05	16.95	16.96	
15	64QAM	36	39		17.00	16.89	16.98	16.85	16.97	
15	64QAM	75	0		16.94	16.89	16.98	16.90	16.83	
				Channel	39700	40160	40620	41080	41540	Tune-up limit (dBm)
				Frequency (MHz)	2501	2547	2593	2638	2685	
10	QPSK	1	0		16.80	16.67	16.37	16.34	16.27	18
10	QPSK	1	25		16.73	16.62	16.77	16.58	16.59	
10	QPSK	1	49		16.69	16.69	16.44	16.25	16.58	
10	QPSK	25	0		16.94	16.80	16.75	16.75	16.70	
10	QPSK	25	12		16.90	16.85	16.95	16.81	16.81	18
10	QPSK	25	25		16.87	16.83	16.87	16.75	16.82	
10	QPSK	50	0		16.84	16.74	16.90	16.61	16.72	
10	16QAM	1	0		17.10	17.00	16.69	16.81	16.58	
10	16QAM	1	25		17.02	17.01	17.17	16.93	17.03	18
10	16QAM	1	49		17.06	17.02	16.93	16.92	17.01	
10	16QAM	25	0		16.99	16.85	16.78	16.73	16.67	
10	16QAM	25	12		16.93	16.89	16.97	16.79	16.79	
10	16QAM	25	25		16.96	16.94	16.96	16.74	16.90	18
10	16QAM	50	0		16.76	16.77	16.90	16.73	16.71	
10	64QAM	1	0		17.07	16.81	16.90	16.64	16.44	
10	64QAM	1	25		16.91	16.93	17.02	16.98	16.93	
10	64QAM	1	49		16.82	17.14	16.79	16.53	16.90	18
10	64QAM	25	0		16.98	16.90	16.80	16.76	16.76	
10	64QAM	25	12		16.94	17.01	16.94	16.85	16.69	
10	64QAM	25	25		16.89	16.94	16.90	16.75	16.88	
10	64QAM	50	0		16.82	16.81	16.91	16.79	16.81	
				Channel	39675	40146	40620	41063	41565	Tune-up limit (dBm)
				Frequency (MHz)	2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0		16.66	16.46	16.59	16.49	16.58	18
5	QPSK	1	12		16.59	16.57	16.64	16.55	16.60	
5	QPSK	1	24		16.61	16.50	16.61	16.50	16.55	
5	QPSK	12	0		16.82	16.70	16.75	16.65	16.77	
5	QPSK	12	7		16.85	16.78	16.85	16.68	16.78	18
5	QPSK	12	13		16.79	16.77	16.77	16.69	16.72	
5	QPSK	25	0		16.76	16.76	16.80	16.65	16.73	
5	16QAM	1	0		16.94	16.89	16.86	16.79	16.84	
5	16QAM	1	12		16.91	16.91	16.89	16.86	16.85	18
5	16QAM	1	24		16.93	16.94	16.90	16.84	16.79	
5	16QAM	12	0		16.82	16.74	16.81	16.73	16.81	
5	16QAM	12	7		16.87	16.85	16.86	16.71	16.80	
5	16QAM	12	13		16.80	16.81	16.82	16.77	16.79	18
5	16QAM	25	0		16.82	16.81	16.86	16.69	16.79	
5	64QAM	1	0		16.87	16.75	16.82	16.71	16.79	
5	64QAM	1	12		16.85	16.87	16.86	16.79	16.82	
5	64QAM	1	24		16.85	16.84	16.87	16.80	16.78	18
5	64QAM	12	0		16.87	16.77	16.81	16.75	16.84	
5	64QAM	12	7		16.86	16.87	16.93	16.76	16.85	
5	64QAM	12	13		16.83	16.86	16.88	16.81	16.81	
5	64QAM	25	0		16.81	16.85	16.90	16.73	16.81	



Band 38_Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.
Channel				37650	38000	38150
Frequency (MHz)				2560	2595	2630
20	QPSK	1	0	20.21	20.20	20.13
20	QPSK	1	49	20.28	20.23	20.17
20	QPSK	1	99	20.26	20.23	20.17
20	QPSK	50	0	20.12	20.10	20.02
20	QPSK	50	24	20.29	20.29	20.13
20	QPSK	50	50	20.23	20.19	20.12
20	QPSK	100	0	20.21	20.19	20.03
20	16QAM	1	0	20.34	20.34	20.24
20	16QAM	1	49	20.39	20.31	20.22
20	16QAM	1	99	20.42	20.31	20.26
20	16QAM	50	0	20.15	20.11	20.05
20	16QAM	50	24	20.34	20.30	20.14
20	16QAM	50	50	20.26	20.19	20.13
20	16QAM	100	0	20.21	20.19	20.05
20	64QAM	1	0	20.08	20.10	20.00
20	64QAM	1	49	20.16	20.07	20.06
20	64QAM	1	99	20.21	20.13	20.08
20	64QAM	50	0	20.15	20.12	20.05
20	64QAM	50	24	20.35	20.30	20.16
20	64QAM	50	50	20.26	20.22	20.16
20	64QAM	100	0	20.24	20.18	20.07
Channel				37625	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	20.21	20.15	20.10
15	QPSK	1	37	20.21	20.16	20.10
15	QPSK	1	74	20.21	20.16	20.11
15	QPSK	36	0	20.19	20.14	20.08
15	QPSK	36	20	20.32	20.31	20.15
15	QPSK	36	39	20.25	20.21	20.15
15	QPSK	75	0	20.26	20.22	20.08
15	16QAM	1	0	20.32	20.30	20.25
15	16QAM	1	37	20.27	20.24	20.24
15	16QAM	1	74	20.41	20.30	20.28
15	16QAM	36	0	20.12	20.08	20.00
15	16QAM	36	20	20.30	20.25	20.11
15	16QAM	36	39	20.23	20.19	20.11
15	16QAM	75	0	20.28	20.22	20.08
15	64QAM	1	0	20.00	19.99	19.88
15	64QAM	1	37	20.11	20.06	20.04
15	64QAM	1	74	20.20	20.10	20.03
15	64QAM	36	0	20.19	20.16	20.08
15	64QAM	36	20	20.35	20.32	20.16
15	64QAM	36	39	20.26	20.23	20.17
15	64QAM	75	0	20.28	20.23	20.08
Channel				37600	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	20.12	20.10	20.03
10	QPSK	1	25	20.11	20.14	20.07
10	QPSK	1	49	20.11	20.14	20.08
10	QPSK	25	0	20.14	20.08	20.04
10	QPSK	25	12	20.23	20.30	20.05
10	QPSK	25	25	20.15	20.14	20.08
10	QPSK	50	0	20.18	20.14	20.08
10	16QAM	1	0	20.30	20.20	20.18
10	16QAM	1	25	20.24	20.15	20.19
10	16QAM	1	49	20.41	20.25	20.27
10	16QAM	25	0	20.07	20.03	19.96
10	16QAM	25	12	20.21	20.21	20.09
10	16QAM	25	25	20.15	20.17	20.05
10	16QAM	50	0	20.24	20.16	20.03
10	64QAM	1	0	19.90	19.97	19.88
10	64QAM	1	25	20.08	20.02	19.95
10	64QAM	1	49	20.12	20.01	19.97
10	64QAM	25	0	20.12	20.15	20.07
10	64QAM	25	12	20.32	20.28	20.07
10	64QAM	25	25	20.20	20.14	20.09
10	64QAM	50	0	20.27	20.19	20.07
Channel				37775	38000	38225
Frequency (MHz)				2672.5	2595	2617.5
5	QPSK	1	0	19.87	19.87	19.82
5	QPSK	1	12	19.97	19.97	19.91
5	QPSK	1	24	19.96	19.95	19.84
5	QPSK	12	0	20.07	19.99	19.91
5	QPSK	12	7	20.13	20.10	20.04
5	QPSK	12	13	20.13	20.10	19.99
5	QPSK	25	0	20.07	20.06	19.98
5	16QAM	1	0	20.00	20.03	19.97
5	16QAM	1	12	20.13	20.17	20.13
5	16QAM	1	24	20.08	20.15	20.10
5	16QAM	12	0	20.05	19.98	19.82
5	16QAM	12	7	20.08	20.11	20.03
5	16QAM	12	13	20.07	20.08	19.99
5	16QAM	25	0	20.09	20.11	20.06
5	64QAM	1	0	19.85	19.70	19.69
5	64QAM	1	12	19.90	19.86	19.82
5	64QAM	1	24	19.90	19.86	19.84
5	64QAM	12	0	20.11	20.00	19.93
5	64QAM	12	7	20.15	20.14	20.06
5	64QAM	12	13	20.15	20.09	20.05
5	64QAM	25	0	20.15	20.13	20.03



Band 41_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	2135	2128	2095	2099	2034	22
20	QPSK	1	49	2136	2133	2137	2125	2128	
20	QPSK	1	99	2131	2131	2109	2088	2119	22
20	QPSK	50	0	2143	2129	2126	2121	2134	
20	QPSK	50	24	2144	2138	2147	2128	2134	22
20	QPSK	50	50	2138	2136	2140	2122	2133	
20	QPSK	100	0	2134	2127	2138	2118	2122	22
20	16QAM	1	0	2184	2180	2111	2115	2100	
20	16QAM	1	49	2140	2141	2149	2141	2139	22
20	16QAM	1	99	2144	2149	2124	2096	2133	
20	16QAM	50	0	2143	2135	2130	2126	2119	22
20	16QAM	50	24	2143	2145	2151	2133	2135	
20	16QAM	50	50	2137	2143	2144	2127	2142	22
20	16QAM	100	0	2134	2133	2142	2123	2127	
20	64QAM	1	0	2128	2123	2075	2086	2084	22
20	64QAM	1	49	2119	2109	2121	2111	2112	
20	64QAM	1	99	2125	2120	2094	2072	2108	22
20	64QAM	50	0	2097	2081	2078	2074	2067	
20	64QAM	50	24	2095	2082	2088	2082	2084	22
20	64QAM	50	50	2082	2090	2092	2075	2090	
20	64QAM	100	0	2090	2083	2089	2071	2075	
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	2138	2102	2113	2108	2095	22
15	QPSK	1	37	2133	2124	2132	2123	2126	
15	QPSK	1	74	2132	2104	2121	2099	2123	22
15	QPSK	36	0	2144	2124	2128	2123	2118	
15	QPSK	36	20	2142	2140	2145	2133	2138	22
15	QPSK	36	39	2140	2130	2141	2126	2136	
15	QPSK	75	0	2139	2132	2142	2130	2125	22
15	16QAM	1	49	2151	2129	2128	2129	2114	
15	16QAM	1	37	2140	2141	2144	2141	2140	22
15	16QAM	1	74	2147	2128	2138	2122	2139	
15	16QAM	36	0	2140	2124	2129	2123	2116	22
15	16QAM	36	20	2140	2140	2145	2135	2137	
15	16QAM	36	39	2138	2132	2142	2125	2138	22
15	16QAM	75	0	2140	2139	2144	2132	2126	
15	64QAM	1	0	2125	2094	2091	2101	2082	22
15	64QAM	1	37	2118	2116	2123	2116	2117	
15	64QAM	1	74	2123	2103	2111	2094	2118	22
15	64QAM	36	0	2096	2078	2081	2075	2071	
15	64QAM	36	20	2087	2084	2088	2087	2091	22
15	64QAM	36	39	2082	2084	2093	2077	2091	
15	64QAM	75	0	2082	2084	2083	2082	2076	
Channel				39700	40160	40620	41090	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	2136	2099	2106	2102	2087	22
10	QPSK	1	25	2128	2123	2132	2113	2126	
10	QPSK	1	49	2124	2094	2119	2098	2123	22
10	QPSK	25	0	2134	2122	2124	2116	2117	
10	QPSK	25	12	2133	2132	2145	2129	2129	22
10	QPSK	25	25	2140	2125	2141	2124	2131	
10	QPSK	50	0	2138	2125	2135	2123	2116	22
10	16QAM	1	0	2145	2119	2122	2129	2107	
10	16QAM	1	25	2138	2131	2144	2140	2136	22
10	16QAM	1	49	2143	2118	2129	2117	2132	
10	16QAM	25	0	2139	2121	2128	2114	2109	22
10	16QAM	25	12	2130	2139	2136	2134	2132	
10	16QAM	25	25	2128	2123	2135	2115	2136	22
10	16QAM	50	0	2135	2133	2141	2131	2118	
10	64QAM	1	0	2122	2092	2081	2093	2076	22
10	64QAM	1	25	2113	2115	2118	2111	2108	
10	64QAM	1	49	2113	2093	2104	2091	2114	22
10	64QAM	25	0	2088	2088	2074	2075	2088	
10	64QAM	25	12	2087	2088	2095	2085	2081	22
10	64QAM	25	25	2082	2078	2084	2072	2091	
10	64QAM	50	0	2084	2074	2083	2076	2074	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2543.3	2593	2638.3	2683.5	
5	QPSK	1	0	2120	2111	2111	2103	2116	22
5	QPSK	1	12	2114	2110	2116	2105	2118	
5	QPSK	1	24	2115	2113	2114	2103	2110	22
5	QPSK	12	0	2127	2118	2123	2114	2124	
5	QPSK	12	7	2133	2127	2131	2114	2127	22
5	QPSK	12	13	2128	2122	2127	2116	2126	
5	QPSK	25	0	2127	2125	2127	2110	2125	22
5	16QAM	1	0	2137	2121	2125	2114	2125	
5	16QAM	1	12	2140	2129	2139	2127	2135	22
5	16QAM	1	24	2139	2128	2133	2122	2126	
5	16QAM	12	0	2130	2119	2119	2111	2120	22
5	16QAM	12	7	2133	2127	2128	2113	2121	
5	16QAM	12	13	2128	2128	2127	2116	2119	22
5	16QAM	25	0	2134	2131	2132	2116	2124	
5	64QAM	1	0	2114	2108	2098	2098	2101	22
5	64QAM	1	12	2105	2115	2109	2104	2102	
5	64QAM	1	24	2111	2107	2108	2101	2104	22
5	64QAM	12	0	2087	2073	2076	2067	2075	
5	64QAM	12	7	2088	2084	2085	2071	2078	22
5	64QAM	12	13	2083	2077	2080	2071	2074	
5	64QAM	25	0	2086	2082	2083	2088	2076	



Band 41_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2566	2543.5	2523	2503.5	2490	
20	QPSK	1	0	2130	2124	2093	2091	2075	22
20	QPSK	1	49	2125	2120	2127	2115	2115	
20	QPSK	1	99	2123	2125	2101	2077	2109	
20	QPSK	50	0	2144	2131	2126	2123	2115	
20	QPSK	50	24	2144	2138	2147	2131	2129	22
20	QPSK	50	50	2141	2139	2141	2124	2136	
20	QPSK	100	0	2136	2128	2135	2119	2122	
20	16QAM	1	0	2184	2186	2127	2126	2111	
20	16QAM	1	49	2159	2157	2165	2152	2151	22
20	16QAM	1	99	2158	2169	2139	2112	2144	
20	16QAM	50	0	2145	2136	2133	2127	2121	
20	16QAM	50	24	2145	2148	2151	2134	2135	
20	16QAM	50	50	2141	2145	2145	2127	2141	22
20	16QAM	100	0	2138	2137	2143	2122	2127	
20	64QAM	1	0	2158	2146	2104	2110	2092	
20	64QAM	1	49	2145	2138	2150	2134	2136	
20	64QAM	1	99	2149	2150	2122	2097	2133	22
20	64QAM	50	0	2146	2132	2130	2126	2119	
20	64QAM	50	24	2145	2149	2151	2133	2137	
20	64QAM	50	50	2142	2142	2145	2127	2141	
20	64QAM	100	0	2138	2134	2141	2123	2126	
Channel				39725	40173	40620	41058	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	2136	2102	2111	2105	2091	22
15	QPSK	1	37	2131	2123	2132	2120	2121	
15	QPSK	1	74	2131	2100	2117	2097	2117	
15	QPSK	36	0	2146	2124	2128	2125	2116	
15	QPSK	36	20	2144	2141	2144	2135	2137	22
15	QPSK	36	39	2142	2130	2141	2127	2137	
15	QPSK	75	0	2139	2133	2141	2127	2125	
15	16QAM	1	0	2168	2146	2141	2141	2125	
15	16QAM	1	37	2159	2164	2164	2157	2154	22
15	16QAM	1	74	2160	2144	2149	2135	2155	
15	16QAM	36	0	2142	2129	2130	2125	2119	
15	16QAM	36	20	2140	2143	2148	2134	2136	
15	16QAM	36	39	2138	2135	2144	2128	2137	22
15	16QAM	75	0	2140	2137	2144	2133	2126	
15	64QAM	1	0	2153	2124	2118	2124	2107	
15	64QAM	1	37	2149	2146	2147	2140	2142	
15	64QAM	1	74	2149	2124	2138	2118	2142	22
15	64QAM	36	0	2146	2126	2130	2126	2121	
15	64QAM	36	20	2147	2153	2149	2137	2140	
15	64QAM	36	39	2143	2131	2145	2127	2129	
15	64QAM	75	0	2141	2133	2144	2132	2127	
Channel				39700	40160	40620	41090	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	2109	2078	2076	2071	2077	22
10	QPSK	1	25	2105	2104	2103	2097	2102	
10	QPSK	1	49	2113	2080	2086	2077	2082	
10	QPSK	25	0	2127	2109	2113	2102	2108	
10	QPSK	25	12	2128	2126	2129	2109	2125	22
10	QPSK	25	25	2125	2114	2118	2106	2113	
10	QPSK	50	0	2120	2118	2118	2101	2118	
10	16QAM	1	0	2147	2117	2117	2109	2112	
10	16QAM	1	25	2144	2141	2144	2133	2132	22
10	16QAM	1	49	2144	2114	2119	2110	2110	
10	16QAM	25	0	2133	2114	2117	2107	2110	
10	16QAM	25	12	2134	2132	2133	2116	2127	
10	16QAM	25	25	2127	2122	2123	2113	2114	22
10	16QAM	50	0	2129	2121	2125	2108	2116	
10	64QAM	1	0	2143	2105	2103	2096	2097	
10	64QAM	1	25	2132	2143	2135	2136	2135	
10	64QAM	1	49	2134	2110	2109	2101	2103	22
10	64QAM	25	0	2135	2116	2120	2112	2116	
10	64QAM	25	12	2137	2136	2136	2120	2132	
10	64QAM	25	25	2133	2123	2126	2117	2120	
10	64QAM	50	0	2122	2121	2123	2106	2117	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2543.5	2593	2640.39	2687.5	
5	QPSK	1	0	2115	2101	2099	2091	2105	22
5	QPSK	1	12	2107	2104	2109	2102	2108	
5	QPSK	1	24	2107	2105	2107	2094	2101	
5	QPSK	12	0	2129	2120	2118	2109	2121	
5	QPSK	12	7	2132	2125	2127	2113	2126	22
5	QPSK	12	13	2126	2123	2124	2116	2116	
5	QPSK	25	0	2124	2121	2126	2107	2119	
5	16QAM	1	0	2145	2128	2134	2120	2131	
5	16QAM	1	12	2141	2131	2138	2127	2133	22
5	16QAM	1	24	2145	2133	2140	2126	2131	
5	16QAM	12	0	2135	2123	2122	2114	2123	
5	16QAM	12	7	2138	2130	2130	2115	2123	
5	16QAM	12	13	2133	2125	2129	2119	2123	22
5	16QAM	25	0	2135	2130	2131	2116	2123	
5	64QAM	1	0	2133	2121	2122	2120	2123	
5	64QAM	1	12	2131	2128	2129	2121	2124	
5	64QAM	1	24	2133	2127	2130	2118	2118	22
5	64QAM	12	0	2134	2122	2123	2117	2124	
5	64QAM	12	7	2135	2134	2132	2117	2131	
5	64QAM	12	13	2135	2126	2130	2120	2120	
5	64QAM	25	0	2132	2129	2130	2114	2124	



Band 38_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2560	2595	2630	
20	QPSK	1	0	19.41	19.40	19.39	20
20	QPSK	1	49	19.40	19.38	19.28	
20	QPSK	1	99	19.32	19.24	19.19	
20	QPSK	50	0	19.27	19.25	19.21	20
20	QPSK	50	24	19.42	19.37	19.28	
20	QPSK	50	50	19.29	19.25	19.22	
20	QPSK	100	0	19.32	19.28	19.17	20
20	16QAM	1	0	19.57	19.59	19.58	
20	16QAM	1	49	19.51	19.44	19.43	
20	16QAM	1	99	19.47	19.38	19.36	20
20	16QAM	50	0	19.30	19.28	19.25	
20	16QAM	50	24	19.47	19.44	19.32	
20	16QAM	50	50	19.34	19.31	19.23	20
20	16QAM	100	0	19.34	19.34	19.20	
20	64QAM	1	0	19.15	19.16	19.11	
20	64QAM	1	49	19.14	19.04	19.05	20
20	64QAM	1	99	19.11	19.00	19.00	
20	64QAM	50	0	19.29	19.27	19.23	
20	64QAM	50	24	19.46	19.40	19.29	20
20	64QAM	50	50	19.32	19.26	19.21	
20	64QAM	100	0	19.32	19.30	19.19	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.35	19.36	19.31	20
15	QPSK	1	37	19.32	19.30	19.24	
15	QPSK	1	74	19.25	19.25	19.19	
15	QPSK	36	0	19.28	19.28	19.22	20
15	QPSK	36	20	19.43	19.41	19.25	
15	QPSK	36	39	19.33	19.27	19.21	
15	QPSK	75	0	19.37	19.35	19.18	20
15	16QAM	1	0	19.55	19.55	19.51	
15	16QAM	1	37	19.41	19.42	19.40	
15	16QAM	1	74	19.49	19.41	19.35	20
15	16QAM	36	0	19.30	19.24	19.18	
15	16QAM	36	20	19.43	19.38	19.24	
15	16QAM	36	39	19.33	19.27	19.21	20
15	16QAM	75	0	19.39	19.38	19.23	
15	64QAM	1	0	19.07	19.09	19.01	
15	64QAM	1	37	19.08	19.06	19.01	20
15	64QAM	1	74	19.07	19.00	18.93	
15	64QAM	36	0	19.32	19.29	19.23	
15	64QAM	36	20	19.42	19.40	19.24	20
15	64QAM	36	39	19.33	19.29	19.22	
15	64QAM	75	0	19.37	19.34	19.20	
Channel				37850	38000	38200	
Frequency (MHz)				2577.5	2595	2615	
10	QPSK	1	0	19.39	19.38	19.37	20
10	QPSK	1	25	19.31	19.30	19.19	
10	QPSK	1	49	19.23	19.15	19.18	
10	QPSK	25	0	19.22	19.25	19.20	20
10	QPSK	25	12	19.36	19.32	19.28	
10	QPSK	25	25	19.22	19.20	19.15	
10	QPSK	50	0	19.23	19.25	19.12	20
10	16QAM	1	0	19.54	19.56	19.56	
10	16QAM	1	25	19.43	19.40	19.35	
10	16QAM	1	49	19.45	19.38	19.28	20
10	16QAM	25	0	19.25	19.18	19.25	
10	16QAM	25	12	19.45	19.41	19.24	
10	16QAM	25	25	19.30	19.21	19.23	20
10	16QAM	50	0	19.26	19.25	19.19	
10	64QAM	1	0	19.07	19.09	19.10	
10	64QAM	1	25	19.12	19.02	18.95	20
10	64QAM	1	49	19.05	18.95	18.90	
10	64QAM	25	0	19.24	19.17	19.21	
10	64QAM	25	12	19.40	19.38	19.28	20
10	64QAM	25	25	19.29	19.22	19.14	
10	64QAM	50	0	19.27	19.22	19.15	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.01	18.99	18.89	20
5	QPSK	1	12	19.05	19.08	18.99	
5	QPSK	1	24	19.07	19.02	18.93	
5	QPSK	12	0	19.16	19.08	19.01	20
5	QPSK	12	7	19.19	19.21	19.11	
5	QPSK	12	13	19.16	19.14	19.06	
5	QPSK	25	0	19.15	19.14	19.05	20
5	16QAM	1	0	19.14	19.10	19.00	
5	16QAM	1	12	19.30	19.28	19.20	
5	16QAM	1	24	19.22	19.16	19.10	20
5	16QAM	12	0	19.12	19.05	18.93	
5	16QAM	12	7	19.17	19.14	19.06	
5	16QAM	12	13	19.16	19.13	19.01	20
5	16QAM	25	0	19.20	19.16	19.05	
5	64QAM	1	0	18.82	18.77	18.66	
5	64QAM	1	12	18.91	18.85	18.78	20
5	64QAM	1	24	18.87	18.82	18.71	
5	64QAM	12	0	19.18	19.16	19.05	
5	64QAM	12	7	19.30	19.24	19.18	20
5	64QAM	12	13	19.21	19.23	19.10	
5	64QAM	25	0	19.21	19.24	19.14	



Band 41_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2505	2548.3	2593	2637.5	2682.5	
20	QPSK	1	0	18.40	18.30	18.07	18.10	17.92	19
20	QPSK	1	49	18.41	18.34	18.45	18.38	18.36	
20	QPSK	1	99	18.34	18.34	18.14	17.95	18.29	
20	QPSK	50	0	18.48	18.38	18.32	18.29	18.24	
20	QPSK	50	24	18.48	18.45	18.53	18.37	18.38	19
20	QPSK	50	50	18.41	18.45	18.45	18.31	18.47	
20	QPSK	100	0	18.38	18.33	18.42	18.25	18.29	
20	16QAM	1	0	18.81	18.37	18.21	18.23	18.07	
20	16QAM	1	49	18.50	18.33	18.56	18.47	18.46	19
20	16QAM	1	99	18.47	18.41	18.30	18.05	18.41	
20	16QAM	50	0	18.51	18.41	18.37	18.35	18.27	
20	16QAM	50	24	18.52	18.51	18.54	18.41	18.42	
20	16QAM	50	50	18.49	18.52	18.48	18.34	18.46	19
20	16QAM	100	0	18.41	18.38	18.46	18.29	18.33	
20	64QAM	1	0	18.31	18.43	17.88	17.92	17.73	
20	64QAM	1	49	18.21	18.28	18.34	18.19	18.25	
20	64QAM	1	99	18.26	18.41	18.04	17.84	18.21	19
20	64QAM	50	0	18.52	18.43	18.37	18.34	18.28	
20	64QAM	50	24	18.49	18.49	18.56	18.40	18.44	
20	64QAM	50	50	18.45	18.59	18.50	18.33	18.50	
20	64QAM	100	0	18.42	18.39	18.46	18.31	18.34	
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	18.39	18.13	18.19	18.10	18.05	19
15	QPSK	1	37	18.38	18.37	18.37	18.19	18.31	
15	QPSK	1	74	18.33	18.15	18.25	18.03	18.30	
15	QPSK	36	0	18.51	18.29	18.35	18.32	18.27	
15	QPSK	36	20	18.47	18.43	18.55	18.42	18.47	19
15	QPSK	36	39	18.44	18.34	18.47	18.34	18.46	
15	QPSK	75	0	18.42	18.37	18.48	18.37	18.34	
15	16QAM	1	0	18.59	18.19	18.37	18.35	18.28	
15	16QAM	1	37	18.47	18.30	18.56	18.56	18.51	19
15	16QAM	1	74	18.55	18.23	18.45	18.29	18.51	
15	16QAM	36	0	18.47	18.31	18.34	18.31	18.27	
15	16QAM	36	20	18.47	18.45	18.53	18.44	18.45	
15	16QAM	36	39	18.48	18.35	18.50	18.34	18.45	19
15	16QAM	75	0	18.46	18.44	18.51	18.40	18.38	
15	64QAM	1	0	18.37	18.10	18.06	18.16	17.92	
15	64QAM	1	37	18.28	18.31	18.35	18.28	18.29	
15	64QAM	1	74	18.30	18.14	18.20	18.09	18.29	19
15	64QAM	36	0	18.51	18.36	18.40	18.36	18.32	
15	64QAM	36	20	18.54	18.50	18.59	18.47	18.51	
15	64QAM	36	39	18.49	18.40	18.53	18.40	18.51	
15	64QAM	75	0	18.46	18.42	18.50	18.43	18.37	
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	18.34	18.03	18.10	18.09	17.95	19
10	QPSK	1	25	18.30	18.36	18.33	18.12	18.31	
10	QPSK	1	49	18.33	18.12	18.20	18.01	18.25	
10	QPSK	25	0	18.51	18.19	18.35	18.30	18.27	
10	QPSK	25	13	18.37	18.35	18.54	18.38	18.38	19
10	QPSK	25	25	18.36	18.25	18.37	18.27	18.39	
10	QPSK	50	0	18.39	18.29	18.45	18.32	18.26	
10	16QAM	1	0	18.54	18.12	18.32	18.33	18.18	
10	16QAM	1	25	18.39	18.28	18.52	18.55	18.44	19
10	16QAM	1	49	18.53	18.14	18.35	18.28	18.49	
10	16QAM	25	0	18.37	18.24	18.28	18.31	18.17	
10	16QAM	25	12	18.44	18.38	18.43	18.42	18.39	
10	16QAM	25	25	18.47	18.33	18.50	18.33	18.37	19
10	16QAM	50	0	18.46	18.40	18.42	18.30	18.28	
10	64QAM	1	0	18.28	18.09	17.90	18.08	17.85	
10	64QAM	1	25	18.25	18.25	18.28	18.20	18.19	
10	64QAM	1	49	18.24	18.09	18.11	18.09	18.24	19
10	64QAM	25	0	18.47	18.28	18.37	18.31	18.32	
10	64QAM	25	12	18.46	18.50	18.51	18.47	18.48	
10	64QAM	25	25	18.46	18.36	18.48	18.36	18.45	
10	64QAM	50	0	18.41	18.34	18.45	18.35	18.37	
Channel				38675	40146	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.38	2687.5	
5	QPSK	1	0	18.28	18.09	18.19	18.22	18.23	19
5	QPSK	1	12	18.14	18.12	18.22	18.20	18.20	
5	QPSK	1	24	18.19	18.10	18.17	18.21	18.15	
5	QPSK	12	0	18.34	18.28	18.28	18.19	18.28	
5	QPSK	12	7	18.31	18.31	18.35	18.22	18.31	19
5	QPSK	12	13	18.32	18.30	18.30	18.24	18.25	
5	QPSK	25	0	18.28	18.29	18.33	18.18	18.28	
5	16QAM	1	0	18.38	18.30	18.30	18.26	18.31	
5	16QAM	1	12	18.38	18.38	18.41	18.31	18.39	19
5	16QAM	1	24	18.40	18.36	18.38	18.32	18.31	
5	16QAM	12	0	18.32	18.24	18.26	18.17	18.26	
5	16QAM	12	7	18.34	18.32	18.34	18.21	18.32	
5	16QAM	12	13	18.29	18.28	18.32	18.23	18.22	19
5	16QAM	25	0	18.33	18.36	18.35	18.23	18.33	
5	64QAM	1	0	18.15	18.03	18.09	18.20	18.09	
5	64QAM	1	12	18.13	18.25	18.17	18.09	18.11	
5	64QAM	1	24	18.12	18.23	18.14	18.17	18.12	19
5	64QAM	12	0	18.35	18.30	18.32	18.27	18.34	
5	64QAM	12	7	18.38	18.37	18.40	18.27	18.35	
5	64QAM	12	13	18.38	18.35	18.39	18.29	18.33	
5	64QAM	25	0	18.38	18.34	18.38	18.25	18.32	



Band 41_Ant 0										
BW (MHz)	Modulation	RB Size	RB Offset	Channel	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel					39750	40185	40620	41055	41490	
Frequency (MHz)					2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0		18.29	18.28	17.91	17.99	17.91	19
20	QPSK	1	49		18.23	18.22	18.30	18.19	18.23	
20	QPSK	1	99		18.22	18.24	18.02	17.82	18.17	
20	QPSK	50	0		18.45	18.32	18.30	18.29	18.22	
20	QPSK	50	24		18.45	18.43	18.52	18.36	18.36	19
20	QPSK	50	50		18.44	18.45	18.43	18.26	18.45	
20	QPSK	100	0		18.35	18.30	18.41	18.24	18.29	
20	16QAM	1	0		18.74	18.88	18.27	18.39	18.14	
20	16QAM	1	49		18.82	18.83	18.68	18.60	18.64	19
20	16QAM	1	99		18.64	18.71	18.40	18.21	18.52	
20	16QAM	50	0		18.50	18.42	18.35	18.34	18.27	
20	16QAM	50	24		18.49	18.50	18.55	18.39	18.41	
20	16QAM	50	50		18.44	18.48	18.47	18.33	18.49	19
20	16QAM	100	0		18.39	18.37	18.46	18.29	18.35	
20	64QAM	1	0		18.62	18.58	18.13	18.18	18.00	
20	64QAM	1	49		18.47	18.47	18.55	18.44	18.46	
20	64QAM	1	99		18.55	18.60	18.27	18.05	18.43	19
20	64QAM	50	0		18.50	18.41	18.36	18.34	18.25	
20	64QAM	50	24		18.47	18.47	18.57	18.40	18.42	
20	64QAM	50	50		18.43	18.47	18.50	18.31	18.49	
20	64QAM	100	0		18.40	18.39	18.45	18.30	18.33	
Channel					39725	40173	40620	41068	41515	
Frequency (MHz)					2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0		18.33	18.06	18.12	18.05	17.97	19
15	QPSK	1	37		18.27	18.30	18.33	18.17	18.27	
15	QPSK	1	74		18.27	18.05	18.18	17.97	18.24	
15	QPSK	36	0		18.49	18.26	18.33	18.33	18.24	
15	QPSK	36	20		18.44	18.38	18.50	18.44	18.47	19
15	QPSK	36	39		18.43	18.31	18.46	18.32	18.42	
15	QPSK	75	0		18.41	18.32	18.43	18.35	18.31	
15	16QAM	1	0		18.67	18.42	18.43	18.54	18.37	
15	16QAM	1	37		18.63	18.54	18.69	18.70	18.62	19
15	16QAM	1	74		18.66	18.36	18.57	18.45	18.62	
15	16QAM	36	0		18.48	18.29	18.35	18.30	18.25	
15	16QAM	36	20		18.46	18.43	18.50	18.40	18.46	
15	16QAM	36	39		18.45	18.36	18.47	18.33	18.43	19
15	16QAM	75	0		18.44	18.39	18.49	18.40	18.34	
15	64QAM	1	0		18.61	18.32	18.26	18.36	18.17	
15	64QAM	1	37		18.62	18.57	18.61	18.54	18.51	
15	64QAM	1	74		18.55	18.37	18.44	18.29	18.51	19
15	64QAM	36	0		18.50	18.30	18.38	18.37	18.30	
15	64QAM	36	20		18.49	18.46	18.56	18.46	18.49	
15	64QAM	36	39		18.48	18.38	18.52	18.35	18.48	
15	64QAM	75	0		18.44	18.41	18.48	18.41	18.33	
Channel					39700	40180	40620	41080	41540	
Frequency (MHz)					2501	2547	2593	2639	2685	
10	QPSK	1	0		18.18	17.80	17.86	17.78	17.79	19
10	QPSK	1	25		18.07	18.01	18.12	18.09	18.05	
10	QPSK	1	49		18.15	17.84	17.88	17.91	17.88	
10	QPSK	25	0		18.26	18.12	18.19	18.09	18.14	
10	QPSK	25	12		18.28	18.27	18.33	18.17	18.31	19
10	QPSK	25	25		18.25	18.19	18.22	18.16	18.17	
10	QPSK	50	0		18.21	18.19	18.27	18.11	18.20	
10	16QAM	1	0		18.53	18.17	18.25	18.17	18.20	
10	16QAM	1	25		18.44	18.41	18.50	18.39	18.43	19
10	16QAM	1	49		18.46	18.16	18.26	18.17	18.19	
10	16QAM	25	0		18.36	18.19	18.22	18.14	18.17	
10	16QAM	25	12		18.37	18.37	18.39	18.27	18.36	
10	16QAM	25	25		18.35	18.24	18.28	18.22	18.22	19
10	16QAM	50	0		18.26	18.26	18.35	18.15	18.25	
10	64QAM	1	0		18.48	18.21	18.12	18.10	18.05	
10	64QAM	1	25		18.45	18.55	18.49	18.45	18.39	
10	64QAM	1	49		18.37	18.20	18.18	18.12	18.12	19
10	64QAM	25	0		18.39	18.22	18.26	18.19	18.22	
10	64QAM	25	12		18.44	18.42	18.45	18.31	18.41	
10	64QAM	25	25		18.40	18.29	18.34	18.25	18.27	
10	64QAM	50	0		18.29	18.24	18.31	18.14	18.24	
Channel					39675	40146	40620	41063	41565	
Frequency (MHz)					2498.5	2545.8	2593	2640.39	2687.5	
5	QPSK	1	0		18.17	18.03	18.10	18.07	18.09	19
5	QPSK	1	12		18.09	18.05	18.14	18.11	18.10	
5	QPSK	1	24		18.10	18.04	18.10	18.11	18.06	
5	QPSK	12	0		18.31	18.20	18.25	18.19	18.28	
5	QPSK	12	7		18.30	18.29	18.35	18.20	18.28	19
5	QPSK	12	13		18.30	18.25	18.26	18.23	18.26	
5	QPSK	25	0		18.24	18.24	18.29	18.11	18.25	
5	16QAM	1	0		18.46	18.33	18.39	18.21	18.42	
5	16QAM	1	12		18.38	18.38	18.43	18.22	18.36	19
5	16QAM	1	24		18.43	18.40	18.44	18.28	18.34	
5	16QAM	12	0		18.33	18.26	18.26	18.20	18.32	
5	16QAM	12	7		18.38	18.30	18.35	18.24	18.32	
5	16QAM	12	13		18.33	18.31	18.38	18.27	18.28	19
5	16QAM	25	0		18.35	18.34	18.36	18.22	18.32	
5	64QAM	1	0		18.37	18.29	18.30	18.25	18.31	
5	64QAM	1	12		18.37	18.40	18.37	18.32	18.30	
5	64QAM	1	24		18.36	18.34	18.38	18.28	18.25	19
5	64QAM	12	0		18.38	18.28	18.33	18.26	18.31	
5	64QAM	12	7		18.40	18.36	18.40	18.29	18.34	
5	64QAM	12	13		18.33	18.35	18.37	18.30	18.29	
5	64QAM	25	0		18.33	18.33	18.40	18.22	18.31	



Band 38_Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2560	2595	2630	
20	QPSK	1	0	19.41	19.40	19.39	20.5
20	QPSK	1	49	19.40	19.38	19.28	
20	QPSK	1	99	19.32	19.24	19.19	
20	QPSK	50	0	19.27	19.25	19.21	20.5
20	QPSK	50	24	19.42	19.37	19.28	
20	QPSK	50	50	19.29	19.25	19.22	
20	QPSK	100	0	19.32	19.28	19.17	20.5
20	16QAM	1	0	19.57	19.59	19.58	
20	16QAM	1	49	19.51	19.44	19.43	
20	16QAM	1	99	19.47	19.38	19.36	20.5
20	16QAM	50	0	19.30	19.28	19.25	
20	16QAM	50	24	19.47	19.44	19.32	
20	16QAM	50	50	19.34	19.31	19.23	20.5
20	16QAM	100	0	19.34	19.34	19.20	
20	64QAM	1	0	19.15	19.16	19.11	
20	64QAM	1	49	19.14	19.04	19.05	20.5
20	64QAM	1	99	19.11	19.00	19.00	
20	64QAM	50	0	19.29	19.27	19.23	
20	64QAM	50	24	19.46	19.40	19.29	20.5
20	64QAM	50	50	19.32	19.26	19.21	
20	64QAM	100	0	19.32	19.30	19.19	
Channel				37625	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.35	19.36	19.31	20.5
15	QPSK	1	37	19.32	19.30	19.24	
15	QPSK	1	74	19.25	19.25	19.19	
15	QPSK	36	0	19.28	19.28	19.22	20.5
15	QPSK	36	20	19.43	19.41	19.25	
15	QPSK	36	39	19.33	19.27	19.21	
15	QPSK	75	0	19.37	19.35	19.18	20.5
15	16QAM	1	0	19.55	19.55	19.51	
15	16QAM	1	37	19.41	19.42	19.40	
15	16QAM	1	74	19.49	19.41	19.35	20.5
15	16QAM	36	0	19.30	19.24	19.18	
15	16QAM	36	20	19.43	19.38	19.24	
15	16QAM	36	39	19.33	19.27	19.21	20.5
15	16QAM	75	0	19.39	19.38	19.23	
15	64QAM	1	0	19.07	19.09	19.01	
15	64QAM	1	37	19.08	19.06	19.01	20.5
15	64QAM	1	74	19.07	19.00	18.93	
15	64QAM	36	0	19.32	19.29	19.23	
15	64QAM	36	20	19.42	19.40	19.24	20.5
15	64QAM	36	39	19.33	19.29	19.22	
15	64QAM	75	0	19.37	19.34	19.20	
Channel				37850	38000	38000	
Frequency (MHz)				2577.5	2595	2615	
10	QPSK	1	0	19.39	19.38	19.37	20.5
10	QPSK	1	25	19.31	19.30	19.19	
10	QPSK	1	49	19.23	19.15	19.18	
10	QPSK	25	0	19.22	19.25	19.20	20.5
10	QPSK	25	12	19.36	19.32	19.28	
10	QPSK	25	25	19.22	19.20	19.15	
10	QPSK	50	0	19.23	19.25	19.12	20.5
10	16QAM	1	0	19.54	19.56	19.56	
10	16QAM	1	25	19.43	19.40	19.35	
10	16QAM	1	49	19.45	19.38	19.28	20.5
10	16QAM	25	0	19.25	19.18	19.25	
10	16QAM	25	12	19.45	19.41	19.24	
10	16QAM	25	25	19.30	19.21	19.23	20.5
10	16QAM	50	0	19.26	19.25	19.19	
10	64QAM	1	0	19.07	19.09	19.10	
10	64QAM	1	25	19.12	19.02	18.95	20.5
10	64QAM	1	49	19.05	18.95	18.90	
10	64QAM	25	0	19.24	19.17	19.21	
10	64QAM	25	12	19.45	19.38	19.28	20.5
10	64QAM	25	25	19.29	19.22	19.14	
10	64QAM	50	0	19.27	19.22	19.15	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.01	18.99	18.89	20.5
5	QPSK	1	12	19.05	19.08	18.99	
5	QPSK	1	24	19.07	19.02	18.93	
5	QPSK	12	0	19.16	19.08	19.01	20.5
5	QPSK	12	7	19.19	19.21	19.11	
5	QPSK	12	13	19.16	19.14	19.06	
5	QPSK	25	0	19.15	19.14	19.05	20.5
5	16QAM	1	0	19.14	19.10	19.00	
5	16QAM	1	12	19.30	19.28	19.20	
5	16QAM	1	24	19.22	19.16	19.10	20.5
5	16QAM	12	0	19.12	19.05	18.93	
5	16QAM	12	7	19.17	19.14	19.06	
5	16QAM	12	13	19.16	19.13	19.01	20.5
5	16QAM	25	0	19.20	19.16	19.05	
5	64QAM	1	0	18.82	18.77	18.66	
5	64QAM	1	12	18.91	18.85	18.78	20.5
5	64QAM	1	24	18.87	18.82	18.71	
5	64QAM	12	0	19.18	19.16	19.05	
5	64QAM	12	7	19.30	19.24	19.18	20.5
5	64QAM	12	13	19.21	19.23	19.10	
5	64QAM	25	0	19.21	19.24	19.14	



Band 41_Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2505	2548.3	2593	2636.5	2680	
20	QPSK	1	0	18.40	18.30	18.07	18.10	17.92	19.5
20	QPSK	1	49	18.41	18.34	18.45	18.38	18.36	
20	QPSK	1	99	18.34	18.34	18.14	17.95	18.29	
20	QPSK	50	0	18.48	18.38	18.32	18.29	18.24	
20	QPSK	50	24	18.48	18.45	18.53	18.37	18.38	19.5
20	QPSK	50	50	18.41	18.45	18.45	18.31	18.47	
20	QPSK	100	0	18.38	18.33	18.42	18.25	18.29	
20	16QAM	1	0	18.81	18.37	18.21	18.23	18.07	
20	16QAM	1	49	18.50	18.33	18.56	18.47	18.46	19.5
20	16QAM	1	99	18.47	18.41	18.30	18.05	18.41	
20	16QAM	50	0	18.51	18.41	18.37	18.35	18.27	
20	16QAM	50	24	18.52	18.51	18.54	18.41	18.42	
20	16QAM	50	50	18.49	18.52	18.48	18.34	18.46	19.5
20	16QAM	100	0	18.41	18.38	18.46	18.29	18.33	
20	64QAM	1	0	18.31	18.43	17.88	17.92	17.73	
20	64QAM	1	49	18.21	18.28	18.34	18.19	18.25	
20	64QAM	1	99	18.26	18.41	18.04	17.84	18.21	19.5
20	64QAM	50	0	18.52	18.43	18.37	18.34	18.28	
20	64QAM	50	24	18.49	18.49	18.56	18.40	18.44	
20	64QAM	50	50	18.45	18.59	18.50	18.33	18.50	
20	64QAM	100	0	18.42	18.39	18.46	18.31	18.34	
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	18.39	18.13	18.19	18.10	18.05	19.5
15	QPSK	1	37	18.38	18.37	18.37	18.19	18.31	
15	QPSK	1	74	18.33	18.15	18.25	18.09	18.30	
15	QPSK	36	0	18.51	18.29	18.35	18.32	18.27	
15	QPSK	36	20	18.47	18.43	18.55	18.42	18.47	19.5
15	QPSK	36	39	18.44	18.34	18.47	18.34	18.46	
15	QPSK	75	0	18.42	18.37	18.48	18.37	18.34	
15	16QAM	1	0	18.59	18.19	18.37	18.35	18.28	
15	16QAM	1	37	18.47	18.30	18.56	18.56	18.51	19.5
15	16QAM	1	74	18.55	18.23	18.45	18.29	18.51	
15	16QAM	36	0	18.47	18.31	18.34	18.31	18.27	
15	16QAM	36	20	18.47	18.45	18.53	18.44	18.45	
15	16QAM	36	39	18.48	18.35	18.50	18.34	18.45	19.5
15	16QAM	75	0	18.46	18.44	18.51	18.40	18.38	
15	64QAM	1	0	18.37	18.10	18.06	18.16	17.92	
15	64QAM	1	37	18.28	18.31	18.35	18.28	18.29	
15	64QAM	1	74	18.30	18.14	18.20	18.09	18.29	19.5
15	64QAM	36	0	18.51	18.19	18.35	18.30	18.32	
15	64QAM	36	20	18.54	18.50	18.59	18.47	18.51	
15	64QAM	36	39	18.49	18.40	18.53	18.40	18.51	
15	64QAM	75	0	18.46	18.42	18.50	18.43	18.37	
Channel				39700	40180	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	18.34	18.03	18.10	18.09	17.95	19.5
10	QPSK	1	25	18.30	18.36	18.33	18.12	18.31	
10	QPSK	1	49	18.33	18.12	18.20	18.01	18.25	
10	QPSK	25	0	18.51	18.36	18.40	18.36	18.38	
10	QPSK	25	13	18.37	18.35	18.54	18.38	18.38	19.5
10	QPSK	25	25	18.36	18.25	18.37	18.27	18.39	
10	QPSK	50	0	18.39	18.29	18.45	18.32	18.26	
10	16QAM	1	0	18.54	18.12	18.32	18.33	18.18	
10	16QAM	1	25	18.39	18.28	18.52	18.55	18.44	19.5
10	16QAM	1	49	18.53	18.14	18.35	18.28	18.49	
10	16QAM	25	0	18.37	18.24	18.28	18.31	18.17	
10	16QAM	25	12	18.44	18.38	18.43	18.42	18.39	
10	16QAM	25	25	18.47	18.33	18.50	18.33	18.37	19.5
10	16QAM	50	0	18.46	18.40	18.42	18.30	18.28	
10	64QAM	1	0	18.28	18.09	17.90	18.08	17.85	
10	64QAM	1	25	18.25	18.25	18.28	18.20	18.19	
10	64QAM	1	49	18.24	18.09	18.11	18.09	18.24	19.5
10	64QAM	25	0	18.47	18.28	18.37	18.31	18.32	
10	64QAM	25	12	18.46	18.50	18.51	18.47	18.48	
10	64QAM	25	25	18.46	18.36	18.48	18.36	18.45	
10	64QAM	50	0	18.41	18.34	18.45	18.35	18.37	
Channel				39675	40146	40620	41063	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.38	2687.5	
5	QPSK	1	0	18.28	18.09	18.19	18.22	18.23	19.5
5	QPSK	1	12	18.14	18.12	18.22	18.20	18.20	
5	QPSK	1	24	18.19	18.10	18.17	18.21	18.15	
5	QPSK	12	0	18.34	18.28	18.28	18.19	18.28	
5	QPSK	12	7	18.31	18.31	18.35	18.22	18.31	19.5
5	QPSK	12	13	18.32	18.30	18.30	18.24	18.25	
5	QPSK	25	0	18.28	18.29	18.33	18.18	18.28	
5	16QAM	1	0	18.38	18.30	18.30	18.26	18.31	
5	16QAM	1	12	18.38	18.38	18.41	18.31	18.39	19.5
5	16QAM	1	24	18.40	18.36	18.38	18.32	18.31	
5	16QAM	12	0	18.32	18.24	18.26	18.17	18.26	
5	16QAM	12	7	18.34	18.32	18.34	18.21	18.32	
5	16QAM	12	13	18.29	18.28	18.32	18.23	18.22	19.5
5	16QAM	25	0	18.33	18.36	18.35	18.23	18.33	
5	64QAM	1	0	18.15	18.03	18.09	18.20	18.09	
5	64QAM	1	12	18.13	18.25	18.17	18.09	18.11	
5	64QAM	1	24	18.12	18.23	18.14	18.17	18.12	19.5
5	64QAM	12	0	18.35	18.30	18.32	18.27	18.34	
5	64QAM	12	7	18.38	18.37	18.40	18.27	18.35	
5	64QAM	12	13	18.38	18.35	18.39	18.29	18.33	
5	64QAM	25	0	18.38	18.34	18.38	18.25	18.32	



Band 41_Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	18.29	18.28	17.91	17.99	17.91	19.5
20	QPSK	1	49	18.23	18.22	18.30	18.19	18.23	
20	QPSK	1	99	18.22	18.24	18.02	17.82	18.17	
20	QPSK	50	0	18.45	18.32	18.30	18.29	18.22	
20	QPSK	50	24	18.45	18.43	18.52	18.36	18.36	19.5
20	QPSK	50	50	18.44	18.45	18.43	18.26	18.45	
20	QPSK	100	0	18.35	18.30	18.41	18.24	18.29	
20	16QAM	1	0	18.74	18.88	18.27	18.39	18.14	
20	16QAM	1	49	18.82	18.83	18.68	18.60	18.64	19.5
20	16QAM	1	99	18.64	18.71	18.40	18.21	18.52	
20	16QAM	50	0	18.50	18.42	18.35	18.34	18.27	
20	16QAM	50	24	18.49	18.50	18.55	18.39	18.41	
20	16QAM	50	50	18.44	18.48	18.47	18.33	18.49	19.5
20	16QAM	100	0	18.39	18.37	18.46	18.29	18.35	
20	64QAM	1	0	18.62	18.58	18.13	18.18	18.00	
20	64QAM	1	49	18.67	18.47	18.55	18.44	18.46	
20	64QAM	1	99	18.55	18.60	18.27	18.05	18.43	19.5
20	64QAM	50	0	18.50	18.41	18.36	18.34	18.25	
20	64QAM	50	24	18.47	18.47	18.57	18.40	18.42	
20	64QAM	50	50	18.43	18.47	18.50	18.31	18.49	
20	64QAM	100	0	18.40	18.39	18.45	18.30	18.33	
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	18.33	18.06	18.12	18.05	17.97	19.5
15	QPSK	1	37	18.27	18.30	18.33	18.17	18.27	
15	QPSK	1	74	18.27	18.05	18.18	17.97	18.24	
15	QPSK	36	0	18.49	18.26	18.33	18.33	18.24	
15	QPSK	36	20	18.44	18.38	18.50	18.44	18.47	19.5
15	QPSK	36	39	18.43	18.31	18.46	18.32	18.42	
15	QPSK	75	0	18.41	18.32	18.43	18.35	18.31	
15	16QAM	1	49	18.67	18.47	18.43	18.54	18.37	
15	16QAM	1	37	18.63	18.54	18.69	18.70	18.62	19.5
15	16QAM	1	74	18.66	18.36	18.57	18.45	18.62	
15	16QAM	36	0	18.48	18.29	18.35	18.30	18.25	
15	16QAM	36	20	18.46	18.43	18.50	18.40	18.46	
15	16QAM	36	39	18.45	18.36	18.47	18.33	18.43	19.5
15	16QAM	75	0	18.44	18.39	18.49	18.40	18.34	
15	64QAM	1	0	18.61	18.32	18.26	18.36	18.17	
15	64QAM	1	37	18.62	18.57	18.61	18.54	18.51	
15	64QAM	1	74	18.55	18.37	18.44	18.29	18.51	19.5
15	64QAM	36	0	18.50	18.30	18.38	18.37	18.30	
15	64QAM	36	20	18.49	18.46	18.56	18.46	18.49	
15	64QAM	36	39	18.48	18.38	18.52	18.35	18.48	
15	64QAM	75	0	18.44	18.41	18.48	18.41	18.33	
Channel				39700	40180	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	18.18	17.80	17.88	17.78	17.79	19.5
10	QPSK	1	25	18.07	18.01	18.12	18.09	18.05	
10	QPSK	1	49	18.15	17.84	17.88	17.91	17.88	
10	QPSK	25	0	18.26	18.12	18.19	18.09	18.14	
10	QPSK	25	13	18.28	18.27	18.33	18.17	18.31	19.5
10	QPSK	25	25	18.25	18.19	18.22	18.16	18.17	
10	QPSK	50	0	18.21	18.19	18.27	18.11	18.20	
10	16QAM	1	0	18.53	18.17	18.25	18.17	18.20	
10	16QAM	1	25	18.44	18.41	18.50	18.39	18.43	19.5
10	16QAM	1	49	18.46	18.16	18.26	18.17	18.19	
10	16QAM	25	0	18.36	18.19	18.22	18.14	18.17	
10	16QAM	25	12	18.37	18.37	18.39	18.27	18.36	
10	16QAM	25	25	18.35	18.24	18.28	18.22	18.22	19.5
10	16QAM	50	0	18.26	18.26	18.35	18.15	18.25	
10	64QAM	1	0	18.48	18.21	18.12	18.10	18.05	
10	64QAM	1	25	18.45	18.55	18.49	18.45	18.39	
10	64QAM	1	49	18.37	18.20	18.18	18.12	18.12	19.5
10	64QAM	25	0	18.39	18.22	18.26	18.19	18.22	
10	64QAM	25	12	18.44	18.42	18.45	18.31	18.41	
10	64QAM	25	25	18.40	18.29	18.34	18.25	18.27	
10	64QAM	50	0	18.29	18.24	18.31	18.14	18.24	
Channel				38675	40146	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.38	2687.5	
5	QPSK	1	0	18.17	18.03	18.10	18.07	18.09	19.5
5	QPSK	1	12	18.09	18.05	18.14	18.11	18.10	
5	QPSK	1	24	18.10	18.04	18.10	18.11	18.06	
5	QPSK	12	0	18.31	18.20	18.25	18.19	18.28	
5	QPSK	12	7	18.30	18.29	18.35	18.20	18.28	19.5
5	QPSK	12	13	18.30	18.25	18.26	18.23	18.26	
5	QPSK	25	0	18.24	18.24	18.29	18.11	18.25	
5	16QAM	1	0	18.46	18.33	18.39	18.21	18.42	
5	16QAM	1	12	18.38	18.38	18.43	18.22	18.36	19.5
5	16QAM	1	24	18.43	18.40	18.44	18.28	18.34	
5	16QAM	12	0	18.33	18.26	18.26	18.20	18.32	
5	16QAM	12	7	18.38	18.30	18.35	18.24	18.32	
5	16QAM	12	13	18.33	18.31	18.38	18.27	18.28	19.5
5	16QAM	25	0	18.35	18.34	18.36	18.22	18.32	
5	64QAM	1	0	18.37	18.29	18.30	18.25	18.31	
5	64QAM	1	12	18.37	18.40	18.37	18.32	18.30	
5	64QAM	1	24	18.36	18.34	18.38	18.28	18.25	19.5
5	64QAM	12	0	18.38	18.28	18.33	18.26	18.31	
5	64QAM	12	7	18.40	18.36	18.40	18.29	18.34	
5	64QAM	12	13	18.33	18.35	18.37	18.30	18.29	
5	64QAM	25	0	18.33	18.33	18.40	18.22	18.31	



1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
2. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
3. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
4. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band
 - b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
 - c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. Per 201904 TCBC workshops, General principles of FCC KDB Publication 248227 D01 can be applied to determine the SAR Initial Test Configurations and test reduction for 802.11ax SAR testing. For the table below the 802.11ax maximum power is SU (non-OFDMA), and the SU maximum power also higher than RU (OFDMA)
6. In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing
7. For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
8. When SAR testing for 802.11ax is required
 - a. If the maximum output power is highest for OFDMA scenarios, choose the tone size with the maximum number of tones and the highest maximum output power
 - b. Otherwise, consider the fully allocated channel for SAR testing
 - c. When SAR testing is required on RU sizes less than the fully allocated channel, use the RU number closest to the middle of the channel, choosing the higher RU number when two RUs are equidistant to the middle of the channel



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
Mode	Channel	Frequency (MHz)	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	16.40	17.00	16.30	17.00	19.36	20.00	100.00
		6	2437	16.80	17.00	16.50	17.00	19.86	20.00	
		11	2462	16.60	17.00	16.40	17.00	19.76	20.00	
	802.11g 6Mbps	1	2412	16.20	16.50	16.00	16.50	19.11	19.50	99.25
		6	2437	16.10	16.50	15.90	16.50	19.21	19.50	
		11	2462	16.00	16.50	16.20	16.50	19.07	19.50	
	802.11n-HT20 MCS0	1	2412	16.10	16.50	16.20	16.50	19.16	19.50	99.24
		6	2437	16.00	16.50	16.10	16.50	19.11	19.50	
		11	2462	16.00	16.50	15.90	16.50	18.91	19.50	
	802.11ac-VHT20 MCS0	1	2412	16.20	16.50	16.20	16.50	19.26	19.50	99.24
		6	2437	16.00	16.50	16.00	16.50	19.21	19.50	
		11	2462	16.00	16.50	16.00	16.50	19.12	19.50	
802.11ax-HE20 MCS0	1	2412	16.20	16.50	16.20	16.50	19.26	19.50	98.69	
	6	2437	16.00	16.50	16.00	16.50	19.21	19.50		
	11	2462	16.00	16.50	16.00	16.50	19.12	19.50		

Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
Mode	Channel	Frequency (MHz)	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	11.80	12.00	11.50	12.00	14.82	15.00	99.00
		40	5200	11.70	12.00	11.50	12.00	14.87	15.00	
		44	5220	11.60	12.00	11.50	12.00	14.77	15.00	
		48	5240	11.70	12.00	11.80	12.00	14.72	15.00	
	802.11n-HT20 MCS0	36	5180	11.40	12.00	11.30	12.00	14.46	15.00	98.99
		40	5200	11.40	12.00	11.20	12.00	14.42	15.00	
		44	5220	11.40	12.00	11.20	12.00	14.42	15.00	
		48	5240	11.20	12.00	11.10	12.00	14.69	15.00	
	802.11n-HT40 MCS0	38	5190	10.10	11.00	10.30	11.00	13.42	14.00	98.47
		46	5230	11.90	13.00	11.80	13.00	14.97	16.00	
	802.11ac-VHT20 MCS0	36	5180	11.30	12.00	11.30	12.00	14.36	15.00	98.99
		40	5200	11.30	12.00	11.30	12.00	14.36	15.00	
		44	5220	11.40	12.00	11.30	12.00	14.42	15.00	
		48	5240	11.20	12.00	11.20	12.00	14.44	15.00	
	802.11ac-VHT40 MCS0	38	5190	10.50	11.00	10.30	11.00	13.44	14.00	98.48
		46	5230	11.70	13.00	11.70	13.00	14.97	16.00	
	802.11ac-VHT80 MCS0	42	5210	9.70	10.00	9.70	10.00	12.78	13.00	96.28
	802.11ax-HE20 MCS0	36	5180	11.30	12.00	11.30	12.00	14.36	15.00	98.69
40		5200	11.30	12.00	11.30	12.00	14.36	15.00		
44		5220	11.40	12.00	11.30	12.00	14.42	15.00		
48		5240	11.20	12.00	11.20	12.00	14.44	15.00		
802.11ax-HE40 MCS0	38	5190	10.50	11.00	10.30	11.00	13.44	14.00	98.12	
	46	5230	11.70	13.00	11.70	13.00	14.97	16.00		
802.11ax-HE80 MCS0	42	5210	9.70	10.00	9.70	10.00	12.78	13.00	95.73	



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a-6Mbps		52	5260	11.60	12.00	11.70	12.00	14.67	15.00
56			5280	11.50	12.00	11.70	12.00	14.62	15.00	
60			5300	11.60	12.00	11.60	12.00	14.74	15.00	
64			5320	11.70	12.00	11.70	12.00	14.84	15.00	
802.11n-HT20 MCS0		52	5260	11.70	12.50	11.70	12.50	14.87	15.50	98.99
		56	5280	11.60	12.50	11.60	12.50	14.77	15.50	
		60	5300	11.50	12.50	12.00	12.50	15.07	15.50	
		64	5320	11.50	12.50	12.00	12.50	15.15	15.50	
802.11n-HT40 MCS0		54	5270	11.80	13.00	11.80	13.00	14.87	16.00	98.47
		62	5310	10.50	11.00	10.30	11.00	13.60	14.00	
802.11ac-VHT20 MCS0		52	5260	11.70	12.50	11.60	12.50	15.01	15.50	98.99
		56	5280	11.50	12.50	11.70	12.50	14.96	15.50	
		60	5300	12.00	12.50	11.90	12.50	15.12	15.50	
		64	5320	12.00	12.50	12.10	12.50	15.22	15.50	
802.11ac-VHT40 MCS0		54	5270	11.80	13.00	11.70	13.00	15.01	16.00	98.48
		62	5310	10.40	11.00	10.40	11.00	13.64	14.00	
802.11ac-VHT80 MCS0		58	5290	8.80	9.50	8.50	9.50	11.91	12.50	96.28
802.11ax-HE20 MCS0		52	5260	11.70	12.50	11.60	12.50	15.01	15.50	98.69
		56	5280	11.50	12.50	11.70	12.50	14.96	15.50	
		60	5300	12.00	12.50	11.90	12.50	15.12	15.50	
		64	5320	12.00	12.50	12.10	12.50	15.22	15.50	
802.11ax-HE40 MCS0		54	5270	11.80	13.00	11.70	13.00	15.01	16.00	98.12
		62	5310	10.40	11.00	10.40	11.00	13.64	14.00	
802.11ax-HE80 MCS0		58	5290	8.80	9.50	8.50	9.50	11.91	12.50	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		Duty Cycle %
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit		
5.5GHz WLAN	802.11a 6Mbps	100	5500	11.90	12.50	11.80	12.50	15.14	15.50	99.00
		116	5580	11.80	12.50	11.80	12.50	15.04	15.50	
		124	5620	11.80	12.50	11.60	12.50	14.94	15.50	
		132	5660	11.70	12.50	11.70	12.50	14.99	15.50	
		144	5720	11.80	12.50	11.80	12.50	14.88	15.50	
	802.11n-HT20 MCS0	100	5500	12.10	12.50	11.90	12.50	15.21	15.50	98.99
		116	5580	11.90	12.50	11.70	12.50	14.91	15.50	
		124	5620	11.80	12.50	11.70	12.50	14.81	15.50	
		132	5660	11.80	12.50	11.70	12.50	14.76	15.50	
		144	5720	11.90	12.50	11.70	12.50	15.04	15.50	
	802.11n-HT40 MCS0	102	5510	11.50	12.00	10.40	12.00	14.54	15.00	98.47
		110	5550	11.90	13.00	11.90	13.00	14.41	16.00	
		126	5630	11.70	13.00	11.70	13.00	14.36	16.00	
		134	5670	11.70	13.00	11.70	13.00	14.31	16.00	
		142	5710	11.80	13.00	11.80	13.00	14.31	16.00	
	802.11ac-VHT20 MCS0	100	5500	12.30	12.50	12.00	12.50	15.11	15.50	98.99
		116	5580	12.00	12.50	11.90	12.50	15.07	15.50	
		124	5620	11.70	12.50	11.20	12.50	15.02	15.50	
		132	5660	11.80	12.50	11.70	12.50	14.92	15.50	
		144	5720	11.80	12.50	11.70	12.50	14.89	15.50	
802.11ac-VHT40 MCS0	102	5510	11.60	12.00	11.40	12.00	14.61	15.00	98.48	
	110	5550	11.90	13.00	11.80	13.00	14.56	16.00		
	126	5630	12.00	13.00	11.70	13.00	14.41	16.00		
	134	5670	11.80	13.00	11.80	13.00	14.37	16.00		
	142	5710	11.90	13.00	11.70	13.00	14.37	16.00		
802.11ac-VHT80 MCS0	106	5530	9.70	10.50	9.70	10.50	12.97	13.50	96.28	
	122	5610	11.70	13.00	11.70	13.00	14.82	16.00		
	138	5690	11.80	13.00	11.60	13.00	14.77	16.00		
802.11ax-HE20 MCS0	100	5500	12.30	12.50	12.00	12.50	15.11	15.50	98.69	
	116	5580	12.00	12.50	11.90	12.50	15.07	15.50		
	124	5620	11.70	12.50	11.20	12.50	15.02	15.50		
	132	5660	11.80	12.50	11.70	12.50	14.92	15.50		
	144	5720	11.80	12.50	11.70	12.50	14.89	15.50		
802.11ax-HE40 MCS0	102	5510	11.60	12.00	11.40	12.00	14.61	15.00	98.12	
	110	5550	11.90	13.00	11.80	13.00	14.56	16.00		
	126	5630	12.00	13.00	11.70	13.00	14.41	16.00		
	134	5670	11.80	13.00	11.80	13.00	14.37	16.00		
	142	5710	11.90	13.00	11.70	13.00	14.37	16.00		
802.11ax-HE80 MCS0	106	5530	9.70	10.50	9.70	10.50	12.97	13.50	95.73	
	122	5610	11.70	13.00	11.70	13.00	14.82	16.00		
	138	5690	11.80	13.00	11.60	13.00	14.77	16.00		



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		149	5745	12.00	13.00	11.90	13.00	15.10	16.00
157			5785	11.90	13.00	11.80	13.00	15.14	16.00	
165			5825	11.90	13.00	12.00	13.00	15.18	16.00	
802.11n-HT20 MCS0		149	5745	11.80	13.00	11.70	13.00	14.98	16.00	98.99
		157	5785	11.80	13.00	11.90	13.00	15.08	16.00	
		165	5825	11.70	13.00	11.80	13.00	14.98	16.00	
802.11n-HT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.04	16.00	98.47
		159	5795	11.80	13.00	12.00	13.00	15.01	16.00	
802.11ac-VHT20 MCS0		149	5745	11.80	13.00	11.70	13.00	15.04	16.00	98.99
		157	5785	11.80	13.00	12.00	13.00	15.12	16.00	
		165	5825	11.70	13.00	11.80	13.00	15.04	16.00	
802.11ac-VHT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.08	16.00	98.48
		159	5795	11.80	13.00	12.00	13.00	15.07	16.00	
802.11ac-VHT80 MCS0		155	5775	11.70	13.00	12.00	13.00	15.04	16.00	96.28
802.11ax-HE20 MCS0		149	5745	11.90	13.00	11.90	13.00	15.10	16.00	98.69
		157	5785	11.90	13.00	11.80	13.00	15.14	16.00	
		165	5825	11.90	13.00	11.70	13.00	15.18	16.00	
802.11ax-HE40 MCS0		151	5755	11.80	13.00	12.10	13.00	15.10	16.00	98.12
		159	5795	12.10	13.00	11.90	13.00	15.22	16.00	
802.11ax-HE80 MCS0		155	5775	11.80	13.00	12.00	13.00	15.16	16.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps		1	2412	14.40	15.00	14.30	15.00	17.51	18.00
6			2437	14.80	15.00	14.40	15.00	17.76	18.00	
11			2462	14.60	15.00	14.50	15.00	17.71	18.00	
802.11g 6Mbps		1	2412	14.10	14.50	14.00	14.50	17.06	17.50	99.25
		6	2437	14.20	14.50	13.90	14.50	17.11	17.50	
		11	2462	13.90	14.50	13.90	14.50	17.11	17.50	
802.11n-HT20 MCS0		1	2412	14.10	14.50	13.90	14.50	17.21	17.50	99.24
		6	2437	14.10	14.50	13.90	14.50	17.11	17.50	
		11	2462	13.80	14.50	14.00	14.50	16.97	17.50	
802.11ac-VHT20 MCS0		1	2412	14.00	14.50	13.80	14.50	17.11	17.50	99.24
		6	2437	14.00	14.50	13.80	14.50	17.01	17.50	
		11	2462	13.70	14.50	13.90	14.50	16.87	17.50	
802.11ax-HE20 MCS0		1	2412	14.00	14.50	13.80	14.50	17.11	17.50	98.69
		6	2437	14.00	14.50	13.80	14.50	17.01	17.50	
		11	2462	13.70	14.50	13.90	14.50	16.87	17.50	

Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		36	5180	9.80	10.00	9.40	10.00	12.78	13.00
40			5200	9.60	10.00	9.30	10.00	12.63	13.00	
44			5220	9.60	10.00	9.50	10.00	12.68	13.00	
48			5240	9.70	10.00	9.80	10.00	12.84	13.00	
802.11n-HT20 MCS0		36	5180	9.30	10.00	9.20	10.00	12.26	13.00	98.99
		40	5200	9.40	10.00	9.10	10.00	12.32	13.00	
		44	5220	9.30	10.00	9.30	10.00	12.27	13.00	
802.11n-HT40 MCS0		38	5190	8.40	9.00	8.10	9.00	11.42	12.00	98.47
		46	5230	9.70	11.00	9.70	11.00	12.91	14.00	
802.11ac-VHT20 MCS0		36	5180	9.20	10.00	9.10	10.00	12.16	13.00	98.99
		40	5200	9.30	10.00	9.20	10.00	12.38	13.00	
		44	5220	9.20	10.00	9.20	10.00	12.17	13.00	
802.11ac-VHT40 MCS0		38	5190	8.30	9.00	8.00	9.00	11.32	12.00	98.48
		46	5230	9.60	11.00	9.60	11.00	12.81	14.00	
802.11ac-VHT80 MCS0		42	5210	7.70	8.00	7.70	8.00	10.78	11.00	96.28
802.11ax-HE20 MCS0		36	5180	9.20	10.00	9.10	10.00	12.16	13.00	98.69
		40	5200	9.30	10.00	9.20	10.00	12.38	13.00	
		44	5220	9.20	10.00	9.20	10.00	12.17	13.00	
		48	5240	9.10	10.00	8.90	10.00	12.27	13.00	
802.11ax-HE40 MCS0		38	5190	8.30	9.00	8.00	9.00	11.32	12.00	98.12
		46	5230	9.60	11.00	9.60	11.00	12.81	14.00	
802.11ax-HE80 MCS0		42	5210	7.70	8.00	7.70	8.00	10.78	11.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		52	5260	9.60	10.00	9.80	10.00	12.72	13.00
56			5280	9.50	10.00	9.60	10.00	12.62	13.00	
60			5300	9.50	10.00	9.60	10.00	12.94	13.00	
64			5320	9.70	10.00	9.60	10.00	12.88	13.00	
802.11n-HT20 MCS0		52	5260	9.60	10.50	9.70	10.50	12.82	13.50	98.99
		56	5280	9.70	10.50	9.60	10.50	12.95	13.50	
		60	5300	9.80	10.50	9.90	10.50	12.97	13.50	
802.11n-HT40 MCS0		54	5270	9.80	11.00	9.80	11.00	12.87	14.00	98.47
		62	5310	8.60	9.00	8.30	9.00	11.54	12.00	
802.11ac-VHT20 MCS0		52	5260	9.50	10.50	9.60	10.50	12.72	13.50	98.99
		56	5280	9.60	10.50	9.50	10.50	13.05	13.50	
		60	5300	9.70	10.50	9.80	10.50	12.87	13.50	
		64	5320	9.90	10.50	9.70	10.50	12.95	13.50	
802.11ac-VHT40 MCS0		54	5270	9.70	11.00	9.70	11.00	12.77	14.00	98.48
		62	5310	8.50	9.00	8.20	9.00	11.44	12.00	
802.11ac-VHT80 MCS0		58	5290	6.70	7.50	6.60	7.50	9.81	10.50	96.28
802.11ax-HE20 MCS0		52	5260	9.50	10.50	9.60	10.50	12.72	13.50	98.69
		56	5280	9.60	10.50	9.50	10.50	13.05	13.50	
		60	5300	9.70	10.50	9.80	10.50	12.87	13.50	
		64	5320	9.90	10.50	9.70	10.50	12.95	13.50	
802.11ax-HE40 MCS0		54	5270	9.70	11.00	9.70	11.00	12.77	14.00	98.12
		62	5310	8.50	9.00	8.20	9.00	11.44	12.00	
802.11ax-HE80 MCS0		58	5290	6.70	7.50	6.60	7.50	9.81	10.50	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
Mode	Channel	Frequency (MHz)	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	9.90	10.50	9.60	10.50	12.94	13.50	99.00
		116	5580	9.80	10.50	9.80	10.50	12.98	13.50	
		124	5620	9.70	10.50	9.70	10.50	12.98	13.50	
		132	5660	9.80	10.50	9.60	10.50	12.92	13.50	
		140	5700	9.80	10.50	9.60	10.50	12.88	13.50	
		144	5720	9.90	10.50	9.80	10.50	12.98	13.50	
	802.11n-HT20 MCS0	100	5500	10.00	10.50	9.90	10.50	13.22	13.50	98.99
		116	5580	10.00	10.50	9.80	10.50	12.87	13.50	
		124	5620	9.90	10.50	9.60	10.50	13.05	13.50	
		132	5660	9.70	10.50	9.50	10.50	12.94	13.50	
	802.11n-HT40 MCS0	102	5510	9.50	10.00	9.50	10.00	12.44	13.00	98.47
		110	5550	9.90	11.00	9.90	11.00	13.05	14.00	
126		5630	9.70	11.00	9.60	11.00	12.98	14.00		
134		5670	9.80	11.00	9.70	11.00	12.72	14.00		
802.11ac- VHT20 MCS0	100	5500	9.90	10.50	9.80	10.50	13.12	13.50	98.99	
	116	5580	9.90	10.50	9.70	10.50	12.77	13.50		
	124	5620	9.70	10.50	9.80	10.50	12.98	13.50		
	132	5660	9.60	10.50	9.60	10.50	12.90	13.50		
802.11ac- VHT40 MCS0	102	5510	9.40	10.00	9.40	10.00	12.34	13.00	98.48	
	110	5550	9.80	11.00	9.80	11.00	12.95	14.00		
	126	5630	9.70	11.00	9.70	11.00	12.98	14.00		
	134	5670	9.70	11.00	9.60	11.00	12.62	14.00		
802.11ac- VHT80 MCS0	106	5530	7.70	8.50	7.60	8.50	10.91	11.50	96.28	
	122	5610	9.80	11.00	9.60	11.00	12.77	14.00		
	138	5690	9.80	11.00	9.60	11.00	12.72	14.00		
802.11ax- HE20 MCS0	100	5500	9.90	10.50	9.80	10.50	13.12	13.50	98.69	
	116	5580	9.90	10.50	9.70	10.50	12.77	13.50		
	124	5620	9.70	10.50	9.80	10.50	12.98	13.50		
	132	5660	9.60	10.50	9.60	10.50	12.90	13.50		
	144	5720	9.80	10.50	9.60	10.50	12.80	13.50		
802.11ax- HE40 MCS0	102	5510	9.40	10.00	9.40	10.00	12.34	13.00	98.12	
	110	5550	9.80	11.00	9.80	11.00	12.95	14.00		
	126	5630	9.70	11.00	9.70	11.00	12.98	14.00		
	134	5670	9.70	11.00	9.60	11.00	12.62	14.00		
	142	5710	9.60	11.00	9.70	11.00	12.74	14.00		
802.11ax- HE80 MCS0	106	5530	7.70	8.50	7.60	8.50	10.91	11.50	95.73	
	122	5610	9.80	11.00	9.60	11.00	12.77	14.00		
	138	5690	9.80	11.00	9.60	11.00	12.72	14.00		



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		149	5745	9.90	11.00	9.80	11.00	13.04	14.00
157			5785	9.80	11.00	9.70	11.00	13.14	14.00	
165			5825	9.90	11.00	9.90	11.00	13.12	14.00	
802.11n-HT20 MCS0		149	5745	9.70	11.00	9.80	11.00	12.94	14.00	98.99
		157	5785	9.70	11.00	9.90	11.00	13.00	14.00	
		165	5825	9.80	11.00	9.90	11.00	13.04	14.00	
802.11n-HT40 MCS0		151	5755	9.70	11.00	9.80	11.00	12.94	14.00	98.47
		159	5795	9.80	11.00	9.90	11.00	13.01	14.00	
802.11ac-VHT20 MCS0		149	5745	9.70	11.00	9.70	11.00	12.94	14.00	98.99
		157	5785	9.80	11.00	9.90	11.00	13.08	14.00	
		165	5825	9.80	11.00	9.80	11.00	12.98	14.00	
802.11ac-VHT40 MCS0		151	5755	9.70	11.00	9.90	11.00	12.98	14.00	98.48
		159	5795	9.80	11.00	9.90	11.00	13.12	14.00	
802.11ac-VHT80 MCS0		155	5775	9.60	11.00	9.90	11.00	12.94	14.00	96.28
802.11ax-HE20 MCS0		149	5745	9.70	11.00	9.70	11.00	12.94	14.00	98.69
		157	5785	9.80	11.00	9.90	11.00	13.08	14.00	
		165	5825	9.80	11.00	9.80	11.00	12.98	14.00	
802.11ax-HE40 MCS0		151	5755	9.70	11.00	9.90	11.00	12.98	14.00	98.12
		159	5795	9.80	11.00	9.90	11.00	13.12	14.00	
802.11ax-HE80 MCS0		155	5775	9.60	11.00	9.90	11.00	12.94	14.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps		1	2412	12.70	13.50	12.80	13.50	15.87	16.50
6			2437	13.10	13.50	13.00	13.50	15.78	16.50	
11			2462	13.00	13.50	13.10	13.50	15.87	16.50	
802.11g 6Mbps		1	2412	12.60	13.00	12.50	13.00	15.61	16.00	99.25
		6	2437	12.60	13.00	12.40	13.00	15.66	16.00	
		11	2462	12.50	13.00	12.60	13.00	15.61	16.00	
802.11n-HT20 MCS0		1	2412	12.60	13.00	12.60	13.00	15.66	16.00	99.24
		6	2437	12.60	13.00	12.60	13.00	15.61	16.00	
		11	2462	12.40	13.00	12.50	13.00	15.61	16.00	
802.11ac-VHT20 MCS0		1	2412	12.70	13.00	12.70	13.00	15.76	16.00	99.24
		6	2437	12.70	13.00	12.70	13.00	15.71	16.00	
		11	2462	12.50	13.00	12.60	13.00	15.71	16.00	
802.11ax-HE20 MCS0		1	2412	12.70	13.00	12.70	13.00	15.76	16.00	98.69
		6	2437	12.70	13.00	12.70	13.00	15.71	16.00	
		11	2462	12.50	13.00	12.60	13.00	15.71	16.00	

Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		36	5180	7.80	8.00	7.60	8.00	10.87	11.00
40			5200	7.80	8.00	7.60	8.00	10.87	11.00	
44			5220	7.70	8.00	7.60	8.00	10.87	11.00	
48			5240	7.70	8.00	7.80	8.00	10.92	11.00	
802.11n-HT20 MCS0		36	5180	7.30	8.00	7.30	8.00	10.40	11.00	98.99
		40	5200	7.30	8.00	7.60	8.00	10.44	11.00	
		44	5220	7.40	8.00	7.10	8.00	10.44	11.00	
802.11n-HT40 MCS0		38	5190	6.40	7.00	6.30	7.00	9.44	10.00	98.47
		46	5230	7.80	9.00	7.70	9.00	11.07	12.00	
802.11ac-VHT20 MCS0		36	5180	7.40	8.00	7.40	8.00	10.50	11.00	98.99
		40	5200	7.40	8.00	7.40	8.00	10.50	11.00	
		44	5220	7.50	8.00	7.20	8.00	10.54	11.00	
802.11ac-VHT40 MCS0		38	5190	6.50	7.00	6.40	7.00	9.54	10.00	98.48
		46	5230	7.90	9.00	7.80	9.00	11.17	12.00	
802.11ac-VHT80 MCS0		42	5210	5.70	6.00	5.80	6.00	8.88	9.00	96.28
802.11ax-HE20 MCS0		36	5180	7.40	8.00	7.40	8.00	10.50	11.00	98.69
		40	5200	7.40	8.00	7.40	8.00	10.50	11.00	
		44	5220	7.50	8.00	7.20	8.00	10.54	11.00	
		48	5240	7.30	8.00	7.20	8.00	10.52	11.00	
802.11ax-HE40 MCS0		38	5190	6.50	7.00	6.40	7.00	9.54	10.00	98.12
		46	5230	7.90	9.00	7.80	9.00	11.17	12.00	
802.11ax-HE80 MCS0		42	5210	5.70	6.00	5.80	6.00	8.88	9.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		52	5260	7.70	8.00	7.70	8.00	10.87	11.00
56			5280	7.60	8.00	7.70	8.00	10.92	11.00	
60			5300	7.70	8.00	7.60	8.00	10.92	11.00	
64			5320	7.80	8.00	7.70	8.00	10.92	11.00	
802.11n-HT20 MCS0		52	5260	7.70	8.50	7.60	8.50	10.97	11.50	98.99
		56	5280	7.80	8.50	7.60	8.50	11.01	11.50	
		60	5300	7.90	8.50	7.70	8.50	11.01	11.50	
		64	5320	7.80	8.50	7.90	8.50	11.07	11.50	
802.11n-HT40 MCS0		54	5270	7.90	9.00	7.70	9.00	10.97	12.00	98.47
		62	5310	6.40	7.00	6.40	7.00	9.65	10.00	
802.11ac-VHT20 MCS0		52	5260	7.80	8.50	7.70	8.50	11.07	11.50	98.99
		56	5280	7.90	8.50	7.70	8.50	11.11	11.50	
		60	5300	8.00	8.50	7.80	8.50	11.11	11.50	
		64	5320	7.90	8.50	8.00	8.50	11.17	11.50	
802.11ac-VHT40 MCS0		54	5270	8.00	9.00	7.80	9.00	11.07	12.00	98.48
		62	5310	6.50	7.00	6.50	7.00	9.75	10.00	
802.11ac-VHT80 MCS0		58	5290	4.80	5.50	4.60	5.50	8.01	8.50	96.28
802.11ax-HE20 MCS0		52	5260	7.80	8.50	7.70	8.50	11.07	11.50	98.69
		56	5280	7.90	8.50	7.70	8.50	11.11	11.50	
		60	5300	8.00	8.50	7.80	8.50	11.11	11.50	
		64	5320	7.90	8.50	8.00	8.50	11.17	11.50	
802.11ax-HE40 MCS0		54	5270	8.00	9.00	7.80	9.00	11.07	12.00	98.12
		62	5310	6.50	7.00	6.50	7.00	9.75	10.00	
802.11ax-HE80 MCS0		58	5290	4.80	5.50	4.60	5.50	8.01	8.50	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		100	5500	7.80	8.50	7.80	8.50	10.98	11.50
116			5580	7.90	8.50	7.90	8.50	10.97	11.50	
124			5620	7.90	8.50	7.80	8.50	11.10	11.50	
132			5660	7.90	8.50	7.80	8.50	11.04	11.50	
144			5720	7.90	8.50	7.80	8.50	10.92	11.50	
802.11n-HT20 MCS0		100	5500	8.10	8.50	7.90	8.50	11.21	11.50	98.99
		116	5580	8.00	8.50	7.80	8.50	11.02	11.50	
		124	5620	7.90	8.50	7.80	8.50	11.08	11.50	
		132	5660	7.80	8.50	7.80	8.50	10.98	11.50	
		144	5720	7.80	8.50	7.70	8.50	11.00	11.50	
802.11n-HT40 MCS0		102	5510	7.60	8.00	7.40	8.00	10.55	11.00	98.47
		110	5550	7.90	9.00	7.80	9.00	11.01	12.00	
		126	5630	8.00	9.00	7.80	9.00	11.01	12.00	
		134	5670	7.80	9.00	7.70	9.00	10.82	12.00	
		142	5710	7.90	9.00	7.80	9.00	10.82	12.00	
802.11ac-VHT20 MCS0		100	5500	8.20	8.50	8.00	8.50	11.31	11.50	98.99
		116	5580	8.10	8.50	7.90	8.50	11.12	11.50	
		124	5620	8.00	8.50	7.90	8.50	11.12	11.50	
		132	5660	7.90	8.50	7.90	8.50	11.04	11.50	
		144	5720	7.90	8.50	7.80	8.50	11.10	11.50	
802.11ac-VHT40 MCS0		102	5510	7.70	8.00	7.50	8.00	10.65	11.00	98.48
		110	5550	8.00	9.00	7.90	9.00	11.11	12.00	
		126	5630	8.10	9.00	7.90	9.00	11.11	12.00	
		134	5670	7.90	9.00	7.80	9.00	10.92	12.00	
		142	5710	8.00	9.00	7.90	9.00	10.92	12.00	
802.11ac-VHT80 MCS0		106	5530	5.90	6.50	5.80	6.50	9.01	9.50	96.28
		122	5610	7.80	9.00	7.70	9.00	10.82	12.00	
		138	5690	7.80	9.00	7.70	9.00	10.88	12.00	
802.11ax-HE20 MCS0		100	5500	8.20	8.50	8.00	8.50	11.31	11.50	98.69
		116	5580	8.10	8.50	7.90	8.50	11.12	11.50	
		124	5620	8.00	8.50	7.90	8.50	11.12	11.50	
		132	5660	7.90	8.50	7.90	8.50	11.04	11.50	
		144	5720	7.90	8.50	7.80	8.50	11.10	11.50	
802.11ax-HE40 MCS0		102	5510	7.70	8.00	7.50	8.00	10.65	11.00	98.12
		110	5550	8.00	9.00	7.90	9.00	11.11	12.00	
		126	5630	8.10	9.00	7.90	9.00	11.11	12.00	
		134	5670	7.90	9.00	7.80	9.00	10.92	12.00	
		142	5710	8.00	9.00	7.90	9.00	10.92	12.00	
802.11ax-HE80 MCS0		106	5530	5.90	6.50	5.80	6.50	9.01	9.50	95.73
		122	5610	7.80	9.00	7.70	9.00	10.82	12.00	
		138	5690	7.80	9.00	7.70	9.00	10.88	12.00	



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		149	5745	8.90	9.00	8.80	9.00	11.96	12.00
157			5785	8.90	9.00	8.90	9.00	11.94	12.00	
165			5825	8.80	9.00	8.80	9.00	12.00	12.00	
802.11n-HT20 MCS0		149	5745	8.70	9.00	8.70	9.00	11.82	12.00	98.99
		157	5785	8.70	9.00	8.80	9.00	11.92	12.00	
		165	5825	8.80	9.00	8.90	9.00	11.90	12.00	
802.11n-HT40 MCS0		151	5755	8.70	9.00	8.80	9.00	11.84	12.00	98.47
		159	5795	8.80	9.00	8.90	9.00	11.97	12.00	
802.11ac-VHT20 MCS0		149	5745	8.70	9.00	8.70	9.00	11.92	12.00	98.99
		157	5785	8.80	9.00	8.90	9.00	12.00	12.00	
		165	5825	8.70	9.00	8.90	9.00	11.88	12.00	
802.11ac-VHT40 MCS0		151	5755	8.70	9.00	8.70	9.00	11.92	12.00	98.48
		159	5795	8.70	9.00	8.90	9.00	11.97	12.00	
802.11ac-VHT80 MCS0		155	5775	8.60	9.00	8.90	9.00	11.94	12.00	96.28
802.11ax-HE20 MCS0		149	5745	8.70	9.00	8.70	9.00	11.92	12.00	98.69
		157	5785	8.80	9.00	8.90	9.00	12.00	12.00	
		165	5825	8.70	9.00	8.90	9.00	11.88	12.00	
802.11ax-HE40 MCS0		151	5755	8.70	9.00	8.70	9.00	11.92	12.00	98.12
		159	5795	8.70	9.00	8.90	9.00	11.97	12.00	
802.11ax-HE80 MCS0		155	5775	8.60	9.00	8.90	9.00	11.94	12.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	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	18.40	19.00	18.50	19.00	21.56	22.00
6			2437	18.70	19.00	18.50	19.00	21.86	22.00	
11			2462	18.70	19.00	18.40	19.00	21.76	22.00	
802.11g 6Mbps		1	2412	18.10	18.50	18.00	18.50	21.16	21.50	99.25
		6	2437	18.20	18.50	17.90	18.50	21.11	21.50	
		11	2462	18.00	18.50	18.10	18.50	21.21	21.50	
802.11n-HT20 MCS0		1	2412	18.20	18.50	18.10	18.50	21.21	21.50	99.24
		6	2437	18.00	18.50	18.00	18.50	21.16	21.50	
		11	2462	17.80	18.50	17.90	18.50	20.97	21.50	
802.11ac-VHT20 MCS0	1	2412	18.20	18.50	18.30	18.50	21.26	21.50	99.24	
	6	2437	18.20	18.50	18.10	18.50	21.11	21.50		
	11	2462	18.00	18.50	18.10	18.50	21.07	21.50		
802.11ax-HE20 MCS0	1	2412	18.20	18.50	18.30	18.50	21.26	21.50	98.69	
	6	2437	18.20	18.50	18.10	18.50	21.11	21.50		
	11	2462	18.00	18.50	18.10	18.50	21.07	21.50		

Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	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	16.30	16.50	16.00	16.50	19.27	19.50
40			5200	16.20	16.50	15.90	16.50	19.38	19.50	
44			5220	16.20	16.50	15.90	16.50	19.32	19.50	
48			5240	16.20	16.50	16.20	16.50	19.34	19.50	
802.11n-HT20 MCS0		36	5180	15.80	16.50	15.70	16.50	18.90	19.50	98.99
		40	5200	16.00	16.50	15.70	16.50	18.82	19.50	
		44	5220	15.90	16.50	15.90	16.50	18.98	19.50	
802.11n-HT40 MCS0		38	5190	14.90	15.50	14.80	15.50	17.97	18.50	98.47
		46	5230	16.40	17.50	16.30	17.50	19.47	20.50	
802.11ac-VHT20 MCS0		36	5180	15.70	16.50	15.60	16.50	18.80	19.50	98.99
		40	5200	15.60	16.50	15.60	16.50	18.98	19.50	
		44	5220	15.80	16.50	15.80	16.50	18.88	19.50	
802.11ac-VHT40 MCS0		38	5190	14.80	15.50	14.70	15.50	17.87	18.50	98.48
		46	5230	16.30	17.50	16.20	17.50	19.37	20.50	
802.11ac-VHT80 MCS0		42	5210	14.30	14.50	14.30	14.50	17.32	17.50	96.28
802.11ax-HE20 MCS0		36	5180	15.70	16.50	15.60	16.50	18.80	19.50	98.69
		40	5200	15.60	16.50	15.60	16.50	18.98	19.50	
		44	5220	15.80	16.50	15.80	16.50	18.88	19.50	
802.11ax-HE40 MCS0		38	5190	14.80	15.50	14.70	15.50	17.87	18.50	98.12
		46	5230	16.30	17.50	16.20	17.50	19.37	20.50	
802.11ax-HE80 MCS0		42	5210	14.30	14.50	14.30	14.50	17.32	17.50	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		52	5260	16.10	16.50	16.20	16.50	19.37	19.50
56			5280	16.00	16.50	16.00	16.50	19.22	19.50	
60			5300	16.10	16.50	16.20	16.50	19.40	19.50	
64			5320	16.20	16.50	16.20	16.50	19.38	19.50	
802.11n-HT20 MCS0		52	5260	16.10	17.00	16.20	17.00	19.38	20.00	98.99
		56	5280	16.20	17.00	16.10	17.00	19.41	20.00	
		60	5300	16.50	17.00	16.50	17.00	19.57	20.00	
802.11n-HT40 MCS0		54	5270	16.30	17.50	16.20	17.50	19.45	20.50	98.47
		62	5310	15.00	15.50	14.80	15.50	18.04	18.50	
802.11ac-VHT20 MCS0		52	5260	16.00	17.00	16.10	17.00	19.28	20.00	98.99
		56	5280	16.20	17.00	16.20	17.00	19.42	20.00	
		60	5300	16.40	17.00	16.40	17.00	18.91	20.00	
		64	5320	16.40	17.00	16.40	17.00	19.57	20.00	
802.11ac-VHT40 MCS0		54	5270	16.20	17.50	16.10	17.50	19.35	20.50	98.48
		62	5310	14.90	15.50	14.70	15.50	17.94	18.50	
802.11ac-VHT80 MCS0		58	5290	13.40	14.00	13.10	14.00	16.35	17.00	96.28
802.11ax-HE20 MCS0		52	5260	16.00	17.00	16.10	17.00	19.28	20.00	98.69
		56	5280	16.20	17.00	16.20	17.00	19.42	20.00	
		60	5300	16.40	17.00	16.40	17.00	18.91	20.00	
		64	5320	16.40	17.00	16.40	17.00	19.57	20.00	
802.11ax-HE40 MCS0		54	5270	16.20	17.50	16.10	17.50	19.35	20.50	98.12
		62	5310	14.90	15.50	14.70	15.50	17.94	18.50	
802.11ax-HE80 MCS0		58	5290	13.40	14.00	13.10	14.00	16.35	17.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5500	16.20	17.00	16.10	17.00	19.64	20.00	99.00	
	116	5580	16.20	17.00	16.20	17.00	19.50	20.00		
	124	5620	16.20	17.00	16.00	17.00	19.40	20.00		
	132	5660	16.20	17.00	16.10	17.00	20.00	20.00		
	144	5720	16.30	17.00	16.30	17.00	19.37	20.00		
802.11n-HT20 MCS0	100	5500	16.60	17.00	16.50	17.00	19.61	20.00	98.99	
	116	5580	16.40	17.00	16.20	17.00	19.40	20.00		
	124	5620	16.10	17.00	16.20	17.00	19.38	20.00		
	132	5660	16.00	17.00	16.10	17.00	19.32	20.00		
802.11n-HT40 MCS0	102	5510	15.90	16.50	16.00	16.50	19.14	19.50	98.47	
	110	5550	16.60	17.50	16.40	17.50	19.55	20.50		
	126	5630	16.10	17.50	16.10	17.50	19.45	20.50		
	134	5670	16.30	17.50	16.30	17.50	19.32	20.50		
802.11ac- VHT20 MCS0	100	5500	16.50	17.00	16.40	17.00	19.51	20.00	98.99	
	116	5580	16.30	17.00	16.10	17.00	19.30	20.00		
	124	5620	16.20	17.00	16.20	17.00	19.32	20.00		
	132	5660	16.10	17.00	16.30	17.00	19.44	20.00		
802.11ac- VHT40 MCS0	102	5510	15.80	16.50	15.90	16.50	19.04	19.50	98.48	
	110	5550	16.50	17.50	16.30	17.50	19.45	20.50		
	126	5630	16.30	17.50	17.40	17.50	19.21	20.50		
	134	5670	16.20	17.50	16.20	17.50	19.22	20.50		
802.11ac- VHT80 MCS0	106	5530	14.30	15.00	14.20	15.00	17.41	18.00	96.28	
	122	5610	16.20	17.50	16.20	17.50	19.34	20.50		
	138	5690	16.30	17.50	16.30	17.50	19.22	20.50		
802.11ax- HE20 MCS0	100	5500	16.50	17.00	16.40	17.00	19.51	20.00	98.69	
	116	5580	16.30	17.00	16.10	17.00	19.30	20.00		
	124	5620	16.20	17.00	16.20	17.00	19.32	20.00		
	132	5660	16.10	17.00	16.30	17.00	19.44	20.00		
802.11ax- HE40 MCS0	102	5510	15.80	16.50	15.90	16.50	19.04	19.50	98.12	
	110	5550	16.50	17.50	16.30	17.50	19.45	20.50		
	126	5630	16.30	17.50	17.40	17.50	19.21	20.50		
	134	5670	16.20	17.50	16.20	17.50	19.22	20.50		
802.11ax- HE80 MCS0	106	5530	14.30	15.00	14.20	15.00	17.41	18.00	95.73	
	122	5610	16.20	17.50	16.20	17.50	19.34	20.50		
	138	5690	16.30	17.50	16.30	17.50	19.22	20.50		



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		149	5745	12.00	13.00	11.90	13.00	15.10	16.00
157			5785	11.90	13.00	11.80	13.00	15.14	16.00	
165			5825	11.90	13.00	12.00	13.00	15.18	16.00	
802.11n-HT20 MCS0		149	5745	11.80	13.00	11.70	13.00	14.98	16.00	98.99
		157	5785	11.80	13.00	11.90	13.00	15.08	16.00	
		165	5825	11.70	13.00	11.80	13.00	14.98	16.00	
802.11n-HT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.04	16.00	98.47
		159	5795	11.80	13.00	12.00	13.00	15.01	16.00	
802.11ac- VHT20 MCS0		149	5745	11.80	13.00	11.70	13.00	15.04	16.00	98.99
		157	5785	11.80	13.00	12.00	13.00	15.12	16.00	
		165	5825	11.70	13.00	11.80	13.00	15.04	16.00	
802.11ac- VHT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.08	16.00	98.48
		159	5795	11.80	13.00	12.00	13.00	15.07	16.00	
802.11ac- VHT80 MCS0		155	5775	11.70	13.00	12.00	13.00	15.04	16.00	96.28
802.11ax- HE20 MCS0		149	5745	11.90	13.00	11.90	13.00	15.10	16.00	98.69
		157	5785	11.90	13.00	11.80	13.00	15.14	16.00	
		165	5825	11.90	13.00	11.70	13.00	15.18	16.00	
802.11ax- HE40 MCS0		151	5755	11.80	13.00	12.10	13.00	15.10	16.00	98.12
		159	5795	12.10	13.00	11.90	13.00	15.22	16.00	
802.11ax- HE80 MCS0		155	5775	11.80	13.00	12.00	13.00	15.16	16.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps		1	2412	16.40	17.00	16.30	17.00	19.51	20.00
6			2437	16.70	17.00	16.40	17.00	19.76	20.00	
11			2462	16.80	17.00	16.50	17.00	19.81	20.00	
802.11g 6Mbps		1	2412	16.10	16.50	15.90	16.50	19.01	19.50	99.25
		6	2437	16.10	16.50	16.00	16.50	19.06	19.50	
		11	2462	16.00	16.50	16.00	16.50	19.11	19.50	
802.11n-HT20 MCS0		1	2412	16.10	16.50	16.20	16.50	19.06	19.50	99.24
		6	2437	16.10	16.50	16.00	16.50	19.01	19.50	
		11	2462	15.80	16.50	16.00	16.50	18.86	19.50	
802.11ac-VHT20 MCS0		1	2412	16.00	16.50	16.10	16.50	18.96	19.50	99.24
		6	2437	16.00	16.50	15.90	16.50	18.91	19.50	
		11	2462	15.70	16.50	15.90	16.50	18.76	19.50	
802.11ax-HE20 MCS0		1	2412	16.00	16.50	16.10	16.50	18.96	19.50	98.69
		6	2437	16.00	16.50	15.90	16.50	18.91	19.50	
		11	2462	15.70	16.50	15.90	16.50	18.76	19.50	

Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		36	5180	14.20	14.50	14.00	14.50	17.22	17.50
40			5200	14.10	14.50	14.00	14.50	17.32	17.50	
44			5220	14.00	14.50	13.90	14.50	17.17	17.50	
48			5240	14.30	14.50	14.20	14.50	17.32	17.50	
802.11n-HT20 MCS0		36	5180	13.70	14.50	13.70	14.50	16.86	17.50	98.99
		40	5200	13.60	14.50	13.70	14.50	16.86	17.50	
		44	5220	13.80	14.50	13.80	14.50	16.82	17.50	
802.11n-HT40 MCS0		38	5190	12.90	13.50	12.80	13.50	15.82	16.50	98.47
		46	5230	14.20	15.50	14.20	15.50	17.41	18.50	
802.11ac-VHT20 MCS0		36	5180	13.60	14.50	13.60	14.50	16.76	17.50	98.99
		40	5200	13.70	14.50	13.50	14.50	16.92	17.50	
		44	5220	13.70	14.50	13.70	14.50	16.72	17.50	
802.11ac-VHT40 MCS0		38	5190	12.80	13.50	12.70	13.50	15.72	16.50	98.48
		46	5230	14.10	15.50	14.10	15.50	17.31	18.50	
802.11ac-VHT80 MCS0		42	5210	12.20	12.50	12.20	12.50	15.50	15.50	96.28
802.11ax-HE20 MCS0		36	5180	13.60	14.50	13.60	14.50	16.76	17.50	98.69
		40	5200	13.70	14.50	13.50	14.50	16.92	17.50	
		44	5220	13.70	14.50	13.70	14.50	16.72	17.50	
802.11ax-HE40 MCS0		38	5190	12.80	13.50	12.70	13.50	15.72	16.50	98.12
		46	5230	14.10	15.50	14.10	15.50	17.31	18.50	
802.11ax-HE80 MCS0		42	5210	12.20	12.50	12.20	12.50	15.50	15.50	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		52	5260	14.20	14.50	14.10	14.50	17.27	17.50
56			5280	14.00	14.50	14.00	14.50	17.28	17.50	
60			5300	14.10	14.50	13.90	14.50	17.22	17.50	
64			5320	14.10	14.50	14.00	14.50	17.34	17.50	
802.11n-HT20 MCS0		52	5260	14.10	15.00	14.20	15.00	17.38	18.00	98.99
		56	5280	14.30	15.00	14.20	15.00	17.34	18.00	
		60	5300	14.40	15.00	14.40	15.00	17.57	18.00	
802.11n-HT40 MCS0		54	5270	14.10	15.50	14.20	15.50	17.47	18.50	98.47
		62	5310	12.80	13.50	12.80	13.50	16.10	16.50	
802.11ac-VHT20 MCS0		52	5260	14.00	15.00	14.10	15.00	17.28	18.00	98.99
		56	5280	14.20	15.00	14.00	15.00	17.66	18.00	
		60	5300	14.30	15.00	14.30	15.00	17.47	18.00	
		64	5320	14.50	15.00	14.30	15.00	17.51	18.00	
802.11ac-VHT40 MCS0		54	5270	14.00	15.50	14.10	15.50	17.37	18.50	98.48
		62	5310	12.70	13.50	12.70	13.50	16.00	16.50	
802.11ac-VHT80 MCS0		58	5290	11.30	12.00	11.00	12.00	14.48	15.00	96.28
802.11ax-HE20 MCS0		52	5260	14.00	15.00	14.10	15.00	17.28	18.00	98.69
		56	5280	14.20	15.00	14.00	15.00	17.66	18.00	
		60	5300	14.30	15.00	14.30	15.00	17.47	18.00	
		64	5320	14.50	15.00	14.30	15.00	17.51	18.00	
802.11ax-HE40 MCS0		54	5270	14.00	15.50	14.10	15.50	17.37	18.50	98.12
		62	5310	12.70	13.50	12.70	13.50	16.00	16.50	
802.11ax-HE80 MCS0		58	5290	11.30	12.00	11.00	12.00	14.48	15.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5500	14.20	15.00	14.00	15.00	17.58	18.00	99.00	
	116	5580	14.30	15.00	14.10	15.00	17.40	18.00		
	124	5620	14.20	15.00	14.20	15.00	17.47	18.00		
	132	5660	14.30	15.00	14.10	15.00	17.38	18.00		
	144	5720	14.20	15.00	14.00	15.00	17.28	18.00		
802.11n-HT20 MCS0	100	5500	14.60	15.00	14.40	15.00	17.61	18.00	98.99	
	116	5580	14.40	15.00	14.10	15.00	17.47	18.00		
	124	5620	14.30	15.00	14.20	15.00	17.27	18.00		
	132	5660	14.20	15.00	14.00	15.00	17.37	18.00		
	144	5720	14.30	15.00	14.10	15.00	17.38	18.00		
802.11n-HT40 MCS0	102	5510	13.90	14.50	14.00	14.50	17.04	17.50	98.47	
	110	5550	14.40	15.50	14.20	15.50	17.47	18.50		
	126	5630	14.20	15.50	14.10	15.50	17.28	18.50		
	134	5670	14.20	15.50	14.00	15.50	17.37	18.50		
	142	5710	14.10	15.50	14.20	15.50	17.27	18.50		
802.11ac-VHT20 MCS0	100	5500	14.50	15.00	14.30	15.00	17.51	18.00	98.99	
	116	5580	14.30	15.00	14.00	15.00	17.37	18.00		
	124	5620	14.20	15.00	14.20	15.00	17.46	18.00		
	132	5660	14.10	15.00	14.10	15.00	17.28	18.00		
	144	5720	14.20	15.00	14.00	15.00	17.28	18.00		
802.11ac-VHT40 MCS0	102	5510	13.80	14.50	13.90	14.50	16.94	17.50	98.48	
	110	5550	14.30	15.50	14.10	15.50	17.37	18.50		
	126	5630	14.20	15.50	14.30	15.50	17.46	18.50		
	134	5670	14.10	15.50	13.90	15.50	17.27	18.50		
	142	5710	14.00	15.50	14.10	15.50	17.17	18.50		
802.11ac-VHT80 MCS0	106	5530	12.30	13.00	12.10	13.00	15.58	16.00	96.28	
	122	5610	14.20	15.50	14.00	15.50	17.58	18.50		
	138	5690	14.30	15.50	14.00	15.50	17.57	18.50		
802.11ax-HE20 MCS0	100	5500	14.50	15.00	14.30	15.00	17.51	18.00	98.69	
	116	5580	14.30	15.00	14.00	15.00	17.37	18.00		
	124	5620	14.20	15.00	14.20	15.00	17.46	18.00		
	132	5660	14.10	15.00	14.10	15.00	17.28	18.00		
	144	5720	14.20	15.00	14.00	15.00	17.28	18.00		
802.11ax-HE40 MCS0	102	5510	13.80	14.50	13.90	14.50	16.94	17.50	98.12	
	110	5550	14.30	15.50	14.10	15.50	17.37	18.50		
	126	5630	14.20	15.50	14.30	15.50	17.46	18.50		
	134	5670	14.10	15.50	13.90	15.50	17.27	18.50		
	142	5710	14.00	15.50	14.10	15.50	17.17	18.50		
802.11ax-HE80 MCS0	106	5530	12.30	13.00	12.10	13.00	15.58	16.00	95.73	
	122	5610	14.20	15.50	14.00	15.50	17.58	18.50		
	138	5690	14.30	15.50	14.00	15.50	17.57	18.50		



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		149	5745	12.00	13.00	11.90	13.00	15.10	16.00
157			5785	11.90	13.00	11.80	13.00	15.14	16.00	
165			5825	11.90	13.00	12.00	13.00	15.18	16.00	
802.11n-HT20 MCS0		149	5745	11.80	13.00	11.70	13.00	14.98	16.00	98.99
		157	5785	11.80	13.00	11.90	13.00	15.08	16.00	
		165	5825	11.70	13.00	11.80	13.00	14.98	16.00	
802.11n-HT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.04	16.00	98.47
		159	5795	11.80	13.00	12.00	13.00	15.01	16.00	
802.11ac- VHT20 MCS0		149	5745	11.80	13.00	11.70	13.00	15.04	16.00	98.99
		157	5785	11.80	13.00	12.00	13.00	15.12	16.00	
		165	5825	11.70	13.00	11.80	13.00	15.04	16.00	
802.11ac- VHT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.08	16.00	98.48
		159	5795	11.80	13.00	12.00	13.00	15.07	16.00	
802.11ac- VHT80 MCS0		155	5775	11.70	13.00	12.00	13.00	15.04	16.00	96.28
802.11ax- HE20 MCS0		149	5745	11.90	13.00	11.90	13.00	15.10	16.00	98.69
		157	5785	11.90	13.00	11.80	13.00	15.14	16.00	
		165	5825	11.90	13.00	11.70	13.00	15.18	16.00	
802.11ax- HE40 MCS0		151	5755	11.80	13.00	12.10	13.00	15.10	16.00	98.12
		159	5795	12.10	13.00	11.90	13.00	15.22	16.00	
802.11ax- HE80 MCS0		155	5775	11.80	13.00	12.00	13.00	15.16	16.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps		1	2412	15.00	15.50	15.00	15.50	18.11	18.50
6			2437	15.40	15.50	15.10	15.50	18.41	18.50	
11			2462	15.30	15.50	15.10	15.50	18.36	18.50	
802.11g 6Mbps		1	2412	14.70	15.00	14.60	15.00	17.71	18.00	99.25
		6	2437	14.70	15.00	14.50	15.00	17.71	18.00	
		11	2462	14.60	15.00	14.70	15.00	17.66	18.00	
802.11n-HT20 MCS0		1	2412	14.70	15.00	14.70	15.00	17.71	18.00	99.24
		6	2437	14.50	15.00	14.50	15.00	17.66	18.00	
		11	2462	14.50	15.00	14.50	15.00	17.57	18.00	
802.11ac-VHT20 MCS0		1	2412	14.80	15.00	14.80	15.00	17.81	18.00	99.24
		6	2437	14.60	15.00	14.60	15.00	17.76	18.00	
		11	2462	14.60	15.00	14.60	15.00	17.67	18.00	
802.11ax-HE20 MCS0		1	2412	14.80	15.00	14.80	15.00	17.81	18.00	98.69
		6	2437	14.60	15.00	14.60	15.00	17.76	18.00	
		11	2462	14.60	15.00	14.60	15.00	17.67	18.00	

Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		36	5180	12.80	13.00	12.60	13.00	15.92	16.00
40			5200	12.70	13.00	12.60	13.00	15.98	16.00	
44			5220	12.70	13.00	12.60	13.00	15.92	16.00	
48			5240	12.80	13.00	12.80	13.00	15.98	16.00	
802.11n-HT20 MCS0		36	5180	12.30	13.00	12.30	13.00	15.40	16.00	98.99
		40	5200	12.40	13.00	12.30	13.00	15.48	16.00	
		44	5220	12.40	13.00	12.20	13.00	15.48	16.00	
802.11n-HT40 MCS0		38	5190	11.40	12.00	11.30	12.00	14.44	15.00	98.47
		46	5230	12.80	14.00	12.80	14.00	16.07	17.00	
802.11ac-VHT20 MCS0		36	5180	12.40	13.00	12.40	13.00	15.50	16.00	98.99
		40	5200	12.50	13.00	12.40	13.00	15.58	16.00	
		44	5220	12.50	13.00	12.30	13.00	15.58	16.00	
802.11ac-VHT40 MCS0		38	5190	11.50	12.00	11.40	12.00	14.54	15.00	98.48
		46	5230	12.90	14.00	12.90	14.00	16.17	17.00	
802.11ac-VHT80 MCS0		42	5210	10.80	11.00	10.80	11.00	13.88	14.00	96.28
802.11ax-HE20 MCS0		36	5180	12.40	13.00	12.40	13.00	15.50	16.00	98.69
		40	5200	12.50	13.00	12.40	13.00	15.58	16.00	
		44	5220	12.50	13.00	12.30	13.00	15.58	16.00	
802.11ax-HE40 MCS0		38	5190	11.50	12.00	11.40	12.00	14.54	15.00	98.12
		46	5230	12.90	14.00	12.90	14.00	16.17	17.00	
802.11ax-HE80 MCS0		42	5210	10.80	11.00	10.80	11.00	13.88	14.00	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		52	5260	12.80	13.00	12.80	13.00	15.87	16.00
56			5280	12.60	13.00	12.80	13.00	15.92	16.00	
60			5300	12.70	13.00	12.70	13.00	15.98	16.00	
64			5320	12.70	13.00	12.70	13.00	15.98	16.00	
802.11n-HT20 MCS0		52	5260	12.70	13.50	12.70	13.50	15.97	16.50	98.99
		56	5280	12.90	13.50	12.70	13.50	16.11	16.50	
		60	5300	13.00	13.50	12.80	13.50	16.11	16.50	
802.11n-HT40 MCS0		54	5270	12.80	14.00	12.80	14.00	16.01	17.00	98.47
		62	5310	11.40	12.00	11.40	12.00	14.65	15.00	
802.11ac-VHT20 MCS0		52	5260	12.80	13.50	12.80	13.50	16.07	16.50	98.99
		56	5280	13.00	13.50	12.80	13.50	16.17	16.50	
		60	5300	13.10	13.50	12.90	13.50	16.21	16.50	
		64	5320	13.00	13.50	13.00	13.50	16.27	16.50	
802.11ac-VHT40 MCS0		54	5270	12.90	14.00	12.90	14.00	16.11	17.00	98.48
		62	5310	11.50	12.00	11.50	12.00	14.75	15.00	
802.11ac-VHT80 MCS0		58	5290	9.90	10.50	9.70	10.50	13.01	13.50	96.28
802.11ax-HE20 MCS0		52	5260	12.80	13.50	12.80	13.50	16.07	16.50	98.69
		56	5280	13.00	13.50	12.80	13.50	16.17	16.50	
		60	5300	13.10	13.50	12.90	13.50	16.21	16.50	
		64	5320	13.00	13.50	13.00	13.50	16.27	16.50	
802.11ax-HE40 MCS0		54	5270	12.90	14.00	12.90	14.00	16.11	17.00	98.12
		62	5310	11.50	12.00	11.50	12.00	14.75	15.00	
802.11ax-HE80 MCS0		58	5290	9.90	10.50	9.70	10.50	13.01	13.50	95.73



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5500	12.90	13.50	12.80	13.50	16.18	16.50	99.00	
	116	5580	12.90	13.50	12.80	13.50	16.14	16.50		
	124	5620	12.90	13.50	12.80	13.50	16.10	16.50		
	132	5660	12.90	13.50	12.80	13.50	16.04	16.50		
	144	5720	12.90	13.50	12.80	13.50	15.98	16.50		
802.11n-HT20 MCS0	100	5500	13.10	13.50	13.00	13.50	16.21	16.50	98.99	
	116	5580	13.00	13.50	12.80	13.50	16.02	16.50		
	124	5620	12.80	13.50	12.70	13.50	16.08	16.50		
	132	5660	12.80	13.50	12.70	13.50	15.98	16.50		
802.11n-HT40 MCS0	102	5510	12.60	13.00	12.40	13.00	15.60	16.00	98.47	
	110	5550	13.00	14.00	12.90	14.00	16.05	17.00		
	126	5630	12.80	14.00	12.80	14.00	15.97	17.00		
	134	5670	12.80	14.00	12.80	14.00	15.92	17.00		
802.11ac-VHT20 MCS0	100	5500	13.20	13.50	13.10	13.50	16.31	16.50	98.99	
	116	5580	13.10	13.50	12.90	13.50	16.12	16.50		
	124	5620	12.90	13.50	12.80	13.50	16.12	16.50		
	132	5660	12.90	13.50	12.80	13.50	16.04	16.50		
802.11ac-VHT40 MCS0	102	5510	12.70	13.00	12.50	13.00	15.70	16.00	98.48	
	110	5550	13.10	14.00	13.00	14.00	16.15	17.00		
	126	5630	12.90	14.00	12.90	14.00	16.11	17.00		
	134	5670	12.90	14.00	12.90	14.00	16.02	17.00		
802.11ac-VHT80 MCS0	106	5530	10.90	11.50	10.80	11.50	14.01	14.50	96.28	
	122	5610	12.90	14.00	12.80	14.00	15.92	17.00		
	138	5690	12.90	14.00	12.80	14.00	15.92	17.00		
802.11ax-HE20 MCS0	100	5500	13.20	13.50	13.10	13.50	16.31	16.50	98.69	
	116	5580	13.10	13.50	12.90	13.50	16.12	16.50		
	124	5620	12.90	13.50	12.80	13.50	16.12	16.50		
	132	5660	12.90	13.50	12.80	13.50	16.04	16.50		
802.11ax-HE40 MCS0	102	5510	12.70	13.00	12.50	13.00	15.70	16.00	98.12	
	110	5550	13.10	14.00	13.00	14.00	16.15	17.00		
	126	5630	12.90	14.00	12.90	14.00	16.11	17.00		
	134	5670	12.90	14.00	12.90	14.00	16.02	17.00		
802.11ax-HE80 MCS0	106	5530	10.90	11.50	10.80	11.50	14.01	14.50	95.73	
	122	5610	12.90	14.00	12.80	14.00	15.92	17.00		
	138	5690	12.90	14.00	12.80	14.00	15.92	17.00		



Channel / Frequency				Ant 1		Ant 2		ANT 1+2		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps		149	5745	12.00	13.00	11.90	13.00	15.10	16.00
157			5785	11.90	13.00	11.80	13.00	15.14	16.00	
165			5825	11.90	13.00	12.00	13.00	15.18	16.00	
802.11n-HT20 MCS0		149	5745	11.80	13.00	11.70	13.00	14.98	16.00	98.99
		157	5785	11.80	13.00	11.90	13.00	15.08	16.00	
		165	5825	11.70	13.00	11.80	13.00	14.98	16.00	
802.11n-HT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.04	16.00	98.47
		159	5795	11.80	13.00	12.00	13.00	15.01	16.00	
802.11ac- VHT20 MCS0		149	5745	11.80	13.00	11.70	13.00	15.04	16.00	98.99
		157	5785	11.80	13.00	12.00	13.00	15.12	16.00	
		165	5825	11.70	13.00	11.80	13.00	15.04	16.00	
802.11ac- VHT40 MCS0		151	5755	11.80	13.00	11.80	13.00	15.08	16.00	98.48
		159	5795	11.80	13.00	12.00	13.00	15.07	16.00	
802.11ac- VHT80 MCS0		155	5775	11.70	13.00	12.00	13.00	15.04	16.00	96.28
802.11ax- HE20 MCS0		149	5745	11.90	13.00	11.90	13.00	15.10	16.00	98.69
		157	5785	11.90	13.00	11.80	13.00	15.14	16.00	
		165	5825	11.90	13.00	11.70	13.00	15.18	16.00	
802.11ax- HE40 MCS0		151	5755	11.80	13.00	12.10	13.00	15.10	16.00	98.12
		159	5795	12.10	13.00	11.90	13.00	15.22	16.00	
802.11ax- HE80 MCS0		155	5775	11.80	13.00	12.00	13.00	15.16	16.00	95.73



General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 77.22% considered in SAR testing, and the duty cycle would be scaled to theoretica

Ant 1

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	13.33	8.78	8.80
	CH 39	2441	13.62	8.85	8.86
	CH 78	2480	13.52	8.89	8.91
Tune-up Limit			14.00	9.00	9.00

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	6.40	6.30
	CH 19	2440	6.50	6.30
	CH 39	2480	6.00	6.00
Tune-up Limit			8.00	8.00

Ant 2

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	12.55	8.02	8.04
	CH 39	2441	13.33	8.64	8.66
	CH 78	2480	13.22	8.70	8.74
Tune-up Limit			14.00	9.00	9.00

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	7.20	7.10
	CH 19	2440	7.30	7.20
	CH 39	2480	6.50	6.40
Tune-up Limit			8.00	8.00